INTERCOUNTY CONNECTOR

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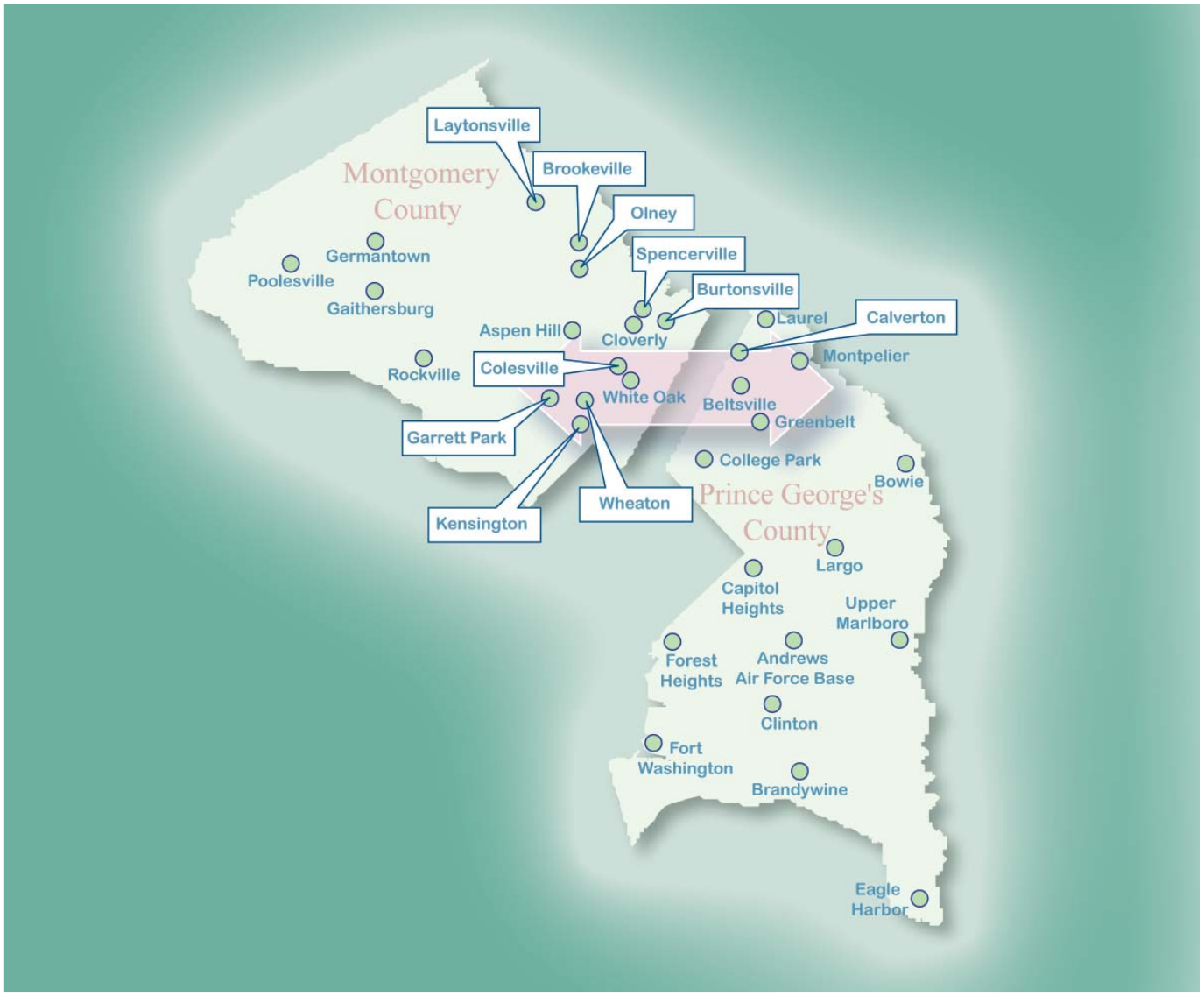

US Department of Transportation
Federal Highway Administration
Maryland Division

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Public comments (e.g., letters, web comments, and e-mails) received on the January 3, 2006 Final Environmental Impact Statement/Final Section 4(f) Evaluation (FEIS) and the March 23, 2006 PM 2.5 Project Level Conformity Determination are grouped in this document by topic area, following the order of the chapters in the FEIS. The index of public commenters is included in Section I of this document. A list of technical experts who prepared the responses is included in Section II. The comments and responses can be found in Section III.

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Public commenters (Elected Officials and Citizens) are listed below alphabetically by last name with comment numbers following each name. The numbered comments can be found in Section III of this document. Commenters who submitted multiple letters, e-mails, or web comments are listed only once.

Elected Officials

Name		Comment Numbers
Andrews	Phil	11, 12, 13, 703, 704
Barkley	Charles	4
Brayman	Stephen A.	4, 260, 541, 774
Davis	Judith F.	257, 305, 652, 774
Dernoga	Thomas	4, 6
Frosh	Brian	4, 12, 13, 798
Frush	Barbara A.	7, 11, 12
Giammo	Larry	11, 12, 13, 798
Grosfield	Sharon	11, 12, 13, 798
Johnson	Jack	51, 464, 646, 650
Kaiser	Anne R.	4, 11, 12, 13, 703, 704, 798
Leventhal	George	195, 197, 213, 214, 650
Ludlow	Suzanne	4, 7, 11, 12, 13
Mandel	Adrienne	4, 11, 12, 703, 704
Menes	Pauline H.	7, 11, 12
Mikulski	Barbara	4, 11, 138, 139, 459, 465
Moe	Brian R.	7, 11, 12
Pinsky	Paul G.	7, 11, 12, 13, 704, 798
Praisner	Marilyn	11, 12, 138, 139, 459, 465
Sarbanes	Paul	4, 7, 11, 12, 13, 798, 800, 803
Teitelbaum	Leonard	11, 12, 13, 703, 704, 798
Van Hollen	Chris	4, 7, 650, 703, 798

Citizens

Name		Comment Numbers
Abdo	Gaith	766
Abe	Mary	84, 305, 372, 450, 574, 763, 768, 778

Citizens

Name		Comment Numbers
Aboumatar	Hasan	646, 650
Abrams	Scott	179, 180, 657
Agnostak	Bill	45, 47, 101, 457, 650
Alder	Cynthia	682
Allen	David	682
Allen	Dennis	650
Alterini	Paul	655
Amaratunga	Ann	142
Ameller	Rafael	650
Anchor	Mark	4, 7, 11, 12, 13, 14, 15, 35, 682, 703, 704, 705, 706, 707, 708, 798, 799
Anderson	Cornelia	108
Anderson	Eric C.	4, 11, 12
Anderson	Van	3, 38, 646, 650
Antonetti	Marc	682, 693
Arrasmith	Tom	356, 357, 619, 652
Asbury	Kim	4, 7, 11, 12, 15, 703, 798
Asbury	Mattie	4, 7, 11, 12, 15, 703, 798
Asbury	Monte	4, 7, 11, 12, 15, 703, 798
Athia	Harivadan	682
Atkinson	Hunter	3, 650
August	Gilbert	38, 101, 411, 650
Averza	Joe	682, 693
Axley	Milton	650
Aylward	Jill	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Baker	Douglas	161
Baker	Frances	38, 45, 650
Baldridge	Jim	650, 653
Barkatt	Aaron	44, 305, 450, 767, 778
Barnes	Ginny	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Barnes	Kenneth	652
Barry	Suzanne	89, 132, 447, 452
Bartles	Mary Jo	93, 652
Bass-Abner	Bernice	49, 287, 646, 650, 655, 658
Baugher	Clark	670, 770
Baum	Rod	171
Bawer	Ken	91, 764

Citizens

Name		Comment Numbers
Baynard	Tracy	3, 38, 646, 650
Becraft	Leonard A.	189
Bell	Bonnie	38, 165, 650, 682
Bensimon	Marc	592
Berger	Myron	7, 12, 16, 215, 652, 799, 841, 842, 843
Bienkowski	Barbara	44, 84, 91, 110, 408, 450, 540, 652, 798
Biles	Kenneth	305, 656
Billingsley	Laurie	4, 7, 11, 12, 15, 703, 798
Billingsley	Richard	4, 7, 11, 12, 15, 703, 798
Bird	David	11
Blachere	Amy	45, 650
Blankenship	Pat	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Blom	Allard	651, 676
Bogley	Patty	4, 7, 11, 12, 15, 24, 93, 146, 158, 176, 187, 198, 199, 200, 201, 202, 203, 204, 205, 206, 241, 242, 305, 373, 374, 399, 419, 567, 589, 590, 593, 595, 599, 600, 601, 652, 699, 703, 740, 743, 798
Boline	Jeannette	38, 132, 257, 451
Booher	Robert	234, 298, 301, 302, 402, 403, 404, 405
Bowen	John	682
Boynton	Lynn Caudle	106, 258, 590
Bozel	Patrick	448, 646, 650
Braden	Dennis Charles	305, 652
Bradley	Joseph	691
Brady	Pat	682
Brand	Fred	650
Brannigan	Kathleeen	69
Brody	Lisette	202, 592, 650
Brooks	Lisa	45
Brown	Howard	650
Brown	Martin	682
Bullock	Marilyn G.	46, 95, 97, 381, 688, 782
Burke	Raymond	132, 650
Burrell	Deirdre	38, 47, 650
Burton	Eve	4, 7, 11, 12, 15, 703, 798
Buyer	Royal	145, 166, 186, 314, 468, 469, 566, 589, 650, 698
Caflisch	Stephen	7, 18, 19, 20, 21, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 223, 224, 225, 237, 261, 262,

Citizens

Name		Comment Numbers
		326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 667, 668, 682, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Calderone	Geoff	656
Cameron	Diane M.	342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 682
Campos	Shirley	682, 693
Cannelli	James	682, 693
Canova	Diane	682
Cantori	Greg	207
Caparosa	Robin	682
Capeles	Tiffany	453, 455, 650
Capon	Ross B.	2, 44, 53, 89, 102, 107, 208, 225, 447, 450, 460, 466, 497, 508, 652, 670, 748, 772, 774
Cardwell	Sara Lou	38, 45, 646, 650
Carin	Joshua	650
Carlstrom	Michelle	38, 45, 650
Carp	Roger	45, 165, 411, 653
Carwile	Howard	650
Chan	Chris	682
Chase	Bob	3, 38, 646, 650, 653
Cheng	Daniel	682
Childress	Barry	178, 184, 213
Chisholm	Yvette	258, 259, 455, 650
Cho	Junghee	682, 693
Choulas	Dean	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Christensen	Barbara	455, 456, 650
Christopher	Kitty	132, 135, 175, 315, 764
Chu	Monica	455, 456, 650
Chute	Barry	682

Citizens

Name		Comment Numbers
Clark	Francis	682
Cmarik	Robert	12, 91, 132, 450, 586
Cochrane	Jack	178, 186, 197, 214, 228, 236, 237, 238, 239, 240, 682, 693
Cohen	Ellen	655
Cohen	Gregory	38, 650
Cohen	Steven	682
Connolly	James F.	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Connors	John	45, 650
Cooney	Manus	38, 132
Copeland	Carole	2, 11, 15, 91, 408, 410, 447, 450, 652, 670
Crane	Patricia	175, 286, 305, 309, 450, 652, 763
Cross	Catherine	38, 650
Cross	Marolyn	137
Crosswhite	Chris	682, 693
Cummins	Ryan	102, 307, 540, 764
Cunningham	Lynda	682
Curran	Diane	11, 12, 13, 703, 704, 798
Curtis	Richard	287, 646, 650, 655, 658
Czeh	C.	682, 693
Daley	Brendan	45, 448, 650
Davis	Paul	543, 652
Davis	Ron	3, 50, 51, 165, 463, 464, 646, 650, 775
DeBenedictis	J.A.	776
DeGilio	Jeff	682
Der	Andrew	684
Derwart	Melissa	682
Dikeman	Richard	658
Dirndorfer	Walter	682
Divilio	Anthony	682
Doll	Ana	456
Donn	Marjory M.	91, 311, 414, 768
Donnelly	Stephen	696
Dorn	Windy	682, 693
Dove	Ronald	141, 682, 693
Drzyzgula	Cathy	682
Duffy	Dennis	287, 646, 655, 658
Dunmire	David G.	2, 15, 16, 18, 33, 34, 103, 304, 305, 309, 311, 331, 332, 350, 356, 357, 359, 371, 377, 392, 393, 394, 395, 396, 397, 572,

Citizens

Name		Comment Numbers
		575, 583, 584, 614, 618, 619, 620, 622, 627, 630, 631, 633, 634, 669, 674, 783, 797
Durek	Dorothy	38, 646, 650
Durek	Thomas	38, 41, 50, 646, 650
Durland	Eric	132, 311
Dyballa	Cindy	659
Eckles, Jr.	Harold	455
Eckley	Cynthia A.	4, 7, 11, 12, 15, 703, 798
Elhilali	Mounir	38, 45, 286
Elkins	Elizabeth L.	11, 12, 685
Engle	Sue	650
Enriquez	Neema	650
Epstein	Jim	287, 652, 753
Epstein	Lee R.	4, 7, 11, 12, 13, 14, 15, 18, 19, 20, 21, 35, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 223, 224, 225, 237, 261, 262, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 667, 668, 703, 704, 705, 706, 707, 708, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 798, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Erhard	Kurt	682
Ettori	Ghislaine	840
Evans	Fred	654
Evans	Jeffrey	682, 693
Fahl	Douglas	3, 38, 646, 650, 653
Fahrner	Jeanne	650
Fain	Cynthia	11
Farcosky	Thomas	650, 653, 655
Fary	Jim	7, 11, 18, 19, 20, 21, 24, 31, 32, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 221, 223, 224, 225, 237, 261, 262, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387,

Citizens

Name		Comment Numbers
		388, 389, 390, 391, 397, 410, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 540, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 639, 652, 667, 668, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 772, 779, 785, 796, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Felice	Sherry	45, 165, 258, 287, 411, 455, 646, 655
Felix	Faustin	177, 411, 650
Fellows	Andrew	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Ferraro	Dave	656
Ferraro	Robert	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Field	Andrew	11
Filmore	Thomas	682
Fiorentino	Sal	45
Fish	Brian	3, 650
Fisher	J.F.	52, 93, 148, 149, 262, 270, 450, 461, 489, 491, 652, 670, 779
Fisher	Sean	45, 650
Fitzpatrick	Neil	7, 18, 19, 20, 21, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 223, 224, 225, 237, 261, 262, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 667, 668, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Flaherty	Joe	646, 650

Citizens

Name		Comment Numbers
Flaherty	John	2, 91, 92, 410, 449, 450, 540, 652, 670
Flanagan	David	650
Flemmings	Calvin	3, 646, 650
Fletcher	Laura	45, 650
Flournoy	Catherine	650
Floyd	Charles	650
Ford	Greg	287, 646, 655
Forrester	Scott	38, 45, 650
Foster	Violet	172
Fravel	Frederic	682
Frazier	Shane	3, 646, 650
Free	Dawn	650
French	George	11, 13, 16, 44, 62, 88, 110, 175, 223, 257, 305, 372, 408, 415, 450, 460, 538, 574, 599, 652, 670, 764, 777, 778
Friday	Carl	682
Fritsch	Joe	183
Froom	Sharon	644, 648, 650, 658
Fuller	Art	682
Furtransky	Pauline	208, 466, 652
Gaines	Stuart	9
Garner	David	11
Garson	Jerry	45, 48, 650, 658, 682, 693
Garthe	Laurence	703
Garza	John	141
Gaspar	Joseph	682
Gerster	Mary Ann	15, 88, 91, 257, 326, 410, 414, 450, 652, 763, 772, 801
Gilliland	Eric	197, 214, 222
Gillin	Joseph	159
Ginsburg	David	675
Girard	Erin E.	324, 325
Goldberg	Jim	682
Goldsborough	Mary Katherine	132, 650
Goldstein	Wayne	4, 18, 24, 25, 66, 126, 152, 153, 154, 155, 156, 157, 277, 278, 279, 280, 281, 282, 288, 291, 292, 293, 294, 295, 296, 297, 298, 375, 376, 377, 378, 379, 406, 407, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 640, 641, 642, 643, 793
Gonzales	Raul	309, 652
Goodman	Joni	11, 13, 305, 450, 652, 709, 801

Citizens

Name		Comment Numbers
Gordon	Arnold B.	4, 7, 11, 12, 13, 14, 15, 35, 682, 693, 703, 704, 705, 706, 707, 708, 798, 799
Gould	Robert	650
Grabowski	Beatrice	11, 93, 289, 447
Gradishar	Daniel	3, 38, 646, 650
Graybeal	Benjamin	10, 185, 199, 209, 210, 211, 212, 312, 567, 585, 589, 590, 591, 592, 593, 594, 596, 601, 604, 605, 606, 607, 701, 702
Graybeal	Christy	10, 185, 199, 209, 210, 211, 212, 312, 567, 585, 589, 590, 591, 592, 593, 594, 596, 601, 604, 605, 606, 607, 701, 702
Greene	Elizabeth	91, 99, 114, 450, 460, 540
Gross	James	682, 685, 694
Grow	Robert	3, 650
Grundy	Ken	38, 45, 650
Guldin	Bob	11
Gupta	Sunil	132
Habib	Donald	682
Hacker	David	58, 257, 304, 398, 450, 467, 652, 670, 691, 759, 778
Hackman	Robert	646, 650
Hagood	Susan	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Hall	Chris	682
Hall	David	682
Hall	Jeffrey	258, 259, 455
Hallberg	Paula Jean	1, 11, 12, 13, 304, 305, 540, 652, 670, 703, 704, 764, 774, 783, 798
Hamilton	John R.	682
Hanlon	Kathleen	11, 12, 13, 703, 704, 798
Hannett	Rose	287, 650, 655
Hantman	Isaac	38, 178, 306, 650, 658, 682, 769
Harper	David	650
Harper	M. Glen	169
Harrington	Nathan	11
Harris	Carol	38, 646, 650
Harris	Pat	3, 50, 51, 165, 463, 464, 646, 650, 775
Harris	Robert R.	144, 608, 787
Hartmann	Judith	801, 839
Harvey	Scott	682
Hasty	Jo Ann	91, 409, 768
Hathway	Charles	650

Citizens

Name		Comment Numbers
Havenner	Craig	3, 650
He	Janet	652
Heald	Chris	650
Heavner	Brad	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Hee Chung	Jeanna Maria	682
Heller	John	38, 646, 650
Henger	Jerry	760, 761
Henn	Carl	44, 84, 85, 86, 88, 89, 269, 285, 475, 538, 539, 540, 541, 748, 774
Hennessey	Bill	40, 45, 165, 258, 287, 411, 455, 646, 650, 653, 655, 658
Henry	Brian	4, 5, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799, 800, 822
Hepner	Ruth	11, 93, 99, 111, 256, 257, 382, 408, 447, 450, 461, 466, 574, 764, 777, 778, 779, 801
Herrmann	Stan	94, 112, 650, 780
Hess	Catherine	93, 305, 763
Heupel	Jerry	12, 13, 15, 26, 27, 37, 52, 61, 62, 128, 263, 276, 305, 331, 466, 493, 501, 502, 503, 504, 545, 611, 670, 703, 714, 715, 763, 790, 798
Hill	Mary Christina	650
Hilton	Suzanne	45, 456
Hislop	Nancy	683
Hogentogler	Wesley	680
Holmes	Brian	39, 258, 653
Holmes	Karen	4, 7, 11, 12, 15, 703, 798
Holt	Joanna	467
Holt	Regina	91, 257, 449, 450, 497, 652, 763, 794
Holt, Jr.	Forrest	682
Holtz	Lisa	652
Holtz	Randall	670
Horner	Amy L.	786
Howard	William	356, 357, 619, 652
Howlin	Judy	46, 588, 650, 654
Hritsik	Chris	3, 38, 646, 650
Hsieh	Carl	11
Hsieh	Lydia	11, 693
Huber	Katherine	652
Huggins	Harold	45, 165, 258, 287, 411, 455, 646, 650, 655, 658
Hughes	Jim	28, 42, 380, 657, 666, 782

Citizens

Name		Comment Numbers
Hussain	Shahid	682
Hustler	Kimberly	456, 650
Imlay	Marc	7, 13, 22, 23, 76, 77, 78, 79, 80, 81, 82, 83, 170, 229, 299, 313, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 553, 554, 568, 571, 572, 573, 581, 582, 617, 618, 619, 620, 621, 622, 623, 624, 625, 631, 632, 662
Ingham	Ken	11, 12
Israel	Stephen	100
Jacobs	Joseph	38, 650
Jacobs	William	772, 782
Jaffe	Matt	682
Jakubowski	Steve	305, 540, 652, 778
James	Tim	97, 98, 305
Janowski	Kenneth	650
Jarrett-Thorpe	Tim	174
Jarvis	Janis	110, 408, 410, 460, 461, 462, 652, 670, 774
Jefferies	Jeff	38, 650
Jenerick	Chris	682, 693
Jepson	Robert	3, 38, 45
Joeckel	Jeff	413, 460, 540, 774
Johnson	Betsy	4, 7, 11, 12, 13, 14, 15, 18, 19, 20, 21, 35, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 223, 224, 225, 237, 261, 262, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 667, 668, 703, 704, 705, 706, 707, 708, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 798, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Johnson	Erin	11, 13, 798
Jolly	Paul	184, 650
Jones	Petronella	214, 236, 237, 245, 246, 247, 248, 249, 250, 251
Jordon	Robert	744

Citizens

Name		Comment Numbers
Karapanos	Vassilios	11
Karasik	Vladimir	448, 650
Karim	Ahmad	45, 165, 411
Keating	Michael	11
Keener	Richard B.	682
Kent	Dorothy	4, 7, 10, 11, 12, 15, 24, 185, 199, 200, 201, 202, 205, 209, 210, 211, 212, 231, 232, 312, 313, 374, 399, 408, 410, 567, 585, 589, 590, 591, 592, 593, 594, 595, 596, 599, 601, 604, 605, 606, 607, 652, 701, 702, 703, 798
Kester	Tobi	45, 650
Key	Pamela	287, 646, 658
Khashan	Ahmad	45, 650
Kibbe	Donna	4, 7, 11, 12, 15, 703, 798
Kibbe	Martin	4, 7, 11, 12, 15, 703, 798
Kim	Stella	458, 650
Kimber	Beth	165, 258, 259, 287, 411, 455, 646, 653, 655
King	Dora	592, 594, 595, 597
Kirkpatrick	Jennifer	258
Klebanoff	Mark	650
Klein	Miriam	12, 91, 132, 450, 586
Kluckhuhn	Dan	656
Koh	Eddie	3, 650
Kosian	Bruce	4, 7, 10, 11, 12, 15, 185, 199, 209, 210, 211, 212, 312, 567, 585, 589, 590, 591, 592, 593, 594, 596, 601, 604, 605, 606, 607, 701, 702, 703, 798
Kosian	Dorothy	4, 7, 10, 11, 12, 13, 14, 15, 35, 185, 199, 209, 210, 211, 212, 312, 567, 585, 589, 590, 591, 592, 593, 594, 596, 601, 604, 605, 606, 607, 701, 702, 703, 704, 705, 706, 707, 708, 798, 799
Kosogof	John	97, 98, 99, 410, 540, 585, 652, 764
Kostyk	James	38, 448, 650
Kozlosky	Lewis	91, 305, 309, 372, 609
Kramer	John	24, 143
Kraus	John	650
Krebs	Robert	682
Kroll	Edith	107, 652, 670, 781
Kryda	Johanna	682
Kutkat	Scott	453
Kwan	Quon Y.	24, 72, 84, 91, 150, 151, 233, 262, 271, 272, 273, 274, 275, 300, 409, 418, 476, 492, 493, 494, 495, 496, 556, 557, 790,

Citizens

Name		Comment Numbers
		791
Labuda	Pat	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Lackman	Frank	650, 655
Lam	Monica	89, 410, 450, 587, 670
Lamari	Cary	15, 94, 372, 408, 718, 774
Land	Robert	38, 650
Lanigan	Thomas	68, 650
Lapinski	Charles	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Larson	Amber	650
Lashmitt	Floyd R.	4, 7, 10, 11, 12, 15, 185, 199, 209, 210, 211, 212, 312, 567, 585, 589, 590, 591, 592, 593, 594, 596, 601, 604, 605, 606, 607, 701, 702, 703, 798
Latt	Alan	11
Lawrence	Grover	650
Leatham	Erica A.	144
Lebbin	Roger	646
Lee	Peter	214, 236, 237, 245, 246, 247, 248, 249, 250, 251
Leea	Louise	91, 187, 542, 586, 652
Leitner	Stephen	656
Lennon	Ethel	141
Levy-Stutsky	Judy	97, 176, 592
Lewis	David	4, 12, 44, 84, 89, 91, 93, 107, 304, 305, 372, 408, 478, 565, 574, 652, 712, 763, 764, 772, 774
Lewis	Elliot	38, 650
Lewis	Tara	4, 12, 44, 84, 89, 91, 93, 107, 304, 305, 372, 408, 478, 565, 574, 652, 712, 763, 764, 772, 774
Lichty	Judy	48, 650
Lindstrom	Pamela	30, 53, 56, 58, 59, 60, 115, 118, 119, 126, 129, 163, 164, 482, 483, 484, 485, 486, 489, 518, 519, 520, 521, 522
Liu	Judie	38, 650
Lohse	Pia	91, 113, 171, 542
Loomis	Tom	682
Lopes	Rocky	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Lorber	Steven	652
Loring	Leta	652, 670
Loss	Roderick J.	4, 7, 11, 12, 15, 703, 798
Lovaas	Deron	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708,

Citizens

Name		Comment Numbers
		798, 799
Lowerre	Jim	682
Lubbers	Larry	682
Lunenfeld	Caroline	453
Luskin	David	283, 284
Lyles	Garry	682, 693
Lyons	John	4, 7, 11, 12, 13, 14, 15, 35, 91, 93, 98, 110, 143, 175, 208, 243, 257, 303, 305, 410, 447, 450, 460, 466, 467, 470, 472, 478, 540, 574, 652, 670, 703, 704, 705, 706, 707, 708, 763, 764, 777, 778, 779, 798, 799
MacArthur	John	682
MacIntyre	Carol	459
MacIntyre	Donald	459
Mackiernan	Gail	1, 309, 652
Macleod	Doug	646
Maestri	George	38, 47, 646, 655
Maier	Charles	38, 650
Maier	Kathleen	38, 258, 650
Mallios	Peter	45, 165, 411
Mann	Steve	160, 411, 459, 470, 523, 650
Manzo	John	175, 305, 410, 450, 801
Manzo	Kathleen	91, 305, 450, 652, 763
Marcus	Martin	682
Marsh	Mary P.	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Matala	John	11, 585, 586, 709, 759
Matala	Myrlene	11, 87, 93, 175, 252, 450, 586, 595, 709, 759
Mattey	Bob	47, 650
Mazelis	Joel	4, 7, 11, 12, 13, 14, 15, 35, 682, 693, 703, 704, 705, 706, 707, 708, 798, 799
McBeth	Kathe	11, 13, 540, 542, 798
McBeth	Mark	11
McElroy	Kathleen	650
McGowan	John	650
McGuckian	Eileen	73, 74, 189, 190, 235, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739
McKenna	Connie	253
McMahon	George	682
McNeill	Don	682

Citizens

Name		Comment Numbers
McNeilly	Bernard	682, 693
Medina	Barbara	7, 408, 466, 772, 798
Menkis	Sid	650, 658
Mesnard	Ronald	11
Meszaros	Michael	100, 466, 650
Metcalf	Roger	4, 5, 7, 11, 12, 13, 15, 703, 798, 799
Meyer	Janet	456
Meyers	Richard V.	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Michaels	Andrew	3, 50, 51, 165, 463, 464, 646, 650, 775
Michaels	David	3, 50, 51, 165, 463, 464, 646, 650, 775
Michaels	Isabel	3, 50, 165, 463, 646, 650, 775
Migdall	Alan	213
Millenson	Janet	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Miller	Kris	650
Miller	Mark	4, 12, 132, 148, 305, 410, 450, 652, 688, 764, 783
Minar	Maxine	91, 257, 682, 764
Mink	Stacey	178, 186, 197, 214, 228, 236, 237, 238, 239, 240
Moats	Peggy	105
Mobley	Diane	682
Mol	Laura	687
Moneyhun	Jeanne	456, 650
Montgomery	Deborah	692
Moore	Carole	652
Moran	Sandra	4, 169, 304, 305, 764
Morgan	Geoffrey	650, 653, 655
Moriarity	Chris	700
Moroney	William	38, 45, 464, 650
Morris	Joseph A.	682, 693
Morrison	Amy	682
Morrison	Jon	214, 226, 227, 228, 236, 237, 245, 246, 247, 248, 249, 250, 251
Moyer	Ernest	311, 652
Mullen	Harry	682
Munzer	Alfred	411, 650
Murphy	Bill	38, 45, 650
Murphy	Joan	38, 650
Murphy	Liza	173

Citizens

Name		Comment Numbers
Nahay	Paul	304, 452, 652, 670
Nathanson	Allan	682
Neel	Robert	682
Nelson	Elisabeth	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Neumann	Ed	682, 693
Newhouse	Bill	11
Nicholson	Errol	650
Nicholson	Paul	650
Niksich	Tracy	650
Nokkeo	Jay	646, 650
North	Marc P.	1, 175, 652, 670
Núñez	David	1, 16, 109, 181, 289, 304, 305, 309, 310, 410, 447, 460, 461, 610, 652, 761, 763, 764, 772, 774, 779, 783
Ober	Andrew	657
Oberg	Jon	86, 91, 286, 289, 450, 652, 670
O'Bryan	David	3, 45, 258, 650
O'Connor	Harriet	102, 132, 286, 447, 763, 777, 778
O'Keiff	Donna	143
Orski	Ken	650
Owen	Kevin	305, 450, 652, 763
Owrutsky	Jeff	801, 805, 806, 807
Pagano	Augusto	682, 693
Pais	Daniel	677, 678, 679
Palleschi	Garry	3, 38, 646, 650
Parambil	Joseph	1, 93, 452, 540, 652, 670
Pardo	Katherine W.	133, 134, 451
Parilo	Chris	38, 47
Park	Sangkyun	682, 693
Parker	Marie	107, 308
Parkhurst	Sharon	682
Parks, Jr.	Robert C.	626
Parnes	Jeffrey	3, 38, 646, 650, 712
Parrish	John	4, 7, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 35, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 76, 77, 78, 79, 80, 81, 82, 83, 115, 163, 164, 167, 168, 170, 223, 224, 225, 229, 237, 261, 262, 299, 313, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420,

Citizens

Name		Comment Numbers
		421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 553, 554, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 571, 572, 573, 578, 581, 582, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 629, 630, 631, 632, 662, 667, 668, 703, 704, 705, 706, 707, 708, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 798, 799, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821
Parsons	Richard	682
Partington	Leigh	132, 304, 305, 452, 540, 764
Pataquiva	Mario	650
Patel	Sunil	682, 693
Patton	Geoffrey	417, 801
Pauley	Joseph	38, 45, 650
Payne	David	140
Peck	Roy	162, 208, 316, 317, 470, 471, 762
Pegram	Karen	650
Peiperl	Maury	11
Pelish	Ann	289
Penn	Marcus	182
Perlmutter	Andrew	171
Peterman	Jeff	682
Petrides	Bette	1, 13, 110, 305, 450, 652, 763
Philipson	Selma	650
Phillips	Chris and Susan	11, 12
Pittleman	Karen	4, 11, 305, 450, 570, 652, 676, 704, 768, 798
Plante	Jake	11, 12, 13, 802
Plaut	Roger	4, 5, 7, 11, 12, 13, 14, 15, 35, 84, 215, 220, 230, 263, 264, 265, 266, 267, 268, 491, 587, 703, 704, 705, 706, 707, 708, 711, 795, 798, 799, 848, 849, 850, 851, 852
Polglase	Chris	682
Polisar	Barry Louis	656
Polk	Linda	38, 45, 650
Polk	Linda A.	305, 542, 652
Pollock	Michael	682, 693
Polyak	Elena	45, 165, 411

Citizens

Name		Comment Numbers
Poppe	William L.	682, 693
Powell	Jane and David	11
Price	Roseanne	7, 13
Price	S. Gregory	11, 12, 44, 91, 305, 409, 413, 540, 652
Prindle	Susannah F.	305, 318, 447, 652, 763
Priovolos	Evangelo	682
Pulliam	Fred	38, 650
Purcell	Patricia	14, 741, 781
Quinn	James	682
Rafats	E. Linda	693
Rafats	Jerry	693
Rager	Roger	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Rauser	Walter H.	682
Reid	Ken	3, 45, 165, 650, 656, 658
Reinheimer	Elizabeth	45, 650
Reinheimer	Tom	38, 106, 650, 682
Reitzel	Todd	11
Remondini	Earnestine M.	84, 305, 449, 452, 542, 652, 670, 763
Remondini	David J.	84, 305, 449, 452, 542, 652, 670, 763
Replogle	Michael	4, 5, 7, 11, 12, 13, 14, 15, 18, 19, 20, 21, 35, 36, 42, 52, 53, 54, 55, 56, 57, 58, 59, 60, 75, 115, 163, 164, 167, 168, 223, 224, 225, 237, 261, 262, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 384, 385, 386, 387, 388, 389, 390, 391, 397, 416, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 547, 548, 549, 550, 551, 552, 558, 559, 560, 561, 562, 563, 564, 565, 567, 568, 570, 572, 578, 610, 611, 612, 613, 614, 615, 616, 629, 630, 631, 667, 668, 690, 703, 704, 705, 706, 707, 708, 710, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 796, 798, 799, 800, 803, 804, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895,

Citizens

Name		Comment Numbers
		896, 897, 898, 899, 900, 901, 902, 903, 904
Rhoads	David	132, 650
Riahi	Hamid	3, 45, 650
Richards	Marjorie	91, 110, 305, 652
Rigby	Pete	3, 646, 650
Riggs	James	3, 38, 646, 650
Rivera	Carlos	38, 45, 650
Rivkin	Malcolm	51, 650
Robbins	Joe	1, 409, 452, 670
Robbins	Louis	3, 38, 100, 106, 646
Roberts	B.	764
Roberts	LeeAnne	132
Robertson	William	45, 456, 650, 655
Robinowitz	Mark	7, 17, 29, 42, 43, 44, 52, 57, 67, 71, 147, 183, 184, 216, 217, 218, 219, 220, 286, 304, 305, 319, 320, 321, 322, 323, 415, 466, 472, 473, 474, 487, 538, 542, 545, 546, 568, 569, 575, 576, 577, 609, 627, 628, 636, 637, 638, 645, 652, 660, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 745, 746, 747, 764, 772, 783, 784
Robinson	Carlton	145, 166, 186, 314, 468, 469, 566, 589, 650
Rochester	Stuart	116, 663, 664, 665, 671, 672
Rodgers	Steve	646, 650
Rodrigues	Dennis	84, 86, 652, 682, 763
Rodriguez	Alonso	45, 453, 455, 650
Rosenberg	Allan	764, 772
Rossman	Lauren	38, 45, 650
Roth	James	305
Rucker	William	3, 38, 646, 650
Russell	Donald	45, 456, 650
Rutstein	Diana	657
Ryan	W. Kelly	682
Sabatini	Jeff	682, 693
Sachs	Fran	45
Saladino	Franco	742
Saltz	Ethel	693
Sanchez-Ordonz	Daniel	682, 693
Sanjeev	M.	130, 650
Sapper	Jacqui	4, 13, 798

Citizens

Name		Comment Numbers
Sarkissian	Patty	45, 650
Sarkissian	Sarkis	682, 693
Sattler	Carol	459
Scharman	Barbara	11
Schmidt-Perkins	Dru	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Schneider	James	682
Schoeny	Joni	305, 410, 652, 801
Schwartz	Stewart	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Schwarz	Kurt	408, 450, 475, 540, 542, 768, 801
Schweitzer	Pam	45, 650, 654
Scott	Ursula	11, 90, 91, 408, 447, 652, 763, 799, 801
Scott	Walter	19, 25, 42, 56, 63, 64, 65, 84, 88, 97, 118, 119, 120, 121, 122, 123, 124, 125, 126, 164, 447, 461, 491, 497, 498, 499, 500, 501, 748, 749, 778
Searle	Geoff	682
Sears	Barbara A.	324, 325
Sedlak	Andrea J.	11, 414, 798
Serafinas	Nelly	45
Shaddinger	Dawn	174
Shaffer	Fred	194, 195, 196, 197
Shah	Pinak	693
Shaifq	Babar	656
Sheehan	Frank	4
Shepherdson	Mary	652
Sherman	John	11, 12, 13, 703, 704, 798
Sherman	Lois	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Shirley	Dennis	4, 7, 11, 12, 15, 703, 798
Shirley	Kevin	45, 165, 411, 653
Shirley	Linda	4, 7, 11, 12, 15, 703, 798
Shirven	Mary Ann	1, 131, 140, 176, 202, 216, 383, 408, 410, 415, 506, 524, 543, 553, 595, 603, 609, 652, 670, 772, 801
Shneyer	David	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Shorb	John	650
Shults	William	47, 411, 650
Sievers	John	682
Signore	Martin	38

Citizens

Name		Comment Numbers
Simms, Jr.	George	305, 307, 452, 540, 652
Simpson	Gary	686
Simpson	Stephen L.	24, 25, 42, 53, 56, 748
Sindoris	Arthur	103
Skilling	Josette	682
Smith	Dan	356, 357, 619, 652
Smith	Greg	4, 7, 11, 12, 13, 14, 15, 35, 688, 689, 698, 703, 704, 705, 706, 707, 708, 717, 798, 799
Smith	James	650
Smith-Tornberg	Ina	650
Soeken	Don	132, 133, 773
Sollner-Webb	Barbara	4, 7, 11, 12, 13, 14, 15, 24, 35, 58, 127, 397, 400, 401, 474, 703, 704, 705, 706, 707, 708, 713, 716, 792, 798, 799
Solomon	Shoba	650
Solomon	Steven	38, 68, 411, 646, 655
Sommers	Laura	650
Sommers	Paul	650
Spano	Elizabeth	38, 412, 588, 646, 650
Spicer	Rob	39, 650
Springer	Jeff	214, 236, 237, 245, 246, 247, 248, 249, 250, 251
Staa	Denise	658
Stake	Jeniffer	693, 695
Stalvey	Heather	650
Stansfield	Charles	650
Stegman	Steve	38, 258, 448, 454
Stein	Steven	107, 257, 688, 764
Stickle	Marsha	11, 13, 16, 44, 62, 88, 110, 175, 223, 257, 305, 372, 408, 415, 450, 460, 538, 574, 599, 652, 670, 764, 777, 778
Stiehl	Jill	682
Stone	Robert	45
Stovall	Trish	458, 650
Sukumar	Mike	650
Suntum	Joseph	682, 693
Suzich	Christopher	91, 305, 450, 542
Swab, Jr.	William K.	38, 650
Swaminathan	Govindan	682, 693
Sweet	James	38, 45, 650
Szot	Stephen	647

Citizens

Name		Comment Numbers
Talbott	Craig	3, 45, 312, 650, 655
Tan	Denis	45
Taniuchi	Erie	682
Tanna	Peter	682, 693
Tawney	Timothy	110, 132, 447, 467, 652
Tedeschi	Valeria	45, 411, 653
Telesco	John	682
Terry	Maria	682, 693
Thacher	Judy	4, 7, 11, 12, 13, 14, 15, 35, 703, 704, 705, 706, 707, 708, 798, 799
Thomas	Patricia	11, 69, 91, 110, 175, 372, 408, 410, 450, 540, 652, 670, 763, 801
Thomas	William J.	682
Thorn	William	104, 136, 770, 771
Titus	Jim	214, 236, 237, 244, 245, 246, 247, 248, 249, 250, 251
Tomlinson	Jane	91, 254, 304
Townsend, II	John B.	45, 455, 464, 490, 646, 649, 650, 655
Trader	James R.	70, 188, 189, 190, 191, 192, 193, 290, 635
Tran	M.V.	411, 458, 646, 650
Trapani	Joseph	38
Triau	Michael	765
Tsitos	John	3, 646, 650
Turpin	John	693
Tutt	Patricia	650, 655
Tworkowski	Robert	682, 693
Tyldesley	Russell	96, 286, 410, 540, 670, 767
Uman	Myron	682
Unterberg	G.	650
Updike	Carl	62, 86, 117, 540, 555, 789
Vaias	Emily J.	579, 580
Valluripalli	Jayaparada Devi	141, 180, 661
Valluripalli	Koteswara Rao	141, 180, 661
Van Winkle	Steve	183, 184, 213, 222, 656
Vance	Alan	91, 450, 467, 585, 774
Vidangos	Henry	287, 646, 655, 658
Vucich	Patricia	652
Wagner	Fred	682, 693
Walker	Chris	38, 650
Wallace	Dan	4, 7, 11, 12, 13, 14, 15, 35, 682, 703, 704, 705, 706, 707,

Citizens

Name		Comment Numbers
		708, 798, 799
Walsh	Barnaby	657
Walsh	Daniel	38, 646, 650, 748
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Chapter S: Summary

Chapter S.D. Initiation of Current Study

1 The State is not truly concerned about the environment.

The Maryland State Highway Administration's (SHA) policy is to meet or exceed all applicable environmental laws and regulations. To that end, we incorporate environmental protection measures into all of our activities from the planning, to the construction, to the maintenance of our facilities. We are confident that our comprehensive and progressive environmental activities and programs are among the best in the country.

2 The environmental impact study was biased.

Throughout this study process, the Lead Agencies have taken an unbiased approach to the development of the project and alternatives in accordance with the National Environmental Policy Act (NEPA) and associated regulatory requirements. The study approach was agreed upon by the federal and state regulatory agencies that we coordinate with on a regular basis. The Lead Agencies are committed to maintaining an impartial NEPA process.

3 The FEIS is sufficient.

Thank you for your comment.

4 Extend comment period so that the FEIS and technical reports can be thoroughly analyzed. SHA experts had over a year to prepare these documents and many of the citizens reviewing them have full time jobs and family obligations.

In response to a number of requests we extended the review period for the FEIS. The FEIS was available for public review until April 11, 2006. The project sponsors and the Federal Highway Administration (FHWA) considered comments received during the review period prior to issuance of the Record of Decision (ROD).

5 Request that PDF files on the CD's be "unlocked" to allow the reviewers to highlight text or extract text or graphics.

All CDs that have been provided to the public by SHA contain "read-only" files. Files that can be edited are not available for distribution. The files, however, are designed to be searchable. As set forth in public notices and on the ICC website, hard copies of the entire document or any one volume are also available for viewing or purchase.

6 The Prince George's County Council invites the ICC study team to participate in staff work sessions to review the environmental documents.

Thank you for your comment.

7 Responses to comments on the DEIS did not match the comments that were submitted.

There was an error in printing Appendix R-7, index of Public Commenters, which is part of Volume 3 of 3 of the FEIS. Therefore, SHA sent a replacement CD that contains a new Appendix R-7 to the project mailing list. The errors in Appendix R-7 were limited to the Index of the public comments submitted on the Draft Environmental Impact Statement/ Draft Section 4(f) Evaluation (DEIS). The actual substantive comments and responses did not contain errors. The corrections to Appendix R-7, Index of Public Commenters, were published on the ICC Website on March 5, 2006 and copies were sent to the ICC mailing list on March 6, 2006. The index was included in Appendix R to enable public commenters to find their own comments and responses

more easily (some commenters had only one comment while others had more). While it may have been more difficult to find a particular comment and response prior to March 6, the errors were corrected with enough time for public commenters to locate their comments, if they had not done so already. The public comments and responses are not random. Instead, the comments and responses were grouped by topic, and logically organized to track the FEIS chapter by chapter, section by section, subsection by subsection. For example, if a person had commented on the air quality discussion in the DEIS, he could easily find and review all of the comments and responses on that subject, even prior to the revised Index being issued. The text of the comments and responses as originally published did not change when the index was corrected. The public comments and agency responses appear in Appendix R-8. The remainder of Appendix R (R-1, 2, 3, 4, 5, 6, 8 and 9) was not revised.

8 The DEIS Summary section was intentionally misleading, poorly written, and longer than mandated by NEPA.

The DEIS Summary was reviewed by both the federal lead agency (FHWA) and the cooperating agencies (MDE, USACE, EPA) and signed, finding it to meet applicable standards for publication. It provides an introduction to the study and a summary of the major issues. All facts presented in the summary either provide a reference to a bibliographical resource, chapter or Technical Report if necessary. The environmental impacts are based on the level of engineering available at the time. The FEIS presents more refined environmental impact data based on engineering refinements accomplished since the DEIS publication. It is not intended to be a section to be used for all decision making.

9 How can I help?

Thank you for your comment.

10 Governor Ehrlich's press release on the ICC contains blatantly false information: The ICC's State-Preferred Corridor is not supported by any elected officials.

The Governor's Press Release does not claim support or opposition by any specific elected official or group of Maryland's elected leadership.

11 Request that the comment period for the ICC FEIS be extended to review the PM 2.5 report.

The FEIS and technical reports were posted on the project website on January 6, 2006. The first public comments were submitted and accepted the same day via an electronic comment form. However, the review period did not officially begin until January 13, 2006, when the Notice of Availability was published in the Federal Register. An initial review period of 45 days was established, but then extended twice in response to requests for time extension from elected officials and interested groups, finally closing on April 11, 2006. With the two extensions, the official review period lasted a total of 90 days – far exceeding minimum 30-day review period established by regulation. On March 24, 2006, the Joint Lead Agencies released an additional technical air quality analysis ("PM2.5 Project Level Conformity Determination") for public comments with a 15-day comment period concurrent with the Final EIS review period. In response to extension requests, the comment period for the PM2.5 Conformity Determination was extended an additional 15 days beyond the close of the Final EIS review period, ending on April 26, 2006 which provided a total comment period of 30 days.

12 The extended comment period of 70 days is still inadequate to review a document of the size and complexity of the ICC FEIS. In essence, the current fast tracked process violates the spirit and intent of NEPA and relevant regulations.

The project-level PM2.5 Conformity Determination for the Intercounty Connector (ICC) prepared

by the Maryland Department of Transportation (MDOT), SHA, Maryland Transportation Authority (MdTA), U.S. Department of Transportation (USDOT), and the FHWA was available for review and comment until April 26, 2006. Additional comments on the FEIS were also accepted until April 11, 2006 and were considered before the final decision was made on the project. With this additional opportunity to comment, the total review period was over 90 days, nearly three times the legally required 30-day period. The ROD for the project was based on the Lead Agencies' review of the FEIS and public comments made during the review period.

13 SHA has acknowledged two major flaws in the FEIS, an entirely new air pollution analysis of PM 2.5 and distribution of a corrected Appendix R-7. These efforts occurred eight weeks into the comment period, which raises concern about the competence of the FEIS.

The Lead Agencies reacted immediately once learning of the mix up with Appendix R-7 by mailing a revised Volume III CD to everyone who provided comments on the DEIS and by ensuring the website and public repositories had the corrected version. Appendix R-7 is the look up table for the comments and all of the comments and responses included in the FEIS Appendix R were published correctly.

The FEIS did not include the analysis of PM 2.5 because the requirement and suggested methodology for such a study was not available. The US Environmental Protection Agency (EPA) didn't publish the requirement and suggested methodology until March 2006, while the FEIS was published in January 2006. However, the Lead Agencies reacted immediately as the EPA ruling was published and conducted the studies and made them available for public review.

14 What steps are SHA taking to ensure that the FEIS contains no other errors, such as the omission of pages from Volume 2 and the printing error in Appendix R-7?

The Lead Agencies conducted a thorough Quality Control check on all portions of the published FEIS. As with any document of the size and comprehensiveness of the ICC FEIS, there are still chances that small errors exist. The Appendix R-7 error was made during the final production and printing and was quickly remedied.

15 The errors and deficiencies in the FEIS have arisen in substantial part from an expedited process driven by political pressure.

This analysis of the ICC was the most comprehensive, inclusive and thorough planning study ever conducted for this project. The project schedule never compromised any technical study or public involvement opportunity. The Lead Agencies conducted a thorough Quality Control check on all portions of the published FEIS. As with any document of the size and comprehensiveness of the FEIS, there are still chances that small errors exist. The Appendix R-7 error was made during the final production and printing and was quickly remedied.

16 By selecting Corridor 1, SHA has selected the most environmentally objectionable option, as noted by EPA in its February 25, 2005 letter, and therefore the spirit and intent of NEPA was subverted. The decision to select Corridor 1 is not supported by the FEIS.

The selection of Corridor 1 does not subvert the spirit and intent of NEPA. NEPA guides a public decision-making process, while conducting detailed engineering and environmental planning studies. The NEPA process does not dictate that a certain solution be reached. The FEIS includes a full range of issues which thoroughly describes impacts and addressees comments from EPA and other agencies in support of its decision of Corridor 1. The process is conducted by balancing a variety of issues, not solely based on the EPA analysis.

17 FHWA, the State and the County should not propose building a highway over the objections of Prince George's County.

While the opinions of the Prince George's County Council, through resolution, has been

thoroughly considered and documented, many other local, state, and federal elected officials who represent Prince George's County, including the County Executive do support the construction of the ICC.

18 **Most of the deficiencies noted in the DEIS comments remain unaddressed by the FEIS. With respect to the hundreds of pages of detailed criticism of the DEIS submitted by the signatories of this letter and others, the Lead Agencies have conducted or referenced some additional studies and modeling and have included some additional analyses in the FEIS. These studies fail to resolve serious deficiencies in the analysis of environmental impacts, transportation modeling, and other critical areas of concern. This is because these studies, modeling runs, and analyses are incomplete, inconsistent, and themselves so flawed as to offer little to no improvement over the information provided in the DEIS.**

As a matter of law, this document is not sufficient to either inform the public or provide the crucial information on impacts and alternatives necessary for sound decision-making – essential functions of an environmental impact statement. There are too many lingering and newly identified deficiencies, too many missing or incomplete analyses, and too many unsupported or deficient assertions, to meet the government's obligations under NEPA, Section 4(f), or related implementing regulations. Lacking substantial further study, modeling, analysis, and consideration by the Lead Agencies – in the form of a supplemental EIS – this fatally flawed product is a legally insufficient foundation upon which to base the government's decision to construct the ICC.

The FEIS complies with all applicable standards for legal sufficiency established under NEPA and the implementing regulations of both the Council on Environmental Quality and FHWA's own NEPA regulations. In addition, the FEIS satisfies all obligations under Section 4(f) of the Transportation Act and Section 109 of the Federal-Aid Highway Act. This comment raises general criticisms of the NEPA process for the ICC project. Where more specific questions or concerns were raised in FEIS comments, the agency has provided more detailed responses.

19 **FEIS falls far short of meeting clearly established standards of adequacy under the National Environmental Policy Act ("NEPA"). The document ignores implementing regulations of the Council on Environmental Quality ("CEQ"), court decisions that provide a roadmap for agency compliance with NEPA, the requirements under Section 4(f) of the Department of Transportation Act, and Section 109 of the Federal-Aid Highway Act.**

The FEIS complies with all applicable standards for legal sufficiency established under NEPA and the implementing regulations of both the Council on Environmental Quality and FHWA's own NEPA regulations. In addition, the FEIS satisfies all obligations under Section 4(f) of the Transportation Act and Section 109 of the Federal-Aid Highway Act. This comment raises general criticisms of the NEPA process for the ICC project. Where more specific questions or concerns were raised in FEIS comments, the agency has provided more detailed responses.

20 **FEIS repeatedly relies on bare assertions and unsupported assumptions for many of its major conclusions. These omissions are violations of CEQ regulation, which mandate that agencies "shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.**

The FEIS references important studies, technical reports or other key documents from the administrative record in drawing its main conclusions. Information related to the assessment of natural resources and/or socio-economic impacts is often summarized in charts or other tables for the convenience of the reader with appropriate citations. The public was given access to key technical reports and studies through the ICC web site. The FEIS also includes a complete "References" chapter with citations to other important secondary source information upon which

conclusions in the FEIS were based.

21 **Only the individual names of the DEIS comment signatories on behalf of these organizations, Lee Epstein and Neal Fitzpatrick, are listed. Even in the revised Appendix R-7, Neal Fitzpatrick's affiliation is still missing. Further, although Chesapeake Bay Foundation and Audubon Naturalist Society submitted one set of comments, in a single document, the comments attributed to Mr. Epstein and Mr. Fitzpatrick in Appendix R-7 are inconsistent: only 12 comment codes are attributed to Mr. Epstein, whereas 197 comment codes are attributed to Mr. Fitzpatrick. This discrepancy still exists in the allegedly revised Appendix and creates serious questions about the accuracy of the responses, the accuracy of the entire appendix, and indeed the public participation process itself.**

Typically for letters that contained multiple signatories, only the first signatory listed was indexed in Appendix R. For comments on the FEIS, all signatories have been indexed.

22 **We have pointed out, in detail, numerous errors, inadequacies, and inaccuracies in the main body of the FEIS. Although some changes were made in the main (three volume) body of the FEIS in response to our DEIS comments, we must point out that no changes at all were made to the text of the Natural Environmental Technical Report (NETR) since it was released in November 2005. The NETR of the FEIS is exactly the same as the DEIS except for a few separate additional studies related to the Paint Branch and Patuxent watersheds. Therefore, the FEIS is fundamentally flawed because the NETR, which is meant to provide the technical support for the text in the main body of the FEIS, does not reflect the changes to the main three volume FEIS.**

The FEIS has served as an update to the Natural Environmental Technical Report (NETR). Key natural environmental sections were updated throughout the FEIS process. An addendum to the NETR included the reservoir study which is referred to as" Comparative Water Resources Hazard Assessment."

23 **Page V-5. The text on page V-5 states "the concept of an outer beltway was dropped in approximately 1971." However, the text on page S-4 states "The concept of an outer beltway was dropped from planning documents in 1968..." Page 1-3 of Volume 1 of the 1997 DEIS states "In 1975, the concept of an outer beltway was dropped." In Attachment "U" of our DEIS comments, we offered documents that show the outer beltway was considered as late as 1980. The FEIS contains conflicting statements, bringing into question the truthfulness and accuracy of the document. These issues were raised in our comments on the DEIS and were not addressed in any way. Was the outer beltway concept dropped from planning documents? If so, when, what year?**

The Lead Agencies apologize for the confusion that may have been created by the multiple references to the Outer Beltway Plans. There have been many studies of various names that some have associated with the concept of the Outer Beltway. The master plans shifted the alignment north from Rockville to Gaithersburg in 1973, but yet studies continued for various segments of what some still referred to as the Outer Beltway. These studies continued in various forms through the 1970s, yet the plans for an Outer Beltway were abandoned as part of the Counties' General and Master plans by the early 1980s.

24 **Citizens who commented on the FEIS could not find their names in the list of commenters in Appendix R-7 or found comments that were not correctly attributed to their names This implies that not all substantive comments were addressed in the FEIS, as required by NEPA, 40 CFR 1503.4 (b).**

We apologize that your name was omitted from Appendix R-7. However, your comments were considered during the decision making process, because many other stakeholders provided the same comment. Please refer to Appendix R-6, Section I, the Lead Agency's response to "The

Purpose and Need was Drafted too Narrowly."

25 A supplemental EIS is needed to prepare a new broader Purpose and Need Statement and thus a full range of reasonable alternatives.

The Lead Agencies do not believe a Supplemental Draft Environmental Impact Statement (SDEIS) is needed. Title 23 CFR, Section 771.130, Supplemental Environmental Impact Statements (SEIS) states that an EIS shall be supplemented whenever the Administration determines that changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or new information or circumstances relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. For this project, none of these conditions currently exist, and therefore, an SDEIS is not warranted.

26 The state should have updated all of its data in the FEIS and not just used a "gap analysis" to update the information supporting the ICC. Page S-11 of the FEIS indicates that the current study still applies information from the 1997 ICC study and that the current study only filled in gaps to the extent required by new regulatory requirements and procedures. This means that much of the information in the FEIS is at least 9 years old, dating back to the information prepared for the 1997 study.

The gap analysis was conducted by the Lead Agencies and reviewed by the resource agencies at the beginning of the study and not just prior to the FEIS. In some cases the team found that the information collected and used in previous ICC studies was still valid and could be utilized for this study. In most cases, technical studies, such as travel demand forecasts, wetland and stream surveys and other technical evaluations were redone.

27 The FEIS should be written in plain English so the residents of the ICC study area who will be adversely affected by Corridor 1 can understand it.

The Lead Agencies worked very hard to write the FEIS in plain English, outlining the definitions for technical terms and reducing the number of undefined abbreviations and acronyms. The FEIS has been reviewed by hundreds, if not thousands of people. The Lead Agencies have received nearly 10,000 individual comments and very few have indicated an inability to understand the reports.

28 The Patuxent Watershed Protective Association still holds that the DEIS was generated by a process seriously flawed in the way it was structured and applied, staffed, implemented, and presented. This conclusion is based, in part, upon the Lead Agencies responses to PWPA's PIA requests, including that in spite of the cost and complexity of the ICC Project, a newly invented, schedule driven, and totally untested process; and the potential impact to citizens, communities and the environment. The ICC project was apparently neither scheduled for nor subjected to independent audit. The methodology by which the ICC project is being documented raises serious questions of its ability to support ICC project deliberations or to supply an adequate audit trail. There are serious questions of conflict of interest and impropriety, as determined by a review of meeting summaries.

The Lead Agencies developed and implemented a thoughtful, structured and comprehensive planning process built upon the well established NEPA and Section 404 processes. The conduct of the project was neither flawed nor improper. The team was comprised of experienced professionals, contractors and agency representatives from local, state and federal regulatory and resource agencies. The process was reviewed and approved by the FHWA, the federal lead agency. The FHWA, along with more than a dozen local, state and federal agencies have audited and participated in the process.

29 A supplemental EIS is needed to apply the 4(f) de minimis standard of SAFETEA-LU to Corridor 2 with respect to historic and park areas between MD 97 and I-95.

A Supplemental EIS and Section 4(f) Evaluation is not needed. Findings of de minimis impact were not required to be made for this project, and if they had formally been made, they would not have changed the outcome of the Section 4(f) evaluation. The authority to make a "de minimis impact" finding under Section 4(f) was established in SAFETEA-LU. FHWA issued guidance for this provision of SAFETEA-LU on December 13, 2005, just a few weeks before the ICC FEIS was issued. With regard to ongoing projects, the guidance said that the decision about whether to apply the de minimis impact criteria "is a matter of agency choice and professional judgment." The guidance lists several factors that can be considered in making the decision, including the stage of NEPA process. Based on that guidance, in particular the advanced stage of the ICC NEPA process, FHWA decided to proceed with a traditional Section 4(f) evaluation for this project. This approach is fully consistent with the December 13, 2005 guidance.

While the FEIS did not include proposed de minimis impact findings, FHWA has considered the potential application of this provision to the ICC build alternatives. The following general conclusions have been reached:

1) The historic resources used by Corridor 2 would not qualify for a finding of de minimis impact, because findings of "adverse effect" were made for all of those properties in the Section 106 process under the National Historic Preservation Act. Under SAFETEA-LU, the de minimis impact finding can be made for a property only if the Section 106 process results in a finding of "no adverse effect" for that property.

2) Many, and possibly all of the parkland resources used by Corridors 1 and 2 may have qualified for finding of de minimis impact. Under SAFETEA-LU, a finding of de minimis impact must take into account any mitigation or enhancement measures that are incorporated into the project. For the ICC, both of the build alternatives included commitments to provide replacement parkland that far exceeds the acreage of the parkland that would be acquired; this mitigation package was carefully developed, with the concurrence of the MNCPPC as park owner, to ensure that it replaced the functions and values of each of the impacted parcels. The Section 4(f) evaluation concluded, for both build alternatives, that "the harm to parkland under each alternative would be neutralized by the proposed mitigation and, in some cases, would even improve upon the existing conditions of the resources." This finding is, in substance, equivalent to a finding that each of the parkland impacts would be de minimis.

30 The arguments in Chapter VII of the FEIS that support Corridor 1 over Corridor 2 are biased against Corridor 2 because they show small differences in benefits, choose favorable examples, and ignore measures that are unfavorable to Corridor 1.

The analysis and selection of Corridor 1 over Corridor 2 was not biased. All of the technical data, including those measures that show the two corridors performing close to one another as well as those that show a clear advantage for one over the other were all presented in the DEIS and FEIS.

31 The Sierra Club is offended that the SHA chose to close the comment period for the ICC FEIS during the week that is recognized as "holy" by the three major religions: April 11th, the birth of Mohamed; April 12th, Passover; and April 14th, Good Friday.

The Lead Agencies had extended the FEIS comment period to allow for more time to review the documentation. Although the review period ended April 11, 2006, groups and individuals had nearly 90 days to review and provide comments.

32 Many studies were performed after the DEIS and FEIS were released and many studies are still ongoing, indicating that the FEIS was not complete and was prematurely released. The ongoing studies were not made available for public comment and therefore

the public has been deprived of its right to a meaningful and substantive review of new data. The comment period should be extended or a supplemental EIS prepared to address uncertainties in the FEIS and provide this information to the public.

It is inappropriate to conduct studies after the DEIS.

It is inappropriate to conduct further studies after the FEIS.

The Lead Agencies' mitigation commitments are not valid because additional studies are needed.

Both the DEIS and FEIS were not published until the studies were completed and made available for review. All studies that were used by the Lead Agencies to reach the decision to identify Corridor 1 as the Selected Alternative have been made available for public and agency review.

It is fully consistent with NEPA and the state and federal highway development process to conduct studies between the DEIS and the FEIS; the results of all such studies have been fully discussed in the FEIS, technical reports and memoranda, and addenda. Studies were undertaken in response to comments on the DEIS from agency and citizen stakeholders. The studies did not reveal significant new impacts that would warrant the preparation of a supplemental EIS.

Likewise, it is fully consistent with NEPA and the state and federal highway development process to conduct further studies after the FEIS; in fact, it is standard practice to conduct some studies, such as additional studies of avoidance, minimization, and mitigation, through design and construction. The FEIS did not include the analysis of PM 2.5 because the requirement and suggested methodology for such a study was not available. The EPA didn't publish the requirement and suggested methodology until March 2006, while the FEIS was published in January 2006. However, the Lead Agencies reacted immediately as the EPA ruling was published and conducted the studies and made them available for public review.

The Lead Agencies' commitments are solid, as documented in the ROD as a complete summary of environmental, project design and other commitments that have been incorporated as part of the proposed action. Consistent with FHWA regulations, specific design details are often not complete at the time of publication of an FEIS. Here, the FEIS reveals in adequate detail the measures that were expected to be included as part of the final project commitments to permit adequate public review and comment. Several concurring and/or cooperating agencies also submitted comments on the FEIS concerning mitigation, design or environmental commitments that have been incorporated into the ROD. Moreover, a Memorandum of Understanding will be executed by the lead and all reviewing federal and state agencies shortly after permits for the proposed action are issued designed to lay out specifically how the agencies will monitor compliance with the extensive mitigation proposals and make necessary adjustments during construction and/or operation of the proposed facility.

33 **SHA has continued to purchase properties along the master plan alignment for decades. By purchasing existing residences along the Master Plan Alignment and tearing them down consistently over many years, the number of affected residences in the FEIS is significantly less that it otherwise would have been (Figure VII-5). This consistent preferential treatment over a period of many years results in biased numbers favoring this route, and makes an objective evaluation of alternatives difficult if not impossible. This issue was identified in our comments on the 1997 ICC study as well as in our comments on the DEIS, but the policy continues to this day.**

The difference in the number of displacements between Corridor 1 and Corridor 2 does not result from any “preferential treatment” by SHA or FHWA in the NEPA process; it is simply a reflection of the fact that Corridor 1 is consistent with the local government’s planned land use,

while Corridor 2 is inconsistent with the planned land use. It is entirely appropriate to consider displacements in weighing the relative advantages and disadvantages of these routes, because the disparity in displacements is an example – and, indeed, a consequence – of the difference between the alternatives in terms of their consistency with planned land use.

Moreover, far from showing bias against Corridor 2, SHA has gone out of its way to protect Corridor 2 from development. The alternative now known as Corridor 2 was first developed in the mid-1990s as part of a previous study; at that time, it was known as the "Northern Alternative." From that time onward, SHA has used its available corridor-preservation funds to protect lands along both Corridor 1 and Corridor 2. This balanced approach is reflected in the acreage of land acquired along each corridor: since 1998, SHA has purchased 99.5 acres along sections of the ICC that are common to both corridors; 58 acres along sections that are unique to Corridor 1; and 288 acres along sections that are unique to Corridor 2. In other words, the acreage acquired specifically for Corridor 2 in the past ten years (288 acres) is nearly five times greater than the acreage acquired specifically for Corridor 1 (58 acres) during the same period.

This balanced approach is consistent with the "Policy for Right-of-Way Acquisition During the NEPA Process for the Intercounty Connector (ICC) Project," which was adopted by SHA and the MdTA in the early stages of the current study (January 28, 2004). This policy states that "It is SHA's and MdTA's intent to use all reasonable means available to protect right-of-way from development occurring along any of the alignments of the Alternates Retained for Detailed Study."

34 The interchange where I-370 connects with I270 would be the western terminus of the ICC, which is already built. This constitutes segmentation of the project into pieces without consideration of the project as a whole.

The portion of roadway known as I-370 was studied and constructed because it provides independent utility, connecting the growing technology corridor of I-270 with a critically important multimodal METRO station at Shady Grove. Although the ICC would connect to I-370, the Lead Agencies considered a multitude of alternatives that did not connect to I-370. No further extension of the ICC beyond its current termini at I-370 and I-95/US 1 is anticipated.

Chapter S.E. Modifications to the 2004 DEIS for the 2005 FEIS

35 SHA did not highlight changes between the Draft and Final EIS, which makes it much more difficult and time consuming for reviewers to ascertain where the agencies have made changes.

The FEIS included a summary of the major additions and changes in every chapter to facilitate review.

36 In other areas, the Lead Agencies provided no further study or analysis in the FEIS in response to criticism of its models and analyses relied upon in the DEIS. Instead, a frequent approach in the FEIS is merely to dismiss studies, models, and other analyses offered by commenters, without further consideration.

All comments and supporting documents submitted by the public were considered by the agency in preparation of the FEIS. Even if the FEIS does not mention a particular study or analysis offered during the public comment period, either in revised text or in responses to comments on the DEIS, those submissions were considered in preparation of the document. In response to public and agency comments, the Lead Agencies performed additional air quality studies, including the potential effects of Mobile Source Air Toxics and Particulate Matter (PM) 2.5. The Lead Agencies also conducted a more detailed analysis of the possible impacts to the Patuxent River Reservoir and further reduced impacts to sensitive natural environmental resources.

Chapter S.K. Regulatory Compliance

37 Page S-45 indicates that there are a number of unresolved issues on which the Lead Agencies have not yet reached agreement. A detailed description of the unresolved issues should be set forth, and the public should have input on these issues. It appears that some of the unresolved issues may relate to the appropriate mitigation treatment of various resources, the terms of an MOA to be executed, and the compensatory mitigation package that will be designed, together with further refinements to the engineering designs. The public should be fully apprised of the unresolved issues and be given ample time to comment on them.

The resolution, including the terms of a Memorandum of Understanding (MOU) drafted and agreed to by all the reviewing federal and state agencies, is included in the ROD. There are some issues that cannot be resolved fully until a greater level of project development occurs, which is the reason that the agency MOU has been created. The public involvement program will continue throughout the design and construction phases to present refinements to the design and mitigation features.

Chapter I: Purpose and Need

Chapter I.A. Project Purpose

38 The ICC is long overdue.

Thank you for your comment.

39 Without the ICC, residents may be forced to leave Montgomery County because of the increasing congestion.

Thank you for your comment.

40 The Base Realignment and Closure process will bring more employment to Bethesda Naval Medical Center. The federal government bears some responsibility, in the form of the ICC, for alleviating the traffic that this employment will bring to the area.

The Bethesda Naval Medical Center is not within the ICC study area, but other projects being studied by SHA and Maryland Transit Administration (MTA) such as the Bi-County Transitway, will address needs in the Bethesda area.

41 The Governor, a County Executive, and a majority of Montgomery County Council members were elected because of their promise to improve transportation and build an ICC. This realignment of voter sentiment for transportation improvements resulted from the growth of traffic congestion on our major highways. The resulting overflow and road rage onto our primary residential roads is now more than voters are willing to accept and endure any more.

Thank you for your comment.

42 An overly narrow statement of purpose and need, crafted to produce a preordained outcome, is cited to justify the Lead Agencies' decision to exclude several better-performing and less environmentally harmful alternatives. This defect dooms the document because, as we show in our study of alternatives, there are other legitimate, effective alternatives that would, unlike the ICC, adequately address the access needs of the region, at lower cost and with less environmental damage. The only alternatives

included in the FEIS for analysis relate to the concept of building a new highway – "required" by the singular nature of the purpose and need statement. Not adequately considered are other modes of transportation and other methods for improving travel and access, such as better management of existing highways, transit, and future land use change.

The ICC project Purpose and Need Statement presents five broad objectives that the proposed action is intended to fulfill: increase community mobility and safety; facilitate the movement of goods and people to and from economic centers; provide cost-effective transportation infrastructure to serve existing and future development patterns reflecting local land use planning objectives; help restore the natural, human, and cultural environments from past development impacts in the project area; and advance homeland security. See FEIS Chapter I.A. and I.B.

The Purpose and Need Statement was drafted by Lead Agencies in June of 2003. Other federal and state agencies participated in a collaborative process for review and comment on the Purpose and Need, including consideration of public comments, during the NEPA scoping process in accordance with CEQ regulation at 40 C.F.R. § 1502.13. The Purpose and Need Statement was agreed to by each of the participating federal, state and local agencies. The interagency collaborative process began with a workshop on June 11, 2003, where the lead agencies presented the project background, proposed the study schedule and process, and discussed a wide range of issues with over 100 representatives from local, state and federal agencies with an interest in the project. Thereafter, on June 16 and July 30, 2003, the following agencies met to discuss and revise the Purpose and Need, and they reached consensus on its content. See FEIS, Section I.D.

- Maryland State Highway Administration
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- Federal Highway Administration
- U.S. Fish and Wildlife Service
- Maryland Department of the Environment
- Maryland Department of Housing and Community Development
- Maryland Historical Trust/Maryland State Historic Preservation Officer
- Maryland Department of Natural Resources
- Maryland Department of Planning
- Maryland Department of Transportation
- Maryland Transportation Authority
- National Park Service

Through that process, alterations were made both to the project purpose as well as the elements of need. In accordance with the coordination process established for the project. (See FEIS, Sections I.D. and VII.A.), the U.S. Army Corps of Engineers and the Maryland Department of the Environment provided letters of concurrence on the Purpose and Need dated September 12 and November 12, 2003, respectively. See FEIS, Appendix B.

The ICC project Purpose and Need is based upon and consistent with transportation goals and objectives of the local and state governments responsible for land use and transportation planning in the study area. The Metropolitan Washington Council of Governments (MWCOG) established policy goals in 1998 that guide its long-range transportation plan. The MWCOG

transportation policy calls for an interconnected multi-modal transportation system supporting the economy, protecting and enhancing the environment, and serving regional activity centers. (TPB Vision, MWCOG, 1998). Similarly, the aim of the Montgomery County General Plan and area master plans is to enhance mobility by providing a safe and efficient transportation system offering a wide range of alternatives that serve the environmental, economic, social and land use needs for the County and provide a framework for development. (General Plan Refinement of the Goals & Objectives for Montgomery County, 1993, p. 63). These transportation goals, established in the state and local planning processes, provided the foundation for the ICC project Purpose and Need. Additional information on the transportation planning process and its link to the project purpose and need may be found in the ICC study team's Response to the report entitled The Intercounty Connector: Performance and Alternatives by Smart Mobility Inc. et al (see FEIS, Appendix R-9.

Many comments objected to the use of the term "multi-modal east-west highway" in the Purpose and Need and asserted that the use of that term meant that the Purpose and Need Statement precluded consideration of non-highway alternatives. Even though the proposed agency action was identified as a multi-modal limited-access east-west highway linking I-270 and I 95/US 1, the lead and cooperating agencies agreed that the underlying Purpose and Need related to broader transportation objectives and would not exclude consideration of a wide range of reasonable alternatives. The 18 alternatives are listed in Section III.A. of the FEIS, and the reasons for eliminating alternatives from detailed study are discussed more completely in the FEIS Chapter III.B.

None of the alternatives considered were eliminated simply because they were not a "highway." Each alternative was evaluated against the and Need to determine whether the alternative could adequately address the underlying purpose and need for the project. In November 2003, the study team held three Public Workshops to obtain comments on the alternatives evaluation. Approximately 400 comments were received and considered before alternatives were eliminated from detailed study. The study team documented its responses to comments in a matrix that is contained in the project administrative record. The evaluation of alternatives and summary of comments received are also discussed in the ICC Alternatives Retained for Detailed Study (ARDS) report dated March 3, 2004. This interim report to the participating agencies presented the alternatives suggested, screening of alternatives, and evaluation of alternatives. The study team discussed the draft ARDS report with federal, state and local agencies in eight interagency meetings between September 2003 and March 2004. See FEIS, Section VII.A.. As with the final Purpose and Need Statement, the Lead Agencies, as well as USACE and MDE, concurred with three alternatives that were retained for detailed study See FEIS Appendix B, USACE letter dated May 18, 2004; MDE letter dated March 24, 2004.

43 SAFTEA-LU's definition of multimodal shows that the ICC has not met the purpose and need for a multimodal facility

SAFETEA-LU was not enacted when the team was formed. The Selected Alternative does meet the SAFETEA-LU definition of multimodal and includes provisions for single occupancy vehicles, high occupancy vehicles, Express Bus Service and pedestrian and bicycle usage. Moreover, the ICC is intermodal in nature by virtue of its connectivity to the MARC commuter rail, Metrorail, Metrobus, and local bus services.

Chapter I.B. Project Needs

44 We should not build more highways in light of impending peak oil.

Thank you for your comment

45 The ICC is a critical transportation link that will relieve congestion in our region.

Thank you for your comment.

46 Reliable cross county travel, especially to BWI, has been needed for a long time.

Thank you for your comment.

47 As the density increases, the government must provide a way to alleviate increased traffic.

Both local and state governments have responsibility to perform land use and transportation planning. Local government, with insight from the Maryland Department of Planning (MDP), creates and updates master plans which help guide various infrastructure needs and decisions. Likewise, specific studies like the ICC study are intended to lead to specific decisions regarding the master plan elements.

Chapter I.E. Information on Project Needs

48 Traffic on MD 198 has become unbearable since the extension to MD 28 was built. MD 198 has become the defacto ICC. This roadway cannot safely handle this new traffic. We support the ICC to alleviate these safety and congestion issues on MD 198.

The improvements brought about by Norbeck Road Extended, while resulting in a better overall balance of traffic flow between the different east-west roadways serving this portion of Montgomery County and greatly improved service over the whole day, have also resulted in some localized increases in delay during the peak periods. As you note, the section of Norbeck Road (MD 28) from Georgia Avenue (MD 97) to Layhill Road (MD 182) is one such area. SHA recognizes this, and has three projects currently in planning or design which will help reduce congestion. One is the ICC, which will attract much of the longer distance traffic which is currently forced to use this segment of MD 28 due to lack of nearby high capacity alternatives. The second is the MD 28/MD 97 interchange project, which will decrease delay at this intersection by reducing the burden of heavy north-south traffic volumes and heavy east-west traffic volumes all converging on a traffic signal by providing an overpass-underpass separation of traffic to improve flow. The third project is the widening of MD 28 to a 4-lane divided highway as part of the MD 28/MD 198 study.

49 Randolph Road becomes the defacto ICC when there is a traffic jam on the beltway. Creating the ICC would relieve this congestion on Randolph Road, which is a neighborhood road.

Thank you for your comment.

50 All transportation improvements in the Regional Long Range Plan except the ICC are in place. The ICC should also be built.

Thank you for your comment.

51 The ICC will advance homeland security.

Thank you for your comment.

52 The ICC would not help with evacuation during a terrorist attack because the primary need would be radial out of the urban core and the ICC would not relieve Beltway traffic. The most effective evacuation route on 9/11 was the Metrorail system, not the roads.

The ICC would provide essential improvements to enhance the State's transportation system to

help support its homeland security initiatives. Its location north of the Capital Beltway and the connectivity between I-270 and I-95 will provide increased mobility during normal conditions but also assist in emergency response situations.

MDOT's Office of Engineering, Procurement and Emergency Services has noted that the biggest bottlenecks during an emergency evacuation or response effort would occur at the intersections of major radial and circumferential highways that meet at-grade. Circumferential highways with grade-separated interchanges provide the best service during evacuations by allowing critical lateral flow and turning movements without impacting radial flow. Currently, the Capital Beltway is the only circumferential highway in the area and it does not have the capacity to assist in emergency response situations.

The ICC is intended to provide a state-of-the-art multimodal highway that would include dynamic message signs, monitoring systems, and other features in a design that could accommodate quick action in an emergency situation. The I-495 Beltway is currently the only east-west transportation route built for high speed in the study area. Building the ICC would provide another high-speed east-west roadway with ITS components and managed lane attributes.

This new east-west link with ITS will support effective and timely incident response and deployment of recovery personnel during severe emergencies and will facilitate mass evacuations of both citizens and major government facilities. In particular, the ICC will provide for the continued viability of our highway system in the event that portions of our interstate highway system, especially the Capital Beltway, are affected by catastrophic and/or terrorist events.

The ICC would provide transportation network redundancy that would provide mobility for almost 300,000 people every day. Travel time improvements, network congestion relief, and travel reliability are all measures of the ICC's significance as part of the transportation system.

53 The Lead Agencies defend the narrow purpose and need statement by asserting that it is supported by the transportation planning process. However, they provide no evidence to show how that process supports such a limited purpose and need. The FEIS states that the purpose and need statement can be shaped by the regional transportation planning process. According to the FEIS, the ICC project purpose and need statement is based on the transportation goals and objectives of two planning documents in particular – the Regional Transportation Planning Board's ("TPB") Constrained Long Range Plan ("CLRP") and the Montgomery County Master Plan of Highways. Neither of these plans is included for reference in the FEIS. Neither of these plans attempts to identify the transportation problem that the proposed ICC project is designed to address, attempts to identify the specific goals and objectives that the ICC is designed to accomplish, or requires the ICC to be a toll road or be funded by other non-traditional funding sources.

The documents referenced in this comment reflect broad planning efforts for either the entire metropolitan region or all of Montgomery County. The general needs and goals identified in those documents would not necessarily include the level of detail provided in the FEIS concerning the proposed ICC. For example, specific design elements for the proposed action, tolling options, etc. are beyond the scope of such general planning efforts. However, the proposed action is consistent with those plans in that it stresses in significant part increased mobility and safety in a highly populated and heavily traveled portion of the region, as well as consistency with local land use plans. As the FEIS describes, specific reference to an east-west road has been part of General Plans and local Master Plans for over 40 years.

54 The FEIS also asserts that "all the participating state and federal agencies agreed on the appropriateness of the project's purpose and need statement. The formal concurrence of the U.S. Army Corps of Engineers and the Maryland Department of the Environment, among other agencies, is not indicative of the merits of the Lead Agencies' claim, and in

any event does not justify a wrong choice by FHWA. Since the ICC has been identified as a priority transportation project, and fast-tracked, CEQ regulations require these agencies to defer to FHWA.11 Therefore the "concurrence"—actually just silence—of these agencies during this particular round of study cannot be interpreted as evidence of expert agency support for an overly narrow purpose and need statement or for the environmental, transportation, or other merits of the project.

Inclusion of the proposed ICC on the President's Executive Order list of priority transportation projects did not alter in any way the deference always given to FHWA as the lead agency for a proposed highway project. In that capacity, FHWA has the final word on key decision points in the NEPA process, including definition of the project Purpose and Need. The process of inter-agency coordination and consultation for the ICC, for consideration of the Purpose and Need statement and other main issues, is reflected in meeting minutes of the Interagency Working Group (IAWG) and is part of the administrative record. Formal concurrence in the Purpose and Need statement was received from the two other permitting agencies, the Army Corps of Engineers (USACE) and the Maryland Department of the Environment (MDE). Other cooperating agencies submitted comments on the DEIS and the FEIS that covered a wide spectrum of issues, including review of the analysis of environmental impacts, proposed mitigation and other key aspects of the proposed action.

55 **In fact, involved agencies have specifically objected to the narrow purpose and need statement. For example, Thomas C. Voltaggio (Deputy Regional Administrator, USEPA Region III) expressed concern over the use of a purpose and need statement that precludes the consideration of non-highway alternatives. The Maryland Department of the Environment's Comments on the ICC Purpose and Need Statement (January 30, 2003) state "As presented, the purpose of the ICC project is to link existing and proposed development areas between I-270 and I-95/US 1 with a 'state-of-the-art, limited access, east-west highway.' This purpose effectively eliminates any alternative(s) that do not include a new highway."**

The EPA letter referenced in this comment was considered by FHWA as part of the inter-agency working process. FWHA and the other concurring agencies concluded that the Purpose and Need as documented in the FEIS identified appropriately project needs and the main issues that needed to be studied during the NEPA process.

56 **The Lead Agencies have failed to offer a project that meets even the extremely narrow purpose and need statement they crafted. This failure is in part due to a contradiction between i) the "need" to reflect local land use planning objectives and the "need" to increase mobility, as defined in the FEIS; and ii) the "need" to build east-west or circumferential transportation infrastructure.**

The project Purpose and Need is stated in Chapter I of the FEIS and repeated in context in various other chapters of the document. The elements of the Purpose and Need do not include as a goal the need to build "circumferential transportation infrastructure," but instead the need to connect major transportation and economic centers, I-270 in Montgomery County and I-95/US 1 in Prince George's County, and the movement of people, goods and services between those major corridors.

57 **Other reasons for the preferred alternative not satisfying the purpose and need statement include failing to study the proposed express bus service on the toll road and misconstruing local land use planning documents. In the latter case, the FEIS claims that the ICC connects major regional economic centers, when in reality it does not.**

FHWA believes that the proposed action satisfies the Purpose and Need to connect regional economic centers. The FEIS describes in Chapter I the important employment, public facilities and other economic resources present in the study area, including at or near the eastern

terminus of the ICC in Prince George's County. The government of Prince George's County has long planned for significant commercial and residential development associated with the Konterra properties. FHWA has coordinated extensively with local planning agencies and governments in preparation of the FEIS and believes it has not misconstrued stated development goals in key planning documents. Finally, the FEIS has considered not only express bus service on the proposed toll road (Refer to FEIS Chapter III.E) but also other issues related to the ability of the proposed action to connect with or encourage use of existing transit and Metro facilities.

58 **The Prince George's County General Plan ("GP") defines transportation goals and objectives that are different than those focused up by the FEIS. The GP establishes objectives by which to measure implementation of the plan. Transportation objectives nowhere mention highway mobility or circumferential travel, and instead are more reasonably viewed as opposing an ICC with performance characteristics (such as increased VMT) favorably noted by the FEIS. In contrast, the GP's transportation objectives include "Reduce average commuter miles traveled by 25% by 2025, increase the proportion of transit trips by 25% by 2025, and increase public funding of transportation infrastructure in the Developed Tier Reduce average vehicle miles traveled by 2025."**

The ICC Purpose and Need Statement includes "facilitating the movement of goods and services between centers," but the Purpose and Need Statement does not actually state that there are any such centers at the Prince George's County end, aside from the planned center at Konterra. The General Plan identifies twenty-five centers at three levels of importance, but none in the ICC study area. This belies the FEIS claim that the ICC Purpose and Need and narrowing of alternatives responds to regional planning goals of connecting development centers.

The General Plan demonstrates that all major metropolitan and regional centers have full transit service, that is, they are located at Metro stations. Konterra, a planned development in the ICC area of I-95, is designated a "possible future center." It is forecast to have fewer jobs and less housing than the single Washingtonian development in Gaithersburg. As noted, I-95 is not designated as a Corridor, although U.S. 1 is designated a Corridor from the D.C. line out to just beyond the intersection with the ICC.

The map of activity centers that appears in Vision Plan shows a number of such activity centers in the I-270 Corridor but no others along the route of the ICC, except the outer end of the U.S. 1 corridor. There are no goals, objectives or strategies in the Vision Plan that put a priority on circumferential facilities.

The 2002 Prince George's County General Plan lays out a wide range of broad policies and strategies regarding development and conservation that complement the Purpose and Need Statement of the ICC (two of its miles lie in the County) as well as other project studies underway or to occur in the County for planned transportation facilities. Details are then provided in the County's many, smaller-scale Master Plans. Regarding the General Plan's "Transportation Systems" policies, the Plan specifically highlights that "[c]ountywide, the transportation system must ensure quality access and mobility options for all residents and workers." (p. 62), and that "[a]n integrated multimodal transportation system is essential to attracting the quality development that the county envisions." (p. 63). The ICC is planned for the County's "Developing Tier," where future growth is also planned. "It is anticipated that two of every three new homes and three of every five new jobs in the county will be in the Developing Tier." (p. 36). Based on the General Plan's development and conservation elements, "[t]ransit options are more limited [in the Developing Tier] than in the Developed Tier. Bus service is the only major transit option and Largo Town Center is the only Metrorail station planned for this Tier." (p. 36). (The County's third tier, called the Rural Tier, is a conservation area covering approximately

one-third of the County in its southern and eastern precincts, far from the ICC study area).

The General Plan also specifies 26 "centers" and 7 "corridors" for future significant development in the County's Developed and Developing Tiers, and they include Konterra as a "regional center" on I-95, and U.S. 1 (Baltimore Ave.) as a "corridor" (pp. 26, 46). The ICC is planned as a multimodal highway passing through Konterra and intersecting with U.S. 1 (p. 103). The General Plan has a broad mix of "transportation objectives," including "[i]ncrease public funding and attract and encourage more private funding of transportation infrastructure in Developing Tier Centers and Corridors." (p. 64).

59 The FEIS states in several places, including in responses to DEIS comments, that "[t]he ICC study area is already substantially developed, as noted in MNCPPC records, with nearly 80% of the planned households and employment in place in 2003." This statement has been refuted in comments to the DEIS based on Montgomery County forecasts which show that growth of about a third in households is possible under current zoning. As noted, housing capacity has been added to several master plans since 2003. Only about half of employment capacity is built, with much of the remaining capacity in the I-270 Corridor. The underestimation of growth potential in the study area undermines other analyses in the FEIS, such as the traffic modeling and cumulative effects analysis thereby overestimating the alleged benefit to travel in the study area while simultaneously underestimating the adverse environmental consequences of the proposed action.

The Maryland National Capital Park and Planning Commission (MNCPPC) estimates that nearly 80% of the household growth in the study area has already occurred according to the adopted master plans. This data did not however, restrict the team from employing the help of an Expert Land Use Panel (ELUP) to evaluate the potential Secondary and Cumulative Affects of constructing the ICC.

The FEIS states that "... nearly 80% of the planned households in place in 2003." (Refer to FEIS Chapter I.E). The reference to employment was deleted from this statement. Note that the growth in the master plans is not equivalent to only the growth in the ICC study area.

60 The FEIS identifies all the transportation studies being conducted by the State of Maryland that are contained in the 2003 CLRP. The FEIS explains that "these transportation improvements are each being studied in a separate NEPA document because each proposed improvement is a distinct project with logical termini and independent utility." Several of these projects were suggested as alternatives, separately or integrated, to the proposed ICC during the scoping phase and in comments on the DEIS, yet none of them were retained for detailed study for this NEPA document. The FEIS fails to provide an explanation as to why the ICC should take precedence over these other planned transportation projects.

The Lead Agencies suggest that it is not a question of priority inasmuch as it is a statement of independent utility. Each of the elements of the suggested alternatives was evaluated during the scoping phase of the ICC study. Some of the options were aimed at addressing entirely different transportation purposes (such as north-south oriented travel instead of east-west or east-west flow much further south in the study area) and some were regionally-based initiatives not able to respond substantively to the ICC Purpose and Need. MDOT remains committed to continuing the study of these other transportation studies and to partner with the Metropolitan Planning Organizations to further regional initiatives.

61 The purpose and need for the project is very weak and so Homeland Security and Environmental Stewardship were added in an attempt to strengthen it.

Environmental stewardship (ES) features were incorporated into the ICC project in recognition that past urban and suburban development within the study area has resulted in long term impacts that will require steps above and beyond the norm to reverse adverse trends. ES

measures have been incorporated previously on many transportation projects. At the national and state levels, ES is being provided more frequently in recognition of the social and natural environmental connections that transportation projects often have. The FHWA actively promotes environmental stewardship through its Vital Few Environmental Stewardship and Streamlining Goal (Environment VFG) See http://environment.fhwa.dot.gov/strmlng/vfovervw.htm. For example, Executive Order 13274, issued by the President on September 18, 2002, directed federal agencies to "promote environmental stewardship in the nation's transportation system" and to streamline environmental reviews for transportation projects. Including "environmental stewardship" as part of the purpose and need for the ICC is consistent with this directive. The ES features have been developed based on extensive involvement from the local, state and federal resource agencies and are being considered by the lead agencies in addition to mitigation measures that will be identified as commitments in the Record of Decision. The types of projects considered include, but are not limited to: providing pedestrian/bicycle trails; rehabilitation of historic structures; providing sidewalks for communities and schools; riparian buffer enhancement and/or reforestation; stream restoration; storm water management improvements; and special protection area best management practices. See ICC Environmental Stewardship Technical Memorandum, I-270 to US 1 (SHA 2004); see also Table VI-6 (list of ES projects considered). The Selected Alternative includes adoption of the ES features described in the FEIS. Therefore, the ES features, developed in coordination with the Inter-Agency Working Group, satisfy the ES element of the Purpose and Need Statement.

The study incorporated SHA's Context Sensitive Design (CSD) approach, which now has expanded into a Context Sensitive Solutions (CSS) approach. The SHA has been a national leader in this approach through its Thinking Beyond The Pavement (TBTP) initiative of 1999. This approach is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. The CSS/CSD is an approach that considers the total context within which a transportation improvement project will exist. Through the CSS/CSD/TBTP initiatives, numerous policies and procedures are now integrated into the project development process as well as the design and construction process to consider the context and surroundings of a project.

The ES concepts integrated into the ICC incorporate and advance the principles of the CSS/CSD/TBTP approach already in practice at the Maryland State Highway Administration. The incorporation of environmentally responsible design features and the proposal of environmentally sensitive construction features with consideration of the local context are consistent with the CSS approach. The alignments and profiles have been developed to minimize natural and community impacts, while preserving community vistas and connectivity. The team continues to develop a conceptual aesthetic theme for bridges, walls and landscape features that both supports the diverse set of communities and the driver's perspective. In addition, the identification and prioritization of environmental stewardship projects are accomplished through a collaborative and context-sensitive approach with input from local, state and federal agencies.

Regarding homeland security initiatives, the ICC would provide much needed system capacity and redundancy to the State and the National Capital region for population evacuation and emergency vehicle access. See FEIS, Section I.E. The study area, which lies just north of Washington, D.C., has experienced enormous planned growth over the last 40 years. In that area, no limited access east-west highway exists between the Capital Beltway and I-70, a distance of about 25 miles. The ICC was always planned to serve this growing area in Montgomery and Prince George's Counties. On September 11, 2001, it became clear that a mass evacuation can cause gridlock in the Nation's transportation network. While it is impossible to build enough capacity to accommodate the extraordinary demands of a mass evacuation, the experiences on 9/11 and the more recent experiences of New Orleans and Houston during Hurricanes Katrina and Rita highlight the need for a highway system with the flexibility and

capacity to handle surges of high volume traffic in emergency events. The need for enhanced mobility between the two Interstate corridors north of the Nation's capital is thus a legitimate concern for elected officials and planners. Additionally, if there is an incident on the Capital Beltway north of the District of Columbia, no other highway exists between I-95 and I-270 to even conceivably take its place as an alternate route. See also 23 U.S.C. 103(b)(1)(B) (the National Highway System "shall meet national defense requirements"), 23 U.S.C. 103(2)(D) (the National Highway System consists of "a network of highways that provide defense access, continuity, and emergency capabilities for the movement of personnel, materials, and equipment in both peacetime and wartime."). MDOT, through its Office of Engineering, Procurement and Emergency Services, has noted that the biggest bottlenecks during an emergency evacuation or response effort would occur at the intersections of major radial and circumferential highways that meet at-grade. Circumferential highways with grade-separated interchanges provide the best service during evacuations by allowing critical lateral flow and turning movements without impacting radial flow. The Capital Beltway would not have the necessary capacity to serve this purpose. In the study area there is no other continuous circumferential highway with interchanges that can serve this pressing purpose. The ICC would fill this need.

62 The ICC is part of an outer beltway which should not be completed.

The study area only extends from I-270 to I-95/US 1. SHA has no plans, in the short or long-term, to extend an ICC, if built, east or west of those limits. This concept of an outer beltway was dropped by 1975 because Montgomery County and Prince George's County had dropped the Outer Beltway Alignment from their transportation planning but retained the portion of it between I-270 and I-95, which is the ICC. The continuation of I-95 through the District was proposed as an ICC alternative. This alternative was dropped from further consideration because it would not benefit east-west travel in the study area and would not link development areas between I-270 and I-95. This alternative is discussed in Chapter III.B.13 of the FEIS.

63 The FEIS presupposes a demand for cross-corridor travel between I-95 and I-270. By the agencies own admission within the FEIS, this demand is insignificant.

Travel demand forecasts completed for the ICC study indicate that the ICC would carry up to 100,000 vehicles per day in certain segments and that nearly 300,000 people would benefit from using the new highway. Not all of the people traveling on the ICC are moving from one end of the corridor to the other. Refer to FEIS Chapters I.E and IV.J.

64 In their response to other public comments, the lead agencies reveal some additional data that was not alluded to in the body of the report. In response to the SMI report, the lead agencies dispute the finding that express toll lanes on the Beltway are an effective way to meet peak period travel demand between the I-270 corridor and points along I-95. They therefore admit that cross-corridor travel is not the purpose of the ICC after all. It is instead the improvement of mobility in 'the central portion of the ICC corridor' – i.e. the area of Olney.

The reference in the response to the Smart Mobility, Inc. (SMI) report indicates that Express Toll Lanes alone or converting a general use lane to an Express Toll Lane would not be enough to resolve the major east-west traffic movements. The ICC's purpose and need is to link I-270 and I-95 and the economic centers and communities in between, which is why interchanges are included in the Selected Alternative.

65 The true 'need' for east-west travel in the study area is almost exclusively for shorter trips that do not span the I-270 and I-95 corridors. There is no inherent need to 'connect' the two corridors. This begs the question of why a full-length highway facility is needed at all, and why alternatives that address specific, local east-west travel demands, cannot be considered.

Travel demand studies have shown that there are a full array of trip purposes and lengths, some shorter in nature and some through the entire study area (refer to FEIS Chapter IV.J). The Selected Alternative includes provisions for most trip lengths by including interchanges at several major north-south cross roads and responds more completely to all of the elements of the Purpose and Need by connecting the I-270 and I-95/US 1 corridors.

66 **Comment 106. SHA writes in this response: "… the ICC provides essential improvements to enhance the SHA's transportation system in support of our homeland security initiatives…" Can SHA "reference available studies or evacuation planning documents that include the [ICC], or indicate need for the [ICC], as part of the evacuation or emergency planning formulation?" Has SHA supplied such studies or documents to EPA or any other federal, state, or local agency?" SHA provides no information other than the phrase "homeland security initiatives." A search of web sites related to MDOT and SHA homeland security initiatives, shows much information as to the actions being taken by the state. These initiatives are impressive in size and scope. However, there is no mention of building major new highways as one of these initiatives.**

Construction of the ICC is not dictated by a Homeland Security initiative in Maryland, but will aid emergency response in the study area due to the increased mobility. Whether designated as emergency evacuation routes or not, roadways provide much needed mobility to the residents and workers within the study area for emergencies and for everyday travel. The ICC Selected Alternative has been shown to improve mobility for the area.

67 **Connecting I-270 to BWI should not be the purpose of the ICC because it is outside the study area, and travel demand outside the study area is not relevant to the Purpose and Need; the covert need is to connect NSA with military contractors along I-270; Maglev was not considered in the travel forecasts, and energy shortages would likely decrease aviation demand before 2030.**

Connecting the I-270 Corridor to BWI Airport is not a stated purpose or need for the ICC. Instead, linking I-270 to the I-95/US 1 Corridor and improving study area mobility and safety between them is. Those who wish to travel some or all of this distance would derive a travel time savings even if they should continue their trip to BWI.

Chapter II: Affected Environment

Chapter II.A. Social Characteristics

68 **Thousands of homes have already been built with the promise of building the ICC.**

Thank you for your comment.

69 **The crime rate is increasing due to the access to local neighborhoods and businesses from I-270. The ICC, with its additional interchanges would further increase crime.**

A study was not completed to determine if building the ICC would result in higher crime rates. However, the Lead Agencies have coordinated with all area emergency service providers including police and fire and rescue service throughout the planning process. Several of the emergency providers provided written comments stating that completing the ICC would provide an additional route for fire and rescue service to respond to incidents and were generally supportive of constructing the ICC.

70 **Cemeteries and burial sites are of historic significance and are protected by Section 4(f) and by Maryland law.**

Thank you for your comment.

Chapter II.C. Land Use

71 Three areas of the ICC would be outside of PFAs, where the ICC can be legally funded: Needwood to Norwood, Layhill to Bonifant, and New Hampshire to Paint Branch main stem. Because Corridor 1 extends beyond the PFA is evident that the study area should include the area between the Capital Beltway and the Maryland/Washington DC border.

Approximately 64% of Corridor 1 lies within designated Priority Funding Areas (PFAs). In addition, the ICC would serve to connect the PFAs along I-95 and I-270. The MDP, SHA and MDOT have performed and analysis of the build alternatives in accordance with Section 5-7B-05 of the Annotated Code of Maryland and determined that the project qualified for an exception to the Smart Growth statutes because it is a transportation project that connects PFAs. On August 31, 2005, the Maryland Board of Public Works determined that the project serves to connect PFAs and approved this exception for the Corridor 1 Alternative. It is also important to note that the PFA boundaries are developed independently from the project study area limits.

Chapter II.D. Cultural Resources

72 The FEIS failed to provide an appropriate response to my comment that the discussion of cultural resources is incomplete because it makes an egregious omission. The SHA failed to include for consideration among the eligible National Register of Historic Places (NHW) structures and historic properties listed in Table 11-9, the entire inventory of historic vehicles on the premises of the National Capital Trolley Museum, which are in the Area of Potential Effect of Corridor 1 [Northwest Branch Option A and 600 feet west of Northwest Branch Option B]. The response #858 basically states that the structures at the National Capital Trolley Museum are NOT eligible for the National Register of Historic Properties. The FEIS is wrong on this issue. It may be true that the building structures, per se, are not eligible. However, the vehicles are eligible for the National Register. The failure to address the trolleys as historic properties also invalidates the Section 4(f) study.

The National Register eligibility criteria, as defined in regulations issued by the National Park Service, state that "districts, sites, buildings, structures, and objects" can be eligible for the National Register only if they "possess integrity of location, design, setting, materials, workmanship, feeling, and association" (36 CFR Part 60.4). The trolleys cannot be eligible for the National Register because they do not possess integrity of location or setting; they are objects in a museum, and the location of that museum has nothing to do with their historical significance.

Moreover, even if the trolleys were considered eligible, they are not being impacted by the project. As noted in the Section 4(f) Evaluation in the FEIS Chapter V, the Trolley Museum has expressed a desire to move to a new location within Northwest Branch park, and SHA is providing assistance to facilitate the move to a new location. The construction of the ICC will require the relocation of the Museum, but will not negatively affect the trolleys in any way; in fact, the trolleys will be better off when moved to a new, permanent home at a more desirable location in the park.

73 Peerless Rockville Historic Preservation, Ltd. understands that information about historic cemeteries is always appropriate and always accepted by SHA, no matter where the process may be at the time. A specific statement by SHA to this effect would raise this organizations level of comfort that this statement is true.

Any historic cemetery or grave identified during the further course of the project would be treated

in accordance with the Unexpected Discovery stipulation, which would require full consideration of the potential effects on such resources as well as coordination with the Maryland State Historic Preservation Officer (MDSHPO). In keeping with the spirit and letter of the Memorandum of Agreement (MOA) (see FEIS Appendix J for the MOA), SHA will always accept new information about the location of cemeteries or graves that may be affected by the project and will investigate such information in accordance with the stipulations of the MOA. SHA carried out identification and evaluation of historic architectural and archeological resources in accordance with Federal and State laws, including the USDOT Act of 1966, as amended in 1968 and the National Historic Preservation Act (NHPA) of 1966, as amended (Section 106). Consultations required by Section 106 of the NHPA have been carried out throughout the project's development. Cemeteries and graves are usually not considered eligible for listing in the National Register of Historic Places unless they meet the special requirements of Criteria Considerations C or D, relating to graves and cemeteries (Potter and Boland 1992 Guidelines for Evaluating and Registering Cemeteries and Burial Places, National Register Bulletin 41). Nonetheless, cemeteries and graves are considered sensitive resources and were carefully considered during the Section 106 and 4(f) analysis. SHA's investigations showed that the project will not impact any identified historic cemeteries. SHA believes, and the Maryland SHPO (MDSHPO) has concurred, that the Section 106 process has been completed through completion of the MOA between the FHWA, the MDSHPO, the MdTA, and SHA, that was signed in December 2005. This MOA sets forth stipulations that FHWA, MdTA, and SHA must carry out in order to take into account the effects of the undertaking on historic properties.

74 A separate list of historic cemeteries in the ICC corridors is a needed addition to the FEIS and future SHA reports. They could continue to be categorized as historic, religious, or archaeological resources, but should also be broken out in a separate list and noted in the document's table of contents.

All historic and archeological sites eligible for listing in the National Register of Historic Places (NRHP) that were identified within the ICC's Area of Potential Effect (APE) are listed in the FEIS (Vol. 1: II-32-II-44). The potential effects of the project on resources within the APE are discussed in Chapter IV (IV-106 –IV-134). SHA is not required to separately identify cultural resources that are not within the APE and that will not be impacted by the project. The FEIS summarizes the results of the many technical studies that were prepared in compliance with the Federal and State regulations that govern the project. These technical studies include detailed analysis of cultural resources within a much larger study area, and include:

- Maryland Historic Context, Montgomery and Prince George's Counties, Intercounty Connector Project (Spero, March 1996, revised October 1996)
- Phase Ib Archeological Identification and Sampling Survey of the Intercounty Connector (ICC), I-270 to US 1, Montgomery and Prince George's Counties, Maryland (Tull et al. 1997)
- Archeological Survey of the Intercounty Connector Project, Montgomery and Prince George's Counties, Maryland (Bedell et al. 2004)
- Archeological Survey of the Intercounty Connector Project, Montgomery and Prince George's Counties, Maryland, Addendum (Bedell and LeeDecker 2005)
- Ground-Penetrating Radar Survey, Billy Ward's Cemetery (18MO622), Kruhm Road, Burtonsville, Montgomery County, Maryland (Chadwick et al. 2005)
- Impact Assessment Technical Report, I-270 to US 1 (EHT Traceries 2004)
- Supplemental Impact Assessment Technical Report, I-270 to US 1 (SHA 2005)
- Maryland Historic Context, Mid-Twentieth Century (1946-1960), Montgomery County and

Chapter II.E. Natural Environment

75 On page II-133, the FEIS discusses Environmentally Sensitive Areas (ESA) that may contain rare, threatened, or endangered species or other species identified by the Maryland Department of Natural Resources. The Lead Agencies admit to only knowing the "approximate location" of each site and acknowledges that it cannot provide "specific information." Such uncertainty, according to the FEIS, "require[s] further field verification and agency coordination prior to any corridor development." The omission of this information from the FEIS fails to satisfy NEPA's disclosure requirements and prevents decision makers and the public from understanding the scope of environmental consequences of the proposed action. The ESA example is illustrative of the uncertainty and inadequate information throughout the FEIS.

Data received from Maryland Department of Natural Resources (DNR) relevant to Rare, Threatened and Endangered (RTE) species primarily consisted of ESA locations. In most cases, the ESA is associated with a species, not just that the area is diverse. From this information, the team was able to identify plant species located within each ESA. Other RTE data came from field reviews and information from local botanists. From several different sources, the Team was able to have very accurate records on the actual locations) for each species. In order to protect species, it is common not to illustrate the exact location of species in an EIS. However, the location is shared with resource agencies as part of their review and consideration. The locations of the RTE species was known as part of the DEIS and FEIS as part of corridor consideration as well as other important natural resources. Even though the exact location may not purposely been shown in the document, descriptions of whether species were impacted or not was described.

76 Page II-133. The Redland Spring ESA location is still described inaccurately. The correct location is east of Redland Road in Rock Creek Regional Park, not "to the west of the intersection of Shady Grove Road and Corridors 1 and 2" as described in the FEIS. The change has not been made as claimed.

The commenter is correct in that Redland Springs ESA is east of Redland Road. The commenter is also correct that this was not changed in Chapter II of the FEIS. FEIS Chapter IV does describe Redland Springs ESA in the proper watershed. The Lead Agencies have been made aware of this comment as part of the decision making process. In addition, the administrative record will include all comments and responses.

77 Page II-134. Omits mention of Smilax Pseudochina in the Aitcheson Bog description. The change has not been made as claimed.

Smilax pseudochina (halberd-leaved greenbrier) was intentionally not included on Page II-134 because it was not part of the data initially provided by DNR. The ESA descriptions, as noted on page II-133, are limited to the information on ESA's as provided by DNR. The information initially received from DNR on the Aitcheson Bog did not include the listing of any species. Instead, this ESA was described as having an unusual wetland community. The presence of halberd-leaved greenbrier within the Bog was identified by ICC Team members and others during the development of the DEIS. The location of halberd-leaved greenbrier within Aitcheson Bog is described in Chapter IV, page 290. The halberd-leaved greenbrier at this location is not anticipated to be impacted.

78 Page II-134. The text still inadequately and inaccurately describes the location of the Northwest Branch - Bonifant Floodplain ESA as "southeast of the intersection of Corridor 1 and Bonifant Road" (Appendix R-8 comment # 1798). Figure I1-19 in Volume 2 of the

FEIS depicts the ESA boundaries north of Bonifant Road and west of Corridor 1. Consequently the data in the FEIS is conflicting. The text on page II-134 remains in error.

The depiction of the Northwest Branch - Bonifant Floodplain ESA in Figure II-19 of the FEIS more accurately illustrates the location of this ESA. The boundary should also include an area north of Bonifant Road and west of Corridor 1. The commenter is correct that the text on page II-134 regarding the location of the Northwest Branch-Bonifant Floodplain ESA is incorrect and that this was not changed in Chapter II of the FEIS. The Lead Agencies are aware of this omission and have considered your comment as part of the decision making process. In addition, the administrative record will include all comments and responses.

79 **Appendix R-8 (page 18 & 47 of 184), comment #179 and #531. The response to our DEIS comment (page 17-18 of our DEIS comments) is inadequate. Whose data, MCDEP or ESAC is more accurate? ESAC data indicates only 19 percent forest cover remaining in Montgomery County, while MCDEP indicates 28 percent remaining. If the ESAC data is more accurate why wasn't it used in the main EIS text? Furthermore, the ESAC data indicates only 0.6 percent of Montgomery's remaining forest is suitable as forest interior habitat and the average remaining patch size is 6.6 acres. Why was the ESAC data buried in the NETR and excluded from the main EIS text? Since the ICC would cause the largest forest loss due to any single project over the past several decades, it is important to accurately describe how little forest is left so that decision makers can understand the significance of the potential forest loss from an ICC. Both 28 percent and 19 percent are very low forest cover figures. However, they are very different statistical estimates of remaining forest cover.**

It is not known which data source is more accurate. The data was derived from two different sources, independent of the ICC study. It is likely that different methodologies were used by both Montgomery County Department of Environmental Protection (MCDEP) and ESAC. One major difference was the use of satellite imagery by ESAC to determine forest cover. The reference to both MCDEP and ESAC forest percentages is located on page II-291 and II-292 in the Natural Environmental Technical Report (NETR). The ESAC was not intentionally limited to the NETR. The NETR was intended to provide more detailed background information. The importance of describing existing forest conditions in both counties in the FEIS was to focus on the loss of forest cover over time in Montgomery County and to a lesser extent in Prince George's County.

80 **Appendix R-8 (page 18 of 184), comment # 185. The response to the question is inadequate. The response states "There are permitting requirements established under Title 08 of COMAR to take, transport, possess, sell, offer for sale, export or import listed species." "It has not been determined at this time whether permitting authority will apply to the ICC project in regards to RTE's." What permit requirements apply regarding the taking of RTE's in relationship to the ICC project? Have you determined the answer as to whether permitting authority will apply to the ICC project in regards to RTE's? If so, what is your answer?**

Permits will not be required for any takings of Maryland listed plant species. No Maryland listed animal species will be taken as a result of the Selected Alternative. For the ICC project, all potential impacts to Maryland listed species have been evaluated as part of the comprehensive review process. Specific comments from DNR and appropriate protection measures pertaining to avoidance and minimization can be found in the FEIS (Appendix B).

81 **Page II-131-132. (Table 11-28 Omissions), Button Sedge (Carex bullata) and Gray Birch (Betula populifolia) are recognized by MD DNR as S-3 and SU respectively. However, Table II-28 does not include these species. The Appendix R-8 comment response # 186 indicates "ICC staff have confirmed the presence of both the gray birch and button sedge." Then why were these species omitted from the FEIS table? As a result of the**

omissions, the table does not adequately describe watchlist and locally significant species.

Button sedge and gray birch were inadvertently omitted from Table II-28 in the FEIS; however, gray birch is located on page IV-292, Table IV-79. The Lead Agencies are aware of this omission and have considered your comment as part of the decision making process.

82 **Page II-112. The sentence that begins the last paragraph on page II-112 states "Field investigations completed to determine the locations of each 30 inch dbh tree along both Corridors 1 and 2." MNPS would like to review the results of your field investigations to compare the locations of each 30" dbh (or greater) tree along each corridor. However, we could not find this data in the FEIS. Where is it? Why is this data mentioned, and at the same time the reader is not directed where to review this data? Perhaps it was not included in the FEIS. If so, why was it omitted? We note that the DEIS (page II-109) stated that the location of each specimen tree "will be determined for the preferred corridor."**

The data showing the location of large trees is included in the administrative record. The specimen tree data is not included in the FEIS or the NETR, in large part because of the volume of information concerning hundreds of trees and mapping that illustrate the location for each tree. As part of the initial forest characterization for the project, the percent of specimen trees per stand was determined (NETR, Vegetation Section). This was useful in giving the public and the agencies a better understanding of the overall maturity as well as size diversity of each forest stand. As part of the FEIS process, the location of each large tree was determined using a Global Positioning System (GPS). This information was used to better determine opportunities to avoid or minimize impacts to groups of large trees or an unusually large tree.

83 **Page 11-134. The discussion on page II-134 for the McKnew Bog states that the McKnew Bog ESA is "Located in Fairland Regional Park." This statement is not true. McKnew Bog ESA lies well to the north and west of Fairland Park and occurs primarily on private land and to a lesser extent on public land in the McKnew Local Park.**

We acknowledge the error and the Lead Agencies have been made aware of it. The Lead Agencies have worked closely with many stakeholders to ensure information within the FEIS is accurate and will take these comments into consideration when making decisions regarding the project. The statement in FEIS Chapter IIE.10.b should have read that McKnew Bog was located north of Fairland Regional Park and directly south of Sandy Spring Road (MD 198).

Chapter III: Alternatives Considered

Chapter III.A. Preliminary Alternatives

84 **Only highway alternatives were considered.**

The 18 alternatives are listed in Chapter III.A of the FEIS, and the reasons for eliminating alternatives from detailed study are discussed more completely in the FEIS Chapter III.B.

None of the alternatives considered were eliminated simply because they were not a “highway.” Each alternative was evaluated against the Purpose and Need Statement to determine whether the alternative could adequately address the underlying purpose and need for the project. In November 2003, the study team held three Public Workshops to obtain comments on the alternatives evaluation. Approximately 400 comments were received and considered before alternatives were eliminated from detailed study. The study team documented its responses to comments in a matrix that is contained in the project administrative record. The evaluation of alternatives and summary of comments received are also discussed in the ICC Alternatives

Retained for Detailed Study (ARDS) report dated March 3, 2004. This interim report to the participating agencies presented the alternatives suggested, screening of alternatives, and evaluation of alternatives. The study team discussed the draft ARDS report with federal, state and local agencies in eight interagency meetings between September 2003 and March 2004. See FEIS, Section VII.A.. As with the final Purpose and Need Statement, the lead agencies, as well as the U.S. Army Corps of Engineers (USACE) and Maryland Department of the Environment (MDE), concurred with three alternatives that were retained for detailed study See FEIS Appendix B, USACE letter dated May 18, 2004; MDE letter dated March 24, 2004.)

A Transit-Only Alternative was analyzed to determine if it would meet the ICC Purpose and Need. The Transit-Only Alternative consisted of options that only include transit systems such as a new light rail or commuter rail system on a dedicated transitway to connect origins and destinations in the I 270 and I 95 corridors. No new roadways or improvements to existing roadways associated with a new transitway were included in this alternative. The inability of transit alone to accommodate the projected passenger and goods movements in the study area was demonstrated by detailed modeling studies conducted as part of the 1990s ICC study, in which three light rail transit alternatives were evaluated. The highest projected ridership on any of the three transit alternatives (Master Plan Transit Alternative, Randolph Road Transitway, and the White Oak Transitway) was approximately 23,400 people per day, which was estimated to provide only a 1.0 percent reduction in travel by auto. See 1997 DEIS, Page II-41, Volume 1 of 4. Moreover, part of the purpose of the ICC is to move not only people but also goods, which cannot be done efficiently with transit.

85 Statewide application of Distance Based Auto Insurance was not considered as an alternative.

Concepts like Distance Based Auto Insurance and other advanced mobility enhancement strategies are evaluated by transportation agencies on a regional level and not for individual projects. Distance Based Auto Insurance would not meet the Purpose and Need because it would not significantly reduce traffic.

86 The study did not consider an aggressive bicounty TDM approaches including parking charges at office complexes and tolls on existing highways. Staggered business hours at large organizations and weekend shifts would help reduce traffic on weekdays.

The current study did include a list of aggressive Transportation Demand Management measures. The Metropolitan Washington Council of Governments (MWCOG) plan includes many Demand Management/Emission Reduction Measures, a list too exhaustive to include here. For more information on the complete set of assumptions contained in the Constrained Long Range Plan (CLRP) used for the ICC study, visit www.mwcog.org and go to "transportation" and search for the 2003 CLRP. However, a sample of the types of programs assumed in the 2003 include Guaranteed Ride Home where commuters are offered alternative transportation home in the event of an unexpected personal emergency or unscheduled overtime; Telecommuting as a cost effective means to reduce NOx and congestion during the peak travel periods; Integrated Rideshare which incorporates service information from area transit providers into a Geographic Information System (GIS) which is compatible with "Commuter Connections;" Bicycle Parking designed to increase commuting trips by bicycle; and Traffic Signal Optimization, just to name a few. There are also specific projects such as the Northwest Branch Greenway and other local government trails and transit initiatives. The Selected Alternative includes many elements of the stand-alone TDM alternatives that were judged not to substantively meet the project's Purpose and Need Statement, including express and feeder bus service, a bicycle and pedestrian plan and additional park and ride lots. Although not part of the CLRP, these elements are now part of the Selected Alternative and will be constructed and implemented along with the ICC.

87 Were other alternatives to the ICC considered fully, such as expanding Metrorail, extending transit on the I-270 corridor, building the Bi-county Transitway, or extending HOV lanes on I-270?

Many alternatives were considered during the scoping phase of the ICC study and were found not to meet the documented need. More than 300 suggested alternatives were reviewed as part of previous studies by Agency representatives and the public. Additional alternatives were solicited from local, state and federal agencies during the Interagency Workshops in June and September of 2003. These suggestions included Transit-Only alternatives and HOV alternatives. However, alternatives that expand the transportation system on north-south facilities were determined not to meet the need for additional east-west capacity, as documented in the Purpose and Need (see FEIS Chapter I). During this process, eighteen general alternatives were identified, and are documented in Chapter III of the FEIS. SHA used preliminary planning analyses, public comments from the November 2003 Alternatives Public Workshops and agency comments to develop a series of alternatives and options for detailed study. SHA presented these findings in the ICC, I-270, to US Alternatives Retained for Detailed Study (ARDS) (March 2004). The report was distributed to the ICC IAWG membership, which includes the two concurrence agencies, the USACE and the MDE. The USACE and the MDE concurred on the ARDS in April and May 2004, respectively.

Chapter III.B. Alternatives Dropped from Further Consideration

88 The FEIS offers no support for dropping other alternatives such as transit, land use and TDM.

Please refer to Chapter III of the FEIS for additional information on alternatives considered. Transportation Systems Management/Transportation Demand Management (TSM/TDM) measures such as synchronizing traffic signals, improving transit, bicycle lanes, telecommuting, and more balanced land use were evaluated during the initial stages of the ICC Study (all of these measures are consistent with the plans of both Montgomery and Prince George's Counties). As described in Chapter III.B.14 of the FEIS, these measures do not meet the ICC's purpose and need, but instead add to the full range of transportation options. It should be noted that numerous TSM/TDM measures throughout Metropolitan Washington, including the ICC study area, are included in the Constrained Long Range Plan, and thus reflected in the travel demand forecasts prepared as part of the ICC study.

During the scoping phase, a variety of transit options were suggested, including a series of rail and enhanced bus initiatives. All of the suggested transit alternatives were evaluated, based on their consistency with the project's purpose and need and their overall feasibility, to determine which options would be retained for further study. Based on this evaluation, the Lead Agencies concluded that transit only alternatives do not substantively meet the project need. Studies of transit alternatives in lieu of a new east-west highway resulted in estimates of only a 1.0 percent reduction in travel by auto. Numerous transit improvements, including new and expanded bus service, are included in the Constrained Long Range Plan and thus reflected in the travel demand forecasts prepared during the ICC Study, including express bus service along the ICC.

A Balanced Land Use Alternative was also considered as a preliminary alternative. This alternative was removed from further consideration because it does not meet the project's purpose and need to support existing and planned development because it would require wholesale changes to development plans and patterns that have been guided by the overall land use concept for over 40 years. Transit alternatives in combination with a more balanced land use scenario were considered and also found not to meet this project's purpose and need. Montgomery County is pursuing a better balance of jobs and housing and more transit-oriented developments. With approximately 80% of the residential development in the study area likely to occur by 2030 already in place, however, such changes will have relatively minor effects on travel demand. Drawing on the studies conducted as part of the 1997 DEIS and from the

Montgomery County citizen's Transportation Solutions Group, the study team has concluded that a multi-modal east west link is still needed in addition to the balanced land use and transit concepts adopted by Montgomery County in their master planning process as a result of Transportation Policy Report Task Force (TPR-2) recommendations. While the land uses in the area were developed in accordance with the long existing plans, transportation infrastructure for those plans has not kept pace with the development.

89 The Purple Line [Bi-County Transitway] should be funded instead of building the ICC.

Federal, state and local officials constantly make choices as they prioritize funding for needed projects. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. In part because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate substantial annual funding for the Washington area Metro system and other needed projects. Additionally, Maryland has allocated $329 million for the new "Metro Matters" program, which will fund increased improvements for the Metro rail and bus system. The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would, of course, only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other MdTA facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the $265 million to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects. The ICC will be a multi-modal highway allowing for east-west express bus transit service, which is not possible on the existing road network in the study area. Transit projects such as the proposed Purple Line (now called the Bi-County Transitway) and Corridor Cities Transitway serve a different purpose and need from the ICC, and are being studied independently. The Maryland Transit Administration (MTA) continues to study the transitways as separate NEPA initiatives in Montgomery and Prince George's Counties.

90 The money should be spent on a subway system instead of the ICC.

Federal, state and local officials constantly make choices as they prioritize funding for needed projects. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. In part because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate substantial annual funding for the Washington area Metro system and other needed projects. Additionally, Maryland has allocated $329 million for the new "Metro Matters" program, which will fund increased improvements for the Metro rail and bus system. The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would, of course, only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other MdTA facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the $265 million to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects. The ICC will be a multi-modal highway allowing for east-west express bus transit service, which is not

possible on the existing road network in the study area. Transit projects such as the proposed Purple Line (now called the Bi-County Transitway) and Corridor Cities Transitway serve a different purpose and need from the ICC, and are being studied independently. The Maryland Transit Administration (MTA) continues to study the transitways as separate NEPA initiatives in Montgomery and Prince George's Counties.

91 Spend the money on transit instead of the ICC.

Federal, state and local officials constantly make choices as they prioritize funding for needed projects. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. In part because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate substantial annual funding for the Washington area Metro system and other needed projects. Additionally, Maryland has allocated $329 million for the new "Metro Matters" program, which will fund increased improvements for the Metro rail and bus system. The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would, of course, only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other MdTA facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the $265 million to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects. The ICC will be a multi-modal highway allowing for east-west express bus transit service, which is not possible on the existing road network in the study area. Transit projects such as the proposed Purple Line (now called the Bi-County Transitway) and Corridor Cities Transitway serve a different purpose and need from the ICC, and are being studied independently. The Maryland Transit Administration (MTA) continues to study the transitways as separate NEPA initiatives in Montgomery and Prince George's Counties.

92 Spend the money on local business development.

Thank you for your comment.

93 Evaluate cheaper alternatives that, unlike the ICC, will relieve traffic.

During the proactive public and agency scoping process, nearly one thousand citizens and many agencies provided comments and suggestions. This process resulted in over 300 suggestions for project alternatives and various options for design or location of alternatives. The Lead Agencies then supplemented these suggestions with alternatives and options considered in past studies. The Lead Agencies proceeded to combine and distill all suggestions into 18 unique alternatives—some of which had multiple sub-alternatives. The purpose of this process was to develop alternatives that would encompass all of the suggestions which could reasonably be expected to address some element of the P&N. These alternatives involved varying combinations of road, transit, traffic management, and land use improvements. TSM/TDM measures such as synchronizing traffic signals, improving transit, bicycle lanes, telecommuting, and more balanced land use were evaluated during the initial stages of the ICC Study. (All of these measures are consistent with the plans of both Montgomery and Prince George's Counties.) As described in Chapter III.B.14 of the FEIS, these measures alone do not meet the ICC's purpose and need, but instead add to the full range of transportation options. It should be noted that numerous TSM/TDM measures throughout Metropolitan Washington, including the ICC study area, are included in the Constrained Long Range Plan, and thus are planned for construction or implementation by 2030 independent of the ICC and are therefore reflected in

the travel demand forecasts prepared as part of the ICC study.

94 Build the ICC further north away from existing residential areas to avoid residential impacts. This option would also be cheaper, less environmentally challenging, would result in more congestion relief to Montgomery County, and would be a less circuitous route to BWI.

A potential connection into Howard County, principally via MD 32, was considered during the scoping phase of the ICC study. Although such a connection would not have been consistent with Howard County's land-use plans, the reason for not studying it in greater detail is that it failed to meet the Purpose and Need for this project. It would not have passed through Prince George's County, for instance, whereas the Lead Agencies identified a need for an east-west highway that would connect central and eastern Montgomery County with northwestern Prince George's County. A Howard County connection to Gaithersburg also would not have accommodated trips between the medium density residential areas of eastern Montgomery County and the employment and housing centers in the I-270 and I-95 corridors. An alternative further north west of MD 97, assuming an I-370 connection, would displace many more residences and businesses than does Corridor 1 or 2 (See FEIS Chapter III.B.4). Building an ICC north of Corridor 2 and east of MD 97 would have severe impacts to the Rocky Gorge watershed and Howard County.

95 Build 4-lanes on MD 28 instead of the ICC.

Expanding MD 28/MD 198 would provide only one corridor for local and regional traffic resulting in potentially higher accident rates. MD 28/MD 198 would still be highly congested, even with intersections as large, if not larger than interchanges. Also, the MD 28 / MD 198 expansion would provide no improved access to I-95 or I-270; instead, would direct traffic through Laurel and Shady Grove Road.

96 The state has not pursued creative mass transit solutions so any transit solutions are facing an unfair evaluation. Mag-Lev was not given a fair chance and there have not creative solutions for revamping bus transportation.

A full range of transit-only alignments and technologies were considered by the Lead Agencies. Maglev is a very unique technology and has been, and continues to be, investigated by the MTA for the I-95 Corridor between Baltimore and Washington. In fact, Maryland, along with very few other states, has been in the lead nationally in its progressive study of the Maglev technology.

During the scoping phase of the ICC study, a variety of transit options were suggested, including a series of rail and enhanced bus initiatives. All of the suggested transit alternatives were evaluated, based on their consistency with the project's purpose and need and their overall feasibility, to determine which options would be retained for further study. Based on this evaluation, the Lead Agencies concluded that transit only alternatives did not provide enough of an improvement to community mobility and safety or other key elements of the Purpose and Need Statement. Studies of transit alternatives in lieu of a new east-west highway resulted in estimates of only a 1.0 percent reduction in travel by auto. For more information on transit alternatives, please refer to the DEIS, Chapter III.B: Alternatives Dropped from Further Consideration. Mag-lev technology is very expensive, far more expensive than other transit services that were studied, such as Express Bus and Light Rail Transit.

Numerous transit improvements, including new and expanded bus service, are included in the Constrained Long Range Plan and thus reflected in the travel demand forecasts prepared during the ICC Study, including express bus service along the ICC. MDOT, through MTA, is in the planning stages for two major new transit projects in Montgomery and Prince George's Counties. The 14-mile Corridor Cities Transitway (CCT) extends from Shady Grove METRO Station at the north end of Metrorail's Red Line through Germantown to Clarksburg. Service will

consist of Light Rail Transit (LRT) or Bus Rapid Transit (BRT). The second project, a 14-mile Bi-County Transitway (also known as the Purple Line), would provide direct connections between the two branches of the Metrorail Red Line as well as the Green and Orange Lines. The ICC will provide a reliable route for buses. Also, Montgomery County, in conjunction with Clear Channel Communications, has recently implemented a program to install approximately 500 bus shelters in the County.

97 MD 28 to MD 198 is sufficient to support travel from Rockville or Gaithersburg to Prince George's County. It does not seem to be congested.

Expanding MD 28 and MD 198, including the recently constructed segment linking them (Norbeck Road Extended) to accommodate the projected volumes of traffic for the ICC would transform these two roads from being local in nature to more like regional routes and would also tend to direct traffic through Laurel and Shady Grove. This alternative would also tend to rely on many at-grade intersections which would experience significant delay. The MD 28/MD 198 corridor, including the Norbeck Road Extended, is currently congested and these conditions will continue to worsen (refer to FEIS Chapter I.E and IV.J.4)

It is recognized that the improvements brought about by Norbeck Road Extended, while resulting in a better overall balance of traffic flow between the different east-west roadways serving this portion of Montgomery County and greatly improved service over the whole day, have also resulted in some localized increases in delay during the peak periods. The section of Norbeck Road (MD 28) from Georgia Avenue (MD 97) to Layhill Road (MD 182) is one such area. SHA recognizes this, and has three projects currently underway in planning or design which will help reduce congestion. One is the ICC, which will attract much of the longer distance traffic which is currently forced to use this segment of MD 28 due to lack of nearby high capacity alternatives. The second is the MD 28/MD 97 interchange project, which will decrease delay at this intersection by reducing the burden of heavy north-south traffic volumes and heavy east-west traffic volumes all converging on a traffic signal by providing an overpass-underpass separation of traffic to improve flow. The third project is the widening of MD 28 to a 4-lane divided highway as part of the MD 28/MD 198 study. Even with these planned improvements, the AM peak period travel time from Rockville to Laurel would be a minimum of 61 minutes in 2030 using MD 28/MD 198, but 34 minutes with the ICC.

98 Expanding MD 28 to 3 lanes, MD 198 to 2 lanes and reconfiguring MD 97 (Georgia Avenue) at Muncaster Mill Road is a better alternative.

Improving local roads was considered as an alternative during the screening process and found not to meet the Purpose and Need of the project. Specifically, an Upgrade Existing Roads Alternative (UERA) would place more traffic on local roads and arterials that, even with the improvements, would remain heavily congested. Also, it would not significantly reduce travel time across the study area, it would not provide a high-speed route for buses, or improve safety. It should be noted that numerous intersections and roadway improvements have been made in the study area in recent years (e.g., US 29, Norbeck Road Extended) and more are contained in the Constrained Long Range Plan used in projecting traffic volumes for the ICC (e.g., MD 355/Randolph Road interchange; MD 97/MD 28 interchange; MD 28 and MD 198 improvements).

Based on detailed studies of the UERA in the prior NEPA evaluation, approximately 45 residential and business displacements could have resulted by the comprehensive improvement of MD 28 and MD 198 alone, which was just a portion of the entire UERA.

99 Use the money for the extension of the Red line to Frederick and a transit line between Wheaton and Rockville. The metro system should be expanded to Annapolis and Baltimore and to Manassas and Fredericksburg, Virginia.

Federal, state and local officials constantly make choices as they prioritize funding for needed

projects. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. In part because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate substantial annual funding for the Washington area Metro system and other needed projects. Additionally, Maryland has allocated $329 million for the new "Metro Matters" program, which will fund increased improvements for the Metro rail and bus system. The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would, of course, only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other MdTA facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the $265 million to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects. The ICC will be a multi-modal highway allowing for east-west express bus transit service, which is not possible on the existing road network in the study area. Transit projects such as the proposed Purple Line (now called the Bi-County Transitway) and Corridor Cities Transitway serve a different purpose and need from the ICC, and are being studied independently. The MTA continues to study the transitways as separate NEPA initiatives in Montgomery and Prince George's Counties.

100 The ICC is a good start to creating the Outer Beltway that was planned in the 1960s. This Outer Beltway should be completed.

The study area only extends from I-270 to I-95/US 1. SHA has no plans, in the short or long-term, to extend an ICC, if built, east or west of those limits.

101 The ICC is the right solution because mass transit will not work.

Thank you for your comment. The Lead Agencies agree with this comment, as documented on page III-14.

102 Money should be spent on transit oriented development instead of the ICC to reduce the impacts of population growth on traffic.

As discussed in Chapter III.B of the FEIS, transit only alternatives and transit alternatives in combination with a more balanced land use scenario were considered and found not to meet this project's Purpose and Need. Montgomery County is pursuing a better balance of jobs and housing and more transit-oriented developments. With approximately 80% of the development in the study area likely to occur by 2030 already in place, however, such changes will have relatively minor effects on travel demand. In addition, the Lead Agencies have thoroughly studied numerous transit lines, none of which had a measurable impact on the study area traffic congestion. The Selected Alternative will support Express Bus Service.

103 The ICC FEIS and process was biased to select the Master Plan Alternative. All other alternatives were dropped for biased reasons. An unbiased study must be initiated.

The current EIS process for the ICC has been rigorous, objective and unbiased.

104 If this is part of a second DC beltway, will the entire second beltway have tolls or just the ICC?

The concept of an Outer Beltway was dropped in 1975 and has not been on any County Master

Plans since then. There are no plans to resurrect the proposed Outer Beltway.

105 In addition to the ICC, another lane on I-270 SB is needed to reduce traffic congestion.

Any widening of I-270 is not a part of the ICC project.

106 It is imperative that additional crossings of the Potomac River be built to relieve traffic on the American Legion Bridge.

Improvements to the Woodrow Wilson Bridge are currently under construction. As part of the Capital Beltway Study, which is currently underway, improvements to the American Legion Bridge are also being considered. There are no current plans for additional western crossings of the Potomac.

107 Montgomery County should fix its roads instead of build the ICC. Use the money to resurface most of the badly needed neighborhood roads in Montgomery County.

Resurfacing existing roads would not add the needed capacity to meet projected traffic volumes and would therefore not meet the ICC project's purpose and need.

108 In addition to the ICC, which is truly needed, Metro should expand to include an outer loop.

Express bus service along the proposed ICC would provide a convenient transit link between the ends of the Red Line and connections to the Muirkirk MARC station. MDOT is conducting other studies in the area that also have transit components, including I-495, the Bi-County Transitway, I-270, and the Corridor Cities Transitway.

109 A recent study evaluated the ICC and five other alternatives as to how they would affect the ICC objectives. These alternatives included the no-build option, an increase of rail and bus transit service coupled with better location of employment and housing, dedicated toll/bus/van pool lanes, high-occupancy/toll (HOT) lanes, and a combination of HOT lanes with improved transit. The study found that the ICC would not reduce the distance driven per vehicle per day as much as would the HOT/transit proposal or even the no-build option. The other alternatives were nearly as effective. Furthermore, only the ICC was found to increase the total hours that all vehicles would travel per day. The ICC would also be the least effective of these solutions for total hours of traffic delay, total trips made, and air quality. This is unacceptable, given that the ICC is the most expensive of these alternatives.

After a thorough examination, the Lead Agencies have concluded that the alternatives proposed by Smart Mobility, Inc. et. al. in the ICC Performance and Alternatives Report (the SMI Report) are not capable of meeting the purpose and need identified in the ICC study environmental Impact Statement. While many of the transportation services and land use incentives proposed in the report may be valuable tools for meeting other transportation needs in the region, these measures do not meet all parts of the ICC corridor-level needs, and hence, were not retained for further study. Many of these proposed projects, services and incentives are not really new but are in place or are the subject of separate plans and studies. The ICC is one part of a regional long-range plan encompassing many road, transit and land use improvements. This NEPA study is focused on just one of the planned improvements. For a full and detailed response and analysis of the SMI Report, including an explanation of how the performance measures applied in the SMI Report do not correlate to the ICC purpose and need, see the SMI Report Response and Evaluation of Alternatives contained in Appendix R-9 of the ICC Final Environmental Impact Statement.

110 Spend money on improving existing roads instead of building the ICC.

Improving local roads was considered as an alternative during the screening process and found not to meet the Purpose and Need of the project (refer to FEIS Chapter III.B.2). Specifically, an Upgrade Existing Roads Alternative (UERA) would place more traffic on local roads and arterials that, even with the improvements, would remain heavily congested. Also, it would not significantly reduce travel time across the study area, it would not provide a high-speed route for buses, or improve safety. It should be noted that numerous intersections and roadway improvements have been made in the study area in recent years (e.g., US 29, Norbeck Road Extended) and more are contained in the Constrained Long Range Plan used in projecting traffic volumes for the ICC (e.g., MD 355/Randolph Road interchange; MD 97/MD 28 interchange; MD 28 and MD 198 improvements).

111 An alternative route for truck traffic has not been considered as an alternative to the ICC.

The only available alternative truck routes to the ICC would be surface streets with houses and businesses that abut them. Currently trucks either use those roads or the Beltway (I-495) to make trips across the study area. One benefit of the ICC is that it would reduce the number of trucks using the local surface streets.

112 The ICC western terminus should be just north or south of Germantown and its eastern terminus should not be near the Muirkirk area.

Throughout the ICC study process, a wide variety of transportation modes (i.e., rail, bus, roadway, etc.) and alignments were studied, including alignments that connected with I-270 and I-95 either north or south of the current preferred alignment location. In each case these alternate termini were judged to not as effectively meet the stated and agreed upon Purpose and Needs of the project.

113 Why wasn't an extension of Midcounty Highway considered instead of constructing the ICC over Shady Grove Road?

The Lead Agencies evaluated a full array of alternatives, including one that consisted of comprehensive upgrades of the existing roadway network. Another included an upgrade of the Midcounty Highway/MD 28/MD 198 corridor. Each of these alternatives was determined not to substantively respond to the Purpose and Need and therefore, was dropped from further consideration. A full discussion of why these and other alternatives were dropped from consideration is included in the FEIS Chapter III.B.

114 Light rail along the US 29 corridor is needed instead of a new highway.

US 29 is a north-south route while the ICC would be an east-west facility. With respect to transit alternatives, the Lead Agencies evaluated hundreds of potential solutions, including a transit only line, such as light rail. Chapter III.B of the FEIS and the DEIS outlines all of the alternatives studied and why some were carried forward for more detailed study and why some were dropped from consideration. The Transit Only Alternative was dropped because transit alone was not able to substantively meet the study area mobility and economic goals. Study area arterial roadways and intersections would remain congested and the movement of goods and service would be limited with a rail only alternative.

115 The TPB Vision Plan's goals do not support the Lead Agencies' arguments for excluding mobility criteria that favor non-highway alternatives. The TPB Vision Plan Goal 1 states "[r]easonable access at reasonable cost to everyone in the region" not increased mobility, as a goal. The TPB Vision Plan also states as an objective to create "[a] web of multimodal transportation connections which provide convenient access (including improved mobility with reduced reliance on the automobile) between regional core and regional activity centers, reinforcing existing transportation connections and creating

new connections where appropriate. Thus, the same document which is relied upon in the FEIS to support the ICC urges improved mobility without increasing vehicle miles traveled. As the FEIS concedes, mobility via a limited-access expressway by definition limits access and fails to advance the goal of improving access.

Montgomery County General Plan Refinement ("GPR") shows the ICC route through the semi-rural Residential Wedge and Suburban Communities areas, neither of which is intended for intense development. Changes in local planning are even more significant for the proposed ICC project which was initially conceived in the 1950s. The GPR does refer to "enhancing mobility," but the term is not used to mean simply longer distances traveled at higher speed, as in the FEIS. Rather, in the GPR, as in the TPB Vision Plan, mobility is enhanced by "an efficient transportation system offering a wide range of alternatives…" GPR goals and objectives are not a ringing endorsement of long distance east-west road travel or increasing VMT as a goal, nor do they support the goal of focusing investment on a single facility that alleges to improve mobility for a very small share of travelers and encourages the single-occupancy vehicle approach which the GPR seeks to reduce.

The FEIS also references the Transportation Policy Report ("TPR") and the Montgomery County Council's 10-year Transportation Plan ("10-year Plan") as support for its elimination of non-highway alternatives. None of the three TPRs includes goals and objectives that clearly support singling out the ICC, contain a mobility goal as defined in the FEIS, or define a special need for east-west travel. The 10-year Plan does not contain goals and objectives except within the narrative. The ICC is listed, among many other facilities. Implied goals include reductions in the time of trips and in road congestion, along with increased transit travel, but east-west mobility is not emphasized.

The reports/studies cited by the comments (TPB Vision Plan, Montgomery County General Plan Refinement, Transportation Policy Report) were intended to present a wide-ranging analysis of general transportation issues in either Montgomery County as a whole and/or a broad cross-section of the region. None of these analyses were intended to address a focused Purpose and Need, such as the one presented in the FEIS. Instead, they were reports designed to consider in the broadest terms a variety of elements of an overall approach to enhancing regional or County-wide mobility. All of them express a wide range of general transportation goals because they were not aimed at assessing a specific transit or highway proposal. Importantly, however, all these reports stress the need for transportation choices (stated in a variety of terms) and do not exclude one mode of transportation or another. Therefore, the FEIS appropriately relies on portions of these studies that express the need to connect existing transportation corridors (like I-270 and I-95/US 1) and to enhance connectivity to mass transportation. The FEIS shows how development of an ICC meets those goals. Moreover, this study included an extensive analysis of alternatives as part of the scoping process, in accordance with NEPA regulations. None of the cited reports were required to conduct this sort of comprehensive review.

The comments misuse the term "limited access highway" in support of their argument that the ICC would restrict access and/or transportation choices. The term "limited access" has nothing to do with the concept of the availability of various modes of travel. It deals instead with a facility that restricts entry to the road via a smaller number of intersections usually accessed via ramps instead of signaled intersections. The current network of local east-west roads in the study area are not "limited access" because of the literally hundreds of private driveways, commercial or public facility parking lots and side streets. Mobility is limited and safety is compromised when vehicles using local roads for longer cross-county trips encounter traffic signals, stop signs, vehicles attempting to access private driveways to homes or businesses, and other "access points." In reality, the proposed action, a "limited access" facility will increase mobility and safety by taking vehicles off local roads and promoting safer cross-county trips.

116 The Fairland Master Plan Citizens Advisory Committee wishes to state, for the record, its

vigorous objection to the Transit Oriented Land Use and Investment option proposed in the letter from Environmental Defense dated February 25, 2005 which can be found at http://edf.org/documents/4404_ICC_DEIScomments.pdf.

As thoroughly discussed in the FEIS, the land use and land use plus transit alternatives did not substantively meet the project's Purpose and Need.

117 The ICC should only be built if I-95 is continued through the District to relieve Beltway traffic.

The ICC and I-95 serve different travel markets and improvements to each are somewhat independent of each other. I-95 serves north-south oriented traffic through the study area and for the entire east -coast, whereas the ICC aims to serve east-west oriented traffic movements between I-95 and I-270. While the ICC Selected Alternative is Corridor 1, the Maryland Department of Transportation is continuing studies of extending I-95 to the University of Maryland.

118 In some cases, the agencies rejected alternatives to the ICC because their impact on traffic volumes in the study area was deemed to be insignificant. For example, Alternative 6, the combined Balanced Land Use and Transit alternative, is rejected because: "[the] Alternative would reduce automobile trips by only five percent, which is equivalent to a few years of normal traffic growth, and, therefore, would not eliminate the need for roadway improvements." In order to fairly reject an alternative, such a criterion must be applied equivalently to all alternatives. This raises the question – how much does the preferred ICC alternative reduce traffic?

As described in Chapter III.B.5 and III.B.6 of the FEIS, the Balanced Land Use (BLU) and BLU and Transit Alternative were dropped from further consideration based on a variety of factors, not simply the reduction of automobile trips. For example, they would require wholesale changes to development plans and patterns that have been guided by the overall land use ("On Wedges and Corridors") concept for over 40 years, which are also consistent with the more recently adopted Maryland Smart Growth Initiatives. The FEIS goes on to indicate that these alternatives fail to substantively meet other mobility and congestion relief goals established in the Purpose and Need statement. The Selected Alternative reduces Average Weekday Daily Traffic on approximately 50 miles of local roadways by more than 10%.

The Balanced Land Use and BLU with Transit were evaluated as stand alone alternatives to the constructing the ICC as was suggested as part of the project scoping process. In addition, the Lead Agencies performed a sensitivity analysis of land use forecasts adopted by local governments and the Metropolitan Washington Council of Governments, including the land use changes suggested as part of the TPR and ICC Expert Land Use processes and found that the conclusions of the study would not have changed.

119 The FEIS only provides anecdotal evidence on the ICC's traffic reduction, rather than general figures. The overall traffic reduction on arterial roads, across the screenlines, between the No- Build and the preferred alternative (Corridor I), is just 2.9%. This is below the level of traffic reduction that was used to reject the BLU alternative, and is less than a third of what the agencies state to be an appreciable, and therefore acceptable, reduction. Looking at individual screenlines, the ICC fails to meet the agencies standard for traffic reduction at 5 out of 6 screenlines – everywhere except at I-95 itself. Based on the reduction of the total number of auto trips, the impact of the ICC on study area trips comes to about a 1.5% increase in person trips and less than a 1% decrease in vehicle trips. So, by the standard of vehicle trip reduction, the ICC does not even come close to reducing vehicle trips at the 5% level of the BLU/transit alternative that was rejected, or the 10% level suggested by the agencies as effective. So, once again, the ICC should be

rejected if we apply a consistent standard.

The studies and data presented are not anecdotal. The Lead Agencies used a variety of measurement tools and analyses to characterize the effect to mobility and traffic congestion. Some of the tools and methods are study area-wide (i.e., screenline analyses) used to measure overall effectiveness, and others are localized (i.e., analyses of intersection Levels of Service) to determine the projected effects on particular roads and intersections. The screenline analysis was used to show overall study area travel trends and to measure increases/decreases in study area travel and mobility. To better understand the localized improvements, the Lead Agencies analyzed the effects on a representative sample of the roadways and intersections that are accommodating this traffic today (FEIS, Chapter IV.J). For instance, there is no better method for analyzing the effect the ICC would have on Randolph Road, Norbeck Road and their intersections than to determine the projected future conditions on these roadways. The Selected Alternative substantially reduces the levels of congestion on study area roads and intersections. The specific intersections and roads that would experience a reduction are discussed on Chapter IV.J and shown on Figures IV-10 to IV-19. The Selected Alternative would have a more significant reduction of local traffic congestion levels than the BLU and Transit alternatives.

The Balanced Land Use and BLU with Transit were evaluated as stand alone alternatives to the constructing the ICC and were suggested as part of the project scoping process. In addition, the Lead Agencies performed a sensitivity analysis of land use forecasts adopted by local governments and the Metropolitan Washington Council of Governments, including the land use changes suggested as part of the TPR and ICC Expert Land Use processes, and found that the conclusions of the study would not have changed.

The final decision was much more complex, taking into account mobility improvements, impacts to the natural, human and cultural environments, economic benefits and costs, and potential secondary and cumulative growth impacts.

120 **Furthermore, alternatives to the ICC that would significantly reduce the level of accidents were not considered. For example, a balanced land use / transit alternative would reduce overall study area VMT and would therefore be very likely to significantly reduce the total number of crashes.**

The Lead Agencies evaluated a full array of alternatives and measured how each would impact safety. The technical studies found (refer to FEIS Chapter III.B) that the Balanced Land Use and Transit Alternative would not significantly reduce the vehicle miles traveled (VMT). Furthermore, the study area's arterial roadway network would not be upgraded or improved with the Balanced Land Use and Transit Alternative and therefore no significant safety improvements would be expected.

121 **"The two connections described in the Staff Hybrid (Midcounty Highway to the proposed six-lane roadway and US 29 to Fairland Road) were local connections that did not meet the project Purpose and Need." No justification is made as to why a "local connection" does not meet a transportation need.**

The ICC is a regional transportation facility meant to link the I-270 and I-95 corridors with a high quality transportation facility, while the Planning Board Staff Hybrid suggested in 1997 would have provided only local connections because it included a combination of highway and exiting arterial roadways. It should be noted that the Hybrid proposal was not advanced by any agency or group as an alternative for the current study.

122 **The component of the hybrids utilizing MD 198 is rejected because "it would not provide a direct new connection to I-95". This is a spurious argument -- the specific creation of a new interchange on I-95 is nowhere stated in the Purpose and Need, and there is no demonstration that only the addition of an I-95 interchange would meet the project needs.**

The alternatives that involved a connection to I-95 via the existing interchange with MD 198 were not dropped from further consideration based only on that consideration. For a more thorough assessment of why the hybrid alternatives and other options were screened out from further consideration, please see FEIS Chapter III.B

123 **The staff and board hybrids are also rejected due to some sections using at-grade intersections, due to "safety and capacity" concerns, and because "motorists must switch back and forth between highway and arterial conditions". The implication is that a highway is always preferable to an arterial road because it is safer and has higher capacity. These blanket assertions are not sufficient grounds to reject any solution involving an arterial road. As stated in the 1997 DEIS, [VI-31], users of the ICC would only travel on the highway for part of their route. Most trips using the ICC would already use existing arterial routes for a substantial portion of the route. So an alternative that mixed highway and arterial segments would only alter the proportion of highway usage. The higher capacity of a highway segment over arterial roads does not guarantee a greater reduction in traffic congestion. If an arterial road provides a more direct route, or if roads leading to and from the highway become jammed, then upgrading the arterial route could provide equal or greater benefit to a given travel market. A proper comparison of such alternatives requires that you actually model them and review outcomes.**

The hybrid alternatives were not rejected solely due to safety considerations. As described in the FEIS (Chapter III.B), studies have shown that access controlled highways like the ICC have a much lower crash experience than do arterial roadways. Further, switching from an arterial to highway and back creates a serious driver expectancy issue that tends to increase crash experience and severity. It should be noted that the Hybrid proposal was not advanced by any agency or group as an alternative for the current study.

124 **The agencies argue that improving I-495 would not "link" planned development in eastern Montgomery County and northern Prince George's County. This ignores the fact that improving one facility can relieve traffic congestion on nearby, parallel facilities, and improve travel times between two points, without having to necessarily build a new facility in that exact location.**

The Capital Beltway serves a different travel market than the Selected Alternative would. MDOT continues to perform a planning study for improvements to the Capital Beltway.

125 **The "Construct Two Separate East and West Highway Links was rejected because it would increase travel on Ednor Road, Bonifant Road, Fairland Road, and Musgrove Road. The preferred ICC alternative also increases travel on many arterial roads.**

The amount of traffic removed or added to the arterial roadway network was a key measure used to evaluate the transportation effectiveness of each of the options studied. Whereas the ICC build alternatives added traffic to a few arterials that would include an interchange with the new highway, the Selected Alternative also reduced traffic volumes on more than 50 miles of local arterial roadways (refer to FEIS Chapter IV.J). In contrast, the alternatives, such as the Upgrade Existing Roads Alternative that were dropped from detailed study, would have added significant volumes of traffic to the local roadway network.

126 **Even if BLU represented a radical departure from the county General Plans and land use concepts (it does not), the agencies seem to suggest that innovation and evolution in land use principles can never occur, which is ridiculous. In fact, the principles of Balanced Land Use are already being put into practice in the revision of various Master Plans.**

The Lead Agencies must take into account the Master Plans, zoning and land uses of

Montgomery and Prince George's counties, as determined by the MNCPPC, Montgomery County government, and Prince George's County government as well as the plans and forecasts of the MWCOG and the Smart Growth laws of Maryland. The Lead Agencies do not believe that innovation in land use and land use policy cannot occur. In fact, Montgomery and Prince George's Counties are leaders in master and land use planning. However, with nearly 80% of residential development already on the ground and according to plan, the Lead Agencies determined that the BLU Alternative could not substantively address the project's Purpose and Need.

127 The FEIS should acknowledge the half hour long discussion by the Montgomery County Planning Board this past winter, before approving the land compensation for the ICC, saying how the money for an ICC could be much better spent on mass transit and other methods of relieving commuter crowding; they stated this yet more emphatically then they admitted in their discussion the previous winter.

The State has been and is continuing to fund the Metrorail and bus system and MARC commuter trains in Montgomery and Prince George's counties, and is currently studying the Bicounty Transitway that would link the two counties just as the ICC would. The State is also studying the Corridor Cities Transitway that would connect the Metrorail Red Line to upper Montgomery County. Moreover, the ICC itself would be multimodal, allowing for east-west express bus service in the two counties.

The Planning Board's notes are included in the project files.

128 The ICC improperly ignores the proposed widening of the beltway in Maryland, which is currently under active consideration. Adding new lanes to the beltway could accomplish the desired improvements in east-west traffic without having the significant adverse impacts on the environment that Corridor 1 will have. The beltway is located within the ICC study area, and the proposed improvements to the beltway should not be ignored in the FEIS. The proposed widening of the beltway is not even listed among the major roadway improvements shown on page S-20 for the study area.

The ICC studies did include considerations for future improvements to the Beltway, both as an alternative to constructing the ICC and in addition to the ICC. Improvements to the Beltway are included in the baseline assumptions for all of the alternatives evaluations. The ICC and the Capital Beltway serve different travel markets and improving or constructing one does not obviate the need for improvements to or construction of the other. As you indicated, MDOT continues to study improvements for the Capital Beltway in Maryland. The proposed beltway widening is not listed among the major roadway improvements shown on page S-20 because it is not in the study area.

129 The evaluation of the BLU and BLU/Enhanced Transit alternatives was flawed. The BLU was not intended to be considered as a separate alternative, but instead as a compatible plan to the counties' general plans. The BLU has been incorporated into the counties' general plans, based on the TPR alternative land use scheme. Examples include the Shady Grove Metro station area, Bethesda's Woodmont Triangle, and the Olney Plan. In addition, the EIS incorrectly associated local intersection improvements with the BLU.

The BLU and BLU with Transit were evaluated as stand alone alternatives to the constructing the ICC and were suggested as part of the project scoping process. In addition, the Lead Agencies performed a sensitivity analysis of land use forecasts adopted by local governments and the Metropolitan Washington Council of Governments, including the land use changes suggested as part of the TPR and ICC Expert Land Use processes and found that the conclusions of the study would not have changed. The FEIS (Chapter III.A) distinguishes the Balanced Land Use alternative from those that include existing roadway and intersection improvements.

130 I suggest a rail connection in the median of the ICC, like the one on I-66 west of DC. This could be an extension of the light rail that is planned for Crown Farm and Rio in Gaithersburg, but should also connect to Shady Grove Metro Station and possibly Glenmont.

The Lead Agencies have studied a full array of alternative solutions, including transit, prior to identifying Corridor 1 as the Selected Alternative. Instead of light rail operating on the median of the ICC, the Lead Agencies have selected a different form of transit to operate along the roadway. Express Bus Service with multiple origins and destinations and the ability to leave the roadway and circulate to more places has been incorporated into the final selection. The Maryland Department of Transportation is currently beginning a study of the operational characteristics (i.e., number of routes, number of buses and schedule) of the Express Bus Service. These studies will be finished prior to the ICC's construction being completed.

131 The ICC should take traffic off of I-270 before the terminus of the Red Line Metro at Shady Grove, use part of MD 28 that is already paved, and use Gude Drive to avoid destroying Derwood.

The Lead Agencies have studied an alternative that included an I-270 and Gude Drive Interchange and found that the interchange construction would cause severe impacts to the neighboring business areas and add traffic and congestion pressures back onto the local roadway network, especially for travelers destined to the Shady Grove Metro. The Selected Alternative carries traffic directly into the Red Line Metro station.

Chapter III.D. Options Dropped From Further Consideration

132 The ICC should not be a toll road.

The decision to establish the ICC as a toll road reflects important policy decisions made by the State of Maryland regarding the financing and management of its transportation system. Use of tolls on the ICC is necessary and appropriate in order to help finance the project with user revenues (thus maximizing use of other transportation funds for other needed projects) and to manage congestion on the proposed facility. See FEIS Chapters III.E and IV.J.

The finance plan for the ICC was endorsed by the Maryland General Assembly through enactment of HB 1352 and SB 255 in the 2005 session. Under this plan, the ICC will be funded from a combination of sources, including Maryland Transportation Authority funding (approximately $1.23 billion), GARVEE bonds ($750 million), funding from the Maryland Transportation Trust Fund ($180 million) and Maryland General Fund ($265 million), and special federal funding allocated to the project (approximately $19 million). The Maryland Transportation Authority funding will cover approximately 50% of the project's cost. Authority funding will include toll revenue bonds, a possible loan under the federal Transportation Infrastructure Finance and Innovation Act (TIFIA), and limited pay-go cash. The debt service on Authority bonds and the potential TIFIA loan will be paid from toll revenues collected from the Authority's toll highways, bridges and tunnels, including the ICC. If it were decided to build the ICC without tolls, the project would not be built as an MdTA project and, thus, would not be eligible for toll related financing. Consequently, approximately $1.2 billion of its capital cost, currently to be funded using toll supported financing, would have to be funded with other funding sources. This would significantly impact progress on other Maryland transportation projects. Without this contribution from tolls, it would be difficult if not impossible to finance the ICC without serious impact to the rest of the state's transportation program.

In addition to their importance as a source of revenue, tolls will also be used as needed as a demand management tool. The ICC will be located in a region of high traffic demand and congestion. With a highly congested roadway network, it is particularly important to provide a

reliable route for time-sensitive trips. By adjusting ICC toll rates based on traffic volumes, tolling can help to maintain relatively free-flowing traffic and thereby provide a predictable, relatively congestion-free route. In addition, existing local roads would continue to be available on a non-tolled basis. Traffic forecasts presented in the EIS take into account the potential for diversion to local roads. According to the forecasts, most of the local roads would still be less congested than they would have been without the ICC. See FEIS Chapter IV.J and the Travel Analysis Technical Report, available at www.iccstudy.org.

133 Instead of making the ICC a toll road, the State of Maryland, Montgomery and Prince George's County should include a line on tax returns to allocate money for the cost of the ICC.

In order to finance major public improvements, funding sources more certain and predictable than voluntary contributions are essential.

Chapter III.E. Alternatives Retained for Detailed Study

134 To alleviate traffic between Norbeck Road and Shady Grove Road, another interchange in addition to the one at MD 97 is needed.

Placement of interchanges involves a balance between access/traffic service and impacts. Much of the land along the five miles between the interchanges on the ICC at Shady Grove METRO Access Road and MD 97 (Georgia Avenue) is parkland or low density residential. Except for Shady Grove Road, none of the roads crossed in this area is planned to have more than two basic lanes, and thus would not be suitable to accommodate the traffic generated by an ICC interchange. (It should be noted that Shady Grove Road is less than one mile east of the Shady Grove METRO Access Road.) Montgomery County has plans to connect Midcounty Highway to the ICC at some future date, which would address, to some degree, the access issue between Washington Grove and MD 97.

135 The ICC will necessitate construction of cloverleaf interchanges which are unsafe.

When designed and built in accordance with current design criteria, cloverleaf interchanges are not inherently unsafe. That being said, there are no full cloverleaf interchanges planned for the ICC. The closest is the interchange at I-95, which will have three loop ramps, with the weaving along I-95 being on the collector-distributor road, separated from the I-95 mainline. The selection of the interchange types for the ICC was based upon accommodating projected 2030 traffic volumes. The ICC engineers were successful in developing interchanges that accommodate the future traffic volumes, while minimizing right-of-way and environmental impacts.

136 Will I be able to use my E-Zpass for my three axle vehicle if it is set up for travel to New Jersey as a two axle vehicle?

The MdTA, which will own and operate the facility, is considering a simplified classification system for vehicles. (With all electronic toll collection, a system with fewer vehicle classifications is more reliable and effective.) It is not yet known how a car with a trailer in tow would be treated in the classification system that will be adopted for the ICC. The classification system will be determined one to two years before the facility is opened to traffic.

E-ZPass is the toll collection system already used on Maryland's toll facilities and its continued use is competitively bid. E-ZPass technology is also used throughout the Northeast corridor to allow for interoperability for motorists in different states.

137 Please consider adding a Metro bus stop at the Park and Ride at the Beltway and I-95

Park and Ride lots are part of the plan, and will be constructed at several of the ICC interchanges. Final decisions on bus routes and park and ride lots locations will be based on a

study that will be conducted by the MTA.

138 SHA did not include the 1.5 mile section of Layhill Road and two-lane no-shoulder bridge that carries traffic north to Norbeck Road, or the Layhill-Bonifant Bel Pre interchange just south of the interchange although that intersection is rated among the 10 most dangerous in the country.

The Lead Agencies did consider the segments of the local roadway network in the evaluation of traffic and safety. Based on traffic counts performed in the last several years, there are approximately 15,000 vehicles per day on the segment of MD 182 north of Bel Pre/Bonifant Roads, yet falling off considerably toward MD 28, and approximately 19,000 vehicles south of the Bel Pre/Bonifant intersection. Layhill Road south of this point is already wide enough to accommodate the forecasted traffic and our forecasts north of the ICC do not warrant widening of Layhill Road. Nevertheless, the State Highway Administration (SHA) will continue to coordinate with the County and observe traffic trends to determine if the Master Plan widening along this stretch of Layhill Road becomes needed.

The association states that it is under the impression that the intersection of MD 182 (Layhill Road) and Bel Pre-Bonifant Road is among the "top ten most dangerous" intersections in Montgomery County. The SHA routinely evaluates its intersections and applies conservative criteria to determine which ones need further safety reviews. Our most recent data (for calendar year 2004), show that the intersection of MD 182 and Bel Pre-Bonifant Road had a crash experience that would be considered quite low when compared to other similar intersections. In addition, the crash rate along this segment of MD 182 is not higher than the average rate expected for similarly designed roadways.

139 Drop the MD 182 interchange unless safety improvements for Layhill Road are planned and funded before proceeding with the interchange.

The interchange at MD 182 is part of the Selected Alternative and will be constructed with the ICC. The community's notion about the future of Layhill Road, between the proposed ICC and Norbeck Road, remaining as a two-lane road is incorrect. As the Lead Agency representatives accurately stated at the meeting, the County Master Plan (as noted in the 1994 Aspen Hill Master Plan, p. 103) calls for Layhill Road eventually to be widened to a four-lane road, with a median, north to Norbeck Road. Although Layhill Road is a state highway (MD 182), the process for moving master plan projects into the highway-development process (i.e., planning, design, acquisition of right-of-way, and construction) remains driven by the local governments. Each Fall, the Secretary, other Department of Transportation officials, and the SHA Administrator visit each county to better understand what transportation improvements local governments feel are their highest priorities. This "tour" provides the most crucial input into how the Department creates its annual Consolidated Transportation Program, capital budget.

Based on traffic counts performed in the last several years, there are approximately 15,000 vehicles per day on the segment of MD 182 north of Bel Pre/Bonifant Roads, yet falling off considerably toward MD 28, and approximately 19,000 vehicles south of the Bel Pre/Bonifant intersection. By 2030, the forecasted traffic on those segments is anticipated to be approximately 28,000 vehicles per day south of the ICC's crossing of MD 182 and 10,900 vehicles per day north of the ICC crossing. Layhill Road south of this point is already wide enough to accommodate the forecasted traffic and our forecasts north of the ICC do not warrant widening of Layhill Road. Nevertheless, the State Highway Administration (SHA) will continue to coordinate with the County and observe traffic trends to determine if the Master Plan widening along this stretch of Layhill Road becomes needed.

140 Request that the Shady Grove Road interchange with the ICC and the entrance to the Shady Grove Metro station be redesigned (sketch of concept included with letter) to

prevent traffic from backing up to Briardale Road and Muncaster Mill road. It would be better for cars to turn right to get to I-270 like they currently do, instead of turning left as proposed.

Traffic and highway engineers reviewed the concept included with the letter, and respond as follows: Several traffic issues would result with the suggested configuration, including putting 1,700 vehicles onto a single lane loop ramp and weaving issues on Metro Access Road and Shady Grove Road. In addition, it appears that the cost and environmental impacts would be higher. There would also be difficulties in maintaining the movement from Shady Grove Road to eastbound ICC while providing the bridge suggested.

The existing AM peak is 1,675 vehicles, making the southbound Shady Grove Road to Metro Access Road movement via a free right turn. In the 2030 build forecast, the AM peak is 725 vehicles making the same movement via the signalized left turn. So we see a reduction of more than 50% relative to the current volumes.

The reduction in forecasted traffic is most likely caused by a reassignment of traffic to the ICC that was previously moving across the county on the local roads and coming south on Shady Grove Road to access I-370. For example, the Peak Hour AM traffic for southbound Shady Grove Road is reduced by 15% at MD 115 and 25% at Midcounty Highway for the build condition vs. the No-Action in 2030.

141 Follow up letter to the August 20, 2005 Avery Park community meeting to confirm the proposals discussed at the meeting, including the berm, grading near Muncaster Mill Road, and the stormwater management area (refer to items 6 through 10 listed in the commenter's letter).

With respect to Items 6 and 7 of the commenter's original letter, we agree. For Item 8 of that letter, continuation of the berm around the corner at Muncaster Mill Road will be considered but may be limited to due available right of way, drainage and utility concerns. While any berm has the potential to reduce noise levels, SHA is constructing the berms at Avery Park Drive for the purpose of visual mitigation. The potential reduction of noise has not been studied. For Item 9 of the commenter's letter, this statement is generally correct; however it should be noted that the design builder could propose modifications that could modify the exact alignment and elevations. For Item 10 of the commenter's letter, the stormwater management (SWM) will be landscaped in accordance with the project aesthetic guidelines, which will respect the beauty and safety of the surrounding communities. Additional coordination with the community is anticipated.

142 Will the ICC go through the Mill Creek South community in Derwood?

The ICC crosses the Mill Creek Stream Valley Park just north of the Mill Creek South community. It will not go through the community.

143 The Brooke Manor and Preserves Homeowner Associations have requested changing the interchange at MD 97 (Georgia Avenue) to a covered one like others shown in the plan. What is the status of this?

An option for the ICC to go under MD 97 was included in the FEIS. The Lead Agencies have changed the original design to be consistent with the communities' desires and the Selected Alternative includes the ICC passing beneath MD 97.

144 We oppose the potential construction of a maintenance facility (referred to as the "Western Maintenance Facility"). This facility was not included in the State Highway Administration's Draft Environmental Impact Statement for the ICC, but was included in the Final EIS.

The Lead Agencies have met with Montgomery County staff on several occasions to discuss the western maintenance facility. They have looked at one potential alternative site suggested by

County staff, which is not acceptable due to traffic and safety concerns.

The MdTA, which will own and operate the ICC, considered many locations for the maintenance facilities for the ICC. The preference was to identify a location in the central part of the study area; however, due to community and environmental concerns a central location was not possible. A decision was made to build a primary facility on the east end of the project and a secondary facility on the western end of the project. The secondary facility is needed to support police activities, routine maintenance and winter storm activities.

The MdTA and SHA feel strongly that the proposed facility can co-exist with the scenario of moving part of Montgomery County's Service Park, now located directly adjacent to the Shady Grove Metro Station, to your client's property enabling the County's property to be developed with high density housing within walking distance of the Metro Station. The area needed for the western maintenance facility is approximately 3 acres. It is our understanding that Casey 7 is approximately 17.3 acres and Casey 6 is approximately 25.2 acres. There seems to be sufficient land available here to meet both of our needs.

The maintenance facilities are needed to support the ICC. There are no alternative sites on the western end of the project, which provide the access and land needed to support a maintenance facility other than Casey 7. The MdTA is willing to work with you to minimize the footprint of the facility and allow for development of a part of the County Service Park on the remainder of the property.

We would be happy to meet with you and discuss the proposed western maintenance facility.

145 The ICC should terminate at I-95 to achieve the most transportation benefits and save considerable money.

The Selected Alternative will extend past I-95 to US 1 in order to provide better access to this portion of Prince George's County. This is addressed in Chapter VII of the FEIS.

146 The SHA modified the alignment at the Overhill Road and Nedham Road connection to Redland Road to protect Rock Creek Regional Park but did not make modifications to avoid impacts to Cashell Estates.

The Lead Agencies did take measures to avoid and minimize impacts to Cashell Estates to the greatest extent practical by narrowing the median, steepening the side slopes and sharpening the horizontal curves. The modifications to Overhill, Garrett and Nedham Roads were made to preserve the access to the remaining homes in Cashell Estates.

147 The M-83 partial interchange is a county project, but would be required for the ICC to be complete. Therefore, building the ICC without M-83 would be segmentation and the displacements from the construction of this interchange should be included in the ICC FEIS.

The partial interchange with M-83 is not required for the ICC to be completed; therefore there is no project segmentation. The maps for the project show several other projects that are to be completed by others (i.e., M-83, A-59, etc.) to further illustrate other planned County Master Planned projects that may be built connecting to the ICC. Impacts associated with these separate projects are not part of the ICC Selected Alternative.

148 The ICC will fail as a tollway because it does not meet the criteria for a successful tollway: there are no reasonable alternative routes (the Bay Bridge or Baltimore tunnels), toll costs are minimal, and the travel time savings are significant. Studies have shown that drivers are not inclined to pay tolls merely to save a couple of minutes.

Traffic studies performed as part of the NEPA approval process for the ICC indicate that, to the

contrary, a significant number of persons will be willing to pay tolls to use the ICC. Time savings will be one of the factors that make the ICC a desirable alternative, even with tolls. Experience with congestion managed toll facilities indicates that people are willing to pay tolls to save time, avoiding congestion on immediately adjacent alternative routes.

149 **If the ICC must be a tollway, then it must be built as a suspended tier over the existing Montrose/Randolph/Fairland corridor as an access controlled toll road. California builds suspended roads in developed, congested areas very successfully and very profitably, and Maryland is not in an earthquake zone.**

The Selected Alternative, Corridor 1, is north of the Montrose/Randolph Road corridor and therefore does not need to be constructed as a suspended tier over those important local arterials.

150 **The FEIS failed to respond to my comment on p. 18 of 58 of my letter regarding p. 111-31 of the DEIS with respect to E-ZPass: Why are other alternatives not considered, such as Pre-Pass? Why isn't competitive bidding proposed to determine which vendor's technology should be used? Isn't it a violation of the state and federal acquisition regulations to procure a particular brand of technology without competitive bidding? Would vehicles already equipped with Pre-Pass be required to buy a second transponder technology, E-ZPass?**

E-ZPass is the toll collection system already used on Maryland's toll facilities and its continued use is competitively bid. E-ZPass technology is also used throughout the Northeast corridor to allow for interoperability for motorists in different states. The Lead Agencies also will continue to investigate video options, as well as pre and post registration via the internet for toll collection.

The vast majority of Pre-Pass users use a transponder that incorporates only the Pre-Pass protocol, a commercial-vehicle-weigh-station-bypass system. The pre-Pass protocol is not used for toll collection. Most do not incorporate an E-ZPass compatible protocol which could be used for toll collection; consequently, in these cases, a second transponder would be required for toll collection. "Fusion transponders" are available which incorporate both an E-ZPass compatible protocol and a Pre-Pass compatible protocol. Anyone using such a transponder may use it for toll collection, provided the account is kept current. Maryland and New York offer fusion transponders, which could be used for toll collection purposes in Maryland. Commercial vehicles using the ICC will be required to have a transponder for toll collection.

151 **FEIS Appendix R-8, in response 1556 dismisses my comment concerning the disregard of commercial vehicle safety inspection and enforcement facilities, such as weigh and inspection stations along the ICC, by stating that there is no space available in addition to noise and impervious surface considerations. This response is hypocritical, if not irresponsible, because it contradicts two facts borne out by the FEIS: (i) two of the stated purposes and needs of the ICC address safety and movement of goods and (ii) park-and-ride lots are being provided for commuters. In addition, the (iii) FEIS failed to show the impact on the human environment of NOT having inspection stations and (iv) the lack of space for a weigh and inspection station is not an excuse. The safe movement of goods cannot be assured without serious attention paid to commercial vehicle safety inspections. The FEIS compromises safety by dismissing inspection stations along the ICC flies in the face of safety as a stated purpose of the ICC and truck diversion off local roads as a stated purpose of the ICC (see FEIS, Appendix R-8, response to comments 101,115, 337, 698, and 1467).**

Truck weigh stations are available along I-495 and weigh in motion facilities are coming on-line to reduce the need for traditional truck weigh stations. The SHA is committed to continuing monitoring the safe and efficient movement of goods.

152 Comments 106 & 116. The response is done in a general fashion, is not responsive, is incomplete, and takes information out of context. The original question had been preceded by 14 multi-part questions that were based on specific comments made in the MCFRS letter dated 5/18/04 that is referenced by SHA in the response, as well as the more detailed follow-up letters dated 8/27/04 from Battalion Chief (B. C.) Jim Resnick of Montgomery County Emergency Management and dated 9/12/03 from Michael J. Weiner, President, Sandy Spring Volunteer Fire Department, [VFD] Inc.

In your comment on the DEIS, you raised several general and several very specific questions about the ICC and its effect on emergency service providers and response times. Because the FEIS, Appendix R was organized to allow commenters easy reference to the section of the FEIS that their comments pertain to, the responses to your comments are spread throughout the document. Additional comments and responses related Emergency Service provisions are also listed in Appendix R beginning on Page 54. The Lead Agencies have also provided some additional data and responses to your various comments in this document, including some clarification to comments listed on pages 3, 4 and 5 of your DEIS letter.

153 Comment 423. This response is complete except for cost data. It is similar to Comment 763 and the two comments and responses should have been cross-referenced. Will SHA build Emergency Vehicle access only ramps and egress only off-ramps at the four Layhill Road locations and the two Shady Grove Road locations specified in B.C. Resnick's letter? If not, why not? How much would these ramps cost?

The Selected Alternative does not include provisions for Emergency Vehicle Only Access ramps near Layhill Road. Travel times and response times will be improved with the construction of the ICC and the Lead Agencies do not think these ramps are warranted. In consultation with emergency service providers, they indicated that access to and from the ICC in this area via the MD 182 interchange is sufficient.

154 Comment 613. An approximate cost for the Winter's Run community cut-and-cover was included, but not an approximate cost for the cut-and-cover options that I requested was provided, including the ICC adjacent to Will Grove, Amersely, Llewellyn Fields, Drayton, and Free Methodist Church Camp Meeting Ground. Please list the cost for each project or a reason why cut and cover is not being considered and explain what the appropriate cost/benefit ratio is for a property listed on the National Register. Please comment on the cost/benefit ratio used for the Baltimore Harbor Tunnel to avoid impacting Fort McHenry.

The cut and cover solution along Rock Creek Option C was applied because of the very specific and unique scenario through the Winters Run community. The limited available right-of-way through Winters Run necessitated the application of retaining walls on either side of the right-of-way to avoid displacement of dozens of homes along the right-of-way. In addition, the Olde Mill Road would need to cross the ICC. The design of the "cover" was an extension of these two factors, which does not exist in the other areas mentioned in your comment. With that said, the Lead Agencies did investigate tunnel options in other areas (not all) throughout the study area. For instance, a tunnel option was investigated to minimize impacts in Spencerville to the Free Methodist Church and Campground. The tunneling options were not adopted due to high construction and maintenance costs. Lastly, with the selection of Corridor 1, the majority of the listed historic sites will not be impacted by the construction of the ICC.

Providing cost/benefit data for Baltimore Harbor tunnel is out of the scope of this project.

155 Comment 759. The response to my questions is incomplete and non responsive. I am told that the cost for a water supply system is "cost-prohibitive," but not what that cost is or even the cost for dry standpipes, which option will be considered at some future date. This response appears to be contrary to the principles and present actions related to

current homeland security initiatives in the state of Maryland.

The Lead Agencies continue to work through design details. Since publication of the FEIS, the team has met with Montgomery County Fire and Rescue Services to discuss, among other issues, provision of water along the ICC for emergency purposes. Fire hydrants will be provided within the ICC right of way at 18 cross streets where existing water supply is available. Montgomery County Fire and Rescue Services indicated this will suffice in lieu of a new water line along the ICC or dry standpipes.

156 **Comment 760. The response is complete except for cost data and at least acknowledges the validity of some of the needs of county fire and rescue. Will SHA build emergency turnarounds as specified in B.C. Resnick's letter? C. If not, why not? How much would these turnarounds cost? Will SHA install location/mileage markings every 0.1 mile along the entire length of the ICC? If not, why not? How much would these markings cost?**

The Lead Agencies met with Montgomery County Fire and Rescue Services many times several months ago. They indicated that the interchange areas are the only access (with the possible exception of one ramp and a turnaround, which is under evaluation) needed to and from the ICC. The Lead Agencies will provide 0.1 mile markers to further aid emergency service providers.

157 **Comment 761. This response is complete except for cost data and at least acknowledges the validity of some of the needs of county fire and rescue. Will SHA build on and off ramps that are wide enough to allow fire and rescue vehicles to pass traffic that is at a standstill? IF not, why not? How much will this ramp widening cost?**

The ramps that are being constructed as part of the Selected Alternative interchanges will be wide enough for emergency vehicle passage if other vehicles move to one side. The minimum width of each ramp is 27 feet (4-foot left shoulder, 15-foot lane, 8-foot right shoulder).

158 **Vol. 3, Appendix R-8, Responses to Comments: # 10 - "the widening of Muncaster Mill Road to 4 lanes is not feasible due to existing land use and the vertical and horizontal curve of the road." Yet, the extreme vertical and horizontal curve of the proposed ICC though Cashell Estates using Rock Creek Option C and destroying the existing "rural" land use is feasible?**

The horizontal and vertical curvature of the Selected Alternative, including the area through Cashell Estates, meets design criteria for a 60 mph design speed, whereas the alignment of Muncaster Mill Road is much sharper. Muncaster Mill Road provides access to adjoining properties, many of which are developed and would be displaced by any substantial widening. It is true that the impact on Cashell Estates is substantial; however, the Lead Agencies feel Rock Creek Option C is the appropriate location of the ICC, for the reasons set forth in Chapter VII of the FEIS.

159 **The ICC lighting design should follow modern IESNA design practices to efficiently provide lighting where it is needed while minimizing light pollution and light trespass in the surrounding communities. SHA has been using full cut-off lighting fixtures on other projects and this practice should be maintained for the ICC.**

The design of all new lighting for the ICC will follow IES RP-8 to be consistent with modern design practices. The lighting will be full cut-off and will include house side shielding where necessary to minimize light pollution and light trespass.

160 **The ICC should be depressed into the ground near East Norbeck Park and Longmead to minimize noise and visual impacts.**

The profile of the Selected Alternative alignment through much of Longmead has been lowered

to avoid visual and noise impacts.

161 A tunnel under Olde Mill Run would be the best solution, instead of an overpass. A tunnel would take advantage of existing contours and not destroy sightlines, and would have less noise pollution than an overpass.

The Selected Alternative does include provisions for the ICC to pass under Olde Mill Run Road. The Selected Alternative includes a roadway deck, up to 625 feet long, over the ICC to preserve vehicular and community connectivity.

162 The Swedish Road Administration is testing a new congestion charging system that varies tolls by time of day to influence traffic patterns and congestion levels. IBM as prime contractor, designed built and operates the processes and technical operations of the system, which will result in reduced pollution and a less frustrating commute. If this Swedish project is one of the first projects and it is in the testing stage, whose system will the ICC be using, and does it have any track record? Has such a system been shown to accomplish the task for which it is designed? If it is a new technology, is it subject to cost overruns?

Varying tolls by time of day or even by congestion levels measured dynamically throughout the day is not new technology that is still being tested and it has been implemented with great success. There are several systems like these throughout the United States and in Canada. For example, in California along SR 91, tolls are varied by peak period congestion. Also in California, I-15 near San Diego has a dynamic toll collection system that can change the toll amount up to every six minutes.

The tolling details have not yet been determined for the ICC, but are under consideration by the MdTA. For more information about the use of transportation pricing throughout the country and the world, visit www.hhh.umn.edu/centers/slp/projects/conpric/

Chapter III.F. Suggested Alternatives Evaluated after Publication of the DEIS

163 The congressionally defined objectives for federally funded transportation programs and projects are: ``(a) Policy.--It is in the national interest to-- ``(1) encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation related fuel consumption and air pollution through metropolitan and statewide transportation planning processes identified in this chapter;.... 23 U.S.C. § 134(a) (as amended 2005). If the Metropolitan Planning Organization adopts a plan containing a specific project as necessary to satisfy these objectives, that plan may create a presumption that the project will satisfy these objectives. But inclusion of a project in a plan does not eliminate the obligation under NEPA to consider alternatives that will achieve the substantive statutory objectives in a less environmentally destructive way. An alternative that better accomplishes the objectives enacted in the Federal Aid Highway Act may not be rejected in favor of a project that is less consistent with substantive statutory objectives.

FHWA is responsible for ensuring that states comply with the general objectives of Section 134(a). The NEPA process requires that an agency consider a "reasonable range" of alternatives that can satisfy a project's Purpose and Need. That was accomplished in this case.

164 The goals and objectives forwarded by local planning documents, but ignored by the FEIS, include increased access to transportation and decreased reliance on the

automobile. The Lead Agencies fail to explain why these local goals are not included in the purpose and need statement. In fact, the FEIS goes so far as to spurn the alternate land use/transit scheme in the Smart Mobility Report, saying it addresses different needs than the FEIS, since "[a] majority of the [Measures of Effectiveness] used in the SMI Report reflect the objective of reducing regional auto travel and increasing regional transit use, which are not objectives of the ICC purpose and need."15 These Measures of Effectiveness ("MOEs") rejected by the FEIS are, of course, exactly the ones promoted by local land use planning documents.

The land use planning documents referenced in this comment include a wide variety of goals and objectives, including both increased transportation mobility and safety and decreased reliance on the automobile. No single transportation project can satisfy all the general planning and transportation goals of local planning documents. However, the proposed ICC does and can meet a major goal of enhanced mobility in a heavily populated and developed portion of the study area.

Chapter IV: Environmental Consequences

Chapter IV.A. Avoidance and Minimization of Impacts Techniques Summary

165 New design and construction techniques will avoid many of the environmental impacts previously identified.

Measures to avoid and minimize the environmental impacts of the ICC have been made, and will continue to be made through the design and construction phases. These measures include alignment shifts to reduce impacts to streams, wetlands and communities; retaining walls and reduced typical sections; longer bridges; lowered profile; and stormwater management measures that exceed local, state, and federal requirements. Measures to mitigate unavoidable impacts are also included in the project, such as parkland, forest and wetland replacement; stream restoration; and noise barriers. Another component of the Selected Alternative is Environmental Stewardship, which includes environmental restoration efforts in the study area that are not related to the ICC or its associated mitigation.

166 Supports the extensive use of bridges to minimize environmental damage in sensitive park areas and provide for safe animal movements.

Thank you for your comment.

167 On page IV-3, the FEIS discusses bridges and culverts. The proper design of bridges and culverts can mitigate to some degree damage to threatened species, water quality, and human enjoyment. Unfortunately, the FEIS fails to provide definitive information about bridge and culvert design. This uncertainty prevents the public from adequately evaluating the impact of the ICC. The FEIS says it will "consider stream channel dimension and channel materials where culverts are planned." Culvert design is critical to prevent channel degradation, and to promote channel stability and fish movement. The public cannot meaningfully comment on critical culvert designs and their environmental impacts if such designs still remain only under "consideration" only months before the Lead Agencies plan to break ground and have not been disclosed for public review and comment.

The ROD has included a complete summary of environmental, project design and other commitments that have been incorporated as part of the proposed action. Consistent with FHWA regulations, specific design details are often not complete at the time of publication of an FEIS. Here, the FEIS reveals in adequate detail the measures that were expected to be included

as part of the final project commitments to permit adequate public review and comment. Several concurring and/or cooperating agencies also submitted comments on the FEIS concerning mitigation, design or environmental commitments that have been incorporated into the ROD. These agency concerns, as well as those suggestions reflected in this comment regarding design and construction, will be taken into account as final design proceeds. Moreover, a Memorandum of Understanding will be executed shortly after permits for the proposed action are issued designed to lay out specifically how the agencies will monitor compliance with the extensive mitigation proposals and make necessary adjustments during construction and/or operation of the proposed facility.

168 A FEIS study should make clear which measures are committed to and which are merely under study. As now written, all the bridge, culvert, runoff, and animal crossing mitigations could be studied and then rejected after the administrative record on the project has been closed - harming wildlife, water quality, and public enjoyment and prohibiting fair review and comment. Failure to provide this information in the EIS prevents meaningful comment by the public and meaningful foundations for decisions.

A full list of mitigation commitments is attached to the ROD. As the name suggests, the agencies are in fact committing to the items enumerated in this exhibit. The specific details and design of certain features have not been completed, just at final design for the proposed project has not been completed prior to issuance of a ROD. However, the list of commitments is an integral part of the project approved by FHWA and will be tracked by the monitoring program described in the FEIS and ROD. The list of available possible mitigation for the full spectrum of natural resources impacts was set forth in the FEIS (refer to Chapters IV and VII.C), allowing the public and governmental entities a reasonable opportunity to comment. For the particular proposal referenced in the comment, a full program of deer and small mammal crossings is part of the environmental commitment matrix for the project.

169 The SHA should use end-on construction of bridges and other environmentally sensitive techniques in place of cut and fill to reduce the footprint and impacts of the ICC.

The exact design and construction techniques have not yet been determined. However, great care has been given during the preliminary design to minimize environmental impacts and the disturbance on the ground in the sensitive stream valley parks. End on construction has proven to be an effective method to "tread lightly" while constructing bridges. This and other innovative construction techniques will continue to be investigated as the design and construction process continues.

170 We are glad that efforts are being considered to lessen impacts to rare species but we are disappointed that we were not consulted about the proposed alignment shifts. As you know, MNPS have extensive knowledge of the natural heritage in the study area and could have informed you about other potential RTE impacts had we been consulted. We gladly offer our time and expertise to visit this site to determine the best alignment alternatives to safeguard the long-term viability of the Rough-leaved asters and the Halberd-leaved greenbriers. Will SHA include MNPS in further discussions related to avoiding Rough-leaved Aster habitat?

The Lead Agencies will continue to consider input from all stakeholders including the MNPS regarding the avoidance and minimization to the Rough-leaved asters and the Halberd-leaved greenbriers. Input from each stakeholder regarding all aspects of the project is valued. The Lead Agencies are committed to consider input from all entities involved with the project. As described in the response to Comment F-511, extensive efforts have been conducted to avoid both rough-leaved aster and halberd-leaved greenbrier In the vicinity of Wetland 6J. In fact, the shift resulted in a complete redesign of the highway from existing I-95 east to US Route 1.

171 Requests for records pertaining to property acquisitions.

The properties that may be acquired for the ICC, if built, are identified on the project mapping that can be viewed on the ICC website (www.iccstudy.org) or in the printed copies at area libraries. Additional Information was provided about potential displacements via CD on March 22, 2006

172 Have affected property owners been notified? How do homeowners in the area find out if their homes are affected by the selected alternative?

All potentially displaced property owners and many others close to the ICC have been included in important mailings and notifications. In addition to the regular mailings to interested stakeholders, the Lead Agencies mailed notification specifically to homeowners that could potentially be displaced and those from whom property may be needed. Specific outreach meetings were held with all communities that would be directly affected. At these meetings, the Lead Agencies focused on very specific information including, but not limited to noise analysis and property rights. These meetings were held in the fall of 2005.

The Lead Agencies will continue to work with the owners of property that is needed for the construction of the Selected Alternative. The Lead Agencies will meet with affected property owners and provide them more detailed information about the real estate process. Likewise, the Lead Agencies will work to further refine the design and specifications of the Selected Alternative and begin the purchase process for those properties that are still needed. For additional information on the real estate needs and acquisition process see FEIS Chapter IV.B and Appendix E, Summary of SHA's Relocation Assistance Program.

173 At a hearing in January 2005, an engineer told me that the grade of Emory Lane would be raised 10 feet to form an overpass over the ICC, and that 16301 Emory Lane would be bought or seized because of lack of access from Emory Lane due to the raise in grade. Today, this address was not listed In the Washington Post article. Will there be an overpass or underpass where the ICC cuts across Emory? Is 16301 being taken? This house is right next to mine. Have the plans changed in this location? Please let me know ASAP.

The FEIS plates show Emory lane being raised approximately 8' to 10', with the ICC being lowered approximately 15-feet from the existing ground and passing under Emory Lane.

While the engineer Ms. Murphy spoke with last January may have indicated that 16301 Emory Lane may be displaced, that is no longer the case. Engineering refinements completed since that time and shown in FEIS have allowed us to limit the impacts at 16301 Emory Lane to a small right of way purchase. This property will not be displaced.

174 This road may be necessary but we may be forced to move because it will be in our back yard.

The Community Impact Assessment in the FEIS (Chapter IV.B) details the potential community impacts that will be expected along the ICC. The Lead Agencies have avoided and minimized impacts to communities by depressing the roadway to minimize noise and visual impacts to communities, shifting alignments to avoid communities and other sensitive resources, and reducing typical roadway section widths where feasible. In addition retaining walls have been proposed near residential properties to reduce the overall footprint of the proposed roadway. If you feel your property is impacted by the Preferred Alternative, please contact SHA Office of Real Estate regarding specific concerns over property acquisition. The State will pay just compensation and provide relocation assistance in accordance with the Uniform Relocation Act

and state laws.

175 The ICC destroys communities.

The Lead Agencies have been committed to minimize impacts in several ways, using such measures as depressing the roadway to minimize noise and visual impacts to communities, shifting alignments to avoid communities and other sensitive resources, and reducing typical roadway section widths where feasible. In addition, retaining walls have been proposed near residential properties to reduce the overall footprint of the proposed roadway (refer to FEIS Chapter IV.B).

176 Residents checked the master plan and purchased their homes based on where the ICC was shown. Residents feel like they are being punished for actually checking the plans.

A substantial portion of the ICC is in the same general location as the master plan alignment shown in several master plans throughout the study area. Most development along the Selected Alternative was set back an appropriate distance from the ICC right-of-way because the majority of the proposed alignment and interchanges were established on the area master plans.

177 The state should offer discounts on the toll to local residents who may need to use the ICC several times a day, which could be cost prohibitive for them.

It is intended that tolls on the ICC be priced to manage demand and congestion (as well as to generate revenue to make a substantial contribution to project costs), allowing vehicles to travel the roadway at highway speeds. Providing discounts to local residents would negate the ability to manage demand and congestion.

178 Request that the State add a parallel bike path along the entire route in the future when population density and ridership make it cost beneficial to do so.

The MDOT recognizes bicycling and walking as important modes of transportation and addresses the needs of cyclists and pedestrians on all roadway improvement projects where it is reasonable and feasible to do so. While the Selected Alternative does not include the full construction of a hiker-biker trail parallel to the roadway, it is designed to accommodate future construction and includes the grading, paving, widening of bridges, lighting and storm water management capacity to support the segments of the trail that are parallel to the ICC. In addition, other bicycle and pedestrian improvements in the study area have been included as Environmental Stewardship opportunities. See FEIS Chapter VII.D.3, (description of proposed bicycle/pedestrian route) and FEIS, Volume II, Figure IV-3.

179 Please tell me exactly how close the ICC and its construction will be to my house (17011 Catalpa Court in Derwood).

Based upon preliminary engineering that is still subject to change, the Selected Alternative includes a retaining wall between the new roadway and the homes on Catalpa. According to the current level of engineering, the new roadway would be approximately 40 feet from the property line of 17011 Catalpa Court and approximately 75 feet from the house. The commenter was also contacted by phone, prior to the ROD, to review this information.

180 Do construction projects like the ICC affect the market value of homes that are close to the highway?

It is possible that construction of a new highway would affect property values, both positively and negatively

181 Eliminating the bicycle paths may have reduced the impact, but a reduced impact is still

an impact, and it is a large one given that we are still left with six motor lanes.

Bike paths were not eliminated, but were scaled back to reduce impacts to sensitive park resources. Impacts of the highway have been evaluated and appropriate mitigation will be included as part of the project.

182 **I received a letter stating that my property is in the area to be condemned for the state ICC project. I believe this letter was sent in error as I live in Anne Arundel County.**

The letter you received was not from the Lead Agencies, but instead was from an attorney attempting to solicit your business in the event that your property is acquired to build the ICC. Clearly, your property will not be acquired as part of the ICC.

183 **Maryland is ignoring the need for the full ICC trail. A partial trail is more dangerous and will encourage people to choose to drive instead.**

The MDOT recognizes bicycling and walking as important modes of transportation and addresses the needs of cyclists and pedestrians on all roadway improvement projects where it is reasonable and feasible to do so. Based on a study of a possible full-scale parallel hiker-biker trail, the Lead Agencies concluded that the additional natural and community impacts associated with construction of an 18-20 mile hiker/biker trail along the entire length of the ICC, combined with a cost of such a trail, which could approach $100 million, were undesirable. The Lead Agencies thus developed an alternative plan that takes advantage of extensive existing trails and planned trails included in County master plans. Areas where the trail diverges away from the ICC allow for better community connectivity to the trail system while also reducing environmental impacts and cost. The ICC concept plan would provide an east-west trail connection throughout the study area. New trail portions along the ICC would be used to facilitate connections between local trail routes and would be located primarily outside of environmentally sensitive areas. This concept plan was developed with input from local, state and federal agencies but would require additional development and coordination with the local governments separate from the current study for full implementation.

While the Selected Alternative does not include the full construction of a hiker-biker trail parallel to the roadway, it is designed to accommodate future construction and includes the grading, paving, widening of bridges, lighting and storm water management capacity to support the segments of the trail that are parallel to the ICC. In addition, other bicycle and pedestrian improvements in the study area have been included as Environmental Stewardship opportunities. See FEIS Chapter VII.D and Figure IV-3 for more information on the trail plan.

184 **Diverting cyclists to side roads and existing trails is not suitable for commuters, those running errands and those carrying heavy or bulky loads. The current plans are a poor substitute for a path along the full ICC right-of-way. Experience has shown that where a high quality high speed trail exists, like the Capital Crescent Trail between Bethesda and Georgetown, hundreds of cyclists will use the trail each day, even in winter. This results in a significant reduction in traffic congestion and environmental degradation. You should build the bicycle path along the entire right-of-way of the ICC.**

For safety reasons, the MdTA and the SHA will not permit bicycle operation on the travel lanes or on the shoulders of this high speed roadway. Based on a study of a possible full-scale parallel hiker-biker trail, the lead agencies concluded that the additional natural and community impacts associated with construction of an 18-20 mile hiker/biker trail along the entire length of the ICC, combined with a cost of such a trail, which could approach $100 million, were undesirable. The $100 million cost estimate for the continuous bike path was derived using a combination of design elements from the previous 1997 ICC Study and current design features. Some of the 1997 elements applied to the cost estimate included the roadway typical section and bridge structures over ramps to allow for continuous bike path connectivity. The right-of-way cost estimates were also based on the unit cost from the 1997 study (which is lower than current land

values).

While the Selected Alternative does not include the full construction of a hiker-biker trail parallel to the roadway, it is designed to accommodate future construction and includes the grading, paving, widening of bridges, lighting and storm water management capacity to support the segments of the trail that are parallel to the ICC. In addition, other bicycle and pedestrian improvements in the study area have been included as Environmental Stewardship opportunities. See FEIS Chapter VII.D, (description of proposed bicycle/pedestrian route) and FEIS, Volume II, Figure IV-3.

185 The impacts to Cashell Estates, one of the oldest residential communities in the area, were not thoroughly studied in the FEIS.

Impacts to Cashell Estates are detailed in the Community Impact Assessment of the Environmental Impact Statement. Please refer to the Socioeconomic and Land Use Technical Report; FEIS Chapter II.A (pages II-11 and II-12); Chapter IV.B.3 (pages IV-29 through IV-82); and Chapter V, Final Section 4(f) Evaluation (pages V-10 through V-20). Rock Creek Option C was developed to avoid impacts to Rock Creek Park. With this option, the ICC would pass beneath Olde Mill Run and an Olde Mill Run grade separation to reduce visual impacts and maintain current access within the community. Retaining walls are included with Rock Creek Option C to minimize displacements and reduce property acquisition at the south end of Catalpa Court and in the Winters Run neighborhood. The Lead Agencies will continue work with residents of these communities throughout the project to further avoid and minimize impacts.

186 Encourages the Park and Planning Commission to take responsibility for the prompt funding and completion of the recreational hiker-biker trail. It should be funded as a recreational rather than transportation project.

Thank you for your comment.

187 The FEIS states that Rock Creek Option C Grade Separation was identified because it would minimize impacts to communities and maintain current traffic patterns. However, it appears to maximize impacts and does not maintain current traffic patterns.

The Olde Mill Grade Separation option associated with Rock Creek Option C was selected in part because it preserves the current vehicular access patterns to the Winters Run community. The Selected Alternative also includes a larger "deckover" section to not only retain the vehicular traffic access to MD 115, but also to provide for a large green space to enhance the communities' connectivity and viewshed.

188 There is a lack of concern for protection of the final resting places of Marylanders and our historical heritage. This is evident by the lack of stated policy by the SHA that known and possibly unknown cemeteries and burial sites will not be impacted or disturbed by the ICC. The FEIS does not address how Maryland Cemeteries will be protected in the Southern Corridor of the ICC project. Maps in the FEIS do not identify nor indicate whether these burial sites will be impacted by construction of the ICC. All cemeteries within the 20-mile corridor of the ICC should be shown on a map and protected from major construction.

It is the SHA's policy not only to make every effort to avoid sensitive resources of this type during planning of transportation projects throughout the State, but also to protect unmarked burial grounds and cemeteries by not promoting their locations to the general public for fear of vandalism that could occur if mapped. Cemeteries have been considered as part of two resource types in the Final Environmental Impact Statement: (1) Community Facilities and Services and, (2) Cultural Resources.

Cemeteries were also considered as potential cultural resources, both as historic (above-ground) properties and as archeological resources. The two cemeteries cited above were previously brought to SHA's attention in a list that Mr. Becraft provided during prior correspondence/public testimony on the Draft Environmental Impact Statement (DEIS) in January 2005. The Bonifant Cemetery (Maryland Inventory of Historic Properties (MIHP) Survey Number M:28-21) was determined not eligible for listing in the National Register of Historic Places (NRHP) by the Maryland Historical Trust (MHT) in a Determination of Eligibility form signed in 2000. This cemetery is located on Pebblestone Drive and will not be impacted by Corridor 1 of the ICC. The Oak Chapel United Methodist Church and Cemetery (MIHP Survey Number M:27-10) has not been formally evaluated for listing in the NRHP. However, the property is not within the Area of Potential Effects (APE) for the ICC project and will not be impacted by the proposed Corridor 1.

The FEIS identifies Corridor 1 as the Preferred Alternative. Prior to selection of the Preferred Alternative, SHA thoroughly investigated all of the potential alignments for the presence of historic and archeological resources as described in Chapters II.D and Chapters IV.E in both the DEIS and FEIS for the ICC. Both of these documents can be accessed on-line at www.marylandroads.com. To the best of our knowledge, the Preferred Alternative will not impact any cemeteries eligible for listing in the NRHP. Furthermore, any historic cemetery or unmarked grave discovered as the project progresses will be treated in accordance with the Unexpected Discovery stipulation of the project's Memorandum of Agreement between the FHWA, the MDSHPO, the MdTA, and SHA as referenced in the FEIS and included as Appendix J in Volume 2 of the FEIS. Any cemetery or unmarked grave, whether historic or not, that might be identified during the course of the project, would be treated in accordance with the State of Maryland's burial laws, including that found in the Criminal Law Article, Title 10, Subtitle 4 of the Annotated Code of Maryland.

189 Coalition has provided information on several burial sites that may be affected or endangered by the ICC. The historic cemeteries that could be impacted by the ICC are the Bonifant Cemetery in Silver Spring, the Oak Chapel United Methodist Church and Cemetery in Layhill, Judea Memorial Gardens, Norbeck Memorial Cemetery in Olney; and other African American church cemeteries on Norbeck and Muncaster Mill Roads.

A list of all identified cemeteries in the project's study area is included in the description of "Other Community Facilities and Services" (FEIS Chapter II.A, page II-21). These cemeteries are mapped on Figure II-4 (FEIS Vol. 2). Impacts to these resources are presented in Table IV-44 (FEIS Chapter IV.B, page IV-83) and discussed on page IV-86. The only potential effect to cemeteries identified in this section is the purchase of 0.15 acre of land from the Judean Memorial Gardens. There are no graves in the area where the potential acquisition would occur. The Judean Gardens cemetery is less than 50 years old and is not an historic cultural resource. Subsequent to the DEIS, one historic cemetery was identified as having the potential to be impacted by the ICC. This was the unmarked "Billy Ward's Cemetery" (18MO622), which was identified in the Burtonsville area through archival research for the additional Phase I archeological investigations. SHA undertook detailed archival investigation and conducted a remote sensing survey of this location. When the results of the geophysical investigation appeared to confirm the presence of the cemetery, SHA engineers redesigned Corridor 2 to avoid any impact to this location. Site 18MO622 is discussed on Page II-40 of the FEIS.

190 No mention is made in the DEIS of the need to protect the Alloway Cemetery or the Primitive Baptist Church Cemetery. However these sites would be impacted by Corridor 2. Cemeteries and burial sites must be included in the MOA with the Maryland Historic Trust and other agencies.

The FEIS identifies Corridor 1 as the Preferred Alternative. Prior to selection of the Selected Alternative, SHA thoroughly investigated all of the potential alignments for the presence of historic and archeological resources as described in Chapters II.D and Chapters IV.E in both the

DEIS and FEIS for the ICC. Both of these documents can be accessed on-line at www.marylandroads.com.

191 Cemeteries and burial sites along MD 198 and I-95 may exist that could be impacted by the ICC.

The Section 106 process, described in detail in the DEIS/4(f), involved careful consideration of all historic and archeological resources identified in and near the proposed alternatives for the ICC. Based on results of historic research and archeological investigations for the DEIS/4(f), no historic cemeteries were identified as being within the potential impact area of the two build alternatives (Corridor 1 and Corridor 2). Subsequent to the DEIS, only one historic cemetery was identified as having the potential to be impacted by the ICC. This was the unmarked "Billy Ward's Cemetery" (18MO622), which was identified in the Burtonsville area through archival research for the additional Phase I archeological investigations. SHA undertook detailed archival investigation and conducted a remote sensing survey of this location. When the results of the geophysical investigation appeared to confirm the presence of the cemetery, SHA engineers redesigned Corridor 2 to avoid any impact to this location. As described in the FEIS, an MOA between the FHWA, the MDSHPO, the MdTA, and SHA was signed in December 2005. This MOA sets forth stipulations that FHWA, MdTA, and SHA must carry out in order to take into account the effects of the undertaking on historic properties. Since the Selected Alternative (Corridor 1) will have no identified impacts to any historic cemetery or grave, any such resource inadvertently discovered during the further course of the project would be treated in accordance with the Unexpected Discovery stipulation, which would require full consideration of the potential effects on such resources as well as coordination with the MDSHPO. Any cemetery or unmarked grave, whether historic or not, that might be identified during the course of the project, would be treated in accordance with the State of Maryland's burial laws, including that found in the Criminal Law Article, Title 10, Subtitle 4 of the Annotated Code of Maryland.

192 Tables 3, 4, and 5 (pages 14, 15, 18, and 21) do not make any reference to cemeteries or burial sites that can be identified in the listings of historic sites or Environmental Stewardship Sites.

The Section 106 process identified no historic cemeteries that will be impacted by the Selected Alternative, Corridor 1. Any historic cemeteries or graves that might be identified during the further progress of the project will be dealt with under the Unexpected Discovery stipulation of the MOA.

193 Historic Rockville/Historic Takoma recently completed a GPS survey of 263 burial sites in Montgomery County which is available as a GIS map to the SHA.

Thank you for this information. SHA made a good faith effort to identify and review all available resources for historic and archeological site identification as described in the following technical reports that were developed as part of the analysis for this project:

- Maryland Historic Context, Montgomery and Prince George's Counties, Intercounty Connector Project (Spero, March 1996, revised October 1996)
- Phase Ib Archeological Identification and Sampling Survey of the Intercounty Connector (ICC), I-270 to US 1, Montgomery and Prince George's Counties, Maryland (Tull et al. 1997)
- Archeological Survey of the Intercounty Connector Project, Montgomery and Prince George's Counties, Maryland (Bedell et al. 2004)
- Archeological Survey of the Intercounty Connector Project, Montgomery and Prince George's Counties, Maryland, Addendum (Bedell and LeeDecker 2005)

- Ground-Penetrating Radar Survey, Billy Ward's Cemetery (19MO622), Kruhm Road, Burtonsville, Montgomery County, Maryland (Chadwick et al. 2005)
- Impact Assessment Technical Report, I-270 to US 1 (EHT Traceries 2004)
- Supplemental Impact Assessment Technical Report, I-270 to US 1 (SHA 2005)
- Maryland Historic Context, Mid-Twentieth Century (1946-1960), Montgomery County and Prince Georges County, Intercounty Connector Project (EHT Traceries, 2003).

194 The ICC trail between Old Gunpowder Road and the Montgomery County line will be an important connection to the trail system of northern Prince George's County, including systems within Fairland Regional Park.

The lead agencies agree that this connection is important and have included this connection as part of the overall plan between Old Gunpowder Road and Briggs Chaney Road. A portion of this connection will be constructed as part of a private development for MNCPPC in Little Paint Branch Park. This section to be built by others will connect the ICC trail with Old Gunpowder Road.

195 The 2002 Prince George's County General Plan designated US 1 as a Developing Tier Corridor, and one goal is to provide pedestrian oriented development along this corridor, with wide sidewalks, a side path, and/or designated bike lanes. The ICC trail would connect to this corridor.

The lead agencies recognize the significance of the US 1 corridor as an area with significant pedestrian and bicycle use. The ICC pedestrian and bicycle route provides a connection to this area as shown on Figure IV-3 of the FEIS, Volume 1.

196 The portion of the trail leading to Virginia Manor Road should remain in the plan. As part of the Subregion I Master Plan update, input by the community and the developers of the planned Konterra development shows support for the incorporation of numerous trails and pedestrian walkways in the vicinity of the town center. These trails will be a logical connection for the ICC trail

The ICC pedestrian and bicycle route plan includes a connection between US 1 and Virginia Manor Road. Connections between Virginia Manor Road and the proposed trail system in the Konterra Development did not have independent utility, and therefore have not been included in the ICC pedestrian and bicycle plan. However, the lead agencies will continue to work with the County to study trail linkages as the Konterra Property plans are developed.

197 Do not preclude future trail construction along the entire corridor.

The Maryland Department of Transportation recognizes bicycling and walking as important modes of transportation and addresses the needs of cyclists and pedestrians on all roadway improvement projects where it is reasonable and feasible to do so. Based on a study of a possible full-scale parallel hiker-biker trail, the Lead Agencies concluded that the additional natural and community impacts associated with construction of an 18-20 mile hiker/biker trail along the entire length of the ICC, combined with a cost of such a trail, which could approach $100 million, were undesirable. The Lead Agencies thus developed an alternative plan that takes advantage of extensive existing trails and planned trails included in County master plans. Areas where the trail diverges away from the ICC allow for better community connectivity to the trail system while also reducing environmental impacts and cost. The ICC concept plan would provide an east-west trail connection throughout the study area. New trail portions along the ICC would be used to facilitate connections between local trail routes and would be located primarily outside of environmentally sensitive areas. This concept plan was developed with input from local, state and federal agencies but would require additional development and coordination with

the local governments separate from the current study for full implementation.

While the Selected Alternative does not include the full construction of a hiker-biker trail parallel to the roadway, it is designed to accommodate future construction and includes the grading, paving, widening of bridges, lighting and storm water management capacity to support the segments of the trail that are parallel to the ICC. In addition, other bicycle and pedestrian improvements in the study area have been included as Environmental Stewardship opportunities. See FEIS, Section VII.D and Figure IV-3 for more information on the trail plan.

198 What is the definition of "housing as a last resort" (FEIS Vol. 1, page IV-13)?

Any relocation assistance eligibility for displaced residents that exceeds the set statutory monetary limits, any entitlement to relocation assistance payment that exceeds $22,500 for a residential owner occupant or $5,250 for a residential tenant automatically qualifies such displaces as "housing as a last resort" recipients.

199 The FEIS mistakenly states that a meeting was held with Cashell Estates on April 14, 2004, when in fact that meeting was cancelled and never rescheduled. SHA did meet with Cashell Estates on October 10, 2005, 6 weeks before the DEIS was released, and it appeared that SHA did not fairly consider the concerns and impacts to Cashell Estates.

Rock Creek Option C was developed in detail very early in this NEPA Study, shown on study maps at community and public meetings/hearings, on the project website and in project literature for more than two years. The Lead Agencies, as part of the proactive public outreach efforts and the Community Impact Assessment conducted for this study, partnered with the community leaders in arranging for a special community meeting in the Spring of 2004. Unfortunately, the community had not completed the notification and scheduling for the meeting and only two residents of Cashell Estates came. The Lead Agencies scheduled another outreach meeting in the fall of 2005. Letters were mailed to hundreds of residents in the Winters Run, Cashell Estates and neighboring communities informing them of the special outreach meeting. The meeting was well attended.

200 Residents of Cashell Estates would not longer be able to walk to the bus stop, the park, or Redmill Shopping Center.

There will be homes remaining in Cashell Estates both to the east and west of the ICC alignment. There are now two potential paths for pedestrians traveling between Cashell Estates and Redland Road: Garrett Road and Nedham Road. With the Selected Alternative, there will be one potential path: Relocated Overhill Road, approximately 1,700 feet south of Garrett Road. Residents to the west of the alignment will be able to access Redland Road and access these facilities as they do today, along Redland Road (although there are currently no sidewalks through this section). For residents to the east of the ICC, the new, less convenient crossing at Overhill Road would provide safe crossing to Redland Road, to the park, shopping centers and other amenities accessible from Redland Road.

201 Residents of Cashell Estates would see a six lane highway with noise barriers, even if the ICC were lowered.

The ICC and its potential noise walls would be visible from the communities, including Cashell Estates residents.

202 The established rural community of Cashell Estates would be destroyed and the remaining fragmented areas would be adversely impacted forever.

Unfortunately, the Cashell Estates and Winters Run communities would experience impacts with Rock Creek Option C. The FEIS does not hide such impacts, which are detailed in the

Community Impact Assessment. These impacts include residential displacements, increased noise, isolation of northern residences, visual intrusions, and other impacts associated with introducing a major transportation facility into a suburban area.

Some of the measures taken to minimize and avoid those impacts include passing the ICC beneath Olde Mill Run to both reduce visual impacts and maintain current access within the community. Retaining walls are included under Rock Creek Option C to minimize displacements and reduce property acquisition at the south end of Catalpa Ct. and in the Winters Run neighborhood. The Lead Agencies will continue to work with residents of these communities throughout the project to further avoid and minimize impacts to the communities where possible.

203 The Fire and Rescue response times would increase due to the re-routing of Overhill Road.

As outlined in FEIS Chapter IV.B.4.c and in the Appendix which includes letters from Montgomery County Fire and Rescue, the ICC is projected to improve response times throughout the study area.

204 SHA did not try to reduce impacts to Cashell Estates by modifying the alignment or by incorporating design features that would reduce impacts.

Some of the measures taken to minimize and avoid those impacts include passing the ICC beneath Olde Mill Run to both reduce visual impacts and maintain current access within the community. Retaining walls are included under Rock Creek Option C to minimize displacements and reduce property acquisition at the south end of Catalpa Court and in the Winters Run neighborhood. The Lead Agencies will continue to work with residents of these communities throughout the project to further avoid and minimize impacts to the communities where possible.

205 Even with a noise barrier, noise levels would increase by 42% over the current level, as substantial impact.

Receptor 6A is located at 6917 Garrett Road in Cashell Estates. The ambient noise levels at receptors distant from any road vary with what is happening in the community at the time of the measurement. The ambient level measured at Receptor 6A was 45 dBA; however, ambient level at nearby receptor R-4D at 17001 Overhill Road was 51 dBA. In any case, an impact occurs at R-6A with the 2030 noise level predicted to be 75 dBA. A barrier was analyzed for this location, which resulted in a noise insertion loss of 11 dBA, thereby lowering the Build noise level to 64 dBA. This reduction is in conformance with 23CFR772, SHA Sound Barrier Policy dated May 1998, and FHWA Guidance dated June 1995. 23CFR, Part 772.11e states: "When noise abatement measures are being considered, every reasonable effort shall be made to obtain substantial noise reduction. On page 1, the FHWA Guidance states "…a substantial reduction should be obtained (at least 5 dBA)." In addition, SHA Sound Barrier policy states "The noise reduction goal for receptors with the highest noise levels (first row receptors) is 7-10 dBA." The Federal Guidance and SHA Policy are based on what is practical to achieve. The barriers analyzed for Cashell Estates exceeds all the above criteria and goals.

206 It would become more dangerous for traffic turning to and from Redland Road and to the relocated Overhill Road. Why wouldn't Overhill Road be relocated to Nedham Road for a safer exit onto Redland Road?

The new intersection of Overhill Road at Redland Road will be designed to satisfy criteria for grades and sight distance. Utilizing Nedham Road would have required raising or lowering the ICC through the area to pass over or under Nedham Road, increasing the visual impact to the community. The Lead Agencies used Nedham Road earlier in the study, but changed to our current arrangement for the above reasons. Utilizing Nedham Road also required steeper grades on both the ICC and Nedham Road.

207 Not including a full and complete bike trail will encourage physical inactivity.

The ICC would maintain all existing pedestrian and bicycle networks while also providing new pedestrian and bicycle networks thus improving opportunities for outdoor exercise and recreation. The ICC is also anticipated to reduce travel times, thus allowing for more leisure time.

208 Access to emergency medical care will get worse with the ICC, specifically for those who must travel on MD 97 from Leisure World to Montgomery General Hospital. It appears from the FEIS that the projected traffic exceeds the capacity of MD 97. Therefore, SHA should conduct a study of all intersections along MD 97 that are between Leisure World and Montgomery General Hospital be studied to support the statement that the ICC will improve the health and safety of Maryland residents.

The ICC would not cause deterioration in emergency vehicle response. The level of service in the peak hours is acceptable and represents little delay given the construction of a new interchange at MD 28 and Georgia Avenue. The MD 28/MD 97 intersection will be grade separated and will have two signalized intersections at its ramp terminals by 2030. Under the No-Action Alternative these two intersections operate at LOS A and B in the AM and LOS C and D in the PM. These two intersections improve under the Build Alternatives (both intersections in the AM have a LOS of A, and both have a LOS of B in the PM. Five intersections along MD 97 were studied in the FEIS: MD 97/MD 108, MD 97/MD 28 (NB), MD 97/MD 28 (SB), MD 97/Bel Pre Road, and MD 97/Randolph Road. Three intersections fail with or without the ICC. Both MD 97/Bel Pre Road and MD 97/Randolph Road become worse with the ICC. The number of hours at capacity is identical for each intersection with or without the ICC (i.e., the amount of congestion is identical for both the No-Action and Build Alternatives).

209 There are no federal agencies dedicated to ensuring that the human environmental impact of different alignments is properly considered, like there are for the natural environment.

While most of the federal resource agencies that participated in the ICC studies have as their primary mission the protection of our natural resources, all of them have a public interest review requirement. This full public review requirement is intended to have ALL agencies attempt to balance impacts and benefits to the natural, social and cultural resources in the study area. Each of the federal agencies takes this full public review very seriously prior to issuing its position on a complex project like the ICC.

In addition, there are state and local agencies whose primary mission is the protection of human and cultural resources. Examples include the MNCPPC, the MHT and the MDP. Like their federal partners, these agencies have an interest in considering all of the potential impacts of the ICC prior to rendering their opinions.

210 In terms of analyzing and presenting the impacts on the human environment of Rock Creek A and C, the DEIS and FEIS are inadequate. Specifically, the FEIS does not provide a discussion of how Cashell Estates residents can be fairly compensated for their homes.

The FEIS includes a discussion (Chapter IV.B.1) of the impacts of residential impacts in the Cashell Estates area as well as the impacts to other neighborhoods throughout the study area. Although the FEIS does not and cannot predict the results of the specific real estate transaction between SHA and individual property owners prior to a final decision, the document does explain how the SHA will proceed through the right-of-way and relocation assistance process. The FEIS summarizes how the social impacts were studied, the results and what laws govern property owners' rights. In addition, in the Fall of 2005, the Lead Agencies conducted an outreach effort that included all of the major groups of communities that could have property

impacts. Cashell Estates and Winters Run were part of the set of communities for which these targeted outreach efforts were conducted. At these meetings, the Lead Agencies devoted a good portion of the presentation informing the community members of their rights as property owners, how they could get more information and who at SHA they could speak with for more information.

211 SHA chose to artificially define "low income" using the federal poverty line of $17,603 for a family of four. Given that Montgomery County is one of the most affluent in the US, SHA's definition of "low income" appears to be biased against retired residents on a fixed income. Instead, SHA should use the US Department of Housing and Urban Development's definition of low income, which is 65 percent of median income, a value that would approach $70,000 in the Derwood area of Montgomery County.

This is a USDOT definition as described in DOT Order 5610.2, and DOT Order 6640.23. Both define "low-income" as a person whose median household income is at or below the Department of Health and Human Services poverty guidelines. A "low income" population is any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.

The Lead Agencies used this recognized standard definition to conduct the studies to meet the requirements of the Executive Order 12898 - Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations. For more information visit http://www.hud.gov/offices/fheo/FHLaws/EXO12898.cfm

212 SHA initiated the condemnation process without federal approval of the ICC and has admitted that there are no comparable residences nearby as required by federal law (The Uniform Act and 49 CFR 24 regulate real estate acquisitions for transportation projects funded through federal dollars). No interviews with residents have occurred.

The Lead Agencies have not initiated the condemnation process for residential and business properties along the ICC corridor. Instead, the Lead Agencies initiated the appraisal process for certain properties that, based on the most recent planning studies are noted as displacements as a result of the identification of the State's Preferred Alternative. The State is aware that the appraisals may not be necessary if a No-Build decision is made by the FHWA. The State also is proceeding with these appraisals understanding that if significant time passes before a final decision is made, the appraisals may need updating. The State is performing these appraisals at this time to secure a better estimate of right-of-way costs associated with the project as the planning – or NEPA process – draws nearer to a conclusion and to be better prepared to proceed into the design and construction phases of the project if the final decision is made to select a build alternative.

213 The state should include construction of a ten-foot wide shared use path along the entire length of the ICC.

The SHA is committed to promoting bicycle/pedestrian connectivity wherever practicable, and the ICC is no different in this respect. Over the course of the last two to three years, the Lead Agencies have worked closely with representatives of Montgomery and Prince George's Counties to develop a bike plan associated with the ICC that attempts to balance the needs of a diverse bicycling community with those of the project.

214 Please incorporate into the design several features which are endorsed by the Washington Area Bicyclist Association (WABA), One Less Car-Maryland Campaign for Bicycling and Walking, and Montgomery Bicycle Advocates (MOBIKE). These include leaving space to permit a future trail bridge over I-95 and over US 29, providing space for a trail along the ICC between Briggs Chaney Road and US 29 and to cross Old

Gunpowder road, Briggs Chaney Road, and Old Columbia Pike. Also provide a space for a trail along the ICC between US 29 and Paint Branch Park and between Notley Road and Northwest Branch Park and to cross the MD 650 and MD 182 interchanges. Consider implementing the changes recommended by the Montgomery County Planning Board to eliminate the detour along Emory Lane.

The Lead Agencies met with the organizations listed and is evaluating each of the proposals on a case-by-case basis. We understand the groups' goals in developing concepts that attempt to minimize the impact of the ICC's design and construction on future bike connections. The Lead Agencies' evaluation of these concepts is ongoing and will continue to be considered if a build alternative is chosen and more detailed design information is developed.

Based on initial review of the concepts, the Lead Agencies have raised some concerns regarding increased project cost, realizing the project budget has been set by the legislature and that project costs must be kept within that budget. Also, purchasing additional right-of-way to preserve the area needed for future trail extensions could prove to be difficult, because this property would not be required as part of the current study's construction or mitigation needs. Regardless, the Lead Agencies have been evaluating the proposals set forth by the bicycling community and will continue to do so as the project progresses.

215 SHA did not fully consider the Longmead community's request to put a cover over the planned below grade route through the community from Norbeck Road to Layhill Road. SHA said this option was too expensive, even though the pollution from the ICC will impact the community.

The Lead Agencies met with the residents and leaders of the Longmead community several times throughout the planning process and did consider a host of engineering options to minimize the impacts of Corridor 1 on the community. Measures such as depressing the roadway grade, providing a pedestrian overpass, providing a cut-and-cover (tunnel-like) section of various lengths were all considered prior to the final alternative selection. The air quality impacts of the Selected Alternative, including CO, Mobile Source Air Toxics (MSAT) and PM 2.5 were analyzed. A cut and cover section would not substantially effect the air impacts.

216 The FEIS does not indicate the displacements caused by the construction of temporary roads during construction at New Hampshire Avenue, Redland Road, Old Mill Road, Muncaster Mill Road, Emory Lane, and MD 28, but it does for Layhill Road and Notley Road.

The potential for displacements at these roadway crossings and at all locations throughout the corridor were considered in the engineering process. At all of these roads, the ICC would pass beneath the existing road, and sufficient right of way, including any associated displacements, is shown in the FEIS to accommodate temporary detour roads during construction.

217 Class 3 bike routes should not be included on busy highways.

The Lead Agencies agree that Class III bicycle paths should not be included on busy roadways and the ICC does not include this type of trail.

218 The proposed bike path east of Virginia Manor would not connect into any other bicycle compatible facility and therefore lacks logical termini.

As described in the FEIS Chapter IV.B.3.d and on Figure IV-3, the bicycle path that would be constructed as part of the Selected Alternative for the ICC will connect to a planned trail along Virginia Manor Road. By connecting to the planned trails the bike path plan provides for a continuous bike trail along the length of the corridor therefore the plan does have logical termini.

219 Routing a bike path on the highway bridge (a miserable experience for cyclists) would not substitute for a bridge that spanned the entire wetland area. Widening the highway bridge for a bike path raises the question of future widening of the ICC highway, since bicycle riders could easily be accommodated with just a conventional bicycle path bridge.

The ICC has not been planned or any of the preliminary engineering completed with the idea that the highway would be widened. The facility will be managed through the use of tolls and planned to remain six lanes. The bicycle path was planned to cross sensitive resources on the same bridge as the highway in certain places to avoid having the impacts of constructing two separate bridges. The bicycle path will be separated from the roadway.

220 Page IV-50 downplays the full impacts to Longmead Community Area, since it does not describe the clearcutting of the linear forest that is the background to much of the community. The EIS needs to describe the many proximity impacts on nearby residential areas, including the risk of damage to foundations from blasting (and posting of bonds to guarantee that any damage would be compensated).

The Selected Alternative is located along the reserved transportation corridor within the Longmead community. The community would experience isolation, character changes, visual, and noise impacts. The Community Impact Assessment (CIA) in the FEIS (Chapter IV.B.3) details the potential community impacts that would be expected along the Selected Alternative. The Lead Agencies avoided and minimized impacts to communities using such measures as depressing the roadway to minimize noise and visual impacts, shifting alignments to avoid communities and other sensitive resources, and reducing typical roadway section widths where feasible. In addition, retaining walls have been proposed near residential properties to reduce the overall footprint of the proposed roadway. Renderings of the ICC in the Longmead Community are provided in Appendix G.

Based upon the geophysical investigations (a study that shows the layers of various ground materials) performed by the Lead Agencies during the planning phase of the study, most areas adjacent to the Longmead community have approximately 18 feet of material that could be excavated without the need for any blasting. Further, the Lead Agencies overlayed the preliminary proposed roadway profile and found that few areas of the roadway section fall below the level where blasting would be required. All of these studies are preliminary in nature and subject to change as the study proceeds into design and construction, where the contractor would be required to develop an approved a blasting plan.

221 How many homes are included in the right-of-way estimate?

The number of homes that are projected to be purchased for the Selected Alternative is 49.

222 SHA should explore technology that exists to allow a full length bike trail to be built adjacent to the ICC in a way that would not add to the width of the ICC or to the amount of impervious surface the highway creates.

The Selected Alternative includes a pedestrian and bicycle trail that has portions to be constructed along the right-of-way of the ICC, portions that would connect to existing trails and portions that would connect to planned trails within the study area. Although the Selected Alternative does not include a full trail adjacent to the ICC, the preliminary design does not preclude the construction of such a trail. The Lead Agencies did study a continuous trail and are not aware of any technologies that could have reduced the impacts to a greater extent than was already investigated.

223 The proposed expenditure of $2.4 billion for the ICC needs to be evaluated for its impacts on equity and environmental justice pursuant to the requirements of Title VI of the Civil Rights Act of 1964 and the Presidential Executive Order on Environmental Justice, and

the DEIS failed to meet these requirements. The Lead Agencies state that the study team did not complete an analysis of potential impacts to Environmental Justice communities in accordance with USDOT's "Order to Address Environmental Justice in Minority Populations and Low Income Populations," 1997 (Order 6640.23) for implementing EO 12898. This inconsistency casts serious doubt on whether the required analysis was conducted or was adequately evaluated.

The previous response (FEIS Appendix R-8, Comment #730) contained an error in the first sentence. The corrected response is as follows: The study team completed an analysis of potential impacts to Environmental Justice (EJ) communities in accordance with USDOT's "Order to Address Environmental Justice in Minority Populations and Low Income Populations," 1997 (Order 6640.23) for implementing EO 12898. All populations, including low income populations, will have choices for travel through the study area. They may choose to travel on existing routes that will be relieved of some traffic congestion, existing or proposed transit service or the multi modal ICC. For more information on the EJ studies, see FEIS Chapter IV.B.2 and the Socio-Economic Technical Report (SETR).

224 **The ICC DEIS analysis has not adequately evaluated the distribution of benefits and burdens related to the transportation plan, particularly with regard to (a) exposure to hazardous air pollutants, noise, and stormwater-borne pollutants and their clean up cost, (b) the accessibility of jobs and services for those with restricted access to cars, (c) traffic safety hazards and their remediation for those especially dependent on walking or bicycling, (d) transportation consumer expenditures and taxation, (e) quality of transit services, such as the degree of overcrowding on vehicles, vehicle age, frequency of service, and comfort and safety of transit access, waiting, and transfer environments, or (f) availability of employer commuter subsidies. Nor have SHA, FHWA, or TPB shown a business justification for continued disparate impacts of transportation plans and projects on protected populations, as required by law.**

Both the DEIS and the FEIS included adequate analysis of a full range of engineering and environmental evaluation and considerations for all of the detailed alternatives under consideration. The possible effects of hazardous material impacts, air pollutants, noise effects and water pollution, are all described in detail in Chapter IV.H, G and F of the FEIS. Chapter IV.B.2 of the FEIS also includes a discussion of effects and potential impacts on low-income and minority populations as part of the Environmental Justice analysis.

The technical studies also included a thorough discussion of access to jobs and that summary is included in Chapter IV.J. The Selected Alternative is projected to provide improved access to approximately 156,000 additional jobs, via car, HOV, Express Bus Service along the ICC or with the connection of proposed and existing bicycle paths. As indicated on Figure IV-3 of the FEIS, the Selected Alternative includes nearly 8 miles of new, separated Class 1 bicycle trails along the ICC (the safest by virtue of its separation from vehicular traffic). These new segments of trail connect with existing and planned trails to form a continuous bicycle and pedestrian system from one end of the study area to the other.

Chapter IV.J of the FEIS also includes a summary of the toll analysis for the Selected Alternative, including a baseline toll rate assumption and a sensitivity test for higher and lower toll rates. The actual toll rate will be set by the Maryland Transportation Authority prior to the facility's opening to traffic. The effectiveness and features of representative Express Bus Service routes along the ICC are summarized in Chapter IV.J (and covered in greater detail in the Traffic Analysis Technical Report). The Maryland Department of Transportation has started a more detailed Service Planning Study to determine the exact operational characteristics of the proposed Express Bus Service along the ICC. These studies will be completed by the time the ICC is open to traffic.

The analysis for the No-Action and build alternatives included an assumption of numerous

Transportation Demand Management (TDM) or Transportation Emission Reduction Measures (TERMS) as already included in the region's Constrained Long Range Plan. Examples include employer commuter subsidies, bicycle accessibility improvements, and telecommuting and rideshare programs.

225 The analysis by Smart Mobility, Inc. found that the ICC would likely be used almost exclusively by travelers who are from upper-middle and high-income households, providing little usage benefit to poor and lower-middle income travelers. The FEIS fails to disclose the fact that use of toll facility accounts could deny individuals with poor or no credit history the benefits attributed to the ICC. Based on our review of practices at other toll facilities it is probable that the ICC toll facility accounts will be limited to credit card users only.

The studies summarized in the DEIS and FEIS do not support this finding. The Selected Alternative identified for the ICC includes transportation choices. Some of the choices that folks from all income-levels have include driving, carpooling/ridesharing, or traveling on Express Bus Service along the ICC. Others may choose to continue to travel on the existing transportation network of roadway and transit service.

In addition, studies around the country on toll roads and facilities that include variable pricing, like the ICC will, have indicated that travelers of all income levels value their time and use facilities that charge a toll or fee to save time and achieve a more reliable trip. For information on the equity studies fro priced facilities and links to specific studies, visit www.hhh.umn.edu/centers/slp/projects/conpric.

E-ZPass can be used by any individual, even those without active credit cards. A potential user of E-ZPass could make payments automatically by credit card, but also could choose to pay by check, money order, or cash. Payments by check or money order can be sent through the mail and replenishing an account with cash can be handled at the E-ZPass Service Center or at any Maryland Transportation Authority Stop-In Center.

226 There is overwhelming public support for inclusion of a contiguous hiker/biker trail along the ICC, yet MDOT resolutely refused to listen to what the community wants.

The Maryland Department of Transportation recognizes bicycling and walking as important modes of transportation and addresses the needs of cyclists and pedestrians on all roadway improvement projects where it is reasonable and feasible to do so. Based on a study of a possible full-scale parallel hiker-biker trail, the Lead Agencies concluded that the additional natural and community impacts associated with construction of an 18-20 mile hiker/biker trail along the entire length of the ICC, combined with a cost of such a trail, which could approach $100 million, were undesirable. The Lead Agencies thus developed an alternative plan that takes advantage of extensive existing trails and planned trails included in County master plans. Areas where the trail diverges away from the ICC allow for better community connectivity to the trail system while also reducing environmental impacts and cost. The ICC concept plan would provide an east-west trail connection throughout the study area. New trail portions along the ICC would be used to facilitate connections between local trail routes and would be located primarily outside of environmentally sensitive areas. This concept plan was developed with input from local, state and federal agencies but would require additional development and coordination with the local governments separate from the current study for full implementation.

While the Selected Alternative does not include the full construction of a hiker-biker trail parallel to the roadway, it is designed to accommodate future construction and includes the grading, paving, widening of bridges, lighting and storm water management capacity to support the segments of the trail that are parallel to the ICC. In addition, other bicycle and pedestrian improvements in the study area have been included as Environmental Stewardship opportunities. See FEIS, Section VII.D and Figure IV-3 for more information on the trail plan.

227 According to MDOT, a full length bike trail would cost $100 million, which is less than 5% of the total cost of the ICC.

This comment was previously considered and responded to by the Lead Agencies (refer Appendix R-6, III. The Project Should Include a Hiker-Biker Trail). The bicycle/pedestrian route plan that is part of the Selected Alternative (see FEIS Chapter IV.B.3.d and Figure IV-3) includes a combination of segments along the ICC as well as segments along existing roads in the study area, thus recognizing the vital links between existing and planned trail systems consistent with master plans from both Prince George's and Montgomery Counties. The ICC will include paving and lighting of portions of the bicycle/pedestrian route that fall within the ICC ROW, but construction of the complete bicycle/pedestrian route is not part of the Selected Alternative. The logical termini link together areas where an ICC trail user could access and exit the trail with connections to other useable routes. Construction of the bicycle/pedestrian route beyond the limits of the logical termini is not precluded, and would require additional coordination between State and local government agencies, separate from the ICC Study.

228 It should be equally important for cyclists to reduce the length of their commutes just like automobile users. MDOT has not followed through on its promises to support the bicycling community nor its own 20 year bicycle plan. Please refer to FHWA's policy that states that bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas unless one of three conditions are met, and that the design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the additional steps listed in the policy.

As part of the Selected Alternative, the Lead Agencies will provide hiker-biker facilities along the ICC, 8 miles of which will be constructed, with the rest connecting into existing and planned trails in Montgomery and Prince George's Counties, in accordance with FHWA and MDOT bicycle policies.

229 SHA cites residential displacements. However, the impacts are obviously very minor compared to the total number of homes within the study area. There have been many highway projects built across the United States where a much higher number of residential displacements have occurred and those impacts were considered to be acceptable by permitting agencies. By the way, why is the destruction of homes in the Cashell Estates neighborhood acceptable and not considered as a "unique" or "unusual" problem when the Peach Orchard Estates impacts are considered unacceptable, unique and unusual? What percentage of households in the ICC study area would the Peach Orchard Estates displacements constitute?

The comment mistakenly references residential displacements from other highway projects built across the United States without regard to the nature of choices that must be made in the context of Section 4(f). Other projects may have resulted in a greater number of displacements, but did not require the balancing of issues required under Section 4(f). Moreover, the appropriate analysis of the impact of residential displacements is not based on a strict quantitative calculation, but on a more qualitative analysis of how the potential displacements impact the surrounding community. Comparing the number of homes to be taken to total homes in the study area, as the comment suggests, fails to take into account the character of the existing neighborhood, what would remain in that neighborhood following the displacements and other relevant factors. The comment also ignores the extreme measures that have been taken during project planning to minimize, wherever possible, residential and commercial displacements through design modifications.

The commenter inquires about the basis of the decision to choose Rock Creek Option C, even though that choice will result in severe impacts to the Cashell Estates neighborhood. In sum, the agency received very strong support from state and federal resource agencies for Rock Creek

Option C because that alignment would best protect sensitive natural resources and would reduce substantially the number acres used from Rock Creek Park. Specifically, both the MNCPPC and the National Park Service advocated vigorously for the selection of Rock Creek Option C, even though it deviated from the alignment generally associated with the County Master Plan. In addition, the analysis of residential displacements relies on the extremely difficult comparison of the Section 4(f) resources at issue and the neighborhood(s) to be impacted. Here, the value of the parkland and natural resources values in Rock Creek Park were deemed to be of such high value, that Rock Creek Option C is the Selected Alternative despite the significant impacts to the Cashell Estates community. (A complete analysis of the factors underlying the selection of Rock Creek Option C can be found in the ROD) Overall, there are fewer residential displacements along Corridor 1 (even with the selection of Rock Creek Option C) than there would be along Corridor 2.

230 Many homes in Longmead are close to the proposed Corridor 1 route and if the State still does not know whether blasting would be required in this area then they cannot know with certainty the degree of damage these homes would sustain if blasting were required. In addition, the refusal to build a tunnel or provide cut and cover in the Longmead area is to deny the importance of the quality of life of Longmead residents.

Based upon the geophysical investigations (a study that shows the layers of various ground materials) performed by the study team during the planning phase of the study, most areas adjacent to the Longmead community have approximately 18 feet of material that could be excavated without the need for any blasting. Further, the study team overlayed the preliminary proposed roadway profile and found that few areas of the roadway section fall below the level where blasting would be required. All of these studies are preliminary and nature and subject to change as the study proceeds into design and construction, where the contractor would be required to develop and get approved a blasting plan.

Cut and cover tunnels were considered and evaluated for the Longmead community and for a few other locations in the study area. The cut and cover design was used through Winters Run, where only 150-feet of right-of-way is available, to avoid even greater residential impacts. Significant retaining walls are required to avoid these impacts, and therefore serve as the "sides" of the cut and cover; adding the cover to these retaining walls was cost effective. In Longmead, a 300 foot right-of-way section is available and the roadway and grading fall within these limits, therefore not requiring extensive retaining walls and residential displacements. The Lead Agencies determined that the option of tunneling through Longmead was cost prohibitive.

231 Comment #363 - addresses the issue, if Overhill Road is relocated and becomes a county maintained road, then our property taxes will increase. Your response was, in part, to reference FEIS Chapter IV.C.3 for an explanation of Tax Base effects. This Chapter and section says nothing about how taxes would be affected by a non-county maintained road becoming a county maintained road.

The Lead Agencies cannot predict the precise effects on tax rates or how the County may modify its tax rates based on changes to the roadway network. It is not uncommon for the state and county to exchange ownership or maintenance duties for roads, sidewalks, and other facilities.

232 Comment #774 address, in part the need for a permanent fence between the ICC and The Shady Grove Presbyterian Church. Your response was, in part, that relocated Overhill Road, a 25 mph residential roadway will be located adjacent to the church. Fencing to separate the church from this roadway may be considered during final design. Overhill Road, once again, is a non-county maintained road, and has no posted speed limit signs and most residents drive less than 15 mph. How did you determine the 25 mph listed in your response?

Permanent fencing will be provided after construction is completed. A 25-mph speed limit is assumed to be the legal speed limit on roads that do not have posted signs.

233 The FEIS failed to respond to my comment on p. 23 of 58 of my letter regarding p. IV-87 of the DEIS: how will motorists summon aid on the ICC? There is no indication as to whether emergency call boxes will be installed and how emergency responders will receive notification of a summons from a call box. Again, safety is of paramount concern. If the lead agencies are so concerned about safety to stipulate it as a purpose and need for the ICC, it would behoove the lead agencies to have emergency call boxes installed for summoning aid along the ICC.

Safety remains an important component in the design, operations and maintenance of the ICC. The Lead Agencies will continue to develop more detailed plans for the design of the facility, including use of emergency and driver information infrastructure. These elements of the highway's design are not typically determined in the planning phase.

234 The ICC will have an adverse visual impact on the Town of Washington Grove because the hedgerow will not prevent the roadway from being seen and will not block the proposed lighting.

SHA's assessment of effects considered all possible physical, audible, visual and atmospheric impacts by the ICC on standing historic properties. SHA used the results of these investigations to determine which impact type would affect the Washington Grove Historic District. MHT examined the materials that SHA provided and conducted a field visit in July 2005. They concurred with SHA's determination that the ICC alignment would be sufficiently removed from Washington Grove Historic District and would not cause adverse visual, audible, physical or atmospheric impacts to the historic property. In addition to noise testing, SHA has completed air quality testing, and considered secondary and cumulative effects of the project as noted in the FEIS. Because of the distance between Washington Grove and the ICC alignment, no adverse physical or atmospheric impacts were identified by SHA's analysis. At Washington Grove's request SHA reviewed the potential noise and visual impacts on Washington Grove Historic District. Again, because of the distance of 1600 feet between Washington Grove and the ICC alignment, no physical, audible, visual or atmospheric impacts were identified that would meet the Criteria of Adverse Effect (36 CFR §800.5). SHA has applied every conceivable test to the area and continues to determine that the construction of the ICC will have no impact on the Washington Grove Historic District. SHA previously has stated that the planned new development will not be constructed in response to the ICC's presence, and its impact on the Washington Grove Historic District cannot be a factor in considering any potential impact by the ICC on historic standing structures. Based on the plan provided by Washington Grove, it would appear that both the proposed school and residential development will interpose quite large barriers between the historic district and the ICC.

With regard to the ramps at the ICC-Metro Access Road interchange, one ramp (Ramp A), will cross over the ICC mainline and be 20 feet above the existing grade of I-370. The visual impact should be limited by the hedgerow if it remains in place or the new construction if that occurs. With regard to lighting, SHA only includes partial interchange lighting along their roadways to provide lighting at interchange decision points. The ramps at the ICC-Metro Access Road interchange will include partial interchange lighting and will have full cut-off so the light does not shine upwards and to prevent the light from overflowing from the roadway at night. Currently, there is existing high mast lighting along I-370 which may need to be modified with construction but the lighting levels will remain as they are today and will have cut off as mentioned above to ensure that the lighting is angled towards the roadway Washington Grove is located further than 75 feet from the ICC and will not have any visual or atmospheric impacts from the highway's lighting.

235 A comparison of our information and that in the FEIS and corridor maps yields some discrepancies in information. The FEIS picks up many but not all of the sites identified by concerned citizens. While a number of them are listed as sites or churches, there is no mention of the historic cemeteries.

All of the listed cemeteries were considered during development of the FEIS. Many were brought to SHA's attention by the Coalition to Protect Maryland Burial Sites. The only cemetery that will be impacted by the ICC project as planned is the Judean Memorial Gardens. As stated in the FEIS Chapter IV.B, Table IV-44 on page IV-84 and discussed on Page IV-86, 0.15 acres of land may be purchased from this cemetery. There are no graves in the area where the potential acquisition would occur. The Judean Gardens cemetery is less than 50 years old and is not an historic cultural resource. Subsequent to the DEIS, one historic cemetery was identified as having the potential to be impacted by the ICC. This was the unmarked "Billy Ward's Cemetery" (18MO622), which was identified in the Burtonsville area through archival research for the additional Phase I archeological investigations. SHA undertook detailed archival investigation and conducted a remote sensing survey of this location. When the results of the geophysical investigation appeared to confirm the presence of the cemetery, SHA engineers redesigned Corridor 2 to avoid any impact to this location. Site 18MO622 is discussed on Page II-40 of the FEIS.

236 At I-95, SHA should investigate the possibility of eventually running the trail through the culvert at Indian Creek.

SHA has evaluated the Indian Creek culvert crossing under I-95 for pedestrian connectivity and found that the existing structures (8-feet high by 11-feet wide) are not large enough to accommodate a hiker-biker trail. In addition, placement of a trail in either of these existing culverts would likely have a negative effect on the hydrology in this area, because a trail would need to be constructed above the base flow volumes in the culverts during smaller storms. In addition, the culverts are about 400-feet long, which is not conducive to a pedestrian crossing.

237 At Northwest Branch Park, accommodations should be made for the trail to ultimately connect to the planned Matthew Henson Trail and Northwest Branch Trail.

The hiker-biker trail in this area has been shifted to the south side of the ICC between MD 650 and Notley Road to accommodate a future connection to the Matthew Henson Trail on the west side of the Northwest Branch.

238 The ICC design should not block the parallel trail from reaching Northwest Branch Park or Paint Branch Park.

Currently there are no ICC design elements blocking the connection from the ICC to NW Branch or Paint Branch Park

239 Within the parks, few special provisions should be needed to allow a future trail. To the extent independent utility is even a concern when simply leaving room for a future trail, trail exits or short loops can be identified at critical points.

The ICC bike trail does not traverse any of the stream valley parks within the study area due to impacts and cost related issues, therefore any connection in these areas would be done by others and would require separate permit and design coordination.

240 The full parallel trail is called for by Montgomery County master plans and by preliminary Prince George's County plans. Therefore the Environmental Impact Study process should treat any ICC design elements that impact future trail feasibility as having a negative impact on the community.

The ICC has established a bike plan that is comprised of existing and planned

bicycle/pedestrian trails that are consistent with the County's master plan. The parallel ICC trails that would be constructed with the project have been designed to facilitate trail connections by providing vital links to the overall trail network. Therefore there is a comprehensive bike plan associated with the ICC and coordination for future connections will be on going.

241 #650 - "Clarification was' added to the Community Impact Assessment for Cashell Estates (Redland Community Area) of the FEIS in Chapter VI.B." There is no mention in Chapter IV.B of the context of comment #650 with regard to the master planned, publicly owned ROW versus private property and the elimination of a neighborhood.

Although both communities are in the path of the Selected Alternative and Rock Creek Option C, the Lead Agencies have always understood and described Cashell Estates and Winters Run to be separate and distinct neighborhoods. These two neighborhoods are often discussed together simply because they are both in the path of the Rock Creek Option C alignment, which was identified as part of the Selected Alternative. It is true that Winters Run is a community that contains a master plan alignment for M-83 (although a narrower right-of-way than associated with the ICC) and that Cashell Estates is a community that did not anticipate an M-83 or ICC alignment crossing. These differences are discussed in Chapter IV.B of the FEIS.

242 In recent correspondence to Cashell Estates regarding issues raised in the October 10, 2005 meeting, SHA did not address the property comparability and relocation discrepancies between verbal and written comments versus the published relocation information.

The SHA will continue to work with residents who will be displaced by the Selected Alternative in developing a fair market value offer and to find a suitable location for relocation. As described in the FEIS (Chapter IV.B.1), the purchase of property from property owners is guided by several state and federal regulations.

243 The ICC would be extremely detrimental to the Greater Olney community, not only to the neighborhoods in the path of the ICC west of Georgia Avenue to the vicinity of Upper Rock Creek and in the southeast quadrant of Olney, but also to the surrounding neighborhoods that rely on MD 97 (Georgia Avenue) as a primary commuter artery.

The Selected Alternative, Corridor 1, would impact the Greater Olney area west of and just east of MD 97, yet would proceed in a southeastern direction into and through the center portion of the study area. The Lead Agencies have worked closely with the leaders of the specific communities around the proposed MD 97 and ICC interchange (FEIS Chapter VIII.B) to further reduce the visual impacts of the ICC. The Selected Alternative includes provision for the ICC to pass under MD 97 to further reduce the visual impacts and to respond to the requests of the neighboring Olney communities.

244 Though included in the DEIS, the FEIS has removed two segments from the planned bike trail (west of Notley and Virginia Manor Roads) because the Maryland Department of the Environment told the Army Corps of Engineers that these trail segments lack independent utility. This is not true. The extra length provided by these two trail segments would be more useful for neighborhood uses such as skating, walking, jogging, and dog walking and would provide an emergency escape routes along the ICC. Dead-end bike trails provide connection for homes along the trail. In short, the dead-end trail has greater independent utility then a dead-end road, even if you do not have a so-called "logical termination." SHA should consider letters from Fred Shaffer of MNCPPC-PG and similar correspondence from the Montgomery planning staff. In addition, we request that SHA request an opinion on this issue from the Office of the Attorney General.

The Lead Agencies, in consultation with the USACE and the MDE, determined that the two segments of the Bicycle Trail Plan west of Notley Road and Virginia Manor Road could not be permitted under Section 404 of the Clean Water Act (CWA) and therefore were dropped from further consideration. Even without those segments, which were never planned to be paved as part of the Selected Alternative Plan, a cyclist can move from one end of the study area to the other. The remaining segments of the ICC Bicycle Trail Plan have independent utility and still connect with existing and planned trails. This issue has been discussed with the agencies through the interagency process, and the conclusion is based on input from MDE and USACE.

245 The Maryland Bicycle and Pedestrian Advisory Committee's Commuting and Transportation Subcommittee is still waiting for answers to a set of questions this committee sent to SHA's Wesley Mitchell in November and December 2005.

Because your comments were received just prior to the publication of the FEIS, the Lead Agencies wanted to assess all of the bicycle path comments provided before responding to your letter. Your comments have been assessed and responded to in this document, and the Lead Agencies will also follow up with a letter response to your comments.

246 MBPAC previously recommended that SHA build the DEIS 7.7 - mile segment and design the ICC to allow an eventual trail from Beltsville to Shady Grove. All of our questions arise from the FEIS' failure to articulate why SHA did not implement the latter recommendation, sometimes called the "no regrets" design.

As discussed in both the DEIS and the FEIS, the Lead Agencies did evaluate the option of designing the ICC to accommodate an eventual trail from end to end within its right-of-way and found that option created undesirable environmental impacts. In fact, this is how the Lead Agencies arrived at the hiker-biker trail plan. The ICC team has designed the facility to not preclude the eventual development of a longitudinal trail at a later date.

247 Old Gunpowder Road to US 29 Commuter Bikeway. On which side of the ICC right-of-way would it be most feasible for Montgomery County to build the trail? What additional provisions are necessary (e.g. leaving room between the interchange and the Auto Park to the northeast)?

The trail would be more appropriate on the south side between US 29 and Briggs Chaney Road, but would also be feasible on the north side. Between US 29/Briggs Chaney Road and Old Gunpowder Road, the trail is currently proposed to be on the south side of the ICC to avoid the residences between Little Paint Branch and Old Gunpowder Road.

248 Georgia Avenue to Emory Road. Have provisions been made for a Georgia Avenue crossing and trail from Georgia Avenue to Emory Road within the ICC right-of-way as recommended by the Montgomery County Planning Board?

The ICC Trail plan includes provisions to cross MD 97 to the north at Emory Road. If the trail along the ICC is completed by others in the future, other crossing locations could be investigated.

249 I-95 to Old Gunpowder Road. Given the draft master plan's expectation of an eventual I-95 crossing on the south side of the ICC: (a) will construction of the ICC from the I-95 interchange to Old Gunpowder Road leave enough room for a trail; and (b) what provisions are necessary to ensure that the Old Gunpowder Road bridge abutment leaves enough room for the trail to cross under Old Gunpowder Road?

The existing trail plan does provide for a crossing of I-95 via Old Gunpowder Road as part of a future County trail along Old Gunpowder Road. The Lead Agencies have investigated the potential to provide a separate crossing of I-95 where you suggested north of Old Gunpowder Road. This crossing was found not to be feasible based on maximum grades and the need to

pass under the ICC/Old Gunpowder Road crossing and over I-95.

250 Briggs Chaney Road to US 29 Commuter Bikeway: Tanglewood Option. We discussed the logistics of a trail along the north side of the ICC in detail during the December 13 meeting. Alternatively, what provisions must be made to extend the trail along the south side of the ICC to connect the trail to the Tanglewood neighborhood (e.g. Stravinsky Drive) as well as to the US 29 Commuter Bikeway South of the ICC?

The ICC Trail Plan includes a crossing of US 29 via Fairland and Briggs Chaney Roads and no connection to the Tanglewood community. A crossing through the US 29 and ICC interchange is not reasonable.

251 Cost of Replacing Canceled Segments with similar segments. Are the additional costs of possible trail expansion options (e.g. extending the trail to the Tanglewood neighborhood) comparable to the savings from the segments cancelled due to the independent utility issue?

The cost associated with the two small segments removed were for grading only and do not amount to enough to fund additional segments of paved trail.

252 What work is currently being done in the Winters Run community?

SHA is collecting soil, rock and water samples to better understand underground conditions. A flier providing additional information was sent to the community. The work in the Olde Mill Run area is expected to last through mid-April 2006, assuming that weather and equipment cooperate. All of this work is being conducted within SHA-owned right-of-way.

253 The Shady Grove Woods Homeowners Association is concerned about the 39 homes at the end of Briardale Road. The ICC will cut off these homes from the playing fields, open space, and elementary school planned for the Casey Property. The community needs a crossing at Station 125, in addition to noise barriers and landscaping for protection from the ICC. We support two pedestrian bridges across the ICC near Briardale Road. A Station 125 crossing will allow Briardale commuters to walk or bike to the MARC station in Washington Grove. A Station 144/145 crossing will allow residents of Epsilon Drive to walk or bike to the Red Line Metro at Shady Grove A and our children to bike or walk to Shady Grove Middle School and playing fields.. These connections are crucial to us as Smart Growth brings new communities, parks, playing fields and tot lots to our area. Our widely dispersed neighborhood of Briardale Road, Court, and Terrace along with Dace Street, Rydal and Polaris has clear needs for two bridges leading to two different schools and communities.

Pedestrian crossings at both of these locations were identified by the MNCPPC, yet are not a part of the Selected Alternative. The Lead Agencies determined that the development of these crossings was an initiative associated with the long term trail plan as identified in the local government's master plan of trails. With that said, the Lead Agencies understand that if it is better that the trail was to pass beneath the ICC, construction of the trail should occur with the construction of the roadway itself. A study was completed and coordinated with the MNCPPC that showed both crossings should ultimately cross over the ICC and therefore were not included with the ICC Selected Alternative.

254 We hope that the #52 Ride On Bus will not be disrupted by the construction and operation of the ICC.

The Lead Agencies will continue to coordinate with the providers of local bus service throughout the construction phase of the ICC. In addition, the Maryland Department of Transportation has started a Service Planning Study to determine the exact routes, schedules and other details of

the Express Bus service that will operate along the ICC. As part of this initiative, the Maryland Transit Administration will also coordinate with Washington Metropolitan Area Transit Authority (WMATA) for METRO Bus, Prince George's County and Ride-On service.

255 There are 16 locations along the ICC where there is more than a half-mile between proposed pedestrian crossings. Some are over a mile apart and some are labeled as potential and may never be built. These long stretches without a crossing form a permanent barrier to creating good pedestrian connectivity across the corridor.

In addition to the pedestrian crossings of the Selected Alternative that have been identified for construction as part of the project, the Lead Agencies have found several other locations where pedestrian crossings could be constructed at a later time when other trail features are put in place. Examples include but are not limited to Station 125 near Shady Grove and Station 144 in the communities west of MD 97.

256 It appears that 400 homes will be left standing along the ICC after 55 or 60 are demolished. How many of the 400 remaining homes are within 500 feet of the ICC and how many are within 1,000 feet?

There are many more homes in the study area that will remain within 500 or 1,000 feet from the ICC Selected Alternative. Although the exact statistic was not calculated for the study, the Lead Agencies estimate that approximately 1,200 homes are within 500 feet and approximately 2,000 additional homes are between 500 and 1,000 feet of the ICC alignment. Note that there would be 49 displacements, not "55 or 60" as the commenter mentions.

Chapter IV.C. Economic Effects

257 It will cost $7 a day in tolls, which is more than parking would cost and more than most people can afford.

Traffic studies conducted as part of the NEPA process indicate that even with the highest of the three toll rates studied, a very significant number of persons would use the ICC. People making the decision to use the roadway, with its relatively congestion free operating environment, would be making a decision that the tolls are reasonable and that the benefit of using the facility warrants the cost. Although some people might not want to pay tolls to travel regularly on the ICC, they could still benefit from the roadway. Some might use it on an occasional basis, when the benefit of congestion free travel warrants the toll. Alternatively, one could use existing routes in the corridor, many of which will have less traffic (and improved operating conditions) because of the diversion of trips to the ICC. Further, users of transit services on the ICC could benefit from the speed and predictability of the trip afforded by the congestion-free operation on the roadway. Additional benefits would be obtained by enhanced links to nearby transit centers. Such trips are not as feasible on today's road and rail network in and near the study area. The decision to establish the ICC as a toll road reflects important policy decisions made by the State of Maryland regarding the financing and management of its transportation system. Use of tolls on the ICC is necessary and appropriate in order to help finance the project with user revenues (thus maximizing use of other transportation funds for other needed projects) and to manage congestion on the proposed facility. See FEIS Chapters III.E and IV.J.

The finance plan for the ICC was endorsed by the Maryland General Assembly through enactment of HB 1352 and SB 255 in the 2005 session. Under this plan, the ICC will be funded from a combination of sources. The MdTA toll revenue-supported debt, including toll revenue bonds and, possibly, a loan under the federal Transportation Infrastructure Finance and Innovation Act (TIFIA), will cover approximately 50% of the estimated cost of the ICC (between $1.05 and $1.2 billion). The debt service will be paid from toll revenues collected by the Authority from its toll highways, bridges and tunnels, including the ICC. ICC toll revenues are expected to contribute up to 25% of the capital cost of the ICC (approximately $400 to $600 million) in

addition to covering operating costs. If it were decided to build the ICC without tolls, the project could not be built as an MdTA project and, thus, would not be eligible for toll related financing. Consequently, the $1.05 to $1.2 billion of its capital cost, currently to be funded using toll supported financing, would have to be funded with other funding sources. This would significantly impact progress on other Maryland transportation projects. Without this contribution from tolls, it would be difficult if not impossible to finance the ICC without serious impact to the rest of the state's transportation program.

In addition to their importance as a source of revenue, tolls also are needed as a demand management tool. The ICC will be located in a region of high traffic demand and congestion. With a highly congested roadway network, it is particularly important to provide a reliable route for time-sensitive trips. By adjusting ICC toll rates based on traffic volumes, tolling can help to maintain relatively free-flowing traffic and thereby provide a predictable, relatively congestion-free route. In addition, existing local roads would continue to be available on a non-tolled basis traffic forecasts presented in the EIS take into account the potential for diversion to local roads. According to the forecasts, most of the local roads would still be less congested than they would have been without the ICC. See FEIS Chapter IV.J and the Travel Analysis Technical Report (www.iccstudy.org).

Experience with congestion priced tolls in other areas (such as SR 91 in California) indicates that public response is generally positive across various income levels. According to user surveys, those who use SR 91 Express Lanes were found to be an economically diverse group. Twenty-five percent of the lowest income travelers surveyed reported using the toll lanes on a frequent basis. See FEIS Chapter IV.B.3. (discussion of effect of tolls on communities).

258 The ICC will support greater commerce between Montgomery and Prince George's Counties' and the business community of Baltimore, as well as BWI. It will help the economy and increase jobs.

According to an independent economic study conducted by the University of Maryland for the ICC, estimated annual travel time savings are valued at nearly $203 million for trips originating or destined to the ICC impact area in 2010 and $250 million in 2030. Therefore, the ICC would provide greater travel time saving benefits than the No-Action Alternative over all modes considered. The economic study conducted by the University of Maryland supports the claim that commerce and economic activity will be improved with the construction of the ICC and found that business representatives interviewed as part of the study agree that an ICC would alleviate the commute of employees, improve access to BWI airport, and provide more affordable housing choices.

259 The ICC will promote livable communities by encouraging quality commercial, industrial, and residential growth.

Thank you for your comment.

260 The FEIS does not note the environmental impacts of projects for which the ICC will provide an economic benefit. For example, the Konterra project will likely have huge impacts on Paint Branch and Indian Creek. College Park is investing time and energy in restoring and protecting these streams and these efforts are undermined if upstream development severely degrades water quality.

The FEIS includes an assessment of the Secondary and Cumulative Impacts (Chapter IV.K) This analysis is intended to assess exactly the types of potential "secondary" impacts associated with continued growth and development and "cumulative" impacts associated with continued actions and improvements to the transportation infrastructure.

261 As the release of the FEIS brought no changes to the study, the Lead Agencies continue to rely on a flawed document in its attempted justification of the transportation project. Moreover, the Lead Agencies' continued reliance on the study is inconsistent with the CEQ regulations governing NEPA actions.

The methodology used in the Economic Impact Study is not flawed but may have some limitations. Several transportation studies have been conducted using similar user benefit analyses and econometric models. All comments regarding this study were considered. The methodology for that study is not flawed and was conducted by respected and experienced transportation economists.

262 The FEIS relies on monetary expressions of the benefits the study claims will result from the ICC, without attempting to quantify in monetary terms either costs easily capable of such quantification (such as user toll costs), or costs resulting from "qualitative considerations," such as the destruction of environmental resources. Such a one-sided use of monetary figures is inconsistent with the CEQ regulations and the clear intent of NEPA. This fatally flawed economic study was crucial to the Lead Agencies' evaluation of the project. It dramatically overstates the benefits of the ICC and ignores all of the project's costs. See Hughes River Watershed Conservancy v. Glickman, 81 F. 3d 437 (4th Cir. 1996) (rejecting an EIS because of its on reliance on a faulty economic study that inflated the benefits of the project).

The comment concludes incorrectly that the economic study prepared for the EIS was part of a formal cost-benefit analysis for the proposed action. FHWA did not base its decision on a cost-benefit comparison and it is not required to do so under NEPA or the CEQ regulations (see 40 CFR 1502.23). Instead, the economic benefit analysis was designed solely to place some other sort of calculus on the potential mobility benefits associated with the various alternatives considered other than minutes saved or Levels of Service at various intersections. An important part of the Purpose and Need is the movement of goods, services and people between major economic centers and transportation corridors in the study area. In many cases, a project's potential for increased mobility benefits fails to capture the impacts of travelers' faster trips, greater flexibility or even the ability to choose to make a trip that would not have been made absent a reasonable transportation option. The FEIS demonstrates that construction of the ICC will encourage additional trips on a safe, reliable facility, and create time savings in making those trips between key locations in the study area (refer to FEIS Chapter IV.J). Corridor 1, as the FEIS shows, has the potential for greater mobility benefits than Corridor 2. The economic study prepared for the FEIS aided the decision-maker and the public in attempting to assign a monetary value to the enhanced mobility offered by both build options. The agency did not apply that information and balance it against the various environmental and socio-economic impacts identified in the FEIS in a formal cost-benefit analysis. But contrary to this comment's allegation, the agency carefully considered all of the project's potential impacts in identifying a Selected Alternative.

263 Including tolls in the traffic model for the University of Maryland economic study to address user costs is in direct contradiction to the brochure entitled "Focus on Economic Impacts," which states that estimates of travel time do not include user costs for tolling. The economic study is also contradicted on page IV-8 when it states that commercial vehicles will be permitted on the ICC without usage fees or tolls, and again in response number 1933 where it states that a discussion on why tolls were not considered in the economic study is listed in Appendix R.

There is no contradiction between the brochure and the economic study. Tolls were considered in determining the traffic levels that were provided as input to the University of Maryland study. Users of the ICC will consider tolls in choosing whether to use a particular highway and that choice is already reflected in the modeled travel forecasts for the analysis. Considering the tolls

are already reflected in the forecasts and tolls have a neutral economic effect, the economic study did not "subtract" toll payments from the benefits when estimating the overall economic benefits of the project. Commercial vehicles will be subject to a toll on the ICC

264 SHA did not respond to my question of whether business leaders who are reported as supporting the ICC were aware of the proposed toll amount.

In each interview, the preparers of the economic impact study described the basic features of the ICC, including the number of lanes and the potential for the facility to be priced based upon usage. The specific toll level was not at that time, and is still not yet been determined, and therefore was not discussed with the interviewees. However, the interviewees were made aware that the ICC would be a toll road.

265 SHA did not respond to my question regarding the following sentence in the Summary Report: "Improvements in mobility translate into lower cost of doing business, and lower friction in the conduct of daily economic and social activities." What is "friction"?

The word "friction" is referring to the various things that affect a person's or business's ability to effectively carry out their desired activities. Examples include delay resulting from high levels of congestion and unreliable travel times.

266 On page 11 of the Summary Report, the following sentence appears: "Further, an ICC can be a catalyst in helping BWI Airport grow its freight movement operations." On what data is this statement based?

The ICC will result in reductions in travel time and improvements in travel reliability between businesses and economic centers in the ICC study area that are not easily accessible to BWI because of high levels of congestion and associated delay. The statement was also based on specific interview responses from carriers and agents involved in the distribution business. Examples of carriers that were interviewed included, FedEx, UPS, Cisco, Kane 3rd Party Logistics, El Kane, Terminal Corporation, Marjack, Eagle Global Logistics, Associated Global Systems, and Amports

267 On page 13 of the Summary Report, the following sentence appears: "Further, without an ICC, any sort of natural disaster or terrorist incursion that might destroy part of the highway system would have a devastating effect on the local economy." On what data is this statement based?

The FEIS concluded that to a certain level, the lack of personal and business mobility is limiting and hurting the area's economic flow and growth. A disaster that removed any existing facility aimed at serving the existing travel market would have a profound effect on the transportation network's ability to accommodate the demand for travel. FEIS Chapter IV.J includes a discussion of the congested links and nodes in the existing network. The Selected Alternative would provide much needed additional capacity to provide greater community mobility. The opposite action, removal of capacity, would have the opposite effect and reduce community mobility. The statement was also based on a network analysis conducted by UMD (refer to FEIS Chapter IV.C).

268 The Logistics and Freight Impact Assessment document was not available at the public hearing. In the Summary Report is it stated that the economic benefit of the ICC to regional carriers and shippers is likely to be only incremental. This information does not appear in the FEIS. This suggests that the benefit would be negligible or nonexistent if tolls were considered. Failure to include this information in the FEIS and to present it at the public hearing suggests an attempt to minimize the importance of data that do not support a Build Alternative.

The Logistics and Freight Impact Assessment was completed and published in September, 2004, well prior to the Public Hearings. It and the rest of the University of Maryland Report were indeed available for review almost a year prior to the Public Hearings on the ICC website (www.iccstudy.org) and by request.

The statement that "the benefits would be negligible or nonexistent if tolls were considered" does not follow the statement quoted from the summary report.

269 The socio economic impact of the ICC on existing business centers such as Wheaton and Sliver Spring remains unaddressed in the FEIS. The ICC will provide faster access to Konterra over minority owned businesses and the cost of this equity issues must be addressed.

The Lead Agencies did not investigate impacts to any specific business beyond direct displacements. The ICC would not directly impact access to these shopping centers. However, the improved mobility provided to area motorists would have a positive benefit to the region, including better access to existing retail centers.

270 Corridor 1 is not the original master plan alignment approved for east-west transportation the master and regional plans. The long established corridor is actually Montrose/Randolph/Fairland. Decades of infrastructure, transit lines and stations, commuting patterns, and residential and business development was built around this alignment, not Corridor 1 as the FEIS claims. Therefore, if Corridor 1 is built, there will be severe adverse economic impacts to the Randolph Road corridor. Building the ICC north of this alignment will create a serious transit disconnect and impact on Metrorail use.

The ICC was never planned by MNCPPC, the Montgomery County government nor the Prince George's County government to consist of a combination of Montrose Road, Randolph Road, and Fairland Road, Although there have been minor shifts to the master plan alignment over the past 40 years, the only major alignment shift happened more than 30 years ago when the western segment (west of MD 97) shifted from the alignment that went into Rockville via an alignment close to what is now known as the Montrose Parkway. That alignment was retained in the master plans, first as the Rockville Facility and later as Montrose Parkway. The newer ICC alignment was shifted farther north, closer to Gaithersburg. The MNCPPC and County Governments have been conducting successful master planning for more than three decades with the ICC alignment close to what has been selected as Corridor 1.

271 The FEIS references the Economic Impact Study of the ICC by the University of Maryland which claims the ICC will bring economic growth. This study says the ICC will generate 14,200 or 16,850 new jobs (depending on alignment). But the FEIS also states (comment 1309 on p. 108 of 187 of Appendix R-81) that the ICC is not expected to create new sources of vehicles, but rather relocate existing sources of vehicles. This suggests no new jobs will be created. Please explain.

The results of the University of Maryland study and the response to comments in Appendix R are not conflicting. The vast majority of the jobs forecasted to be "created" are jobs that are associated with economic development that is planned in area master plans. While such growth is consistent with local land use plans, it is not necessarily inevitable; if adequate transportation infrastructure is not provided, local governments may not be able to achieve their economic development and land use goals. The Selected Alternative for the ICC will help create the mobility and accessibility improvements necessary for existing and planned economic growth to occur. An example of where job growth density will occur and that is according to plan is in northwest Prince George's County in the Konterra Town Center. These jobs are planned for in the Sub region I Master Plan.

With respect to sources of vehicles, it is reasonable to assume that some of the people getting new jobs (if the new job is substantially better than the old job) may choose to sell their old cars

and buy a newer cars (which would decrease pollution) somewhat sooner than they would otherwise do. There are no reliable methods to quantify this and in any event, selling, then buying a new car does not create new sources of vehicles, it just changes the specific vehicles.

272 The General Accountability Office Report No. GAO-05- 172 (January 2005), "Highway and Transit Investments" on page 15 states, "A highway improvement in one area may induce businesses to relocate from a neighboring area, brining increased tax revenue and providing jobs; but the neighboring area then loses that tax revenue and employment . . . These economic impacts may represent transfers of economic activity from one area to another; while such a transfer may represent real benefits for the jurisdiction(s) making the transportation improvement, it is NOT a real economic benefit from a national (or state) perspective because the economic activity is simply occurring in a different location. Economists state that true job creation from building a highway, such as the ICC, should only be counted as acceptable when the person getting the job would otherwise be unemployed, and thus the reduction in unemployment benefits could be considered a benefit of the highway. The FEIS is misleading the public as to economic growth as a benefit of the ICC.

Page 11 of the referenced report (GAO-05- 172) shows the types of direct benefits that highway and transit projects may accrue to local economy. The report further acknowledges the difficulty in accounting for indirect benefits. The analysis leading to the forecasts of economic activity for which transportation supply may act as a catalyst was based on the long term patterns of association between economic activity and transportation supply in the region of interest. First, confirmation of a statistically significant strong positive relationship between transportation supply and economic activity is itself an important result. Second, this economic activity is NOT obtained through explicit attraction of existing businesses from other parts of the State. Rather, the economic activity is the net result of complex dynamics that entails formation of new businesses in this region, expansion of existing business activity, retention of businesses that may have otherwise faltered or moved, and finally some activity that may have relocated from other areas. It is therefore incorrect to qualify this growth as a mere transfer from another area of the State. Note in addition that transportation supply is not the only factor affecting this growth; agglomeration economies (i.e. concentration of businesses of a certain type in a given location, e.g. high tech) themselves increase an area's competitiveness for certain business activity - and would not just appear in other locations without the catalysts included here.

Had the forecasted increase in economic activity been obtained through an analysis of existing firms in other states and their propensity to move here, the point made in the comment about net benefit for the nation might have some validity. However, as noted, the increased activity is predicated on endogenous growth factors-- new business formation, expansion and so on-- associated historically with transportation supply in the region.

273 The FEIS should state that economic growth forecasts associated with a new highway is at best speculative. The FEIS demonstrates its selectivity in how it presents material because when it dismisses the possibility of induced demand and decrease in property values due to new highways as "speculative" but solidly claims economic growth benefits which it cannot substantiate.

The FEIS, Chapter IV.J (pgs. IV-347 and IV-348) does discuss the issue of induced and latent demand. The FEIS and its associated technical reports present the methodology of all of the predictive models and forecasts used to analyze the future conditions, whether those studies include forecasts of future traffic volumes, land use patterns or economic conditions. In some cases, the methodology and science for developing forecasts is not as mature and standardized. The FEIS also includes discussions of economic growth (Chapter IV.C) and secondary and cumulative growth (Chapter IV.K).

274 The lead agencies stand behind the facade that The Economic Impact Study of the ICC is not required to be peer-reviewed, but it knows that if this study were peer-reviewed, it would fail because of the internal contradictions as well as conflict with the views of accepted, renowned transportation economists.

The University of Maryland MTI study was conducted by independent and highly qualified transportation economists and the study was thoroughly reviewed by federal, state, and local agencies prior to publication.

275 The Economic Impact Study of the ICC says that the ICC will draw commercial vehicle traffic away from the Capital Beltway. There is a weigh and inspection station on the Beltway at the I-95/I-495 interchange. If no weigh and inspection is built on the ICC, commercials vehicles will be able to use the ICC to avoid the weigh and inspection station on the Beltway.

The Lead Agencies considered truck weigh stations along the ICC right-of-way and determined that there were sufficient capacity and facilities elsewhere in the transportation network and a facility was not needed along the ICC.

276 Page S-36 translates projected travel time savings into annual economic benefits by multiplying the change in travel time by the value of that time. It is unclear how the time saved was valued – for example, for every hour of travel time saved, what value was assigned to that hour?

The scientists at the University of Maryland used a formula and data to calculate the value of the travel times saved. The formula and explanation is included in Chapter VI Part I. of the University of Maryland Report, which is available at www.iccstudy.org. The basis of the calculation is that travel time savings is estimated by multiplying the change in travel time or delay by the value of time. The value of time is estimated based on regional data and the type or nature of the trip.

277 Comment II. D. The FHWA Economic Analysis Primer - Benefit-Cost Analysis completely contradicts the assertions of this response and the more detailed response in Comment 2032. No facts are presented to support this novel economic theory that drivers who pay tolls to use the ICC will not consider that to be a real expense to them because the government will use those funds in a way that will cancel out the effect of the cost to them. However, these very same drivers will consider as real the income earned based on time saved, which I have calculated to be in the range of seconds and pennies per person-trip. Thus, this statement on the ICC study website, that the same study indicates that the ICC will: "Create annual user benefits valued at over $250 million starting in 2010, equating to more than $5 to 7 billion over 20 years," does not include the cost of tolls because the cost of tolls is not a real cost. Based on SHA's illogical interpretation, I don't see how such a theory should not be applied to the vehicles, gasoline, repairs, insurance, taxes, and the many other activities that people spend their money on. Under this theory, one could argue that nothing costs anybody anything because all of the money is redistributed throughout the particular system that receives the money, and thus benefits everyone who pays into that system in a specific way. If the tolls are not real money spent, then why does SHA make the point that express buses that will use the ICC will allow the riders to not have to pay a toll?

The methodology used for the study conducted by professional transportation economists at the University of Maryland was not a "novel economic theory" and does not contradict the response in the FEIS. Tolls were considered in determining the traffic levels that were provided as input to the University of Maryland study. Users of the ICC will consider tolls in choosing whether to use a particular highway and that choice is already reflected in the modeled travel forecasts for the analysis. Considering the tolls are already reflected in the forecasts and tolls have a neutral

economic effect (toll payments are not considered as net costs just as toll revenues are not considered benefits), the economic study did not "subtract" toll payments from the benefits when estimating the overall economic benefits of the project.

278 Comment IV.A from Appendix R-6 (The University of Maryland Economic Impact Study was flawed). This response is not a response but provides background on the project and the people and institutions involved.

The University of Maryland Economic Impact Study was not flawed and a full description of the methodologies applied, which are commonly held as appropriate for this type of economic analysis, are contained in the reports available at www.iccstudy.org.

279 Comment IV.B from Appendix R-6 (formal Cost/Benefit Analysis should have been conducted). This response, by not deducting the cost of tolls from the $300 million cited, is double counting the economic benefits. Even if the $300 million were an accurate figure, the amount is presented without any context. Since the total annual personal income for the 2 counties, but without including business income, is $72.3 billion, this $300 million represents just .4% of the total personal income.

Considering the tolls are already reflected in the forecasts and tolls have a neutral economic effect (toll payments are not considered as net costs just as toll revenues are not considered benefits), the economic study did not "subtract" toll payments from the benefits when estimating the overall economic benefits of the project. Had tolls been "subtracted" from the "benefits," that would constitute double-counting the costs of the project. The collected tolls, which were reflected in the travel demand forecasts, are applied to the cost of the project.

The benefits, as estimated at $300 million according to the University of Maryland study, will be incurred regardless of whether one is paying tolls or not. The tolls are neutral in this level of economic analysis.

280 Comment 810. This response is nonresponsive. It is a mere recitation of information about the study. I read the study, included questions about the study in my DEIS comments, and SHA has responded that the answer to my questions are in the study. This is a completely unacceptable answer. Based on the total ICC-generated jobs, whether created in one year or over a number of years, as compared to the ongoing job growth rate in the two counties, why is it a good taxpayer investment and commitment of federal and state resources to spend $2-$3 billion to help increase the number of jobs by such incremental amounts?

The purpose and needs for the ICC, as described in the DEIS and FEIS, are multifaceted and are focused on improving the study area mobility and safety (refer to FEIS Chapter I.B). The capital investment to construct the ICC is to address all of these needs. The project has not been justified based solely on the economic benefits of time savings and job creation.

281 Comment 819. This response is nonresponsive. It is a mere recitation of information about the study. I read the study, included questions about the study in my DEIS comments, and SHA has responded that the answer to my questions are in the study. This is a completely unacceptable answer to questions. Why weren't groups of user types included in the study and why isn't additional research being done to answer such questions? I asked this question to see how individuals benefited from savings attributed to the ICC. If most people save $10 a year with the ICC, this is an important fact to share with the public. If some people save thousands of dollars a year and others save little or none, this is also important information to have. Can SHA quantify and group the amount of savings for individual users? Can SHA show how many would save up to $2000/yr. in $100 increments starting at $0? How many individual users would spend more with the

ICC?

The studies completed for the ICC planning did not include an analysis of the expected savings for individuals or groups of individuals with the ICC. Instead, the Lead Agencies commissioned the independent economic analysis performed by the University of Maryland to capture the potential savings for all of the citizens that could benefit from the construction of the ICC, not specific individuals or groups.

282 Comment 2033. This is a strange response, because the University of Maryland study was able to calculate a value for savings achieved for operating costs like vehicle maintenance for the hundreds of thousands of vehicles using the ICC each year, as mentioned on pages II-7 and VI-18. Apparently, no effort was made to calculate the costs of accidents which involve a few thousand vehicles a year. What would be the cost of medical care and vehicle repair or replacement under the different options?

As noted in the response to Comment 2033, such costs were not measured because there is no way to link the repair cost for vehicles and medical costs to any particular trip or by facility.

283 The ICC economic study is a valuable contribution to the body of literature on this subject because it is among the few studies that have used an econometric model to quantify the local economic impacts for a specific project.

Thank you for your comment.

284 The economic study may have underestimated the regional employment benefits because the future attraction of businesses to the ICC corridor may largely represent an intra-regional diversion, not diversion from outside the study region, resulting in no net gain. In addition, the economic study did not address the issue of reverse causality, where highway investments are concentrated in areas that are already densely developed (see study by Eagle and Stephenedes, 1987). Further, the study did not consider second order effects that would arise from agglomeration economies, and the omission of the quality dimension may have introduced omitted variable bias into the estimated coefficients on the roadway supply variable (see study by Boarnet, 1997).

The economic study did adopt a conservative stance in projecting economic impacts. For example, the econometric models explicitly included agglomeration effects on employment. However, as indicated in the study report, the forecast did not then include the second order effects through the agglomeration variables (as in the system dynamics approach of Eagle and Stephanedes as cited in the comment). This would have required a more elaborate forecasting framework, and would have required different assumptions on the dynamics of the process than could be supported by the scope of the study. For this reason, the forecasts will indeed be on the conservative side.

With regard to the omitted variable bias, the model specification did include the quality dimension by separating the transportation supply variables on the basis of functional classification hierarchy. The final model results reflect what the data eventually could support through statistical testing. The model passed all usual statistical tests for goodness of fit and specification; therefore while omitted variables could always be an issue in any empirical model, there is no evidence of significance bias.

Chapter IV.D. Potential Land Use Estimates

285 The study did not consider down zoning the areas outside the designated growth corridors.

Areas within the Corridor 1 Alternative are zoned appropriately. Areas outside growth areas are not significantly at risk because they are largely protected by park status. The Lead Agencies did

evaluate growth pressures and available tools for addressing those pressures for Corridor 1 and Corridor 2 Alternatives. It is noted that growth pressures are greatest within Corridor 2 and fewer tools to prevent growth are in place. However, even if the Project Sponsors could down zone those areas, such an alternative would not meet the purpose and need because it would do nothing to eliminate the existing congestion.

Much of the growth designated within county master plans has already occurred. Montgomery and Prince George's Counties' planning agencies, which have had very strict planning and regulatory frameworks in place for the past 75 years, have the tools in place to guide the location, pattern and pace of growth for each county. In Montgomery County, land use plans include higher density development in the lower county and along designated north-south corridors and centers, while saving lands elsewhere for lower density development or as preservation areas. An ICC, part of the Counties' planning efforts, is needed, to serve the existing and planned residences, businesses, and community facilities in the study area. Any new development within the area of the ICC will still be controlled through local and state land development policies. Chapter IV.D in the FEIS discusses Smart Growth regulations.

286 The ICC will not encourage high-density smart growth development.

The Purpose and Need statement stresses increased mobility and community access. The purpose of the project is not the promotion of growth. Much of the growth designated within county master plans has already occurred. Montgomery and Prince George's Counties planning officials, which have had very strict planning and regulatory frameworks in place for the past 75 years, feel that they have tools in place to guide the location, pattern and pace of growth for each county. In Montgomery County, land use plans include higher density development in the lower county and along designated north-south corridors and centers, while saving lands elsewhere for lower density development or as preservation areas. An ICC, part of the Counties' planning efforts, is needed, to serve the existing and planned residences, businesses, and community facilities in the study area. Any new development within the area of the ICC will still be controlled through local and state land development policies.

The MDP concluded that Corridor 1 would connect PFAs (at the proposed termini at I-270 and either I-95 or U.S. 1) and is compatible with the intent of the Smart Growth Act. The MDP found that approximately 64 percent of Corridor 1 is within designated PFAs and is generally compatible with local master plans. Following a public hearing on August 31, 2005, the Maryland Board of Public Works approved Corridor 1 as an exception under the Smart Growth Act because it connected PFAs between I-270 and I-95 and was determined to be the proposed Build Alternative most compatible with the Maryland Smart Growth and Planning Acts.

287 Supports smart growth measures that provide housing choices and better communities by alleviating traffic congestion.

Thank you for your comment.

288 Comment 860. I did not make general comments on this subject and this response ignores the specificity of my questions related to historic resources.

Your cultural resource questions concerned the protection for Willow Grove, Llewellyn Fields, Amersley, Drayton and others on the path of Corridor 2. The Selected Alternative was Corridor 1, which would not impact these resources.

Chapter IV.E. Cultural Resources

289 A convenient commute does not justify destroying our parks, wildlife and wildlife habitats.

In accordance with NEPA, the Lead Agencies have conducted all possible planning to minimize harm to socioeconomic, cultural and natural environmental resources. Coordination has been ongoing with the environmental resource agencies to avoid or minimize potential impacts. Impact Mitigation and Environmental Stewardship are also being provided as part of the project. Mitigation will be used to replace or lessen negative effects of resources directly impacted by the ICC. Environmental Stewardship has been incorporated into the ICC in recognition that past urban development within the study area has resulted in long term impacts that will require steps above and beyond the norm to reverse these trends. Environmental stewardship measures have been incorporated previously on many transportation projects but the ICC represents a previously unsurpassed commitment to this program in Maryland. At the national and state level, ES is being provided more frequently in recognition of the social and natural environmental connection that transportation projects often have.

The ICC will benefit many travelers in the study area. It is projected that the Selected Alternative would improve performance at 38 of the 50 key intersections studied over the No-Action Alternative (see FEIS, Chart IV-1). Also, the ICC would reduce the number of hours that drivers experience congested conditions at the worst intersections in the study area, namely a 24% reduction in the number of hours that drivers would experience congested conditions compared to the No-Action Alternative in 2030.There are crashes of all types and severity on the local road network due to the mix of local, longer-distance, service vehicles, bicycles and pedestrians on narrow, curving roads. Numerous driveways, side streets, and other access points contribute to the number of potential conflicts and crashes. By taking some vehicles off the local roads, traffic conditions would become safer on the local network and those vehicles that use the ICC would be able to travel safely at higher speeds due to the high design standards that are found on a limited access highway. Crash rates on local roads in the study area are far higher than the crash rates for roads similar to the ICC.

290 The Coalition to Protect Maryland Burial Sites, Inc. did not receive a response to its July 12, 2005 letter regarding any potential impacts or disturbances to historic cemeteries or burial sites. Making another request to respond to their concerns.

Mr. James Trader was reached in person on February 24, 2006. He requested a letter documenting that SHA and the Governor's office had not received his July 12 2005 letter. A letter was forwarded to Mr. Trader stating that responses to his comments would be forthcoming.

291 The noise specialists hired by Washington Grove prove that noise levels are higher than SHA has been claiming.

A detailed review of the report prepared by Phoenix Noise and Vibration (PNV), the specialist hired by Washington Grove, revealed that the noise levels determined by PNV are in fact not significantly different from the noise levels contained in the FEIS and NQTR. In any case, these noise levels would not result in a noise impact as defined by 23CFR772 and SHA's Sound Barrier Policy.

292 Sound walls are a necessity to protect the character of the uniquely important historic community of Washington Grove.

SHA has determined that the Washington Grove Historic District's primary function is residential. The Washington Grove Historic District meets the FHWA Federal Noise Abatement Criteria found at 23 CFR Part 772, under Activity Category "B," which includes parks, residences, churches, libraries and hospitals. These types of resources (both historic and non-historic) have places of quiet and solitude, as well as areas of greater noise (such as parks with baseball diamonds and playgrounds) that are acceptable for the "oasis of tranquility" that the residents of the Washington Grove Historic District enjoy.

293 Sound wall for Washington Grove should be an Environmental Stewardship (ES) project. Since ES funds will be used to restore historic and cultural resources and to undo previous environmental damage, these funds would be appropriate to undo the previous environmental damage, in the form of noise, done to this historic resource by the construction of I-370.

Environmental Stewardship (ES) funding must be applied to projects that would provide the greatest public benefit. ES projects were selected collaboratively with interagency consultation.

294 It appears that SHA wants to save money by hiding behind inappropriate laws and regulations and having noise studies that appear to underestimate the level of noise in Washington Grove.

SHA has fully complied with the requirements of NEPA, 36 CFR Part 800 and 23 CFR Part 772.

295 We have been disappointed at times with Maryland Historical Trust's degree of willingness to stand up for historic resources.

The MHT has many responsibilities and should be commended for the excellent work it performs.

296 We were disappointed in the MOU for the 1780 Moneysworth Farm, next to the new county jail, which would have resulted in the "mothballing" of the Farm's outbuilding.

The SHA was not a party to that MOU and is unable to comment on the results of another state agency's actions or decisions.

297 We are disappointed in the way that MHT allowed SHA to demolish the outbuildings of the then NR-eligible Marlow House, and use the loss of those outbuildings as an excuse to allow demolition-by-neglect, NR delisting, followed by actual demolition of the Marlow House itself.

SHA and FHWA consulted with MHT and the Keeper of the National Register of Historic Places regarding the Howard Marlow Property's eligibility prior to the property's demolition.

298 The reluctance of MHT to stand up for Washington Grove should not be used as an excuse to reduce the historic value of this unique resource.

SHA provided information about Washington Grove to MHT in accordance with the requirements of 36 CFR Part 800. SHA understands that MHT's decisions were based on that information as well as a field visit.

299 SHA cites historic impacts. However, not a single historic structure would be taken. Only 2.5 total acres would be required from historic properties (Alloway 0.4 acres & Holland, 2.1 acres). SHA exaggerates the impacts to historic sites. Yes, noise and visual intrusion are legitimate concerns. However, most of the adversely affected historic sites are already situated along busy roads including MD 182, MD 198, MD 650, and US 29 and have existed in close proximity to busy roads for many decades, if not longer. If noise and visual intrusion are such serious considerations why hasn't SHA considered it necessary to provide noise and visual barriers in the past along these State roads to protect these historic sites?

The overall Section 4(f) determination regarding the prudence of the proposed Corridor 2 alignment was made based on an accumulation of environmental, community and other impacts, of which historic and cultural resources impacts was only one factor. The FEIS did not, as the comment asserts, over-exaggerate the potential adverse affects to historic and/or cultural

Section 4(f) resources along Corridor 2. The agency conducted all requisite consultations with the State Historic Preservation Officer and other historic resources experts and concluded that, besides the adverse noise and visual impacts referenced in the comment, the proposed Corridor 2 alignments would seriously affect the historic and cultural setting in and around that Corridor. In comparison with the Selected Alternative, the cultural setting of Corridor 2 would be far more seriously impacted because of an inherent change in the character of the surrounding neighborhoods and land use. Unlike the parkland resources along Corridor 1, these changes would likely not be amenable to successful mitigation.

The comment goes on to suggest that existing roads in the study area negatively impact historic or cultural resources and asks why additional mitigation has not already been implemented. The planning and/or review of past projects are beyond the scope of the FEIS. Moreover, the choice and implementation of mitigation for historic resources, such as noise or visual barriers, must take into account how those structures themselves affect the resource. For example, we are providing visual barriers through landscaping for the two adversely affected historic properties, Cashell Farm and Willow Grove, because the ICC will be visible from these properties.

SHA considers other types of barriers, if required by noise analysis. Laws and regulations also provide the framework of this noise analysis for the ICC. Specifically 23CFR772 specifies the requirements for noise analyses to be considered as part of the NEPA process. The noise analysis for the ICC was done in conformance with this regulation, and further guidance from FHWA Policy dated 1995 and SHA Sound Barrier Policy dated 1998. SHA regularly applies the Federal Noise Abatement Criteria found in 23 CFR Part772 to standing historic places, including historic districts throughout Maryland. Where residences, including historic properties are impacted, barriers are considered. Where residences are not impacted barriers are not investigated as in the case of the two historic properties adversely affected by the ICC.

The laws and regulations cited in this response are requirements of the NEPA process and are regularly considered by SHA during project planning and in the Project Development approval process for highway improvements throughout Maryland.

300 The FEIS failed to respond to my comment relevant to the handling of inadvertent discovery of historic properties. The inadvertent discovery of fossils is addressed (in response to comment no. 914 in Appendix R-8), but not that of historic properties. The FEIS fails to discuss whether a programmatic agreement is in place or will be drafted between the SHA and Maryland State Historic Preservation Officer to govern actions to be taken when historic properties are discovered, as prescribed in 36 CFR 800.13(a). In the absence of such an agreement, the FEIS fails to discuss what efforts will be taken to avoid, minimize, or mitigate adverse effects when such historic properties are found.

The FEIS does discuss the ongoing coordination between the Lead Agencies and the MDSHPO, which will be guided by an MOA that deals with these issues. The MOA can be found in Appendix J of the FEIS.

301 The Town of Washington Grove remains concerned that the issues SHA chose to address in its August 23, 2005 letter are only the issues narrowly defined in the SHA criteria, and not the ones most pertinent to the determination of adverse effect as defined in the 106 process. We are not in agreement with your interpretation that there is no impact to the Town.

SHA completed the consultation with the Maryland State Historic Preservation Officer (MD SHPO or MHT), as well as the affected property owners in the ICC corridor in December 2005. SHA has also consulted with the MDSHPO and the Federal Highway Administration (FHWA) regarding Washington Grove's comments. Because all three agencies identified Washington Grove Historic District as an important resource, careful consideration was given to potential impacts by the ICC when the Impact Assessment Technical Report was finalized in August 2005. On May 2, 2005, SHA and FHWA determined that there would be no impact on

Washington Grove by the ICC. The MDSHPO concurred with that determination on July 8, 2005. SHA agrees that Washington Grove Historic District is an important historic place in Montgomery County and in Maryland. However, we do not agree that the ICC will have any additional physical, visual, audible or atmospheric impacts that would adversely affect Washington Grove Historic District. SHA has continued to determine that there will be no impacts on the Washington Grove Historic District. We make this determination because although the ICC may be visible or traffic may be heard in the historic district, the increases in both sight and sound are a small change from the current sound levels and views. The changes do not meet the definition of an adverse effect found in 36 CFR §800.5 (Criteria of Adverse Effect).

302 The Town of Washington Grove is on the Register because of its uniquely defined sense of place. It's placement on the Register attests to the fact that, contrary to SHA's assertion, it clearly cannot be considered just a normal residential area.

SHA has determined that the Washington Grove Historic District's primary function is residential. The Washington Grove Historic District meets the FHWA Federal Noise Abatement Criteria found at 23 CFR Part 772, under Activity Category "B," which includes parks, residences, churches, libraries and hospitals. These types of resources (both historic and non-historic) have places of quiet and solitude, as well as areas of greater noise (such as parks with baseball diamonds and playgrounds) that are acceptable for the "oasis of tranquility" that the residents of the Washington Grove Historic District enjoy.

303 In addition, the FEIS data show that the ICC would adversely impact Willow Grove. No amount of mitigation, and certainly not the mitigation planned by SHA, will offset the indelible noise, lighting and visual consequences of the ICC on Willow Grove.

SHA appreciates the continued input by the Willow Grove owners. SHA has met all regulations and guidelines under 36 CFR Part 800. SHA is sensitive to the significance of Willow Grove and has taken all measures to minimize harm to this historic property.

Chapter IV.F. Natural Environment

304 Opposes the ICC because it will kill and displace thousands of wild animals and will destroy wildlife habitats.

Coordination has been ongoing with the state and federal resource agencies to develop the safest and most effective roadway design for the ICC with respect to deer and other wildlife. Special wildlife crossing structures are part of the roadway design to help maintain the connectivity between wildlife communities and enable wildlife to maintain their range of habitat by allowing safe passage through areas that would otherwise be bisected and isolated by a new roadway. The structures include bridges and different sized culverts depending on wildlife known to be within proximity to each crossing and adjacent land uses.

305 The ICC is too environmentally destructive.

In accordance with NEPA, the Lead Agencies have conducted all possible planning to minimize harm to socioeconomic, cultural and natural environmental resources. Coordination has been ongoing with the environmental resource agencies to avoid or minimize potential impacts. Compensatory Mitigation and Environmental Stewardship are also being provided as part of the project. Mitigation will be used to replace or lessen negative effects of resources directly impacted by the ICC. Environmental Stewardship has been incorporated into the ICC in recognition that past urban development within the study area has resulted in long term impacts that will require steps above and beyond the norm to reverse these trends. Environmental Stewardship measures have been incorporated previously on many transportation projects but the ICC represents a previously unsurpassed commitment to this program in Maryland. At the

national and state level Environmental Stewardship is being provided more frequently in recognition of the social and natural environmental connection that transportation projects often have.

306 The State will protect the affected watersheds as much as possible and improve, acquire, and protect other watersheds as compensation.

Thank you for your comment.

307 The ICC will destroy Maryland farmland.

The majority of impacted farmland properties are planned for residential or commercial use. The Selected Alternative avoids Montgomery County's Agricultural Reserve and Prince George's County's Rural Tier and would minimize secondary impact to farmlands in comparison to Corridor 2.

308 More and more deer and other wildlife are being forced out of their natural environments. What plans are included to relocate them?

There are no plans to relocate wildlife as part of the construction of the ICC, but the project does include plans for cost-effective wildlife passage and preservation and enhancement of wildlife habitat.

309 The road would provide ample surface area for large amounts of runoff to find their way into four stream valleys, contaminating drinking supplies for wildlife and possibly for humans served by Tridelphia and Rocky Gorge reservoirs. It might inundate the headwaters of the Anacostia and the Bay. Bulldozing the swath would destroy woodland and wetland habitat now, but it would also bring changes that would cause future damage to remaining habitat. The alteration of drainage patterns would threaten the dynamics of adjacent wetlands, possibly eliminating distinct compositions of species.

The FEIS acknowledges that the ICC would result in additional runoff from impervious surfaces as well as both direct and indirect impacts to forests and wetlands. However, with the selection of Corridor 1, these impacts are not anticipated to significantly affect the Triadelphia or Rocky Gorge Reservoirs. Potential impacts to the Anacostia tributaries and other resources on Corridor 1 have been greatly minimized through an unprecedented level of avoidance and minimization measures. These include, but are not limited to, water quality treatment of stormwater that exceeds MDE minimum requirements, redundant sediment and erosion control in "Special Protection Areas," longer bridges than hydraulically necessary and extended "wing walls" at bridge abutments to limit wetland and floodplain impacts, a reduced median and steeper side slopes to limit the roadway footprint and numerous other measures that are discussed for each natural resource in Chapter IV.F under the heading of "Avoidance and Minimization." For impacts that are unavoidable, mitigation to offset these impacts is being provided in the form of tree replacement, wetland creation, stream restoration, and water quality improvements. In addition, environmental stewardship projects above and beyond mitigation are expected to also address existing water quality and stream problems in the project watersheds. A number of these projects would specifically address restoration priorities that have been established by local and state efforts for affected watersheds, such as storm water management, fish blockage removal and stream rehabilitation. Both mitigation and environmental stewardship projects will be monitored to assess effectiveness. Environmental monitors will be employed during construction of these sites, as well as during construction of the ICC itself, to ensure compliance with all environmental commitments and permit conditions. See FEIS Chapter VII.D.5. Similar plans have worked effectively on other high-profile, environmentally sensitive projects, such as the Woodrow Wilson Bridge. The Lead Agencies have very specific goals for the performance of the state-of-art stormwater management plan that will be constructed as part of the Selected Alternative; that is to collect, treat and release all stormwater to minimize water quality and

quantity effects to local streams and waterways.

310 Forests adjacent to the ICC would be damaged. The elimination of mature native woods presents an opportunity for noxious weeds to invade adjacent remaining woods. Bulldozed areas adjacent to the ICC would never be able to succeed back into native forests. Rather, exotics like ailanthus, paulownia, honeysuckle, multiflora rose, porcelainberry, bittersweet, and mile-a-minute weed would smother these areas, crowding out any native seedlings that would have established themselves. Then they would invade the adjacent woods. Roses, bittersweet, and porcelainberry would climb the edge trees, weigh them down, and topple them, opening the edge of the canopy to invasive trees. This is now happening in Buck Branch Park along Bells Mill Road and the extension of Democracy Boulevard. Already we are losing too much habitat to development, and the ICC would only add to the destruction.

A section on invasive species is provided in Chapter II.E.8.d and IV.F.8.d of the FEIS. The Lead Agencies continue to coordinate with MNCPPC regarding invasive species with special emphasis on their establishment adjacent to parklands. The SHA has a program in place to control State listed noxious weeds as defined by the Maryland Department of Agriculture. The overall goal of these plans is to control the proliferation of invasive species and to install appropriate plant species consistent with the local plant communities.

311 Most creeks in the Washington, DC area are in poor shape with the exception of Paint Branch, which will be partially paved over to construct the ICC.

A detailed evaluation was made of all the streams in the project area. Measures will be taken to assure impacts to all streams and especially Paint Branch will be minimized and mitigated.

312 We are concerned that well and septic systems would be adversely impaired.

No impacts to septic systems are anticipated. However, the Lead Agencies are committed to monitoring construction and will repair or mitigate any construction impacts to well and septic systems.

313 The Pileated Woodpecker exists on Corridor 1, contrary to what was published in the FEIS, as they can be found all year long on a property located along Rock Creek Option C.

As part of the Natural Environmental Technical Report, the Pileated Woodpecker is listed as being present within the study area at large and not necessarily limited to one area or associated with one corridor. The Team would concur that the Pileated Woodpecker would be found throughout other parts of the study area including within or in close proximity to both corridors. The listing of the Pileated Woodpecker within the FEIS (Chapter IV.F.9.e) was not meant to suggest that this species is limited to Corridor 2. The reference to the Pileated Woodpecker in this section is an example only of some of the highly habitat-sensitive species that could be evident in a particular area.

314 Supports the various water treatment methods to actually improve water quality over existing conditions.

Thank you for your comment.

315 Impacts to streams from the ICC will cause underground water to flow from the Layhill area to the Layhill View neighborhood, where the streets are unstable. Two streets have previously collapsed from underground water flow.

All of the stormwater collected from storms draining along the ICC will be collected, treated and

released and will not flow unabated under streets.

316 What is the effect of deicing salt on local trout streams and on spotted trout in particular? How much salt is used in a normal snow event, broken down for bridges and for roads, for an entire year? What is the capacity of the salt domes proposed for the ICC? What authority contributed to the answers to these questions?

As discussed in the FEIS (Chapter IV.F), deicing salts can be stressful to fish populations, including brown trout. Due to the sensitivity of the trout resource to salts and other roadway runoff constituents, the Lead Agencies have taken unprecedented measures to reduce the potential for such impacts. As described in the FEIS, (Chapter IV.F.5), all runoff to the critical trout spawning habitat in the Good Hope Tributary of the Paint Branch will be captured and redirected to either the Northwest Branch or the mainstem of the Paint Branch. This will prevent runoff that might carry salts from reaching the most sensitive portion of the resource. In addition, existing runoff from the Montgomery County Maintenance Depot that could currently be contributing salts to the trout resource will also be redirected to Northwest Branch. While runoff potentially containing salts and other constituents would still reach project waterways and other portions of the Paint Branch resource that might be utilized by adult trout, the ICC drainage systems are being designed to provide state-of-the-art treatment of stormwater runoff to remove roadway and vehicular pollutants, exceeding the minimum requirements set forth by the Maryland Department of the Environment in many ways. However, road salt in soluble form is difficult to remove from stormwater. The amounts of salt application for any given roadway are highly variable.

SHA balances road salt application (from cost and environmental viewpoints) and public safety, including high tech means for determining when salt is needed and how it is applied. SHA has a constant reevaluation process that involves reviewing new technologies and strategies for deicing, for the purpose of minimizing deicer application and thereby saving money. Technologies include state-of-the-art salt application equipment, pavement temperature sensors, and other means for determining when and how much deicing agent application is required. Strategies for proper deicing agent application include maintenance operator training as well as identification of sensitive areas such as water supply watersheds where salt application rates are critical. These technologies and strategies will be employed on the ICC to reduce the potential for chloride impacts given the sensitive nature of the receiving streams. The Lead Agencies consulted water quality environmental specialists, as well as maintenance professionals at the SHA to respond to these questions.

317 WSSC has expressed concern about deicing salt entering the water supply. How has SHA changed its maintenance procedures to address these concerns?

With the selection of Corridor 1 for the ICC, salts from the project will not affect the reservoir.

318 The construction of the ICC would begin a process of invasion and destruction, despite the SHA's efforts to control runoff after the ICC is built.

In accordance with NEPA, the Lead Agencies have conducted all possible planning to minimize harm to socioeconomic, cultural and natural environmental resources. Coordination has been ongoing with the environmental resource agencies to avoid or minimize potential impacts. Impact Mitigation and Environmental Stewardship are also being provided as part of the project. Mitigation will be used to replace or lessen negative effects of resources directly impacted by the ICC. Environmental Stewardship has been incorporated into the ICC in recognition that past urban development within the study area has resulted in long term impacts that will require steps above and beyond the norm to reverse these trends. Environmental Stewardship measures have been incorporated previously on many transportation projects but the ICC represents a previously unsurpassed commitment to this program in Maryland. At the national and state level ES is being provided more frequently in recognition of the social and natural environmental

connection that transportation projects often have.

The stormwater management approach for quality and quantity control of runoff from the ICC must meet MDE requirements or an approval for same will not be granted by MDE, the storm water management review and approval authority for the project. Additionally, the Lead Agencies have committed to exceeding MDE's regulatory requirements for water quality for the entire project and will, at a minimum, meet water quantity control requirements including extended detention for the 1-year, 24 hour storm event.

319 The FEIS maps need to show the remaining sizes of FIDS habitat if the ICC is built as well as the impacts to the largest remaining FIDS habitats.

Potentially impacted forest interiors are shown on the map series and a total acreage of the forest interior is given. Amount of impact acreage, acreage of interior converted to edge habitat, and remaining forest interior acreage is discussed in the text. Impacts due to the linear cut are discussed in the indirect impacts section (refer to FEIS Chapter IV.F.9).

320 The bridge east of North Branch (Sta. 330) would not provide much minimization to wetland 1Z.

The bridge at this location was included largely to avoid impacts to the stream channel, floodplain functions of the tributary, and wildlife passage. A longer bridge was considered, however, the roadway profile isn't high enough through this area to sustain the wetland under the bridge. Raising the profile would have increased 4(f), wetland, stream and community impacts due to the additional fill that would be required. So the decision, with input from USACE and other agencies, was to include the shorter bridge. Some minimization of impacts to wetland 1Z was achieved through a narrower roadway section, though it is true that much of the wetland will still be impacted.

321 Redesigning the stormwater facility near the famous "ICC Big Tree" would not ensure its long term survival, since suddenly removing all of the surrounding forest would probably cause its demise. There is no way to mitigate the oxygen the nearby oaks that would be clearcut provide, the shade they give to the land, the habitat they offer a variety of species and the fact they are critical for the integrity of the Sycamore tributary of North Branch Rock Creek.

The noted "ICC Big Tree" has been avoided and will not be impacted.

322 The February 8, 2005 memo from Eric Foster, MNCPPC states that it is difficult to "acquire contiguous parkland for recreational trails that travel the east-west direction." Therefore, the Maryland State Highway Administration should convert ICC reservations to parklands to ensure the maintenance of forested connections between the stream valley parks, critical for their continued (degraded but still important) habitat function. The DEIS did not describe the ecological destruction that would be caused if these forested interconnectors are clearcut.

The DEIS and FEIS do describe the direct and indirect impacts to forest and wildlife that could occur as a result of the ICC. As required under the Maryland Reforestation Law, forest loss is primarily compensated through reforestation efforts. The Maryland Reforestation Law requires State agencies to make every reasonable effort to avoid or minimize impacts to trees and forest. The ongoing mitigation site selection process focuses on selecting the most appropriate reforestation sites to improve existing habitat conditions on other publicly or State-owned land.

The Lead Agencies have worked very closely with the regulatory agencies including DNR to identify sites that are most suitable for reforestation with specific emphasis on sites that are adjacent to protected mature protected forest thus increasing wildlife habitat including wildlife

corridors.

Reforestation efforts also included ensuring that reforestation efforts were compatible with other state and county goals including DNR's Green Infrastructure Program. DNR has identified existing undeveloped lands within the study area as important to the preservation of the regional Green Infrastructure. The ICC reforestation efforts are complimentary to the Green Infrastructure goals. Many of the reforestation sites are consistent with the Green Infrastructure by promoting forest buffer enhancement and forest connectivity.

323 A new series of visualizations should be created that accurately shows the severe impacts on parks and neighborhoods, including forests that have been clearcut and the I-95 interchange ramps.

The Lead Agencies will consider developing further visualizations as the public involvement process continues during design and construction.

324 The Betty Brown Casey Trust requests the removal of wetland mitigation site "SC-19" from the FEIS as this site does not meet the mitigation site criteria. It is not located in a watershed similar to that of the ICC, it lies in Montgomery County agricultural preserve, and the property owners do not wish to sell the property.

SHA acknowledges the concerns that have been previously expressed by the Casey Trust regarding this property being used as a wetland mitigation site. Regular contact and correspondence between the parties continues and it is hoped that a suitable agreement can be reached in the short term.

325 The Betty Brown Casey Trust requests the removal of the reforestation site located at 15615 Schaeffer Road from the FEIS. The property is not public land (public land should be used), it is located a significant distance outside of the ICC study area, and the property is zoned Rural Density Transfer and lies in Montgomery County agricultural preserve and should be kept in use for agricultural uses.

Efforts to identify viable reforestation sites have included input from the resource and regulatory agencies with special emphasis on DNR and MNCPPC. Whenever possible, areas suitable for reforestation within the study area were considered, especially if those areas are publicly owned (or would become public lands through acquisition) and adjacent to existing protected forest. In addition, areas were selected that were consistent with DNR's Green Infrastructure Program. This program focuses on identifying and protecting large forested areas (or areas that can become protected forest) that can be connected throughout a county such as Montgomery County or Prince George's County) through a series of corridors (stream valleys, buffers, etc.) and hubs (typically larger protected areas such as a park). Initially, reforestation opportunities were focused within the study area. However, to meet and possibly exceed reforestation goals, it was necessary to extend the reforestation search outside of the study area. As part of this process, DNR had requested that areas be strongly considered that were consistent with the Green Infrastructure Program. The Casey property is one of the properties approved by DNR and other agencies for being consistent with project reforestation goals as well as consistency with the State's Green Infrastructure Program. The use of the property for reforestation efforts would require that it be publicly owned. The intent has been that the property would become acquired by the state and granted to the county as part of their park system.

326 The FEIS's inconsistent, incomplete, and inadequate modeling of water quality impacts is of no use to a decision maker. The Lead Agencies failed to adequately assess the potential water pollution impacts, direct and indirect, that would or could result from the ICC. The Lead Agencies' response to criticisms is an incomplete and inconsistent approach to modeling the impacts for the two build alternatives. As a result, the modeling of water quality impacts is simply inadequate either i) to assess the result of constructing

the ICC on either route individually or ii) to compare impacts between the ICC build alternatives. The two new water quality analyses fall far short of plugging the holes identified in comments to the DEIS.

The Lead Agencies determined that the level of analysis provided by the methods employed is adequate to assist in the NEPA decision-making process. This method, called "The Simple Method" was developed by Tom Schueler for MWCOG. The document that contains the method is entitled "Controlling Urban Runoff" (known as the "green book"). The non-point source pollutant load modeling tool used was selected because it is widely accepted, flexible, and suitable for calculating annual pollutant loads from various land uses, and allows for comparison of nonpoint source impacts between watersheds and Corridors.

327 **The Lead Agencies' modeling for each build alternative is incomplete, even for Corridor 2. There is no apparent explanation for why the Lead Agencies would model direct and indirect impacts from Corridor 2 on only a single watershed, while omitting any analysis of other watersheds or surface water resources which are equally likely to be impacted by development of Corridor 2. This is especially troubling since the FEIS concluded that secondary and induced development resulting from Corridor 2 would impact water quality in the Rocky Gorge watershed.**

The Comparative Water Resources Hazard Assessment was prepared to assess the potential environmental impacts of the ICC Build Alternatives on the surface drinking water resources in the project area, specifically the Rocky Gorge watershed and Patuxent Reservoirs. The study was initiated in response to substantial feedback from various stakeholders who expressed concern about the impacts from the ICC on a primary source of drinking water. The NPS pollutant modeling analysis presented both existing and future annual loadings for both Corridor 1 and Corridor 2 for the Rock Creek, Anacostia River, Rocky Gorge, and Upper Patuxent watersheds (See pages 6 through 9 of the ICC Pollutant Load Study).

328 **In the case of Corridor 1, the Lead Agencies neglected to do any modeling of indirect impacts, instead merely assessing the water quality impacts of laying a strip of pavement on Corridor 1. Although one should expect localized impacts to surface waters as a result of the paving, regardless of the best management practices employed, this piece in isolation, without consideration of indirect impacts and land use changes, will not have substantial regional water quality implications. However, this result is not representative of the likely and reasonably predictable indirect water quality impacts due to a project such as the ICC.**

The Lead Agencies chose to model only the proposed right of way strip on Corridor 1 and the majority of Corridor 2 because the Lead Agencies do not control development or land use decisions outside of the right of way strip. On Corridor 2 in the Rocky Gorge watershed, secondary impacts were analyzed based on the SCEA findings at the request of EPA and the regional public water authority due to concerns over impacts to public water supply for over 550,000 people. In addition, the SCEA analyzed secondary and cumulative impacts to water quality for the entire project area and SCEA boundary through impervious surface analyses. Quantification of changes in impervious surfaces provides a useful tool for analysis of the relative potential indirect impacts to surface waters, synthesizing not just potential chemical impacts, but hydrologic and biological impacts as well. Numerous studies from across the Country have shown watershed imperviousness to be predictive of [overall] watershed health (CWP, 2003)."

329 **For the single watershed in which the Lead Agencies conducted any modeling of indirect impacts, the agency chose an overly simplistic spreadsheet model despite the existence of many more sophisticated, professionally-accepted and cost-effective models.**

The Simple Method was chosen as the watershed modeling tool, in consultation with EPA and FHWA, because it is widely accepted, flexible, and suitable for calculating annual pollutant loads from various land uses. The Rocky Gorge watershed was modeled at the request of the regional public water authority due to concerns over impacts to public water supply for over 550,000 people. Analyses of potential water quality impacts were conducted for all watersheds through impervious surface assessment in the SCEA.

330 If the Lead Agencies thought that the "Simple Method" was adequate to model land use change, it should have used this model for Corridor 1, determining basin-specific loads or impacts upon the Anacostia, Rock Creek, and Upper Patuxent, and/or upon tributaries to these major streams (e.g., the Paint Branch, Sligo Creek).

Modeling of land use change was conducted for the proposed right of way strip on Corridor 1 and the majority of Corridor 2 and the Rocky Gorge watershed because the Lead Agencies were addressing comments raised by WSSC with regard to effects on the Rocky Gorge Reservoir.

331 In his review of the Lead Agencies' proposed stormwater mitigation plans, EPA Regional Administrator Welsh cautions: There is considerable risk that the trout population will be lost when highways span trout streams, with slope stormwater runoff, forest clearing, added sediment load, and the potential failure of infiltration systems (allowing uncontrolled runoff or slow release of potential hazardous spills). The Department of Interior's Comments on the 1997 DEIS/Section 4(f) Evaluation for the ICC state "We are especially concerned with heated stormwater entering the Good Hope…The stormwater runoff will overwhelm the base summer flows in this stream and overheat the water. The juvenile and adult trout will be eradicated by these recurring events."

The Lead Agencies have worked closely with EPA and other agency representatives since the DEIS to address these and other concerns. Among other things, the FEIS included more detailed information on stormwater management measures, mitigation and stewardship packages were finalized, and greater detail on the approach for environmental management of the construction of a build alternative was provided. In addition, the Lead Agencies and Resource Agencies, including EPA, have worked together to develop a Memorandum of Understanding to assure ongoing oversight of project commitments through construction and mitigation monitoring. In their 2006 letter, the EPA has indicated that the environmentally sensitive design, mitigation package, and environmental stewardship have addressed many of their concerns from the DEIS. It is not anticipated that the Good Hope tributary or Gum Springs will receive the large heated stormflows described in the US Department of the Interior's (DOI's) 1997 letter. These comments have been addressed during the more recent NEPA process and project design which involved extensive coordination with the agencies on this issue. As a result of this and other coordination the current project contains a stormwater management approach not envisioned in 1997 that captures and redirects these flows away from the Good Hope and critical spawning habitat, as described in Chapter IV.F.5 of the FEIS. The DOI's 2006 letter states that based on the "measures and mitigations proposed by the Lead Agencies, the Department finds the [preferred alternative] to be environmental acceptable" and "is reassured by the strategies that will be taken and believe[s] every possible measure will be taken to protect the trout stream".

332 The FEIS fails to adequately address how baseflow contributions in combination with stormwater design and operational controls and stewardship measures will ensure that long-term stream temperature conditions of the Good Hope tributary will not exceed the Use III standard. The data collected for the study provide only a snapshot of existing temperature and baseflow conditions over one summer season and cannot be extrapolated to predict long-term conditions.

The limited baseflow/temperature study conducted during the FEIS stage was a targeted study requested by the agencies to assess the characteristics of specific Good Hope Tributaries and

was not intended to predict long-term baseflows or temperatures with or without the ICC. The memo summarizing the study acknowledges these limitations. However, longer-term data from stations monitored by MCDEP and DNR were also used in the preparation of the NETR, DEIS and FEIS which discuss existing violations of the temperature standard in the Good Hope. Because of the existing temperature problems, as well as the potential for new impervious surfaces to add to these problems if unmitigated, the Lead Agencies have worked extensively to avoid and minimize the potential for heated runoff from reaching the Good Hope tributary. Measures include: linear stormwater management that uses infiltration to maintain baseflows, routing of stormflows that cannot be infiltrated into the adjacent watersheds (Northwest Branch and Paint Branch mainstem), and conveyance of stormwater flows off bridge structures for treatment. These measures were designed to both help maintain baseflows as well as avoid ICC related temperature spikes during storm events by capturing and redirecting heated runoff away from the critical trout spawning habitat in the Good Hope. In addition, mitigation will be heavily concentrated in the Paint Branch watershed in accordance with state and federal agency preferences to offset unavoidable impacts through projects aimed at improving existing water quality and stream channel conditions. Moreover, environmental stewardship projects above and beyond mitigation are expected to also address existing water quality and stream problems in the watershed. A number of these projects would specifically address restoration priorities that have been established by local and state efforts for the Paint Branch and other affected watersheds, such as storm water management, fish blockage removal and stream rehabilitation. Both mitigation and environmental stewardship projects will be monitored to assess effectiveness.

333 Comments made by Chesapeake Bay Foundation, Audubon Naturalist Society, Environmental Defense, Sierra Club, and others with respect to the DEIS's treatment of affected wetlands remain unresolved by the FEIS.

All comments and concerns with regard to wetlands were considered by the Lead Agencies in the decision making process. Comments on the DEIS in this regard were addressed in the FEIS Appendix R and are further addressed in the more detailed comments and responses in this document.

334 In DEIS comments, Audubon Naturalist Society and Chesapeake Bay Foundation noted an inconsistency among the § 404 permit materials (Joint Public Notice) and the DEIS as to the amount of wetlands to be impacted. The FEIS attempts to explain this contradiction by noting that earlier information in the permit materials was made more accurate as further study ensued. However, this suggests that one of these figures must have been inaccurate. Legally, a public notice – or worse, a permit, should not be issued based on inaccurate information.

The FEIS correctly explains that the information describing the areas and amounts of impacted resources has been continually reviewed and revised during the study when necessary as further avoidance and minimization measures and additional information has been developed. It is not accurate to suppose that the information that exists previous to these additional efforts being considered during various phases of the planning study is "wrong". The public notice and permit information were accurate based on the best information available at the time they were issued.

335 With respect to mitigation, the Army Corps of Engineers is said to be requiring in-kind wetlands mitigation, but many of the primary sites for mitigation, and many more of the "back-up" sites, are "out-of-watershed" locations – some are even in the Monocacy watershed outside Montgomery County. Mitigation should be conducted in the watersheds affected. Indeed, the Anacostia must regain wetlands by the scores of acres, not lose them, in order to come anywhere near restoration – an objective formally agreed

to by Montgomery and Prince George's Counties.

A watershed-based approach has been used throughout the project when considering affected areas and potential mitigation sites. The Corps' mitigation guidelines consider "the watershed" at the Hydrologic Unit, which in this case include the Middle Potomac - Anacostia - Occoquan and Middle Potomac - Catoctin basins.

336 While the FEIS considers avoidance and mitigation by alignment, it does not show how each major wetlands-impacting sub-facility (e.g., the major bridge or wetlands crossings) has been designed to avoid or minimize wetland impacts.

FEIS Chapter IV.F.7.e summarizes overall project avoidance and minimization measures for wetlands as well as more specific measures by watershed on both corridors. Appendix M contains tables detailing the type of avoidance and minimization measures employed (bridge, extended wing walls, etc.) at each wetland on both corridors and the impact savings achieved during the DEIS and FEIS phases of the project. This is the level of detail on avoidance and minimization that is available at FEIS based on the available level of engineering detail. More detailed designs of bridges, culverts or other project elements will occur during the final design phase where the Lead Agencies are required to continue the avoidance and minimization process in coordination with the permitting agencies.

337 The Lead Agencies have violated Maryland law because the construction and operation of the ICC will require the Lead Agencies to take species in need of conservation by killing or harming such species, jeopardizing the continued existence of state endangered and threatened species, and resulting in the destruction or modification of habitats the Secretary of Natural Resources has designated as Ecologically Significant Areas ("ESAs"). Chapter IV.F.10 of the FEIS acknowledges that both corridors would impact state endangered and threatened plants. Both corridors would cause indirect impacts, such as loss of habitat suitable for colonization, establishment of invasive species, and changes in soil composition, that would further jeopardize the plant species.

For the ICC project, all potential impacts to Maryland listed species have been evaluated as part of the comprehensive review process. Specific protection comments from DNR and appropriate protection measures pertaining to avoidance and minimization issues are a matter of public record in the FEIS. It is important to note that all relevant provisions established in Title 08.03 of the Code of Maryland Regulations (COMAR) will be followed in the event that a take scenario were to occur as part of this project, including securing appropriate permits from DNR as necessary.

338 The FEIS lists recommendations provided by the Maryland Department of Natural Resources in connection with impacts to the comely shiner but does not indicate whether it will follow these recommendations. While it is not clear the extent to which these recommendations would allow the Lead Agencies to avoid taking or jeopardizing the comely shiner, there is apparent in the FEIS no commitment by the Lead Agencies to follow these recommendations in order to reduce the harm to the species.

The majority of the measures recommended by DNR to protect the comely shiner were already committed to in other portions of the document including Best Management Practices (BMP's) for stormwater and sediment and erosion control, an independent environmental monitor to ensure compliance, and mitigation and ES projects to improve existing water quality in the watershed. The only measure not committed to in the FEIS was the recommended extension of the stream closure. The feasibility of this recommendation has since been assessed, and the commitment to extend the stream closure is now included in the ROD, along with the other measures mentioned above.

339 The violations of Maryland law are not surprising, as the Lead Agencies have admitted

that they have not even determined what their obligations are under state wildlife law. In response to a comment inquiring what permits are required "pursuant to COMAR 03.08.03 and Natural Resources Article 10-2A-01 through 10-2A-09," the Lead Agencies responded: "It has not been determined at this time whether permitting authority will apply to the ICC project in regards to RTEs." In fact, however, a permit from DNR was obtained to conduct surveys for the endangered bog turtle in connection with the ICC, illustrating the applicability of the permitting requirements to the ICC project.

No Maryland listed animal species will be taken as a result of the Selected Alternative (refer to May 8, 2006 correspondence with DNR). In addition, permits will not be required for any takings of Maryland listed plant species. For the ICC project, all potential impacts to Maryland listed species have been evaluated as part of the comprehensive review process. Specific comments from DNR and appropriate protection measures pertaining to avoidance and minimization can be found in the FEIS (Appendix B).

340 **The FEIS is specific as to where it intends to provide compensatory mitigation and how such mitigation will proceed. However, the document fails to provide any information as to the nexus between the area being harmed by the ICC and the area subject to compensatory mitigation. Without adequate explanation of the quality of land being taken versus the quality of land identified for mitigation purposes, neither the public nor decisionmakers can adequately assess whether the Lead Agencies' compensatory mitigation meets statutory and administrative requirements.**

The process used to evaluate the affected resources, and the results of that process, are detailed in the Natural Environmental Technical Report and Chapter II of the FEIS while the areas proposed for mitigation are described in Chapter IV. Descriptions of how the proposed mitigation fulfills the statutory requirements and administrative guidelines of the regulatory agencies are also described in Chapter IV. The technical viability and replacement ecological value of the mitigation sites compared to the areas of impact has been coordinated extensively with the resource and regulatory agencies and found to be adequate to meet their requirements. In its September 21, 2005 letter to SHA, MNCPPC stated its satisfaction with the compensatory mitigation package based on total lands acquired and impacted. They stated in their letter, "There is no definition of environmental equivalency, so we have used interior forest as the most significant measure. The ICC requires the use of parks whose principal purpose is conservation. Being certain that we have no net loss of forest interior is a critical factor in our satisfaction with the mitigation package. We have also reviewed the combined extent of stream buffers, steep slopes, erodible soils, and wetlands to satisfy ourselves of environmentally equivalent land. Finally, we have a particular desire to obtain land within the Paint Branch Special Protection Area. We find that your offer to mitigate 82 acres that you require for the ICC with 698 acres of the Casey, Llewellyn, Dungan, McNeill, Southern Asia, and Peach Orchard/Allnut properties meets and in many aspects exceeds the land compensation necessary." Likewise, in 2006, the EPA and DOI noted in their comment letters on the FEIS that the mitigation package for the project was very thorough at addressing their impact concerns, and the DOI stated that based on the "measures and mitigations proposed by the Lead Agencies, the Department finds the [preferred alternative] to be environmental acceptable."

341 **The FEIS states that "a grading plan…will be prepared[.]" However, such a grading plan is not included in the FEIS. Grading directly affects erosion, and can impact wildlife, road safety, and project costs. The failure to provide an adequate grading plan, or any grading plan at all, is just one in a long line of examples that deprives the public of the right to meaningfully comment. In any event, the failure to prepare such a plan during the years of study allotted to the EIS process strongly suggests that a decision will be made to construct the ICC without the benefit of this and many other elements critical to understanding the impacts such a project will entail.**

The NEPA process and preparation of the associated DEIS, FEIS and ROD occurs during the transportation planning process and discussions in these documents are typically based on a very preliminary level of engineering. Detailed engineering, including grading plans, does not occur until the final design phase of a project and is not a typical part of the NEPA process. On the ICC, engineering was considerably advanced, giving the public a much greater insight into the ultimate design of the roadway than on most projects, however, there remain many elements that will not be completed in detail until final engineering design. Grading plans are one of these elements. Discussions in the NEPA documents have qualitatively anticipated impacts from grading and incorporated avoidance and minimization measures into the project commitments for the future design phases such as requirements for sediment and erosion control as well as measures above and beyond requirements such as redundant controls in highly sensitive areas. These commitments will be closely tracked by the Lead Agencies and will also be monitored throughout the project by the regulatory and resource agencies through permits and a Memorandum of Understanding to ensure that environmental commitments are met.

342 **Technical literature review on the subject of highway stormwater pollution by Professor Richard Horner, written for the Natural Resources Defense Council in 1994 as part of a legal case. (I have received permission from NRDC to submit this document to the ICC record, and this paper has also been cited elsewhere.) The paper is entitled, "Constituents and Sources of Water Pollutants in Highway Stormwater Runoff." Although this paper is now twelve years old, the information it contains on stormwater is highly relevant to the issue of stormwater pollutant loadings from the proposed ICC.**

The DEIS and FEIS extensively evaluated the potential impacts of highway stormwater runoff based on information relevant to the proposed project and considered all information provided in public comments. The NPDES permit that will authorize the discharges from the project will address applicable regulatory requirements.

343 **Letter of October 10, 2005, from the Montgomery County Water Quality Advisory Group to County Councilmember (and then-Council President) Tom Perez. This letter is crucial to the decision-making process for the ICC, since it is sent by a diverse body of citizens appointed by Montgomery County's government to advise it on water quality matters, and because it raises serious concerns about the potential for water quality damages and degradation that the ICC would cause, and gives and important recommendation. The WQAG's recommendation to Council President Perez is that Montgomery County's Executive and Council "encourage that State Highway Administration to adopt a non-degradation standard or objective."**

The ICC project will use state of the art stormwater management, will be designed to exceed certain regulatory requirements for water quality, and will pursue environmental stewardship projects to address water quality from previously developed areas. These actions demonstrate that the Lead Agencies are committed to protecting local water resources. MDE uses a non-degradation policy in implementing its delegated Clean Water Act authorities.

344 **The document, Stormwater Management Criteria for the Intercounty Connector (ICC), Draft, January 8, 2004, should be part of the decision-making record and public review in its entirety It was not included in either the DEIS or the FEIS in full, and it was only vaguely referred to in the DEIS.**

The referenced Stormwater Management Criteria document is a summary of stormwater management criteria that are incorporated in various portions of the DEIS and FEIS. Therefore, all criteria addressed in the summary have been made the subject of public comment. The document is included as part of the project administrative record.

345 **SHA's stormwater discharges, including those that would occur from the ICC, are legally point sources under the federal Clean Water Act, and thus the FEIS is erroneous in**

referring to these pollutant discharges as "indirect" impacts from the proposed ICC.

The FEIS is not erroneous in that it expressly recognizes that the project involves point source discharges of stormwater that will require a federal Clean Water Act permit, referred to in the FEIS as a National Pollutant Discharge Elimination System (NPDES) permit. See, e.g. p. S-38, IV-165. The water quality discussion in the FEIS differentiates between "direct" and "indirect" in describing the potential effects of the project's stormwater discharges but does not use this terminology to characterize the types of discharges that will be subject to NPDES permit requirements. The FEIS discusses in detail the measures for stormwater management that the project will employ to minimize these effects, including measures that are anticipated as requirements in any NPDES permit issued for the project.

346 **The acknowledgement of current and future establishment of TMDLs by MDE and their applicability to the ICC, along with SHA's citing of the US EPA 2002 Memo concerning TMDLs and Municipal Separate Storm Sewer System permits, are positive signals that should be fully pursued by SHA. This responsibility should be borne out through the means of a specific TMDL permit section listing all applicable TMDL WLAs and required implementation actions to achieve and maintain those WLAs as water-quality based effluent limits. Whether the SHA continues operating under its statewide general stormwater permit, or whether individual stormwater permits are issued to large projects such as the ICC, in either case these permits should be re-opened to incorporate WLAs for applicable TMDLs as soon as those TMDLs are approved.**

The FEIS expressly anticipates, as this comment notes (e.g., p. S-38), that the Clean Water Act's Total Maximum Daily Load (TMDL) provisions for stormwater discharges will be reflected in any NPDES permits issued for the project. The MDE, as the NPDES permitting authority for the project, will address the TMDL provisions that may be required for any NPDES permit issued for the project. It is beyond the scope of this EIS to address potential future actions by the MDE concerning applicable TMDL requirements.

347 **The first such TMDL that would be applicable to the ICC, were it to be built, would be the Anacostia Bacteria TMDL, and highway bacteria levels are significant according to the review by Horner and the published literature that he presents and that is enclosed for the record with these comments. (See especially, Table 3 in the enclosed Horner paper, the entries for Fecal coliforms and Fecal streptococci, which are from the data from Shaheen (1975) and are from a study of highways in the Washington DC area.) Although the Shaheen data set is now thirty years old, there is no reason to suspect that microbial pollutant sources and deposition factors have changed in the intervening years. If SHA questions the validity of this or other available data sets, they are encouraged to work with MDE to undertake a new study of highway runoff pollutant levels including microbial pathogen indicator levels.**

MDE is developing a number of TMDLS, some of which may affect the proposed project. As the permitting authority, MDE will determine what applicable TMDL requirements in the NPDES permit will address project stormwater discharges. The DEIS and FEIS considered all information provided in public comments.

348 **The stormwater pollutant discharges from the ICC would be significant and should also form part of any MDE 401 Water Quality Certification review under the Clean Water Act. Such a State review should pertain to any potential for water quality criteria violations and use impairments on waters of the United States, not only for wetlands damages, of federally-sponsored or licensed projects.**

The FEIS expressly lists a Clean Water Act § 401 Water Quality Certification as one of the permits or approvals that will be required for the project (p. S- 46). As reflected throughout the

water quality sections of the FEIS (see Chapter IV.F.5.a, page IV-166) close coordination with MDE regarding water quality issues and the anticipated implementation of a variety of MDE stormwater management measures has been a hallmark of the EIS process for the project. MDE will take into account stormwater discharges associated with the project in evaluating the issuance of a § 401 certification for the project.

349 The set of tables in Chapter IV labeled "Modeled Pollutant Loads" to various creeks "From the ICC Corridor" are based on an unclear source of data for highway runoff pollutant concentrations, and the claim that the ICC would result in less stormwater pollution that is now occurring in the ICC right of way, is not supported by a full investigation of the available literature, particularly for the outfalls that would be granted waivers.

The pollutant load concentrations data for various land uses modeled came from the most recent National Stormwater Quality Database (Pitt et al, 2004). These data have been compiled from NPDES Phase I storm sampling results and cover the widest variety of land uses and pollutants of any sampling data currently available. This data was checked against data used by MDE for watershed modeling purposes to ensure consistency with MDE data. The DEIS and FEIS contain extensive analyses of the potential impacts of the project on water quality. Some of this analysis demonstrated that certain existing land uses provide higher pollutant loads for certain constituents than highway right of way, and that such pollutant loads would decrease to the extent they were displaced by the project. The FEIS does not claim that on a corridor-wide basis the project would result in less stormwater pollution.

350 Even if it were actually the case that the stormwater treatment BMPs were to be applied to all ICC outfalls to the highest level of treatment possible, it would be erroneous to suggest that this outcome was somehow beneficial for stream quality for two reasons: 1) unless pollutant-specific, stream-specific impact analyses, including cumulative impact analyses, from all ICC-related impacts including secondary development were performed, there is no way to predict or ascertain the effect of pollutant loadings on the streams; and 2) if the goal of SHA as a regional land use decision maker in the Rock Creek and Anacostia watersheds is to improve the quality of these watersheds, then SHA should undertake a series of watershed protection, land preservation, and watershed restoration decisions and investments in lieu of building the ICC, which overall represents an enormous blow to the health and resilience of these watersheds.

The comment incorrectly states the scope of analysis required for a NEPA study and overstates the authority of the SHA. First, there is no requirement for the agency to conduct pollutant-specific or stream-specific studies for the water quality impacts assessment for the proposed action. Second, it is beyond the scope of SHA's authority to plan or implement regional land use decisions along the lines suggested in this comment. However, the project Purpose and Need includes a wide variety of Environmental Stewardship features that are specifically designed to address water quality issues.

351 In the technical literature review by Professor Richard Horner, Table 1shows a comparison of the well-known Federal Highway Administration study of highway pollutant levels performed by Driscoll, Shelley, and Strecker (1990) against the general urban values the Nationwide Urban Runoff Program of the early 1980s. For the "Urban Highways" that carry more than 30,000 vehicles a day- and this category would include the ICC- the runoff is about "twice as contaminated as general urban drainage." This finding is also supported by the additional data presented by Horner from two other highway runoff pollutant studies (Shaheen, 1975; Novotny and Olem 1994 after Ellis, 1996).

The pollutant loads modeled for the ICC are based on concentrations from the most recent National Stormwater Quality Database (Pitt et al, 2004). Concentrations of pollutants identified in

stormwater reflected in the Pitt study were derived from actual NPDES Phase I monitoring data. Since many parameters, including vehicle manufacturing technology and methods of data collection technology, have changed over time, the Lead Agencies have determined that the use of the most recent National Stormwater Quality Database is more appropriate in this case.

352 There are questions about SHA's assumptions concerning runoff treatment levels. If they are to be subset of ICC outfalls which are issued stormwater treatment waivers, then obviously that subset will receive little or no pollutant removal. Secondly SHA is proposing to treat different watersheds differently: for instance, Northwest Branch, which is not a Special Protection Area, is not slated under SHA's plans for the ICC to receive infiltration and other more protective BMPs.

The Lead Agencies intend to pursue water quality treatment for all impervious areas on the ICC. Impervious surfaces caused by ICC construction in each watershed affected will be accounted for and addressed either directly by BMPs on the project or indirectly by constructing BMPs to treat existing off-site impervious in the same watershed (in addition to Environmental Stewardship projects). Applicable water quality requirements allow for making distinctions based on, for example, the identification of a stream as a Special Protection Area.

353 Linear infiltration and other more protective BMPs, that SHA has proposed only for SPAs and in parts, perhaps for other Use III or Use IV streams, should be applied by SHA to all streams affected by the ICC's stormwater discharges. To consign the Use I and I-P streams to a lesser treatment standard, when such infiltration techniques are technically feasible for all watersheds and streams that would be crossed by the ICC, is to give them less than the Maximum Extent Practicable protection that the Clean Water Act requires as a technology-based minimum of protection, and in addition would be counter to, and a violation of, Performance Standard No. 3 of the 2000 Maryland Stormwater Design Manual, which states: "Annual groundwater recharge rates shall be maintained by promoting infiltration through the use of structural and non-structural methods. At a minimum, the annual recharge from post development site conditions shall mimic the annual recharge from pre development site conditions." This performance standard is not limited to any particular stream class or watershed, but rather is a general design standard that is required for all new development projects throughout the State, wherever this manual is applied.

The requirements set forth in the 2000 Maryland Stormwater Design Manual will be met in all watersheds, including in Use I and Use I-P streams. Groundwater recharge requirements from the 2000 Maryland Stormwater Design Manual shall be met by design of the ICC or permits to construct will not be issued by MDE. The ICC is purposely being constructed with median and roadside swales that will exceed MDE Grass Channel Credit requirements, a non-structural practice that automatically meets groundwater recharge requirements. The linear filtration systems found in the SPAs and Use III watersheds, in addition to the grass channel credits, is for the purpose of meeting Montgomery County's SPA design requirements and addressing a higher level of water quality protection for the sensitive resources being protected. The comment inaccurately describes the Clean Water Act "maximum extent practicable" requirement for stormwater discharges as requiring "a technology-based minimum level of protection." The Clean Water Act "maximum extent practicable" requirement is applicable only to stormwater discharges and is not a technology-based standard. Neither the statute nor any EPA regulations define "maximum extent practicable" as a technology-based or any other minimum level of protection. MDE will determine, as part of its permitting process for the project, whether all applicable statutory requirements are satisfied.

354 Waivers should not be requested or provided for any of the ICC's stormwater outfalls. The FEIS references the NETR for "more detailed information on stormwater management

design approaches, treatment effectiveness, temperature effects, and maintenance of baseflow." However, the NETR referenced - but did not provide- the aforementioned and enclosed Stormwater Management Criteria for the Intercounty Connector. The methodology suggested by this document begins stating that "A stormwater management needs assessment shall be carried out at each discharge point along SHA's right of way receiving runoff... once discharge points are established, the criteria governing stormwater management waivers as found in the Guidelines should be evaluated for applicability." Although this paragraph ends with the note that "Widespread use of waivers is not anticipated on the ICC," the thrust of this paragraph is to encourage the use of waivers on the ICC whenever the SHA can get Montgomery County to approve them. This pro-waiver policy obviously would provide considerably less than full stormwater treatment for the ICC's pollutant discharges.

The thrust of the stormwater management approach for the ICC is to exceed certain MDE and Montgomery County requirements and protect receiving stream water quality to the maximum extent possible as required by law and given existing technology and BMPs. The Lead Agencies were pursuing a "no-waiver" policy for stormwater management, but determined with MDE's input that such a policy would be impractical on a large scale project, especially while the project is still in the NEPA phase. Accounting of impervious surfaces in each watershed affected will be maintained to ensure that all ICC impervious be afforded water quality treatment either directly by BMPs on the project or indirectly by constructing BMPs to address existing impervious that is presently untreated (in addition to Environmental Stewardship projects).

355 **Appendix R-8 (page 17 of 184, comment # 167). The response has nothing to do with the statement made. Our issue concerned the permits and regulatory requirements pursuant to the MD Nongame & Endangered Species Act (10-2A-01) through (10-2A-09). The response focused on compensation for impacts to migratory bird habitat. This is an inaccurate and inadequate response.**

No permits will be required for the takings of plant species. With respect to permits and regulatory requirements pursuant to the MD Nongame & Endangered Species Act for the ICC, all potential impacts to Maryland listed species have been evaluated as part of the comprehensive review process. Specific comments from DNR are a matter of public record in the FEIS (Appendix B).

356 **Appendix R-8, (page 84 of 184) comment #1016 and #1017. The responses to our questions regarding anti-degradation are grossly inadequate. Please show us scientific studies and analyses performed in the current ICC study to indicate that water quality will be sufficiently maintained to be able to support the Use Class III Natural Trout Waters designation in the Paint Branch watershed if the ICC is constructed along Corridor 1. We cannot find any scientific data to support the EIS claim that the resource will be protected against degradation of the existing use class (Use III). When commenting on the 1997 DEIS, the EPA Region III provided lengthy Technical Comments that discuss stream impacts, particularly to the Paint Branch watershed.**

The Lead Agencies' assertion that water quality will be maintained is founded on the implementation of stormwater best management practices (BMPs) that are based on a wide range of scientifically evaluated and accepted measures to protect water quality. This body of scientific data and analysis is reflected in the 2000 Maryland Stormwater Design Manual (MDE, 2000), which identifies compliance measures based on studies on SWM effectiveness. While this scientific background is not explicitly contained in the FEIS text, it is contained by reference in the technical documents used and referenced in the FEIS, and the SWM approach developed for the ICC as a whole, and sensitive areas like the Paint Branch that meet and exceed MDE guidelines for water quality treatment.

For instance, the linear stormwater management system is expected to infiltrate a portion of

storm flows to provide temperature dissipation and help maintain baseflows as well as provide pollutant removal. Infiltrating stormwater in this manner to achieve these water quality benefits is not a new idea, but is rather a method derived from years of study of stormwater management effectiveness coupled with calculations of expected pollutant loads, temperatures and underground cooling capacity. These and other scientifically based measures proposed for protecting the Paint Branch, such as redirecting even treated stormwater from the Good Hope and Gum Springs, provide "cost-effective and reasonable best management practices for nonpoint source control" as stipulated in the anti-degradation policy (40 CFR 131.12). The project has been closely coordinated with EPA during the current study to ensure that the agency's comments from previous studies were addressed and with MDE to ensure that the project would comply with 401 water quality certification requirements, including the anti-degradation policy. This coordination is expected to continue through the permitting process as well as throughout construction and post-construction monitoring of the project under a Memorandum of Understanding defining continued agency participation.

357 **The Paint Branch will be irreversibly damaged by an ICC and cannot be restored because, by its nature, it is unique to the county. The naturally reproducing brown trout that inhabit the Paint Branch represent the high-quality, delicately balanced aquatic ecosystem that exists in this watershed and is unique to the Washington, D.C. area. Recent data have indicated that the Paint Branch has been under particular stress because of combined factors of natural conditions (drought) and past land use activities (uncontrolled stormwater runoff from old subdivisions). The DEIS indicates that the data is not clear as to whether the resource can successfully recover from these stresses with more normal weather conditions and recent construction of SWM retrofit and restoration projects, even without an ICC. The DEIS proposes several design features, and stormwater management (SWM) and sediment and erosion control measures that exceed federal and Maryland requirements. An ICC that traverses through Paint Branch could significantly and adversely affect this resource. This is of particular concern for Corridor 1, which crosses through the two most critical and high quality streams within the ecosystem. As the DEIS discusses, construction and operation of a major highway generates impacts of warm water discharges, loss of stream base flow, increased sediment loads, and increased chemical pollutants. All these impacts can irreversibly damage Paint Branch's high quality resource if not adequately minimized and mitigated. However, there remains a significant question as to whether such measures are sufficient to protect the Paint Branch resource. Staff is concerned that some of the more stringent and costly control measures may not be pursued at a later time if project costs become a major concern. If the Paint Branch is damaged, the mitigation measures may not be adequate to restore the resource.**

The protection measures that the county has put into place to protect and improve this resource (SPA designation, Environmental Overlay Zone, park acquisition program, storm water management retrofit and stream restoration projects) have been crafted with the recognition that all development and supporting infrastructure must be implemented with the aim of truly protecting the Paint Branch.

The measures to protect the Paint Branch resource on Corridor 1 that are referenced in the comment are project commitments that will be tracked by both the Lead Agencies and the resource and regulatory agencies through final design and construction of the ICC. The evaluation of potential impacts contained in the DEIS does not support the comment's assertion that the Paint Branch will be irreversibly damaged by the ICC. While the future of the trout population cannot be guaranteed even without the ICC, these measures have been developed in close consultation with local, state, and federal resource managers and are expected to maintain the high water quality in the Paint Branch that the trout require. The agencies will continue to provide an oversight role through a Memorandum of Understanding to assure agency participation and commitment compliance as the project moves forward. As an additional

level of assurance that commitments are met, it is anticipated that the regulatory agencies will include many of these commitments as conditions of any regulatory permits issued for the project.

The Lead Agencies acknowledge the County's work in protecting the Paint Branch through its designation as a Special Protection Area (SPA) and have worked closely with the County in development of the ICC to ensure that impacts to the SPA and its sensitive resource are avoided and minimized to the greatest extent possible. The Lead Agencies have committed to numerous avoidance and minimization measures specifically targeted for the SPA , including the use of erosion and sediment control plans with redundancy of erosion and sediment controls in sensitive areas, state-of-the art storm water management systems that incorporate infiltration and redirection of flows from critical trout spawning habitat, the incorporation of long bridges over Good Hope, Gum Springs and Paint Branch, and other design alterations and operational features to minimize impacts in these areas. See FEIS Chapters IV.F.5 and IV.F.6.b. In addition, mitigation will be heavily concentrated in the Paint Branch watershed in accordance with state and federal agency preferences to offset unavoidable impacts through projects aimed at improving existing water quality and stream channel conditions. Moreover, environmental stewardship projects above and beyond mitigation are expected to also address existing water quality and stream problems in the watershed. A number of these projects would specifically address restoration priorities that have been established by local and state efforts for the Paint Branch, such as storm water management, fish blockage removal and stream rehabilitation.

358 **On July 14, 2005, John Parrish measured air and water temperatures downstream of Good Hope Road to illustrate the benefits of forest cover for protecting the temperature of the Good Hope trout stream. The weather that day was sunny, hot and humid (92 degrees). The forest interior measured 86 degrees. The water temperature of the Good Hope tributary measured 70 degrees. A springbrook outlet from a nearby seepage wetland measured 68 degrees. During heavy rain and lightning, John observed streams of runoff alongside Good Hope Road and Cape May Road. The water was running directly down Cape May Road joining the runoff from Good Hope Road. All of this water was headed into the Good Hope Tributary. The grassy swales along each roadside were overflowing with brown muddy water. As the storm subsided, John recorded the changes in air and water temperatures. The air temperature it the forest had dropped from 86 to 75 degrees. The Good Hope Tributary was running at ball, filled to the brim with brown muddy water. The water temperature had risen from 70 to 75 degrees. The nearby springbrook outlet remained constant at 68 degrees.**

To be designated a "Use III Natural Trout Waters," the maximum temperature is not supposed to exceed 68 degrees because temperatures in excess of 68 degrees become stressful to trout, especially to young trout. Trout also require clean streams free of excessive sediment. As shown in our observations on July 14, 2005, summer storm events are posing a significant threat to the viability of the critical Good Hope trout stream. It is very likely that heated runoff from summer storms has and will continue to exceed the 76 degree lethal threshold of tolerance for Brown Trout. This, in our opinion, is a significant contributing factor to the decline of the trout in the Paint Branch watershed. The ICC would add, not reduce stresses to an already stressed watershed. How can building a major highway along the Good Hope Tributary possibly improve the health of the stream? The Good Hope Tributary is the primary spawning and rearing tributary in the Paint Branch watershed. Studies have indicated that 90 percent of Paint Branch trout spawn and are reared in the Good Hope Tributary.

The Lead Agencies acknowledge the sensitive nature of the Good Hope Tributary as well as the importance of mitigating the potential for temperature increases in the Good Hope. Consequently, the Lead Agencies have planned stormwater management systems that will infiltrate a portion of stormflows to maintain cool baseflows and redirect flows in excess of what can be infiltrated away from the Good Hope. Runoff from the bridge over the Good Hope will

also be captured and treated to avoid these potentially heated flows from reaching the tributary, while runoff from the County Maintenance Depot that currently discharges to a tributary of the Good Hope will also be redirected away from this sensitive resource.

359 **No ES sites are proposed that would help alleviate the runoff problems in the Upper Good Hope watershed that would help alleviate the runoff problem along Cape May and Good Hope Roads. ES measures are proposed for only one site (upstream of Good Hope Road). This site (PB-114, PB- 115) is located in the Peachwood development. The project proposes to reconstruct grassy swales and provide bioretention areas, including one at the end of Eastway Drive in Peachwood Park to treat runoff upstream of the park. While this ES measure can lessen the runoff impact from 44 acres, the Upper Good Hope watershed encompasses 311 acres. The Peachwood ES proposal does not address runoff from impervious surfaces elsewhere in the Upper Good Hope watershed. The ICC would add 18.5 acres of impervious surfaces to the Good Hope watershed and cause increased sedimentation and thermal impacts due to loss of forest cover near the stream and due to increased runoff during construction and operation of the highway. Forest cover is widely recognized as the best land use in terms of water quality. Inevitably, the Good Hope tributary would suffer substantial degradation from the ICC and the trout would be eliminated. The FEIS fails to prove that the Good Hope Tributary would not degrade as a result of the ICC. The FEIS fails to prove that the anti-degradation statute would be upheld.**

The first portion of this comment is factually incorrect, as there are several Environmental Stewardship (ES) projects proposed to help with current runoff problems in the Upper Good Hope subwatershed near Cape May Road and Good Hope Road area include PB: -114, -114A, -115, -33, -109 and CM site -119. As noted in the comment, PB-114 and 114A are both in the Peachwood Park, the largest area (44 acres) without stormwater management (SWM) in the Upper Good Hope. As such, this area has been targeted for improved stormwater management through a combination of facilities ranging from infiltration-type best management practices (BMPs) to a new extended detention SWM basin within the park. PB-115 will use a BMP to capture runoff from an area along Peachwood Road that could not be diverted to the County's SWM basin when it was retrofitted a few years ago. CM project PB-119 will improve riparian buffers along, and habitat within, the small stream below the BMP at -115 (East Fork Good Hope). On this same stream below Good Hope Road, PB-33 will retrofit and improve two SWM facilities and an eroded stream channel from the Good Hope Apartments community.

Back on the mainstem, a BMP will be located along Cape May Road and further restoration will be included in the tributary from Cape May to the Good Hope. Restoration will continue along the mainstem from this tributary to about 900 linear feet below Good Hope Road where it joins the channel from the PB-33 projects. Riparian reforestation, control of thermal and sediment inputs, and habitat improvements are all components that are being included in these projects. In addition, it should be noted that although the ICC will add impervious cover to the Upper Good Hope watershed, the runoff from a substantial portion of these new impervious areas will be diverted out of the Good Hope watershed, and existing impervious runoff from the County Maintenance Depot that now discharges to the Good Hope will be redirected out of the Paint Branch watershed. This stormwater management approach and ES efforts have been coordinated with the County's extensive watershed planning efforts in the Upper Paint Branch and are anticipated to maintain the current high level of water quality and in turn enhance the aquatic community.

360 **Page IV-165. The text states "Under the State's federally mandated anti-degradation policy (COMAR 26.08.02.04), the designated use class for each stream must be protected and maintained. The text goes on to state that protection will be accomplished with the use of BMP's and compliance with NPDES permits for stormwater discharges. What scientific data has been compiled as a result of the current ICC study to prove that the**

existing use class will be protected?

The science behind the Lead Agencies' assertion that BMPs can provide water quality protections is reflected in the 2000 Maryland Stormwater Design Manual (MDE, 2000), which identifies compliance measures based on studies on SWM effectiveness. While this scientific background is not explicitly contained in the FEIS text, it is contained by reference in the technical documents used and referenced in the FEIS, and the SWM approach developed for the ICC as a whole, and sensitive areas like the Paint Branch that meet and exceed MDE guidelines for water quality treatment.

361 **Appendix R-8, page 89 of 184. The response to comment # 1079 attempts to address one of seven questions we made pertaining to the Anacostia Watershed Restoration Agreement (AWRA). However, we did not receive a response to the six other questions we ask regarding the AWRA. Please answer the remaining six questions.**

The response provided in the DEIS was intended to answer all of the questions related to the compatibility of the ICC with the goals of the AWRA. The commenter asks how the ICC, with its unavoidable impacts, can satisfy the goals of reducing pollutant loads, restoring the ecological integrity of the Anacostia River system, restoring natural ranges of anadromous and resident fish species, increasing the acreage of wetlands, protecting and expanding forest cover, and increasing public participation in the restoration of the resource.

As stated in the response, "While all impacts from the ICC in the Anacostia watershed cannot be avoided, the ICC's commitment to environmentally sensitive design, environmental stewardship and strict adherence to all applicable regulations, including exceedance of some regulatory requirements is in keeping with many of the goals of the agreement and addresses the need to protect and restore resources while meeting transportation commitments." The AWRA does not preclude the ICC or other activities in the watershed, but is one of many things that provides a basis for the unprecedented level of environmentally sensitive design, avoidance and minimization, and environmental stewardship implemented in every phase of the project. During development of the ICC, the Lead agencies worked closely with many local, state, and federal AWRA participants, soliciting and receiving recommendations for mitigation and environmental stewardship projects in keeping with the AWRA goals.

362 **Appendix R-8, page 96 of 184. The responses to our amphibian vernal pool comments (#1174, # 1185, & #1186) indicate "no additional information is anticipated to be added to the vernal pool data collected in the spring of 2004" despite additional information offered by MNPS. Furthermore, the responses fail to address the specific concerns we raise under #1185 and #1186. We can only conclude that the EIS falls short of answering our legitimate concerns regarding amphibian migration routes and the likelihood of success for the amphibian passages proposed. Consequently, the responses to our questions are inadequate. In addition, the FEIS fails to include the additional information we offered.**

The Lead Agencies analyzed the information provided by Maryland Native Plant Society (MNPS) and also provided it to other regulatory and resource agencies. MNPS's information (Comment number 1174, Appendix R-8 of the FEIS) refers to additional vernal pool species identified within the Upper Rock Creek and Mill Creek subwatershed. The agencies already had in their possession adequate information concerning the vernal pools because at least one obligate species known to be present in the pools and that the pools are located within a larger sensitive forested habitat.

Studies for the avoidance and minimization of impacts to vernal pools closely paralleled those for protected wetlands and floodplains as the majority of vernal pools are associated with wetlands. The goal of ongoing design efforts is, by regulation, to avoid as many wetlands as practicable. As a result, many vernal pool impacts have been avoided. In many cases, bridges would span large sections of the 100-year floodplain and wetlands, thus avoiding direct impacts

to vernal pools.

With regard to amphibian passages (Appendix R-8, Comments 1185 and 1186) amphibian/reptile passage has been included as part of the roadway design. Despite the relative uncertainty associated with attempted control over amphibian migration, steps are proposed to ensure that passage to the other side of the ICC is possible. As mentioned, bridges are proposed to span large sections of 100-year floodplain. In areas where deer culverts are proposed, passage opportunities may include designing the culverts to have natural substrates that maintain some debris for cover and moisture retention. The incorporation of mesh along the bottom three feet of deer fencing is proposed to minimize amphibian movement along the highway. Lastly, replacement of impacted vernal pools is being considered and a determination will be made as final design continues and more detail is developed. Efforts are ongoing with MNCPPC to consider vernal pool creation immediately along the proposed ROW, with specific emphasis in the North Branch of Rock Creek and Northwest Branch watersheds.

363 **Appendix R-8, page 98 of 184. In comment # 1213 we stated that the DEIS omitted data pertaining to rare and uncommon species. The response states "All known federal and state listed species along with species of local significance within the project ROW are discussed in the DEIS and NETR and summarized in Chapter IV.F.10." The Maryland Native Plant Society has already pointed out omissions in the points we raised above concerning Smilax pseudochina, Carex bullata, and Betula populifolia. In addition, the text on page IV-290 does not indicate impacts to Woolly Sedge from Northwest Branch Option A despite our comments (page 39 of our DEIS comments) stating that Option A would directly impact the state-rare Woolly Sedge near Station 557 and despite Table IV-79 listing Woolly Sedge as an RTE impact from Northwest Branch Option A. The statement that all known state listed species along with species of local significance within the project area are discussed in Chapter IV.F.10 is simply not true. Furthermore, Table IV-79 omits listing Woolly Sedge for Northwest Branch Option B even though the text on page IV-290 accurately includes Woolly Sedge as an impacted species. The conflicting data leaves a serious reader of the FEIS confused about the accuracy of the information.**

The commenter is correct regarding some confusion with the listing of Woolly sedge. Table IV-79 would be correct by showing an impact for woolly sedge associated with Northwest Branch Option B. The reference in the FEIS to Option A is incorrect.

For this and other plant references, we acknowledge the omissions discussed above and the Lead Agencies are aware of them. The Lead Agencies have worked closely with many stakeholders to ensure information within the FEIS is accurate and will take these omissions into consideration when making decisions regarding the project. The presence of RTE's is an important component to the project. Coordination with DNR included the agency's primary concern that efforts be made to avoid state listed threatened or endangered plant species wherever possible. Information on rare or uncommon plant species was provided to the agencies including DNR as well. However, these species are not typically afforded the protection that state listed threatened and endangered species have. The presence of RTE's were also taken into consideration, in combination with other environmental resources (wetlands, floodplains, etc.), when evaluating opportunities to avoid or minimize impacts to different natural resources. Greater emphasis was placed on resources with federal or state regulatory requirements such as wetlands, streams, parkland and state listed species. Issues considered as part of selecting a preferred option, such as within Northwest Branch, involved an evaluation of a variety of resources including RTE's.

364 **The text on page IV-298 states that both a southward and northward shift to the DEIS alignment was considered to avoid impacts to the Rough-leaved Aster. The text also states "The rough-leaved aster can be avoided completely by either shift, but impacts**

would be reduced more by shifting to the south versus the north. In coordination with the USACE, MDE, and USFWS, the southern shift was selected. The Maryland Native Plant Society would prefer the alignment to be shifted to the north to totally avoid the Rough-leaved Asters and Halberd-leaved Greenbriers and be shifted far enough to the north to totally avoid Wetland 6J. We are aware of another population of Rough-leaved Aster and Halberd-leaved Greenbrier to the south of Wetland 6J that may be destroyed if the alignment were shifted to the south. Even if a highway can be squeezed between the two populations without directly impacting either one, the result would be that each population would no longer be connected by natural habitat (as currently exists) and consequently, the populations would be permanently isolated from each other. In addition, the alternative as currently proposed would unnecessarily sever the north to south riparian corridor of the Indian Creek tributary. Therefore, a shift to the north just outside and north of, Wetland 6J is preferable. Furthermore, a northward shift would not take property or any homes from residents along Muirkirk Road.

The Lead Agencies worked closely throughout the planning process to consider different engineering efforts in order to avoid both Wetland 6J and the rough-leaved aster population. Agency field visits were conducted to review both Wetland 6J and the area where the rough-leaved aster is evident. The agencies requested that the Lead Agencies pursue the southern shift for two reasons. First, the agency preference was for the proposed roadway to be to the south of the Wetland 6J. The concern with placing the shift to the north of Wetland 6J was whether current hydrology patterns upstream of Wetland 6J would be disturbed. Secondly, the southern shift is located approximately in line with where Wetland 6J is the narrowest. Based on these reasons, the decision was made to shift the alignment to the south. In addition, based on agency requests, the landowner and the Lead Agencies have agreed to place both Wetland 6J and the rough-leaved aster location into a conservation easement (includes a 100-foot buffer around the existing forest line of the area).

365 **Appendix R-8 page 98 of 184. Our DEIS comments (#1219 and #1223) state that 3 watchlist species (Pubescent Sedge, Carolina Tassle-rue and Showy Skullcap) would be directly impacted by Rock Creek Option A. The response to our comments (#1223) says that while these species "are individually located within the vicinity of Rock Creek Option A, none are impacted." We maintain are assertion about direct impacts to two of these species. Pubescent Sedge grows within the southern edge of the proposed ROW near Station 212 and would suffer direct impacts. Showy Skullcap grows near Station 223 directly within the ROW. The only species that is not directly impacted is the Carolina Tassle-rue, which grows within 100 feet outside of the proposed construction zone. However, the Tassle-rue may suffer substantial indirect impacts due to edge effects, altered drainage patterns, and a subsequent influx of non-native invasive species along the newly formed forest edge. We would gladly show officials the exact locations of these species again so that these errors can be corrected. Will SHA visit the 3 sites with a MNPS representative to confirm locations?**

Based on the Limit of Disturbance boundaries shown in the FEIS, the Lead Agencies believe that Carolina tassle-rue and Pubescent sedge (both watchlist species) would not be directly impacted by Rock Creek Option A. In addition, the Lead Agencies have selected Option C. The commenter is correct that Showy skullcap (watchlist species) is shown in the FEIS as being impacted. The Lead Agencies recognize that indirect impacts could occur for both species not impacted but would be close the ROW. Indirect impacts to RTE's have been described in the FEIS (Chapter IVF.10.b, page IV-295). Since publication of the DEIS, there have been numerous alignment shifts to avoid as many resources as possible including watchlist species. Even though these species are not actively tracked by DNR, the Lead Agencies understand that other stakeholders have concern with whether they are impacted or not. The regulatory agencies have considered a variety of environmental resources in their review of the project. Efforts have been ongoing to avoid or minimize impacts to resources including all RTE's. DNR, however, has placed special emphasis on state listed threatened or endangered species.

Avoidance efforts for other species, such as rare, watchlist or locally significant, were also considered throughout the project. However, in many cases, greater emphasis was placed by the regulatory agencies on avoiding resources with federal or state regulatory requirements such as wetlands, streams, and parkland. The Lead Agencies are available to meet with all stakeholders including with MNPS on RTE related matters.

366 **Appendix R-8 page 98 of 184. Our DEIS comment (#1220) called attention to Low Bindweed listed as an uncommon species (in the discussion on the North Branch Rock Creek watershed) when it should actually be listed as a state-rare (S-2) species. The response to our comment states "The text in Section IV.F.10.a under North Branch Rock Creek will be revised to reflect the State rare status."We looked in Section IV. F.10.a. (page IV-289) and found that the text was not revised to reflect the state rare status. Therefore the text on page IV-289 is inaccurate and inadequate because the change was not made as claimed, It does not distinguish the difference between the uncommon species Shingle Oak and the state-rare species Law Bindweed. These distinctions are made throughout the other watershed discussions and should be applied consistently in each discussion for the sake of accuracy and adequacy.**

The Lead Agencies have checked the FEIS and did not find the discrepancy described in the comment. In Chapter II, page II-131, Table II-28, low bindweed is listed as "S2" or state rare. In Chapter IV, page IV-289, low bindweed (without a ranking) is mentioned as being impacted for species within North Branch of Rock Creek. The sentence from page IV-289 reads as follows: "Corridors 1 and 2 would directly impact known habitat for two species, low bindweed and shingle oak." The ranking is not provided for either of the species. This is similar to the rest of the section describing whether species are impacted or not. The ranking was not provided for all rare, watchlist or locally significant species. State listed threatened or endangered species were referenced if they were either threatened or endangered. Furthermore, the ranking for all species are provided as part of Table IV-79 on page IV-292 and 293. Table IV-79 lists low bindweed as a state rare plant. There is not a reference in Chapter II or IV that refers to low bindweed as an uncommon species.

367 **Appendix R-8 page 99 of 184. Our DEIS comment (#1226) ask "Does the MD Nongame and Endangered Species Act require any application of avoidance of harm to the State Endangered and State Threatened plants in the ICC right of way? " The response refers us to the Chapter II RTE section of the FEIS regarding regulations pertaining to the ICC project. We note that on page II-125 in regard to the Annotated Code of Maryland 10-2A-01 the text states: "This law is supported by regulations set forth in Title 08.03.08 of COMAR, which contains the official State list of species considered endangered, threatened, or in need of conservation (COMAR, 1985). The DNR is mandated under this law to maintain a list of species deemed to be endangered, threatened, or in need of conservation within the State. The Secretary of Natural Resources is required to establish conservation programs for these species. State agencies are required to help maintain and enhance populations of species, which are found to be endangered, threatened, or in need of conservation."**

The text on page IV-297 indicates "Trailing Stitchwort would be impacted by both Corridors 1 and 2 in the North Branch Rock Creek watershed. What conservation program by the Secretary of Natural Resources was established for protecting the Trailing Stitchwort? Since State agencies are required to help maintain and enhance populations of endangered species, how is it legally possible to comply with this requirement when the ICC would inevitably result in taking most (if not all) of the population of the Trailing Stitchwort at this site? Isn't it illegal for the State to take actions contrary to their requirements to help maintain and enhance populations of species which are found to be endangered?

The listing of the Trailing Stitchwort as a Maryland RTE species is a conservation measure that affords certain protections limiting the taking, possession, transportation, exportation, processing, sale or offer of sale, and shipment of listed species. Avoidance and minimization information for all state listed species is provided in the FEIS, specifically Chapter IV.F.10. Specific DNR avoidance and protection measures relevant to the Trailing Stitchwort are found in the FEIS (Appendix B, Agency Correspondence subsection, DNR letter dated July 26, 2004, page 141). The primary avoidance measure suggested by DNR is to relocate the alignment 100 meters to the south of where the plant is located. In addition, if the alignment is shifted, DNR has recommended maintaining a forested buffer 100 feet between the plant location and any soil disturbance. Another recommendation is to develop a long term weed control strategy to limit invasive species in the proximity of the Trailing Stitchwort. However, other important natural resource constraints (adjacent wetlands, floodplain and forest) limit possible avoidance measures for this plant species.

368 Does Title 08.03.08 of COMAR or any other State law permit the State to destroy populations of State endangered species?

State law, including Title 08.03.08 of COMAR, does allow for the takings of Maryland listed endangered species.

369 Appendix R-8 page 98 of 184. In our DEIS comments (pages 32 & 33) we ask if the EIS would be updated to include a major reason as to why reptiles are very susceptible to becoming road kill. We stated that snakes and turtles are attracted to road surfaces to warm their body temperatures because they are cold-blooded and the roads are often significantly warmer than the surrounding air temperature. As a result, reptiles are less mobile because they tend to bask on warm road surfaces. In Appendix R-8 page 98 the response to our comment (#1209) indicates "This information is included in Section IV.F.9.d. of the FEIS." We looked in this section on page IV-280 and found that the text remains unchanged. Therefore, we conclude that your statement is not true because the information we offered is not included. Why does the response claim that the FEIS included this information when it was not included?

A review of the wildlife section (Chapter IV.F.9, pages IV-270 and IV-280) shows that the FEIS does include a reference to the heat from road surfaces and some wildlife that can be attracted to them. On page IV-270, the reference to heat and road surfaces is in the first paragraph under the heading “Physical Influence.” On page IV-280, language is also provided (second paragraph under the heading “General”) that describes the effects of a roadway on reptiles and amphibians. The Terrestrial Wildlife section (Chapter IV.F.9, page IV-267) in the FEIS also provides more detailed information on many other direct and indirect effects on wildlife, including reptiles and amphibians.

370 If the Good Hope and Gum Spring tributaries are degraded and can no longer support trout, the anti-degradation statute would be violated. If these streams cannot support trout, the Paint Branch watershed's trout fishery would collapse.

The Lead Agencies acknowledge the sensitive nature of the Good Hope and Gum Springs Tributaries and have therefore provided stormwater management systems that will infiltrate a portion of stormflows to maintain cool baseflows and redirect flows in excess of what can be infiltrated away from the Good Hope and Gum Springs. Bridge runoff will also be captured and treated to avoid these potentially heated flows from reaching the tributaries, and runoff from the County Maintenance Depot that currently discharges to a tributary of the Good Hope will also be redirected away from this sensitive resource. In addition, mitigation and Environmental Stewardship projects are planned to address existing problems that currently degrade water quality.

371 SHA cites greater impacts to the Patuxent River/Rocky Gorge watershed. However, by comparison, the Anacostia watershed is severely impacted to a far greater extent by the Corridor 1 alternative compared to Corridor 2 in respect to forest loss, new impervious cover, linear feet of stream impact, stream crossings, degradation of trout streams and the loss of parkland. Why is the Anacostia watershed not analyzed in terms of prudence for Corridor 1? We find SHA's arguments to be selective and unbalanced.

The effects of an ICC on the Patuxent Reservoirs/Rocky Gorge watershed was highlighted because it is unique to the study area and supplies drinking water to more than 550,000 people in the region. The Comparative Water Resources Hazard Assessment presented in the FEIS determined that while "over a twenty-year period Corridor 2 may experience [only] one serious hazardous materials releasing incident that has the potential of directly affecting the Rocky Gorge Reservoir or its tributaries... the ramifications of even a single hazardous materials release could significantly impact the ability to use the ... Reservoir as a source of drinking water." The Lead agencies recognize the important public drinking water supply issues associated with the operation of the Patuxent Reservoirs as well as the important natural resources associated with the Anacostia watershed and all of the watersheds in the study area. Consequently, the Lead Agencies have worked closely with stakeholders to include unprecedented resource protection measures and environmental stewardship into the ICC, many of which exceed regulatory requirements, as detailed in the FEIS.

372 The Chesapeake Bay would be harmed by the run-off caused by the increased amount impervious surface as a result of the ICC. The contamination of the Chesapeake Bay is a serious public health concern.

The ICC includes an unprecedented level of environmentally sensitive design features that avoid and minimize potential impervious impacts to waterways that ultimately drain to the Chesapeake Bay. Runoff from the ICC will be treated with state-of-the-art stormwater management facilities that provide water quality treatment that exceeds state requirements, greatly minimizing the potential for detrimental water quality impacts to occur. Project impacts to waterways that are unavoidable will be mitigated with a comprehensive package of wetland creation, stream restoration, and other water quality improvement projects that will offset the detrimental effects of the roadway. In addition, environmental stewardship projects above and beyond regulatory requirements have been developed to improve existing water quality problems that currently negatively impact project area watersheds and the Bay.

373 In Volume 1, Chapter IV it is stated that chemical releases could migrate vertically and enter shallow groundwater, and then you state that an impact is unlikely because most wells are deeper than subsurface resources. De-icing chemicals are also addressed, although in more detail in the Comparative Water Resources Hazard Assessment, which will increase the possibility of contamination to existing wells. We have never used any de-icing chemicals on Overhill Road or Garrett Road in Cashell Estates. My well is approximately 70 feet deep, which puts my well at a higher risk for contamination.

Road salt can and has impacted both private and public wells. Road salt is chemically the same as ordinary table salt. It is not considered a hazardous material. Salt is composed of sodium (Na) and the chloride ion of chlorine (Cl). The EPA has published drinking water standards which include the presence of chloride in water. The EPA's recommended secondary standard is 250 parts per million. A secondary standard is one that applies to drinking water qualities that are not health related. In this case, the standard is based on taste. At this level, most individuals can just begin to detect the presence of salt in the water. The EPA has not published a standard for sodium. Sodium does not survive very long in solution. It is rapidly exchanged for other elements, usually calcium and magnesium. Road salt can be removed by distillation or reverse osmosis. Most well contamination takes place in old wells and springs that were drilled before

modern casing and sealing methods became law (1972).

374 SHA addressed the well contamination issue by stating "most well contamination takes place in old wells and springs that were drilled before modern casing and sealing methods became law in 1972." My well was drilled in 1957, so my well is at a higher risk of contamination. An SHA representative told me that if my well was damaged, I would have to file a damage claim, and if the State is found responsible the State MAY compensate me with a well replacement or a reverse osmosis system. If my well is damaged, wouldn't a replacement well be damaged also?

It is unlikely that well contamination would occur as a result of construction of the ICC. However, if contamination or damage to a well structure were to occur as a result of an action by SHA or its contractors, appropriate compensation will be provided. It appears from the comment letter that the author is particularly concerned with ground water contamination. If ground water contamination occurs due to ground water seeping into shallow or inferior wells, a new well drilled pursuant to modern methods is very likely to resolve contamination of the well water.

375 Comment 953. I did not make general comments on this subject and this response ignores the specificity of my questions related to rain gardens.

Comment #50 from your DEIS comments specifically referred to the application of rain gardens and similar type treatments. The Lead Agencies have incorporated bioretention facilities, along with other environmentally sensitive design elements to minimize the impacts of the ICC.

376 Comment 986. This response is not credible. Since the response mentions that "Montgomery County has identified approximately four miles of stream restoration in the Rock Creek watershed," SHA could ask Montgomery County how much the four miles will cost, how many more miles of stream banks need to be stabilized and restored, and do the math of the per mile cost and the total cost themselves or even ask the county to do the math for them. What is the cost to stabilize and restore all stream banks in the Upper Rock Creek watershed? What is the cost to stabilize and restore all stream banks in the rest of the ICC study area? What is the cost to stabilize and restore all stream banks in the rest of Montgomery County?

The stream bank stabilization and stream restoration that is proposed is needed as a result of the construction of the ICC or is proposed as part of the project's Environmental Stewardship package. It is beyond the scope of the ICC study to estimate, much less repair, streams throughout the entire County.

377 Comment 1232. This response is contrary to public promises made by SHA, because of the emphasis on Environmental Stewardship in the Purpose and Need Statement. Hiding behind the statement that protecting fragile environmental resources in as scientifically sound a way as keeping within the limits of an impervious surface cap because it "is not required compliance with Federal and State regulations" disproves the claimed intent of SHA to provide Environmental Stewardship. SHA does not show any real interest in even protecting environmental resources by mitigating and minimizing the impact on the reproducing brown trout population that will be severely affected by the additional, excessive imperviousness and thermal impacts of the ICC.

The FEIS includes hundreds of pages (mostly contained in Chapter IV) describing the extensive steps taken to avoid, minimize and mitigate impacts of the ICC to the natural, human and cultural resources in the study area. Specifically by example in the Montgomery County SPA, the ICC will include underground and linear stormwater management facilities designed specifically to accomplish the goals you mention in your comments. The Lead Agencies were not influenced by the requirements of the SPA guidelines. Instead, the Lead Agencies were motivated to decrease the environmental impacts of the ICC.

378 Comment 1232. What is the cost to lower the total percentage of impervious surface in the Upper Paint Branch Special Protection Area to 8% through such methods as installing rain barrels, rain gardens and storm chambers for free; removing patios and other impervious surfaces for free; replacing impervious surfaces with pervious ones; buying houses on the open market, removing all extraneous impervious surfaces and reselling houses with impervious surface limit covenants; buying houses on the open market, demolishing the houses, removing all impervious surfaces, and turning the vacant land into passive recreation parkland or open space?

Many of the suggestions made were applied to the design of the ICC, including bioretention facilities. Other programs, such as private property surface conversions (i.e. patios, extraneous surfaces) and buying homes are outside the scope of the ICC project. The Lead Agencies would encourage you to forward these comments about further impervious surface reductions to Montgomery County.

379 Comment 1777. This response almost entirely contradicts Comment 1232. Which response is the correct one for SHA? What is the cost to lower the total percentage of impervious surface in the Upper Paint Branch Special Protection Area to 8% through such methods as installing rain barrels, rain gardens and storm chambers for free; removing patios and other impervious surfaces for free; replacing impervious surfaces with pervious ones; buying houses on the open market, removing all extraneous impervious surfaces and reselling houses with impervious surface limit covenants; buying houses on the open market, demolishing the houses, removing all impervious surfaces, and turning the vacant land into passive recreation parkland or open space?

Although the responses to 1232 and 1777 may seem to be contradictory, they both convey the message that the Lead Agencies are not required to lower impervious surface area or develop a cost for doing so in Upper Paint Branch (or any other watershed) to comply with any state or federal regulations. However, the Lead Agencies acknowledge that the water quality in the Upper Paint Branch is in decline because of existing development, which has occurred without the ICC. As part of the Environmental Stewardship commitment for this project, the Lead Agencies have committed to undertake projects that repair a number of eroded stream channels and address a percentage of existing developed areas that are presently without stormwater management. The Lead Agencies are working with MNCPPC, the Montgomery County Department of Environmental Protection (MCDEP), and the Montgomery County Department of Public Works and Transportation (MCDPWT) and other agencies to monitor existing conditions and address the effects of existing impervious surfaces and those directly created by the ICC on watershed health, significantly beyond state and federal requirements.

380 The Patuxent Watershed Protective Association (PWPA) concluded that the DEIS process is seriously flawed based on how the DEIS handled the protection of drinking water and the related public health as well as the Rocky Gorge Reservoir Watershed in Corridor 2.

The DEIS was not flawed. The Lead Agencies have worked closely with all interested stakeholders, including those concerned about the Patuxent Watershed. A comprehensive Comparative Water Resource Hazard Assessment was conducted to more fully understand the potential impacts to the Rocky Gorge Reservoir. The study is included and summarized in Chapter IV.F.5 of the FEIS and in greater detail in the NETR.

381 The studies of groundwater and stream impacts are not correct because they do not take into account the altered hydrology associated with building the Norbeck Road Connector.

Hydrologic and hydraulic analyses performed as part of the ICC studies assess and deal with land use changes within the proposed ICC right of way. ICC studies therefore assume that off-site hydrology impacts, such as that associated with Norbeck Road Extended, other roads,

subdivisions, etc., have been addressed as part of the permit process for the individual project at the time the project was constructed, and the impacts for the individual projects have been mitigated in the permit and construction process for those projects.

382 What is the total health impact of the ICC considering air, ground water, and noise pollution?

Each of these health-related impacts was considered during the detailed study phase for the ICC. Chapter IV of the FEIS summarizes the results of each of these studies.

383 Concerned about the impacts of building 11.2 acres of stormwater management ponds in addition to the roadway.

The environmental impacts of the stormwater management areas proposed throughout the Selected Alternative alignment have been accounted for just as the impacts from the mainline of the roadway. Stormwater management facilities are important to ensure proper quality and quantity treatment of rainfall events to avoid erosion and other environmental impacts. In the most sensitive Special Protection Areas, such as Paint Branch and portions of Rock Creek parks, the Lead Agencies have incorporated linear and underground SWM features to further minimize water quality impacts.

384 Chapter IV.F reviews the multifarious, potential effects of the ICC on the natural environment, but fails to quantify many of these. Hidden in the welter of detail is the overriding underestimate of the secondary effects of the ICC. The ELUP estimates cannot be taken seriously in the light of other analyses and, reportedly, the wide differences of opinion within the ELUP.

FEIS Chapter IV.F evaluates resources that will be directly impacted by the ICC. The SCEA (FEIS Chapter IV.K) is a stand alone assessment of secondary and cumulative impacts that used the results of the ELUP to further assess resource impacts above direct impacts. Please refer to Chapter IV.K of the FEIS for an assessment of resource impacts based on secondary and cumulative effects, including streams.

385 The FEIS uses generalized and inaccurate estimates of imperviousness associated with each land use. The FEIS uses a constant factor for each land use type, even though there is wide variability in imperviousness within each category. This problem is acknowledged for some of the data used by SHA.

"the information generated in GISHydro is less accurate than that in the CSPS since it was generated from land use categories rather than an analysis of actual impervious ground cover" (FEIS page IV-176)

The referenced quote from the FEIS (Page IV-176) on the information generated in GISHydro is part of a discussion of indirect water quality impacts from the highway itself and is not related to secondary or cumulative impacts. The SCEA is a stand alone assessment of secondary and cumulative impacts that used the results of the ELUP to further assess resource impacts above direct and indirect highway impacts. The analyses completed for the Chapter IV discussions are more detailed and used detailed design-based estimates of new impervious surface from the road and related facilities. To put this in the context of existing imperviousness and potential percent increases, available information of existing imperviousness in each watershed was used. For Montgomery County watersheds, the data were the imperviousness estimates from the Countywide Stream Protection Strategy. For Prince George's County, these detailed estimates were not available and more generalized estimates from GISHydro were used. The SCEA analysis was conducted at a different and broader scale due to the size of the area being investigated. DNR's Surf Your Watershed Percent Impervious Indicator was used in calculating existing and future imperviousness within the entire SCEA boundary for each alternative. While more detailed methods for analyzing existing imperviousness exist, they are not required under

the SCEA guidelines and are not necessary to provide decision makers with a relative comparison of potential secondary and cumulative impervious impacts between alternatives.

386 **The RESAC studies measured imperviousness irrespective of land use class. For the ICC area the results were aggregated by Maryland Department of Planning Land Use Class. The differences in average imperviousness by category vary from 1 - 23% (Table 1). More important, the RESAC data provide measures of the variation within each Land Use category. The standard deviations of imperviousness in each category are, in some cases, greater than the mean. The ICC Pollutant Load Study imperviousness values are given for comparison.**

The Lead Agencies acknowledge that more detailed methods for impervious analysis exist, however, in accordance with state SCEA process and the federal secondary and cumulative effects guidance, the SCEA utilizes readily available data to provide estimates of potential secondary and cumulative impact from the roadway. These data are widely used throughout the state for planning purposes and basic pollutant modeling and provide a level of detail appropriate project planning.

387 **In February 2005 the University of Maryland RESAC submitted a study of the anticipated impact of the proposed Intercounty Connector (ICC) highway to the SHA. The RESAC study used satellite remotely sensed data to calibrate a cellular automaton model and made predictions of future impervious cover likely to be generated by the ICC through secondary development. Two future scenarios were explored with the model: "Business as Usual" which applied existing planning controls and incorporated the ICC, and "Smart Growth" that embodied Maryland Smart Growth legislation and no ICC. In both cases predictions were made of impervious cover in 2030 which were compared with the existing areas. Accuracy of the model was assessed by comparison of its predictions of current impervious surface with actual measurements. Very good agreement (0.5%) was found.**

The results challenge the SHA's estimates of the effect of the ICC on secondary development. Much of the FEIS's conclusions rest on predictions obtained by the SHA using an Expert Land Use Panel. The RESAC model results, however, agreed with an independent econometric model (Ewing and Kuzmyak, 2005), and also with some ELUP members' opinions. Since secondary development is likely to be the main cause of environmental degradation associated with the ICC rather than the highway itself, accurate forecasting of its extent is critical.

The MDP studied the ICC and prepared an in-depth White Paper on Intercounty Connector Alternative Selection and Compliance with the Maryland Planning Act and the Smart Growth Regulations as part of the Maryland Board of Public Works' review of the ICC project under the Smart Growth Act. See FEIS, Appendix I. MDP concluded that while both Corridors 1 and 2 would connect PFAs (at the proposed termini at I-270 and either I-95 or U.S. 1), Corridor 1 is more compatible with the intent of the Smart Growth Act. MDP found that Corridor 1 lies approximately 64 percent within designated PFAs and is generally compatible with local master plans. Corridor 2, by contrast, only lies within a PFA for 38 percent of its length, is generally inconsistent with local master plans, would encourage more unplanned development and would encourage development in rural areas not planned for growth. Overall, MDP concluded in the White Paper (and the Maryland Department of Transportation agreed) that Corridor 2 would have more negative smart growth impacts than would Corridor 1. See FEIS Chapter IV.D.5 (information on compliance with Smart Growth Initiatives).

Additionally, on August 31, 2005, the Maryland Board of Public Works determined that the project serves to connect Priority Funding Areas, and approved the exception for the Corridor 1 Alternative under the Maryland's Smart Growth - Priority Funding Area Law, thereby permitting

the State to provide state funding for the construction of the ICC.

SHA chose the Expert Land Use Panel (ELUP) approach because experience has shown that expert panels often provide useful feedback on complex land use issues such as proposing to build a major transportation facility in a densely populated area. The Lead Agencies coordinated with the IAWG on the selection of the ELUP approach. The ELUP used a well-developed research technique known as the "Delphi Process" to estimate future land use impacts of the various alternatives. The use of ELUPs and the Delphi Process are widely recognized methods for analyzing transportation and land use alternatives. The study process followed by the ELUP was open, independent and informed and, as a result, the estimates its members arrived at were reasonable. For additional information regarding the range of accepted approaches to analyzing induced growth (including land use models and ELUPs), refer to the Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth, (March 2005), prepared by ICF Consulting Inc., for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment. See also Indirect and Cumulative Impact Work Group (March 15, 2005) (inter-agency task force report on Executive Order 13274).

388 Response to Comment #991 in DEIS:

The ICC Pollutant Load Study estimates 300% increases in zinc and copper pollution in the Anacostia watershed from the roadway itself. The Pollution Load Study does not consider the much larger effects that will result from the secondary development in the watershed. The only analysis of the effects of secondary development are for Rocky Gorge Watershed (see Response #6 above), where a 200% increase in zinc and copper are estimated. Fecal coliform loads are estimated to increase by 50%. Furthermore, this Rocky Gorge Watershed analysis uses the SHA's estimates of the amount of secondary development, estimates that are significantly lower than are shown by two objective modeling exercises and in a minority opinion of the SHA's own ELUP process. The significance of these facts is not addressed in the response to Comment 991.

The response to Comment 991 also omitted this point that is acknowledged in the FEIS.

"Additional impacts to this subwatershed (i.e. the Anacostia) may cause further channel instability and erosion, through SWM erosion and sediment control, and other measures would be expected to reduce this impact" (SHA FEIS page I60).

The purpose of the ICC Pollutant Load Study was to estimate and compare annual pollutant loads for a variety of Non Point Source (NPS) pollutants both pre- and post-ICC based on land use changes within the right-of-way strip. An analysis of the cumulative effects of NPS pollution was completed for the Rocky Gorge watershed in order to determine the effects of land use change within the SCEA boundary on pollutant loads that may affect the drinking water supply. As a result of the land use changes predicted in the SCEA, Corridor 2 could potentially have an effect on water quality within the Rocky Gorge watershed.

SHA chose the ELUP approach because experience has shown that expert panels often provide useful feedback on complex land use issues such as proposing to build a major transportation facility in a densely populated area. The ELUP used a well-developed research technique known as the “Delphi Process” to estimate future land use impacts of the various alternatives. The use of ELUPs and the Delphi Process are widely recognized methods for analyzing transportation and land use alternatives. The study process followed by the ELUP was open, independent and informed and, as a result, the estimates its members arrived at are considered reasonable.

For additional information regarding the range of accepted approaches to analyzing induced growth (including land use models and ELUPs), refer to the Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth, (March 2005), prepared by ICF Consulting Inc., for the AASHTO Standing Committee on the Environment. See also Indirect and Cumulative Impact Work Group (March 15, 2005) (inter-agency task force report on

Executive Order 13724). Comment 991 inquired about "new pollutant" loads and the original response was accurate in stating that the project is not anticipated to add any "new pollutants" to the Anacostia River. The Lead Agencies were concerned about pollutant loads and therefore undertook the effort to model the effects of the ICC on receiving waters. The model demonstrated that increases in certain existing pollutant loads can be expected when considering the conversion of existing land use to roadway land use within the proposed project right-of-way; especially if these pollutants are not readily removed by stormwater management facilities. Although the relative change in copper and zinc loads appear to be considerable under the right-of-way strip scenario, they would be considered insignificant if existing conditions in the entire watershed were modeled.

389 The FEIS acknowledges, on page IV-164, and elsewhere, that additional impacts will be increased flashiness of storm water (increased peak and reduced base flows) and increased water temperature. Both these factors are likely to alter the stream biota in the Anacostia watershed.

The state-of-the-art stormwater management system adopted as part of the Selected Alternative was conceived to extensively manage both quantity and quality (including temperature) of the runoff in these sensitive stream areas. Flashiness of streams can be mitigated through use of stormwater management practices. The ICC alignments under study have been evaluated to ensure that state-of-the-art stormwater management can be accommodated to mitigate the impacts of roadway development on receiving streams. Water temperature increases are a more difficult problem because current stormwater management practices do little to mitigate temperature increases. For the ICC, the Lead Agencies plan to extensively use grass channels to address water quality and, in many locations, use underground detention to provide stormwater quantity management. These practices are believed to best address thermal pollution issues because grass channels promote infiltration of runoff and underground detention allows cooling of stormwater while keeping the stored water out of the sun. The design of these systems for the Selected Alternative will include elements to promote as much temperature control as practical.

390 The FEIS frequently refers to the reduction in stream impact by the use of bridges rather than fill with culverts. For example on page IV-165:

- **Spanning streams and floodplains with bridges instead of culverts where practicable**
- **Using bridge spans much greater in length than required hydraulically to reduce fill and avoid and minimize impacts to stream channels, wetlands and floodplains**
- **Locating bridges to avoid placement of piers in stream channels and minimize impacts to wetlands**

While the physical impacts on wetlands should be reduced by the bridges (except during construction), this does not reduce the impact of increased runoff water, together with its increased concentration of pollutants from the roadway.

Bridges do present a number of challenges with regard to stormwater management. Bridge decks on the ICC were accounted for in the stormwater management analyses. Water quality control requirements address all new impervious and portions of redeveloped impervious areas as may occur on side roads or roadway reconstruction. In SPAs, the Lead Agencies have committed to providing stormwater treatment for bridge deck runoff prior to discharge to receiving streams. Elsewhere on the ICC, bridges that are long enough to require deck drainage may be treated on-site or by offset. Offset is used when existing impervious surfaces in the same watershed are treated in lieu of providing treatment for the impervious surface being constructed. Runoff from shorter bridges typically flows off the end of the bridge into the

roadway drainage system then to a stormwater treatment device.

391 The FEIS states (Sect. J5, page S-37):

"To address water quality, MDE's 2000 Stormwater Design Manual generally requires applicants to demonstrate treatment of 90 percent of all rainfall events (1 inch or less of rainfall) using Best Management Practices (BWs) or stormwater credits identified in the manual. For the ICC, MDE minimum requirements would be exceeded by treating 95percent of all rainfall events (1.5 inches of rainfall)".

While this additional 5% of rainfall events - those yielding.5 inch rainfall or less - is reassuring, it should be borne in mind that most sediment transport, bank erosion, and sediment-bound pollutant transport takes place in the largest storm events. The increase in impact is exponential, thus 2 inch and 4 inch events will he much more drastic than the 1.5 inches allowed for. In fact >2 inch and >4 inch events occur in the region under consideration, on average, a little less than once a year (>2 inch) and once every 5 years (>4 inch) (Table 3).

The 1.5-inch rainfall amount is in relation to water quality control requirements. In addition to the 1.5-inch rainfall amount, the Lead Agencies addressed stormwater management quantitative control requirements, a.k.a. Channel Protection Volume, that requires attenuation of 2.6 inches of rainfall. Therefore, a more significant fraction of rainfall events will be addressed than just the 1.5-inch event via water quality requirements. We agree that maximum stage in-channel flows typically associated with a 1-1/2 to 2 year return period storm event cause potentially the greatest amount of sediment transport as a result of stream bank erosion. In addition to providing stormwater management designed to provide stream channel protection, as part of compensatory mitigation and environmental stewardship associated with the ICC, significant retrofitting of existing development with stormwater management devices as well as numerous stream restoration and stabilization projects are to be constructed to reduce sediment loads.

392 The mitigation measures defined in the FEIS do not adequately address the value and function of the resources and natural features that would be destroyed by the ICC. The overall parkland experience that is provided by the Paint Branch Stream Valley Park that will be lost is not addressed in the FEIS. The mitigation approach defined in the FEIS may be well-intentioned but is seriously flawed. The impacts of the ICC are downstream yet the large majority of proposed mitigation projects are located upstream of the proposed ICC. This plan fails to include the acquisition of key environmentally sensitive parcels, such as the large cold spring located east of Good Hope Road that has been widely recognized for many years as an important feature for the vitality of the Good Hope.

Replacement of lost parkland at a greater than 1:1 ratio has little meaning when the functionality of the parkland is lost. The functionality provided by the wild trout resource in the Paint Branch is likely to be lost if the ICC is built, and the FEIS does not address the loss of this resource, or the potential replacement of the lost resource. The ratio of 5:1 replacement is not adequate to replace the functionality of the wild trout streams that will be lost in the Paint Branch.

Any decision to build the ICC must be based on the premise that these priceless resources will be forever lost.

The Lead Agencies have worked very closely with a team of local, state and federal resource and regulatory agencies to develop the mitigation plan to respond to the unavoidable environmental impacts of the Selected Alternative. These resource and regulatory agencies have approved the ICC's mitigation plan, in the Upper Paint Branch and throughout the study area. In addition to the mitigation plan, the Lead Agencies have adopted a full set of Environmental Stewardship (ES) projects to respond to existing environmental deficiencies in the area. The mitigation and environmental stewardship plans not only address the quantity of

impacts, but also the value and functions of the impacted resources.

With regard to acquisition of ecologically significant areas, although the spring east of Good Hope Road was not targeted for protection, several parcels in the Upper Paint Branch with significant springs and wetland resources have been purchased. This followed coordination with local resources managers including MNCPPC, the agency responsible for managing the SPA, to determine priority acquisitions based largely on the goal of resource protection. Additionally, following coordination and on-site visits with resource and regulatory agency staff to the Good Hope Road area, several of ES and Compensatory Mitigation (CM) sites have been included to protect the aquatic resources in this area.

393 **In the mid-1990s a regional effort was mounted to define a program to provide comprehensive protection for the Paint Branch watershed. The result was a Limited Master Plan Amendment for Parkland Acquisition, the Upper Paint Branch Special Protection Area, significant parkland expansion, and the Environmental Overlay Zone. This process also yielded standards regarding impacts to the watershed. These standards were originally defined by the Upper Paint Branch Technical Work Group, an interagency body with representative from more that 20 different local and state organizations, and have been reaffirmed by Montgomery County Council and the Montgomery County Planning Board. Tenets of this standard include mitigation should be in the same sub-watershed as impacted, or at least watershed, replacement land will be of equal or greater natural resource, recreation and economic value as the parkland taken for or impacted by the project, no net loss of parkland, and in cases where natural features are impacted, there may be cases where more than acre-for-acre replacement of parkland will be required. While greater than acre-for-acre replacement is included in the FEIS, appropriate mitigation in the Paint Branch watershed has not been adequately addressed. Furthermore, replacement of equal or greater natural resource values has clearly not been addressed.**

The FEIS does not explicitly address compliance with the requirements of the Upper Paint Branch Special Protection Area or the Environmental Overlay Zone. This shortcoming is no oversight, since it was identified several times throughout the public involvement process, as well as in our comments on the DEIS. Will SHA comply with these provisions, ignore them, or request a waiver? Other local, state, and federal government agencies have attempted to sidestep these regulations, and in the end all have complied.

The Lead Agencies have coordinated with local, state and federal resource and regulatory agencies to work toward meeting, and in some cases exceeding, the environmental protection and stewardship goals established as part of the project's Purpose and Need Statement and in the numerous environmental regulations and laws. These agency partners have all expressed their satisfaction with the environmental stewardship principles and projects applied, as well as the comprehensive and intense mitigation plan that has been developed.

Meeting the goals of applicable environmental regulatory efforts and then going beyond those requirements where feasible has been a primary interest of the Lead Agencies. An example is the commitment to meet the MCDEP SPA Stormwater Criteria and review process within the SPAs. Consistent with that effort, many actions have been taken to implement a comprehensive watershed approach. This approach not only embodies the goals of the local planning and SPA programs, but also satisfies the goals of the many federal and state agencies that have an environmental protection and oversight role on this project. The Lead Agencies have begun the Mandatory Referral process with the MNCPPC to continue the coordination and seeking of input with respect to local environmental goals, like the SPA and Overlay Zones.

394 **The ICC would destroy the second largest contiguous interior forest habitat in**

Montgomery County (the largest if other adjacent forested areas are included). More than 500 acres of increasingly scarce interior forest habitat would be destroyed. Committing to preserving forest in Germantown would not provide appropriate mitigation for the loss of parkland in the Good Hope and Gum Springs watershed because it would not replace the lost functionality, value, or availability of natural experience for down-county residents. The SHA/MNCPPC MOU clearly states that "The replacement land will be of equal or greater natural resource, recreation and economic value as the parkland taken for or impacted by the project." SHA is not going to provide replacement habitat for the self-reproducing trout population in the Paint Branch, or anything that could even remotely be considered as an equivalent value, and thus does not comply with this agreement.

The Lead Agencies believe that the proposed mitigation package adequately mitigates for the loss of parkland throughout the study area and also complies with the MOU between MNCPPC and the SHA. In fact, in their September 21, 2005 letter to SHA, MNCPPC stated the following:

"The standards we [MNCPPC] have established for mitigation are based upon the Memorandum of Understanding (MOU) between MNCPPC and the State Highway Administration. We seek land of at least equal value, at least equal acreage, and equivalent environmental value. The MOU was not based specifically upon Section 4(f) but on total lands acquired and impacted. There is no definition of environmental equivalency, so we have used interior forest as the most significant measure. The ICC requires the use of parks whose principal purpose is conservation. Being certain that we have no net loss of forest interior is a critical factor in our satisfaction with the mitigation package. We have also reviewed the combined extent of stream buffers, steep slopes, erodible soils, and wetlands to satisfy ourselves of environmentally equivalent land. Finally, we have a particular desire to obtain land within the Paint Branch Special Protection Area. We find that your offer to mitigate 82 acres that you require for the ICC with 698 acres of the Casey, Llewellyn, Dungan, McNeill, Southern Asia, and Peach Orchard/Allnut properties meets and in many aspects exceeds the land compensation necessary."

395 **The estimated construction period (18-24 months) through the Paint Branch and amount of disturbance is sure to result in a major instream sediment debacle. The trapping efficiency of state of the art sediment control measures is at best 80%, and is frequently significantly less. The "short-term" impacts during construction are not adequately accounted for in the FEIS. Furthermore, additionally secondary and indirect impacts after construction are sure to result.**

Construction impacts were full accounted for in the FEIS. The sensitive nature of the Upper Paint Branch (UPB) is the reason the Lead Agencies have committed to employment of redundant erosion and sediment control (ESC) devices during construction in this Special Protection Area (SPA). Redundant ESCs means that accelerated stabilization and multiple layers of sediment filtering and trapping devices, in addition to what is presently required by the regulatory agencies, will be used to compensate for limited sediment removal of traditional approaches to ESC. The Lead Agencies have implemented an aggressive sediment control maintenance, inspection and compliance program on other projects to ensure the program is properly used on the ICC, including the UPB SPA, to ensure the highest level of ESC compliance through competency and accountability during construction.

396 **On October 26, 2005 EOPB (and also Trout Unlimited) wrote to Wesley Mitchell at SHA (and later also to Secretary Flannigan) and requested that a policy of "non-degradation of water quality" be adopted for the ICC project. We have not received a response to our letters. If Governor Ehrlich's public proclamations that the ICC will actually improve the environment are true, then it should be a simple matter to adopt this policy. The fact is that building the ICC along Corridor 1 would result is significant degradation of water quality in the Paint Branch, in the Anacostia watershed, and in the Chesapeake Bay.**

The Lead Agencies have no record of the Eyes of the Paint Branch's letter regarding the

"incorporation of non-degradation of water quality policy into the project." However, we did receive an identical letter stating the same exact request and concerns, dated November 8, 2005, from Nicholas Weber, President of the Potomac-Patuxent Chapter of Trout Unlimited. We responded to Mr. Weber's letter on December 15, 2005.

That letter confirms SHA's policy of "non-degradation of water quality." This letter states that compliance with the anti-degradation policy under the requirements of the federal Clean Water Act is inherent in the SHA's stated commitment to obtain a CWA Section 401 water quality certification (see FEIS Chapter IV.F.5). Under the State's federally mandated anti-degradation policy (COMAR 26.08.02.04), the designated use class for each stream must be protected and maintained. This will be accomplished through BMPs throughout the corridor as well as compliance with required NPDES permits for stormwater discharges. Throughout the document, the BMP compensatory mitigation and environmental stewardship measures proposed for the project are described. When taken as a whole, these measures offer an unprecedented level of impact minimization and water quality protection.

Chapter IV.G. Noise Impacts

397 The Lead Agencies have failed to adequately study noise impacts in park areas under Section 4(f) and NEPA.

The Lead Agencies did include a thorough and adequate evaluation of potential noise impacts to parklands. As part of the noise analysis, which is summarized in the FEIS Chapter IV.G (and also discussed in Chapter V), noise receptors were placed throughout the study area in order to measure ambient levels of noise and to help construct a noise model to analyze the noise effects throughout the area, including all areas in parks. Further detail was applied using the FHWA Traffic Noise Model (TNM) to assess the noise impact zones within all the parks, that is, areas where the noise levels were 66 dBA or above or 10 dBA above the existing noise levels. Even greater detail on the methodology and study results can be found in the Noise Analysis Technical Report available at www.iccstudy.org.

398 Sound walls are required at many locations but are not being used because of their high cost.

The Lead Agencies conducted a thorough analysis of noise impacts and the appropriateness and feasibility of noise walls. The FEIS includes noise walls in all cases where they are warranted, are likely to achieve a measurable reduction in future noise levels, and where judged by federal criteria to be cost effective. These walls will be constructed as part of the ICC as long as there is community agreement.

399 A letter from SHA indicates that noise barriers will run from Founders Mill Road through Winters Run. However, based on three different copies of Plate 6 that received between October 10, 2005 and November 1, 2005, the noise barriers appear to run from Nedham Road through Winters Run. Where these copies of Plate 6 in the FEIS?

Receptor 6A is located at 6917 Garrett Road in Cashell Estates. Although this specific location is shown as being removed in the current plans, it was retained in the analysis to represent nearby residences that are to remain. The ambient level measured at Receptor 6A was 45 dBA. A noise impact occurs with the 2030 noise level predicted to be 75 dBA. A barrier was analyzed for this location, which resulted in a noise insertion loss of 11dBA, thereby lowering the Build noise level to 64 dBA. There are barriers on both sides of the alignment starting at Nedham Road (which is called Founders Mill on the west side of Redland Road) and proceeding through the Winters Run community. No barriers were shown in the FEIS, but they are shown on Plates 6 and 7 of the Noise Quality Technical Report, which is available at www.iccstudy.org and at several

locations throughout the study area.

400 SHA performed the noise analysis for all the parks during the time that cicadas (17 year locusts) were out, which explains why their recorded ambient noise measurements for the tranquil parts of parks seem much too high. While the ambient noise during the middle of cicada time reaches around 80 dB, early and late in the cicada time they increased ambient noise by 10-20 dB, which explains why the parks' measurements (taken in the later part of the cicada time) were about that much too high.

All the information included in both the DEIS and the Noise Quality Technical Report is as honest and factually correct as possible; there are no faulty assumptions. The measurements were not taken during the Cicada season, which was in the summer of 2004. The majority of the new ambient measurements were taken in fall of 2003, with a few additional locations measured while studies were on-going. No measurements were taken during the periods when the cicadas were actively singing.

401 Is it true that the ICC would not need to be consistent with local noise ordinances? As stated in the DEIS comments provided by several people, including myself, Montgomery County's Noise Ordinance requires quiet periods that the ICC document appears to ignore. Further, it is my understanding that the Montgomery County Noise Ordinance regulates noise not only within the citizens' houses, as the ICC teams' R-8 answer states, but also on the citizens' property, presumably out to their property line. This needs to be clarified.

Noise levels were determined at locations of noise sensitive use. These are ground level locations near the residence. This is consistent with the Montgomery County Highway Noise Abatement Policy dated October 2001 which defines a receptor location as a "location of common human activity within a noise sensitive land use." The noise analysis was performed in conformance with the FHWA and SHA adopted and approved process.

402 The CFR 800.5 assessment scope is broader than the narrow criteria that SHA has chosen to define impact. Broader issues and standards than the two applied in your determination. The criteria in the Noise Barrier Policy are inappropriate to apply to Washington Grove.

SHA regularly applies the Federal Noise Abatement Criteria found at 23 CFR Part 772 to standing historic properties, including historic districts throughout Maryland. SHA has determined that the distance between the proposed highway and Washington Grove prevents adverse audible, physical, visual or atmospheric impacts on the historic property as defined by 36 CFR §800.5. MHT examined the materials that SHA provided and conducted a field visit in July 2005. They concurred with SHA's determination that the ICC alignment would be sufficiently removed from Washington Grove Historic District and would not cause adverse visual, audible, physical or atmospheric impacts to the historic property.

The "impact" is not defined by SHA Sound Barrier Policy, but by Federal Regulations. Specifically, Code of Federal Regulation Title 23, Part 772 defines when an "impact" occurs. SHA Sound Barrier Policy clarifies the type of mitigation, and whether the mitigation is feasible and reasonable. As is demonstrated from ambient measurements in the report from Washington Grove's acoustical consultant (PNV), Washington Grove is significantly affected by noise from the railroad which is immediately adjacent to the community; and also by other local roads in the area and within the community. Noise from various modes of transportation has always been part of the noise environment of the Washington Grove area and is today. Although the noise from the railroad is intermittent, it is frequent and more significant than the noise from the ICC which would be 1600 feet from the nearest Washington Grove residence, and more than 2500 feet from the center of town. In general, noise degrades (reduces) at a rate of 4.5 dBA per distance doubling for a soft ground site. As an example of this, considering the analyses

demonstrates that noise within 50 feet of the ICC roadway is approximately 75 dBA, at a distance of 1600 feet the noise would be 22 dBA less (53 dBA); and at 2500 feet the noise would be 26 dBA less (49 dBA).

403 The Town of Washington Grove and its consultant Phoenix Noise and Vibration, LLC, has requested clarification of the noise readings and the noise analysis methodology. We also request the parameters of the predictive model to verify its accuracy. They are awaiting details of the Traffic Noise Model and answers to previously asked questions before finalizing their analysis.

The requested information and clarifications were sent on March 28, 2006.

404 The I-370 interchange should have been included in the noise study to evaluate the impacts of the construction under Type I and Type II Highway Criteria.

The acoustical analysis performed for the ICC included all roadways and ramps within the limits of the ICC; from the Interchange at MD 355 on the west side, to US 1 on the east side. With regard to the Type 1 I or Type II Highway criteria, nothing was "excluded" from the study. Although a sound barrier was not analyzed, the Washington Grove area was specifically analyzed as a Type I project and found to be: "Not Impacted." For the analysis I-370 is an existing road, and the Federal criteria that determine impact consider it as such. In addition, given the low noise levels in the Washington Grove area, it would not qualify under the Type II program. As a result, SHA determined that the ICC would have no auditory impact on the Washington Grove Historic District.

405 ICC Noise Analysis conducted by Phoenix Noise and Vibration. LLC that presents the results of their on site noise measurements and review of currently available documents. The report asserts that SHA's methodology is incorrect. It shows that the Town is already suffering from the audible effects of the ICC and that there is a discrepancy between reports the FEIS and the NQTR.

The Noise Analysis conducted for the ICC study is adequate and meets the requirements set forth by the FHWA for such analyses. The noise analysis and impact assessment for the ICC are based on the requirements of 23 CFR § 772. A noise impact is defined in 23 CFR, paragraph 772.5.g as follows: "Traffic Noise Impact--impacts which occur when the predicted traffic noise levels approach or exceed the noise abatement criteria, or when the predicted traffic noise substantially exceeds the existing noise levels. As stated in 23 CFR § 772, the assessment is based on comparing the noise from traffic to the existing noise levels, not combining the two. However, even if the total combined noise level suggested by PNV (60 dBA) were to be used, the resulting noise level would still not result in an impact, because it does not approach or exceed the impact noise level of 67 dBA required by the Federal Noise Abatement Criteria.

In accordance with 23 CFR § 772, cumulative noise is not considered in the determination of impact. Specifically an impact occurs if the Build traffic noise level approaches or exceeds the Noise Abatement Criteria (67 dBA) or is substantially (10 dBA) greater than existing noise levels. If mitigation is warranted, the effect of cumulative increases in noise can be considered as part of reasonableness analysis, but this is not the case because the projected noise levels within the Washington Grove Historic District do not meet either of these impact criteria. In addition, when determining ambient noise levels, noise that is "usually" part of the noise environment must be considered. Although anomalous noise such as temporary construction noise could be eliminated from the measurement data, noise that is part of the permanent noise environment such as traffic on local roads and the adjacent railroad must be included.

Washington Grove is a residential community. Although it is historic, the historic designation of the town would only be considered as an increased number of "equivalent" benefited residences

if a barrier had been warranted. As discussed above, based on both Federal and State policies, residential communities are considered as Category B uses with a Noise Abatement Criteria level equal to 67 dBA. While it may be desirable to have lower noise levels than the 67dBA for Category B uses, the federal guidance is based on what is practical to achieve. In the case of Washington Grove, the key factor is that existing and future noise levels are strongly influenced by noise sources other than I-370 and the ICC. Also, the distance between the ICC and the residences will be significant and will not result in an impact as defined by 23 CFR § 772. Likewise, because the anticipated noise levels to do meet the impact standard under 23 CFR § 772, they do not meet the adverse effect criteria for noise under 36 CFR § 800.5.

All of the noise analysis is predictive and the Town is not suffering from noise impacts from the ICC because the highway has not yet been constructed.

406 **Comment 1243. This response, while complete, is a disappointment. What studies or written literature exist that indicate that noise levels do not influence the decisions of buyers to purchase historic properties in rural areas? Are there any studies or literature that indicates that people do not care if the noise levels around their historic houses are raised from less than 45 dBA to up to 66 dBA?**

The response to your comment regarding noise impacts to historic properties did not include a statement that "…people do not care if the noise levels around their historic houses are raised…" The Lead Agencies simply stated that studies of such influences and personal opinions are outside the scope of these planning studies.

407 **Comment 1255. This response ignores the specificity of my questions related to sound walls.**

The specific DEIS noise comments listed in your letter (primarily on page 7) are associated with existing and future noise levels adjacent to historic sites along Corridor 2. The measurements of noise levels are included in the FEIS, Chapter IV.G. The Selected Alternative is Corridor 1 and will not have direct impacts to the historic sites you include in your comments.

Chapter IV.H. Air Quality

408 **The ICC will destroy forest buffers between houses and neighborhoods and create noise and air pollution as the result.**

Both Noise and Air Quality studies have been completed to determine noise and/or air quality impacts as a result of each of the alternatives studied. Please refer to the Noise Quality Technical Report (NQTR) and Air Quality Technical Report (AQTR) for a detailed description and results of both of the analyses.

Noise analyses for all ICC alternatives and options were conducted in accordance with FWHA criteria and SHA Sound Barrier Policy. Noise levels were determined at locations of noise sensitive use. These are ground level locations of common human activity within a noise sensitive land use. When modeling the future noise conditions, the Lead Agencies took into account the alignment of the Selected Alternatives and future topographical conditions, including removal tress between the communities and the ICC.

The use of forest buffers should have no affect on air pollution. The microscale CO hot-spot analysis in the EIS and the qualitative PM2.5 hot-spot analysis in the “Project-level Conformity Determination for the Intercounty Connector Project in Maryland” show that there will be no localized violations of the primary National Ambient Air Quality Standards (NAAQS). These standards are set by EPA based on the requirements of the Clean Air Act. The Clean Air Act requires these limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. The regional air quality analysis performed by MWCOG shows that the region with the ICC conforms to the region’s air quality implementation plan’s

purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards, including the NAAQS for CO, ozone, and PM2.5.

409 ICC planners have ignored the broader issue of global warming.

The issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government. In February 2002, the Administration committed the U.S. to a comprehensive strategy to reduce the greenhouse gas (GHG) intensity of the American economy by 18% over the next 10 years through voluntary measures. However, it is important to recognize that no national regulatory thresholds for greenhouse gas emissions or concentrations have been established through law or regulation.

Transportation is a significant source of greenhouse gases, particularly of carbon dioxide (CO2) emissions - the predominant GHG. The transportation sector was responsible for 32.3% of all U.S. CO2 emissions in 2002. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (97.9%) of transportation-sector emissions result from the consumption of petroleum products such as motor gasoline, diesel fuel, jet fuel, and residual fuel.

Recognizing this concern, FHWA is working with other modal administrations through the DOT Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases - particularly CO2 emissions - and to assess the risks to transportation systems and services from climate changes. In these efforts, FHWA has been working with other Federal agencies, including EPA and DOE, to evaluate effective approaches consistent with our national goals.

FHWA does not believe it is informative at this point to consider greenhouse gas emissions as part of the project-level planning and development process. Greenhouse gases are quantitatively and qualitatively different from other motor vehicle emissions, and their magnitude and breadth appear to require a different approach to address their potential climate impacts. First, HC and other criteria pollutant emissions are of concern, and thus regulated, in individual metropolitan or smaller areas. The climate impacts of CO2 emissions, on the other hand, are global in nature. From a NEPA perspective, it is analytically problematic to conduct a project level cumulative effects analysis of greenhouse gas emissions on a global-scale problem. Secondly, criteria pollutant emissions last in the atmosphere for perhaps months; CO2 emissions remain in the atmosphere far longer - over 100 years - and therefore require a much more sustained, intergenerational effort. Finally, due to the interactions between elements of the transportation system as a whole, project-level emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concludes that we cannot usefully evaluate CO2 emissions in the same way that we address other vehicle emissions.

The NEPA process is meant to concentrate on the analyses of issues that can be truly meaningful to the consideration of project alternatives, rather than simply "amassing" data. In the absence of a regional or national framework for considering the implications of a project-level GHG analysis, we feel that such an analysis would not inform project decision-making, while adding administrative burden.

410 This project is at the expense of clean air, quiet, and quality of life for communities nearby.

The ICC will improve the quality of life in the study area by increasing mobility, reducing congestion at some of the most congested intersections, improving safety, and increasing access to jobs and activity centers. The Lead Agencies have been committed to minimize

impacts; however some impacts and displacements to communities are inevitable. Several ways the Lead Agencies have avoided and minimized impacts to communities have included such measures as depressing the roadway to minimize noise and visual impacts to communities, shifting alignments to avoid communities and other sensitive resources, and reducing typical roadway section widths where feasible. In addition retaining walls have been proposed near residential properties to reduce the overall footprint of the proposed roadway. Additionally, mobility is expected to improve for study area residents therefore improving quality of life.

The microscale CO hot-spot analysis in the EIS and the qualitative PM2.5 hot-spot analysis in the "Project-level Conformity Determination for the Intercounty Connector Project in Maryland" show that there are will be no localized violations of the primary National Ambient Air Quality Standards (NAAQS). These standards are set by EPA based on the requirements of the Clean Air Act. The Clean Air Act requires these limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. The regional air quality analysis performed by MWCOG shows that the region with the ICC conforms to the region's air quality implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards, including the NAAQS for CO, ozone, and PM2.5.

411 Auto emissions would decrease significantly with the improvements in average peak-hour speeds and reduced congestion as a result of the ICC.

The ICC would decrease the amount of vehicles idling at some existing signalized intersections, but would add new signalized intersections (i.e. end of freeway ramps). The criteria pollutants do not exceed the S/NAAQS (refer to FEIS Chapter IV.H).

412 It is not right to protect wildlife at the expense of people choking on fumes when they are stuck in traffic in 90 degree weather.

The project is intended to relieve congestion and provide for safe, cost effective wildlife passage.

413 The ICC will put the state in jeopardy of losing federal funds because the pollution from the ICC will cause the region's air quality not to meet the standards.

As shown in the FEIS Chapter IV, the ICC as a project does not present any air quality violations. In addition, the region's air quality, with the assumption that the ICC would be constructed, also was found to be in conformity with the purpose of the State Implementation Plan (SIP). The Lead Agencies also conducted an additional air quality study of the potential localized effects of Particulate Matter (PM) 2.5. This study showed the ICC as a project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

414 How can the state consider building more highways when the air quality in the Washington, DC area is already so poor?

As shown in FEIS Chapter IV.H, the ICC as a project does not present any air quality violations. In addition, the region's air quality, with the assumption that the ICC would be constructed, also was found to be in conformity with the purpose of the SIP. The Lead Agencies also conducted an additional air quality study of the potential localized effects of Particulate Matter (PM) 2.5. This study showed the ICC as a project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

415 The FEIS does not consider the impacts on local, regional, and global climate from converting forests to pavement (impervious surface).

The issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government. In February 2002, the Administration

committed the U.S. to a comprehensive strategy to reduce the greenhouse gas (GHG) intensity of the American economy by 18% over the next 10 years through voluntary measures. However, it is important to recognize that no national regulatory thresholds for greenhouse gas emissions or concentrations have been established through law or regulation.

Transportation is a significant source of greenhouse gases, particularly of carbon dioxide (CO2) emissions - the predominant GHG. The transportation sector was responsible for 32.3% of all U.S. CO2 emissions in 2002. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (97.9%) of transportation-sector emissions result from the consumption of petroleum products such as motor gasoline, diesel fuel, jet fuel, and residual fuel.

Recognizing this concern, FHWA is working with other modal administrations through the DOT Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases - particularly CO2 emissions - and to assess the risks to transportation systems and services from climate changes. In these efforts, FHWA has been working with other Federal agencies, including EPA and DOE, to evaluate effective approaches consistent with our national goals.

FHWA does not believe it is informative at this point to consider greenhouse gas emissions as part of the project-level planning and development process. Greenhouse gases are quantitatively and qualitatively different from other motor vehicle emissions, and their magnitude and breadth appear to require a different approach to address their potential climate impacts. First, HC and other criteria pollutant emissions are of concern, and thus regulated, in individual metropolitan or smaller areas. The climate impacts of CO2 emissions, on the other hand, are global in nature. From a NEPA perspective, it is analytically problematic to conduct a project level cumulative effects analysis of greenhouse gas emissions on a global-scale problem. Secondly, criteria pollutant emissions last in the atmosphere for perhaps months; CO2 emissions remain in the atmosphere far longer - over 100 years - and therefore require a much more sustained, intergenerational effort. Finally, due to the interactions between elements of the transportation system as a whole, project-level emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concludes that we cannot usefully evaluate CO2 emissions in the same way that we address other vehicle emissions.

The NEPA process is meant to concentrate on the analyses of issues that can be truly meaningful to the consideration of project alternatives, rather than simply "amassing" data. In the absence of a regional or national framework for considering the implications of a project-level GHG analysis, we feel that such an analysis would not inform project decision-making, while adding administrative burden.

416 The DEIS failed to consider the adverse impacts on the interrelated problems of oil dependence, greenhouse gas emissions, and global warming. Environmental Defense's earlier comments provide a detailed analysis of the impact that the ICC will have on oil dependence and greenhouse gas emissions. Those comments remain valid with respect to the FEIS. While we refute the Lead Agencies' claim that an analysis of greenhouse gas emissions "goes far beyond the disclosure of impacts needed to make sound transportation decisions," we do acknowledge that the Lead Agencies has, at least in part, made an effort to respond to our concerns regarding the impact of the ICC on global warming.

The issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government. In February 2002, the Administration committed the U.S. to a comprehensive strategy to reduce the greenhouse gas (GHG) intensity of the American economy by 18% over the next 10 years through voluntary measures. However,

it is important to recognize that no national regulatory thresholds for greenhouse gas emissions or concentrations have been established through law or regulation.

Transportation is a significant source of greenhouse gases, particularly of carbon dioxide (CO2) emissions - the predominant GHG. The transportation sector was responsible for 32.3% of all U.S. CO2 emissions in 2002. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (97.9%) of transportation-sector emissions result from the consumption of petroleum products such as motor gasoline, diesel fuel, jet fuel, and residual fuel.

Recognizing this concern, FHWA is working with other modal administrations through the DOT Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases - particularly CO2 emissions - and to assess the risks to transportation systems and services from climate changes. In these efforts, FHWA has been working with other Federal agencies, including EPA and the Department of Energy (DOE), to evaluate effective approaches consistent with our national goals.

FHWA does not believe it is informative at this point to consider greenhouse gas emissions as part of the project-level planning and development process. Greenhouse gases are quantitatively and qualitatively different from other motor vehicle emissions, and their magnitude and breadth appear to require a different approach to address their potential climate impacts. First, HC and other criteria pollutant emissions are of concern, and thus regulated, in individual metropolitan or smaller areas. The climate impacts of CO2 emissions, on the other hand, are global in nature. From a NEPA perspective, it is analytically problematic to conduct a project level cumulative effects analysis of greenhouse gas emissions on a global-scale problem. Secondly, criteria pollutant emissions last in the atmosphere for perhaps months; CO2 emissions remain in the atmosphere far longer - over 100 years - and therefore require a much more sustained, intergenerational effort. Finally, due to the interactions between elements of the transportation system as a whole, project-level emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concludes that we cannot usefully evaluate CO2 emissions in the same way that we address other vehicle emissions.

The NEPA process is meant to concentrate on the analyses of issues that can be truly meaningful to the consideration of project alternatives, rather than simply "amassing" data. In the absence of a regional or national framework for considering the implications of a project-level GHG analysis, we feel that such an analysis would not inform project decision-making, while adding administrative burden.

417 Pollution will result from the energy, transportation, and raw materials and from the emissions that come from their production. In essence the billions of dollars spent on the ICC will cause billions of dollars of pollution. How are these contributions to PM 2.5 and PM 10 and other pollutants factored into the overall pollution levels in our community. How is the cost of pollution factored into the cost of the ICC?

The contribution of PM2.5, CO, and ozone from the ICC are factored into the region's mobile source pollution levels through the Metropolitan Washington Council of Government's regional emissions analysis for the National Capital Region Constrained Long Range Plan and Metropolitan Transportation Improvement Program. In CO and PM2.5 nonattainment and maintenance areas, localized mobile source emissions are also analyzed in a hot spot analysis.

In the PM2.5, CO, and ozone project level analyses it was "determined that the ICC project met all project level conformity requirements, and that the proposed ICC project will not cause or contribute to a new violation of the PM2.5, CO, or ozone NAAQS, or increase the frequency or severity of a violation." Based on this finding and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project

will not have a significant impact on the air quality in the region.

The Washington, DC-MD-VA region is significantly below the NAAQS for nitrogen dioxide, sulfur dioxide and coarse particulate matter (PM10). The region has not exceeded any of the NAAQS for these three pollutants in the last 11 years.

418 **The FEIS failed to address my comment pertaining to the need to address SOx emissions and their contribution to acid rain - ecosystem acidification, eutrophication, and harm to vegetation (agriculture and cultural properties). The FEIS response to comment 1324 notes that the macroscale air quality analysis by the Metropolitan Washington Council of Governments shows that the region with the ICC as being within the emissions budget for NOx but is silent on SOx.**

There is not expected to be any significant impact on the levels of SOx and its contribution to acid rain – ecosystem acidification, eutrophication, and harm to vegetation as it relates to the ICC. Thus, it was unnecessary in the EIS to discuss them beyond saying the project area is attainment for these pollutants.

The MWCOG's Air Quality Trends Washington DC Region 1993-2004, dated August 2005 states, "A general characterization of SO2 concentrations in the Washington, DC region is that levels are low and declining…The data show that in recent years the highest SO2 levels in the region have been approximately one-fourth of the federal health standard value of 0.03 ppm. Additionally, there have not been any recorded exceedances of the 24-hour federal health standard of 0.14 ppm at any of the monitors during the entire analysis period (1993-2004)." (Page 16)

Also, with the implementation national engine and fuel standards, on-road emissions, SOx are expected to decline dramatically.

419 **In the Air Quality Technical Report Analysis, Chapter III-10, Table III-36, CO concentrations; Receptor R-6a, using Rock Creek Option C, the 1 hour CO concentration levels will increase form 3.5 ppm to 5.6ppm and the 8 hour CO concentration levels will increase from 2.8ppm to 4.1ppm. Despite these levels being under the S/NAAQS averages, the levels will increase by 60% and 47% respectively. These are more negative and harmful impacts to the residents of Cashell Estates.**

The NAAQS for CO is 35 ppm for the one-hour standard and 9 ppm for the 8-hour standard. While CO levels may increase as a result of the ICC under the worst-case traffic scenarios, the projected levels are still considerably below the NAAQS. The Clean Air Act section 176(c)(1)(B) states that transportation projects must not cause or contribute to any new violation of any standard in any area, or increase the frequency or severity of any existing violation of any standard in any area. The project level conformity determination for CO demonstrated that the project met these requirements.

420 **Unfortunately, this MSAT analysis and the current FEIS fail to adequately evaluate the significant adverse impacts the proposed highway is likely to have on human health, including the health of children and neighborhoods nearby the ICC study area. This is especially significant because of the proximity of a number of schools and day care centers to the proposed ICC.**

Finally, in regards to health effects, the FEIS points out that "interpretation of this research and its implications for public health and the transportation community are expected to be addressed by EPA, as declared in the 2001 rulemaking." Under 40 C.F.R. 1502.22(b) the FHWA is required to include a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and an evaluation of such impacts based upon

theoretical approaches or research methods generally accepted in the scientific community. Substantial evidence has emerged showing that fine particles and toxic air pollutants are associated with a wide range of adverse health impacts, including asthma, respiratory disease and early death. The FEIS fails to provide the required summary of existing credible scientific evidence which is relevant to evaluating the health effects and foreseeable adverse impacts posed by increased exposures to MSATs that would be the result of a decision to build the ICC.

The above referenced evidence, as a whole, demonstrates that the FEIS must be supplemented with further analysis to produce health risk estimates based on analysis of estimated increase in exposures to MSATs for those living, working, or attending school in close proximity to the ICC, and compared to a no-build case and other alternatives not presently considered in the FEIS. In addition, the FEIS neglects to identify mitigation strategies that might be undertaken to reduce these adverse health impacts. This failure is particularly noteworthy given that lifetime cancer risk from diesel soot in Montgomery and Prince George's Counties exceeds the risk of all other air toxics tracked by EPA combined, and that this risk is over 370 times greater than EPA's acceptable cancer level of 1 in a million.101

The MSAT analysis itself, as well as previous responses herein, addressed the variety of issues associated with assessing health impacts associated with specific locations based on estimated emissions resulting from the project, and no supplement is necessary. Documentation associated with the MSAT analysis did include a discussion of and citation for health related information, as available from US EPA at the time the analysis was completed. As stated in the analysis and referred to by commenters, FHWA relies on EPA for the review and interpretation of air pollution research and associated health effects. FHWA believes that EPA, and its established procedures and use of panels of national scientific experts, is in the position to prepare and present credible scientific evidence. In the FEIS, FHWA provided a summary of the scientific consensus of the health effects of the six pollutants that EPA has identified as the priority mobile source air toxics, and conducted an emissions analysis for these six pollutants. This discussion begins on page IV-318 of the FEIS.

The commenter cites a lifetime of cancer risk from diesel soot for the counties of the project area. Investigation of the reference (101) for this estimate reveals that it in turn references the report "Diesel and Health in America: The Lingering Threat" produced by the Clean Air Task Force. Page 5 of this report discusses cancer risk, and reports the national cancer risk from diesel exhaust based on both the range of potential risk estimates in EPA's 2002 "Diesel Health Assessment Document" and the CA risk factor mentioned above. The footnote for this discussion includes the following quote from the EPA health assessment document:

"The estimated possible risk ranges (10-5 to 10-3 as well as lower and zero risk) provide a perspective of the potential significance of the lung cancer hazard." EPA, Health Assessment Document for Diesel Exhaust, Office of Research and Development, EPA/600/8-90/057F (May 2002) at p. 8-15.

Elsewhere, this same EPA health assessment also says:

"An exploratory risk analysis shows that environmental cancer risks possibly range from 10-5 to nearly 10-3, while a consideration of numerous uncertainties and assumptions also indicates that lower risk is possible and zero risk cannot be ruled out. These risk findings are only general indicators of the potential significance of the lung cancer hazard and should not be viewed as a definitive quantitative characterization of risk or be used to estimate an exposure-specific population impact" [emphasis added].

This means that the likely potential risk of developing cancer from all sources of diesel emissions is between 1 case for every 1,000 population and 1 case for every 100,000 population, a very large range of potential risk. However, the EPA document also indicates that the risk might be lower than that (e.g. on the order of 1 in 1,000,000) and that zero risk cannot

be ruled out.

The cited source for the cancer risk estimates for these project-area counties fails to mention these important EPA caveats on the estimated range of cancer risk from diesel particulate matter. In fact, the Clean Air Task Force report has relied in part on this range of risk in estimating diesel cancer risk in Montgomery and Prince George's Counties in spite of the fact that EPA has cautioned readers not to do so. Thus, there is no scientifically accepted estimate of cancer risk from diesel particulate for these Counties, irrespective of the commenters' assertion to the contrary.

The commenter raises questions about the potential for negative health impacts in proximity to the roadway. This is an emerging area of research and FHWA has an effort underway to examine the levels and dispersion characteristics of MSAT emissions in Las Vegas, and perhaps elsewhere. Furthermore, the Health Effects Institute, an independent non-profit organization, has a body of work underway to establish whether MSAT hot spots exist and what their health implications are if they do. EPA and others also have extensive research programs underway. While the results of these efforts are still pending, this remains a potentially important but otherwise unresolved area.

Finally, the commenter questions the lack of mitigation for MSATs. We do not believe that mitigation is necessary in this case. Overall MSAT emissions are expected to decline precipitously over a 25 year period. Further the build alternative is only slightly higher than that no-build, but we feel the difference is negligible. Thus mitigation for MSATs is not called for.

421 The FEIS contains conflicting information about the number of MSATs the Lead Agency studied. Although the FEIS lists six MSATs, in the FEIS preface it lists seven air toxics. The Lead Agency should correct this inconsistency and discuss the results, if any, of the seventh toxic studied.

The description in the FEIS preface was a typographical error. The EIS studied six air toxics. The typographical error does not change the analysis performed for the six MSATs and is not substantive. The body of the FEIS and the Air Quality Technical Report include analysis of the six MSATs.

422 MSAT analysis is inadequate because it fails to analyze health impacts. The Lead Agencies claim they are unable to predict ICC-related health impacts at the project level for three reasons (1) uncertainties in the MOBILE 6.2 model; (2) the difficulty of assessing exposure to mobile source air toxic emissions; and (3) uncertainties surrounding the health effects of these pollutants.

FHWA has taken its responsibilities of assessing the potential impacts of the project on MSAT emissions quite seriously. Even prior to the MSAT analysis for the ICC, FHWA was reviewing literature, assessing modeling capabilities, and considering the best ways to meet our responsibilities under NEPA with regard to the potential impacts of MSATs. This effort which entailed extensive research and analysis was done as concerns were raised in response to the lawsuits brought on the US 95 widening in Las Vegas, the Katy Freeway in Houston and the Circumferential Highway in Vermont, culminated in the FHWA Interim Guidance on Air Toxics Analysis in NEPA documents, issued on February 3, 2006.

The commenter is correct that FHWA has concerns with the 1.) uncertainties in the Mobile 6.2 model, 2.) the difficulties in assessing exposures particularly at the project level, and 3) uncertainties surrounding the health effects, among other concerns. Nonetheless, a quantitative assessment of MSAT emissions was conducted and was adequate to provide information on the potential impacts of the project on MSAT emissions. FHWA does not believe that further analysis would reliably yield new information.

Even so, FHWA went beyond normal NEPA practice in analyzing MSAT emissions for the ICC

project. While commenters cite several examples of past research projects conducted to evaluate air toxics modeling tools and potential applications for these tools, MSAT analysis of highway projects in NEPA is a relatively new field. At the time the ICC FEIS was published, MSAT analyses had been completed in NEPA documents for only two other FHWA projects nationwide (an I-5 widening project in Portland, and the Detroit Intermodal Freight Terminal project). The methodology used to analyze the ICC is generally consistent with that used for these other two projects.

One month after the ICC FEIS was signed, FHWA issued guidance for conducting MSAT analysis in the NEPA process (Federal Highway Administration memorandum, Interim Guidance on Air Toxic Analysis in NEPA Documents, February 3, 2006). This guidance includes traffic volume thresholds to serve as a guide for when a MSAT emissions analysis should be conducted. The ICC design volumes fall below these thresholds, so this new guidance would not have required the level of analysis that was performed. Thus, FHWA exceeded normal practice and the requirements of its own guidance with the level of analysis that was performed for the FEIS. Each of the specific issues associated with assessing health impacts is addressed in additional detail below

FHWA has intensively studied the possibility of employing various techniques as a means of assessing health outcomes. We have found all of them to be inadequate for purposes of informing decision makers on project level decisions. Overall our major argument with these techniques is that they all depend on the sequential estimation of emissions, concentrations, exposure and final health outcomes for which uncertainties-- and in some of the analyses, huge uncertainties -- exist which negate the accuracy of the results, particularly at the project level. Furthermore since the uncertainties are cumulative in nature. Imprecision in an earlier estimate, of emissions for example, compounds the uncertainties in all subsequent analyses (exposure, health risk) to the final health impacts. The uncertainties in estimating the emissions at the project level are generally thought to be a factor of two. This means that the "true" emissions level of a proposed project could be as little as one-half of the estimate to two times the estimate. Furthermore, there are questions as to whether the errors in the analysis, which cause the uncertainties, are systematic which means that they apply equally to all situations and potential alternatives to the project. FHWA believes that even with the large uncertainties in the emissions estimate using current tools there is value to estimating emissions of major projects particularly when the proposed alternatives are similar. When they are not, additional uncertainties are likely introduced.

It is potentially even more difficult to adequately assess exposures at a project level. The techniques the commenter cites are most appropriate at large scales. When dealing with a small scale of a project, the exposure analysis must take into account the mobility of the population since many of the health impacts are due to long-term (70-year) exposures. Few residents, if any, will be within the vicinity of a transportation project for such a long time. Most travel daily into and out of the project area.

Taken together these uncertainties raise such serious questions about the accuracy of the analysis that FHWA believes that they do not serve the intended purpose of NEPA. Instead the approach taken in the FHWA guidance and applied to the ICC project was based on the common sense notion that more MSAT emissions will have greater negative health impacts and vice versa.

423 The FEIS emphasizes that the MOBILE 6.2 model was not designed specifically to estimate emissions at the project level, has not undergone any validation at that level, and is not officially approved or recommended for that purpose by EPA. However, US EPA experts responsible for air toxics emissions analysis attest to the adequacy of the MOBILE 6.2 model for analysis of project and link-level emissions for MSATs. The Federal Aviation Administration within the U.S. Department of Transportation has incorporated MOBILE 6.2 emission factors into the Emissions and Dispersion Modeling System which

is used to conduct project-level analysis.

We would emphasis that Mobile 6.2 was used to estimate MSAT emissions on the ICC project. Nonetheless, the commenter is correct that we have some concerns about its use at the project level since the model is more accurate at larger geographic scales. These concerns are detailed elsewhere in our responses to these comments. Further, we cannot speak to personal conversations that have been held on this subject, but the model cannot be approved for use by EPA since NEPA analysis on Federally funded or approved transportation projects is the responsibility of FHWA, as the Agency has indicated. Finally, FAA's approach, according to their experts, is largely in line with our own with respect to MSAT analysis and use of Mobile 6.2.

On February 24, 2004, EPA's Director of the Office of Transportation and Air Quality released "Policy Guidance on the Use of MOBILE6.2 and the December 2003 AP-42 Method for Re-Entrained Road Dust for SIP and Transportation Conformity." This guidance speaks directly to EPA's position on MOBILE6.2 and MSAT analyses for NEPA analysis. "While MOBILE6.2 is EPA's best available tool for quantifying toxics emissions from on-road vehicles, its availability has no direct bearing on the administration for the National Environmental Policy Act (NEPA). The Department of Transportation has responsibility for implementing NEPA for Federally funded or approved transportation projects, and it is currently developing a policy on how mobile source air toxics should be addressed in NEPA analysis, in consultation with EPA." Even though the FEIS was issued before the official FHWA guidance, the MSAT analysis in the FEIS for the ICC was consistent with FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents (February 3, 2006). The policy was developed with input from EPA. It was also developed with input from the President's Council On Environmental Quality, which has ultimate responsibility to ensure federal agency compliance with NEPA. We do not have documentation of the "personal conversation" with EPA staff cited by the commenter in the footnote, although we are aware that individuals at EPA may have opinions not completely in line with our guidance or with EPA's own previously stated position. However, the official position of EPA documented in the February 24, 2004 guidance does not conflict with the air toxics analysis in the FEIS.

The FAA uses its Emissions Dispersion Modeling System (EDMS) to support airport Environmental Assessments and Environmental Impact Statements. According to FAA officials, the system incorporates MOBILE6.2 emission factors for on-road vehicle emissions within the boundary defined by the airport and employs the EPA AERMOD/MET models for EDMS dispersion analysis, though dispersion analysis is not a routine part of the analytical framework. FAA officials note that dispersion analysis is conducted on a case-by-case basis, usually tied to a specific issue or where a need is identified through the scoping process.

Common practice on airport analyses includes speciation at the emissions inventory level but does not include dispersion, population exposure, or health risk [due to the many technical uncertainties]. Officials also noted that dispersion analysis is conducted on a case-by-case basis, but is limited to situations where local conditions demand such an assessment.

During the interagency coordination process for the development of FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents, the Federal Aviation Administration (FAA) officials commented that FHWA's draft guidance was similar to their agency's approach to assessing MSATs. The FAA supported the FHWA's position that quantitative analysis should be confined to total or gross emissions, as opposed to dispersion analysis and concentrations. In addition, the FAA noted that it did not intend to expand its assessment protocol to include human exposures or health risk due to what it cited as a lack of reliable data or applicable health risk standards.

424 Moreover, EPA's "Technical Guidance on the Use of MOBILE6 for Emission Inventory Preparation" confirms the suitability of the MOBILE 6.2 for project-level emissions assessment:

MOBILE6 was designed to account for differences in vehicle activity on different roadway types and allow for more precise modeling of emissions for individual roadway links.

If the user wishes to estimate emissions of an individual roadway link (or obtain separate results for a set of individual roadway links for use in a table), a single average speed estimate for each particular link or roadway segment must be used for each model run, instead of an average speed distribution.

The MOBILE 6.2 model is the EPA-approved model for use in particulate matter conformity determinations and is capable of producing credible estimates of MSAT emissions from individual highway segments.

FHWA does not contest that MOBILE6.2 can be used to calculate emissions by link, and in fact, the model was used to generate emissions for individual roadway links for purposes of both the MSAT emissions analysis and the CO hotspot analysis. The issue is not whether MOBILE6.2 can do this, but whether the results are accurate enough to use in site-specific assessments (micro-scale analysis) of PM10 and PM2.5 emissions. In response to a very similar comment made in the preamble to EPA's March 10, 2006 final rule (71 FR 12500), it states, "The commenter incorrectly interpreted the specific text referenced in the MOBILE6.2 technical guidance that describes how the model can be used to account for differences in emissions by roadway type. Although this input accounts for the differences in emissions in stop-and-go driving as on an arterial street and continuous speed driving as on a freeway, those differences only apply to the estimation of CO, HC and NOx emissions. PM10 and PM2.5 emissions are not effected by these inputs. As described above, differences in emission by the type of driving that will occur are critical to analyses of individual projects and MOBILE6.2 cannot account for these differences for PM2.5 and PM10 hot-spot analyses."

For the gaseous air toxics, as for the criteria pollutants, emissions estimates from MOBILE6.2 are considered more reliable at larger geographic scales of analysis than at microscale levels of analysis. MOBILE6.2, like its predecessors, is a trip-based model – emission factors are projected based on a typical trip, and on average speeds for this typical trip. As a result, MOBILE6.2 characterizes aggregate emissions summed from different roadways with less error than it characterizes emissions on any specific roadway.

MOBILE6.2 is a useful tool for projecting near-term emissions trends, and performing comparisons between alternatives for large projects. MOBILE6.2 is best suited for relative emissions analysis comparing roadway alternatives, particularly for the larger projects that by their nature incorporate a wide range of travel activity (e.g., the projects themselves represent an average speed similar to the way MOBILE6.2 is constructed). For the ICC, FHWA designed the methodology for MSAT analysis to best match MOBILE6.2's capabilities. Emissions were calculated for individual roadway links, but then summed over a roadway network that covered a wide geographic area. Thus, the emissions estimates reported in Tables IV-90 and IV-91 of the FEIS are for a network that incorporates a wide range of travel activity, most consistent with the way MOBILE6.2 is constructed.

425 **While EPA plans to undertake additional research to refine the evaluation of the emission characteristics of heavy duty diesel vehicles in the future to produce greater precision in the estimates of MSAT and particulate emissions in future emission models that succeed MOBILE 6.2, the current release of the model has been used in a number of scientifically-accepted project-level hot spot analyses documented through peer reviewed scientific studies. For example, EPA and state and local agencies have applied the MOBILE 6.2 link-based methodology in Portland, Oregon, where a 24,000 roadway link inventory of MSATs was used to evaluate near-road pollution "hot spot" exposures…The FEIS also claims that the MOBILE 6.2 has limitations for use in project-level assessments of diesel particulate matter ("DPM") emissions as necessary for quantitative analysis:**

The only conditions that affect DPM emissions in MOBILE 6.2 are fleet and fuel

characteristics. However, activity factors such as speed, driving cycle, and number and distribution of engine starts per day do have an impact on actual DPM emissions from motor vehicles.

The Portland study demonstrates that certain limitations of the MOBILE 6.2 model can be addressed during MOBILE 6.2 post-processing steps.

The commenter misinterprets the Portland methodology. Particulate matter emissions were not adjusted for speed as part of the Portland study. Page 4 of the cited report notes that diesel particulate emissions do not vary by speed, and page 8 of the report notes that the link-based calculations were based directly on MOBILE6.2 emissions rates for those toxics where emissions do not vary by speed. The speed curve equations were used to more accurately assign link-specific emissions rates for those pollutants for which emissions do vary by speed.

The need for accurate PM speed correction factors to enhance our ability to model the particulate impacts of roadway projects is very well understood by FHWA and EPA. This was a recommendation of an FHWA-sponsored particulate matter research workshop conducted in 2005; four EPA staff participated in this workshop (see "Strategic Plan for Particulate Matter Research: 2005 to 2010, publication forthcoming). EPA will address the issue in its upcoming MOVES model, which will replace MOBILE6.2 as noted above. While we cannot discount the possibility that some study has in fact devised a way to correct the model for speed, we would question its validity since such a correction depends on accurate statistically representative data which to our knowledge has not yet been published. EPA and FHWA are collaborating with other public and private sector agencies on a major research effort in Kansas City to collect this data for use in the upcoming MOVES model.

On April 3, 2006, EPA released an update to the particulate matter calculation methodology to MOBILE6.2. This update was issued to correct errors in the emissions rates for future heavy-duty vehicles that cause the uncorrected model to overestimate future emissions. While FHWA has not recalculated emissions for the ICC, the EPA release notice indicates that particulate emissions in 2030 may be overestimated by approximately 15%. Thus, there will likely be an even greater dedine in diesel particulate emissions in the project area than the FEIS analysis indicates.

426 **A suite of dispersion models are readily available for use in conjunction with MOBILE 6.2 and other emission models to consider how emissions at the project-level might translate into MSAT and particulate emission concentrations around potential "hot spots."…Dispersion models are therefore scientifically accepted and available, and could have been utilized by the Lead Agencies to translate outputs from MOBILE 6.2 into estimates of likely MSAT and particulate emission concentrations that would be experienced by children and adults breathing the air in locations close to highways such as the ICC or I-95, where traffic and emissions will increase significantly as a result of a decision to build the ICC.**

In addition to dispersion models, a new generation of Eulerian grid-based models is now capable of comprehensively treating transport and chemical transformations of air toxics.

FHWA does not disagree that air quality dispersion models are available and have been used in research settings to conduct both area-wide and localized modeling of air toxics concentrations FHWA recently funded a similar study, the "Good Neighbor Project," in Denver, Colorado.

Our major concern however is that the primary input into a dispersion model, the emissions estimate, has high uncertainty bounds which creates high uncertainty bounds in estimated concentration levels and raises serious concerns about the accuracy of the estimates derived from the dispersion models. Within a factor of two is the typical measure of success for a model in predicting measured concentrations, while the change in MSAT emissions, predicted in the FEIS, is much less than that. The combination of emissions and air dispersion models are less

precise than the change in MSAT emissions being assessed (see also our response to specific comments on this topic). Also it is inappropriate to use estimated concentration levels in lieu of conducting an exposure analysis, as the commenter seems to imply.

To predict potential human exposures to concentrations of MSATs, air dispersion models must be applied to predict concentrations that occur at a specific time at a specific location. Model-to-monitor comparison studies have shown that predictions of concentrations that occur at a specific time and at a specific location are poorly correlated with actually observed concentrations and are much less reliable (40 CFR 51, Appendix W).

There is a fundamental difference in the level of accuracy needed in a research setting to test applications of models to identify potential hotspot issues "for further study" (e.g., the Portland study) verses the level of accuracy needed to define impacts in the NEPA context and provide a decision maker with information that is precise enough to distinguish between alternatives. While there is no harm in attempting such analysis in a research setting, doing so in a NEPA analysis has the potential to mislead the decision maker.

Given these limitations, and coupled with the purpose of the analysis which is to help distinguish between alternatives, FHWA has determined that nothing more than an emissions analysis is necessary as described in the recently released guidance.

427 **The FEIS highlights caveats of exposure assessment models and concludes that such caveats "present complications of understanding exposure at the project-level and thereby interpreting absolute emissions estimates with exposure impacts." Assessing exposures and associated health risks is not simple, but it has largely been done for other agencies by EPA in its Integrated Risk Information System ("IRIS"). EPA has explained that IRIS "is an EPA database of scientific information that contains the Agency consensus scientific positions on the potential serious adverse health effects that may result from lifetime (chronic) exposure to substances found in the environment…EPA uses the data in IRIS to select the pollutants on the MSAT list.**

Application of the health risk assessments in conjunction with IRIS data is not appropriate at the project level. The EPA characterizes their reference concentration for chronic inhalation exposure as "an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily inhalation exposure of the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime" (EPA, 2006, "Integrated Risk Information System (IRIS)", http://www.epa.gov/iriswebp/iris/index.html). The emphasis on characterizing these risks is that the health impact is due to long term, chronic exposures rather than episodic exposures that are caused by the criteria pollutants. The IRIS provides reference concentration values applicable to populations chronically exposed for annual and 70-year periods. This makes the use of IRIS data highly problematic in a project-level assessment. Uncertainties in determining the MSAT exposure a population faces will be greatest at the small scale of a project since the population is highly mobile. This differs greatly from analysis at larger scales and using long-term concentration levels where air pollution assessments using the IRIS database may be more applicable. Furthermore, any exposure analysis would of necessity build on the emissions and dispersion analyses and will incorporate all uncertainties and issues with them as discussed above. With the additional uncertainties, issues and concerns that exposure analysis brings (see below), FHWA does not feel that extending the analysis to include exposures will add relevant information. The specific factors relevant to exposure are discussed in more detail below.

In addition to the general comments above, the use of the IRIS database cannot yield any information related to the long-term health impacts of diesel particulate matter since EPA has determined that such a toxicity value cannot be set based on the available data.

428 **The MATES-II study, summarized in Environmental Defense's DEIS comments, provides convincing evidence that the cancer risks attributable to exposure to toxic air pollutants**

at levels found in the Los Angeles air basin are significant from a public health perspective. MATES-II demonstrated that on-road vehicle emissions of the 31 toxic air pollutants measured in the air basin account for 50% of the total cancer risk associated with all toxic air pollutant emissions from all sources. The study also found that the range of cancer risks varied significantly across the region from 1,120 in a million in the cleanest neighborhoods to about 1,740 in a million in the most polluted, with higher levels of cancer risk occurring near freeways and freeway junctions. This analysis demonstrates that estimating health risks associated with MSATs is feasible.

There are several reasons why the MATES II study is not applicable to the ICC project.

1.) These estimates are based on a California-specific cancer risk estimate for diesel particulate matter. The national authority in this matter—EPA--has concluded that the available scientific information does not support establishing a similar estimate that would be applicable nationwide--see discussion below responding to Comment 1.c. In fact, in its "Health Assessment Document for Diesel Exhaust Emissions" determined that, "zero risk [for diesel particulate matter] cannot be ruled out."

2.) Specific to MATES-II, FHWA earlier received a request to apply the MATES-II methodology to the US95 project in Las Vegas, Nevada. FHWA commissioned an independent review of the MATES-II study to determine whether this was possible; the study's authors concluded that it was not. See http://www.fhwa.dot.gov/environment/airtoxic/casesty1.htm

3.) The MATES II study, as the authors at the South Coast Air Quality Management District have affirmed, was not a project-level assessment. Its scope and scale were much larger and more suitable to a research activity that begins the process of understanding such risks. And to the credit of the SCDAQMD, they have continued to reassess their findings in light of new information in a follow up study, MATES III. We find these research results of interest but also find that they do not inform project-level decisions due to all of the uncertainties in the emissions, dispersions, exposure and toxicity analyses, as well as to the difference in scale of the analysis.

429 **The Lead Agencies failed to evaluate the peak MSAT emission conditions that would be associated with a decision to build the ICC, conditions that would occur soon after the facility is open to traffic. Instead, the FEIS evaluates only 2000 baseline and 2030 MSAT emissions. The Lead Agencies present a best case analysis, showing a dramatic decline (up to 92.5 percent) from 2000 baseline study-area MSATs by 2030. This fails to evaluate the considerably higher MSAT emissions that will occur in 2010-2020, the years immediately after the ICC is planned to open to traffic.**

The commenter provides no objective data to support the assertion that MSAT emissions will be "considerably higher" in the 2010 – 2020 time period, and there is strong evidence to the contrary. According to an FHWA analysis, even if VMT increases by 64 percent, [emphasis added] reductions of 57 percent to 87 percent in MSATs are projected from 2000 to 2020. While it is possible that MSAT emissions trends in the vicinity of the ICC might not be the same as national trends, there is evidence that these trends are in fact similar. The recent PM2.5 conformity analysis for the metropolitan Washington nonattainment area found that PM emissions – which include diesel particulate matter, a priority MSAT – would decline by 56% between 2002 and 2010 [see Fine Particles (PM2.5) Standards Air Quality Conformity Assessment, December 21, 2005, National Capital Regional Transportation Planning Board, Metropolitan Washington Council of Governments]. This analysis also shows a continuous decline within the even shorter time period ending in 2010 and demonstrates a decline at the regional level.

Taken together, these analyses show no indication of any tendency toward an interim rise in emission levels. In fact, they indicate the opposite and support the MSAT analysis done on the

ICC, i.e., that MSAT emissions will likely decline continuously through 2030, and the expected growth in traffic and resulting changes in vehicle operation in the ICC study area will not offset the benefits realized from EPA's vehicle and fuel control programs. To demonstrate the benefits anticipated, a simplified emissions analysis was completed using mobile source emission factors projected for calendar year 2010 in the MOBILE6.2 model, and the design year traffic projections for 2030. This provides a conservative approach to evaluate the potential emissions for an interim period as MSAT emissions rates are higher in 2010 than in 2030 and the higher traffic volumes for 2030 were used in the analysis. The results of this simplified analysis demonstrate that the decreases in MSAT emissions are between 60 and 66 percent in the ICC study from 2000 to 2010. Given the conservative approach used in this analysis, it is reasonable to conclude that even higher MSAT emissions decreases in 2010 would be documented if 2010 traffic projections were used.

Finally, FHWA notes several important considerations. First, the regional trend in pollutant emissions is probably a better indicator of MSAT exposure trends than the level of pollutants in any one location. Second, the Lead Agencies have incorporated in the FEIS the most reliable information available from EPA, the agency responsible for monitoring such emissions, to assess future MSAT emissions. Third, the FHWA Guidance on MSAT analysis does not require analysis of interim years. Based on these considerations, FHWA disagrees with the commenter in stating that "considerably higher" MSAT emissions will occur.

430 The emissions estimation approach used in the MSAT analysis also conflicts with the approach used in the FEIS for the CO analysis where the Lead Agencies used a "rollback methodology" which "assumes that the number of stationary sources of CO and vehicle miles traveled increase at the same rate as the CO emission factors from these sources decrease. This results in equilibrium between improved technology and growth in local VMTs and other non-mobile sources of CO." In contrast, the MSAT analysis growth factors for new and existing sources of MSATs were not included. These non-mobile sources of air toxics recognized as MSATs may contribute to future increases in background concentrations that may offset potential decreases in highway MSATs.

The "rollback methodology" was used to estimate only background CO levels. The CO hot-spot analysis is a quantitative analysis that estimates concentrations resulting from the project and background sources. As stated in the FEIS and in other responses, this type of analysis cannot be accomplished for MSAT pollutants. The analysis performed for the MSAT analysis is an emissions comparison between the ICC alternatives, and is not a comparison against an air quality standard. Thus background levels are not needed.

Furthermore, in a suburban/rural area like the ICC study area, most background would likely be mobile-source related, since there are few industrial sources of the MSAT pollutants (such as refineries or chemical plants); background contributions to near-roadway MSAT concentrations should decline roughly proportional to the projected decline in emissions, which is documented in the FEIS. Trend data for the other sources of MSATs are sparse; EPA maintains a toxics trends web page (www.epa.gov/airtrends/toxic.html) which provides some limited data:

Based on the data in the NEI, estimates of nationwide air toxics emissions decreased by approximately 24 percent between baseline (1990-1993) and 1996.Thirty-three of these air toxics that pose the greatest threat to public health in urban areas have similarly decreased 31 percent. Although changes in how EPA compiled the national inventory over time may account for some differences, EPA and state regulations, as well as voluntary reductions by industry, have clearly achieved large reductions in overall air toxic emissions.

Trends for individual air toxics vary from pollutant to pollutant. Benzene, which is the most widely monitored toxic air pollutant, is emitted from cars, trucks, oil refineries, and chemical processes. The graph below shows trends for benzene at 95 urban monitoring sites around the country. These urban areas generally have higher levels of benzene than other areas of the country. Measurements taken at these sites show, on average, a 47 percent drop in benzene levels from

1994 to 2000. During this period, EPA phased in new (so-called tier 1) car emission standards; required many cities to begin using cleaner burning gasoline; and set standards that required significant reductions in benzene and other pollutants emitted from oil refineries and chemical processes. EPA estimates that benzene emissions from all sources dropped 20 percent nationwide from 1990 to 1996. In the 2001 toxics pilot monitoring project, city averages of benzene ranged from about 0.9 to 2.5 µg/m3.

EPA's nonroad engine regulations will also provide future reductions in diesel particulate matter from this source, which accounts for about half of nationwide diesel emissions. EPA's 2004 Clean Air Nonroad Diesel Rule is projected to reduce diesel particulate emissions from regulated nonroad engines by over 90 percent. (www.epa.gov/otaq/regs/nonroad/equiphd/2004fr/420f04029.htm).

EPA is also pursuing regulations for locomotives and marine diesel engines which are expected to provide similar benefits for these engines (www.epa.gov/otaq/regs/nonroad/420f04041.htm). Finally, EPA recently proposed additional motor vehicle and fuel standards to reduce emissions from vehicle operation and gas containers, which will provide some non-diesel benefits, particularly for benzene (www.epa.gov/otaq/regs/toxics/420f06021.htm). Thus, FHWA does not expect that non-highway sources of MSATs will increase from present levels over the time period covered by the analysis; EPA's projections indicate emissions from non-highway sources will decrease.

In addition, EPA has also developed and is continuing to develop air toxics regulations affecting stationary and area sources. The promulgation of these national emission standards for hazardous air pollutants (NESHAP) or maximum achievable control technology (MACT) standards will continue to tighten controls on air toxics, some of which include MSATs.

431 The FEIS states that the ICC build alternative will generate six to eight percent of the MSAT's within the ICC study area in 2030. But it fails to evaluate how these emissions will be concentrated in the much smaller areas that are immediately proximate to the ICC, where the eight percent increase in MSATs across the much larger study area might easily result in a massive increase in MSAT emissions – potentially orders of magnitude greater than is now experienced on the localized basis in some of the sites along the ICC right-of-way. The FEIS also fails to evaluate how these concentrated emissions are likely to result in increased exposure of those living, working, or attending schools proximate to the ICC. Such an analysis must be undertaken in order for FHWA to satisfy its obligation under Section 109(h) of the Highway Act, as well as under NEPA.

As noted elsewhere in the response to comments, the tools necessary to estimate emissions levels and their dispersion have significant limitations to adequately conduct this type of analysis. Further the dispersion characteristics of MSAT emissions are still under study which is particularly important in that some of these emissions are reactive or undergo physical changes which can make them more or less of a concern. Since these processes are still being investigated under ambient conditions, estimating concentration levels at a distance from the roadway is problematic. In addition, it is difficult if not impossible to imagine how concentration levels of MSATs in localized areas could be orders of magnitude higher in some locations over today's levels given the dramatic declines in MSAT emissions that EPA has forecasted due to the stringent passenger and heavy-duty vehicle and standards that the Agency has implemented.

Furthermore, MSAT emissions from the ICC will likely be only a small portion of the total exposure to these pollutants faced by nearby populations. First, a large part of exposure is likely due to regional background concentrations, not direct roadway exposure. For example, the studies cited later in the comment letter (e.g., pages 37-38, 39-41) show that even high-volume roadways are responsible for only an incremental increase in concentrations over those measured or modeled farther away from a roadway facility, not an increase of "orders of

magnitude".

MSAT exposure is also dependent on the time people spend at various locations to work, shop, attend school, or for other activities, and the concentration at those locations. There are indoor sources of some of these pollutants; for example, formaldehyde is a well-know indoor air pollutant. Thus, a new roadway has only an incremental impact on total daily MSAT exposure, and assessing MSAT exposure is not a simple matter of calculating the impacts of a new roadway in isolation from these other sources of exposure.

For purposes of a 70-year cancer risk assessment, assessing the impact of a new roadway on total MSAT exposure is even more problematic, because individuals will not be located at fixed roadside locations for an entire 70-year period. Census data (www.census.gov/population/www/socdemo/migrate.html) show that the average person in the U.S. changes residence approximately every 7 years; the Bureau of Labor Statistics estimates that the average worker in the U.S. changes employers every 4 years (www.bls.gov/news.release/tenure.nr0.htm). Children typically attend a given school for 3 or 4 years, and then move on to another school. Accurately calculating an average 70-year exposure for people at precise locations within the ICC study area is simply not possible.

Finally, if the ICC is built, populations in other locations would likely receive reduced exposure to MSAT pollutants because of reductions in traffic volumes on those roadways. Use of simplifying assumptions (such as assuming that a given person would be at a fixed roadside location for an entire year or 70-year lifetime, or disregarding the reductions in MSAT pollutants occurring elsewhere) would add large uncertainties on top of the inaccuracies noted above for the MOBILE6.2 emissions model and the available dispersion models.

By satisfying their obligations under NEPA and the Clean Air Act, FHWA and SHA have also satisfied their obligation under Section 109(h) of the Highway Act. Section 109(h) does not impose obligations on state and federal agencies beyond what is required under NEPA and the Clean Air Act, and does not mandate a separate public interest determination, as suggested by the commenter. While not part of mitigation to meet one of the NAAQS, SHA will implement a Diesel Emissions Reduction Program as part of the Project Performance Specifications. SHA Standard Specifications also specify Dust and Moisture Dust Control during construction. In light of significant environmental and public concerns associated with the ICC, the Project RFP will include detailed requirements and practices that will reduce or prevent the surface and air transport of dust during construction.

By satisfying their obligations under NEPA and the Clean Air Act, FHWA and SHA have also satisfied their obligation under Section 109(h) of the Highway Act. Section 109(h) does not impose obligations on state and federal agencies beyond what is required under NEPA and the Clean Air Act, and does not mandate a separate public interest determination, as suggested by the commenter. Instead, FHWA's "Environmental Impact and Related Procedures" regulations (23 CFR 771) lay out a single process that by design addresses responsibilities under both NEPA and Section 109(h).

432 The Lead Agencies optimized signal timing in its Carbon Monoxide analysis, thereby eliminating from the forecast substantial emissions from likely periods of congestion, such as accidents or longer idling times at busy intersections. Optimization does not meet Clean Air Act requirements to use worst-case assumptions for air quality modeling or a range of operating conditions from average to worse case. The Lead Agencies acknowledge this requirement in its Carbon Monoxide analysis, yet failed to keep its analysis consistent with worst-case assumptions. The optimization causes CO emissions, and therefore the environmental and health consequences of such emissions, to be underestimated.

The use of optimized signal timing was determined to be a reasonable assumption and the most recent estimate at the time of the CO conformity analysis. The optimized signal timing condition

assumes that queue lengths are "equally congested" along two or more legs of an intersection, a situation when peak emissions would be expected to occur. Assuming a signal timing that has congestion only along one leg of the intersection in reality would overestimate CO concentrations along the assumed congested leg and underestimate CO concentrations along the other legs. The CO analysis performed for this project uses the "likely usage patterns" suggested by the commenter. The local governments regularly review the signal timing, as necessary, to assure that the intersection operate efficiently and provide safe and efficient movement of vehicles through the intersections along the ICC.

The Clean Air Act does not require that "worst-case" assumptions be used, or that a range or conditions from "average to worse case" be analyzed. Section 176(c)(1) of the Clean Air Act only requires that the determination of conformity be based on the most recent estimates of emissions, and that such estimates shall be determined from the most recent travel estimates as determined by the MPO or other agency authorized to make such estimates. The commenter takes the term "worst-case" out of context as used in the FEIS. The document actually states, "The worst-case one-hour CO average analyses conducted for this study were performed using the a.m. and p.m. peak one-hour traffic volumes, Stability Class F and a 1.0 m/s wind speed. The maximum one-hour CO impact was obtained for each air quality receptor by adding the background concentration to the one-hour CO receptor-specific concentration." The worst-case scenarios were used in the analysis to examine the locations with the greatest emissions impacts, to meet the requirements of the Transportation Conformity Rule. This does not mean the "worst-case" assumptions that could possibly be derived need to be used, but instead that the worst-case scenarios were identified based on the most recent estimates of travel.

433 **The FEIS fails to discuss the extent that pollution from nitrogen oxides, sulfur dioxide and coarse particulate matter will increase as a result of the ICC. FEIS Section IV.H merely states that Montgomery and Prince George's counties are currently in attainment under the Clean Air Act for nitrogen dioxide, sulfur dioxide and coarse particulate matter, but this fails to address the impact that the ICC will have on the future pollution levels of these substances or resolve whether emission increases from the project are likely to contribute to violation of the class II PSD increments for these pollutants…Without a discussion of the adverse environmental and health impacts that will occur as a result of increased pollution from nitrogen oxide, sulfur dioxide and coarse particulate matter, the EIS is inadequate.**

There is not expected to be any significant impact on the levels of any of these pollutants, and thus it was unnecessary in the EIS to discuss them beyond saying the project area is attainment for these pollutants. Also, Class II PSD increments relate to projects that are defined as a physical change in or change in method of operation of an existing major stationary source (40 CFR 51.166). The ICC, a highway project, is not subject to PSD permitting or requirements.

The Washington, DC-MD-VA region is significantly below the NAAQS for nitrogen dioxide, sulfur dioxide and coarse particulate matter (PM10). The region has not exceeded any of the NAAQS for these three pollutants in the last 11 years.

The Metropolitan Washington Council of Governments' (MWCOG's) Air Quality Trends Washington DC Region 1993-2004, dated August 2005 states, "A general characterization of SO2 concentrations in the Washington, DC region is that levels are low and declining…The data show that in recent years the highest SO2 levels in the region have been approximately one-fourth of the federal health standard value of 0.03 ppm. Additionally, there have not been any recorded exceedances of the 24-hour federal health standard of 0.14 ppm at any of the monitors during the entire analysis period (1993-2004)." (Pages 16)

"There is no discernable trend in the annual NO2 values in the region. However, during the past ten years, the maximum annual average NO2 levels are approximately half of the federal

standard at the highest recording monitor in the region." (Page 17)

"All monitors in the metropolitan area are well within each of the PM10 NAAQS." (Page 20) The data shows that since 1993, the maximum levels of PM10 are less than 40 µg/m3 for the Annual Average and approximately 80 µg/m3 for the 24-hour maximum. The S/NAAQS are 50 µg/m3 for the Annual Average and approximately 150 µg/m3 for the 24-hour maximum.

Also, with the implementation national engine and fuel standards, on-road emissions, especially those of NOx and SOx are expected to decline dramatically.

434 Peer-reviewed scientific studies demonstrate that motor vehicle emissions of PM… have a significant impact on health

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment). The qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule. The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS, which are health based standards. Based on this finding in the PM2.5 qualitative hot spot analysis and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project will not have a significant impact on the PM2.5 air quality in the region and does not require additional review under NEPA. The project will not have any significant impacts on health from PM2.5. Therefore, the health impacts of PM2.5 were evaluated.

435 Peer-reviewed scientific studies demonstrate that motor vehicle emissions of … air toxics have a significant impact on health

FHWA agrees that there is a body of literature that indicates the potential health impacts of air toxics. That is the ultimate reason why FHWA issued interim guidance on February 3, 2006 that requires the analysis of MSAT emissions under NEPA or otherwise specifies how such emissions should be treated.

436 EPA designated 21 chemicals as mobile source air toxics (MSATs) in March 2001. And "selected these chemicals based on a scientific consensus that exposure to the chemicals pose serious threats to health."

The commenter states that EPA designated 21 mobile source air toxics (MSATs) in March 2001 and "selected these chemicals based on a scientific consensus that exposure to the chemicals pose serious threats to health." This is incorrect. In the same rule-making, EPA stated, "[I]t is important to note that inclusion on the [MSAT] list is not itself a determination by EPA that emissions of the compound in fact present a risk to public health or welfare."

437 All six [priority MSATs] have extensive toxicologic data and many have substantial epidemiologic data documenting their health risks.

The commenter cites EPA information that was included in the FEIS. We do not argue with the evidence provided but note that significant research issues remain. One important question is whether these emissions have negative health implications at the usual concentrations found in ambient air. Also, as noted by the commenter the scientific literature sometimes relies on animal studies but similar effects have not been documented in humans.

438 This landmark study [MATES II] … concluded that overall cancer risk from air toxics to residents in the area was 1400 per one million…and mobile sources contribute 96% for

the cancer risk resulting from exposure to air toxics in Montgomery County, Maryland, where the proposed ICC is located, with diesel emissions responsible for 85% of the risk.

These studies employ a questionable risk factor for diesel particulate matter and thus the cancer estimates are quite suspect. The risk factor employed is one that is unique to California. EPA, after reviewing the same data and soliciting advice on establishing such a risk factor, declined to do so because the data were insufficient. This was also the conclusion of the independent Health Effects Institute. EPA has noted in its Health Assessment Document for Diesel Particulate Matter that the estimated risk range is very large, ranging from 1 in 1000 to 1 in 100,000 and zero risk cannot be ruled out.

439 Epidemiologic studies of health effects and mobile source emissions show that MSATs and Particulate Matter have a significant impact on health.

There are two major caveats that the commenter did not include that are related to the information on these pages. The first is that an epidemiological study can only determine whether a statistical association between variables exists. It is critical to control for all potentially intervening activities, exposures and genetic pre-disposition in the analysis which is very difficult to do. As such, no epidemiological study can truly determine causation. The second is that most, if not all, of the studies cited by the commenter, relate to some or all emissions from motor vehicles and not just the MSATs, including the criteria pollutants for which national ambient air quality standards are established to protect public health under the Clean Air Act.

440 Methods are available to assess the health impacts from fine particulate matter and mobile source air toxics.

We respectfully disagree with the commenter. FHWA has intensively studied the possibility of employing various techniques as a means of assessing health outcomes. We have found all of them to be inadequate for purposes of informing decision makers on project level decisions. Overall our major argument with these techniques is that they all depend on the sequential estimation of emissions, concentrations, exposure and final health outcomes for which uncertainties-- and in some of the analyses, huge uncertainties -- exist which negate the accuracy of the results, particularly at the project level. Furthermore since the uncertainties are cumulative in nature. Imprecision in an earlier estimate, of emissions for example, compounds the uncertainties in all subsequent analyses (exposure, health risk) to the final health impacts. The uncertainties in estimating the emissions at the project level are generally thought to be a factor of two. This means that the "true" emissions level of a proposed project could be as little as one-half of the estimate to two times the estimate. Furthermore, there are questions as to whether the errors in the analysis which cause the uncertainties are systematic which means that they apply equally to all situations and potential alternatives to the project. FHWA believes that even with the large uncertainties in the emissions estimate using current tools there is value to estimating emissions of major projects particularly when the proposed alternatives are similar. When they are not, additional uncertainties are likely introduced.

It is potentially even more difficult to adequately assess exposures at a project level. The techniques the commenter cites are most appropriate at large scales. When dealing with a small scale of a project, the exposure analysis must take into account the mobility of the population since many of the health impacts are due to long-term (70-year) exposures. Few residents, if any, will be within the vicinity of a transportation project for such a long time. Most travel daily into and out of the project area.

Taken together these uncertainties raise such serious questions about the accuracy of the analysis that FHWA believes that they do not serve the intended purpose of NEPA. Instead the approach taken in the FHWA guidance and applied to the ICC project was based on the common sense notion that more MSAT emissions will have greater negative health impacts and

vice versa.

441 The ICC FEIS indicates that an ICC build alternative will increase MSAT emissions in the ICC study area by one to six percent in 2030 relative to a non-build alternative, due primarily to increased VMT for the build alternative. However, the ICC does not evaluate localized MSAT emissions and concentrations that can be anticipated to result in pollution hot spots close to the highway, especially in the early years of operation of the ICC, from 2010 onward, when the MSAT emissions can be anticipated to be at their highest levels.

The FEIS does not calculate localized concentration for the reasons cited immediately above. The uncertainties in the process do not vary with time. As such the requested analysis, i.e. concentrations from 2010 on, suffers from the same shortcomings as those cited above and would be no more accurate. Furthermore, these concentration levels in 2010 will not persist (due to the forecasted emission reduction) and therefore will not be relevant to assessing any potential increase in chronic health impacts.

Since there is no analysis of the MSAT levels on the ICC for 2010-2020, by either SHA or the commenter, stating that MSAT emissions will be at their highest from 2010 onward is conjecture and not based upon analysis. The commenter's assertion is, in fact, contradicted by FHWA Guidance. The FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents states, "The EPA has issued a number of regulations that will dramatically decrease MSATs through cleaner fuels and cleaner engines. According to an FHWA analysis, even if VMT increases by 64 percent, reductions of 57 percent to 87 percent in MSATs are projected from 2000 to 2020." Page 2 of this document shows a continuous downward trend in MSAT emissions, even with growth in VMT taken into account.

Note that while the commenter cites that the build alternative will slightly increase emissions, it is predicted to be a very small increase which must be viewed in light of the dramatic decreases that are forecast for both the build and no-build alternatives. Further, given the uncertainties cited above we believe that such a slight predicted increase is negligible.

442 FHWA asserts it is unable to evaluate localized emission concentrations of health effects because of uncertainties in the MOBILE6.2 model, especially with respect to diesel particulate matter, and uncertainties surrounding the health effects of MSAT pollutants. However, exposure and risk assessment tools are available to establish the degree of risk roadside populations face from exposure to fine particulate matter and air toxic emissions of motor vehicles and to determine diesel particulate emissions.

We do not think that exposure and risk assessment for MSAT analysis is well suited to project level analysis. First, they will suffer from the uncertainties in the emissions and concentration assessments. Second, exposure analysis does effectively not take into account the mobility of the population in a small-scale assessment. Finally, there is no nationally recognized risk factor for diesel particulate matter.

443 Cancer risks from exposure to MSATs may be determined using a methodology similar to that used in the MATES-II study. Changes in the concentration of the six priority MSATs may be estimated using EPA's MOBILE6.2 model. For those MSATs with cancer unit risk values in EPA's IRIS database, the estimated concentrations of the individual air toxics from the construction of the Intercounty Connector can be combined with the cancer unit risk values to produce estimates of cancer risk from exposure to individual air toxics as well as the total risk form exposure to all toxics combined.

MATES II cannot be used as a model for MSAT analysis on the ICC. The study, as affirmed by its sponsor – the South Coast Air Quality Management District -- is not a project-level assessment. Its scale is larger than that of the ICC project and scaling this analysis down to the project level would create new uncertainties. Secondly, there is no nationally accepted risk factor

for diesel particulate matter, and MATES II found this type of emission to be the most important by far toward increases in cancer incidence. Finally, MATES II may be important research but further research is still needed to understand the uncertainties and context for its findings. To their credit, the SCAQMD recognize this and have continued their efforts in the MATES III research effort.

444 The ICC FEIS argues that because large reductions in MSATs are expected by 2030 for all alternatives, FHWA does not believe that there will be significant adverse impacts on the human environment from MSATs as a result of the ICC. Thus, they argue they have no obligation to consider cancer risks that may decrease even if traffic increases. The argument is misguided.

The analysis that was done was well thought out and reasonable. It in fact went further than required under the 2006 FHWA guidance. Our analysis showed that emissions will go down for all priority MSATs. Both the direction and scale of the forecast emissions reductions indicate that any negative health impacts will likely be less in the future than currently. Our reasons for conducting an emissions analysis only are based on the uncertainties associated with conducting subsequent analysis of the exposure, health risk and final health outcomes detailed in our other responses. As noted above, we do not feel these can be done credibly at the project level.

445 Because old vehicles are not immediately removed from service, aggregate emissions from new cleaner vehicles and the pre-2007 vehicles likely will continue to increase for a decade or more before total emissions begin to decline.

The MSAT emissions analysis in the FEIS takes these factors into account. EPA's MOBILE6.2 emissions model incorporates data on the emissions standards that apply in various years, the useful life of these vehicles, and the rate at which vehicles are retired and replaced with new vehicles. Projections based on this model (for example, see page 2 of the FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents) show that emissions decline continuously over time. With EPA regulations covering fine PM and volatile organic compounds, MSATs have declined over the past 30 years from mobile sources. The trends are expected to continue to 2030 due to the new vehicle and fuel regulations that EPA has implemented despite increases in vehicular travel. Thus we accurately modeled fleet turnover and the likely emissions impacts, and do not anticipate any continuous period of elevated emissions before emissions begin to decline.

446 Thus cancer risks must be modeled on emissions characteristics that will be prevalent from 2010 to 2030, not just those that become prevalent in 2030. It would be far more appropriate to estimate cumulative risks as of 2030 rather than assuming no risks prior to 2030, and then discounting them because of expected declines in mobile source air toxic emissions.

We believe for the reasons cited above that estimates of exposure and cancer risk would be too uncertain at the project level to yield useful information under NEPA.

Chapter IV.J. Effects on Transportation

447 The ICC will increase congestion on the Capital Beltway.

Improved mobility and safety in the ICC study area is not designed or intended to relieve Capital Beltway (I-495) congestion. This has been true throughout the ICC's history. The ICC serves a different travel market than does the Beltway, which is intended for motorists traveling to and from communities and employment centers that surround the Washington, DC urban core, whereas the purpose of the ICC is to connect the growth corridors of I-270 and I-95 in eastern

Montgomery County and northwestern Prince George's County. The Beltway has reached its current capacity, and is congested most hours of the day. To address this, an I-95/I-495 Capital Beltway Study is currently being conducted to evaluate improvements to Maryland's 42-mile portion of the Capital Beltway, and is being coordinated with a similar study by Virginia DOT. Although the focus of that study is on provision of managed lanes, improvement of interchanges will also be considered. For more information about the Capital Beltway Study, please contact the project manager Ms. Sue Rajan at (410) 545-8514 or toll-free at (800) 548-5026.

448 The ICC will improve congestion on the Capital Beltway.

Improved mobility and safety in the ICC study area is not designed or intended to relieve Capital Beltway (I-495) congestion. This has been true throughout the ICC's history. The ICC serves a different travel market than does the Beltway, which is intended for motorists traveling to and from communities and employment centers that surround the Washington, DC urban core, whereas the purpose of the ICC is to connect the growth corridors of I-270 and I-95 in eastern Montgomery County and northwestern Prince George's County. The Beltway has reached its current capacity, and is congested most hours of the day. To address this, an I-95/I-495 Capital Beltway Study is currently being conducted to evaluate improvements to Maryland's 42-mile portion of the Capital Beltway, and is being coordinated with a similar study by Virginia DOT. Although the focus of that study is on provision of managed lanes, improvement of interchanges will also be considered. For more information about the Capital Beltway Study, please contact the project manager Ms. Sue Rajan at (410) 545-8514 or toll-free at (800) 548-5026.

449 The ICC was planned decades ago and is not a relevant solution for today's traffic and growth management.

A wide variety of alternatives were considered and the Lead Agencies identified Corridor 1 as the Selected Alternative, which includes innovative environmental features and congestion management controls, and is the most appropriate alternative to meet the project's purpose and need.

450 The ICC will not relieve congestion on local roads.

The FEIS and various supporting studies demonstrate that the Selected Alternative produces net benefits to mobility and congestion in the study area. One of the primary project goals is to relieve traffic congestion on east-west oriented local roadways. The proposed ICC clearly accomplishes this goal. For example, the Selected Alternative, Corridor 1, would improve the Level of Service ("LOS") for 38 of 50 key intersections during the PM peak hour. In addition, an ICC would reduce the number of hours that drivers experience congested conditions at the worst intersections in the study area. For example, there would be a 24 percent reduction in the number of hours that drivers experience congested conditions. Many existing roadways in the study area would benefit from a reduction in the average weekday traffic ("AWDT") as a result of the ICC. Roads such as MD 28, MD 198, Randolph Road, and Cherry Hill Road are projected to experience decreases in AWDT of more than 10 percent compared to the No-Action Alternative. Travel time savings would improve for trips within the study area, as well as for those who have an ending or beginning in the study area.

Travel times also would improve for trips along the entire length of the ICC and for trips that access the ICC via local arterials. For example, traveling the ICC from White Oak to Gaithersburg in the AM peak period would save 22 minutes over the No-Action Alternative. Travel time savings between Prince George's and Montgomery counties are also significant with the ICC. Travel times between Laurel and Gaithersburg are 44 percent lower with the ICC compared to the No-Action Alternative. Similarly, travel times between Gaithersburg and BWI Airport improve by 28 percent (over 30 minutes saved) over the No-Action Alternative.

Commenters correctly point out that the FEIS includes traffic data showing modest increases to AWDT (5-10 percent) to sections of certain north-south roadways. These trends largely result

from expected use of new interchanges with an east-west ICC developed as part of any build alternative. At the same time, however, the ICC will relieve congestion at Georgia Avenue (MD 97), Connecticut Avenue (MD 185), and Colesville Road (US 29). (Refer to Figure IV-11, "Changes in 2030 Average Daily Traffic Corridor 1 / No-Action" on page IV-31 of the Travel Analysis Technical Report). This figure shows minimal changes (less than 10 percent) in the north-south oriented roadways, with some exceptions. In particular, Georgia Avenue, near MD 28, increases by more than 10 percent, whereas Georgia Avenue between Olney and MD 28 decreases by more than 10 percent. The AWDT on Connecticut Avenue and Layhill Road (MD 182) increases by more than 10 percent north of Randolph Road. Colesville Road increases by more than 10 percent in the vicinity of the ICC interchange, but otherwise shows no major effects.

In summary, the ICC results in meaningful traffic relief (over 10 percent) on several east-west oriented roads and intersections and minimal changes on the north-south oriented arterials. Expected increases to AWDT on certain north-south 2030 arterial volumes near proposed ICC interchanges and other locations noted above do not alter the conclusion that the net benefits of the Selected Alternative adequately meet the increased mobility and congestion relief elements of the Purpose and Need. Please also refer to Tables IV-108, IV-111, and IV-112 (FEIS Volume I of III, pages IV-363, IV-371, and IV-373) and Figure IV-14 (FEIS Volume II of III) for more information on specific traffic data.

451 The Olney and Aspen Hill areas are very populated. Getting some of this commuter traffic off local roads would really help.

There are several road segments and important intersections in the Olney and Aspen Hill planning areas that we expect to experience significant reductions in traffic and delay. Examples include MD 28, MD 108, Bowie Mill Road, Norwood Road as well as intersections of Bel Pre and MD 182 and MD 182 at Ednor/Norwood Roads.

452 The ICC will not relieve congestion.

In terms of traffic needs in the study area, the ICC Purpose and Need Statement focuses on the increase of community mobility, enhanced safety and the facilitation of the movement of goods and people. These concepts best reflect the reality that in an already congested region with additional population growth expected, while mobility can be improved, as measured in reduced travel times or improved access to activity centers, congestion will remain. The ICC study shows that the ICC has more beneficial than detrimental impacts on mobility and congestion in the study area, and that, taken together, the project benefits adequately meet the purpose and need.

At the present time, the only east-west access-controlled highway in the study area that connects the I-270 and I-95/US 1 corridors is the Capital Beltway, which forms the southern boundary of the study area. This road has reached its current capacity and is congested most hours of the day. As a result, travelers in the study area rely on the existing local road network that was not engineered for the volume of current and expected future east-west demand. See FEIS, Section I.E.1.b. In order to evaluate how the build and No-Action alternatives would meet the Purpose and Need of increasing mobility and safety in the study area, a variety of factors were considered, including: access to jobs, travel time savings, average daily traffic volumes, network capacity, intersection congestion and availability of express bus service. See FEIS, Section VII.C.

Among the key measurable mobility and congestion improvements is the projection that an ICC would improve performance at 38 of the 50 key intersections studied (depending on whether the AM or PM peak period is analyzed) over the No-Action Alternative. See FEIS, Chart IV-1. Also, an ICC would reduce the number of hours that drivers experience congested conditions at the worst intersections in the study area. For the Corridor 1 alternative, there would be a 24%

reduction in the number of hours that drivers would experience congested conditions, and for the Corridor 2 alternative there would be a 26% reduction, compared to the No-Action Alternative in 2030.

453 The ICC will benefit commuters traveling between the Baltimore area to the Washington Metro area.

The ICC will provide significant benefits to Montgomery and Prince George's Counties as well as the Washington Metropolitan region and the State of Maryland. A new, reliable east-west highway connecting the growth corridors of I-95/US 1 and I-270 will help manage growing traffic congestion, reduce the number of hours wasted in gridlock on local arterials not designed to handle heavy volumes of traffic and large trucks, and increase the economic opportunities for all citizens in the region. Improved transportation infrastructure will mean reduced travel times between these economic centers and savings in vehicle operating costs due to reduced travel times (fuel, oil, and maintenance) as well as improved reliability of travel times and improved movement of freight and reduced risk of delayed delivery. This improved connection between these economic centers would create new jobs and help retain existing businesses and jobs in the region. The ICC, as a toll road, would be a managed facility that maintains traffic flows at a consistent, acceptable level. By taking traffic off the local roads that were not designed to carry them, east-west trips would take less time and be more reliable and safer.

During the peak periods of travel, majority of the intersections in the study area will improve (refer to FEIS Chapter IV.J.4.f). This translates to reduced congestion and better traffic flow throughout the study area. Cars that move produce less air pollution than cars idling in traffic. Travel times would also be reduced and mobility increased with the ICC. For example, a trip from Rockville to BWI Airport would be reduced by approximately 30 minutes (refer to FEIS Chapter IV.J.4.b). Both longer and shorter distance east-west trips would have more predictable travel times. More jobs would be reachable within a reasonable commute. Opportunities for transit would increase; as a multimodal highway, the ICC would provide a travelway for high quality east-west express bus service to serve the study area. The ICC study results show projections of thousands of new transit riders each day, some of whom would be former auto users who switched to transit (refer to FEIS Chapter IV.J.4.d).

454 The ICC will relieve some congestion on US 29.

The analysis of the ICC included the effects of additional roadway improvements that are scheduled to occur or have already occurred. For example, the intersection of Georgia Avenue (MD 97) and Norbeck Road (MD 28) will be converted into a grade separated interchange. The intersection of Georgia Avenue (MD 97) and Randolph Road will also be converted into a grade separated interchange. US 29 is currently being improved. Several at-grade intersections are being converted into grade separated interchanges along US 29. These improvements will help north-south traffic movements. The reduction in traffic on many roadways due to the ICC will also benefit some north-south travel.

455 The ICC will help produce a more efficient means of traveling both locally and regionally and will reduce travel times during peak periods.

Thank you for your comment.

456 The response and transport time for Emergency Medical Services (EMS) would improve with the ICC.

Emergency and health care service providers were contacted to determine any impacts to the services they provide. Montgomery County Fire and Rescue Service noted that a completed ICC would provide an additional route for fire and rescue services to respond to incidents, and noted that during the construction process delays on existing roads passing over or under the ICC may

occur.

457 The ICC will reduce road rage because it will improve traffic.

Thank you for your comment.

458 Housing in Montgomery County is not affordable for median income workers so we are forced to endure long commutes. The ICC will help median income households.

Thank you for your comment.

459 Citizens are concerned about safety issues related to the proposed ICC Layhill Road interchange and the impact of the interchange on traffic safety north of the interchange. Representatives from SHA told the community that these safety issues would be Montgomery County's responsibility. However, because MD 182 is a state roadway, it should be the state's responsibility to include planning and design of improvements to MD 182 north of the proposed interchange. The county has no plans to improve this roadway. The community has written to Montgomery County Council President Leventhal and Councilmember Praisner to ask SHA to evaluate this segment of MD 182.

The County Master Plan (as noted in the 1994 Aspen Hill Master Plan, p. 103) calls for Layhill Road eventually to be widened to a four-lane road, with a median, north to Norbeck Road. Although Layhill Road is a state highway (MD 182), the process for moving master plan projects into the highway development process (i.e., planning, design, right-of-way and construction) remains driven by the local governments. Each Fall, the Secretary, SHA Administrator and other Department of Transportation officials visit each county to better understand what transportation improvements local governments feel are their highest priorities. This "tour meeting" remains the most crucial input into how the Department creates our annual program (Consolidated Transportation Program, or CTP).

460 The ICC will not relieve traffic on I-95 or I-270, which commuters will continue to use.

Thank you for your comment. Your observation is correct.

461 The ICC will increase congestion on many local roads by more than 10 percent.

Although the ICC would reduce traffic congestion on more than 50 miles of roadways and the vast majority of study area intersections, forecasts show that congestion on a few north/south roadways would increase by 10 percent. Most of these short segments where the average weekday daily traffic is projected to increase are in areas where an interchange is proposed, illustrating that travelers would be accessing the ICC from these roadways.

462 Few people would use the ICC compared to the other heavily traveled roads in the area.

Studies have shown that more than 100,000 vehicles per day would use certain segments of the ICC and more than 300,000 people would benefit from the new facility. There are other high quality roadways in the study area, like I-270 and I-495 that carry more traffic than the ICC, yet over 100,000 vehicles per day is a significant volume of traffic by any measure.

463 The ICC will provide a reliable route for bus rapid transit and is expected to serve about 11,500 transit riders per day at much improved service levels. Mass transportation improvements need to be included in the overall plan, but capital and operating costs need to be charged to the appropriate county or state mass transit account, not the ICC cost.

The Selected Alternative includes the operation of Express Bus Service along the ICC and a budget of $20 million has been established for the continued study and capital costs of that

service. The long term operating and maintenance costs will be borne by the agency(ies) operating bus service along the new roadway.

464 The ICC will improve access to and from economic growth centers.

Thank you for your comment.

465 The Allanwood-Gayfields-Willson Hills-Gaywoods Estates Civic Association is concerned about the current dangerous condition at the Layhill-Bonifant-Bel Pre Road intersection just south of the planned Layhill Road interchange

The Lead Agencies understand the Association's continued opposition to the ICC and, specifically, to the proposed interchange at Layhill Road. Care will be taken during the final design process to assure safety and traffic operations near all project interchanges will be enhanced to the extent possible.

466 The FEIS acknowledges that the ICC will not ease traffic congestion. It will not relieve traffic on the Beltway, and will add 3,000–4,000 cars each to Connecticut and Georgia Avenues, and Colesville Road. In general terms it says there will be more congestion if the ICC is built than if the ICC is not built.

The FEIS and various supporting studies demonstrate that the Selected Alternative produces net benefits to mobility and congestion in the study area. One of the primary project goals is to relieve traffic congestion on east-west oriented local roadways. The proposed ICC clearly accomplishes this goal. For example, the Selected Alternative, Corridor 1, would improve the Level of Service ("LOS") for 38 of 50 key intersections during the PM peak hour. In addition, an ICC would reduce the number of hours that drivers experience congested conditions at the worst intersections in the study area. For example, there would be a 24 percent reduction in the number of hours that drivers experience congested conditions. Many existing roadways in the study area would benefit from a reduction in the average weekday traffic ("AWDT") as a result of the ICC. Roads such as MD 28, MD 198, Randolph Road, and Cherry Hill Road are projected to experience decreases in AWDT of more than 10 percent compared to the No-Action Alternative. Travel time savings would improve for trips within the study area, as well as for those who have an ending or beginning in the study area.

Travel times also would improve for trips along the entire length of the ICC and for trips that access the ICC via local arterials. For example, traveling the ICC from White Oak to Gaithersburg in the AM peak period would save 22 minutes over the No-Action Alternative. Travel time savings between Prince George's and Montgomery counties are also significant with the ICC. Travel times between Laurel and Gaithersburg are 44 percent lower with the ICC compared to the No-Action Alternative. Similarly, travel times between Gaithersburg and BWI Airport improve by 28 percent (over 30 minutes saved) over the No-Action Alternative.

Commenters correctly point out that the FEIS includes traffic data showing modest increases to AWDT (5-10 percent) to sections of certain north-south roadways. These trends largely result from expected use of new interchanges with an east-west ICC developed as part of any build alternative. At the same time, however, the ICC will relieve congestion at Georgia Avenue (MD 97), Connecticut Avenue (MD 185), and Colesville Road (US 29). (Refer to Figure IV-11, "Changes in 2030 Average Daily Traffic Corridor 1 / No-Action" on page IV-31 of the Travel Analysis Technical Report). This figure shows minimal changes (less than 10 percent) in the north-south oriented roadways, with some exceptions. In particular, Georgia Avenue, near MD 28, increases by more than 10 percent, whereas Georgia Avenue between Olney and MD 28 decreases by more than 10 percent. The AWDT on Connecticut Avenue and Layhill Road (MD 182) increases by more than 10 percent north of Randolph Road. Colesville Road increases by more than 10 percent in the vicinity of the ICC interchange, but otherwise shows no major effects.

In summary, the ICC results in meaningful traffic relief (over 10 percent) on several east-west oriented roads and intersections and minimal changes on the north-south oriented arterials. Expected increases to AWDT on certain north-south 2030 arterial volumes near proposed ICC interchanges and other locations noted above do not alter the conclusion that the net benefits of the Preferred Alternative adequately meet the increased mobility and congestion relief elements of the Purpose and Need. Please also refer to Tables IV-108, IV-111, and IV-112 (FEIS Chapter IV.J, pages IV-363, IV-371, and IV-373) and Figure IV-14 (FEIS Volume II) for more information on specific traffic data.

467 The majority of commuter traffic is using I-270 and I-495 to Virginia. The ICC will not help the majority of commuter traffic.

There are many commuter routes in and around the Washington D.C. area that are experiencing heavy traffic volumes and congestion levels. The east-west commuter routes between I-95 and I-270 are heavily congested, which the ICC would relieve.

468 The ICC, although very expensive, will pay dividends in reduced congestion on county and state roads and major time savings for auto, truck, and transit users.

Thank you for your comment.

469 Toll should be set at or near the upper range being considered because the potential time savings has great economic value to commuters and business travelers and recovering this value in tolls will free up general transportation user funds for the many other transportation improvement needs of the state.

Thank you for your suggestion. The toll rates will be set by the MdTA just prior to the opening of the roadway or any segment of the roadway and will be based upon detailed traffic and revenue studies. These studies will consider both the effect that tolls would have on the usage of the ICC and the on the revenue that would be generated by the users of the ICC.

470 The intersection of MD 97 and MD 28 is currently failing, but FEIS shows this intersection as not failing. Is this based on planned improvements being made? If so, is there any documentation that shows that improvements will be made before the ICC is built? Currently these intersection improvements are on hold and are not a priority for SHA.

The FEIS shows the intersection of MD 97 and MD 28 as not failing for the LOS analysis in 2030 based on the planned improvements for the intersection. This intersection is in the Secondary Program for intersection improvements and is funded for engineering through FY 2007. The study anticipated completion of these improvements at this intersection by 2030, the year for which the LOS analysis was conducted.

471 Why do the travel time savings differ for trips that start or end in Rockville and Gaithersburg? The travel time savings should be the same if the same "one mile detour" is used for both trips.

The slight difference between the travel time savings for trips between Rockville and Gaithersburg could be due to numerical rounding and different traffic volumes on the ICC and the local roads. Because the travel times for these two similar trips are approximations, the reported difference—a total of four minutes—in travel time savings is not meaningful. In Table IV-104, only trips where the travel time improves by either 20 percent or 10 minutes or more compared to the No-Action alternative are highlighted as having the greatest travel benefit.

472 The FEIS does not consider the impact on I-95, Georgia Avenue, and other feeder roads that would be overwhelmed by additional traffic from the ICC. Each of these roads would have severe congestion near the ICC interchanges and the impact of the added ICC traffic

needs to be included in an analysis of how these roads would operate with the ICC.

The ICC FEIS does include an analysis of the north-south (e.g., MD 97, MD 650, I-95, etc.) and east-west roads in the study area that would be positively and potentially negatively affected by the construction of the ICC (The effects of the ICC on these and other roads in the study area are shown in Chapter IV.J of the FEIS). In addition, the Lead Agencies performed a more detailed study of the effects of the ICC on I-95 and I-370/I-270 as part of a separate federal requirement called Interstate Access Point Approval (IAPA).

473 Intersections in the southern part of the study area were not included in the traffic analysis. In particular intersections near the Capital Beltway, where the worst congestion in the region is, were not included.

More than 50 intersections all around the study were included in the detailed traffic analysis for the ICC. The intersections included were chosen either to represent some of the most heavily traveled or to ensure a geographic spread throughout the area. As indicated in several places in the FEIS (Chapter III.B), the ICC build alternatives are intended to serve a travel market north of the Capital Beltway. There is another planning effort currently ongoing for alternatives to improve the Capital Beltway. However, there were several intersections in the southern portion of the study area included in the analysis including several along Randolph Road along with the intersection of Powder Mill Road and Cherry Hill Road.

474 The FEIS should show additional lanes on I-95 between MD 212 and I-495 as a result of the ICC. Likewise, a "logical terminus" analysis is needed to document that the additional traffic from ICC would not overwhelm I-95, or SHA must fully disclose the impacts of widening I-95 to the north, including reconstruction of Brooklyn Bridge Road over I-95.

I-95 is currently an eight lane section (four lanes northbound and four lanes southbound). Interchanges with MD 212, the ICC, future Contee Road, and MD 198 will be accommodated with a combination of ramps and collector distributor (CD) roads. As shown in Appendix A, Plate 37 of the FEIS (I-95 Station 820), the combination of these various roads and ramps totals 18 lanes, but the number of through lanes on I-95 remains at 8. The Lead Agencies determined that the ICC study area constitutes a project with logical termini at the start of the study process. Any impacts associated with interchange construction, including improvements along I-95, have been included in the decision to select Corridor 1.

475 While the ICC is forecast to increase vehicle miles of travel ("VMT"), reducing per capita VMT is a key but unmet objective of the adopted metropolitan Washington Regional Transportation Plan. Due to projects like the ICC, which the FEIS admits will spur more development at the edge of the region, the regional plan fails to accomplish its VMT reduction objective.

The Transportation Planning Board (TPB) developed a vision which serves as the policy framework that guides the development of the financially constrained long-range plan (CLRP). The TPB vision includes a vision statement, goals, strategies, and objectives for the region and the regional transportation system. Although one of these regional objectives is to reduce the per capita vehicle miles traveled, this objective is intended to apply to the entire transportation system and not one specific project, such as the ICC. Not every transportation project is designed to meet every objective, which is why it is important to apply these goals and objectives to the entire transportation network. This vision helps guide the selection process for the CLRP so that an appropriate balance of projects capable of meeting regional goals is included in the plan. The ICC contributes to the TPB by meeting several of its goals and objectives, including contributing to a comprehensive range of choices for users of the region's transportation system; promoting a strong and growing economy throughout the entire region; creating a new connection in a web of multi-modal transportation connections that provide convenient access between regional activity centers; reducing regional congestion; supporting

options for inter-regional travel of passengers and goods; and increasing connectivity to Baltimore/Washington International airport.

476 **The FEIS contains little information about the Express Bus Service that is allegedly part of the ICC project. The Lead Agencies have yet to conduct or present any detailed analysis of this service. The FEIS does not contain a map of the bus routes and services assumed in the cursory FEIS express bus ridership analysis, information about the assumed bus service levels and characteristics, analysis of the capacity utilization of the assumed bus services, nor any information on the character, purpose, and length of the transit trips purportedly served by this new service. The FEIS is therefore inadequate as it fails to provide (or even consider) information critical to decision makers and the public to determine whether the preferred alternative meets the purpose and need.**

Both the FEIS and the Travel Analysis Technical Report include information and a description of the representative Express Bus lines/routes that were used to model and study the effectiveness of Express Bus Service along the ICC. In addition, a separate Express Bus Service Plan Study will be conducted to determine the exact characteristics and needs for the bus service (i.e., location and routes, number of buses, schedule headways, etc.). The Maryland Department of Transportation remains committed to providing Express Bus service along the ICC, and this Service Plan study will be completed prior to the completion of construction of the ICC.

477 **The omission of the analysis of express bus service calls into question other results reported in the FEIS. The considerations endemic to express bus service, such as the number of buses traveling on the ICC, tolling for buses, exits for bus stops and transfers, will have an effect on the performance of the ICC which is not currently included in the traffic modeling as well as environmental analyses, such as the Mobile Source Air Toxics ("MSATs") analysis conducted by the Lead Agencies and the PM 2.5 analysis that is yet to be completed. The Record of Decision should not be issued until the Lead Agencies complete the study for the proposed express bus service and updates the traffic modeling and environmental analyses to take this into account.**

Both the FEIS and the Travel Analysis Technical Report include information and a description of the representative Express Bus lines/routes that were used to model and study the effectiveness of Express Bus Service along the ICC. In addition, a separate Express Bus Service Plan Study will be conducted to determine the exact characteristics and needs for the bus service (i.e., location and routes, number of buses, schedule headways, etc.). The Maryland Department of Transportation remains committed to providing Express Bus service along the ICC, and this Service Plan study will be completed prior to the completion of the ICC.

The study of a specific set of representative routes provided the team with the opportunity to judge the overall applicability, potential impacts and effectiveness of Express Bus Service along the ICC, as well as to understand the potential impacts of such service.

478 **The Lead Agencies' use of a single land use forecast for both ICC-Build and No-Build alternatives assumes that the ICC would have no impact whatsoever on land use as it evaluated traffic and air quality impacts. This assumption not only defies logic, but runs counter to a number of recent federal court rulings that have found it imperative that environmental reviews for major highway projects consider secondary and induced impacts on land use and traffic. Recognition of induced traffic was boosted in January 1997, when a U.S. District Court ruled that the Illinois Department of Transportation must consider effects of highway construction on development by tying its competing "build" and "no-build" scenarios to corresponding socioeconomic and land-use forecasts. In 2001, it was found that FHWA had erred by using identical population and growth forecasts for Build and No-Build alternatives in its evaluation of impacts. In short, there is legal precedent for considering different land use patterns when comparing No Build and**

various Build alternatives.

The EIS did consider the effects of Secondary and Cumulative Effects with the sensitivity analysis described in Chapter IV.J, of the FEIS. The Lead Agencies determined the effect of Cooperative Forecast Land Use 6.4A on the ICC, and established that there will be sufficient capacity available on the ICC to accommodate the additional traffic associated with this land use forecast.

Using multiple land uses for modeling the build and no-build scenarios would require using Land Use Round 6.4. Round 6.4 growth forecasts were never adopted by MWCOG and its constituent governments. The most recently approved Cooperative Forecast when work on the EIS began, Round 6.3, was used for the EIS and a sensitivity analysis was performed with the next approved land use, Round 6.4A. Therefore the SMI analysis used an unapproved land use forecast, Round 6.4. Furthermore they modified the growth pattern for transit-oriented alternatives, which could not have been done with the same rigor as the Cooperative Forecasting process would have used, and those forecasts would probably not have been approved by MWCOG as was the land use forecasts used for the ICC FEIS. Each round of growth forecasts undergo a rigorous testing process and are approved by regional planning directors before they are used for modeling, which never happened with Round 6.4. Therefore the model cannot be applied using the Round 6.4 forecast. Since this growth forecast was never approved, it is not an appropriate basis for modeling.

The Lead Agencies did consider the effects of SCEA in the sensitivity analysis in Chapter IV.J of the FEIS. SHA determined the effect of Land Use 6.4A on the ICC and determined that there will be sufficient capacity available on the ICC to accommodate the additional traffic associated with this land use.

479 **A number of serious deficiencies with the computer transportation modeling methods, identified by Environmental Defense and others in comments to the DEIS, remain unresolved. Further, the FEIS response to these comments is inadequate and fails to disclose the methods underlying the Lead Agencies' findings. The FEIS makes no attempt to respond to any of the six unresolved transportation modeling issues documented in those earlier comments. Moreover, the response of the Lead Agencies to modeling comments raised by others is inadequate and not fully documented.**

The Transportation Planning Board (TPB) responded to the six deficiencies identified by the Transportation Research Board (TRB) and those responses are provided in Appendix F of the Travel Analysis Technical Report.

480 **Appendix G and Appendix F of the ICC Travel Analysis Technical Report are not included in the PDF format of the ICC Travel Analysis Technical Report. In addition, we note that no documentation of the Lead Agencies' evaluation of the Version 2.1D model is provided in the FEIS. Without access to these documents, we, and other members of the public, cannot fairly comment on or evaluate the information they include. We have requested an extension of the comment period in part to enable us to review these documents that are part of the FEIS.**

Appendix G and F were provided in PDF format with the Draft EIS. These appendices have not changed since that document was published. An additional CD of these appendices were provided to the commenter.

The comment period was extended to April 11, 2006.

481 **In earlier communications with SHA we raised our concerns about the adequacy of the Transportation Planning Board model for evaluating the ICC FEIS. SHA rebuffed our requests to participate on a technical modeling oversight panel for the DEIS analysis to help address modeling integrity issues in a constructive fashion. The Lead Agencies**

should upgrade the modeling used to support a new EIS or a supplemental EIS for the ICC before proceeding to a record of decision.

A technical committee comprised of local travel forecasting and transportation planning professionals, and a representative from FHWA who is a travel forecasting professional participated on a technical modeling committee that reviewed the validation of the travel forecasting model used for the ICC. This committee concluded that the model performed well and could be used for forecasting 2030 travel demand in the ICC corridor.

The Lead Agencies do not believe an SDEIS is needed. Title 23 CFR, Section 771.130, Supplemental Environmental Impact Statements (SEIS) states that an EIS shall be supplemented whenever the Administration determines that changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or new information or circumstances relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. For this project, none of these conditions currently exist, and therefore, an SEIS is not warranted.

482 **There are a number of serious problems with the sensitivity analysis in the FEIS. First, in the test run reported in the FEIS, there is an apples to oranges comparison between the preferred alternative build scenario and no-build baseline scenario. In this run, the Lead Agencies combined the out-of-date model version 2.1C with the Round 6.4A growth forecast to produce modeling results for the ICC preferred alternative route only. The FEIS then compared these results with the no-build alternative, which was based on an earlier growth forecast, Round 6.3. Recall that Round 6.3 included 50,000 more employees in Montgomery County. This was due to an error in over counting jobs in year 2000 data, which was corrected in the Round 6.4 forecast. Round 6.4A added 25,000 jobs to the baseline figure of Round 6.4, representing growth due to the ICC.**

The sensitivity test did not compare the build alternative to a baseline, but compared the build alternatives using 6.4Aland use with the build alternatives using 6.3 land use and determined that the ICC would have higher volumes with the 6.4A land use.

Cooperative Forecast 6.4A land use was modified for employment definition differences in the Washington and Baltimore areas. In order to use the 6.4A Land use with the 2.1C model and maintain a consistence between the model and land use those modifications were not included in the 6.4A land use when it was analyzed with Version 2.1C modified. This is because Version 2.1 C modified had already adjusted for those differences in another fashion.

483 **Two additional, similarly severely flawed, sensitivity test runs were made by the Lead Agencies, and not reported in the FEIS. These runs, though not mentioned in the FEIS, were reported in a May 2005 letter from SHA to County Council members Phil Andrews and Marilyn Praisner. These tests were apparently as follows: the first test inappropriately combined the Round 6.4 forecasts with Model Version 2.1C; and the second test inappropriately combined Round 6.3 and Version 2.1D. Both tests were run for the two build alternatives only. The only data sent with the letter showed "screenline" data for the various combinations, which is meaningless since land use inputs were mismatched with the traffic models. The output parameters presented are not useful in judging the variation caused by differences in growth, which is the critical question asked by these sensitivity tests.**

The tests referred to by the commenter did not mismatch land use forecasts and traffic models. Cooperative Forecast 6.4A land use was modified for employment definition differences in the Washington and Baltimore areas that existed with Cooperative Forecast 6.3. In order to maintain consistency between the 6.4A land use and the 2.1C model, those modifications were not included in the 6.4A land use when it was analyzed with Version 2.1C modified. This is because

Version 2.1 C modified had already adjusted for those differences in another fashion. The sensitivity analysis described in Chapter IV.J of the FEIS assessed the effect of Land Use 6.4A on the ICC and determined that there will be sufficient capacity available on the ICC to accommodate the additional traffic associated with this land use.

484 The FEIS fails to document or reference the basis for its determination that induced development would not impact mobility along the ICC.

The Lead Agencies documented the basis for its determination that induced development would not impact mobility along the ICC. There is sufficient capacity for the ICC to accommodate additional traffic based on the land use forecast. The ability of the ICC to accommodate additional traffic volumes are detailed in Chapter IV.J of the FEIS.

485 The FEIS fails to quantify impacts to the local roadway network.

The FEIS quantifies impacts of the ICC alternatives to the local roadway using level of service (LOS) and volume to capacity ratios (V/C) for intersections in the local roadway network. Since traffic flow is controlled by intersections, intersections serve as the points of evaluation for the local roadway network.

Relatively small numerical changes in V/C ratios can have big impacts on the road conditions drivers experience each day even without changes in LOS ratings. For example, the intersection at MD 182/Ednor Road and Norwood Road has a LOS grade of F during both the AM and PM peak hours under both the No-Action and Corridor 1 alternatives, but the No-Action V/C ratio is 1.39 and the Corridor 1 V/C ratio is 1.25. Under the No-Action alternative this intersection is at capacity for 12 hours per day, whereas the same intersection is at capacity for only 9 hours per day under the Corridor 1 alternative. This V/C ratio improvement of .14 reduces the hours the intersection is at capacity by three hours per day.

The LOS was calculated for several intersections using the Critical Lane Volume (CLV) technique for the AM and PM peak periods. The LOS and V/C results for key intersections for both the AM and PM peak hours under the three alternatives are presented in FEIS Chapter IV.J, Table IV-111 and Table IV-112 (pages IV-371-374). For the No-Action alternative, V/C ratios will exceed 1.2 at ten intersections during the AM and eight intersections during the PM. Under the Corridor 1 alternative, the number of intersections with V/C ratios over 1.2 will decrease to 7 in the AM and 6 in the PM (see Table IV-110 on page IV-370). This translates to fewer hours of congestion experienced throughout the day. Furthermore, the FEIS provides an estimate of the number of hours that key intersections would operate at or over capacity for each alternative. Compared to the No-Action alternative, Corridor 1 would reduce the number of hours that the study intersections would operate at or over capacity from 217 to 165, a 24 percent improvement.

486 To address the fundamental comparison problems in the EIS modeling, the Lead Agencies at a minimum need to re-run the model as follows: i) run the no-build alternative, using Model Version 2.1D and the Round 6.4 forecast input; ii) run the ICC preferred build alternative, using Model Version 2.1D and the Round 6.4 forecast; and iii) run the ICC preferred build alternative, using Model Version 2.1D and the Round 6.4A forecast. This analysis should take into account the interaction of changes in forecast regional job-housing imbalances for future years with the assumptions for external traffic coming into and leaving the modeled region, in line with the recommendations of the 2004 FHWA Baltimore Travel Model Peer Review

Additional modeling is not necessary using Round 6.4 because Round 6.4 growth forecasts were never adopted by MWCOG and its constituent governments. Each round of growth forecasts are approved by regional planning directors before they are used for modeling, which never happened with Round 6.4. Therefore the model cannot be applied using the Round 6.4 forecast. Since this growth forecast was never approved, it is not an appropriate basis for

modeling. The model 2.1D#50 was run with the Round 6.4A land use to check the validation compared to 2.1C. The 2.1C model validated better. The 2.1D model was run for the build alternatives and not the baseline alternative, but the results were only compared to the 2.1C build alternatives.

487 **Although the FEIS claims that the ICC will substantially improve the volume to capacity ratio ("V/C") of "nearly half" of the intersections at the failing level of service ("LOS") grades of E and F in the AM Peak hour, this observation exaggerates even what the Lead Agencies' data indicates about the ICC. In fact, based on the Lead Agencies' data, only 10 out of 27, or roughly 1/3 of intersections, will achieve an even 10% improvement in that peak hour. Further, while improvement from one letter "grade" to the next better one may be perceptible when a 10% or higher improvement is achieved, when that improvement means going from one "F" Level of Service with a 1.39 V/C to another "F" LOS at 1.25 V/C, improvement is not noticeable.**

A ten percent improvement in an intersection's V/C ratio will result in a significant and noticeable improvement of traffic conditions at that intersection. A reduction in V/C ratios from 1.39 to 1.25 can result in a reduction of three hours per day that an intersection is at or over capacity. Although the V/C ratio changes by only 0.14, an intersection will have a noticeable improvement. An intersection can experience this improvement while retaining an LOS F, which measures performance during the AM or PM peak hours and not throughout the day. Similar reductions in V/C ratios at other intersections will lead to less congestion in the study area throughout the day.

For example, the intersection at MD 182/Ednor Road and Norwood Road has a LOS grade of F during both the AM and PM peak hours under both the No-Action and Corridor 1 alternatives, but the No-Action V/C ratio is 1.39 and the Corridor 1 V/C ratio is 1.25. Under the No-Action alternative this intersection is at capacity for 12 hours per day, whereas the same intersection is at capacity for only 9 hours per day under the Corridor 1 alternative. This V/C ratio improvement reduces the hours the intersection is at capacity by three hours per day.

Thirty-seven percent of intersections at the failing LOS grades of E and F in the AM peak hour will achieve a 10 percent or greater volume to capacity ratio (V/C) improvement in the AM peak hour. Even in cases where the LOS grade does not change for an intersection, improvements in the V/C ratio will produce noticeable improvements. Regardless of an intersection's LOS, an improvement in the V/C ratio reduces the total number of hours that an intersection is at capacity each day. The LOS rating measures an intersections performance during the AM and PM peak hours; whereas the V/C ratios indicate if those peak hour conditions spill over into other times of the day.

488 **The FEIS states that no intersections reflect degraded V/C greater than 10% or more. This statement is in contradiction with the Lead Agencies' own data, which indicates degraded V/C for: i) U.S. 1/Contee Road, at -14%; ii) U.S. 29 N.B./Briggs Chaney, at -30%; iii) I-95 N.B./Contee at -119%; iv) MD 97/Bel Pre at -15% (PM peak); v) U.S. 1/Ritz Way at -11% (PM peak); and vi) 197/198 at Irving Drive, at -19% (PM peak). In the PM peak, 38 of 50 V/C ratios show "improvement," but many of those improvements are so miniscule as to be unnoticeable by the traveling public.**

The FEIS does not state that no intersections reflect a degraded V/C of 10 percent or more. The FEIS states that with Corridor 1, of the 27 intersections operating at LOS E or F in the AM peak hour in the No-Action alternative, none reflect a degraded V/C ratio of 10 percent or more. None of the intersections cited as contradictory examples fit the criteria—operating at LOS E or F in the AM peak hour in the No-Action Alternative—of the statement made in the FEIS. In the PM peak, 38 of 50 intersections show V/C ratio improvements. In aggregate these improvements combined with AM peak improvements results in a reduction of 52 hours per day that the intersections are at or over capacity. This represents a 24 percent daily savings in the number of

hours that the study-area intersections are at or over capacity.

Even relatively small changes in V/C ratios at an intersection can result in significant traffic improvements. For example a reduction in V/C ratios from 1.39 to 1.25 can result in a reduction of three hours per day that an intersection is at or over capacity. Many of these changes throughout the roadway network will provide a large aggregate reduction in congestion.

489 The FEIS calculation of travel time savings suffers from another flaw. The FEIS reports a travel time savings of 3,000 hours/year for Corridor 1, but does not report the total amount of travel time in or through the study area (the denominator), so it is not clear whether 3,000 hours' savings is significant or insignificant in its own right.

The EIS did not analyze the total amount of travel time in the study area. The Lead Agencies considered several other factors in analyzing alternatives, such as hours of congestion, intersection LOS, highway LOS, and travel time comparisons for trips on the ICC.

Corridor 1 will result in an estimated annual travel time savings of approximately 3,000 hours during the AM peak every weekday for individuals who are making trips on the ICC. With the No-Action Alternative the estimated aggregate travel time for these trips is 7,079 hours. With Corridor 1 estimated travel time is 4,087 hours for the same trips. This travel time savings represents a 42 percent improvement in travel time for Corridor 1 over the No-Action Alternative. Furthermore, Corridor 1 will reduce the hours that intersections operate at capacity by 24% for people not using the ICC, which will result in additional travel time savings within the study area.

490 The ICC will clear the chronic bottleneck at I-270 and the Beltway and at I-95 and the Beltway.

Improved mobility and safety in the ICC study area is not designed or intended to relieve Capital Beltway (I-495) congestion. This has been true throughout the ICC's history. The ICC serves a different travel market than does the Beltway, which is intended for motorists traveling to and from communities and employment centers that surround the Washington, DC urban core, whereas the purpose of the ICC is to connect the growth corridors of I-270 and I-95 in eastern Montgomery County and northwestern Prince George's County. The Beltway has reached its current capacity, and is congested most hours of the day. To address this, an I-95/I-495 Capital Beltway Study is currently being conducted to evaluate improvements to Maryland's 42-mile portion of the Capital Beltway, and is being coordinated with a similar study by Virginia DOT. Although the focus of that study is on provision of managed lanes, improvement of interchanges will also be considered. For more information about the Capital Beltway Study, please contact the project manager Ms. Sue Rajan at (410) 545-8514 or toll-free at (800) 548-5026.

491 Predictions made regarding travel time savings cannot be evaluated by the public unless the specific starting and ending locations are provided. Where are the starting and ending points for trips and what routes were modeled for trips?

The travel demand model was used to predict travel times for the future Build and No-Action scenarios, and do not include specific landmarks within each travel analysis zone. Each traffic analysis zone includes a "centroid," or central node, that was used to represent a more exact location. The same centroid location was used to calculate travel times between origin and destination pairs for the Build and No-Action scenarios. The Build and No-Action travel times were compared to determine the difference, and thus the reduction, between them. Further information about the traffic analysis zones is included in FEIS Chapter IV.J and in the Travel Analysis Technical Report, which is available on line at www.iccstudy.org.

492 The FEIS response to comments 1425 and 2112, forecasts for trucks, an accident rate of 53/year and fatality rate of one/year (in 2030). Assuming that these rates are not underestimated, the FEIS fails to use a risk analysis to show how many accidents and fatalities would be generated by omitting a weight and inspection facility along the ICC.

The lead agencies cannot use as an excuse that there is no model for the effectiveness of roadside inspections for preventing crashes avoided and lives saved. The reason is that the U.S. Department of Transportation has posted such a model for predicting crashes avoided and lives saved at the web site: http//ai/fmcsa.dot.gov/Program/Measures/PM/PerfMeas.asp. If safety is indeed a serious purpose of the ICC, it would behoove the lead agencies to tell the public how "safe" the ICC by dismissing weigh and inspection facilities.

The Lead Agencies did consider the crash rates in the technical studies used to make the decision to Select Corridor 1. Chapter IV.J and the Travel Analysis Technical Report contain information on crash rates for various types of vehicles and conductions.

The Lead Agencies considered truck weigh stations along the ICC right-of-way and determined that there were sufficient capacity and facilities elsewhere in the transportation network and a facility was not needed along the ICC. There will be continued opportunities to revisit weigh in motion facilities on the ICC and other Maryland Highways.

Truck weigh stations are available along I-495 and weigh in motion facilities are coming on-line to reduce the need for traditional truck weigh stations. The SHA is committed to continuing monitoring the safe and efficient movement of goods.

493 **The FEIS failed to address my comment regarding p. IV-3 10 of the DEIS pertaining induced demand. Although the FEIS response to comment 2105 provides an explanation from FHWA, it fails to take note that FHWA has come up with a fairway for forecasting induced demand due to highway capacity expansion that the four-step urban travel demand models are otherwise unable to incorporate. This FHWA paper "Estimating Induced Travel, Emissions and Benefits in Highway Corridor Analysis" describes the model called Spreadsheet Model for Induced Travel Estimation (SMITE), which is available at www.fhwa.dot.gov/steam/links. The FEIS cannot use some FHWA "official explanations and statements" to support certain arguments that favor the ICC and at the same time ignore FHWA "official explanations and statements" that detract from the ICC.**

The SMITE model is a spreadsheet that has limited application to project-specific planning exercises like this study of the ICC. SMITE is a sketch-level planning tool far less sophisticated and appropriate than the detailed travel demand modeling performed as part of the ICC study effort.

494 **The FEIS failed to address my comment regarding p. IV-325 of the DEIS about the number of transit riders. The FEIS confused and equated "4,400 riders" (in the text) with "4,400 trips" (in Table IV-95). It is basic knowledge in transit that the number of riders is about half of the number of trips because a transit rider on the average makes two trips per day on transit (one in the AM rush and one in the PM rush). Thus, the number of new riders should be 2,200 if the number of trips is actually 4,400.**

Table IV-107 includes 4,400 "new transit trips" estimated to be made using the express transit service using the ICC. The information in the table is correct. The text does state that Corridor 1 would generate 4,400 new riders. This can be construed as new patrons, which was not the intent. However the table clarifies the text and clearly states that these are new transit trips.

495 **The FEIS failed to address my comment that east-west roadway segments were included so that the "crash rate" would look excessively high when in reality it should not. The FEIS response to comment 1410 notes that there is an east-west component to north-south or radial travel. The problem with the response is that the response fails to distinguish between the (i) proportion of crashes occurring in the east-west component of predominantly north-south travel normalized by east-west vehicle miles traveled that should be included in the calculation and (ii) proportion of crashes occurring in**

predominantly east-west travel normalized by east-west vehicle miles traveled that should be included in the calculation. The latter [i.e., (ii)] should exceed the former [i.e., (i)]. However, because the proper proportion (or weighting) of (ii) versus (i) was NOT included in the calculation of crash rate, north-south travel, which has a much higher crash rate as shown in Table 1-6 of the DEIS, biased the calculation resulting in the specious conclusion that a high crash rate justifies the need for the ICC.

It is not possible to isolate crashes on north-south routes that are due to east-west travel for existing conditions or for 2030 forecasts. However, it is possible to report crashes on east-west routes such as MD 198, Randolph Road and other routes included in the FEIS. The existing weighted crash rate for all of these east-west roads is 237 crashes per 100 million vehicle miles traveled. In 2030 it is projected that the weighted crash rate for east-west facilities only will be 280 crashes per hundred million vehicle miles traveled if an ICC is not constructed and if the ICC is constructed the crash rate is projected to be approximately 180 crashes per hundred million vehicle miles traveled. Refer to FEIS Chapter IV.J.4.h for more information on the accident analysis.

496 The FEIS failed to address my comment pertaining to double-counting of highway sections operating at LOS E or LOS F during the peak hours.

The information in the FEIS (see FEIS Chapter IV.J) was correct and the segments were not double-counted.

497 The Lead Agencies distort their own findings on traffic safety, claiming that the ICC would improve safety when it does not.

The safety analysis conducted for the study clearly indicates that access controlled highways designed like the ICC are safer than many other types of roadways in the study area. This increase in safety along the ICC would also bring about an overall safety improvement in the study area (see FEIS Chapter IV.J)

498 The ICC study uses job accessibility but not household accessibility as a measure of effectiveness.

Employment/Job accessibility is a standard measure of effectiveness used in assessing accessibility. A significant number of people choose the location their residences based on how accessible jobs are to them.

499 If an alternative is invalid because it increases travel on certain arterial roads, then the preferred ICC alternative is also invalid, because it also increases travel and congestion on several key arterial roads. The agencies use of increased travel on roads such as Fairland and Bonifant Road to eliminate an alternative with less environmental impact than the full ICC is therefore arbitrary and capricious – unless it is also applied to the Corridor I and II alternatives as well.

The amount of traffic removed or added to the arterial roadway network was a key measure used to evaluate the transportation effectiveness of each of the options studied. Whereas the ICC build alternatives added traffic too few arterials that would intersect with the new highway, the Selected Alternative also reduced traffic volumes on more than 50 miles of local arterial roadways (refer to FEIS Chapter IV.J). In contrast, alternatives such as the Upgrade Existing Roads Alternative that were dropped from detailed study would have added significant volumes of traffic to the local roadway network.

500 To better understand the true nature of travel demand in the study area, it would be useful to go beyond the selective origin and destination pairs provided by the agencies, and look at all types of travel to and from the study area. Using the full auto trip matrix obtained from the agencies, I performed such an analysis and reported on it in my public

comments on the DEIS last year. I concluded that about 90% of study area trips are either local (traveling within a community such as Rockville) or radial (traveling north-south to such destinations as Washington, D.C., Bethesda, Silver Spring, and College Park). Furthermore, I projected that only 1% of all study area trips actually go between the I-270 and I-95 corridors. The agencies did not respond to the latter conclusion, but they confirmed the dominant nature of radial trips in their response (#1558, mentioned previously). Nowhere in the body of the FEIS – not in the purpose and need, the alternatives analysis, the traffic analysis, or the final selection – is this basic truth admitted to: that the need for cross-corridor travel is insignificant compared to other travel patterns.

The 1% statistic presented by the author is irrelevant, because one of the key elements of the ICC's purpose and need is to link I-270 and I-95 as well as all of the economic centers and communities between them. The studies did include a complex and comprehensive analysis of trip patterns, but the chart presented in the FEIS to illustrate the travel times savings were includes a representative set of origin-destination (O-D) pairs (refer to the Travel Analysis Technical Report for the complete set). As stated by the commenter, there are thousands of different origins and destinations in a study area of this size. For more information on the travel analysis zones (TAZs) and the entire travel demand exercise, please visit the project website at www.iccstudy.org and view the Travel Demand Analysis Technical Report.

501 **We can also get a sense of the relative impact of the ICC on overall travel times during the AM rush hour, as opposed to the selective travel times presented by the agencies. Only 5% of study area trips would use the ICC, and trips using the ICC would save an average of 7 minutes – well under the savings for the specific trips, such as Rockville to BWI, highlighted in the FEIS.**

One of the most significant benefits of the ICC is the savings of travel time. The data in the FEIS (see Chapter IV.J and the Travel Analysis Technical Report) shows that people will save time with the ICC. The FEIS presented a matrix of travel times from a representative list of origins and destinations for both the AM and PM peak periods. The matrix includes a cross section of O-D pairs for both shorter trips within the study area and longer trips through the study area.

502 **Improvements to the three intersections along US 29 shown on Figure I-4 to clover leaf interchanges would improve the No-Build alternative. Therefore the benefits of the No-Build alternative are underestimated.**

The improvements to the intersections along US 29 are included in the baseline assumptions (they are included in the MWCOG's Constrained Long Range Plan) and therefore are considered in all future forecasts, including the Build alternatives and the No-Action scenario.

503 **Why does the current FEIS project less traffic in 2030 than the 1997 draft study projected for the year 2020? This is of particular concern to the extent the 1997 study was used as the basis for rejecting various alternatives to the ICC, including the Upgrade Existing Roads Alternative.**

There are two primary reasons that the 2030 forecasts are different from the 2020 forecasts from the 1997 DEIS. First, the modeling procedure and the model used for this planning study differ from those used in the mid 1990s when the prior study's modeling was completed. The current MWCOG model uses a "speed feedback" method to help improve the modeler's ability to account for the capacity of the existing roadway network. This process tends to lead to slightly lower forecasts because it more readily takes into account the limited capacity of the existing roadways. The second reason for the change is the application of the tolls at a higher level than was considered in the previous study.

504 The residents of our area have already endured significant construction (i.e., along US 29), and we should not have to endure several additional years of construction time so that someone in Rockville can save a few minutes when they want to travel to Prince George's County.

The ICC will benefit most area travelers even if they are not using the ICC directly; further, most trips in the study area will not be made by those traveling from one end to the other. Construction related impacts, detours and inconvenience are to be expected. The Lead Agencies will work closely with the selected contractor and designer to attempt to reduce impacts to all communities, including those impacted by the construction at US 29, north of Fairland Road.

505 Comment 82. The response is non-responsive. It merely restates the purpose and need statement without responding to the details of the question. 11. Page I -1 states: "...the local roads must accommodate extremely high volumes of traffic." However, the ICC would increase vehicle miles traveled by 20% over the No-Build option. Is the purpose of the ICC to accommodate existing volumes of traffic, to generate additional volumes of traffic, or to do both? Please explain your answer.

One of the purposes of this project is to provide increased mobility in the east-west direction in the study area. Increased mobility involves allowing more people to make desired trips at desired times of day, and to make those trips in less time. While the project is not intended to "generate additional volumes of traffic," a project that provides increased mobility, such as the ICC, will generally result in increased vehicle miles of travel (VMT). The traffic modeling results (see FEIS Chapter IV.J) confirmed that, as would be expected for this type of project, each of the build alternatives results in increased VMT. The traffic modeling also showed that, even with the increase in VMT, the ICC would provide relief for many overcrowded arterial roadways, by providing substantial new capacity for accommodating east-west travel. The result is a net benefit to the traveling public. The increased VMT reflects this benefit, because some users will choose to make longer trips, or trips that otherwise would not have been made, now that they have the option of a faster, more reliable east-west traveling option.

506 Comment 106. How does SHA respond to my statement that Montgomery County does not support evacuation or evacuation routes? Would this position by the County undermine the purpose and need for the ICC for reasons of Homeland Security?

Whether designated as emergency evacuation routes or not, roadways provide much needed mobility to the residents and workers within the study area for emergencies and for everyday travel. The ICC Selected Alternative has been shown to improve mobility for the area (refer to FEIS Chapter IV.J), and thus would be an important element of any evacuation plan; the same would be true of all limited-access facilities.

Also, it is commonly assumed that evacuation would only involve north-south. Travel movements, because of a perception that any emergency situation would involve evacuating Washington, D.C., and that there would be little need for east-west travel in that situation. In fact, emergency evacuation needs could arise anywhere in the metropolitan area, not just from an emergency in Washington, D.C. In addition, even for an evacuation that primarily involves north-south movements, the entire road network will be strained; high-capacity, limited-access transportation facilities, in all directions, would play an extremely important role in any large-scale evacuation.

507 Comment 278. My detailed questions related to bus travel on the ICC were lumped together with entirely different questions related to transit. My questions were not answered in whole or in part in a response that included much unrelated, extraneous information concerning transit plans in other parts of Montgomery County.

The comments and questions raised about Express Bus Service were made as part of #30 in your DEIS comment letter. The Lead Agencies remain committed to implementing and continuing to operate Express Bus Service along the ICC once it is constructed. The Selected Alternative includes the operation of Express Bus Service along the ICC and a budget of $20 million has been established for the continued study and capital costs of that service. Representative bus lines were studied during the planning phase to better understand the potential ridership and the impact on study area mobility of this important transit service. The results indicate that Express Bus Service could have a positive impact on mobility. As part of this ICC Study, MDOT has made a commitment to complete a more detailed Service Planning Study for transit service on the ICC. This study will determine, with much greater levels of certainty, what service lines will be provided and how that service will be provided (e.g., service headways, connections with other transit lines, ancillary parking lots, etc.). Some of the detailed questions you raise about the future usage and service headways cannot be answered until the bus service is in operation.

508 **Comment 369. If a multimodal highway is one that allows buses to use it, the ICC will be passively multimodal, meaning that buses will simply be allowed to use it, as is true of all but the smallest roads.**

The Selected Alternative will include Express Bus Service operating along with other vehicles. The difference between the ICC and other roads where buses operate is that the ICC will be priced to maximize service flow and minimize delays. Buses therefore will be able to operate at highway speeds and have a greater travel time savings and enhanced travel time reliability.

509 **Comment 764. The response, while partially complete, is contradicted by the facts to the point of being a self-serving justification. The unintentional irony is that most of the comment that was included in the FEIS version of the comment was presented in quotation marks because it came from this letter that I included and quoted from in my DEIS comments. SHA's blanket assertion that the ICC will improve safety in the study area ignores the specific concerns of this local fire professional: DEIS, Vol. 2 - Letter dated 9/12/03 from Michael J. Weiner, President, Sandy Spring Volunteer Fire Department, [VFD], Inc. to Sam Raker, Special Assistant to the Secretary of MDOT: "...Certainly with the ICC in place, our anticipation would be to see an up-tick in incidents...Will SHA pay for "emergency apparatus and personnel in anticipation of more severe incidents on the ICC" for new and/or existing eastern Montgomery County fire stations? If not, why not? How much would this emergency apparatus cost and what would be the annual salaries and benefits of this additional personnel?**

The Lead Agencies do not expect an "up-tick" in accidents. Access controlled roadways like the ICC are some of the safest roadways, with crash rates far below those for the other types of roadways in the study area (refer to FEIS Chapter I.E.5 and Chapter IV.J). The cost of extra emergency apparatus is not included in the cost of the project.

510 **Comment No. 1397. The crux of this detailed comment was to get verification or refutation of the way that I used the most basic mathematical calculations to arrive at the value of the average per person-trip for time and money saved. SHA has not answered this critical part of the ongoing debate about the purpose and need of the ICC. Does SHA agree that my calculations are correctly done and accurately characterize the average time and average user benefit savings per person-trip for SOV? If not, what is the correct calculation and what better characterizes the average time and average benefit savings per person-trip? If the calculations are correct, why is it a good taxpayer investment and commitment of federal and state resources to spend $2 to $3 billion dollars to save seconds and pennies per average person-trip? Please list and explain all reasons in detail. Can SHA quantify and group the amount of time savings for individual users? Can**

SHA list how many people would have travel time improvements in increments of 1 minute from 0 to 29 minutes and how many people would lose travel time in increments from 1 to 4 minutes?

The logic of dividing an aggregate total by a number of person-trips to illustrate what the average user will experience is quite misleading, especially for the particular set of numbers you have chosen. In particular, the number used for all O-D pairs, all 2191 traffic analysis zones are mostly those that lie quite far from the ICC impact area. In particular, this calculation is done for the entire greater Washington metro area—which includes all of the city of Washington, DC, as well as a large chunk of Northern Virginia that includes Prince William and Loudoun counties. These numbers are included to illustrate that the benefits primarily accrue to travelers to, from and in the impact area in Maryland— without leading to a worsening for the rest of the region. To make the point more clearly, one could arbitrarily drag down the per user benefits by including larger and larger areas—like the entire state of Virginia or Pennsylvania. Those would contribute many person-trips, the vast majority of which incur zero impact from the ICC (note also that the calculations in the citizen's comments are only approximately correct because the total trips are different under the different alternatives). The second distortion in the numbers considered here is that they combine peak periods with the off-peak. In the report, these are broken out separately because we would expect relative savings to be greatest when congestion is heaviest—i.e. during the peak periods. Therefore it would be more meaningful to examine the totals given for the ICC impact area, starting with Table VI-54; and in table VI-56, for the PM peak, we see that the relative benefit is in the order of 5 to 7%.

Nevertheless, the more useful way to examine the magnitude and incidence of these savings is to produce exactly the kind of information suggested here, namely relative frequency distributions of travel time savings per trip. While it is not possible to obtain the exact distribution for individual trips (the demand forecasting methodology used here relies on aggregate flows, and not on individual traveler trips), a very good picture can be obtained by looking at the average trip time reductions for different O-D pairs, or from all origins to selected destinations in the ICC impact area. Such information is presented in Figures VI-13 through VI-92, and summarized in histogram fashion in Tables VI-106 through VI-129. These show both graphically and in summary form the magnitude of the travel time savings revealed in this analysis.

511 **Comment 1398. The phrasing of the comment is entirely unacceptable because both of the sections from the DEIS that I quote and my subsequent, related questions have been paraphrased in such a manner as to completely alter the intent and to partially support the wholly inadequate response. Even with such obvious manipulation, the response does not stand up to scrutiny. The use of such design techniques as breakaway light poles has been a standard protection for single vehicle crashes with a fixed object for decades. It is inconceivable that accident rate and cost data and degree of injury and fatality data for limited access highways like the ICC and for local roads are not regularly compiled. I can only conclude that SHA does not want to answer these specific questions because the answers will not support the claims it makes in the Purpose and Need Statement concerning Community Mobility and Safety. According to Table IV-104, in 2030, there would be 5085 crashes with the No-Build option, 5075 crashes with Corridor 1, 5002 crashes with Corridor 2, 5056 crashes with Corridor 1 truncated and 4994 crashes with Corridor 2 truncated. The difference in crash rates between the No-Build option and the various Corridor 1 options is .2% to .6% and between the No-Build option and the various Corridor 2 options is 1.6% to 1.8%. Why are percentage differences of .2% to 1.8% in crash rates between the No-Build and ICC options significant? If these percentage differences are significant, what would be an insignificant percentage? Please explain in detail. Is the ICC Project Need of Community Mobility and Safety to lower the absolute number of accidents by a significant percentage or to allow more miles to be driven while leaving the total accident rate unchanged?**

In addition to the accurate FEIS response, the Lead Agencies add that even with an increase in

overall mobility, the number of crashes is reduced. As discussed in Chapter IV.J and in the Travel Analysis Technical Report, access controlled facilities, like the ICC will statistically have a far lower crash rate than arterials, partially due to the limited number of obstructions along the roadway itself. The Lead Agencies do in fact continuously collect crash data for major highways and use statistics to determine which roads and which types of roads have lower crash rates. These statistics can also be compared with other state highway agencies around the country to assess the crash rates on various types of roadways. Access controlled highways, like the ICC Selected Alternative, consistently have far lower crash rates than do arterial roadways. The Lead Agencies assert that any reduction in total number of crashes and crash rates is important, especially when the volumes of traffic are increasing.

512 **Comment 1398. Page IV-349 states: "Statistical analysis has clearly shown that crashes occur less frequently on access-controlled facilities such as the ICC compared to local arterials… Table IV-104 presents the results of the safety analysis of many roadways in the study area. As shown in the bottom row of the table, the ICC Build Alternatives could reduce the estimated number of crashes on study area roadways six to seven percent because the ICC would divert non-local traffic from local roads which have higher crash rates than the access-controlled ICC facility. It is estimated that with the Corridor 1 Alternative nearly 356 fewer crashes would occur on local roads in the study area than with the No-Action Alternative. Page I -1 states: "…the local roads must accommodate extremely high volumes of traffic." However, the ICC would increase vehicle miles traveled by 20% over the No-Build option. Is the purpose of the ICC to accommodate existing volumes of traffic, to generate additional volumes of traffic, or to do both? Please explain your answer. If the ICC generates 20% more vehicle miles traveled and allows people to drive farther to jobs, how is that impact compatible to the principle of Smart Growth? Please define your meaning of Smart Growth and provide local examples of limited-access highway-based Smart Growth. What would be the level of injury and number of deaths under the different options? What would be the cost of medical care and vehicle repair or replacement under the different options? How does the severity of injury, property damage and the death rate of ICC crashes compare to the severity of injury, property damage and the death rate of local road crashes?**

One of the purposes of this project is to provide increased mobility in the east-west direction in the study area. Increased mobility involves allowing more people to make desired trips at desired times of day, and to make those trips in less time. While the project is not intended to "generate additional volumes of traffic," a project that provides increased mobility, such as the ICC, will generally result in increased vehicle miles of travel (VMT). The traffic modeling results confirmed that, as would be expected for this type of project, each of the build alternatives results in increased VMT. The traffic modeling also showed that, even with the increase in VMT, the ICC would provide relief for many overcrowded arterial roadways, by providing substantial new capacity for accommodating east-west travel. The result is a net benefit to the traveling public. The increased VMT reflects this benefit, because some users will choose to make longer trips, or trips that otherwise would not have been made, now that they have the option of a faster, more reliable east-west traveling option (refer to FEIS Chapter IV.J).

This increased mobility is provided predominantly for residential and household growth that has occurred according to the local land use plans and to large extent within Priority Funding Areas (areas that state and local governments have identified for growth and public investment). The Maryland Board of Public Works also approved the ICC, in part because it served to connect major Priority Funding Areas. In accordance with Section 5-7B-05 of the Annotated Code of Maryland (the Smart Growth Act), the SHA, and the Maryland Departments of Planning and Transportation have determined that the Selected Alternative performs better to link the PFAs and therefore permits the State to provide state funding for the construction of the ICC.

513 **Comment 1399: The response is correct in only the most minimal of ways. Comment 1437: Response is incorrect. With as little as 10 fewer crashes between the No- Build and the preferred Corridor 1 option, this is a distinction without a difference. To state that "… the study area network would be expected to experience fewer crashes with the ICC than without it." would not be accurate, even using the lowest standard deviation, with just .2% separating the 2 numbers. If SHA can make a statement such as it wrote on Page IV-349 of the DEIS: "Statistical analysis has clearly shown that crashes occur less frequently on access-controlled facilities such as the ICC compared to local arterials…," then it must accept all of the principles of statistical analysis, such as a requirement to adjust for standard deviation. Furthermore, if such small numerical differences really mattered, it would follow that SHA would want to support the Corridor 1 truncated option over the Corridor 1 option, because there would be 19 fewer accidents with the truncated option, and hundreds of millions of dollars would also be saved in construction costs for building a shorter ICC. The difference in crash rates between the No-Build option and the various Corridor 1 options is .2% to .6% and between the No-Build option and the various Corridor 2 options is 1.6% to 1.8%. Why are percentage differences of .2% to 1.8% in crash rates between the No-Build and ICC options significant? If these percentage differences are significant, what would be an insignificant percentage?**

At best, under the use of the most minimal standard deviation, the accident rate would have to be considered identical between the No Build Option and the ICC. Therefore, it appears that this aspect of the Community Mobility and Safety claim of the Purpose and Need for the ICC has not and cannot be met. Is the ICC Project Need of Community Mobility and Safety to lower the absolute number of accidents by a significant percentage or to allow more miles to be driven while leaving the total accident rate unchanged?

The decision to identify Corridor 1 as the Selected Alternative was not made merely on the measure of improved safety and crash rates. The build Alternatives and options studied in detail each addressed the ICC Purpose and Need to some degree, and each would have impacted different aspects of the study area's environment. The Lead Agencies weighed these benefits and impacts and also considered the No-Action Alternative. While the measures used in the FEIS to compare mobility performance, safety benefits and environmental impacts were important considerations, no single measure alone was determinative. Instead, an accumulation of factors led the Lead Agencies to select Corridor 1, which was the Preferred Alternative. The advantages and disadvantages of each alternative are listed on pages VII-88 to VII-93 of the FEIS.

514 **Comment No. 1400: SHA provided a number of ways to determine what impact that the ICC would have on congestion on local roads by measuring future congestion: at intersections, on individual roads and at screenline areas that it chose. While SHA claims that "screenlines only give a sampling of traffic volumes on local roads," screenlines, in fact, sample all significant local roads as well as limited-access interstate segments. Looking at selected intersections and selected roads is clearly a far more limited analysis than looking at the impact of the ICC on traffic on multiple east-west roads in the study area corridor. I asked questions to determine what the TOTAL impact of the ICC on congestion would be. I can only assume that SHA concurs with my conclusions about the minimal overall impact of the ICC on all local roads where I conclude that the average overall decrease of local traffic is 1% per screenline segment and that my conclusion can be shared with confidence with the public. With average decreases of local traffic to six of the seven screenline areas of .5%, 1%, 1.5%, 2.4%, 2.9%, 5.7% respectively, and an increase of local traffic in one screenline area of 7%, based on my calculations, what do these numbers indicate about the impact of the ICC on local traffic? Is there a better method to determine the impact on local traffic of the ICC than averaging the various toll options? What are the results from other methods? Is it accurate to state that the average impact over the length of the ICC on local traffic is a 1% decrease? If not, why is it**

inaccurate and what would be a more accurate way to state the average impact over the length of the ICC?

The Lead Agencies used a variety of measurement tools and analyses to characterize the effect on mobility and traffic congestion. Some of the tools and methods are study area-wide, used to measure overall effectiveness, and others are localized to determine the projected effects on particular roads and intersections. The screenline analysis was used to show overall study area travel trends and to measure increases/decreases in study area travel and mobility. To better understand the localized improvements, the Lead Agencies analyzed the effects on a representative sample of the roadways and intersections that are accommodating this traffic today. For instance, there is no better method to analyzing the effect the ICC would have on Randolph Road, Norbeck Road and their intersections than to determine the projected future conditions on these actual roadways. This analysis can be found in the FEIS, Chapter IV.J.

515 **Comment 1470. SHA answered most of my question except for the following: Using the screenline comparison areas, what are the number of new bus riders and the percentage of total ICC users they represent?**

The Lead Agencies have not analyzed the number of new bus riders across the screenlines. Instead, the team estimated, based upon representative Express Bus routes, the number of bus riders and the number of new bus trips. This analysis is summarized in Chapter IV.J of the FEIS and presented in greater detail in the Travel Analysis Technical Report. For the Selected Alternative, the forecasts show more than 11,000 Express Bus transit trips per day, with 4,400 of them being new transit trips.

516 **Comment 1506. Table IV-116 of the FEIS states that while the ICC shows a rate of 49.4 crashes per hundred million miles traveled, 10% lower than the state rate of 54.67, the local roads show an average rate of 195.58 per hundred million miles traveled, 44% lower than the state rate of 348.98 for highways. Of the 34 roads analyzed, only 7 of the roads had crash rates equal to or exceeding the 348.98 figure. These 7 roads have 1715 crashes under the No Build option, 33.7% of the total. With Corridor 1, these 7 roads have 1650 crashes, 34.9% of the total, a drop of 65 crashes, or 3.8%, although 3 of the roads have more crashes and one is almost unchanged. Most of the decline is caused by just one of the 7 roads, which has 59 fewer crashes, although it, like most of the other 7, is a divided highway. This may mean that injuries and fatalities caused by crashes on local roads would be considerably lower than what the state figures might suggest and that the ICC will have a far lesser impact on injuries and fatalities because there are few nondivided highways. How do you also respond to the assumptions by Sandy Spring VFD President Michael Weiner about ICC crashes, such as "the expected increased severity of higher speed crashes" and "required to respond to fewer but more severe incidents occurring on the ICC."?**

The decision to identify Corridor 1 as the Selected Alternative was not made merely on the measure of improved safety and crash rates. Although Corridor 1 does reduce the number of study area crashes amidst an increase in overall traffic, the final decision was much more complex, taking into account mobility improvements; impacts to the natural, human and cultural environments; economic benefits and costs; and potential secondary and cumulative growth impacts.

Although traffic will be operating at higher speeds along the ICC than all or most of the study area roadways, statistically these higher designed roadways experience a crash rate far lower than rates along local roadways. Statistics also show that fatal crash rates are lowest for access-controlled expressway type facilities as well (refer to FEIS Chapter I.E).

517 **Comment 1560. This response, while accurate in general terms, does not provide any**

data to support the claims of accidents caused by mixing various types of vehicles. The fact that speeds would be much slower either allows for better reaction time to avoid crashes or results in crashes that cause far fewer injuries and fatalities than on faster non divided highways.

Statistics show that crash rates are far lower on access-controlled, higher- speed higher designed roadways, like the ICC (see FEIS Chapter I.E). There are numerous accidents of all types and severity on the local road network due to the dangerous mix of local, longer-distance, and service vehicles with bicycles and pedestrians. The number of potential conflicts due to the numerous driveways, side streets, and other access points contributes to the unsafe condition on the local road network. By taking many vehicles off of the local roads, traffic conditions become safer on the local network. Those vehicles that use the ICC would be able to travel safely at higher speeds due to the high design standards that are found on a limited access freeway like the ICC.

518 **The safety analysis does not compare the number of crashes that would occur on the ICC. The higher reduction would occur on Corridor 2, not Corridor 1.**

Table IV-116 of the FEIS does show the number crashes projected to occur on the ICC for all of the alternatives. Roadways with design features like the ICC typically show far lower crash rates than arterial type roadways. Future accidents along the ICC are estimated to be 340 and 346 per 100 million vehicle miles of travel for Corridors 2 and 1, respectively.

519 **The FEIS states that Corridor 1 would provide better access to jobs - 27% more compared to 18% more with Corridor 2, which amounts to only a 9% difference.**

The comment captures the comparison of improvements to accessibility to jobs correctly. Both Corridor 1 and Corridor 2 would provide improved access to jobs, with Corridor 1 providing better access to nearly 156,000 jobs, and Corridor 2 to approximately 107,000 jobs.

520 **The measures for evaluating travel time savings are statistically invalid because only 11 origin-destination pairs are shown and most of these are trips that are so similar that they are practically the same trip. The FEIS also contains contradictory statements about the comparison of Corridor 1 and Corridor 2 and no methodology is given. The difference in total travel time between the two corridors should be presented, not the difference between hours saved.**

The travel times savings matrix was developed using representative origins and destinations for all types of trips. Trips are represented from outside to inside the study area, contained only within the study area and trips through the study area. There are shorter trip pairs and longer trip pairs included in the analysis. The methodology for how the Lead Agencies developed the travel times savings is summarized in Chapter IV.J of the FEIS and in greater detail in the Travel Analysis Technical Report. The comment is correct that both build alternatives improve travel time savings and each alternative has an advantage for certain origin and destination pairs.

521 **The comparison of intersection congestion relief in Table IV-111, based on intersections with LOS E or F, shows no significant advantage to Corridor 1, because 11 intersections are better with Corridor 1, 11 are better with Corridor 2,and six are the same with either alternative. In addition, many intersections operate better with Corridor 2 than with Corridor 1, but most remain congested with either alternative. Of 17 intersections with LOS F, four would improve to better than LOS F with Corridor 1, compared to five with Corridor 2.**

Improvements with Corridor 1 and Corridor 2 are similar. The Lead Agencies agree that both build alternatives improve intersection LOS within the study area over the No-Action Alternative.

522 Increasing network capacity is not the goal of any regional or local plan. However, the support for this goal shows that Corridor 2 would use Norbeck Road Extended and the lower capacity of this segment of Corridor 2 increases congestion at intersections in the vicinity of Corridor 2. However, Table IV-108 shows that with Corridor 2, AWDT is strikingly higher at several links that would carry traffic avoiding the ICC. On the other hand, Corridor 1 has negative effects on certain parts of Georgia Avenue, US 29, MD 198, and I-95, which would carry 30,000 more trips per day with Corridor 1 than with Corridor 2.

One of the primary goals of the ICC, as stated in the project's Purpose and Need Statement is to improve study area mobility and safety. Table IV-108 shows the existing and projected Average Weekday Daily Traffic on study area roadways and is intended to show comparisons between alternatives. Both build corridors show an improvement in study area mobility and increases in AWDT on a few north-south oriented roads near planned ICC interchanges. This is to be expected as study area residents are traveling these roadway to access the ICC.

523 Norbeck Road east of Georgia Avenue should be widened to accommodate additional traffic from the Georgia Avenue interchange, in compliance with the Aspen Hill and Olney Master Plans (green median with access roads).

Widening Norbeck Road (MD 28) to master plan widths is not within the scope of the ICC study. However, the SHA is conducting a separate study to construct an interchange at the intersection of MD 28 and MD 97 (Georgia Avenue). With that project, there will be some widening of MD 28 through the interchange area.

524 Why does the ICC have to be six lanes when four lanes would be sufficient?

The forecasted future traffic volumes for the ICC (as a toll road) warrant six lanes for the majority of its lenth. Travel demand forcasts indicate that, even with the tempering effect of tolls, six basic lanes are needed for the ICC to operate at an acceptable level of service in 2030.

525 The FEIS analysis does not consider the preferred build alternative (Corridor 1) in the same section of the report as the No-Action alternative. It is necessary to consider traffic volumes, intersection and roadway LOS, and accident analysis for both of these alternatives to demonstrate that the preferred alternative will address the traffic issues identified in the Purpose and Need section.

The FEIS compares the forecast performance of the preferred build alternative (Corridor 1), the Corridor 2 alternative, and the No-Action alternative in FEIS Chapter 4.J.

In this section of the FEIS, the effects of all three alternatives on forecast traffic condition are detailed. Table IV-108 (FEIS pages IV-363 through IV-367) shows existing and forecast traffic volumes, Tables IV-111 and IV-112 (FEIS pages IV-371 through IV-374) show existing and forecast intersection LOS and V/C ratios, and Table IV-115 (FEIS pages IV-381 through 383) shows existing and forecast freeway segment LOS.

These tables provide a comparison of various traffic conditions forecast for both FEIS build alternatives and the No-Action alternative for the year 2030. Additionally, these tables include measurements for the base year 2000, which demonstrate how traffic conditions are anticipated to degrade by 2030, and which of the alternatives is best able to mitigate increased traffic in the study area in 2030.

The Purpose and Need section of the FEIS also quantifies congestion for a 2000 base year and for the 2030 No-Action alternative using 1) traffic volumes on east-west screenlines, 2) intersection and roadway levels of service, and 3) accident analysis. These metrics are used in this section of the FEIS to determine, in part, that congestion is expected to increase in the study

area between 2000 and 2030. Later in Chapter 4 of the FEIS, these same metrics (identified in the tables listed above) are used to compare the ability of the two build alternatives and the No-Action alternative presented in the FEIS to address the forecast congestion.

526 The FEIS implies that the ICC would address east-west congestion by providing additional roadway capacity - reducing traffic on other east-west roadways possibly to below 2000 levels, and certainly to well below forecast 2030 No-Action levels.

The FEIS never states nor implies that the ICC could reduce traffic volumes on arterial east-west roadways to below 2000 levels. The anticipated growth in the study area, even in the No-Action alternative, is substantial enough that any future transportation improvement project cannot be expected to reduce volumes below 2000 levels. To compare the forecast performance of each alternative in 2030 to observed conditions in 2000 is an inappropriate measure of effectiveness.

The FEIS compares the two build alternatives and the No-Action alternative to determine which would be most appropriate for relieving congestion in the forecast year 2030. The ICC Corridor 1 alternative can help relieve congestion and increase east-west mobility by improving the transportation network compared to the No-Action alternative in the year 2030. The traffic volumes reported in Table IV-108 (FEIS Chapter IV.J, pages IV-363 and IV-367) show that under the Corridor 1 alternative many east-west roads are forecast to have lower traffic volumes than under the No-Action alternative, including MD 28, MD 911, Briggs Chaney Road, MD 198, East Randolph Road, Cherry Hill Road, Musgrove/Fairland, Randolph Road, MD 108, Bel Pre Road, MD 115, Bonifant Road, Norwood Road, Shady Grove Road, Redland Road, Good Hope Road, Ednor Road, Contee Road, and Powder Mill Road

527 The FEIS modeling shows that traffic volumes will increase over the 2000 base year on other east-west roadways in the study area whether or not the ICC is constructed. For example the Capital Beltway traffic would increase by identical amounts with or without the ICC. The ICC reduces the traffic volume slightly at some east-west roadways.

The growth in the region will cause all traffic volumes to increase in the study area between 2000 and 2030, even under the No-Action alternative. Comparing the 2030 forecast performance of the proposed alternatives to the base year 2000 is an inappropriate measure of effectiveness.

Given that growth will occur regardless of the transportation facilities, it is important to compare the performance of the proposed alternatives in 2030. Compared to the No-Action alternative, the Corridor 1 alternative will lower traffic volumes on approximately 50 miles of roadway by at least 10 percent in 2030 (refer to FEIS Chapter IV.J.4.e). This will help to ameliorate the anticipated decline in levels of service compared to taking no action in 2030. Many of the roadways forecast to have reduced traffic volumes with the ICC are the collectors and arterials currently serving as the default east-west connections.

528 The ICC will be ineffective at meeting the project need of relieving congestion on other east-west roadways. At the farthest west screenline, I-270, despite the ICC, traffic volumes on both the Beltway and the arterials are shown as higher with the ICC than without it. For the central part of the project, forecast ICC traffic volume ranges from 9 to 67 times as much as the reductions shown in traffic volumes on parallel roadways. Even where the ICC performs best, at the eastern two screenlines - I-95 and US 1 - the forecast ICC traffic volume is 3 times the reduction in traffic forecast for parallel roads.

It is not the Purpose and Need of the ICC study to relieve congestion on east-west arterial roadways in the study area. It is the Purpose and Need of the study to increase east-west mobility in the developed portions of Montgomery and northwestern Prince George's Counties. The Corridor 1 alternative accomplishes this Purpose and Need by improving the study area's capacity to accommodate east-west trips, which will result in increased volumes in total east-

west traffic. This will make it easier for people to travel over longer distances in the study area.

Increased traffic volumes do not necessarily translate to increased congestion, especially when there are major facility improvements, such as the ICC. Additionally, a screenline analysis of the ICC alternatives shows that the Corridor 1 alternative will reduce traffic volumes on east-west arterials at five out of the six screenlines over the No-Action alternative. The only screenline that does not show a reduction in traffic volume is the farthest west screenline, I-270. At this screenline the arterials increase their AWDT in the Corridor 1 alternative over the No-Action alternative by 1,000 vehicles from 664,000 to 665,000, a .2 percent change. In essence, the AWDT at this screenline with and without the ICC is the same (refer to FEIS Chapter IV.J.4.a). The ICC does not reduce traffic at this point of the study area because the I-370 already serves this function.

Increases in east-west traffic volumes are accommodated by the ICC. The ratio of increased volume on the ICC to volume reductions on east-west arterials is not a good measure of effectiveness. The increased volume across the screenline does show that mobility will increase with the ICC by accommodating increased east-west traffic volumes. People will use the ICC to access jobs and other destinations that they could not reasonable reach without the ICC due to congestion.

529 Traffic volumes on the Beltway are shown as higher with the ICC than without it.

The ICC was not designed to reduce traffic volumes on the Capital Beltway and the FEIS never claimed that the Corridor 1 alternative was capable of such an improvement. The ICC is expected to divert a few trips to the new facility. But any capacity gained on the Beltway by the loss of these trips will be immediately absorbed by drivers attracted from alternative routes, alternative times of travel, and alternative modes. Comparison of traffic impacts on the Capital Beltway is largely irrelevant, because the origin-destination flows served by the ICC are not the same as those served by the Capital Beltway, as discussed in the Chapter IV.J of the FEIS.

530 There is no consideration of north-south roadways. The ICC will necessarily increase traffic on other roadways, particularly those north-south roadways with ICC interchanges. In fact, the FEIS reports that the ICC will result in higher traffic volumes on several north-south roadways than the No-Action alternative, including sections of I-95, US 29, MD 97, MD 182, MD 185, and MD 650.

North-south roadways are an integral part of the transportation network in the study area and were considered during the evaluation of each alternative. FEIS Chapter IV.J, Table IV-108 (FEIS pages IV-363 through IV-367) provides traffic volumes from each approach direction for several intersections. Additionally, Table IV-115 (FEIS pages IV-381 through IV-383) provides freeway LOS ratings for I-270 and I-95. An emphasis throughout the FEIS was placed on east-west traffic since the ICC would represent a major new east-west thoroughfare. The FEIS acknowledges that the construction of the ICC will increase north-south traffic on roadways providing access to the ICC. With the ICC, approximately 12 miles of roadway are forecast to have increases in average weekday daily traffic (AWDT) volumes of ten percent or more, mostly north-south roadways with ICC interchanges. But the ICC will also lower AWDT volumes by ten percent or more on approximately 50 miles of the local roadway network (refer to FEIS Chapter IV.J.4.e). All of these effects were considered in choosing an alternative.

531 The FEIS states that under the No-Action alternative, poorer forecast LOS are anticipated for many intersections compared to their current LOS, which will increase east-west travel times. The inclusion of "east-west" is misleading because an intersection LOS is for the overall intersection and does not distinguish the direction of travel. More than half of the roadway LOS segments presented are for I-95 and I-270, which are north-south roadways.

The statement that poorer forecast LOS for many intersections will increase travel times is not misleading. It is true that deterioration in an intersection LOS rating alone does not necessarily indicate that traffic is getting worse in a specific direction. Since intersections have at least three possible directions of traffic, it is possible that increased traffic volumes on a north-south road could cause the intersection LOS grade to drop even if the traffic volumes on the east-west road stay constant. Although this is a theoretical possibility, the statement made in the FEIS was based on the underlying traffic volume conditions, which does distinguish the direction of travel, used to forecast intersection LOS and not solely on the intersection LOS grade. Table IV-108 (FEIS Chapter IV.J, pages IV- 363 through IV-367) shows that AWDT volumes on 95 percent of east-west approaches in the analysis of arterial intersections are expected to have increases in traffic volumes from 2000 to 2030 if no action is taken. Since no major east-west capacity improvements are planned for the study area besides the ICC, this increase in volumes on the roadways will contribute to increased east-west travel times and poorer intersection LOS.

The data presented in the FEIS on LOS for roadway segments—as opposed to intersections—included exclusively freeway road segments and was not an analysis of east-west arterial roadways. The LOS freeway segment analysis was not offered as evidence of increased east-west travel times and was not the basis for the statement, however, LOS on I-270 and I-95 were analyzed to determine if increased east-west mobility provided by the ICC would have an effect on those facilities.

532 The FEIS demonstrates that the proposed ICC will not reduce the number of accidents significantly. The estimated number of accidents per year for both the Corridor 1 alternative and the No-Action alternative round to 5,100. Furthermore, the accident rate assumed for the ICC is lower than that observed for any of the study area roadways, and this assumption may be optimistic. The lower accident rate forecast for the limited access ICC is balanced by the increased miles of travel.

Citing the raw numbers of estimated accidents for both the Corridor 1 alternative and the No-Action alternative is misleading. Since the ICC will result in increased VMT, the number of accidents per VMT will be less with the ICC than without it, which means that the ICC facilitates safer travel. The raw number of accidents is similar for the two alternatives because the estimated crash rates for the ICC are anticipated to be lower than arterial crash rates according to comprehensive SHA statistics for limited access highways, such as the ICC. Crash rates on limited access highways in Maryland are lower than for roads with at-grade intersections (refer to FEIS Chapter IV.J.4.h and the Maryland Automated Accident Reporting System data provided by the SHA Office of Traffic and Safety for this study). The increased vehicle miles of travel accommodated by the ICC will offset its lower estimated crash rate and result in similar numbers of total accidents, but the number of accidents per VMT will decline.

533 The FEIS alternatives analysis results also include forecast peak period travel time between two points. However, this information is not very useful without information about how many travelers are affected. A metric such as the total travel time metric that we used in our alternatives analysis is much more useful, as this incorporates both travel time and the trips actually being made.

A measure of travel times between major destinations in the study area provides useful information regarding the travel conditions individual users will face with each of the FEIS alternatives. The metric suggested by the comment, total travel time, obscures how the performance of each alternative will affect individual users since it focuses on the aggregate travel time of all users. Relying on such an aggregate measure makes it impossible to consider if mobility improves for trips between major destinations.

Additionally, the FEIS offers several other measures of travel time improvements in the study area. Corridor 1 will result in an estimated annual travel time savings of approximately 3,000 hours during the AM peak hour every weekday for individuals who are making trips on the ICC.

With the No-Action Alternative the estimated aggregate travel time for these trips is 7,079 hours. With Corridor 1 the same trips the estimated travel time is 4,087 hours. This travel time savings represents a 42 percent improvement in travel time for Corridor 1 over the No-Action Alternative. Furthermore, Corridor 1 will reduce the hours that intersections operate at capacity by 24% for people not using the ICC, which will result in additional travel time savings within the study area (refer to FEIS Chapter IV.J.4.b).

534 The FEIS results show congestion increasing on some roads with the ICC and decreasing on others. Therefore, the primary result of the ICC will not really be congestion relief but rather increased auto travel with the same amount of time traveled or more travel time.

Many benefits can be attributed to the ICC. The Corridor 1 alternative both relieves congestion as well as increasing VMT. The ICC will increase the transportation network's capacity to accommodate east-west travel. The ICC will attract east-west trips off of local arterial roads that would otherwise be congested by 2030, thus relieving congestion. The Corridor 1 alternative will reduce the hours that intersections operate at capacity by 24 percent for people not using the ICC, which will result in reduced congestion within the study area. In addition, the ICC will allow increased mobility resulting in longer trips because travelers can reach desired opportunities in less time than they can with the No-Action alternative, which will account for the rise in VMT. The Corridor 1 alternative is also expected to produce 3,000 hours in travel time savings on the ICC for weekday daily AM peak hour travel compared to the time taken to make the same trips with the No-Action alternative, a 42 percent improvement (refer to FEIS Chapter IV.J.4.b).

535 The FEIS treats land use forecasts as if they are cast in stone. The adopted land use plans are an artifact of the political process just as a new highway is. The point of considering them together is to determine whether better outcomes are possible if land use and transportation planning are better coordinated.

Regional and countywide planning efforts establish regional land-use plans and transportation plans that are used as a framework for project planning studies, such as the ICC EIS. These regional studies provide land-use forecasts and associated transportation systems to support the land-use forecasts. The ICC and other project planning studies are performed within the projected land-use and transportation systems, resulting from regional plans at the time the project planning begins, which in this case are Cooperative Forecast Round 6.3 and the FY 2003 CLRP. However, the Lead Agencies recognize that during the course of a NEPA study, like this one, that alterations to the adopted land use forecasts can occur. In this case, Round 6.4A was adopted prior to the completion of the technical studies and the Lead Agencies performed a sensitivity test to measure the potential effect of these changes. As described in FEIS, Chapter IV.J, the results of this test showed no major variations that would alter the remaining process or the decision to identify Corridor 1 as the Selected Alternative.

In planning a major transportation improvement, it is unreasonable to assume that the land use of a region will change to support any alternative. Neither the FHWA nor the SHA control the local political process that results in land use plans, zoning laws, and growth management restrictions and these agencies cannot responsibly assume that land use plans, zoning laws, and growth management restrictions will change when defining a range of reasonable alternatives. The adopted land use plans are the result of the political process. That process has resulted in the retention of the ICC and the placement of growth in anticipation of an ICC for over four decades.

536 It is ineffective to try to build out of congestion by relying on roadway capacity alone.

Expanding roadway capacity alone cannot solve all congestion problems. As a multimodal highway, the Corridor 1 alternative will expand both roadway and transit capacity in the study area to reduce congestion. The new east-west travel way will provide the opportunity for high-

quality east-west express bus service in the study area. The FEIS modeled transit in all of the ICC Build Alternatives and incorporated all of the transit features in the FY 03 MWCOG CLRP, plus six representative express routes that would use the ICC and five representative local routes that would feed the express service. These additional transit lines would provide service that would take advantage of the ICC to provide faster transit travel throughout the area. Express bus service on Corridor 1 is projected to attract 11,500 daily transit trips, 4,400 of these are new daily transit trips (refer to FEIS Chapter IV.J.4.d).

Additionally, the State has been and is continuing to fund the Metrorail and bus system and MARC commuter trains in Montgomery and Prince George's counties, and is currently studying the Bicounty Transitway that would link the two counties just as the ICC would. The State is also studying the Corridor Cities Transitway that would connect the Metrorail Red Line to upper Montgomery County. Moreover, the ICC itself would be multimodal, allowing for east-west express bus service in the two counties.

537 The Travel Analysis Technical Report states: "A 2010 toll of $.30 per mile during peak hours and $.20 per mile during off-peak hours was used for all of the travel forecasts. This equates to a toll of $.17 per mile during peak hours and $.13 during off-peak hours in 2004 dollars." $.30 per mile in 2010 is not equal to $.17 in 2004. FEIS Table IV-102 correctly says that the rates assumed in 2003 dollars are equivalent to $.20/$.15 in 2010.

The 2010 toll prices reported for 2010 of $.30/$.20 in the text of the Travel Analysis Technical Report are typos. The toll prices of $.20/$.15 shown in FEIS Table IV-102 (FEIS Chapter IV.J, page IV-350) are correct and were the toll prices used for all calculations and analysis. This typo does not affect the analysis or the reported results.

Chapter IV.K. Secondary and Cumulative Effects Analysis

538 The White Paper on ICC Alternative Selection and Compliance with the Maryland Planning Act and Smart Growth Regulations (Appendix I of the FEIS) makes a compelling case that Corridor 1 is superior to Corridor 2 but it does not demonstrate that Smart Growth impacts of Corridor 1 are acceptable or that better alternatives are not available.

The Economic Growth, Resource Protection, and Planning Act of 1992 (the "Planning Act") and the Smart Growth and Neighborhood Conservation Act of 1997 (the "Smart Growth Act") is a statutory requirement that certain projects funded through State or federal funds "be consistent with the local plans of the jurisdictions in which the projects are located" and further requires that growth related projects must not only be consistent with local master plans but also must be in areas that serve existing development or areas planned for development, called Priority Funding Areas (PFA) and is not a judgment of whether there are better alternatives. Instead, the alternatives screening and evaluation process of the NEPA study is used for that purpose.

The Maryland Department of Planning (MDP) studied the ICC and prepared an in-depth "White Paper on Intercounty Connector Alternative Selection and Compliance with the Maryland Planning Act and the Smart Growth Regulations." The MDP concluded that while both Corridors 1 and 2 would connect PFAs (at the proposed termini at I-270 and either I-95 or U.S. 1) Corridor 1 is more compatible with the intent of the Smart Growth Act. The MDP found that Corridor 1 lies approximately 64 percent within designated PFAs and is generally compatible with local master plans. Corridor 2, by contrast, only lies within a PFA for 38 percent of its length, is generally inconsistent with local master plans, would encourage more unplanned development and would encourage development in rural areas not planned for growth. Overall, MDP concluded in the White Paper (and the Maryland Department of Transportation agreed) that Corridor 2 would have more negative smart growth impacts than would Corridor 1.

539 The ICC does not meet Vision 5 of the 1992 Planning Act, "conservation of resources,

including reduction of resource consumption."

The Lead Agencies took great strides to avoid and minimize human and natural environmental impacts, which is the focus of the fifth goal of the Maryland Planning Act of 1992. For those unavoidable impacts, the ICC project includes an unprecedented level of compensatory mitigation, to replace and enhance the segments of the environment that will be impacted. Still above and beyond that mitigation, the project includes environmental stewardship projects that were developed to specifically address degraded environmental conditions in the study area that are not a result of the ICC.

540 The ICC will support longer commutes and more commuters and subsequently will support sprawl development. The resulting direct and secondary impacts of sprawl are a waste of land resources.

The Lead Agencies took great strides to avoid and minimize human and natural environmental impacts, which is the focus of the fifth goal of the Maryland Planning Act of 1992. For those unavoidable impacts, the ICC project includes an unprecedented level of compensatory mitigation, to replace and enhance the segments of the environment that will be impacted. Still above and beyond that mitigation, the project includes environmental stewardship projects that were developed to specifically address degraded environmental conditions in the study area that are not a result of the ICC.

541 The White Paper on ICC Alternative Selection and Compliance with the Maryland Planning Act and Smart Growth Regulations (Appendix I of the FEIS) does not demonstrate that the ICC complies with goals of the Maryland Planning Act.

Please refer to the Secondary and Cumulative Effects Analysis, FEIS Chapter IV.K. Measures that would be appropriate to offset most future developmental impacts in the ICC study area will be beyond the control and funding authority of SHA, MdTA or FHWA. The pace and location of future development along an ICC will be influenced and controlled by state and county land development policies and plans. Additionally, the MDP studied the ICC and prepared an in-depth "White Paper on Intercounty Connector Alternative Selection and Compliance with the Maryland Planning Act and the Smart Growth Regulations." The MDP concluded that while both Corridors 1 and 2 would connect PFAs (at the proposed termini at I-270 and either I-95 or U.S. 1) Corridor 1 is more compatible with the intent of the Smart Growth Act. The MDP found that Corridor 1 lies approximately 64 percent within designated PFAs and is generally compatible with local master plans. Corridor 2, by contrast, only lies within a PFA for 38 percent of its length, is generally inconsistent with local master plans, would encourage more unplanned development and would encourage development in rural areas not planned for growth. Overall, DOP concluded in the White Paper (and the Maryland Department of Transportation agreed) that Corridor 2 would have more negative smart growth impacts than would Corridor 1.

Following a public hearing on August 31, 2005, the Maryland Board of Public Works approved Corridor 1 as an exception under the Smart Growth Act because it connected PFAs between I-270 and I-95 and was determined to be the proposed Build Alternative most compatible with the Maryland Smart Growth and Planning Acts.

542 The ICC will cause more traffic because neighborhoods will be built along it, which will use capacity meant for commuters.

The County Master Plans have been substantially built out adjacent to the ICC. According to statistics from the Maryland National Capital Park and Planning Commission in Montgomery County, nearly 80 % of the residential land use in the ICC study area has already occurred. The remainder of lands adjacent to the ICC is reserved for parkland.

543 The expansion of I-270 led to more development and the same thing will happen if the ICC is built.

The Selected Alternative, Corridor 1, is consistent with master plans, both at the study area level and the local level. The ICC's consistency with the local master plans would accommodate the growth in areas planned for development. Please refer to Chapter IV.K.5 of the FEIS for more details.

544 Is there any information about potential future development at the junction of the ICC and I-95?

The Prince George's County General Plan and area master plans such as Sub Region I Master Plan and the Laurel, Beltsville and Vicinity Master Plan are the best source of information about development around this interchange. The Konterra community is a planned mixed-use development project along I-95 that has been on Prince George's County's master plan for many years.

545 A supplemental DEIS is needed to fully evaluate changes to the proposed action that would result in significant environmental impacts that were not evaluated in the EIS, such as peak oil's impact on growth projections and additional transportation projects needed as a result of the ICC (e.g. I-95).

The issue of oil dependence is an important national and global concern that is being considered by the Federal government. USDOT recognizes that energy is an essential input to a strong U.S. economy and that energy consumption has increasingly been outstripping production. In part, this is why USDOT recently issued a final regulation (FR: April 6, 2006 (Volume 71, Number 66)) to reform the structure of the corporate average fuel economy (CAFE) program for light trucks and establish higher CAFE standards for model year 2008-2011 light trucks. Reforming the CAFE program will enable it to achieve larger fuel savings, while enhancing safety and preventing adverse economic consequences. USDOT estimates that the new standards will save approximately 10.7 billions of gallons of fuel and includes, for the first time ever, the largest sport utility vehicles.

FHWA does not believe however that it is informative to consider oil dependence as part of the project-level planning and development process. The NEPA process is meant to concentrate on the analyses of issues that can be truly meaningful to the consideration of project alternatives, rather than simply "amassing" data.

There have been no new studies or information that would require a Supplemental Environmental Impact Statements (SEIS). Title 23 CFR, Section 771.130, states that an EIS shall be supplemented whenever the Administration determines that changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or new information or circumstances relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. For this project, none of these conditions currently exist, and therefore an SEIS is not warranted.

546 Why were Figures IV-20 through IV040 included in the FEIS? They include development plans in Frederick County, which is not part of the study.

Figures IV 20 - IV 40 are figures depicting various considerations taken into account for the Secondary and Cumulative Effect Analysis (SCEA). The study methodology, including why a region larger than the study area was used to analyze the potential secondary and cumulative effects of the ICC alternatives is included in Chapter IV.K of the FEIS.

547 It is not clear from the Lead Agencies' study's description what future land uses in the ICC area were actually modeled, and therefore it is impossible to determine the validity of

this analysis. It appears that in this limited analysis, conducted for only Corridor 2 and only for impacts upon Rocky Gorge, the Lead Agencies used merely the build-out of existing zoning and transportation land uses, rather than induced growth beyond existing zoning.

The analysis of potential future land uses and how they may be affected by the construction of the ICC was studied at length and described the Secondary and Cumulative Effects Analysis (SCEA) portion of the FEIS (Chapter IV.K). The SCEA was used to assess the potential land use changes and it was not bound by the existing land uses contained in the area master plans. In fact, the Lead Agencies employed the help of an ELUP that considered the existing land use plans, along with many other factors to provide the basis for the technical study of secondary and cumulative effects. Further, the SCEA was used in the assessment of potential effects of both build alternatives on the Rocky Gorge Reservoir.

548 **The SCEA findings were not included in the Lead Agencies' analysis of potential changes in water temperature and other impacts to the resident and reproducing brown trout population of the Upper Paint Branch (Good Hope tributary).**

The SCEA findings were not analyzed in the Direct Impact Section of Chapter IV.K. The SCEA is a stand alone analysis that evaluates secondary and cumulative impacts above direct impacts. Changes in water temperature and impacts to brown trout were analyzed in the SCEA Technical Memorandum (November 30, 2004), which is a more detailed version of the SCEA included in the FEIS. Please refer to the SCEA Technical Memorandum (Sections A.7.e. Surface Water/Habitat and A.7.k. Impervious Area) for more details.

549 **Environmental Defense's comments to the DEIS noted that the Regional Earth Sciences Application Center (RESAC) study, conducted by scientists at the University of Maryland and Woods Hole National Laboratory, concluded that the DEIS likely underestimated induced development by 2030 by a factor of four or five for the study area, and thereby also substantially underestimated the likely adverse impacts that building the ICC would have on water quality and ecosystems in the Anacostia River and adjacent watersheds. The FEIS attributes the differences in findings between the RESAC study and the FEIS to variations in methodology. The FEIS is in error to state that local land use objectives were not considered in the RESAC Study; this erroneous assertion is used to call into question the validity of the independent study carried out by University of Maryland scientists.**

The assertion that there is an underestimation of secondary development as a result of the ICC does account for variations in methodologies. Future growth in any region is influenced by a large number of factors, ranging from immigration to land use regulations to general economic conditions. The Current Trends and Smart Growth scenarios proposed by the RESAC Report account for all additional development that has the potential to occur within the area, specifically looking at spreading center growth, edge growth, spontaneous growth and road-influenced growth. The ICC SCEA identified growth likely to occur as a result of the No-Action and secondary development as a direct result of the ICC for Corridor 1 and Corridor 2 based on estimates from an ELUP. The SLUETH model identifies all growth based on potential urbanization of an area looking at developed vs. non-developed pixels. The ICC SCEA identified areas of growth based on land use and zoning classifications established by each individual jurisdiction in the area. Additionally, the project team coordinated with local jurisdictions to discuss current trends and areas where land could likely develop within the SCEA boundary. This input was valuable in the analysis since Montgomery and Prince George's Counties have had very strict planning and regulatory frameworks in place to guide the location, pattern and pace of growth for each county over the past 75 years.

The SLUETH Model (according to Figure 1, 2 and 3 of the RESAC Report, 2005) also analyzed

an area considerably larger than the SCEA boundary. The ELUP only identified scenarios relevant to the ICC, No-Action, Corridor 1 and Corridor 2 within the defined SCEA boundary. The SCEA boundary was defined in accordance with SHA's SCEA guidelines for Environmental Impact Statements and Environmental Assessments (2000) in addition to local, state and federal review agencies. Therefore, Table 3 (Attachment 2) is not an accurate comparison of the amount of development slated to occur and is possibly misleading. Furthermore, Table 3 (Attachment 2) identifies numeric values that were not found in the DEIS SCEA (136,979 and 147,754) and therefore should not be considered when making a comparison.

Although the University of Maryland and Woods Hole National Laboratory concluded that the FEIS likely underestimated induced development by the year 2030, the Maryland-National Capital Park and Planning Commission has the appropriate regulatory framework in place to guide the location, pattern and pace of development within the SCEA boundary, regardless of the amount of development predicted by outside efforts, therefore limiting the amount of adverse impacts on water quality and ecosystems in the Anacostia River and adjacent watersheds.

550 Our analyses show the probable impact of the ICC on this area. What the ELUP fails to capture is the probability of zoning restrictions, rezoning and increased development pressure once the highway is completed. As for the ELUP process, we understand that the "average" of participants' opinions were so skewed between two extremes that an average is meaningless. We are at a loss to understand why the Lead Agencies decided to ignore studies based on widely accepted models and neglected to use such models, in favor of a methodology which is based on synthesizing into a single opinion the views of fifteen people sitting around a table. Certainly, such a methodology is easier to use, and possibly, less expensive. But it is not a rigorous, scientific, and verifiable method, but is instead based on fifteen subjective opinions. Worse, it is based on an averaging of those opinions into a single position

Under the SCEA Guidelines for Environmental Impact Statements and Environmental Assessments (SHA 2000), the agency has at its discretion several methods to analyze land use trends, data, projections and plans for a SCEA. The SHA may seek the direction of the Metropolitan Washington Council of Governments land use group. Another method is to convene planners from the region and seek their guidance. A third method, used here, is to convene an independent, non-governmental panel (an ELUP) and ask them to review governmental and non-governmental information, assess it, and provide their guidance as to likely land use scenarios. SHA chose the ELUP approach because experience has shown that expert panels often provide useful feedback on complex land use issues such as proposing to build a major transportation facility in a densely populated area. The ELUP approach was coordinated with the Interagency Working Group (IAWG). The ELUP used a well-developed research technique known as the "Delphi Process" to estimate future land use impacts of the various alternatives. The use of ELUPs and the Delphi Process are widely recognized methods for analyzing transportation and land use alternatives. The study process followed by the ELUP was open, independent and informed and, as a result, the estimates its members arrived at were reasonable. For additional information regarding the range of accepted approaches to analyzing induced growth (including land use models and ELUPs), refer to the Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth, (March 2005), prepared by ICF Consulting Inc., for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment. See also Indirect and Cumulative Impact Work Group (March 15, 2005) (inter-agency task force report on Executive Order 13724).

In addition to the ELUP's land use estimates based on existing data, the Secondary and Cumulative Effects Analysis (SCEA) also reflects input from public state and local officials intimately involved with land use and planning decisions in the study area. The Maryland Department of Planning, responsible for evaluation of proposed transportation projects for compliance with the State's "Smart Growth" statutes, the Maryland-National Capital Park and

Planning Commission (MNCPPC), responsible for implementation of the Montgomery and Prince George's Counties' master plans, and the County Councils, the final decision-making authorities concerning those master plans, all gave additional perspective on the potential for future growth, with and without an ICC. These officials constantly evaluate growth and development issues, incorporating views from the general public. These entities' comments, combined with the analytic framework produced by the ELUP, resulted in a fair estimate of secondary and cumulative effects.

551 Without the opportunity to review the findings of the map analysis, it is difficult to evaluate the basis used to determine that "[i]n general, it has been determined that all areas that contain environmental justice populations would experience beneficial or adverse effects similar to those of the overall study area population." The FEIS does not attempt to evaluate the disparate impacts of the ICC on access to jobs for low-income and minority households.

There are no disproportionate impacts to low income and minority communities in the study area. Appendix E (Alternatives Mapping Plates) is included in the Socioeconomic and Land Use Technical Report as pages 421-511 of the PDF document available online. The summary of the Environmental Justice analyses is presented in Chapter III.A.2 in the Socio-Economic Technical Report (SETR) and Figure II-3 (Minority and Low Income Populations) illustrates the location of the studied populations. The SETR is available at www.iccstudy.org.

552 There appears to be an arithmetic error with the developed acreage estimates in Figure IV-24 on page IV-401. The table lists "no action" developed acres at 170,294 and developed acres as a result of Corridor 1 at 174,240. However, according to the FEIS, construction of Corridor 1, in addition to the no-action secondary growth impacts of 2,512 acres, is expected to result in 4,945 acres of secondary growth.

Figure IV-24 does not contain an arithmetic error. Figure IV-24 only considers residential development. The amount of secondary growth for Corridor 1 (4,945 acres) considers residential, commercial and industrial development that could occur.

553 SHA cites impacts to Montgomery's Agricultural Wedge as a unique and unusual problem. We disagree. First, almost all of Montgomery's Agricultural Reserve is located in western Montgomery County. The area in eastern Montgomery is a narrow sliver by comparison. In addition, there is very little active agriculture in and around the Corridor 2 alignment options. Much of the remaining agricultural land is already slated for low-density housing developments and/or is not being used anymore for agricultural uses. Besides, only a minor part of the Corridor 2 alignments enter the Agricultural Wedge.

The Lead Agencies made reference to direct and indirect impacts, as well as the potential for greater secondary land use impacts of certain ICC alternatives on the Agricultural Wedge that was defined in part by the General Plan. According to the General Plan "On Wedges and Corridors," Montgomery County includes significant portions of the Agricultural Wedge east of I-270, running all along the northern tier of the County. The Agricultural and Residential Wedges are very important to the plans and growth patterns of the County. The General Plan is the underpinning of each master plan that has been created over the course of the last half century.

554 SHA cites encouragement of sprawl development. However, sprawl would be a major problem under any alternative including the no-build. Selection of Corridor 2 alternatives may expedite the sprawl but it will continue regardless of the alternative chosen. SHA cites limited mobility benefits. However, the differences in mobility between the build alternatives are minor and both meet the purpose and need as described in the FEIS. The differences will become increasingly minor considering that most growth will be pushing outward over time into upper eastern Montgomery County regardless of the alternative

chosen. This outward growth would be better served by a Corridor 2 alignment.

The comment correctly notes that so-called "sprawl" development is a concern in the study area, regardless of which alternative is selected, including the No-Action Alternative. However, the Lead Agencies determined that the interests of consistency with detailed, local land use planning would be best served by the Selected Alternative. The presence of a major transportation facility along any route besides that identified by the Master Plan would run afoul of the long-standing expectations of residents and business owners along Corridor 2. The ICC, as a part of the counties' master plans, discourages sprawl to the north by serving existing and planned development. In addition, selection of Corridor 2 could encourage unplanned development outside a greater number of Priority Funding Areas as defined by the State's strong "Smart Growth" laws. The FEIS analysis of transportation effects reveals that the difference between the two build corridors is not minor, but instead, Corridor 1 serves a substantially greater number of users and is accessible to greater number of travelers in the study area. Contrary to the opinion expressed in this comment, additional growth spurred by the selection of Corridor 2 (or growth that would not be served if the No-Action Alternative were selected) would create negative mobility and land use impacts.

Montgomery and Prince George's Counties' planning officials have determined that they have tools in place to guide the location, pattern and pace of growth and development for each county. Development within the area of the ICC will be controlled through local and state land development laws, plans, and policies limiting sprawl. The ICC, as a part of the counties' master plans, discourages sprawl to the north by serving existing and planned development. In addition, the state's Smart Growth laws govern the location of conservation and development areas.

555 **Konterra should be the last development of its type and further building growth should be disallowed to prevent more traffic.**

Thank you for your comment.

556 **The FEIS states [in answer to general comment 16-17 on p. 141 of 187], "The Expert Land Use Panel (ELUP) panel members reasoned that a different number of households and/or jobs would be balanced by changes in the totals in other parts of the region (e.g., Virginia, District of Columbia) outside the study area. Most concluded the build alternatives would make the study area more competitive overall, resulting in net growth relative to the base case." If the economics associated with a new highway is a zero-sum game, then how can any net growth be expected? It is not true that the ICC will cause economic growth. The Transportation Research Record claims that "Many researchers agree that at this time new investments in highways in the United States have little impact on overall growth in out put. New highways play a more important role in shifting economic activities among places, drawing jobs from other locations into the highway corridors - a phenomenon known as negative spillovers" (TRR Vol. No. 1864, pp. 94).**

The ICC Selected Alternative will contribute to economic improvement in the region (see FEIS Chapter IV.K). In addition to the responses you cite, it is important to note that the much of the residential planned land use growth has occurred despite not having the ICC, another element of the area master plans. The ICC Selected Alternative will help to serve the existing and planned development as well as provide mobility and accessibility improvements needed to realize the other planned residential and employment land uses included in area plans.

557 **FHWA, regardless of whether it be a Division or Headquarters, is not qualified to make interpretations of what constitutes an appropriate and adequate Secondary and Cumulative Effects Analysis. Any interpretation by the Council on Environmental Quality preempts any interpretation by the FHWA. The SHA should take note that the Council on Environmental Quality's Considering Cumulative Effects under the National Environmental Policy Act, Table 2-1, page 13 lists greenhouse gases resulting in climate**

modification as a legitimate issue for cumulative effects.

The SCEA in the ICC FEIS has been extensively reviewed by FHWA at both the Division Office and Headquarters levels. FHWA considers this analysis to be in full compliance with the requirements of NEPA. While the CEQ guidance mentions greenhouse gas emissions as one possible topic for cumulative impacts analysis, it also encourages federal agencies to focus on a few specific issues in a cumulative impacts analysis, as determined on a project-by-project basis. There is nothing in the CEQ guidance that contradicts the approach used in this FEIS for addressing cumulative impacts analysis.

The issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government. In February 2002, the Administration committed the U.S. to a comprehensive strategy to reduce the greenhouse gas (GHG) intensity of the American economy by 18% over the next 10 years through voluntary measures. However, it is important to recognize that no national regulatory thresholds for greenhouse gas emissions or concentrations have been established through law or regulation.

Transportation is a significant source of greenhouse gases, particularly of carbon dioxide (CO2) emissions - the predominant GHG. The transportation sector was responsible for 32.3% of all U.S. CO2 emissions in 2002. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (97.9%) of transportation-sector emissions result from the consumption of petroleum products such as motor gasoline, diesel fuel, jet fuel, and residual fuel.

Recognizing this concern, FHWA is working with other modal administrations through the DOT Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases - particularly CO2 emissions - and to assess the risks to transportation systems and services from climate changes. In these efforts, FHWA has been working with other Federal agencies, including EPA and DOE, to evaluate effective approaches consistent with our national goals.

FHWA does not believe it is informative at this point to consider greenhouse gas emissions as part of the project-level planning and development process. Greenhouse gases are quantitatively and qualitatively different from other motor vehicle emissions, and their magnitude and breadth appear to require a different approach to address their potential climate impacts. First, HC and other criteria pollutant emissions are of concern, and thus regulated, in individual metropolitan or smaller areas. The climate impacts of CO2 emissions, on the other hand, are global in nature. From a NEPA perspective, it is analytically problematic to conduct a project level cumulative effects analysis of greenhouse gas emissions on a global-scale problem. Secondly, criteria pollutant emissions last in the atmosphere for perhaps months; CO2 emissions remain in the atmosphere far longer - over 100 years - and therefore require a much more sustained, intergenerational effort. Finally, due to the interactions between elements of the transportation system as a whole, project-level emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concludes that we cannot usefully evaluate CO2 emissions in the same way that we address other vehicle emissions.

The NEPA process is meant to concentrate on the analyses of issues that can be truly meaningful to the consideration of project alternatives, rather than simply "amassing" data. In the absence of a regional or national framework for considering the implications of a project-level GHG analysis, we feel that such an analysis would not inform project decision-making, while adding administrative burden.

558 The FEIS has reduced the already unrealistically low estimates of secondary development presented in the DEIS and commented upon in RESAC (2005).

In Table 1 (Hard Copy) below the figures used in the FEIS are added to the data presented in the DEIS and by RESAC (2005). The DEIS estimated 8% increase in residential area caused by the ICC. RESAC (2005) showed an increment of 15% caused by the ICC (Current trends - Smart growth). In the FEIS the SHA's estimate is reduced to 3.6 % and 4% for Corridors 1 and 2 respectively. No explanation for this revision is given. The already low estimates of increased development are halved in the FEIS.

The SCEA analysis presented in the FEIS has not reduced the amount of secondary development stated in the DEIS. Please refer to Summary Section, page IV-391 of the DEIS and page IV-352 of the FEIS. The SCEA findings are presented exactly the same in the DEIS and FEIS: 2,512 acres of additional development for the No-Action Alternative, 4,945 acres of Secondary Development under Corridor 1 and 5,546 acres of Secondary development under a Corridor 2 scenario.

559 **The Summary of New Impervious Cover Associated with the ICC by Corridor and Watershed in Acres (Table IV-55, page IV-161) provides minute details of the ELUP allocations to each part of the ICC affected area but does not justify the overall low total impervious area. Two quantitative studies (Ewing and Kuzmyak 2005, RESAC 2005) estimated about four times more development as a result of the ICC.**

Table IV-55 provides no details of the ELUP. This table is looking at imperviousness as an indirect effect from the highway. The SCEA assesses impacts above direct and indirect impacts. Please see Appendix P-10, Subwatershed Impervious Area within the SCEA study area, for details on imperviousness related to the ELUP estimates.

560 **Another example of the underestimation of full effects of the ICC on development by the FEIS is the omission of effects in watersheds not crossed by the ICC.**

The SCEA assesses impacts above direct impacts, which includes assessing subwatersheds far beyond ones that only cross the ICC. Please refer to FEIS Chapter IV.K.8 (pages IV-452 and IV-453) for cumulative effects on subwatersheds within the SCEA boundary.

561 **The high values of imperviousness used in the FEIS probably explain the paradox of agreement between the RESAC model and the FEIS on the total percentage impervious in the ICC area in 2030, but the FEIS's overestimate for 2000 (RESAC report, 2005 Table 5, p.24). By using a realistic value of developed area for 2000, the FEIS overestimates imperviousness since the impervious percentages for all the land cover types are unrealistically high. Although the increase in the area of development by 2030 is underestimated, the high percentage imperviousness compensates and gives approximately the same imperviousness as the RESAC model for 2030. Notwithstanding this fortuitous agreement, the FEIS and the ELUP significantly underestimate the secondary development that will be caused by the ICC.**

The assertion that there is an underestimation of secondary development as a result of the ICC is related to the variations in methodologies. Future growth in any region is influenced by a large number of factors, ranging from immigration to land use regulations to general economic conditions. The Current Trends and Smart Growth scenarios proposed by the RESAC Report account for all additional development that has the potential to occur within the area, specifically looking at spreading center growth, edge growth, spontaneous growth and road-influenced growth. The ICC SCEA identified growth likely to occur as a result of the No-Action and secondary development as a direct result of the ICC for Corridor 1 and Corridor 2 based on estimates from an ELUP. The SLUETH model identifies all growth based on potential urbanization of an area looking at developed vs. non-developed pixels. The ICC SCEA identified areas of growth based on land use and zoning classifications established by each individual jurisdiction in the area. Additionally, the project team coordinated with local jurisdictions to discuss current trends and areas where land could likely develop within the SCEA boundary.

This input was valuable in the analysis since Montgomery and Prince George's Counties have had very strict planning and regulatory frameworks in place to guide the location, pattern and pace of growth for each county over the past 75 years.

562 The SLEUTH model assigns a reduced probability of development according to zoning restrictions, wetlands, parks, steep slopes, and other constraints to development, appropriate to the current zoning and physical conditions. Because probabilities of exclusion of development are assigned to these various constraints, development can occur in any areas that have a constraint probability 4.0 in the model, however the model results adhere to the designated probabilities. This approach is justified since the ICC will undoubtedly lead to relaxations in zoning. The FEIS acknowledges that existing zoning is flexible. In fact it is the SHA's ELUP that seems not to take all constraints on development into account.

The SCEA in no way suggested that a relaxation in zoning would occur. The ICC modeled the worst case for secondary development accommodating all of the ELUP estimates. If the estimates from the ELUP could not be accommodated in current zoning classifications it was assumed that rezoning or possibly redevelopment could occur. This would be the worst case scenario. The SCEA analyzed each zoning classification to determine the exact number of households or jobs that could be accommodated on a given parcel of land.

563 A second charge in the SHA response (Comment 1617 & 1618) is that current development was not considered in the RESAC study.

This is also incorrect since the model was calibrated using observations for 2000 and earlier years, then run forward to 2030. Thus all development up to the date used by the ELUP was included. Moreover the allegation that the master planning process was not considered in the RESAC study, while false, implies that SHA believes future development will follow existing zoning whereas, in many places in the FEIS (e.g., Table IV-105), changes in zoning are tacitly assumed. In most cases, rezoning is incorporated in the FEIS to accommodate the ELUP's predictions.

In accommodating the ELUP estimates changes in zoning were assumed, however the SCEA also reflects views from local and state officials intimately involved with land use and planning decisions in the study area. The Maryland Department of Planning, responsible for evaluation of proposed transportation projects for compliance with the State's "Smart Growth" statutes, the Maryland-National Capital Park and Planning Commission (MNCPPC), responsible for implementation of the Montgomery and Prince George's Counties' master plans, and the County Councils, the final decision-making authorities concerning those master plans, all gave additional perspective on the potential for future growth, with and without an ICC. These officials constantly evaluate growth and development issues, incorporating views from the general public. These entities' comments, combined with the analytic framework produced by the ELUP, resulted in a fair estimate of secondary and cumulative effects.

564 "The other major difference (with the University of Maryland study), and benefit, of the ELUP process is the inclusion of the DELPHI method to determine the Group's position."

When difficult predictions have to be made there is clearly a place for the opinions of experts. There is also a place for serious consideration of quantitative predictions such as the RESAC's (RESAC 2005) and other modeling studies such as Ewing and Kuzrnyak's (2005). Nevertheless, one outcome that the Delphi method cannot accommodate is a wide divergence of views at the end of the process; reporting an average of diametrically opposed estimates does not do justice to the richness of opinions expressed by the experts. No indication is given of the degree of unanimity or divergence of opinions in the ELUP is given in the FEIS.

Under the SCEA Guidelines for Environmental Impact Statements and Environmental Assessments (SHA 2000), the agency has at its discretion several methods to analyze land use trends, data, projections and plans for a SCEA. The SHA may seek the direction of the Metropolitan Washington Council of Governments land use group. Another method is to convene planners from the region and seek their guidance. A third method, used here, is to convene an independent, non-governmental panel (an ELUP) and ask them to review governmental and non-governmental information, assess it, and provide their guidance as to likely land use scenarios. SHA chose the ELUP approach because experience has shown that expert panels often provide useful feedback on complex land use issues such as proposing to build a major transportation facility in a densely populated area. The ELUP approach was coordinated with the Interagency Working Group (IAWG). The ELUP used a well-developed research technique known as the "Delphi Process" to estimate future land use impacts of the various alternatives. The use of ELUPs and the Delphi Process are widely recognized methods for analyzing transportation and land use alternatives. The study process followed by the ELUP was open, independent and informed and, as a result, the estimates its members arrived at were reasonable. For additional information regarding the range of accepted approaches to analyzing induced growth (including land use models and ELUPs), refer to the Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth, (March 2005), prepared by ICF Consulting Inc., for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment. See also Indirect and Cumulative Impact Work Group (March 15, 2005) (inter-agency task force report on Executive Order 13724).

565 **The impacts of the development that will be induced by the ICC are significantly greater than the effects of the roadway itself. These consequent effects are considered in the Secondary and Cumulative Effects Analysis (SCEA) by the FEIS, but they are not used in the Affected environment, Natural Environment chapter (SHA I1 E5a). The SCEA is applied only to Rocky Gorge, not to the entire area. Great detail is provided of effects of the roadway itself, but scant information on the much larger area that will be affected by Secondary and Cumulative Effects (for example Table IV-55 Summary of New Imperious Cover Associated with the ICC by Corridor and Watershed in Acres, pages IV-161 to IV-163).**

The Affected Environment Section looks at only direct and indirect effects as a result of the ICC. The SCEA looked above and beyond direct and indirect impacts and evaluated an area much larger than the Rocky Gorge Watershed. The SCEA boundary encompassed portions of six different counties, Montgomery, Prince George's, Howard, Anne Arundel, Carroll and Frederick Counties it also included most of Washington DC. The SCEA boundary extends far beyond the limits of the direct impact study area and far beyond the Rocky Gorge Reservoir. Please refer to FEIS Chapter IV.K for the entire SCEA analysis.

Chapter V: Final Section 4(f) Evaluation

Chapter V.D. Methodology

566 **Concurs with the decision to replace park land taken for highway purposes at a ratio of about 8 acres for each acre taken. This will add significantly to the recreational assets of Montgomery County.**

Thank you for your comment.

567 **Per the 1989 MOU, SHA is required to provide replacement parkland of equivalent acreage. SHA is providing MNCPPC 8.5 times the amount of land taken for the ICC.**

Thank you for your comment. The Lead Agencies' mitigation plan includes a comprehensive

package of compensatory mitigation for parkland, wetlands, forest interior dwelling species, floodplains, reforestation and other features. The 8.5:1 ratio cited in the comment refers to the entire mitigation package, not just the Section 4(f) parkland replacement.

568 A 4(f) analysis is needed for the portion of Upper Paint Branch Stream Valley Park that was acquired before Section 4(f) was enacted and before the highway route was changed in the 1980's. Another parcel was purchased around the time Section 4(f) was enacted, but no road was planned, and another parcel was purchased after Section 4(f) was enacted, but when the highway was planned to go through the Paint Branch, Good Hope confluence area. The accurate description of affected 4(f) properties was shown in the 1997 DEIS but not in the current FEIS. There is no Designated Transportation Area over Gum Springs and Paint Branch main stem. The park impacts are therefore double what are shown in the FEIS.

The FEIS description of Section 4(f) impacts to Upper Paint Branch Stream Valley Park indicated that Corridor 1 would follow the Designated Transportation Area (DTA) through the park, but would take 6.2 acres of additional land resulting from portions of the project extending beyond the DTA at several locations (mostly for erosion and sediment control facilities).

In response to this and related comments, the agency conducted additional research into the acquisition of land for Upper Paint Branch Stream Valley Park. It was determined that three parcels on the eastern side of the park were acquired at a time when the ICC alignment was located slightly farther south. These three parcels do not include a DTA for the ICC and available record indicate that they were likely acquired as parkland. Therefore, these parcels will be considered parkland for purposes of Section 4(f). In addition to the 6.2 acres described in the FEIS, Corridor 1 would also require the use of approximately 4.9 acres from these three parcels at the eastern edge of the park. These findings and conclusions are summarized in an Addendum to the Section 4(f) Evaluation.

Importantly, the 4.9 acres of additional parkland exist solely because of MNCPPC's decision to adopt an alignment shift through Upper Paint Branch Stream Valley Park that minimized natural resources impacts. The additional acreage recognized as Section 4(f) land does not result in any change in the location or impacts of the project since publication of the FEIS. In this regard, the analysis of these additional acres is very similar to the "S Curve" through Northwest Branch Stream Valley Park. In the case of Upper Paint Branch Stream Valley Park, the shift was made by the park owner, MNCPPC, rather than by FHWA or SHA as part of the NEPA process.

With this correction, the Lead Agencies documented the change in the characterization of ownership; FHWA has reviewed this new information in consultation with the MNCPPC and the U.S. Department of the Interior. After consulting with those agencies, FHWA has re-affirmed the conclusions in the Section 4(f) Evaluation. For further information, please refer to the Addendum to the Section 4(f) Evaluation, which is attached as an appendix to the Record of Decision.

569 The 4(f) analysis is deficient because it did not consider a LUTRAQ style alternative.

The Lead Agencies did include alternatives like LUTRAQ (Land Use, Transportation and Air Quality), or balanced land use. The land use-based alternatives were included in the analysis of alternatives, yet were determined not to substantively meet the Purpose and Need (refer to FEIS Chapter III.E) and therefore were not studied further in the Section 4(f) Analysis.

570 The FEIS suffers from several critical deficiencies in its evaluation under Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303, and its FHWA implementing regulations. These deficiencies hinder decision-makers from making an informed decision regarding the proposed action by masking the true environmental consequences of the proposed action on Section 4(f) resources and cause the EIS to fail

to meet the statutory requirements for parkland mitigation.

The FEIS complies with all applicable standards for legal sufficiency established under NEPA and the implementing regulations of both the Council on Environmental Quality and FHWA's own NEPA regulations. In addition, the FEIS satisfies all obligations under Section 4(f) of the Transportation Act and Section 109 of the Federal-Aid Highway Act. This comment raises general criticisms of the NEPA process for the ICC project. Where more specific questions or concerns were raised in FEIS comments, the agency has provided more detailed responses. Refer to FEIS Chapter V for the full evaluation of Section 4(f) resources and the Department of Interior's approval of that analysis in its letter of February 24, 2006.

571 **The statement at the bottom of page V-6 (Northwest Branch Stream Valley Park, Unit 5) is not true. The text states "The curved alignment through this park is known as Northwest Branch Option B, and is sometimes referred to as the "S-curve." In fact, the curved alignment (S-curve) is known as Northwest Branch, Option A, not B. Will SHA correct this error?**

The "S" curve is known as Northwest Branch Option A. The Lead Agencies are aware of this correction.

572 **The text on V-6 (DTAs) states that Section 4(f) does not apply to the use of land within the DTA's. This, in fact, is not true. The courts have rendered decisions that Section 4(f) may apply to reserved lands if the reserved land has received de facto use as parkland. Indeed, the reserved land associated with parks in the Rock Creek, Northwest Branch, Paint Branch, and Little Paint Branch watersheds have been used for parkland purposes for many decades by local citizens. In addition, the reserved ROW within Paint Branch Park is part of the Upper Paint Branch Special Protection Area and Environmental Overlay Zone designated to protect the unique Paint Branch trout stream. That land clearly serves as an example of a wildlife refuge, not just for trout, but for other wildlife species such as mammals and forest-interior dependent bird species. The Eyes of Paint Branch, Audubon Naturalist Society and MNPS regularly sponsor walks for the general public in this area so that the public can enjoy and learn about the area's natural resources.**

The comment refers to a particular court case, Stewart Park v. Slater, 352 F.3d 545 (2d Cir. 2003). In that case, the state transportation agency acquired certain lands for the prospective development of an airport. Before construction of the airport commenced, however, the agency entered into agreements with the state conservation department and other local governments to manage and operate some of the lands for recreational purposes, such as hunting, swimming, and boating. Thus, even though the lands were not "established recreational facilities," they were operated for almost 30 years as parks pursuant to written agreements. The state went so far as to promulgate regulations for the use and enjoyment of those lands for recreational purposes (see 353 F.3d at 555). In that specific situation, the Second Circuit held that Section 4(f) applied to the lands in question and an analysis under Section 4(f) must be prepared. For this and other reasons, this case is distinguishable from the facts surrounding DTA lands in the proposed ICC build corridor.

The FHWA appreciates that citizens have used certain properties for general enjoyment. But the parcels identified as Designated Transportation Areas are not portions of parks with authorized trails, or other recreational amenities, and do not have formal access points, signage or parking for the types of activities referenced in the comment. If an agency purchases property with the intent that it would be used for transportation purposes and, as in this case, has never deviated from that planned use, it cannot be said that the property loses that designation simply because individuals use it in the interim before construction for various recreational purposes. The lead agencies have no reason to dispute that the commenters and/or other organizations have used certain DTA parcels for non-transportation purposes during the long delay in analysis of the

proposed ICC. However, the language reflected in transaction documents for those parcels and/or the resolutions from the County Council and MNCPPC related to the acquisition of these lands make it clear they were purchased for and remain set aside for a transportation corridor.

The designation of particular parcels of land is not based on labels, as the comment suggests, but must be based on how those specific parcels are managed. The parcels in question have never been designated a "wildlife refuge" and have consistently been identified as transportation lands. Even if a broader range of lands in the Paint Branch watershed has been identified as a Special Protection Area, nothing about the ownership or management of the DTA parcels has changed since they were purchased. Therefore, they should not lose their designation as land set aside for a transportation corridor.

573 Page V-9, V-10, and V-101 (Parkland Mitigation). The text states, "The goal for parkland mitigation for this project is to replace the functions and values of the Section 4(f) property used. This is primarily accomplished through the replacement of parkland. Candidate parkland replacement sites were identified and evaluated to assess how well the candidate replacement lands would replace the functions and values of the Section 4(f) property used." The text on pages V-101 lists 5 properties selected for parkland replacement for Corridor 1. On page V-102 the text states, "These five properties were selected as parkland replacement sites due to their proximity to the impacted parklands and their ability to replace the functions and values of the parkland used by this alternative." The reader is directed to look in Section H (page V-60 to V-66) to read about parkland mitigation sites and the functions and values they provide. We find that the FEIS fails to present sufficient technical evaluation to demonstrate that the candidate replacement lands replace the functions and values of parklands potentially impacted by the ICC. Furthermore, the data in Section H falls woefully short of showing that the replacement lands would satisfy the loss of functions and values associated with the parks.

It is unclear precisely what "technical evaluation" the comments suggest would permit for a more complete analysis of the proposed mitigation package. The important elements of the mitigation package were to: target key parcels identified by the park owner as ideally suited for acquisition and protection; determine whether replacement lands possessed quality that reflected the functions and values of parkland to be used by the proposed action, such as forest coverage and/or Forest Interior Dwelling Species habitat, and qualities that would foster and promote stream valley and water quality health. The MNCPPC definition of "stream valley park," the majority of parklands affected by the proposed action, stresses precisely these sorts of qualities and functions. The MNCPPC carefully surveyed available parcels, those it had targeted in the past for potential acquisition and other property specifically possessing these characteristics for inclusion in the mitigation package. The park owner made its recommendations for property acquisition based on the size of the parcel, the overall natural resources qualities of the parcel, proximity of the parcel to existing parkland and/or other important natural features, and considerations of potential future development in and around the parcel. Based on all this information, the mitigations recommendations reasonably reflected both quantitative and qualitative factors. As can be seen from the comment letters provided by the state, local and federal resource agencies responsible for parkland management and conservation, the identified properties meet many important conservation and water quality preservation criteria. The Lead Agencies have received adequate comment and analysis from the relevant expert agencies to make the determinations reflected in the Final Section 4(f) Evaluation.

Chapter V.H. Measures to Minimize Harm

574 SHA can not satisfactorily mitigate or minimize the impacts incurred by bisecting communities, parks and stream valleys.

The ICC was substantially planned by the County in its master planning process to be designed around planned communities and parks. Total avoidance of stream valleys and parks is unavoidable, but impacts will be mitigated to the maximum extent possible.

575 Page V-62 of the FEIS suggests that the Peach Orchard property would be potential future FIDS habitat, but it would be decades before any saplings would mature to the point where they could replace the loss of existing FIDS habitat. Therefore, this is not adequate compensatory mitigation. The only legitimate park replacement would consist of new areas not in the path of a highway that has numerous 100-year-old trees, endangered species, forested wetlands, clear springs, and interior habitat for migratory neotropical songbirds. Farmland should not be converted to forests. The ICC should be delayed until reforestation is underway and can support FIDS.

As required under the Maryland Reforestation Law, forest loss is primarily compensated through reforestation efforts. The Maryland Reforestation Law requires State agencies to make every reasonable effort to avoid or minimize impacts to trees. The ongoing mitigation site selection process focuses on selecting the most appropriate reforestation sites to improve existing habitat conditions on other publicly or State-owned land. It is understood that it would take considerable time to fully realize the maximum benefits of a forest mitigation project. For eastern hardwood forests such as those possibly affected, nearly 40 years could be needed to realize the compensation of mature forests. However, several strategies are being considered to replace the functions impacted forests provide including acquisition of properties with existing mature forest. This includes acquiring parkland replacement sites that maintain mature forest as well as open space. In addition, the Casey Property at Hoyles Mill, a 459-acre mostly forested site is being acquired to further compensate for natural resource impacts.

Parkland replacement efforts have been conducted separate from the reforestation efforts. However, several of the parkland replacement sites include both existing mature forest as well as open space. In many cases the open space areas adjacent to mature forest will be used for reforestation efforts. Over time, this will increase the amount of existing (Forest Interior Dwelling Species (FIDS) habitat.

Additional mitigation for natural resources impacted in Rock Creek Regional Park is anticipated to be provided at the Casey Property at Hoyles Mill, which is located outside of the ICC study area near Poolesville in Montgomery County. This site, which would become public parkland, would add an additional 459 acres to the park system adjacent to several existing parks including Seneca Creek State Park, South Germantown Recreational Park, Little Seneca Stream Valley Park and Hoyles Mill Conservation Park. Preservation of this property will add over 340 acres of existing forest and 214 acres of existing FIDS habitat to the park system. There is approximately 118 acres of open land that may be available for reforestation, which could also help increase the FIDS habitat to approximately 340 acres on site.

576 Figure V-49 does not indicate the 4(f) impacts from widening I-95.

Figure V-49 shows only the Section 4(f) resources associated with the ICC/I-95 interchange area.

577 The parkland mitigations sites shown on Figure V-50 do not mitigate the impacts.

The mitigation package developed for the ICC and agreed to by MNCPPC is a comprehensive group of mitigation measures that includes parkland replacement, wetland mitigation stream mitigation, reforestation, and other compensation for parkland natural resource impacts. All of these measures function together to mitigate the impacts of the ICC.

The parkland replacement sites indicated in this comment are intended to mitigate for the loss of parkland as a result of the Selected Alternative. In selecting these sites, the Lead Agencies conducted an extensive search for potential parkland replacement sites in and around the study

area. The potential sites identified were evaluated on a number of criteria including (but not limited to) the size of the parcel, the presence of natural resources (i.e., forests, wetlands, etc.), the watershed in which the property is located, and the property's proximity to impacted parklands. The five parkland replacement sites within the study area provide 239.7 acres of parkland to replace the 83.4 acres that would be used by the ICC. The Lead agencies have also committed to ensuring the conversion of the unused Designated Transportation Area in Northwest Branch Stream Valley Park - Unit 5 (21.3 acres) to parkland. All of these sites provide other functions similar to those of the impacted parklands. These functions include watershed protection and recreational opportunities.

The Lead agencies have also committed to providing the Casey Property (458.8 acres) and the Santini Road Properties (49.2 acres) as compensation for natural resource impacts. These properties provide valuable functions such as additional watershed protection (in particular in the Rocky Gorge Watershed) and Forest FIDS habitat.

Combining the benefits to the park system that would result from the donation (and therefore protection) of these properties as parkland with the benefits derived from compensatory mitigation and reforestation measures that affect parklands results in a package that mitigates to the fullest extent possible the impacts of the ICC.

578 **The FEIS greatly underestimates the scope of Section 4(f) land whose functions will be significantly impaired by the proposed ICC. As a result, the functional value and acreage lost is significantly distorted. However, even based on the Lead Agencies' flawed evaluation under Section 4(f), the proposed compensatory mitigation for parkland is inadequate under both NEPA and Section 4(f). This inadequacy stems from the failure of the FEIS to identify all necessary parkland mitigation sites, failure to qualitatively describe properties proposed for mitigation, and inaccurate or contradictory information contained within the FEIS related to Section 4(f) resources.**

The proposed mitigation packages satisfies the Section 4(f) requirement for the agency has included "all possible planning" in the development program for any of the proposed build alternatives. The park owner MNCPPC expressed interest in all the properties that have been identified in the ICC mitigation packages as replacement parkland. These properties were selected for a variety of reasons, but primarily because they can and do address precisely the functions and values associated with the parkland that would be used by the proposed action, such as stream valley conservation, water quality protection, preservation of forested acres and FIDS habitat. As a result of the ICC's mitigation package, the MNCPPC park system will grow substantially in areas that were specifically targeted by the park owner. The requirement in Section 4(f) to conduct "all possible planning" to minimize harm to parkland that would be "used" by a proposed action is not a requirement to mitigate to a certain quantitative level. The FEIS in this case properly identifies the values that would be lost as a result of development of either build alternative and describes in sufficient detail the planning and specific proposals associated with the overall proposed mitigation package. Moreover, the US Department of Interior has stated that the parkland mitigation package for Corridor 1 sufficiently mitigates for the loss of parkland on Corridor 1 and that all of the requirements of Section 4(f) have been satisfied.

579 **Use of the Peach Orchard Allnut (POA) Property for parkland mitigation is unsound for several reasons including 1) Winchester Homes, Inc. has a contractual right to repurchase the POA property, 2) the environmentally sensitive portion of the POA property has already been incorporated into Winchester's development plan, transferring 70 acres to the MNCPPC free of cost, and 3) use of the remaining POA property for reforestation and FIDS habitat is illogical because it has been approved for the construction of 130 lots and is already partially cleared, graded, and developed.**

The Peach Orchard Allnut Property was selected as a parkland mitigation site because it

provides a significant amount of land to be added to the local park system in the sensitive Upper Paint Branch Watershed and it has the potential to provide valuable functions in the long term. While there is only approximately 28 acres of existing forest on this site, it is proposed for reforestation and in the future could be completely forested. It is important to note that the conversion of this property to parkland would protect it in perpetuity from development, thus allowing it to contribute to the protection of the watershed. When the trees planted as a result of reforestation efforts mature, this site will also provide a substantial amount of habitat for Forest Interior Dwelling Species.

The Lead Agencies acknowledge that 70 acres of this property would be transferred to MNCPPC free of charge as part of Winchester's development plan. However, SHA will not authorize the repurchase of this property at this time by Winchester Homes, Inc. because SHA has determined that this property is needed for the ICC. Therefore, Winchester's development plan will not proceed and the entire 118 acres, including the environmentally sensitive portions of the property, will be protected as parkland. Despite the fact that the site has been partially cleared, graded and developed, the Lead Agencies analysis of potential parkland replacement sites identified features of this site that were deemed valuable to preserve. Primary among these features was the site's ability to provide watershed protection within the Upper Paint Branch area. Recognizing that reforestation of the site would ultimately enhance the watershed protection value of the property as well as provide additional forest and FIDS habitat, the Lead Agencies have committed to 90 acres of reforestation at this location.

580 **SHA purchased the Peach Orchard Allnut (POA) property from Winchester Homes, Inc in 1998 subject to Winchester's right to repurchase the property if it were not used for ICC right-of-way. With the selection of Corridor 1, it is apparent that the SHA no longer needs the POA property for right-of-way and therefore Winchester has the right to repurchase the property. However, SHA has now indicated that this property will be used for parkland mitigation instead, which is inconsistent with the parties' Repurchase Agreement. Winchester has a contractual right to the POA property.**

SHA's letter of April 18, 2005, to the commenter explained that SHA had not determined that the property was no longer needed for the ICC because it was being considered for use as a mitigation site. As noted in the commenter's letter of March 23, 2006 the FEIS for the ICC, which was open until April 11, 2006, for public review and comment, has designated the POA Property for parkland mitigation, reforestation and FIDS habitat to mitigate the effects of the construction of the ICC and the taking of parkland property in that process. In the event that final plans are approved which include these designations, the use of the property for this purpose must be considered part of the land needed by SHA for the proposed road or transportation project. The ICC and other modern highways consist of more than the actual paved area upon which cars are driven.

In reaching this determination, SHA considered whether a privately owned property could be acquired by SHA through its use of its eminent domain authority for parkland mitigation, reforestation and FIDS habitat needed for the ICC. In other words would the POA Property meet the public use and necessity criteria for a state highway purpose? In the event that the environmental approvals for the ICC mandate parkland mitigation, reforestation, and FIDS habitat by the use of this specific property, SHA's acquisition of the Conveyed Property via eminent domain would be justified and it would be a part of the property needed "for the proposed roadway." Since the POA Property could be acquired via eminent domain for a parkland replacement site, it must also be concluded that this use of the Conveyed Property (for which SHA paid 100% of the fair market value) would not trigger the repurchase rights because it would be utilized for the proposed roadway.

Since the terms of the Agreement are only triggered if the Conveyed Property is not utilized for the proposed ICC and the property may be used for the proposed roadway, SHA will not authorize the repurchase at this time.

581 **Page V-63. On page V-63 and page V-102, the Santini Road Properties and the Casey Property are discussed in the Section 4(f) Evaluation as if they are proposed for Section 4(f) parkland replacement. According to Appendix R-3 page 21, the Casey Property is not proposed as Section 4(f) parkland mitigation. Is the same true for the Santini Road properties? After reading the text on page V-63 we are left with the impression that Casey and Santini are part of the Section 4(f) park mitigation plan. Please clarify this misleading association. Are the Casey and Santini properties proposed as Section 4(f) parkland mitigation or not? If not, why are they included in the Section 4(f) Evaluation as if they are a part of the Section 4(f) parkland mitigation plan? If so, why are properties from distant watersheds acceptable to mitigate local watershed impacts? After all, the ICC preferred alternative does not impact the Little Seneca or Patuxent watersheds.**

The Santini Road and Casey Properties are included in the Section 4(f) Evaluation because providing these lands as mitigation for natural resources impacts serves to also benefit the local park system in Montgomery County. The parkland impacted by the Selected Alternative would be more than fully replaced without either of these properties. However, these sites are proposed as mitigation because they provide valuable functions such as protection of the Patuxent Watershed and protection of FIDS habitat. By converting them to parkland, these sites are preserved in perpetuity and can continue to perform these functions. As a result of converting these sites to parkland, the county's park system would be improved by adding additional acreage of high-quality natural land. Therefore, it is relevant to discuss them in the Section 4(f) Evaluation because they serve to benefit the parks. These benefits must be considered when assessing the overall harm to parklands.

582 **Page V-64. Environmental Stewardship (ES) is discussed on page V-64 and V-103 within the context of the Section 4(f) Evaluation. This is misleading since ES features are considered separately from the Section 4(f) park mitigation plan. Why is ES discussed within the context of the Section 4(f) Evaluation? MNPS believes this is inappropriate because it may confuse a reader to think that it is appropriate to include the ES component as part of the Section 4(f) mitigation plan. ES is a separate plan that is meant to go beyond compensatory mitigation requirements. Why is ES included in the Section 4(f) Evaluation? Why is it appropriate to include ES in the Section 4(f) Evaluation?**

It is appropriate to discuss all elements of the project, especially those that specifically respond to the project's Purpose and Need, within the context of the Section 4(f) Analysis. In many cases, environmental stewardship enhancements would result indirectly in a reduction of harm to certain Section 4(f) resources affected by this project. For example, stream restoration, wetland creation, and stormwater management retrofit enhancements would serve to improve water quality in the streams. This would reduce harm to the function of many of the parks because protection of the steams is a primary function of the stream valley parks. Implementation of these enhancements within Section 4(f) resources however was not considered Section 4(f) use because the sole purpose of these features is to improve the existing natural and/or recreational environment of the resources, allowing them to better perform their intended functions.

583 **The ICC Corridor 1 route was conceived before present-day environmental regulations, and has been rejected at every juncture in the past because of its significant and unavoidable environmental impacts.**

The preferred route in the FEIS is a holdover from what had been the route of least resistance prior to enactment of § 4(f), when transportation planners routinely selected stream valleys in order to avoid developed, populated areas. See generally Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1971).

Although Corridor 1 is somewhat representative of the master plan alignment and alternatives

that have been developed during past studies, the study team for this planning study applied an entirely different approach at planning and preliminary engineering. Medians were decreased, side slopes were steepened, bridges were lengthened, just to name a few environmental stewardship principles that were applied. In addition, the team applied stewardship in an even more extensive form by incorporating specific stewardship projects that address existing environmental needs in the study area.

The Lead Agencies prepared a comprehensive Section 4(f) Evaluation that addresses the Section 4(f) impacts for each of the build alternatives. For more information about the Lead Agencies determination that Corridor 1 has the least harm to Section 4(f) resources and that Corridor 2 is not a prudent alternative please see Chapter V of the FEIS.

Unlike the Overton Park Case, where the State of Tennessee proposed to build an interstate highway through the middle of a Nashville City Park, in the case of the ICC, the same agency that implemented the land use plans and park plans implemented the highway plans. In most cases, MNCPPC concurrently planned the ICC and the parks it passes through.

584 **All possible planning to minimize harm to the upper Paint Branch watershed from the ICC have not been employed. The ICC as defined in the FEIS is not a new state-of the- art highway. Possible planning to minimize harm should have included new and innovative concepts such as the elevated highway shown high above a farm on the "Fast-Track" web site. Instead of digging into the sensitive wetlands, recharge areas, and disturbing the aquifer in the Good Hope sub-watershed to build the ICC under New Hampshire Avenue, would it not be less damaging to put the highway high above the trees, as shown in this illustration? All possible planning to minimize harm must certainly include new and innovative approaches. No information/documentation has been provided showing what new and innovative options were considered in the ICC study, and for which specific locations? What cost-benefit analyses of these types of options were done and what were the results?**

Whether linear and underground stormwater management, steepened side slopes or much longer bridge spans than hydraulically required, the Lead Agencies have applied new and innovative design principles to minimize harm in Upper paint Branch and throughout the study corridor. In addition, the lead Agencies will continue to work with local, state and federal agencies and the design teams and contractors to find further innovations for the construction of the Selected Alternative.

Chapter V.K. Alignment Option Decisions Common to Both Corridors

585 **Choosing the route that destroys homes (Rock Creek Option C) and neighborhoods is irresponsible.**

The Lead Agencies' decision to select Rock Creek Option C instead of Rock Creek Option A was a difficult one that included a myriad of potential impacts and benefits as well as consideration of strongly held positions on all sides. The Final EIS reflects information provided at numerous community meetings describing the complexity and wide range of issues that went into this decision. They are not contained within one particular area of study. Determining a proposed Rock Creek Regional Park crossing involved comparison of impacts that are not easily measured. For example, the decision presented a stark comparison between natural environmental impacts and community impacts. Thus, the Lead Agencies could not easily compare acres of wetland or forest impacted by the two Rock Creek options. In addition to the complexities of natural versus human and cultural impacts, the team had to consider the conflicting and strongly held positions of both citizens and various local, state, and federal agencies.

Rock Creek Option C, with a grade-separated crossing under Olde Mill Run Road, has been identified as the Selected Alternative. The following list describes the primary factors that were weighed prior to identifying the Selected Alternative:

- Rock Creek Option C (grade separation) requires substantially less parkland acquisition than Rock Creek Option A (12.0 acres compared to 37.4 acres).
- Rock Creek Option C requires the displacement of 15 more residences and one business compared to Rock Creek Option A.
- Rock Creek Option C is less consistent with the Montgomery County Master Plan than Rock Creek Option A.
- The park owner, Maryland National Capital Park and Planning Commission (MNCPPC), following the recommendations of its February 3, 2005 staff report, the Department of the Interior, which includes both the U.S. Fish and Wildlife Service and the National Park Service, in its letter of February 25, 2005, and the Environmental Protection Agency, in its February 25th letter, all recommended Rock Creek Option C due to its ability to minimize harm to natural resources. The Montgomery County Council and County Executive expressed their support for Rock Creek Option A because of community impacts.
- Under Rock Creek Option A, the planned Midcounty Highway extension could result in an additional crossing of Rock Creek Regional Park, requiring an additional five to eight acres of Section 4(f) use and converting approximately 324 acres of additional area to transportation use. Because Rock Creek Option C would use a portion of the corridor reserved for the Midcounty Highway and eliminate the need for an additional Midcounty Highway crossing, the future community and parkland impacts associated with the planned Midcounty Highway crossing would be avoided.
- In addition to three times as many acres of parkland, Rock Creek Option A causes greater impacts to the natural environment, requiring three times as much impact to 100-year floodplains and more than three times as much total Forest Interior Dwelling Species habitat (53.5 acres versus 15.9 acres).
- Rock Creek Option A would cross Rock Creek Regional Park in an area that contains higher quality interior forest, while Option C would cross through lower quality stands including some isolated forest remnants. Option C would result in less disruption of the natural terrain than would Option A because Option C would cross Rock Creek between two knolls and at one of its narrowest points.

The Lead Agencies understand from comments received that residents of the affected communities dispute conclusions concerning the relative quality of natural resources affected by Option A vs. Option C. Information provided by both the park owner and the National Park Service is entitled to great weight during the Section 4(f) decision-making process. Those agencies indicated that the resources potentially affected by Option A were of a generally higher quality and presented greater challenges to minimize or mitigate adverse affects than those resources associated with Option C. While we recognize that individuals may differ in their views on the relative merits of the identified natural resources, the Lead Agencies decided to defer to the information and opinions expressed by those agency officials directly responsible for parkland management and protection.

Those factors and others were weighed in consideration of Section 4(f) of the U. S. Department of Transportation Act of 1966, 49 U.S.C. sec. 303, which provides that the use of land from a public park will be permitted only if there is no feasible and prudent alternative to the use of that land and all possible planning to minimize harm to the park has been included in the transportation project. This federal law, as interpreted by the courts, means that, in balancing impacts to parks versus impacts to buildings, including homes, all effort must be made to

minimize impacts to parkland.

586 It is unfair to expect residents to leave their homes when the negative effects of the ICC are still being debated.

The NEPA process for the ICC has been careful and deliberative. Since the current study was begun in June 2003, a series of public open house and workshops have been held (9 workshops and 4 public hearings over a two-year period, attended by more than 2,000 people). A Draft EIS was made available in November 2004. Four public hearings were held and over 3,500 comments were received and considered. The Final EIS was made available in January 2006. No acquisitions of homes will be authorized until after the Record of Decision is issued.

587 Longmead Crossing has worked to restore quality of life in its neighborhood. Building the ICC through this neighborhood will destroy what this community has built and achieved. A pedestrian bridge over the ICC is no compensation.

The ICC Selected Alternative is located along the reserved transportation corridor within the Longmead community. The Community Impact Assessment in the FEIS (Chapter IV.B) details the potential community impacts that would be expected, including isolation, character changes, and visual and noise impacts. The Lead Agencies have avoided and minimized impacts to communities with measures such as depressing the roadway to minimize noise and visual impacts to communities, shifting alignments to avoid communities and other sensitive resources, and reducing roadway section widths where feasible. In addition retaining walls near residential properties would reduce the overall footprint of the proposed roadway.

588 The ICC has been planned for a long time so homeowners who bought at discounted prices in that area have known about it. People who just bought there have no right to complain about home values. The planned ICC routes have affected property values for years.

For over 30 years, Montgomery County Code, Section 40-10 includes the requirement of Notice of the County's applicable Master Plan to purchases of real estate. Chapter IV.D describes the effects of the ICC on local master plans.

589 The SHA should have selected Rock Creek Option A instead of Option C to drastically reduce the number of homes to be taken (18 versus 3), the number of land acquisitions, and the disruption of two neighborhoods.

The Lead Agencies' decision to select Rock Creek Option C instead of Rock Creek Option A was a difficult one that included consideration of a myriad of potential impacts and benefits as well as consideration of strongly held positions on all sides. The Final EIS reflects information provided at numerous community meetings describing the complexity and wide range of issues that went into this decision. They are not contained within one particular area of study. Determining a proposed Rock Creek Regional Park crossing involved comparison of impacts that are not easily measured. For example, the decision presented a stark comparison between natural environmental impacts and community impacts. Thus, the Lead Agencies could not easily compare acres of wetland or forest impacted by the two Rock Creek options. In addition to the complexities of natural versus human and cultural impacts, the team had to consider the conflicting and strongly held positions of both citizens and various local, state, and federal agencies.

Rock Creek Option C, with a grade-separated crossing under Olde Mill Run Road, has been identified as the preferred option. The following list describes the primary factors that were weighed prior to identifying the Selected Alternative:

- Rock Creek Option C (grade separation) requires substantially less parkland acquisition than Rock Creek Option A (12.0 acres compared to 37.4 acres).

- Rock Creek Option C requires the displacement of 15 more residences and one business compared to Rock Creek Option A.
- Rock Creek Option C is less consistent with the Montgomery County Master Plan than Rock Creek Option A.
- The park owner, MNCPPC, following the recommendations of its February 3, 2005 staff report, the Department of the Interior, which includes both the U.S. Fish and Wildlife Service and the National Park Service, in its letter of February 25, 2005, and the Environmental Protection Agency, in its February 25th letter, all recommended Rock Creek Option C due to its ability to minimize harm to natural resources. The Montgomery County Council and County Executive expressed their support for Rock Creek Option A because of community impacts.
- Under Rock Creek Option A, the planned Midcounty Highway extension could result in an additional crossing of Rock Creek Regional Park, requiring an additional five to eight acres of Section 4(f) use and converting approximately 324 acres of additional area to transportation use. Because Rock Creek Option C would use a portion of the corridor reserved for the Midcounty Highway and eliminate the need for an additional Midcounty Highway crossing, the future community and parkland impacts associated with the planned Midcounty Highway crossing would be avoided.
- In addition to three times as many acres of parkland, Rock Creek Option A causes greater impacts to the natural environment, requiring three times as much impact to 100-year floodplains and more than three times as much total Forest Interior Dwelling Species habitat (53.5 acres versus 15.9 acres).
- Rock Creek Option A would cross Rock Creek Regional Park in an area that contains higher quality interior forest, while Option C would cross through lower quality stands including some isolated forest remnants. Option C would result in less disruption of the natural terrain than would Option A because Option C would cross Rock Creek between two knolls and at one of its narrowest points.

The Lead Agencies understand from comments received that residents of the affected communities dispute conclusions concerning the relative quality of natural resources affected by Option A vs. Option C. Information provided by both the park owner and the National Park Service is entitled to great weight during the Section 4(f) decision-making process. Those agencies indicated that the resources potentially affected by Option A were of a generally higher quality and presented greater challenges to minimize or mitigate adverse affects than those resources associated with Option C. While we recognize that individuals may differ in their views on the relative merits of the identified natural resources, the Lead Agencies decided to defer to the information and opinions expressed by those agency officials directly responsible for parkland management and protection.

Those factors and others were weighed in consideration of Section 4(f) of the U. S. Department of Transportation Act of 1966, 49 U.S.C. sec. 303, which provides that the use of land from a public park will be permitted only if there is no feasible and prudent alternative to the use of that land and all possible planning to minimize harm to the park has been included in the transportation project. This federal law, as interpreted by the courts, means that, in balancing impacts to parks versus impacts to buildings, including homes, all effort must be made to minimize impacts to parkland.

While the Montgomery County master planning process is one of the most progressive and successful in the country, a federally-funded project does not automatically need to be constructed in its planning areas according to its master plans. Although existent master plans include a specific County-preferred alignment, neither a NEPA study nor a U. S. DOT Act Section 4(f) study can be bound by any one alternative. The proposed action's relative

consistency with state and local land use plans is an important factor, one that is required to be considered in any NEPA study. However, the Lead Agencies are also required to consider other "reasonable and feasible" alternatives (such as Rock Creek Option C and Corridor 2), which were not shown in area master plans.

590 Rock Creek Option A has been shown in the Master Plan for decades. Rock Creek Option C has never been shown in the Master Plan. Any deviation from area master plans would violate Montgomery County's most fundamental planning principles.

Rock Creek Option C was evaluated in SHA's 1997 study as a Section 4(f) alternative. Montgomery County did not include it in area master plans and it was not included in any other state or local documents other than the 1997 ICC DEIS. However, the majority of the Rock Creek Option C alignment through Winters Run is included as M-83 (the Midcounty Highway) in the master plan.

While the Montgomery County master planning process is one of the most progressive and successful in the country, it still does not guarantee that a federally-funded project will or will not be constructed in its planning areas according to its master plans. Although existing master plans include a specific County-preferred alignment, neither a NEPA study nor a Section 4(f) of the U. S. DOT Act study can be bound by any one alternative. Therefore, the Lead Agencies were required to consider other alternatives, including Rock Creek Option C and Corridor 2, which were not shown in area master plans.

591 Rock Creek Option C takes less parkland than Option A (the difference between the two options is 22 acres), but there appear to be no endangered species or plants or animals in the park nor difference in the number of streams that would be crossed.

Rock Creek Option C (grade separation) requires substantially less parkland acquisition than Rock Creek Option A (12.0 acres compared to 37.4 acres). In addition to three times as many acres of parkland, Rock Creek Option A causes greater impacts to the natural environment, requiring three times as much impact to 100-year floodplains and more than three times as much total Forest Interior Dwelling Species habitat (53.5 acres versus 15.9 acres). Rock Creek Option C impacts approximately 1,900 linear feet of stream, as opposed to about 1,300 linear feet for Rock Creek Option A. There are also species of concern along Rock Creek Option A: bashful bulrush (state rare/watchlist) and showy skullcap (watchlist).

592 Opposed to Rock Creek Option C.

Thank you for your comment.

593 The County Council and County Executive support Rock Creek Option A.

Thank you for your comment.

594 The State is blaming the federal agencies for the decision to select Rock Creek Option C over Option A, even though the citizens and elected officials prefer Option A. Thinks that SHA selected Option C because it is the easiest way to get federal approval for the ICC.

The park owner, MNCPPC, following the recommendations of its February 3, 2005 staff report, the Department of the Interior, which includes both the U.S. Fish and Wildlife Service and the National Park Service, in its letter of February 25, 2005, and the Environmental Protection Agency, in its February 25th letter, all recommended Rock Creek Option C due to its ability to minimize harm to natural resources. The Montgomery County Council and County Executive expressed their support for Rock Creek Option A because of community impacts. The Lead Agencies understand from comments received that residents of the affected communities dispute conclusions concerning the relative quality of natural resources affected by Option A vs. Option C. Information provided by both the park owner and the National Park Service is entitled

to great weight during the Section 4(f) decision-making process. Those agencies indicated that the resources potentially affected by Option A were of a generally higher quality and presented greater challenges to minimize or mitigate adverse affects than those resources associated with Option C. While we recognize that individuals may differ in their views on the relative merits of the identified natural resources, the Lead Agencies decided to defer to the information and opinions expressed by those agency officials directly responsible for parkland management and protection.

595 Option C costs $50 million more than Option A, for a 1.8 mile section of road. Why would SHA choose an option that is so much more expensive? Why can't the $50 million be used instead to improve Option A so it can be selected?

The Lead Agencies' decision to select Rock Creek Option C instead of Rock Creek Option A was a difficult one that included a myriad of potential impacts and benefits as well as consideration of strongly held positions on all sides. The Final EIS reflects information provided at numerous community meetings describing the complexity and wide range of issues that went into this decision. They are not contained within one particular area of study. Determining a proposed Rock Creek Regional Park crossing involved comparison of impacts that are not easily measured. For example, the decision presented a stark comparison between natural environmental impacts and community impacts. Thus, the Lead Agencies could not easily compare acres of wetland or forest impacted by the two Rock Creek options. In addition to the complexities of natural versus human and cultural impacts, the team had to consider the conflicting and strongly held positions of both citizens and various local, state, and federal agencies.

The Lead Agencies also worked diligently to minimize the impacts of both Rock Creek Options through very sensitive environments by minimizing median widths, varying vertical and horizontal alignments and other engineering tools. The Lead Agencies have also determined that additional minimization efforts along Rock Creek Option A would not result in any significant savings of impacts through that section of Rock Creek Park.

596 The level of communication between the state and the community has been inadequate. Many in the community did not know that Option C was a possibility. Many citizens did not receive responses to their e-mails about how Option C was selected and how it would be built. Many citizens were not invited to the community meeting with the Winters Run community.

Rock Creek Option C was originally studied as part of the Section 4(f) analysis in the NEPA study in the mid 1990s and has been, in part, included on area master plans as M-83 (MidCounty Highway Extended). Option C was developed in detail very early in this NEPA Study, shown on study maps at community and public meetings/hearings, on the project website and in project literature for more than two years. The Lead Agencies, as part of the proactive public outreach efforts and the Community Impact Assessment conducted for this study, partnered with the community leaders in arranging for a special community meeting in the Spring of 2004. Unfortunately, the community had not completed the notification and scheduling for the meeting and only two residents of Cashell Estates came. The Lead Agencies scheduled another outreach meeting in the fall of 2005. Letters were mailed to hundreds of residents in the Winters Run, Cashell Estates and neighboring communities informing them of the special outreach meeting. The meeting was well attended.

597 Residents are concerned about the health effects of living near a tunnel. How will the state monitor and prevent air pollution coming from the two entrances to the tunnel to be built under Olde Mill Run?

The Lead Agencies have included air quality measurements and modeling at receptors in

Winters Run adjacent to the cut and cover roadway, and found no violations of air quality standards for either current conditions or future conditions with the ICC. The cut and cover at Winters Run will be up to 625 feet long and would not affect air quality any differently than an open road section. The type of "tunnel" noted in the comment typically requires a special ventilation system and is used for tunnels much longer than 700 feet.

598 Feels that the state government does not care about the Winters Run community or its expressed concerns.

The Final EIS reflects information provided at numerous community meetings describing the complexity and wide range of issues that went into this decision. They are not contained within one particular area of study. Determining a proposed Rock Creek Regional Park crossing involved comparison of impacts that are not easily measured. For example, the decision presented a stark comparison between natural environmental impacts and community impacts. Thus, the Lead Agencies could not easily compare acres of wetland or forest impacted by the two Rock Creek options. In addition to the complexities of natural versus human and cultural impacts, the Lead Agencies had to consider the conflicting and strongly held positions of both citizens and various local, state, and federal agencies. Some of the measures taken to minimize and avoid those impacts include passing the ICC beneath Olde Mill Run to both reduce visual impacts and maintain current access within the community. Retaining walls are included under Rock Creek Option C to minimize displacements and reduce property acquisition at the south end of Catalpa Court and in the Winters Run neighborhood, where a cover will also be provided. The Lead Agencies will continue to work with residents of these communities throughout the project to further avoid and minimize impacts to the communities where possible. Unfortunately, the Cashell Estates and Winters Run communities would experience impacts with Rock Creek Option C. The FEIS does not hide such impacts, which are detailed in the Community Impact Assessment (refer to FEIS Chapter IV.B). These impacts include residential displacements, increased noise, isolation of northern residences, visual intrusions, and other impacts associated with introducing a major transportation facility into a suburban area.

599 The FEIS states that the displacements due to Rock Creek Option C would account for approximately one-third of the total displacements for Corridor 1. However, Rock Creek Option C will result in 53% (10 out of 19) homes impacted on Overhill and Garrett Roads.

The FEIS includes a discussion (Chapters IV.B and V.E) of the impacts of residential impacts in the Cashell Estates area as a percentage of the total overall impact to houses in the project area, as well as the impact to the Cashell Estate community.

600 Rock Creek Option C was selected to avoid parkland impacts, but Rock Creek Option A would go through parkland that has been designated transportation right-of-way, not parkland, by MNCPPC (refer to Vol. 1, page V-6). MNCPPC considers Rock Creek Regional Park to be reserved for the ICC.

The Rock Creek Regional Park property crossed by the current Montgomery County master plan alignment was purchased in the 1950s-1960s at a time when the master plan alignment was not planned to be in that area. Therefore that parkland cannot be considered as reserved for transportation use under a Section 4(f) analysis.

That factor and others were weighed in consideration of Section 4(f) of the U. S. Department of Transportation Act of 1966, 49 U.S.C. sec. 303, which provides that the use of land from a public park will be permitted only if there is no feasible and prudent alternative to the use of that land and all possible planning to minimize harm to the park has been included in the transportation project. This federal law, as interpreted by the courts, means that, in balancing impacts to parks versus impacts to buildings, including homes, all effort must be made to minimize impacts to parkland.

601 MNCPPC expressed preference for Rock Creek Option C and stated that it is only a minor deviation from the Master Plan.

While the Montgomery County master planning process is one of the most progressive and successful in the country, a federally-funded project does not automatically need to be constructed in its planning areas according to its master plans. Although existent master plans include a specific County-preferred alignment, neither a NEPA study nor a U. S. DOT Act Section 4(f) study can be bound by any one alternative. The proposed action's relative consistency with state and local land use plans is an important factor, one that is required to be considered in any NEPA study. However, the Lead Agencies are also required to consider other "reasonable and feasible" alternatives (such as Rock Creek Option C and Corridor 2), which were not shown in area master plans.

The notion of a Rock Creek Option C, while relatively new in the long history of ICC studies, was first evaluated almost 10 years ago in the 1997 ICC study as a Section 4(f) alternative. When the current ICC study was initiated in June 2003, Rock Creek Option C was also included as an alternative to minimize harm to parkland in Rock Creek. Throughout the current study, Rock Creek Option C was shown in the DEIS, the DEIS public hearing brochures, the FEIS, and other informational materials. It was also presented as a possibility at public hearings and community meetings. While the study team made efforts to remain consistent with the overall Montgomery County Master Plan, in Rock Creek Option C, Section 4(f) considerations dictated a deviation from that Plan.

At the time MNCPPC acquired land for Rock Creek Regional Park in Montgomery County between 1955-63, the ICC had not been planned, therefore no designated transportation corridor through the park was reserved. As a consequence, the federal government considers the County Master Plan's ICC corridor through the park, delineated in 1971, to be a protected 4(f) resource. Because there is no prudent alternative that would entirely avoid the use of Section 4(f) property given the east-west transportation need and the north-south stream valley parks, the Selected Alternative incorporates all possible planning to minimize harm to 4(f) resources to the maximum extent practicable. As a part of that 4(f) planning, MNCPPC, the park owner, as well as the National Park Service, supported by the federal resource agencies, recommended that Rock Creek Option C was preferable to Option A in terms of overall 4(f) impacts.

602 How would a potential home buyer have found the information about the existence of Rock Creek Option C if it was not in any local or state land use document?

The notion of a Rock Creek Option C, while relatively new in the long history of ICC studies, was first evaluated almost 10 years ago in the 1997 ICC study as a Section 4(f) alternative. When the current ICC study was initiated in June 2003, Rock Creek Option C was also included as an alternative to minimize harm to parkland in Rock Creek. Throughout the current study, Rock Creek Option C was shown in the DEIS, the DEIS public hearing brochures, the FEIS, and other informational materials. It was also presented as a possibility at public hearings and community meetings. While the Lead Agencies made efforts to remain consistent with the overall Montgomery County Master Plan, in Rock Creek Option C, Section 4(f) considerations dictated a deviation from that Plan. The majority of the Rock Creek Option C alignment through Winters Run is included as M-83 (the Midcounty Highway) in the master plan.

603 How can Rock Creek Option C be considered a fair and reasonable alternative if it was never shown in any planning documents? Commenter bought his house in 2001, before the current study began, and checked the master plan, which did not show Rock Creek Option C as part of the ICC.

While the Montgomery County master planning process is one of the most progressive and

successful in the country, a federally-funded project does not automatically need to be constructed in its planning areas according to its master plans. Although existent master plans include a specific County-preferred alignment, neither a NEPA study nor a U. S. DOT Act Section 4(f) Evaluation can be bound by any one alternative. The proposed action's relative consistency with state and local land use plans is an important factor, one that is required to be considered in any NEPA study. However, the Lead Agencies are also required to consider other "reasonable and feasible" alternatives (such as Rock Creek Option C and Corridor 2), which were not shown in area master plans.

In 2001, there was no ICC study underway. When the new ICC study was initiated in 2003, the Rock Creek Option C was included as an alternative to minimize harm to parkland in Rock Creek. Throughout the current study, Rock Creek Option C was shown in the DEIS, the DEIS public hearing brochures, and other informational materials.

604 The SHA has incorrectly depicted Cashell Estates in the majority of figures in the DEIS and FEIS, even after being made aware of the omission of Garrett Road on the maps. It appears that this was done intentionally to downplay the impacts.

Garrett Road is shown on all of the FEIS engineering plates and on all of the large scale aerial maps that have been produced since the issue was raised. There are still some maps of the entire study area presented at a scale that does not permit showing all of the neighborhood streets. The Lead Agencies understand the significance of Garrett Road to the access and mobility needs of the Cashell Estates community.

605 SHA uses the extension of M-83 to justify Rock Creek Option C, even when there are more reasonable routes to connect M-83 to I-370 at their closest points through a less environmentally sensitive area.

The Lead Agencies have not tried to "use" the M-83 master plan alignment to justify Rock Creek Option C. Instead, the Lead Agencies have attempted to inform the communities about the existence of this master planned roadway and how the two coincide for a distance through and around the Winters Run community. As can be seen in the FEIS Chapters III, IV and V, several optional alignments were studied prior to identifying Rock Creek Option C as part of the Selected Alternative.

606 Prior to SHA's announcement of its Preferred Alternative in July 2005, residents of Cashell Estates were told that there was virtually no chance that Rock Creek Option C would be selected, essentially deceiving the community (quotes SHA employees who stated this). They were told that Rock Creek Option A could be constructed in an environmentally sensitive way.

Option C was originally studied as part of the Section 4(f) analysis in the NEPA study in the mid 1990s. Option C was developed in detail very early in this NEPA Study, shown on study maps at community and public meetings/hearings, on the project website and in project literature for more than two years. The Lead Agencies, as part of the proactive public outreach efforts and the Community Impact Assessment, have always presented Rock Creek Option C as a full option, equal to Rock Creek Option A and at no time prior to the July 11, 2005 identification of the locally Preferred Alternative presented one Option as favored or better.

607 A table prepared by the residents of Cashell Estates, based on information in the DEIS, shows that Rock Creek Option C is not better than Rock Creek Option A in terms of natural environmental impacts. Specifically, Rock Creek Option A only impacts 0.5 acres more of wetlands than Option C.

Although Rock Creek Option C requires the displacement of 15 more residences than does Rock Creek Option A, Rock Creek Option C (grade separation) requires substantially less parkland acquisition than Rock Creek Option A (12.0 acres compared to 37.4 acres). Rock

Creek Option A also causes greater impacts to the natural environment, requiring three times as many impacts to 100-year floodplains and more than three times as much total Forest Interior Dwelling Species habitat (53.5 acres versus 15.9 acres). Because Rock Creek Option C would use a portion of the corridor reserved for the Midcounty Highway and eliminate the need for an additional Midcounty Highway crossing, the future community and parkland impacts associated with the planned Midcounty Highway crossing would be avoided. Rock Creek Option A would cross Rock Creek Regional Park in an area that contains higher quality interior forest, while Option C would cross through lower quality stands including some isolated forest remnants. Rock Creek Option C would result in less disruption of the natural terrain than would Option A because Option C would cross Rock Creek between two knolls and at one of its narrowest points.

608 **Winchester homes designed its development to accommodate the original ICC Master Plan Alignment and M-83, the Midcounty Highway. Rock Creek Option C conflicts with the approved Site Plan and also conflicts with the Upper Rock Creek Area Master Plan alignment of the ICC. The subdivision approval restricted the recordation of plats, providing SHA the opportunity to acquire the land before Winchester proceeded with development. The SHA has made no effort to acquire the property. As was suggested to SHA during a meeting with Winchester Homes, if Rock Creek Option A is not feasible, SHA should use the M-83 alignment across the Winchester Homes property.**

The referenced Winchester Homes property is located east of Rock Creek, south of MD 115. Both Rock Creek Options A and C pass through the property. The Selected Alternative, which includes Rock Creek Option C, utilizes the southern portion of the M-83 corridor through this property. Rock Creek Option C, as shown in the FEIS, was shifted to include some land south of the M-83 corridor to reduce wetland impact (wetland 1MD). This has the added benefit of increasing the buffer between the ICC and the residences on the south side of MD 115. It is for these reasons that the M-83 corridor is not fully utilized.

Except for protective buying situations, SHA is precluded from acquiring any property for the ICC prior to Record of Decision.

Chapter V.L. Alignment Option Decisions Specific to Corridor 1

609 **Any replacement forest or parkland should be in the same watershed (i.e., Rock Creek and Anacostia River).**

To the extent possible, replacement forests and parklands were identified in the same watershed in which the impact would occur. Complete replacement within the watershed was not possible in all cases. Therefore, replacement sites were identified that would provide additional forest or parkland of a similar quality, but outside of the watershed. In these cases, sites were selected based on their ability to provide a similar function as that of the impacted land. Considerations including the size of the site, forest, FIDS habitat, wetlands, and streams were factored into the selection process. Each of the mitigation sites was coordinated with the local jurisdictions and it was determined that the proposed sites would constitute acceptable mitigation.

Chapter V.N. Comparison of End-to-End Alternatives

610 **The proposed mitigation package does not meet the substantive requirements of Section 4(f). Prior to issuing the ROD, the Lead Agencies should revise the proposed Section 4(f) mitigation package to provide the necessary information to decisionmakers to make an informed decision about the proposed action and assess the adequacy of the proposed mitigation.**

The important elements of the mitigation package were to: target key parcels identified by the park owner as ideally suited for acquisition and protection; determine whether replacement lands possessed quality that reflected the functions and values of parkland to be used by the proposed action, such as forest coverage and/or Forest Interior Dwelling Species habitat, and qualities that would foster and promote stream valley and water quality health. The MNCPPC definition of "stream valley park," the majority of parklands affected by the proposed action, stresses precisely these sorts of qualities and functions. The MNCPPC carefully surveyed available parcels, those it had targeted in the past for potential acquisition and other property specifically possessing these characteristics for inclusion in the mitigation package. The park owner made its recommendations for property acquisition based on the size of the parcel, the overall natural resources qualities of the parcel, proximity of the parcel to existing parkland and/or other important natural features, and considerations of potential future development in and around the parcel. Based on all this information, the mitigations recommendations reasonably reflected both quantitative and qualitative factors. As can be seen from the comment letters provided by the state, local and federal resource agencies responsible for parkland management and conservation, the identified properties meet many important conservation and water quality preservation criteria. The Lead Agencies have received adequate comment and analysis from the relevant expert agencies to make the determinations reflected in the Final Section 4(f) Evaluation. The US Department of Interior has stated that the parkland mitigation package for Corridor 1 sufficiently mitigates for the loss of parkland on Corridor 1 and that all of the requirements of Section 4(f) have been satisfied.

611 **The FEIS focuses on the sheer acreage of compensatory land. However, there are serious flaws in the mitigation package. In Appendix R-3, the FEIS states that a property known as the Casey Property "is not a Section 4(f) parkland mitigation." Yet, the FEIS includes discussion of the Casey Property in its Section 4(f) mitigation plan: "Off-site mitigation for [Forest Interior Dwelling Species ("FIDS")] habitat impacted by Corridor 1 would be at the Casey Property, located outside the study area, but within Montgomery County in Poolesville." In fact, this one parcel represents roughly two-thirds of the total compensatory mitigation acreage for Corridor 1. This contradiction also impacts the ability of decisionmakers to evaluate the substantive components of the mitigation package to determine whether the Section 4(f) requirements have been satisfied.**

Mitigation for the loss of forest interior dwelling bird habitat is not a requirement by the regulatory agencies for this project. The Lead Agencies, however, have considered opportunities to compensate for FIDS loss. This includes the acquisition of the Casey property, which will serve several environmental goals including additional natural resource mitigation such as providing for FIDS habitat. The Casey property is not located within the study area, however, is still anticipated to be an important resource for FIDS within the surrounding study area. Other FIDS compensation opportunities that are within the project area include identifying parkland sites that possess existing features such as mature forest cover. In addition, reforestation sites within the study area have been selected that, over time, will add to the overall FIDS habitat within and surrounding the study area. Most of the reforestation sites are located immediately adjacent to existing protected forested areas. Other mitigation-related sites (wetlands creation, fish passage, etc.) are described as examples that existing parkland in the study area will be further enhanced. For instance, various wetland creation, storm water management and fish passage mitigation and stewardship opportunities are proposed to further benefit existing parkland. The identification of the primary Section 4(f) sites were conducted with MNCPPC including the parameters used to select sites that most closely resembled those park areas that could not be avoided.

612 **Another problem with the Casey Property is that the Casey Property is proposed as the sole replacement for FIDS being "taken" by the preferred alignment. Yet the Casey Property is located outside the study area, as defined by the Lead Agencies; it is not even located within the same watersheds that the proposed ICC will impact, the Rock Creek**

and Anacostia watersheds. Rather, the Casey Property is located in the Little Seneca and Patuxent watersheds. Thus, the Casey Property fails to provide any real mitigation to the adverse environmental impacts caused by the impact of the proposed ICC to Section 4(f) parkland.

The Casey property is not the sole mitigation effort to address FIDS loss. FIDS mitigation is not a regulatory requirement. In an effort to consider the loss, however, efforts have been proposed by the Lead Agencies to address the issue. Other than the Casey property, several parkland mitigation sites possess existing mature forest. In addition, reforestation efforts have largely been geared to reestablishing forest adjacent to existing forest in order to increase the FIDS habitat. The Team does recognize, however, that recent tree plantings will not immediately serve as FIDS habitat.

613 **The Lead Agencies appear to take the position that it is unconstrained geographically, or by any other parameter, when fulfilling its obligation of compensatory mitigation. But such an interpretation would severely undermine the policies and purposes motivating Section 4(f). Where projects such as the ICC are built in developed or developing areas, areas where land values and demand are high, compensatory mitigation properties will always be located in areas that are less developed and land less expensive. As a rule then, transportation projects will generally be built through parks, because this land entails far fewer financial and political costs than locating such projects on developed private land.**

For mitigation efforts such as wetland creation and reforestation, it is a requirement to first consider viable opportunities on-site or close proximity to the impacted resource (same subwatershed, watershed, etc.). The Lead Agencies worked carefully together in identifying sites that would, from a larger ecological perspective, maintain a resource within close proximity to the impact site. If this was not possible, other sites were considered the best mitigation available.

Parkland in the study area could not be totally avoided due to the north-south orientation of the stream valley park system. The Lead Agencies have proposed substantial mitigation for disturbed parkland.

614 **The "descriptions" of proposed mitigation sites merely recite the quantity and type of property that is available at the proposed mitigation site, but provide no information about the functional and environmental values. These descriptions raise more questions than they answer. What type of stream quality exists at this site—pristine or heavily polluted? What type of forest exists at this site—immature or mature? What is the current FIDS value? What type of passive use exists at these sites? Further, reforestation misses the point of Section 4(f) mitigation. The current proposed action will decimate habitat, existing FIDS and passive use functions within the study area. It will take decades for these values of parklands to be replaced through reforestation. Additionally, there is no guarantee that reforestation will be successful. Mitigation should not be speculative and should address these immediate impacts so that in the interim time period, while waiting for the reforestation to occur, there is replacement of these functions in the study area.**

Close coordination with the resource agencies including MNCPPC has ensured that regulation requirements are met including considering the functions and values of proposed mitigation sites. Mitigation sites were reviewed in the field by resource agencies to ensure that each site would be suitable for mitigation including the ability to improve the ecological function of the site. In addition, criteria for evaluating the mitigation sites included the ecological compatibility of the site to the surrounding landscape. Information on wetland mitigation site evaluations can be found in the FEIS, Chapter IV.F.7.f, the NETR, Chapter II.H.5 and the administrative record. Descriptions of parkland mitigation sites are located in the Section 4(f) Evaluation, Chapter V.H

of the FEIS. Information on the evaluation of reforestation is located in the administrative record.

The Lead Agencies are aware that the functions and values lost from impacts associated with the ICC can not in many cases be fully replaced for many years. As part of effort to address this, mitigation sites are proposed to be monitored once constructed to determine the level of success. From the monitoring efforts, the need for additional improvements (additional plantings, maintenance, etc.) can be determined. Wetland creation sites, for instance, are typically monitored for a period of five years with a report forwarded to resource agencies each year detailing the level of success for each site. For many resources such as forest and wetlands, monitoring efforts are required as part of agency permits and approvals and are not simply voluntary on the part of the Lead Agencies.

It should be noted that reforestation efforts are mitigation requirements under the Maryland State Reforestation Law and are not required under Section 4(f). The selection of parkland mitigation sites was coordinated with the park owner, MNCPPC. Resources agencies including MNCPPC have agreed that planting native trees within open space available at many of the proposed parkland would further improve the ecological functions and values of the property both in the short and long term.

615 The description is not clear whether the proposed reforestation is separately required under Maryland state law or is proposed specifically to meet the requirements of Section 4(f). The Lead Agencies should not "double count" required reforestation under state law for Section 4(f) purposes and should clarify how it is accounting for this proposed mitigation.

The Lead Agencies did not "double count" reforestation and Section 4(f) mitigation sites. Reforestation is being provided to comply with the Maryland State Reforestation Law. Reforestation is not required under Section 4(f). However, reforestation is being provided in numerous locations that will in the long term, serve to enhance the watershed protection function of many of the impacted parklands. Under the Maryland State Reforestation Law, the Lead Agencies are not precluded from reforesting land that is also being purchased and donated to the local park agency, and the Lead Agencies are not required to purchase and donate reforestation sites to a park agency. Since reforestation would serve to minimize harm to these parklands and, along with many other minimization measures, demonstrate the Lead Agencies' compliance with the Section 4(f) requirement to include all possible planning to minimize harm to Section 4(f) resources, it is appropriate to discuss reforestation in the Section 4(f) Evaluation.

616 The confusion regarding "double counting" proposed mitigation under Section 4(f) is also an issue with proposed Environmental Stewardship projects and compensatory mitigation under Section 404 of the Clean Water Act. In response to public comments, the Lead Agencies have made clear that proposed Environmental Stewardship projects are not being credited toward Section 4(f) mitigation.198 However, the Lead Agencies insist on discussing Environmental Stewardship in the Final Section 4(f) Evaluation. Even with the disclaimers, the mixing of subjects is misleading and the Lead Agencies should reserve all discussion about Environmental Stewardship to the chapter on Environmental Stewardship.

The Lead Agencies did not "double count" compensatory mitigation, reforestation, or environmental stewardship with Section 4(f) mitigation. In terms of compensatory mitigation and reforestation, it is perfectly appropriate, if not desirable, to have a single property provide more than one type of mitigation. The Lead Agencies have worked together to review the best mitigation opportunities for each resource. Wetlands creation sites, for example, were reviewed by agencies responsible for the review and permitting of wetland impacts. Reforestation efforts have primarily involved the Maryland Department of Natural Resources and MNCPPC. For each resource, full mitigation requirements will be met as per permit or approval conditions. Furthermore, where compensatory mitigation or reforestation activities occur in locations that

benefit impacted stream valley parks in the study area, these activities also serve to enhance the primary function of the parks, which is to provide watershed protection. Therefore, providing compensatory mitigation and reforestation on lands that benefit the parks serves to offset the impacts and minimize harm to the parks as is required under Section 4(f). This more holistic approach does not diminish the legal mitigation requirements for each resource being impacted and also demonstrates the Lead Agencies' compliance with the Section 4(f) requirement to include all possible planning to minimize harm to Section 4(f) resources in the project.

Environmental Stewardship (ES) enhancements are being provided above and beyond the legal requirements for compensatory mitigation and reforestation. However, many of the ES enhancements also serve to improve the previously stated primary function of many of the impacted parklands. Therefore, the ES enhancements that benefit the parks are considered in the Final Section 4(f) Evaluation as measures to minimize harm to Section 4(f) resources. Similar to compensatory mitigation and reforestation, the inclusion of ES enhancements demonstrates the Lead Agencies' compliance with the Section 4(f) requirement that all possible planning to minimize harm to Section 4(f) resources be included in the project.

617 The commenter questions the adequacy of the proposed mitigation package as it pertains to each park identified in the FEIS evaluation.

According to Section 4(f) regulations, Section 4(f) only applies to publicly-owned parkland, recreational facilities, wildlife and waterfowl refuges, and National Register listed or eligible historic sites. Research conducted as part of the ICC study (and included in the ICC Technical Support Data located at SHA headquarters) demonstrates that the parcels adjacent to Mill Creek Stream Valley Park that have been identified in this study as Designated Transportation Areas were purchased by MNCPPC and placed in reservation for the ICC and were never designated as parkland. Information contained in the deeds of sale for these properties indicates that the properties were acquired as right-of-way for the ICC or the Outer Beltway - not for use as parkland. Therefore, despite the delay in development of the parcel for transportation uses, Section 4(f) does not apply to these lands.

The Lead Agencies cannot speculate as to the eventual use of the land within the Designated Transportation Corridor adjacent to Mill Creek Stream Valley Park if the ICC is not constructed. The land is owned by MNCPPC and any conversion of the land to another type of use other than transportation right-of-way would only be made at that agency's discretion.

The Lead Agencies conducted an extensive search for potential parkland replacement sites in and around the study area. The potential sites identified were evaluated on a number of criteria including (but not limited to) the size of the parcel, the presences of natural resources (i.e., forests, wetlands, etc.), the watershed in which the property is located, and the property's proximity to impacted parklands. The results of the evaluation yielded a series of properties that were considered "high priority" sites. These sites were found to provide many of the same features as those contained within the impacted parklands and, in many cases were located within a reasonable distance from impacted parklands. Due to the density of development surrounding the existing Mill Creek Stream Valley Park, no "high priority" sites were identified in the Mill Creek watershed in close proximity to the impacted parkland. However, the Dungan Property North, located in the Rock Creek Watershed adjacent to existing parkland, was found to be an exceptional parkland replacement site that would provide many of the same functions and values as the land impacted within Mill Creek Stream Valley Park, Rock Creek Regional Park, and North Branch Stream Valley Park. In addition, this site would provide more parkland than that which is impacted in those three parks combined (44.9 acres of parkland replacement vs. 29.7 acres of parkland impact).

618 Upper Paint Branch Stream Valley Park. The actual "use" of land within the Upper Paint Branch Stream Valley Park amounts to approximately 70 acres of potential impact, not 6.2

as incorrectly stated in the FEIS. The exclusion of "reserved" right-of-way greatly distorts the true impacts to Paint Branch Park. All the land considered by SHA to be "reserved" continues to be used and enjoyed by the general public as de facto parkland, as it has been for many years, if not decades. The reserved land is completely integrated with existing parkland, and there has been no way for park users to distinguish the "reservation" from the parkland on-site. There have never been fences, signs, or other markers in the park to designate the reservation borders.

According to Section 4(f) regulations, Section 4(f) only applies to publicly-owned parkland, recreational facilities, wildlife and waterfowl refuges, and National Register listed or eligible historic sites. Research conducted as part of the ICC study (and included in the ICC Technical Support Data located at SHA headquarters) demonstrates that three of the parcels adjacent to Upper Paint Branch Stream Valley Park that have been identified in this study as Designated Transportation Areas were purchased by MNCPPC and placed in reservation for the ICC and were never designated as parkland. Information contained in the deeds of sale for these properties indicates that the properties were acquired as right-of-way for the ICC or the Outer Beltway - not for use as parkland. Therefore, despite the delay in development of the parcel for transportation uses, Section 4(f) does not apply to these lands.

However, the Lead Agencies acknowledge that three additional parcels adjacent to Upper Paint Branch Stream Valley Park that were identified in this study as having portions that are Designated Transportation Areas were done so in error. These three parcels should have been treated as Section 4(f) parkland in their entirety. This has resulted in an additional 4.9 acres of Section 4(f) use being added to Upper Paint Branch Stream Valley Park, which brings the total use to 11.1 acres. The analysis of this portion of Upper Paint Branch Stream Valley Park has been included in an addendum to the Final Section 4(f) Evaluation.

619 **All of the proposed right-of-way through Paint Branch Park is forested and most of it is composed of mature forest. This forest protects the two most critical trout spawning tributaries (Good Hope & Gum Springs) where over 90 percent of the trout are hatched. We note that the streams found on the three properties proposed for parkland mitigation do not support trout. Furthermore, the ICC would bisect and degrade the Good Hope Biodiversity Area in Paint Branch Park. This area was designated as a biodiversity area primarily due to the presence of exceptional natural habitats, large contiguous forest cover, and uncommon species. Furthermore, the entire area in this portion of the park is designated as a "Best Natural Area" by MNCPPC. The mature riparian and upland forest contains forest-interior habitat, vernal pools, and uncommon species.**

MNCPPC, as part of its comprehensive planning process, has also designated a transportation corridor that crosses the Upper Paint Branch stream system. MNCPPC's plans and planning process recognize the importance of land use in the entire watershed, and not just near the streams. Although the three parkland replacement sites located in the Upper Paint Branch Watershed do not have streams that support trout, they do provide valuable watershed protection, and the park mitigation package as concurred upon by MNCPPC is adequate. By converting this land to parkland, it becomes protected in perpetuity from development that may occur in the future that would further degrade water quality in the watershed. Recognizing the importance of the water resources, the ICC mitigation plan (See ROD) includes many stream restoration and stormwater management retrofits, and reforestation within the existing Upper Paint Branch Stream Valley Park. The comprehensive mitigation package, along with the integrated environmental features of the ICC, mitigates the impacts of ICC. In addition, several environmental enhancement projects within the Upper Paint Branch watershed are part of the ICC Environmental Stewardship package (See ROD), and these projects will provide an enhanced level of environmental protection to the Upper Paint Branch watershed.

620 **The parkland mitigation proposed in the Paint Branch watershed (Peach Orchard/Allnutt, McNeill, and South Asia Adventist) amounts to approximately 171 acres when 6 acres of**

the McNeill and South[ern] Asia Adventist properties are subtracted from the 177 total acres of land. The six acres are to be used for the future MD 198 widening. At least 1 00 of the 171 acres proposed for mitigation are not forested, and the portions that are forested do not contain any forest-interior habitat. According to page V-62, the Peach Orchard/Allnutt Property contains 90 acres of open land and 28 acres of forest. This property is described on page V-61 of the DEIS as follows, "a 118-acre site, including 146 contiguous, undeveloped parcels, that are currently owned by SHA."... "The site includes residential parcels that may still be sold off to the original developer if the land is not needed for the ICC " We would like to add that this land was cleared and graded for streets and lots, and had storm sewers constructed before SHA purchased the land from Winchester Homes to prevent home construction in the late 1990's. Most of the property stands today as a vacant sparsely vegetated field. The 36-acre McNeill Property is composed of forest cover, buildings, and open fields. The forest does not contain any forest-interior habitat. The FEIS fails to assess what percentage is forested and what percentage is open area. We note that a substantial acreage is presently an open field that was used in recent years for growing corn. There is also a substantial acreage of open areas surrounding the buildings. These open areas are of limited ecological value when compared to the forest cover. We estimate (conservatively) that at least 10 acres of the McNeill Property are not forested. The 23-acre South Asia Adventist Property is mostly forested, but it does not contain any forest-interior habitat. At least 100 (90 from Peach Orchard/Allnutt & at least 10 from McNeill) of the 171 acres proposed for Paint Branch parkland replacement are not suitable to replace the ecological functions and values of mature interior forest habitat that would be lost along the preferred alternative. The lands proposed for mitigation do not contain any forest-interior habitat, nor would they qualify as "biodiversity areas" or as a "Best Natural Area." They offer nothing to mitigate impacts to the two critical trout spawning tributaries, Good Hope and Gum Springs.

The McNeill Property, Southern Asia Adventist Property and the Peach Orchard Allnut Property were selected as parkland mitigation sites because they provide a significant amount of land to be added to the local park system in the sensitive Upper Paint Branch Watershed and they have the potential to provide valuable functions in the long term. While there are only approximately 28 acres of existing forest on the Peach Orchard Allnut Property, the remainder is proposed for reforestation and in the future could be completely forested. The conversion of this property to parkland would protect it in perpetuity from development, thus allowing it to contribute to the protection of the watershed. When the trees planted as a result of reforestation efforts mature, this site will also provide a substantial amount of habitat for FIDS.

621 According to Appendix R-3 (page 21 of 36), the Casey Property "is not proposed as Section 4(f) parkland mitigation" and therefore cannot be counted in the Section 4(f) mitigation plan.

The mitigation package for parkland impacts takes several different forms. In certain circumstances, the park owner has requested and SHA has agreed to provide, in-kind replacement lands. For example, the Selected Alternative would use a small portion of Layhill Local Park and athletic fields at that resource. Historically, those fields have not drained well and are often unavailable for use. The mitigation package includes higher quality replacement fields for the use of Layhill Local Park. Other elements of the mitigation package reflect efforts to protect or enhance the functions and values of certain land that would be used from stream valley parks in the study area. These replacement lands have been selected because they protect watersheds in which they are located, the same functions of the effected stream valley parks. Overall, the MNCPPC would own significantly greater quantity of parkland following implementation of the mitigation plan. The Casey Property was identified by the MNCPPC as an important acquisition target. As explained by the NPS, this property includes a substantial

number of forest acreage that can offset expected loss of forest resources.

622 The FEIS analysis is biased in favor of the Corridor 1 alternative despite irrefutable evidence that the Corridor 1 is qualitatively and quantitatively the most harmful alternative to Section 4(f) resources and environmental resources.

The FEIS concludes, in part, that the scope and quality of the mitigation package proposed for Section 4(f) resources to be used by the Selected Alternative allowed FHWA to determine that the two build alternatives resulted in roughly equivalent Section 4(f) resource impacts. FHWA's decision is not the result of a bias towards one build alternative or another, but a reasoned and careful analysis of the accumulation of factors relevant to the Section 4(f) analysis. One crucial factor in that analysis is the "net" harm to Section 4(f) resources (which include not only publicly owned parklands, but also historic properties), taking proposed mitigation into account. In this case, FHWA's conclusions regarding the adequacy of the mitigation package to address impacts to Corridor 1 Section 4(f) resources has been validated by the concurring opinions of the park owner and other state and federal resource agencies. While this comment clearly disagrees with the Section 4(f) decision, it fails to substantiate in any way an agency bias.

The FEIS evaluation and decision reflects the comments and approval of the park owner, MNCPPC, MHT and the DOI.

623 SHA cites severe disruption of local land use control. However, many federal-aid highways have been approved that violated local land use plans and they were not considered to be imprudent.

As described in Chapter V of the FEIS, the severe impact on local land use planning in Montgomery County was one factor that led FHWA to find Corridor 2 is not prudent. This finding was consistent with FHWA's regulations, policy and guidance.

624 Corridor 2 alternatives are prudent under Section 4(f). SHA's Section 4(f) analysis is severely flawed. We reject both alignments, but consider the Section 4(f) impacts to be far greater along Corridor 1 when compared to Corridor 2 in terms of quantity and quality of Section 4(f) resources. By comparison, it is far easier to mitigate the Section 4(f) parkland impacts in Corridor 2 when compared to Corridor 1. This fact is irrefutable.

The opinions expressed in this comment are not "facts," as alleged, but qualitative opinions related to the quality of the 4(f) resources present in the two proposed build corridors and the ability of mitigation to address anticipated impacts. The Section 4(f) Evaluation shows that Corridor 1 will produce a greater number of affected acres of parkland than along Corridor 2. However, the nature of the Section 4(f) properties along Corridor 2 generally are historic and cultural resources that reflect the overall more rural and less developed setting in that part of the study area. The FHWA has concluded, based especially on the opinions of the MNCPPC, the park owner and agency responsible for land use planning in Montgomery and Prince George's Counties, that it is more difficult to replace or restore a loss of a sense of place and the historic and/or cultural setting marked by the resources present along Corridor 2. By contrast, the unprecedented scope of parkland mitigation package offered to mitigate for the use of property along Corridor 1, has satisfied the MNCPPC that forest acres, stream resources and other values represented by the acreage used along Corridor 1 can, in fact, be mitigated successfully. Moreover, the Final Section 4(f) analysis summarizes that an accumulation of relevant factors associated with the proposed development of Corridor 2 would result in serious community and other resource impacts that make selection of a build alternative along that Corridor imprudent.

625 The 458 acre Casey Property is discussed in the Section 4(f) chapter as if it is supposed to satisfy Section 4(f) parkland replacement. However, as discussed earlier in our comments, we have read in Appendix R-3 (page 21, comment response #77) that "this site is not proposed as Section 4(f) parkland mitigation." Even if it were proposed as

Section 4(f) parkland mitigation, no amount of new parkland acquisition outside of the Rock Creek and Anacostia watersheds can possibly mitigate impacts within these watersheds. In our view, Mill Creek Stream Valley Park, Rock Creek Regional Park, North Branch Stream Valley Park, Northwest Branch Recreational Park, Northwest Branch Stream Valley Park, and Paint Branch Stream Valley Park are irreplaceable natural and community resources.

The Casey Property is included in the Section 4(f) Evaluation because providing this land as mitigation for natural resources impacts serves to also benefit the local park system in Montgomery County. The parkland impacted by the Selected Alternative would be more than fully replaced without this property. However, this site is proposed as mitigation because it provides valuable functions such as protection of the Little Seneca Watershed and protection of FIDS habitat. By converting it to parkland, this site is preserved in perpetuity and can continue to perform these functions. As a result of converting this site to parkland, the county's park system would be improved by adding additional acreage of high-quality natural land. Therefore, this area is not considered Section 4(f) mitigation, but it is relevant to discuss it in the Section 4(f) Evaluation because it serves to benefit the parks. These benefits must be considered when assessing the overall harm to parklands.

626 **The State's transfer of the Llewellyn Property for parkland mitigation purposes, as opposed to utilizing the Property for the alignment of the proposed ICC, would violate the terms of Llewellyn's Repurchase Agreement. In addition, to the extent that the State already has agreed to a transfer of the Property for this purpose, this violates Paragraph 14 of the Repurchase Agreement. It is requested that the FEIS be modified to remove the Llewellyn Property from the properties included within the parkland mitigation and replacement package or, alternatively, that the FEIS be modified to clearly provide that the Llewellyn Property would only be utilized for parkland mitigation if Llewellyn elects not to exercise its repurchase option.**

SHA acknowledges that the Agreement provides certain rights to Llewellyn to repurchase under certain conditions property previously purchased by SHA ("Conveyed Property"). Pursuant to a clause on the first page of the Agreement those rights are subject to the following conditions "provided, inter alia that the Seller selects an Inter-County Connector ("ICC") alignment that does not utilize the Conveyed Property for the proposed roadway".

As noted in the commenter's letter of March 20, 2006, the FEIS, which was open until April 11, 2006, for public review and comment, has designated the Conveyed Property as a potential "Parkland Replacement Site" to mitigate the effects of the construction of the ICC and the taking of parkland property in that process. In the event that final plans are approved which include this designation, the use of the property for this purpose must be considered part of the land needed by SHA for the proposed roadway. The ICC and other modern highways consist of more than the actual paved area upon which cars are driven.

In reaching this determination, the SHA considered whether a privately owned property could be acquired by SHA through its use of its eminent domain authority for parkland replacement needed for the ICC. In other words would the Conveyed Property meet the public use and necessity criteria for a state highway purpose? In the event that the environmental approvals for the ICC mandate the replacement of parkland by the use of this specific property SHA's acquisition of the Conveyed Property via eminent domain would be justified and it would be a part of the property needed "for the proposed roadway." Since the Conveyed Property could be acquired via eminent domain for a parkland replacement site, it must also be concluded that this use of the Conveyed Property (for which SHA paid 100% of the fair market value) would not trigger the repurchase rights because it would be utilized for the proposed roadway.

Since the terms of the Agreement are only triggered if the Conveyed Property is not utilized for the proposed ICC and the property may be used for the proposed roadway, SHA will not

authorize the repurchase at this time.

Chapter V.Q. Constructive Use Analysis

627 SHA did not conduct a Constructive Use analysis on Rock Creek Regional Park, North Branch Stream Valley Park, Northwest Branch Recreational Park, Northwest Branch Stream Valley Park, Upper Paint Branch Stream Valley Park, Layhill Local Park, and other major and minor stream valley parks for the portions of the parks that lack Designated Transportation Areas.

The FEIS, Chapter V (Section 4(f) Evaluation) does include a Constructive Use Analysis for certain Section 4(f) resources. According to FHWA's Section 4(f) Policy Paper (March 2005), "Constructive use is only possible in the absence of permanent incorporation or temporary occupancy of the type that constitutes a use of 4(f) land by a transportation project." Therefore, a constructive use analysis was not conducted within these parks because the permanent incorporation of land from these parks would occur as a result of the project.

628 The FEIS did not examine the psychological impacts of the unique "sense of place: that the stream valley parks and their publicly owned forested interconnectors have for the study area.

The FEIS did address the impacts of the proposed ICC on the parks that it passed through and by. The parks themselves were largely conceived concurrently with the planned highway. Considerable attention was paid to wildlife connectivity via fencing and wildlife crossings.

629 The Lead Agencies' interpretation of the FHWA regulations relies entirely on FHWA guidance which reversed FHWA's longstanding opinion in earlier agency guidance. FHWA's Section 4(f) Policy Paper of October 5, 1987 ("1987 Policy Paper") said only that, with respect to "[j]oint [d]evelopment (Park with Highway Corridor)…[t]he requirements of Section 4(f) do not apply to the subsequent highway construction on the reserved right of way as previously planned."181 The 1987 Policy Paper remained in effect, with a single "minor amendment" in an unrelated area, until FHWA released its Section 4(f) Policy Paper of March 1, 2005 ("2005 Policy Paper").182 Only in that 2005 Policy Paper, released after the close of the DEIS comment period, does FHWA articulate a new interpretation that Section 4(f), and constructive use analysis in particular, do not apply to the public park, recreation area, or wildlife refuge when a portion of the resource is reserved for highway use prior to or concurrent with the establishment of the resource. This interpretation is wholly unreasonable, as it excludes huge masses of land within 4(f) resources from constructive use analysis merely because a fraction of the resource would be physically occupied.

FHWA has not changed its policy. The FEIS considered and mitigated for proximity impacts to parklands adjacent to reserved highway corridors ("Designated Transportation Areas"). However, the proximity impacts did not result in a "constructive use" of parkland pursuant to FHWA's regulations and Policy guidance. Parklands that are established after a highway corridor is reserved, and parklands that are established at the same time the highway corridor is reserved, can not be constructively used by the highway. A constructive use occurs when a transportation project does not physically take land from a Section 4(f) property but has severe proximity impacts that substantially impair the protected activities, features, or attributes. When a park is established after or concurrent with a highway corridor, the two public facilities are considered jointly planned and as such, the highway can not be said to substantially diminish the park's intended function because the park was always intended to co-exist with the highway.

630 The Lead Agencies claim that they do not need to conduct constructive use analysis for non-concurrently planned Section 4(f) park resources adjacent to the reserved

transportation corridor. The Lead Agencies' response on this point is incomplete and inadequate, as it fails to explain how such adjacent, non-DTA resources will be incorporated. It also fails to identify which Section 4(f) resources are covered by this apparent exclusion from 4(f) constructive use analysis. Among the parkland Section 4(f) resources which are adjacent or proximate to a DTA or otherwise incorporated project land are East Norbeck Local Park, Redland Local Park, and Little Paint Branch Stream Valley Park. Among these, only Little Paint Branch Stream Valley Park has been identified by the Lead Agencies as being "concurrently planned," but the FEIS includes no constructive use or proximate impact analysis for any of these properties.

The FEIS/Section 4(f) Evaluation considered and mitigated for proximity impacts to parklands adjacent to reserved highway corridors ("Designated Transportation Areas"). However, the proximity impacts did not result in a "constructive use" of parkland pursuant to FHWA's regulations and Policy guidance.

East Norbeck Local Park is a 25-acre recreational park owned by M-NCPPC. It features a playground, softball field, lighted baseball field, two lighted tennis courts, and a picnic area. As shown on plate 15 of Appendix A to the FEIS, although the edge of the park is adjacent to the Selected Alternative's right-of-way line, the recreational features are located approximately 600 feet from the highway. Noise modeling was conducted in the park. However, the activities that typically occur in this park, such as ball games, are not sensitive to noise and would not be substantially impaired as a result of increased highway noise. Similarly, the introduction of the ICC into the visual environment at this park would not substantially impair the use of the park because the activities for which this park is used do not derive value from a natural setting, as opposed to a man-made setting. Therefore, there would be no substantial impairment of the function of this park due to visual intrusion. There would be no changes in access to this park as the Selected Alternative would pass on the northeast side and the main access point is on the south side, along MD 28. Therefore, there would be no constructive use due to restriction of access at this park. Also, there are no features at this park that have the potential to be affected as result of vibration associated with the selected Alternative. In summary, this brief analysis of the potential proximity impacts of the Selected Alternative shows that the primary recreational purposes/activities of the East Norbeck Local Park would not be impaired to the extent that a substantial diminishment of the park's function or features would occur due to noise, visual intrusion, and restriction of access or vibration. Therefore, there would be no constructive use of this park.

In addition, it should be noted that the portion of East Norbeck Local Park located closest to the proposed ICC was purchased by M-NCPPC in 1997. The property was a portion of a larger parcel that purchased from the property owner as a hardship acquisition. The property owner submitted a development plan which could not be approved by Montgomery County because part of the property would be needed for the ICC. The portion of the property purchased by M-NCPPC was acquired because it was determined that it would be landlocked once the ICC was built. Therefore, M-NCPPC purchased it and added it to East Norbeck Local Park. The deed of sale for the property by MNCPPC includes a description of the property boundaries which references the proposed ICC right-of-way. This demonstrates that the portion of the park was jointly planned with the ICC. Therefore, per FHWA regulations, constructive use would not occur at this property.

Redland Local Park is a 10.12 acre recreational park owned by M-NCPPC. It features a playground, basketball court, ballfield, tennis court, picnic shelter, and exercise trail. As shown on plate 6 of Appendix A to the FEIS, the closest recreational area to the Selected Alternative is more than 800 feet away. A detailed constructive use analysis was not conducted for this resource because the park boundary is located approximately 500 feet from the limit of disturbance of the Preferred Alternative (Rock Creek Option C) (see Figure V-11 of the FEIS). The type of uses and features at this park would not be sensitive to noise or vibration. Therefore, an increase in noise or vibration would not substantially impair the functions of this

park. Based on the intended function of this park, the aesthetic or visual quality of the surrounding area would not constitute an important contributing element to the value of this resource. In addition, there are existing homes between the park and the proposed roadway that would partially shield the road from view. Therefore, the ICC would not result in the substantial impairment to the function of the park due to visual intrusion. There would be no changes in access to the park. Therefore, there would be no substantial impairment of the functions of the park due to restriction of access. In summary, this brief analysis of the potential proximity impacts of the Selected Alternative shows that the primary recreational purposes/activities of the Redland Local Park would not be impaired to the extent that a substantial diminishment of the park's function or features would occur due to noise, visual intrusion, and restriction of access or vibration. Therefore, there would be no constructive use of this park.

Little Paint Branch Stream Valley Park is located just west of the proposed I-95 interchange with the Selected Alternative and exists in discontinuous sections from just south of I-95 to Greencastle Road, a distance of approximately 1.5 miles. The main alignment of the Corridor 1 Alternative would utilize state-owned right-of-way and pass between two individual parcels of this park located to the north and south of the alignment. The portion of the park bordering this corridor was purchased by the M-NCPPC on December 21, 1973, with a 400-foot wide strip through the land purchased on the same date by the Maryland State Highway Administration (SHA). (Reference to the "Outer Beltway" is contained in the description of property boundaries in the deeds of each of the park parcels. Copies of these deeds can be found in the ICC technical support data files located at SHA headquarters in Baltimore.) This demonstrates that the portion of the park was jointly planned with the ICC. Therefore, per FHWA regulations, constructive use would not occur at this property.

631 **In their comments on the 2004 DEIS, the Department of Interior (DOI) stated, "the Section 4(f) Evaluation should analyze the potential of constructive use due to noise, vibration, change in access, visual intrusion, air quality, and loss of function (conversion of FIDS habitat to edge habitat) for those portions of parkland which are adjacent to the right-of-way corridors. Parkland that should be evaluated for constructive use includes Rock Creek Regional park, North Branch Stream Valley Park, Rock Creek Stream Valley Park, Northwest Branch Recreational Park, and Northwest Branch Stream Valley Park - Unit 5." The SHA response in Appendix R-3, page 17 states "Section 4(f) uses due to property acquisition (as opposed to constructive uses) occur at each of the parks listed in this comment. According to Section 4(f), a constructive use does not occur when there is a physical use of a Section 4(f) resource." Apparently SHA has a different interpretation of Section 4(f) compared to DOI regarding the definition and application of constructive use. Otherwise why would DOI raise the issue in the first place? This conflict leads us to question the validity of the SHA position. Do the DOI and the SHA follow different policies regarding this? Have the courts rendered two (or more) conflicting decisions regarding what constitutes a constructive use?**

The DOI did raise concerns about constructive uses of Section 4(f) property in its comments on the DEIS. The FHWA responded to DOI's concerns in the FEIS, and FHWA and DOI also discussed the concerns. As a result, DOI was satisfied that the Constructive Use analysis in the FEIS (pages V-125 to V-164) and did not repeat its concerns in its letter commenting on the FEIS. In a letter dated May 16, 2006, DOI stated "The Department is satisfied with the constructive use analysis presented in the FEIS. Therefore, the Department advises the Department of Transportation that in our view, all of the requirements under Section 4(f) have been satisfied."

632 **Page V-118. SHA argues that Corridor 2 AX and Corridor 2DB are imprudent. MNPS disagrees. We consider SHA's arguments to be unsubstantiated and biased. For example, we do not agree with SHA statement that "impacts to the sensitive headwaters of the left**

and right fork tributaries to Paint Branch" due to construction sediment loads, increased pollutant loads and roadway deicers as unique or unusual. These impacts are certainly not unique or unusual. Impacts such as these would occur along the much more sensitive (and critical) Good Hope and Gum Spring tributaries in Corridor 1. They would also occur in the North Branch Rock Creek watershed.

The FEIS acknowledges that "the Corridor 1 Alternative would have a greater potential impact on the brown trout by negatively affecting nursery and spawning habitat of the Good Hope and Gum Springs tributaries" (2006, ICC FEIS, Page V-114).The impacts to the left and right forks of Paint Branch under Corridor 2AX are unique in the context of Corridor 2 as these streams provide support to the downstream trout resource in Paint Branch. Both Corridor 1 and Corridor 2 equally affect the North Branch of Rock Creek. While specific impacts to critical trout habitat could potentially be higher on Corridor 1 (see page V-119), impacts to Paint Branch were not presented as the determining factor in the identification of 2AX and 2DB as imprudent, but rather as part of a list of many factors that, when taken as a whole, reach a magnitude of impact determined to be imprudent. While the presence of Brown Trout is an indicator of relatively high water quality, the Brown Trout is neither a threatened or endangered species, nor is it a species native to the U.S.

633 **The 2006 FEIS overstates the position of state and local government regarding the so-called 300 foot right of way reserved for transportation use. SHA makes it sound like state and local government has consistently maintained an unaltered position regarding the intended use of this land for the ICC. This is not the case at all. In fact when Governor Glendening realized that the environmental consequences of Corridor 1 were significant an unavoidable and abruptly reversed his position, intended to remove this reservation. MNCPPC and Montgomery County Council defined and implemented a series of measures intended to provide long-term protection for this area, including a Limited Master Plan Amendment, the Special Protection Area, significant parkland acquisition, and an Environmental Overlay Zone.**

MNCPPC did not evaluate the extent of the environmental impact of the ICC on parkland in this study, as they did in 1997. Their findings clearly show that the impacts of the ICC would extend way beyond the 300 foot so-called right of way reserved for transportation use, beyond the parkland purchased in conjunction with this right of way, and into parkland that was undoubtedly purchased for the sole purpose of protecting the Paint Branch. These impacts on Comments on FEIS for the ICC Eyes of Paint Branch March 23, 2006 Page 6 the Paint Branch Stream Valley Park are Section 4(f) impacts, and they are not included in the FEIS even though this issue was raised in DEIS comments.

The Lead Agencies have not overstated the status of the reserved right-of-way in the FEIS. Both the local and state governments have retained the reserved right-of-way corridor for the ICC for nearly 50 years. Throughout general and master plan updates and planning studies, the reserved right-of-way has been maintained.

634 **The Paint Branch Stream Valley Park is recognized by appropriate local officials for activities requiring special qualities of serenity and quiet, including many forms of passive recreation (the natural reproduction of wild brown trout, trout fishing, bird watching, hiking, cross country skiing, wildflower identification). Based on these characteristics, the federal noise abatement criteria for the Paint Branch Stream Valley Park should be Land Use Category A (57dBA). However, the FEIS classifies the Paint Branch Stream Valley Park as Land Use Category B, and significantly underestimates the noise impacts of the ICC on the intended uses of this park. This problem was identified in our DEIS comments, but was not corrected in the FEIS.**

Federal Regulations 23CFR772 form the basis of the ICC Noise Analysis. Table 1 in 23CFR772

lists Categories A thru E for various activities. Category A includes 'Lands on which serenity and quiet are of extraordinary significance"; but 23CFR772 does not defined these activities. Category B specifically includes parks and recreation areas with a Noise Abatement Criteria (NAC) level equal to 67 dBA Leq. (SHA considers 1 dBA less, 66 dBA, as "approaching" the NAC.) All activities included as Category B are: "Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals."

Chapter VI: Environmental Stewardship

Chapter VI.B. ES Priority Needs

635 The ICC Environmental Stewardship priority needs to not include cemeteries or burial sites.

The ICC Study includes environmental stewardship measures, which are enhancement and restoration efforts that go beyond the NEPA required avoidance, minimization, and mitigation measures, to improve existing conditions for a specific resource.

The DEIS included Chapter VI, Environmental Stewardship (ES), with a discussion of Priority Needs. Priority Needs were developed for the ICC through coordination with various local, State, and Federal agencies and the public. The original ES inventory identified more than 900 natural and human environmental project opportunities. All suggestions for ES opportunities went through an initial screening revision which removed many of the sites from further consideration based on their ability to meet ES needs established for ICC planning areas, feasibility, and proximity to the ICC study area. This resulted in Table 5 in the Public Hearing Brochure and was followed by a more comprehensive ranking applied by examining the cost/benefit, agency opinion, number of resources improved, and additional adverse impacts that may occur. Those receiving the highest ranking were selected for the priority ES packages for Corridor 1 and Corridor 2. Community ES sites include pedestrian/bicycle trails, sidewalks near schools, and a dog park. Cultural resource ES sites include improvements to several historic structures and creating signage to identify and direct interest to various cultural resources.

636 Site 29 - Falling Green House. "Proposed improvements" to this building would not mitigate in any way the decimation of forested stream valley parks, old forests, rare habitats and the forested connectors between the parks used by wildlife as their critical habitat.

The restoration of the Falling Green House, which was included as a Community/Cultural Environmental Stewardship Feature for Corridor 2 was not intended to address impacts to forested or habitat impacts. Moreover, the Lead Agencies have selected Corridor 1 and therefore, the Falling Green House restoration is no longer a project included in the ICC construction.

However, the DEIS and FEIS do describe the direct and indirect impacts to forest and wildlife that could occur as a result of the ICC. As required under the Maryland Reforestation Law, forest loss is primarily compensated through reforestation efforts. The Maryland Reforestation Law requires State agencies to make every reasonable effort to avoid or minimize impacts to trees and forest. The ongoing mitigation site selection process focuses on selecting the most appropriate reforestation sites to improve existing habitat conditions on other publicly or State-owned land.

The Lead Agencies have worked very closely with the regulatory agencies including DNR to identify sites that are most suitable for reforestation with specific emphasis on sites that are adjacent to protected mature protected forest thus increasing wildlife habitat including wildlife

corridors.

Reforestation efforts also included ensuring that reforestation efforts were compatible with other state and county goals including DNR's Green Infrastructure Program. DNR has identified existing undeveloped lands within the study area as important to the preservation of the regional Green Infrastructure. The ICC reforestation efforts are complimentary to the Green Infrastructure goals. Many of the reforestation sites are consistent with the Green Infrastructure by promoting forest buffer enhancement and forest connectivity.

637 The dog park in Site 52 would need a sidewalk on all nearby roads.

The Lead Agencies will evaluate the pedestrian access to the proposed Dog Park during the design phase of the project.

638 Site S-14 - Sidewalks along Short Portions of MD 198 needs to factor in how persons are expected to walk or bicycle from east of I-95 to west of I-95 (through the ramps on the interchange). Building short sidewalks to nowhere is pointless if they suddenly end when they are needed most.

The Lead Agencies have identified Corridor 1 as the Selected Alternative. The S-14 Environmental Stewardship feature was added through coordination with Prince George's County MNCPPC for Corridor 2 (to serve to enhance the pedestrian features already in place in West Laurel and not to cross I-95) only. The bicycle plan that is associated with the Selected Alternative provides for a crossing of I-95 via existing and planned bicycle accommodations along Old Gunpowder Road. A trail user traveling west to east would be able to access the existing bicycle accommodations along Old Gunpowder Road along a new segment of trail that would be constructed along the ICC. Likewise, after crossing I-95, a trail user would again use a system of roadways that currently accommodate bicycles.

Chapter VI.C. ES Features Prior to the FEIS

639 How can the SHA ensure that Environmental Stewardship and state of the art stormwater management does not get cut because of potential rising cots of construction?

The Lead Agencies have committed to including these elements of design in the construction of the ICC. The ROD includes these elements as commitments, just like all of the other elements of the design. These elements were included in the project cost estimate.

640 Comment 1781. This response ignores the specificity of my questions related to Environmental Stewardship. No evidence has been presented to counter the impression that the projects chosen and the funds determined to be used are arbitrary in nature.

The process used to list, study, rank and select each Environmental Stewardship project is discussed in Chapter VI of the FEIS and was not "arbitrary in nature." The process was thorough and fair, relying extensively on the input on local governments and added expertise of state and local resource and regulatory agencies.

641 Comment 1784. The response is incomplete because it did not explain the rationale for just choosing to do the projects on the list, when there are many other unmet needs as articulated in my original questions that would meet the standards for Environmental Stewardship. Geographical limitations are arbitrary as well. Last year, a fish ladder was built to bypass the dam at Pierce Mill on Rock Creek in upper northwest Washington, D.C. It was paid for with Environmental Stewardship funds provided by the Wilson Bridge replacement project, which is many miles away. With proposed ES packages costing 1.9% to 2.8% of the estimated ICC project total, what would be considered too low a

percentage cost to represent substantial and meaningful ES and what would be considered too high a percentage cost for ES? What is the cost to reforest all treeless riparian buffers in the ICC study area with trees with a minimum caliper of 3 inches, to keep the trees watered as necessary, to replace trees that die, and to otherwise protect the trees from deer and beaver damage until the trees are large enough? What is the cost to reforest riparian buffers as described in the rest of Montgomery County? What is the cost to dig out all exotic invasive plants in parks and other public land in the ICC study area? What is the cost to remove such plants in parks and other public land in the rest of Montgomery County? What is the cost to stabilize and restore all stream banks in the Upper Rock Creek watershed? What is the cost to stabilize and restore all stream banks in the rest of the ICC study area? What is the cost to stabilize and restore all stream banks in the rest of Montgomery County?

Several of the questions raised cannot be completely answered because the specifics were not estimated. However, cost by itself was not a determining factor for Environmental Stewardship projects, but rather the benefit that the opportunity would provide. There are Environmental Stewardship opportunities that range from a few thousand dollars to several million dollars. It is also important to note that the commitment to Environmental Stewardship by the Lead Agencies comes not only in its funding of specific Environmental Stewardship projects, but also with the Compensatory Mitigation package and in avoidance and minimization design principles. For instance, the Lead Agencies have incorporated far more mitigation for parkland than is required and has proposed bridge lengths far greater than what is needed from a hydraulics design standpoint. Further examples include linear and underground stormwater management facilities to further minimize impacts in the most sensitive watershed and Special Protection Areas.

All in all, the features resulting from the Lead Agencies' Environmental Stewardship principle are estimated to cost hundreds of millions of dollars (considering both the specific ES projects along with the features of the project design that result from the principle of ES). For the specific Environmental Stewardship project package, the Lead Agencies developed a list of candidate needs based on input from local and state agencies and the public. Each project was rated and screened (for more information of the screening and rating process, please see FEIS Chapter VII) with input from the Interagency Working Group (a group of local, state and federal agencies) to determine the final package. Only projects with a minimum score were picked for the primary list. The team also developed a back-up list in case certain primary projects were determined not to be reasonable based on further study.

Please note that the fish ladder built to bypass the dam at Pierce Mill was a mitigation project, not an enhancement project. The costs you have requested are outside the scope of this project.

642 **Comment 1814. The response ignores the specificity of my comment. I oppose the ICC only to the extent that SHA has not factually proven the need for it and has failed to provide adequate Environmental Stewardship to ensure that the total environmental impact of the ICC is positive rather than negative.**

The Selected Alternative meets the elements of the project's Purpose and Need Statement to a greater extent than other alternatives studied. Specifically, with respect to Environmental Stewardship, the Selected Alternative includes numerous design features (e.g., linear and underground stormwater management, extensive retaining walls, and longer bridges) and projects that avoid, minimize, mitigate environmental impacts and in some cases improve the environmental conditions with in the study area.

643 **Comment 1880. The response ignores the specificity of my comment. It is apparent that SHA has made significant efforts to mitigate the impacts of the ICC to the seeming satisfaction of the EPA. However, there is much more that SHA could do through Environmental Stewardship to offset much more of the overall environmental damage. It is unfortunate that EPA does not seem to hold such projects in high regard.**

The commitment to Environmental Stewardship by the Lead Agencies comes not only in its funding of specific Environmental Stewardship projects, but also with the Compensatory Mitigation package and in avoidance and minimization design principles. For instance, the Lead Agencies have incorporated far more mitigation to parkland than is required and has proposed bridge lengths far greater than what is needed from a hydraulics design standpoint. Further examples include linear and underground stormwater management facilities to further minimize impacts in the most sensitive watershed and Special Protection Areas. All in all, the features resulting from the Lead Agencies' Environmental Stewardship principle are estimated to cost hundreds of millions of dollars.

Chapter VII: Preferred Alternative

Chapter VII.B. Impact Assessment of Alternatives

644 Supports Corridor 1 with an interchange at MD 182.

Thank you for your comment.

645 Option B (truncated) is not a serious alternative, since the westbound ICC shows a "ghost road" just east of I-95 that would be part of a future ICC from I-95 to US 1.

Options to truncate the ICC at I-95 were evaluated as part of the detailed studies for both build alternatives. The Selected Alternative includes the construction of the ICC along Corridor I all the way to US 1. Although forecasted traffic volumes are lower east of I-95 than west, these volumes still show a strong desire for motorists to continue to Virginia Manor Road and US 1. The descriptions and graphics in the FEIS do not show a road east of I-95 under the truncated options.

Chapter VII.C. Evaluation of Corridors 1 and 2

646 The ICC will provide a critical east-west link between I-270 and I-95, which has been shown in the master plans for over 40 years, that will substantially reduce congestion and traffic accidents.

Thank you for your comment.

647 The Community of Hampshire Greens supports County master plans and is in agreement with the Final Environmental Impact Statement. Please note that the Board and majority of community residents support the ICC; support our Master Plans; feel that this project is long overdue; feel that it is the most effective project that can be constructed which addresses congestion in our metro region; linking Prince George's County (I-95) with Montgomery County (I-270) is critical for businesses, local residents, and visitors.

Thank you for your comment.

648 Does not support Corridor 2. Even though Corridor 2 addresses the traffic problems in the area, too many people are displaced with the Spencerville options.

Thank you for your comment.

649 Previous surveys by AAA showed solid support for the ICC across the State of Maryland and even stronger support in the impacted area. A poll conducted in late 2004 showed that 52 % of those surveyed in Maryland favored the ICC, 17% opposed it (31% had no opinion). The residents of Prince George's and Montgomery Counties showed the highest

level of support (65% support, 19% oppose).

Thank you for your comment.

Chapter VII.D. Preferred Alternative

650 Supports ICC

Thank you for your comment.

651 I am interested in buying a house in Silver Spring, but realized it is close to one of the proposed ICC corridors, the Notley Road to US1 option as shown on your website. Is the State recommending the corridor as indicated on the website under Notley Road to US 1?

The recommended alternative is Corridor 1, which closely resembles the alignment in area master plans. Corridor 1 is the alignment that crosses Notley Road and ends at US 1 (Corridor 2 passes farther north of Notley Road).

652 Opposes the ICC.

Thank you for your comment.

653 The ICC is a good balance between economic benefits and environmental impacts.

Thank you for your comment.

654 The ICC will benefit all citizens of Maryland, not just those in Montgomery and Prince George's Counties.

Thank you for your comment.

655 The ICC will improve transportation and quality of life within the corridor.

Thank you for your comment.

656 What is the status of the bike path?

The bicycle/pedestrian route plan that is part of the Selected Alternative (see FEIS Chapter IV.B.3.d and Figure IV-3) includes a combination of segments along the ICC as well as segments along existing roads in the study area, thus recognizing the vital links between existing and planned trail systems consistent with master plans from both Prince George's and Montgomery Counties. The ICC will include paving and lighting of portions of the bicycle/pedestrian route that fall within the ICC ROW, but construction of the complete bicycle/pedestrian route is not part of the Selected Alternative. The logical termini link together areas where an ICC trail user could access and exit the trail with connections to other useable routes. Construction of the bicycle/pedestrian route beyond the limits of the logical termini is not precluded, and would require additional coordination between State and local government agencies, separate from the ICC Study.

657 When will each phase of construction begin and end? Include the days of the week and hours of the day that construction will occur.

A detailed construction schedule is being studied, but no firm recommendations have been approved. Schedule details, such as days of the week and hours of the day, would be finalized after the Federal Highway Administration (FHWA) issues a Record of Decision (ROD). These details will be developed to minimize the impacts of construction (e.g., noise, access) to adjoining communities, and will be subject to approval by FHWA. Consideration will be given to noise sensitive activities in the communities and will be part of the SHA's construction noise

policies for the ICC. Areas of construction, schedules, and detour routes will be available through the ICC website and periodic media briefings once the details are finalized.

658 Supports Corridor 1, the Master Plan Alternative.

Thank you for your comment.

659 Please include in the environmental commitments additional metro bus and ride-on routes, park and ride lots, and funds to support the additional metro riders using the additional bus lines.

The Selected Alternative for the ICC includes provisions for Express Bus Service (the Maryland Transit Administration is currently conducting a detailed service planning study to determine the exact routes and extent of service), additional park and ride lots, improvements to existing park and ride lots and other transit support features.

660 The EIS needs to describe whether the ICC would be built simultaneously along the entire route, or whether it would be constructed in stages, as most highways are. Construction of temporary lanes and roads would have substantial impacts on traffic flow, potentially for a period of years. If the road is built in segments because the funding would be available in stages, then the traffic impacts of building ICC segments must be included in the EIS. What would be the impacts on Georgia Avenue or other roads to only build these parts of the ICC?

The exact construction phasing plan has not yet been determined, yet the requirement for this plan will be that all impact areas, temporary or permanent, will be contained within the areas identified in the FEIS. The financial plan demonstrates that sufficient funding is available to complete construction of the entire route by the fall of 2010, barring unforeseen delays.

661 Concerned about noise levels at my house during the construction of the Muncaster Mill Road bridge and also after the bridge is complete. What plans does SHA have to reduce noise levels during the construction phase?

Although short-term in nature, noise impacts associated with construction are unavoidable. The Lead Agencies will work closely with the community and the contractor to reduce the impacts of noise construction. Regular maintenance of construction vehicles and time of day restrictions on certain activities are two examples of methods the team can use to reduce construction related noise impacts.

662 Due to the unique and precious natural resources that occur in harms way, the Maryland Native Plant Society would be greatly harmed if the preferred alternative were to be constructed along the State's preferred alternative. We want to see new alternatives studied that would cause less harm to parks and local communities while achieving mobility and congestion relief in the northern Washington DC metropolitan area.

The Lead Agencies studied a full complement of alternatives from No-Build to transit, to upgrades to new multimodal facilities. As a result of extensive engineering and environmental study, Corridor 1 was identified as the Selected Alternative.

663 In their letter to the SHA on the DEIS, the Audubon Naturalist Society and the Chesapeake Bay Foundation misrepresented the Prince George's County Council Resolution No. CR-32-2003, which endorses changes to the ICC that would require rewriting a whole series of Montgomery County master plans. Prince George's County Council does not have the right to make such demands.

The Lead Agencies acknowledge the resolution of the Prince George's County Council opposing

the ICC; that opinion was considered prior to identifying Corridor 1 as the Selected Alternative.

664 This letter (Audubon Naturalist Society and the Chesapeake Bay Foundation to SHA) asserts that the planning work that went into the 1997 Fairland Master Plan was uninformed, when it was anything but uninformed. Corridor 2 would contradict the goals and recommendations of the approved and adopted 1997 Fairland Master Plan.

Thank you for your comment.

665 Opposition to a transportation project is not necessary and sufficient justification to substitute a land use or transportation alternative that would require changes to approved master plans. The NEPA process is the wrong venue to promote such changes in any case.

Following the study of alternatives to the ICC, such as major changes to land use patterns, transit and others, Corridor 1 is the Selected Alternative.

666 The Patuxent Watershed Protective Association (PWPA) is pleased to see that the FEIS acknowledges the inappropriateness of an ICC within the Rocky Gorge Reservoir Watershed, is gratified with SHA's plans to prohibit HAZMAT material transport on the US-29 reservoir bridge, and that Corridor 2 was not selected as the Preferred Alternative.

Thank you for your comment.

667 Given the cost and environmental consequences of the ICC, the documented benefits are relatively small and are not quantified in any way that they can be made comparable to the costs.

Given the tremendous growth in this region (that will occur with or without the ICC; with or without other transportation projects), the estimated benefits of the Selected Alternative are substantial. No single project in isolation can effectively address the region's congestion problem. Too much existing volume and expected growth will continue to stress even an improved system with enhanced road and transit facilities, as well as progressive land use elements. Of the FEIS alternatives, the Corridor 1 alternative is best suited to address the congestion facing the region and offers significant improvements in traffic conditions over the No-Action alternative.

The Corridor 1 alternative benefits include:

- Approximately 50 miles of the local roadway are forecast to have lower average weekday daily traffic (AWDT) by at least ten percent. Many of the roadways expected to experience reduced traffic volumes are east-west arterials (refer to FEIS Chapter IV.J.4.e).
- Thirty-seven percent of intersections at the failing level of service (LOS) grades of E and F in the AM peak hour will achieve a 10 percent or greater volume to capacity ratio (V/C) improvement in the AM peak hour. Even in cases where the LOS grade does not change for an intersection, improvements in the V/C ratio will produce noticeable improvements. Regardless of an intersection's LOS, an improvement in the V/C ratio reduces the total number of hours that an intersection is at capacity each day. For example, a .14 reduction in V/C ration can result in a reduction of 3 hours that an intersection is at or over capacity. Improvements in V/C ratios will result in a 24 percent reduction over the No-Action alternative in the amount of time intersections are at or over capacity (refer to FEIS Chapter IV.J.4.f).
- The total daily AM peak hour travel time savings for ICC users is 3,000 hours, a 42 percent improvement over the time to make the same trips under the No-Action alternative (refer to FEIS Chapter IV.J.4.b).

- A reduction in the number of crashes per vehicle mile traveled. The Corridor 1 alternative is forecast to facilitate more vehicle miles of travel without increasing the total number of crashes. Therefore, the number of crashes per vehicle mile traveled will decrease under the Corridor 1 alternative, resulting in safer travel (refer to FEIS Chapter IV.J.4.h).

These benefits provide decision makers with adequate information for deciding which alternative is best suited to meet the Purpose and Need of the study area. Not all benefits are easily quantified for a benefit-cost analysis. The inability of such an analysis to incorporate the above benefits shows its limitations as an effective tool for evaluating the alternatives presented in this study. In addition to the travel and congestion benefits, the Selected Alternative includes dozens of environmental stewardship projects that will improve existing environmental degradation that has occurred within the study area.

668 **Responses to previous comments on the FEIS exhibit what management science calls a "self sealing" process. Independent proposed alternatives will not be considered because they are outside boundaries previously set. SMI did not restrict its alternatives to boundaries that had been previously set including the selection of a travel corridor, the selection of a mode, and the selection of a funding mechanism. Instead EDF devised a diverse group of alternatives for addressing future traffic issues outside of these bounds. Transportation forecasting is based on assumptions about future land use, as it is the land uses that generate travel and traffic. Therefore, each of our alternatives is comprised of two building blocks: (1) transportation facilities, including the regional Transportation Planning Board's (TPB) adopted 2003 Constrained Long Range Plan (CLRP); and (2) land use using forecasted patterns of growth to the year 2030, including Round 6.4, Round 6.4A, or a modified growth pattern developed for this study.**

The selection of the travel corridor is based on the needs of the study area. The ICC has been planned for four decades, a fact which has resulted in land-use decisions made anticipating such a facility. The regional growth in the developed portions of Montgomery and northwestern Prince George's Counties has led to congestion of east-west arterial roads. The study area needs improved east-west mobility. Alternatives capable of meeting this need were evaluated as part of the study. There is nothing in the FHWA regulations and guidance or any of the applicable statutes that prohibits identification of a study area boundary (so long as it is reasonable), potential different modes (highway, transit, etc.), and funding mechanisms (tolls) to determine a reasonable range of alternatives.

669 **Our comments on the DEIS included the need to explicitly dedicate a funding reserve to accommodate construction related mitigation problems. This process has been highly successful in other projects in terms of alleviating a common reason for delays in mitigation of impacts once a job has begun, which is who pays for the work. We have not received any response to our request.**

Funding to accommodate construction related mitigation issues will be handled by the overall construction contingency included in the project financial plan.

Chapter VIII: Agency Coordination and Public Involvement

Chapter VIII.A. Interagency Coordination

670 **The ICC is a 3 billion dollar give-away to developers and special interests. The ICC is short term vision for quick political support.**

Throughout this study process, the Lead Agencies have taken an unbiased approach to the

development of the project and alternatives in accordance with NEPA and associated regulatory requirements. The study approach was agreed upon by the federal and state regulatory agencies that we coordinate with on a regular basis. The Lead Agencies are committed to maintaining an impartial NEPA process.

671 The Fairland Master Plan Citizen Advisory Committee was not consulted by the EPA or the Corps of Engineers regarding changes to the ICC alignment. Nor did the EPA submit written or oral testimony to the Montgomery County Planning Board, the County Council, or its Planning, Housing, and Economic Development Committee during the master plan review.

The Lead Agencies fully consulted with interested groups as well as MNCPPC, the Montgomery and Prince George's County governments throughout the study, including through the Interagency Working Group, which included EPA and the USACE on all project issues, including the ICC alignment.

672 The EPA has attempted to downplay both environmental and community impacts on its favored Corridor 2 despite overwhelming public and official testimony that Corridor 2 was more problematic from the standpoint of master planning upheaval, severe community dislocation, harm to Section 4(f) historic sites, and threats to public health from drinking water supply contamination in the Patuxent River reservoir.

Corridor I is the Selected Alternative.

673 The public oversight process was inadequate because 35 interagency review meetings took place with no public involvement and the interagency agreements are privileged and not available to the public. The Environmental Streamlining process has resulted in more interagency communication with less public involvement.

The Lead Agencies developed and implemented a comprehensive and responsive public involvement process that has provided, and will continue to provide numerous ways for all citizens to stay involved and to be heard. Examples include numerous public meetings/workshops and hearings geographically spread throughout the study area, a project website updated regularly, public information kiosks throughout the study area, community meetings and project brochures and literature. The public involvement process has been successful in allowing thousands of individuals to particpate, as partially evidenced by the thousands of comments the team received on the DEIS and FEIS.

On every planning project, government agencies conduct internal deliberations. The purpose of the IAWG was to consolidate this deliberation into one location, which is necessary for a project of this size. The IAWG summaries are available upon written request, which include the contact information for IAWG members.

674 The FEIS provides a sample letter for contacting interested parties to obtain information about potential mitigation sites or environmental stewardship opportunities. Unfortunately SHA did not contact EOPB or Trout Unlimited, both well known stakeholders, for our input. This is unacceptable.

The sample letter in the FEIS is an example of the letters sent to regulatory and resource agencies. Coordination with community and watershed groups was conducted through the public open houses and public meetings.

Chapter VIII.B. Public Involvement

675 Request for a map of the proposed route.

Maps were provided to all who requested them. The map can also be found on the project

website, www.iccstudy.org.

676 I understand that the State of Maryland has made a decision on the proposed road and that it will be posted on a federal web site for 45 days. What is the federal website address?

The 30-day review period starts when the Notice of Availability is posted in the Federal Register (see www.gpoaccess.gov/fr/index.html). However, all of the technical information about the project can be found at www.iccstudy.org. Please note that the comment period was extended to April 11, 2006.

677 The project website does not show where the alternative will be. The website should provide an aerial photo with the alternative shown on it and a toggle function to show certain options.

Thank you for your suggestion. The website includes a variety of maps to aid in understanding the study and the alignments. A general area map with the Selected alternative alignment is available at www.iccstudy.org.

678 The maps provided in documents are not easy to understand. The maps mailed to the public are not detailed enough.

Letter and map sent 2/14/06

679 The website does not provide comprehensive answers and details that are understandable by a general audience.

The project website is a comprehensive source of project information; however if you have a specific question, please call 1-866-462-0020 to speak to an SHA staff person.

680 Please send me detailed maps of the Current Corridor 1 proposed route with the options associated with it. I am unable to find any detailed information regarding Corridor 1 on the web page.

Please refer to www.iccstudy.org. for detailed maps of the Selected Alternative. Click on "Project Overview' and then "Map Overview" to view aerial maps of the Selected Alternative. Commenters were also sent a copy of the map.

681 Images on the website are not loading properly.

Please call 1-866-462-0020 for technical support. (Attempted to immediately contact commenter, but phone number given was out of service and address given was undeliverable).

682 Please send me a copy of the FEIS on CD.

Thank you for your request. All requests for FEIS CDs were fulfilled.

683 The Upcounty Regional Services Center would like to request free copies of the environmental study for distribution to the public. Please advise me as to how they may be obtained. We frequently receive requests for information.

Three additional hard copies and 10 CD's were delivered on March 28, 2006.

684 How can I get a copy of the wetland Jurisdictional Determination or the agency verified wetlands in the project area?

This information was provided to the commenter on January 30, 2006.

The results of the agency wetland JD are shown on the maps that can be found on the project website (www.iccstudy.org) and in the FEIS.

685 Having difficulty accessing the CD's that were sent to me.

The commenter was contacted prior to the close of the FEIS review period with instructions on how to download a later version of Adobe Acrobat Reader from the ICC website (www.iccstudy.org). This corrected the difficulty in accessing the files on the CDs.

686 Request the bidders list or a list of companies who have expressed an interest in the construction contracts for the new ICC to be able to contact interested companies and express our interest in teaming with them.

Due to Maryland procurement rules, the Lead Agencies are not able to release this information at this time.

687 The symbols on the legend for the list of libraries where loaner copies of the FEIS should be double checked.

The legend of locations where the FEIS can be reviewed or borrowed shown on the ICC website www.iccstudy.org is correct.

688 How will comments on the FEIS be addressed? Will the document be publicly available? How will the decision makers use the comments?

A summary of all comments and responses is included in this document. It is available on the ICC website (www.iccstudy.org). Every comment on the DEIS and FEIS was carefully reviewed by the state and federal decision makers before making recommendations and decisions.

689 Requests copy of letter from SHA to James Connolly and a list of parties to whom notice of release of FEIS were mailed.

On April 19, 2006, SHA provided a copy of the requested letter and a CD containing the requested list of parties to whom notice of release of the FEIS was mailed.

690 CD of FEIS received from SHA did not include Appendix F of the Travel Analysis Technical Report as requested.

A CD of Technical Reports and Addendums was provided.

691 Citizens were not informed that the ICC would be a toll road. This is a betrayal of trust of those who supported the ICC. Requests clarification on the County Executive's position on tolls, including when he first became aware of the tolls.

The tolling concept was presented at the Alternatives Public Workshops in June 2004 and at the Public Hearings in January 2005. The toll information was also included in the Alternatives Public Workshop brochure, the Public Hearing brochure and the Draft Environmental Impact Statement.

With respect to the County Executive's position on tolls, Montgomery County staff has been involved as study team members through the Interagency Working Group since the beginning of the study and the County Executive received regular briefings on the status of the ongoing planning studies.

692 Request change of address for mailing list.

Mailing list updated.

693 Please add me to your mailing list.

Added to mailing list.

694 Thank you for providing the Adobe Reader information. This solved my problem with reading the ICC documents.

Thank you for your comment.

695 This is a great website where one can enjoy the thought of a great mind long departed. Good work.

Thank you for your comment.

696 Please remove my name from your mailing list.

Commenter's name removed from mailing list.

697 Public involvement during the NEPA process was misleading because the public hearings were advertised as "Location/Design" hearings, which gave the impression that the No-Build was no longer an alternative.

The Public Hearing presentation by SHA representatives and the Public Hearing brochure clearly stated that the No Build Alternative was being considered. The term "Location/Design Public Hearing" is a standard term used in all NEPA studies n Maryland. At the hearings, the public had the opportunity to comment on the locations and general design of the proposed ICC alternatives and other findings contained in the Draft Environmental Impact Statement (DEIS). The purpose of the Location/Design Public Hearing was explained in the advertisement for the hearings and on the project website prior to the hearings.

698 Please send me an electronic copy of the notice that was sent out on March 6, 2006.

Thank you for your request. The file has been sent.

699 Commenter is on the mailing list but is not receiving information.

Commenter was not on mailing list, but has been added.

700 Request that the earliest possible version of Adobe pdf be used to create the FEIS CDs so that people with older computers can read the files. Also request that for all future CDs, the version of pdf (i.e., version 1.6) used be stated on the disc label.

Due to CD size constraints, the PDF's of the ICC FEIS were compressed using Adobe Acrobat 7 Professional. As a result, the majority of the PDF's on the disk are indeed version 1.6 PDF's. However, all PDF's were verified to open using Adobe Acrobat Reader 5.0.5 prior to being released on CD. One can download Adobe Acrobat Reader 5.0.5 for Windows 95 and up by going to:

http://www.adobe.com/products/acrobat/readstep2_allversions.html. If you continue to have difficulty after downloading the latest version of Acrobat Reader, ICC CD's are available at all FEIS locations and can be viewed on the computers available there for public use.

701 Three properties in Cashell Estates were damaged by SHA during testing. No notification was received by property owners that any tests would be conducted on their property. SHA then claimed that there was a notification error.

The testing was completed to gather archeological profiles and data. The SHA sent property owner notification at the beginning of the study process that indicated that there may be periodic

needs to access private property. On the afternoon of December 19 staff knocked on the doors of four houses along Garrett Road, because a proposed SWM pond in their back yards was one of our target areas; no one was home at any of these houses. Shovel testing behind those houses was conducted on the morning of December 20. Shovel tests are round holes about 18 inches in diameter, and since this was a grassy yard, the sod had been removed in one piece. We filled the holes in, tamped the sod back down, and moved off the property.

702 At SHA's meeting with Cashell Estates on October 10, 2005, staff were not prepared to answer certain questions. After four months, Cashell Estates had not received responses to these questions.

The targeted outreach meeting held with the community in October 2005 was well attended and included a two hour question and answer period. The Lead Agencies' representatives answered all of the questions and promised to follow up in a letter to all that attended the meeting on greater detail on several issues. The letter was mailed to the meeting participants in February 2006. The Lead Agencies apologize for the delay in responding.

703 Please provide broader, fairer access to the entire FEIS, including all technical reports and addenda, in hard copy and in electronic formats that facilitate analysis and comment. Specifically, please provide electronic files that can be edited, such as Word, Word Perfect, or Excel.

As set forth in public notices and on the ICC website, hard copies of the entire document or any one volume are also available for viewing or purchase. All "pdf" files on the CDs that have been provided to the public by SHA are fully searchable for words and phrases. They are "read only" which limits the ability for these documents to be edited. Files that can be edited are not available for distribution.

704 The FEIS was not mailed on the official release date; instead SHA wasted nearly a week because the FEIS was not mailed until the middle of the next week. Review of the complete FEIS was also delayed because SHA had to redistribute pages that were in error in the hard copies.

The FEIS was signed on January 6, 2006 and was immediately posted on the project website. The availability of the FEIS for public review, and the beginning of the official review period, was advertised in the Federal Register on January 13, 2006. By that date, the FEIS copies had been placed in the 26 public repositories and were available for review. Each location also had a supply of FEISs on CD that were available for free.

705 SHA took an additional week to send electronic copies of new analyses and addenda to parties who had specifically requested them, which wasted nearly a third of the comment period. In addition, this information was not sent to the thousands of people who had received the FEIS electronically, nor were they informed that new analyses were available.

The Lead Agencies responded in about one week to the initial requests for free copies of CDs of the FEIS and associated appendices. After the first week, the Lead Agencies began to respond within two business days to any requests for material or technical assistance with the website and material already available for public review. The entire FEIS review period was extended to 93 days, through April 11, 2006. The PM 2.5 report was distributed to all who requested it on March 26, 2006 by mail and was also immediately available on the ICC website (www.iicstudy.org).

706 The SHA failed to provide hard copies of the technical reports and addenda at locations that are open outside of weekday work hours. This unnecessarily impedes review by affected and interested reviewers who work on weekdays. Please place these documents

in several libraries, for loan, near the ICC's proposed alignments.

In addition to the seven government centers where printed copies of the various technical reports were available for review and copying, the FEIS Technical Reports were available for download on the ICC project website and were all available on CD upon request, free of charge.

707 Requests that the Audubon Naturalist Society be provided with two free hard copies of the full Final EIS and the full Draft EIS, including all technical reports and addenda. The technical reports are integral to the EIS and thoroughly reviewing them is critical.

The Lead Agencies posted the entire FEIS and all of the technical appendices on the ICC project website, as well as offered free CDs containing this information. Additional printed copies of the FEIS were available for loan at several locations throughout the review period. CDs of the entire FEIS were mailed to everyone who provided comments on the DEIS. The Lead Agencies also offered printed copies of the FEIS for a fee reduced significantly from the actual printing costs.

708 SHA should provide one free hard copy of the main volumes of the FEIS to any non-profit community organization that requests one, as was done for the 1997 DEIS. By providing a single copy to one organization to share with others gives the impression that SHA does not want a thorough review and that it favors some commenters over others.

The Lead Agencies posted the entire FEIS and all of the technical appendices on the ICC project website, as well as offered free CDs with this information. Additional printed copies of the FEIS were available for loan at several locations throughout the review period. CDs of the entire FEIS were mailed to everyone who provided comments on the DEIS. The Lead Agencies also offered printed copies of the FEIS for a fee reduced significantly from the actual printing costs. The distribution policy for this study includes many additional opportunities that were not available for the DEIS in 1997.

709 Never received a notice about the PM 2.5 study even though commenter thought he should be on the mailing list.

Commenter was sent a copy of the PM 2.5 Report and added to the mailing list.

710 Appendix E of the Socioeconomic and Land Use Technical Report is not included in the PDF format of the Socioeconomic and Land Use Technical Report, obtained from the ICC website. The Lead Agencies should extend the comment period to permit review of Appendix E due to its late release.

Appendix E (Alternatives Mapping Plates) was included in the Socioeconomic and Land Use Technical Report as pages 421-511 of the PDF document available online.

711 Various graphics in the Public Hearing Brochure that show areas where congestion will increase more than 10% over the No-Action alternative were white on a white background, making them very difficult to read and understand. Individuals who received these brochures should be mailed figures that are printed in a way that they can be interpreted easily.

The issue centers on the finding that with the ICC, approximately 50 miles of the local roadway network would see a decrease in Average Weekday Daily Traffic (AWDT) of at least 10 percent, while about 10 miles would see an increase of at least 10 percent (refer to FEIS Chapter IV.J). The latter did not appear on the brochure map you reference because of a problem associated with converting the original four-color process format to a spot color format required by the two-color web press used for the brochure. The Lead Agencies corrected this error. This information was widely distributed in several ways and the correct maps appeared in the DEIS, FEIS and on

the project website.

712 We are grateful to the study team for all of the work that it has done throughout this project. The public meetings have been informative and the representatives of the SHA and other agencies and consultants were helpful and patient.

Thank you for your comment.

713 The FEIS should include the letter to the Washington Post by Neal Potter, previous Montgomery County Executive, stating how he now recognizes that an ICC would have a negligible effect on relieving traffic and is effectively a waste of money, as well as an environmental travesty, and should not be built.

Newspaper articles and opinion columns are not included in the environmental documentation unless the author formally submitted them as part of the comment and review period. However, the Lead Agencies, through its thorough public involvement and media plan, monitored the media coverage of the ICC planning study and decision-makers were informed of this media coverage.

714 The March 3, 2006 notice clearly indicates that loaner copies of the FEIS would be available from the Eastern Montgomery Services Center at 3300 Briggs Chaney Road. However, no loaner copies were available at that location. Instead, we were given three computer discs containing the FEIS. It was impracticable to print out the FEIS from my home computer. We had to call around to the other locations to find one that had a loaner copy available, which resulted in unnecessary delays in obtaining information that should have been readily available.

We apologize that you had trouble obtaining a loaner copy at the Eastern Montgomery Services Center, yet loaner copies of the FEIS have been available at this location since the second week of January. The Lead Agencies conducted regular checks, both by phone and visual inspection, for all of the public locations to ensure that all of the material was still available and usable and has restocked the supply of free CDs throughout the comment period.

715 There are problems with the CD's that were distributed. Page I-11 states that various roads in Figure I-4 are represented by either green lines or orange lines. However, neither the loaner copy that I eventually received nor the computer discs show any colors in Figure I-4 or in any of the other tables. Either the FEIS is inaccurate or the copies made available to the public were not user-friendly. The Preface on Disc 1 only shows the first page. There should obviously be more than just the one page, as page P-1 ends in the middle of a sentence.

The Lead Agencies checked several copies of the FEIS available for loan and all of them have the orange and green shaded lines. We apologize for the difficulty you experienced accessing the Preface on the CD. The FEIS Preface includes a total of 17 pages that were available in all hard copies of the document made available at FEIS locations throughout the study area as well as on the project website at www.iccstudy.org.

716 The largest photo in the ICC brochure is of a parkway style road, which is not what the planned ICC will look like. Why was this photo used? It makes the ICC look better than it will actually look to people near the road.

There was no rendering of the ICC included in the DEIS brochure, yet the Lead Agencies have prepared numerous rendering of the ICC for inclusion in the DEIS and the FEIS. In all cases they are artist's representations of the proposed roadway based upon actual preliminary engineering drawings. Moreover, the preliminary design of the ICC Selected Alternative does have many design elements that would allow some to interpret it to look like a parkway design. Examples include a narrow median with landscape treatments, smaller graded areas on the

outside of the roadway edge and aesthetics treatments of other roadway features.

717 Request for electronic copies of all notices that the Lead Agencies sent about the extension of the public comment periods on the DEIS, FEIS, and PM 2.5 Conformity Determination.

Requested information was provided to commenter on April 28, 2006

718 The MDOT public outreach representative was biased toward building the ICC and made citizens feel they could not fairly participate in the process. We were somewhat surprised that such a clearly biased person was hired to facilitate this process.

The Special Assistant from MDOT did not bias the fair and complete analysis of alternatives by any of the Lead Agencies. Throughout this study process, the Lead Agencies have taken an unbiased approach to the development of the project and alternatives in accordance with NEPA and associated regulatory requirements. The Lead Agencies also conducted a far reaching and interactive public involvement process which included dozens of meetings, newsletters and brochures, public hearings, community meetings, and a comprehensive and regularly updated website. Each of these methods, which were used and accessed by thousands of interested stakeholders, included the sharing of unbiased and factual information about the ongoing studies.

Appendix A: Alternatives Engineering Plates

719 Plate 2 shows that the ICC would have a four lane section at the Shady Grove interchange. It is likely that this section will be widened to six lanes, so the full impact should be shown.

Refinement of the preliminary design has been made in this area since publication of the FEIS to provide three through lanes on eastbound ICC and accommodate three through lanes on westbound ICC. This has resulted in a slight increase in right of way from that shown in the FEIS, with no changes in displacements. The refinement has resulted in an increase of 1.25 acres of forest, 2 specimen trees, and 0.001 acres of floodplain, yet has also resulted in a decrease of 0.001 acres of wetland areas.

720 The FEIS (Plate 13) does not show the partial relocation of properties. These property owners should be fully compensated for the full value of their homes because they would have an interstate highway in their backyards and their property values would decrease, even though the homes would not be fully demolished.

The Selected Alternative does not take away property shown on Plate 13 in the FEIS. Each property with a residence from which land is to be acquired is considered individually. In all cases, the property owner will be compensated for land that is needed to construct the ICC in accordance with state and federal laws. Where such an encroachment would make the residence uninhabitable (e.g., loss of majority of lot), the residence is counted as a displacement. Property owners will only be compensated if land is taken, there will be no compensation for property affected by the proximity (but without any property taken) to the project. Further study and coordination with affected property owners will occur during the design stage.

721 The FEIS does not show the relocations of MD 28, Longmead Crossing, Notley Road, New Hampshire Avenue, Old Columbia Pike, Briggs Chaney Road, Old Gunpowder, during construction (see Plates 15, 17, 20, 25, 28, 31, 32)

These roadways will not be relocated as part of the final construction of the ICC and therefore

are shown correctly in their current location. Minor deviation in the alignment may occur during construction. These impacts are accounted for in the footprint of the road.

722 Plate 17 does not show the potential displacements from the proposed Park and Ride lot.

The proposed Park and Ride lot along MD 182 would not require any residential relocations.

723 Plate 25 does not show the impact of a connection to the Montgomery County Maintenance Depot, which was clearly built in expectation of ICC construction.

The Montgomery County Maintenance Depot has been in operation for many years to help local government operate and maintain County Roads. That function will remain as it is today, even after the ICC is constructed and there is not a connection between the Depot and the ICC planned.

724 There does not appear to be a bridge planned over the stream at Station 840.

There is not bridge proposed at this crossing. Instead, a culvert is proposed to convey the stream under the proposed ICC.

725 The impacts of the A-59 interchange, which would provide a major connection to Konterra, should be considered part of the ICC.

The partial interchange with A-59 is not being proposed as part of the ICC project. The maps for the project show several projects that are to be completed by others (i.e., M-83, A-59, etc…) to further illustrate other planned County Master Planned projects that may be built connecting to the ICC.

726 Plate 33 implies that a small cloverleaf type single lane ramp would be adequate for northbound to westbound traffic at the I-95 interchange with the ICC. This is not realistic, considering that the previous DEIS (1997) showed a multi-lane high speed directional ramp to accommodate the projected traffic. The full impacts of the ultimate design of this interchange as well as the potential impacts of bridge construction over the existing I-95 should be evaluated.

This movement is projected to have less than 800 vehicles per hour (575 am/775 pm) in its peak hours and the weave between it and the WB to SB loop ramp is anticipated to operate at a LOS of C/C (am/pm) in 2030. A semi-directional ramp for this movement was too large of a solution for the projected traffic volumes.

727 Plate 37 needs to be more explicit that I-95 would be 18 lanes wide at Station 825. In addition, this sequence of weaving ramps could be very confusing to motorists

I-95 would not have 18 through lanes. I-95 is currently an eight lane section (four lanes northbound and four lanes southbound). Interchanges with MD 212, the ICC, future Contee Road, and MD 198 will be accommodated with a combination of ramps and collector distributor (CD) roads. As shown in Appendix A, Plate 37 of the DEIS (I-95 Station 820), the combination of these various roads and ramps totals 18 lanes, but the number of through lanes on I-95 remains at 8.

728 No bridge is planned over Indian Creek at Station 978. Many other creeks would not have bridges to reduce park impacts.

The station referred to is not Indian Creek; it is a tributary to Indian Creek that flows out of wetland 6J. There is not a bridge proposed at this crossing. Instead, the current plan is for two culverts at this location, one of which is to allow for small mammal crossings.

729 Plate 37 shows that southbound traffic from Contee Road would have a difficult merge (Stations 570 to 575 on the ramp), with only a few seconds to cross over high speed traffic if they want to take I-95 south instead of the ICC westbound. This suggests an additional braided ramp might be part of an ultimate design not fully examined in the EIS.

All three lanes of traffic along SB I-95 will be carried to the next decision point on the Collector/Distributor road to SB I-95. Therefore the rightmost lane and the movement in question is a "choice" lane, where motorists can either elect to go to WB ICC or SB I-95, and not all be funneled to SB I-95 or ICC.

730 Harding Cemetery, Harding Lane is not shown. Only the Joseph Harding House shows on plates 52, 53A, 54, 56, and 58.

Harding Cemetery: This cemetery is part of the Joseph Harding House historic property (Maryland Inventory of Historic Properties [MIHP] Number M: 28-27), which was determined eligible for listing in the NRHP. As discussed in the FEIS (Chapter IV.E.1.b, pages IV-114 andIV-115), Corridor 1 would have no effect on this property and Corridor 2 would have no adverse effect.

731 Round Oak Church (only) shows on plate 53. Round Oak Missionary Baptist Church Cemetery, Good Hope Road, is not shown.

Round Oak Missionary Baptist Church Cemetery (M:28-51): This property was inventories for the ICC and determined not eligible for listing in the NRHP. It is outside the APE for archeology; no direct impacts are anticipated.

732 Unnamed cemetery across MD 198 from Kruhm Road is shown on plates 53C, 55C, and 69. Union Cemetery, MD 198 and Kruhm Road is not shown.

Union Cemetery: This cemetery was inventoried for the ICC (Spero 1996) and was determined not eligible for the NRHP by the Maryland Historic Trust (MHT) in 1998. This is not an historic resource issue. However, a corner of the cemetery property is within the limit of disturbance for Corridor 2. Impact to graves would be avoided.

733 Mt. Calvary Church (only) is shown on plates 68 and 72. Mt. Calvary Church, Batson Road, is not shown.

Mt. Calvary Church: No inventory form or Determination of Eligibility (DOE) form has been prepared for this property. The property is outside of the APE for architecture and archeology.

734 Merson Cemetery, Columbia Pike and MD 198, is not shown.

Merson Cemetery: This cemetery is located at the intersection of MD 198 and Old Columbia Pike. It is not within the APE for the ICC project.

735 Burton Cemetery, Beall Road, is not shown.

Burton Cemetery (William Wilcox House/Burton Cemetery (M:15-64). There is a MIHP form for this property, but no DOE form. The cemetery is located on Bell Road outside of the APE for architecture of archeology.

736 Burton - Carr Cemetery, MD 198, is not shown.

Burton-Carr Cemetery (Burton, Carr, Edmundson Cemetery): This cemetery is located on the Fehr nursery property north of MD `98 near Wooten Lane. It is outside of the APE for architecture or archeology.

737 Single grave on Batson Road, 500' north of Mt. Calvary, is not shown on Plate 68.

Single grave on Batson Road, 500' N of Mt. Calvary: SHA has no additional information on this potential grave. However, Batson Road 500 feet north of Mt. Calvary is outside of the APE for cultural resources.

738 Billy Ward grave, Kruhm Road next to Kenneth Poole farm, is shown on maps from Louis Berger and John Milner Associates Reports.

Billy Ward's Cemetery (18MO622): This site was identified in the Burtonsville area through archival research during Phase I archeological investigations. SHA undertook detailed archival investigation and conducted a remote sensing survey of this location. When the results of the geophysical investigation appeared to confirm the presence of the cemetery, SHA engineers redesigned Corridor 2 to avoid impact to the cemetery. This unmarked grave location is not shown in the FEIS due to concerns about site security. Impact to graves would be avoided.

739 Mt. Pleasant Church and Cemetery, Norbeck and Muncaster Mill Roads, is shown on plates 14 and 41.

Mt. Pleasant Church + Cemetery (M:23-113-1): This property was determined eligible for listing in the NRHP in 1996. However it is outside of the APE for either Corridor 1 or 2 and will not be impacted.

740 Vol. 1, p-37: States that "the horizontal alignment of Rock Creek Option C has been refined from the western edge of Winters Run to east of MD 115 to eliminate two sets of compound curves...were not desirable." I see no apparent change in Appendix A, plates 6 - 11, and 124 furthermore, these curves are less than the ones through Cashell Estates, so how are the tight horizontal and vertical curves through Cashell Estates acceptable?

Plate 7 of the DEIS (Appendix A) shows two sets of compound curves (indicated by the PCCs at Sta. 214 + 79.13 and 232 + 75.53). Plate 7 of the FEIS (Appendix A) shows a tangent between the curves. This results in a barely perceptible shift of the alignment, and was made to comply with guidance from the American Association of State Highway and Transportation Officials (AASHTO) to avoid compound curves where the difference in radii exceeds a ratio of 1.5. This is unrelated to the sharpness of individual curves. The curves through Cashell Estates meet AASHTO criteria for a 60 mph design speed.

741 There is a mistake on the ICC maps. Castle Cliff Court is shown as Ivystone Way.

Thank you for your comment. The Lead Agencies inspected the mapping (Plate 26 for the Selected Alternative) and found that the streets were labeled properly. Ivystone Way is farther to the north, closer to the ICC than is Castle Cliff Court.

Appendix E: Summary of the Relocation Assistance Program of the State Highway Administration of Maryland

742 What is the process for compensating people whose houses will be taken for the ICC? How are housing prices determined?

Compensation for homes that need to be acquired is based on establishing fair market value. A real estate professional from SHA will work with the home owner, who has a right to accept the appraisal and offer from SHA or obtain an independent appraisal. In the vast majority of the cases, a mutually acceptable offer price is agreed upon. When that is not the case, the homeowner and SHA work with a third mutually agreed upon appraiser. If a price still cannot be

agreed to, the case will go before a court or board of property review. The process is governed by state and federal laws.

Appendix G: Perspectives, and Line of Site Drawings

743 Cashell Estates is incorrectly shown as being on the west side of Redland Road in Vol. 2, Appendix G, page 2 of 16.

Thank you for bringing this to the Lead Agencies' attention, as we can see how this could confuse the reader. The graphic includes titles for each aerial depiction and each of the drawings was showing Cashell Estates from different angles. The title "Cashell Estates" was placed in the bottom left for each drawing and was not intended to label the location of the community.

744 It appears that labels for Redland Station and Mill Creek South are reversed on the figure on page 1 of Appendix G. The figures also indicate Redland Station in two locations.

The commenter is correct. The community labels on the two upper photos (existing/proposed) should have been reversed (Mill Creek South and Redland Station). Mill Creek South should replace the Redland Station label in the lower left corner of both lower photos. The Lead Agencies have considered this comment in the decision making process, as part of their review of all comments and responses.

Appendix N: Avoidance and Minimization Studies

745 The Underground Stormwater Management Facility shown in Appendix N would be in a location of bedrock blasted away for the highway. This would have severe impacts on the very rare wetland ecosystem immediately south of the proposed route on the east side of the creek.

There are several underground SWM facilities shown in Appendix N, yet soil borings are being collected to locate hard rock and other geologic features, and steps will be taken to avoid blasting if at all possible. Additionally, control and discharge of groundwater during construction of features that may penetrate it such as underground SWM, deep excavations, culverts, bridge foundations, etc., will require outlets that will be designed to maintain hydrology. Hydrology maintenance will be a priority during design and construction.

746 Appendix N does not show how Option A would have greater impacts on parkland, forests, additional streams and about the same amount of wetland acreage. It does not show the displacement of the Trolley Museum.

Appendix N includes the maps and figures that support the data and conclusions in Chapter IV and Chapter V. The data on impacts of Northwest Branch Option A versus B are included in the FEIS body (Chapter IV for general environmental impacts and Chapter V, specifically for Parkland Impacts). The Selected Alternative would displace a portion of the National Capital Trolley Museum, but Trolley Museum representatives have expressed a desire to relocate independent of the ICC project.

747 Appendix N (Paint Branch to Route 1) needs to include a community impact analysis from the three level ICC / 29 interchange, since the highest ramps would probably be visible in the Tanglewood neighborhood, and would definitely increase the noise they must endure.

The FEIS (Chapter IV.B.3) includes a discussion of the Community Impact Assessments (CIA). The results of the Tanglewood Community Area CIA are included on page IV-60 and do discuss the potential visual and other impacts of the US 29/ICC interchange. The view of the ICC/US 29

three-level interchange will be screened from the Avonshire and Tanglewood communities by constructing earthen berms, walls, vegetative screening, or any combination thereof. SHA will ensure that the SHA-owned land on which these features are constructed will be dedicated to providing visual screening of communities adjacent to the interchange. In addition, the Lead Agencies will continue to investigate opportunities to lower the profile through the US 29 Interchange area.

Noise mitigation (including all feasible and reasonable criteria such as cost averaging identified in the FEIS) will be further evaluated for all impacted Noise Sensitive Areas (NSA) during subsequent project design stages. Final recommendations, including community coordination, will occur during final design of the ICC. Tanglewood is one such location.

Appendix R-9: Smart Mobility Inc. Response

748 **The FEIS fails to respond adequately to criticisms leveled by the Smart Mobility, Inc. Report. The Smart Mobility Report demonstrates, that when a more realistic model is used, with more realistic inputs than are used in the ICC model, a number of alternatives outperform the ICC. The Lead Agencies have sought to reject the conclusions of this study by criticizing the Smart Mobility Report methodology. However, their criticism contradicts professional experience and judgment, and in fact highlights some of the key omissions of the FEIS.**

The agency fully considered the Smart Mobility Report. Specific comments are addressed individually in this document.

749 **The Lead Agencies characterize the Smart Mobility Report's measures of effectiveness as "inappropriate for a project-specific study:" The majority of MOEs used in the SMI Report reflect the objective of reducing regional auto travel and increasing regional transit use, which are not objectives of the ICC purpose and need. Projects with these objectives are often urban and specifically designed to reduce mobile source emissions or increase modal choice. In particular, the Lead Agencies challenged the appropriateness of fundamental measures of effectiveness, such as VMT and vehicle hours traveled ("VHT"). The FEIS does not use VMT to evaluate alternatives to the ICC because "the effect of VMT on air quality has become less significant than it was in previous decades." In a similar manner, the Lead Agencies also questions the use of VHT: "In a highly congested network such as the Washington, DC region, the more appropriate performance measures are a function of vehicle delay, not vehicle hours of travel [ ]."**

It is critical to note that the use and disclosure of VHT and other measures of effectiveness is common practice among transportation planners. To say that VHT is not an appropriate measure of vehicle delay defies logic. VHT helps to show which alternatives will reduce the total amount of time that people in the study area must spend in their cars and trucks as they satisfy their mobility needs. It is arbitrary and capricious for the FEIS to draw support from Maryland-National Capital Park and Planning Commission's ("M-NCPPC") 2002 project specific study of the ICC—a study which relies upon VHT as a key performance measure— while at the same time rejecting the use of the same measure of effectiveness in the Smart Mobility Report.

The Smart Mobility Report employs both VHT and vehicle hours of delay ("VHD") as measures of vehicle delay. These are performance measures supported by research performed for FHWA which represents the best work in the field.

VMT, VHT, and VHD are not effective measures of an alternative's ability to address the Purpose and Need of the study, which is to increase mobility in Montgomery and northwestern Prince George's Counties. For example, any project that can reduce the region's VHT would come out favorably in such an analysis regardless of that project's ability to improve east-west

mobility (such as a north-south express transit line). Conversely, if VHT is used, a project that increases VHT while it improves east-west mobility would perform poorly (such as a limited access road as the ICC that increases traffic volumes and reduces travel times). Since an improvement not focused on providing east-west mobility between I-95 and I-270 can affect VHT and VHD while not addressing the Purpose and Need, facility-specific corridor-wide metrics focused on each alternative's ability to improve east-west mobility in the study area are the most appropriate metrics.

Furthermore, it is misleading to suggest that VMT, VHT, and VHD demonstrate if the amount of time individuals spend in their cars increases. As stated, there is an implication that as VHT increases so does the amount of time that individuals spend traveling. This is not necessarily true. Since these are aggregate measures, they report the total travel time of all vehicles and obscure the travel conditions of individuals. Therefore, VHT could increase while the individual travel times of users declined. A measure such as person hours of travel (PHT) would be more appropriate for demonstrating the effects of different projects on the travel conditions of individual users.

750 The Smart Mobility Report analyzes alternatives within two study areas: (1) the Smart Mobility Report ICC Study Area; (2) a Smart Mobility, Inc. second tier analysis. The Smart Mobility Report ICC Study Area was developed based on discussions with Maryland SHA staff early in the DEIS process. It includes portions of Montgomery and Prince George's Counties that are bounded by and include the Capital Beltway, I-270, and U.S. 1. It differs from the FEIS ICC Study Area only by the inclusion of those portions of Clarksburg and Germantown that are east of I-270, a small portion of northern Gaithersburg east of I-270, and rural largely undeveloped portions in northern Montgomery County near Damascus. The FEIS study area is defined too narrowly, excluding even areas that are just barely beyond the immediate endpoints of the proposed ICC, thus ignoring a large portion of the locations from which trips using the ICC would begin or end. The Smart Mobility Report addressed this problem by evaluating the performance of the ICC and alternatives against a second-tier analysis area composed of all of Montgomery County and the portion of Prince George's County north of Central Avenue.

The Smart Mobility Report second-tier analysis area, composed of all of Montgomery County and the portion of Prince George's County north of Central Avenue, is approximately twice the size of the FEIS study area and is too large to identify the effects of a project that is providing mobility for east-west movements between I-270 and US 1 so far north of the Capital Beltway. The Purpose and Need states that the proposed ICC project is intended to link existing and proposed development areas between the I-270 and I-95/US 1 corridors within central and eastern Montgomery County and northwestern Prince George's County. The problem with the secondary area chosen by Smart Mobility is that it is so large that alternatives that do not serve the market identified by the Purpose and Need can affect this area, and do not permit a fair evaluation of alternatives designed to serve the Purpose and Need.

751 The FEIS also attacks the land use and travel forecasting methodology employed in the Smart Mobility Report. The Lead Agencies assert that the ICC travel forecasting model – Version 2.C – is "better suited" for use in the ICC FEIS than the more recent Version 2.D as used in the Smart Mobility Report. To claim that an earlier, no longer used version of the travel forecasting model is somehow "better suited" to this EIS than one in which some (though certainly not all) of the many significant modeling defects have been corrected is arbitrary and capricious. Smart Mobility, Inc. utilized the very latest model available from MWCOG TPB in Fall 2004, while the DEIS for the ICC (which was also under way at that time) used an earlier, thoroughly discredited version. The same discredited model is still relied upon in the FEIS.

Model 2.1C was never discredited. The Transportation Research Board (TRB) provided

suggestions on how to improve the model, many of which were incorporated in the modified version of 2.1C used for modeling the ICC. In fact, the TRB committee stated in their second letter to TPB on May 10th 2004 that they found the improvements achieved with this model "encouraging and proposes that TPB staff continue to evaluate whether systematic adjustments to the sort used in these corridor studies may lead to improved highway assignments on a regional level." While some of these improvements were included in Version 2.1D #50, not all were, and thus SHA has determined that it is not better suited for the ICC EIS. Furthermore, the model used for the commenter's analysis was not the most recently approved model by MWCOG, which was Version 2.1D#50. They used an earlier draft of that model, which was never adopted by MWCOG.

As stated in Attachment 1, page 11, of the comment, "Nevertheless, the refined model Version 2.1C and Version 2.1D are quite similar, and the ranking alternatives probably would be the same with either model." While the ICC study team still believes that the modified Version 2.1C is better suited for the ICC study, the statement included in the Authors' own document demonstrates that they believe using Version 2.1 D would not change the selection of an alternative for the ICC EIS.

Travel analysis for the Intercounty Connector (ICC) was performed using a refined version of the COG/TPB travel forecasting model version 2.1 C. The 2.1 C version of the model was refined specifically for the ICC to incorporate improvements capable of more accurately modeling tolls and to improve the volume-delay functions (VDF). Furthermore, the ICC version of the model made improvements to the network within the ICC study area that better defined link characteristics such as facility and area types, which determine the speed and capacity classes. The ICC model also revised centroid connectors to improve traffic assignment. After the travel analysis for the ICC was completed with this refined model, COG/TPB released a new model set, version 2.1 D Draft #50. The new 2.1 D model incorporated many of the improvements made to the refined 2.1 C model used for forecasting traffic on the ICC; however it did not include the improved link characteristics and centroid connectors. The primary improvements that the new model made over the 2.1 C modified model include, six iterations versus the previous three for 2.1 C, and a reduction in the number and magnitude of K-factors.

The results of a screenline refinement process provide a means for evaluating how well each version of the model performs compared to observed traffic volumes. The forecast volumes for 2000 are compared to observed volumes for 2000 to calculate the percent deviation for each cutline. For a cutline to be considered modeled accurately, it should have a percent deviation—based on the difference between the forecast volume and the observed volume—less than the acceptable deviation for that cutline as defined by NCHRP 255. The acceptable deviation provides a measure to ensure that the level of error in the highway forecast does not vary by more than one roadway lane. In terms of cutline processing, the new model version 2.1 D is similar to the ICC model except that it loses a few minor links: Glenallan Avenue/Road, Shady Grove Road ramps, and A-59.

The post-processing results show that the Version 2.1D model does not forecast traffic for the base year as well as the ICC model. The refined ICC model has 5 of the 46 cutlines, or 11 percent, more than 5 percent above the acceptable deviation. Version 2.1 D of the model has 14 of the 46 cutlines, or 30 percent, more than 5 percent above the acceptable deviation. Twelve (12) of the Version 2.1 D model cutlines are 10 percent or more above the acceptable deviation compared to 3 cutlines for the ICC model. For the 46 cutlines used for the Corridor 1 alternative, eight (8) have a lower percent deviation with the Version 2.1 D model and 36 have a higher percent deviation than with the model used for the ICC EIS. Two of the cutlines had the same percent deviation. Therefore, based on this comparison, it is clear that the modified version 2.1 C model used for the ICC EIS more accurately predicts traffic than version 2.1 D.

Cooperative Forecast 6.4A land use was modified for employment definition differences in the Washington and Baltimore areas. In order to use the 6.4A Land use with the 2.1C model and maintain a consistence between the model and land use, those modifications were not included

in the 6.4A land use when it was analyzed with Version 2.1C modified. This is because Version 2.1 C modified had already adjusted for those differences in another fashion.

752 The Smart Mobility Report analysis maintained rigorous consistency with adopted planning assumptions, correcting these only where independent expert opinion – including a concurrent FHWA sponsored peer review panel for the Baltimore Transportation Planning Board – confirmed the need to correct accounting errors.

The Lead Agencies appreciate the effort and extent of study that Smart Mobility Inc. invested in the analysis of ICC alternatives. However, regardless of the results that were provided in the report, the Lead Agencies maintain that its authors used different measures to judge the effectiveness of the alternatives. The measures used in the Smart Mobility Report were nearly all regional and system-wide in nature as opposed to study area specific.

753 Extensive economic development and planning research suggests there is general agreement among experts that new transportation investments tend to redistribute job and housing growth, rather than induce new growth. The proposed ICC would be expected to produce more automobile-dependent sprawl development in areas that are not now urbanized or have low density development, and to draw new development away from the more transit oriented urban and suburban core areas. In contrast, the transit-oriented alternatives the Smart Mobility Report proposes would be expected to produce more transit-oriented development in areas that are already urbanized and to draw projected development away from low density automobile-dependent areas and green fields development. That is the basis for modifying the official Round 6.4 forecast land use pattern in the Smart Mobility Report. Again, we reiterate that the total number of jobs and households in Montgomery and northern Prince George's County were held constant for each alternative.

The Lead Agencies are familiar with studies purporting the ability of transportation investments to redistribute job and housing growth. In the context of this study area and the development trends associated with this project, the redistribution of jobs and growth is not as pronounced as that observed in other studies. See Chapter IV for a discussion of the SCEA. Moreover, Increased transit-oriented development is a goal of the local governments and is supported by the Lead Agencies. There continues to be initiatives and modifications to area master plans to encourage and plan for increased levels of transit-oriented development, particularly around existing transit hubs. The ICC would also include a transit component in the form of Express Bus Service.

754 The Transit-Oriented Land Use and Investment alternative uses a land-use component that modifies the growth pattern of the Round 6.4 growth forecasts to reduce imbalances in jobs and households and increase transit-oriented development but keeps the region growth a total constant.

Round 6.4 growth forecasts were never adopted by MWCOG and its constituent governments. The most recently approved Cooperative Forecast when work on the EIS began, Round 6.3 was used for the EIS and a sensitivity analysis was performed with the next approved land use, Round 6.4A. Therefore the SMI analysis used an unapproved land use forecast, Round 6.4. Furthermore SMI modified the growth pattern for transit-oriented alternatives, which could not have been done with the same rigor as the Cooperative Forecasting process would have used, and those forecasts would probably not have been approved by MWCOG as was the land use forecasts used for the ICC FEIS. If the transportation network affects land-use forecasts as significantly as the commenter stipulates it will with the ICC, which the study team and the regional planning process do not agree, then conversion of existing roads throughout the region to HOT lanes should affect land-use even more.

755 The Transit-Oriented Land Use and Investment alternative calls for the widening of a segment of Muncaster Mill Road to four lanes.

Muncaster Mill Road (MD 115) is master planned to remain two lanes between MD 28 and Redland Road due to extensive right-of-way and environmental challenges and as a four-lane divided roadway between Redland Road and MD 124. The Lead Agencies evaluated the Transit-Oriented land Use and Investment options and found that they did not substantively meet the project purpose and needs. This alternative was not carried forward for detailed study and is therefore not a part of the Selected Alternative.

756 The SMI Add Toll Lanes-Express Bus alternative, Convert to High Occupancy Toll (HOT) Lanes-Express Bus alternative, and Transit Oriented-HOT Lane-Rail and Express Bus alternative, proposed by the Coalition for Smarter Growth were tested using the unchanged Round 6.4 growth forecasts.

Round 6.4 growth forecasts were never adopted by MWCOG and its constituent governments. The most recently approved Cooperative Forecast when work on the EIS began, Round 6.3 was used for the EIS and a sensitivity analysis was performed with the next approved land use, Round 6.4A. Therefore the SMI analysis used an unapproved land use forecast, Round 6.4. Furthermore SMI modified the growth pattern for transit-oriented alternatives, which could not have been done with the same rigor as the Cooperative Forecasting process would have used, and those forecasts would probably not have been approved by MWCOG as was the land use forecasts used for the ICC FEIS. If the transportation network affects land use forecasts as significantly as the commenter stipulates it will with the ICC, which the study team and the regional planning process do not agree, then conversion of existing roads throughout the region to HOT lanes should affect land-use even more.

757 The SMI Add Toll Lanes-Express Bus alternative would add 357 express bus route-miles beyond those planned in the 2003 CLRP.

The Selected Alternative assumes all of the transit features in the Metropolitan Washington Council of Governments (MWCOG) FY 03 Constrained Long Range Plan (CLRP) to be in place. In addition, the FEIS includes six representative express bus routes that would use the ICC and five representative bus routes that would feed ICC express service. The proposed express bus-routes, which are in addition to those included in the CLRP, would add more than 900 revenue miles (miles of service that generate revenue from transit rider fees) of express bus service using the ICC during the peak periods.

758 The SMI understands that the version 2.1 C model uses 1980 dollars but the version 2.1 D model uses 1994 dollars. The FEIS is inconsistent regarding the year of the monetary values used for the model. The FEIS response says that coding is done in "1984 dollars" (Appendix R-9, p. 14) instead of the correct values of 1980 dollars for version 2.1 C or 1994 dollars for version 2.1 D.

The FEIS response stating that coding is done in "1984 dollars" is a typographical error. The coding was done in 1980 dollars, consistent with the commenter's understanding that the version 2.1 C model uses 1980 dollars. This typographical error does not affect the analysis or the reported results.

Miscellaneous

759 How can the ICC cost the same today as the estimate over 3 years ago?

The cost estimate has been updated with every major step throughout the project development process. In fact, the cost is not the same as it was three years ago. As a result of previous ICC studies, the cost was estimated to be approximately $1.7 billion, which was the baseline

estimate used in 2003. Since then, there have been several updates and revisions of the cost estimate. The Selected Alternative, Corridor 1, would cost $2.15 billion in 2004 dollars. Including inflation between the present and the time of construction, the project will cost approximately $2.45 billion.

760 What is the annual maintenance cost of the ICC over the next ten to twenty years?

The operating and maintenance costs of the Intercounty Connector (ICC) will be paid by the Maryland Transportation Authority using revenues from the ICC and its seven existing toll facilities. ICC operation and maintenance costs will constitute a relatively small portion of system wide revenues and costs. Preliminary estimates of ICC operating and maintenance costs have been made based on experience at other toll facilities and general industry practices. Given that the ICC will open to traffic in phases over a several year period, and considering the normal ramp up in traffic on new roads, it is expected that ICC operation and maintenance costs will increase gradually over its first years of operation, growing to approximately $20 - $25 million per year once traffic volumes have matured.

761 Will the cost of maintaining the ICC take funds from other projects?

Maintenance costs for the ICC will not restrict the state from developing other projects. The SHA and MdTA both have capital budgets that are separate from operations and maintenance. For more information about the State's Capital Improvement Program, please visit www.mdot.md.us.

762 Request for the Technical Support data files.

All requests for information, copies of the FEIS and technical reports were fulfilled.

763 The ICC is too expensive.

SHA's cost estimate is conservative compared to other major (projects that cost over $1 billion) highway, bridge and transit projects in metropolitan areas nationwide (e.g., extending Metrorail 11.6 miles to Reston, Virginia is estimated to cost $1.6 billion). FHWA conducted verification of the SHA's cost estimate. The highest cost items for the ICC project are right-of-way due to the study area's high property values, earth-moving for extensive cut and fill sections due to the study area topography, paving, and bridges associated with new highway construction. In addition, the cost estimate includes the improvements to intersecting roads (e.g., MD 97, US 29, I-95). For example, along I-95, these improvements extend from the north side of MD 212 to north of MD 198. The costs also include environmental mitigation and stewardship measures to enhance and protect the study area natural environment. Considering the project's economic benefits are over $300 million per year as quantified by the University of Maryland's independent analysis, that 25 percent of the project's costs will come from user tolls, and the degree to which the ICC satisfies the project's purpose and needs, the ICC is cost-effective.

764 The ICC is a waste of money.

The estimated benefits of the Selected Alternative are substantial. The Selected Alternative substantively responds to all of the elements of purpose and need by providing a high quality transportation link between the I-270 and I-95/US 1 corridors for movement of goods, services and people. Approximately 50 miles of the local roadway are forecast to have lower average weekday daily traffic (AWDT) by at least ten percent. Many of the roadways expected to experience reduced traffic volumes are east-west arterials (refer to FEIS Chapter IV.J.4.e). Thirty-seven percent of intersections at the failing level of service (LOS) grades of E and F in the AM peak hour will achieve a 10 percent or greater volume to capacity ratio (V/C) improvement in the AM peak hour. Improvements in V/C ratios will result in a 24 percent reduction over the No-Action alternative in the amount of time intersections are at or over capacity (refer to FEIS Chapter IV.J.4.f). The total daily AM peak hour travel time savings for ICC users is 3,000 hours,

a 42 percent improvement over the time to make the same trips under the No-Action alternative (refer to FEIS Chapter IV.J.4.b). The Corridor 1 alternative is forecast to facilitate more vehicle miles of travel without increasing the total number of crashes. Therefore, the number of crashes per vehicle mile traveled will decrease under the Selected Alternative, resulting in safer travel (refer to FEIS Chapter IV.J.4.h). In addition to the travel and congestion benefits, the Selected Alternative includes dozens of environmental stewardship projects that will improve existing environmental degradation that has occurred within the study area.

765 Requests the name and address of the most senior person on the project so that commenter may discuss the destructive nature of this project.

The commenter was contacted on February 14, 2006, and advised that he could speak with project team representatives by calling 1-866-462-0020.

766 If this is the final route then the department should consider delaying the Fairland/ US 29 bridges and interchange that are part of the US 29 corridor upgrades under construction now. Proceeding with construction will incur major financial costs if the ICC were to be constructed in the near future.

The study teams for both the US 29 Corridor and the ICC have been working together closely to ensure the engineering plans for both improvements work well together. The current plans achieve that goal and the US 29/Fairland Road interchange, which has a very different purpose from the ICC, can move forward before the construction of the ICC. The ICC financial plan will allow for simultaneous development of other projects, including US 29, in accordance with statewide priorities.

767 Even with bond issue and toll revenues, the ICC will use money that could have been used for transit.

Federal, state and local officials constantly make choices as they prioritize funding for needed projects. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. In part because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate substantial annual funding for the Washington area Metro system and other needed projects. Additionally, Maryland has allocated $329 million for the new "Metro Matters" program, which will fund increased improvements for the Metro rail and bus system.

The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would, of course, only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other Authority facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the $265 million to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects.

The ICC will be a multi-modal highway allowing for east-west express bus transit service, which is not possible on the existing road network in the study area. Transit projects such as the proposed Purple Line (now called the Bi-County Transitway) and Corridor Cities Transitway serve a different purpose and need from the ICC, and are being studied independently. The MTA continues to study the transitways as separate NEPA initiatives in Montgomery and Prince George's Counties.

768 Supports No-Action Alternative

Thank you for your comment.

769 Pleased to see that gas taxes are being spent on a road that is used by tax payers instead of being diverted to non-road projects.

Thank you for your comment.

770 What will the toll be?

The actual toll rates for the ICC are not being determined as part of this NEPA process, but will be set by the MdTA prior to the opening of the facility. Toll rates for the ICC will be established to achieve a blend of various goals, including (1) generating adequate revenue to cover operating costs and, at a minimum, a portion of its capital cost, and, ultimately, to contribute to the funding available for the MdTA's consolidated system of tolling facilities, and (2) managing traffic demand and congestion on the ICC.

771 Although an ICC is needed, it is unlikely that it will generate enough revenue to justify the expense of high speed toll collection.

The approved financing plan includes all of the capital costs to implement the project including the cost of highway speed electronic toll collection.

772 The current projection of up to $2.5 billion does not factor inflation, material costs, or overruns into the equation. These could drive the final cost toward $3 billion

The Selected Alternative, Corridor 1, would cost approximately $2.45 billion, including inflation between the present and the time of construction. The ICC cost estimates were developed using a specialized highway cost estimating procedure and the estimate was subject to thorough reviews, including a FHWA Mega Project Review Team. The FHWA Team found the estimates to be reasonable, in part because of the contingencies for things such as material cost increases, inflation and other factors that could affect an estimate over time.

773 MD 32 dualization is a much more important project than the ICC.

The State Highway Administration continues to pursue the widening of MD 32 between MD 108 and I-70. This project is moving through the highway development process independently of the ICC. It should also be noted that travel demand in the ICC study area is greater than the capacity that would be gained by the widening of MD 32.

774 The ICC will use funds from many sources that should be used to fund many other projects in Montgomery and Prince George's Counties instead.

Federal, state and local elected officials constantly make choices as they prioritize funding for needed projects. The ICC, after all, has been planned for many years. The finance plan for the ICC was developed to allow maximum funding for other Maryland transportation projects. ICC costs will be jointly funded by the Maryland Transportation Authority (MdTA) and the Maryland Department of Transportation (MDOT) using a combination of funding sources, including MdTA toll revenue bonds (and possibly, toll supported debt in the form of a TIFIA loan), GARVEE bonds, funding from the Maryland Transportation Trust fund and from the General Fund. The MdTA and GARVEE funding sources (funding approximately 80 percent of the project's cost) are typically not available by law or policy for public transit projects. The ICC funding plan is designed to minimize use of the Maryland Transportation Trust Fund to ensure sufficient funding for other needed transportation projects. For example, Maryland has allocated $329 million for the new "Metro Matters" program, intended to fund additional improvements for the Metro bus

and rail system. The recently enacted re-authorization of the federal highway and transit programs (SAFETEA-LU) has authorized substantial funding for Maryland in the FY 05-09 period, including approximately $2.9 billion in federal highway funding and approximately $1 billion in federal transit funds (including some $220 million in funding contingent upon future project approvals and appropriations bills).

775 **The ICC can easily pay for itself through tolls and federal and state highway user fees.**

Thank you for your comment.

776 **Pre-construction of the ICC has damaged my property on New Hampshire Ave. Improvements and installation of storm drains for the ICC done by the County have caused severe erosion. The County has not been able to remedy the problem. If this is an example of post construction results, then construction of major roadway projects should be delayed. The Dept of the Environment and County residents should know about destructive nature of these projects and how these projects are not being resolved to the satisfaction of long standing county homeowners.**

There has been no ICC preconstruction work and the improvements noted were not part of the ICC. SHA investigated and found the problem attributable to the County's project. SHA referred the problem to the County after field checking the drainage area. The County has a storm drain committee that meets frequently to discuss problems of this nature, and SHA gave the property owner the County contact information.

777 **The current ICC funding plan will take $1 million a week from the State's General Fund for the next 5 years. The General Fund is used to fund schools, education and health care.**

The General Fund contribution, as provided under legislation passed in the 2005 session, will be approximately $265 million. These General Funds are being used for the ICC as a repayment for amounts previously borrowed from the Maryland Transportation Trust Fund and used for General Fund purposes.

778 **The ICC will take $180 million from Maryland's Transportation Fund. The Transportation Fund is used for Metro, transit and road construction.**

Because the ICC funding plan is designed to not use substantial Maryland Transportation Trust Fund monies, the state has been able to allocate significant funding for the Washington Metro and other needed projects. For example, Maryland has allocated $329 million for the "Metro Matters" program, intended to fund work for the Metro system. The $180 million Maryland Transportation Trust fund contribution for the project is approximately 7% of the project's cost.

779 **The ICC will use 12 to 18 percent of the federal dollars allocated to Maryland until the year 2020.**

Maryland's federal highway funding is authorized at approximately $583 million per year (average) through FY 2009. Based on conservative assumptions, the maximum amount of debt service to be paid on twelve year GARVEE bonds is expected to be approximately $86 million per year, beginning in FY 2010. Even if there were no increase in Maryland's federal highway funding, GARVEE debt service would consume 15% of authorized federal highway funding. In the FY 06-11 capital program period, GARVEE debt service would use only some 7% of the current average authorized funding level, and will not adversely impact state transportation programs or the funding available to maintain the existing system.

780 **The ICC should be funded with a one tenth of a cent increase in the gas tax instead of with tolls.**

Even were it practical for gas tax revenue to be used as a substitute for the toll revenue funded

component of the ICC, it would not necessarily be desirable to operate the ICC as a toll free facility. In addition to helping generate revenue for the project, tolls will help to manage traffic demand and congestion on the ICC roadway, resulting in a relatively congestion free operating environment with predictable trip speed and duration. Without tolls, the ICC would ultimately suffer the same congestion that currently affects major highways in the Washington region.

Using state and federal gasoline taxes to help pay for the ICC makes sense; in fact these funds are already being used to fund a substantial portion of the project. The Maryland Transportation Trust Fund will contribute $180 million; federal highway trust funds will be used to pay the debt service on the $750 million in GARVEE bonds to be used for the project. However, a 1/10th of a cent increase in gasoline taxes would not serve as a substitute for the funding derived from tolls, and it is unlikely that state gasoline taxes could be increased to substitute for the toll revenue component of the ICC funding. It is expected that ICC toll revenues could pay for perhaps up to $600 million of the project's initial capital cost and for ongoing operation and maintenance costs of the facility. An increase in Maryland's gasoline tax by approximately 2 to 3 cents per gallon would be needed in generate an equivalent amount of revenue.

781 The money for the ICC should be used for schools and social services instead.

The funds that are to be used for the ICC could not be readily re-programmed for other transportation or non-transportation purposes. The toll revenues from the ICC itself would only be available if the ICC is built. The toll revenues from other MdTA facilities are available for the ICC because it will be owned and operated by the MdTA; if not used for the ICC, the toll revenues from other MdTA facilities would be used for its other projects. Funding from the Maryland Transportation Trust Fund must be used for transportation purposes; it cannot be used for general governmental purposes. Funding from the State of Maryland General Fund could be used for general governmental purposes; however, the funds to be used for the ICC is a repayment of an amount previously borrowed from the Maryland Transportation Trust Fund. In short, with the exception of the General Fund component, the funding sources are typically not used for general government purposes; they are used to fund transportation and infrastructure projects.

782 There will be a severe shortfall in the expected toll revenues because unrealistic toll revenue estimates were used to lower the cost estimates of the ICC. The cost estimates do not include the added interest charges that the state will incur when they state fails to pay its loans on schedule, which will increase the cost of the ICC.

Traffic estimates for the ICC were based on three potential toll rates. Traffic estimates were done using commonly accepted industry practices for estimation of demand and usage. These estimates are not unrealistic. It should be noted that for each of the three potential rates studied, ICC traffic volumes were substantial. Project cost estimates were not raised or lowered because of the estimates of traffic volumes.

The estimated $2.45 billion initial capital cost estimate for the ICC does not include interest paid on bonds but does account for inflation between the present and the time of construction,. Repayment of interest as well as principal has been figured in the financing assumptions for the ICC. Federal highway funds and MdTA revenues will be more than adequate to pay the full debt service on GARVEE bonds and toll revenue debt.

Even if ICC toll revenues were to be less than anticipated, the validity of the ICC financing plan would not be jeopardized. Toll revenues to be collected from the ICC constitute a small portion of the funding sources for the project. (ICC revenues are expected to be sufficient to pay debt service on approximately $400 - $600 million in debt – a relatively small portion of the total project cost. Were ICC revenues to be less than expected, the other funding sources would be available to fund the project.)

783 The ICC alternatives are not very different from those in the 1997 DEIS in terms of ecological impacts.

The prior study never progressed beyond a DEIS. As a result, the Lead Agencies never substantially considered mitigation proposals. More fundamentally, the current proposal and the current EIS are substantially different. Unlike the prior study, the current study, for example, produced a more focused purpose and need statement that placed the proposed project within the context of local and regional land use planning objectives; introduced the concept of environmental stewardship as part of the proposed action; proposed new alternatives and options that avoid or minimize resource impacts; proposed design features that also avoid or minimize resource impacts (e.g., modifying the profile, narrowing the median, underground and linear stormwater management, etc.); conducted a secondary and cumulative effects analysis on possible land use changes; analyzed the proposed project in the context of Maryland's Smart Growth laws; commissioned an economic effects study from the University of Maryland; created a substantial mitigation package to compensate for natural resource impacts; and engaged the federal, state and regional resource agencies in an on-going collaborative review process of issue-spotting and conflict resolution.

Although the prior Governor halted the 1997 study, the government's analysis of study area transportation demands and potential solutions did not end there. In 1998, the Governor appointed a blue-ribbon panel called the Transportation Solutions Group (TSG) to examine transportation, land use and environmental issues for the Montgomery/Prince George's region between I-270 and I-95. The M-NCPPC Montgomery County Planning Board and County Government appointed a Transportation Policy Report Task Force (TPR) to examine the same issue areas. The reports ultimately issued by these groups and presented to elected and planning officials called for a comprehensive package of road, transit and land use improvements, including an ICC. The need for an ICC has not diminished ever the past decade. The Maryland General Assembly passed a resolution in early 2002 calling for a renewed NEPA study, both major party candidates for Governor did the same later that year, as did the County Executives and the Congressmen for the affected counties. The lead agencies, learning from the TSG and TPR processes and reports as well as the comments received on the 1997 DEIS, initiated the new, more comprehensive, more thorough NEPA study in 2003. As a result of the very substantive project modifications, mitigation package and environmental stewardship options, no agency found the ICC as reflected in the 2004 DEIS to be "environmentally unacceptable."

784 What is the privacy policy for the electronic toll collection system?

Regarding the use of information regarding those who drive on ETC toll roads, prior to the implementation of the electronic toll collection ("ETC") system in Maryland beginning in April of 1999, the Maryland General Assembly enacted statutory protection of the information created, recorded, obtained by, or submitted to the MdTA or its agents in connection with any electronic toll collection system. (See Maryland State Government ("SG") Code, Annotated, Section 10-616(m)). In 2001, the protection was extended to information pertaining to any associated transaction system. (See Acts of 2001, chapter 529.) The following persons are the only ones authorized by law to inspect such information: individuals named in the information; that individual's attorney of record; employees or agents of the MdTA in an investigation or proceeding relating to speed violations or liability for failure to pay a toll; employees or agents of third parties entering into an agreement with the MdTA to use the ETC system for non-toll applications, in the collection of revenues due to the third party; or employees or agents of an entity in another state operating or having jurisdiction over a toll facility. Md. SG Code, Ann., Section 10-616(m). All other persons (including, but not limited to public and private entities, organizations, government agencies, law enforcement agencies, etc.), for any purpose not specifically listed in the law, must obtain a subpoena that is issued by a court of record, in order to obtain any such information.

Regarding the length of time the data is retained, currently, toll transaction data is retained for at least 12 months or as long as state law or policy requires. Customer account data and transactions are retained for at least 12 months and current practice requires that transaction data be discarded within 24 months of the satisfaction of the transaction and that customer data is discarded within 24 months after closing and satisfying the account. Customer statements are retained for 3 years. Customer applications and customer correspondence are retained indefinitely.

Regarding buying a fare card to use the ICC without having to tie the card to one's identity, although final decisions are yet to be made concerning specific toll policies, it is currently not anticipated that such cards would be used. Tolls would be collected by matching transponders or license plate images to established accounts associated with specific persons (the account holder), or by matching license plates to the owner of the vehicle. Currently, information required for E-ZPass accounts includes name, address, telephone numbers, drivers' license information, and vehicle information.

785 What methodology did the SHA use to compute the $2.4 billion construction cost of the ICC? This information did not appear to be included in the FEIS.

The SHA used its Project Planning Cost Estimating manual for estimating cost, which is used for nearly all highway projects in Maryland and relies on detailed quantities of materials. The engineering team, by using the results of the preliminary design developed during the planning process, was able to estimate quantities of materials needed and price these elements based on recent SHA bid tabulations (actual values from contractors' bids, in 2004 dollars, for relevant quantities and geographic areas). The cost estimate was also carefully reviewed by a designated team at FHWA, which found the estimate to be an accurate estimate of ICC related costs.

786 Please provide all records received by SHA between January 1, 2006 and March 31, 2006 including comments received from local, state, and federal government agencies and officials, and other organizations and individuals. Also, please provide all records regarding the Joint Federal/State Application number 04-NT-0408/200560011.

All information was sent as requested on May 1, 2006.

787 Montgomery County approved the Preliminary Plan and Site Plan for the 24 home subdivision by Winchester Homes at Needwood Road and Muncaster Mill Road. The Preferred Alternative of the ICC will affect all 24 planned homes, though the FEIS reports that only a portion of the lots would be affected. Therefore the economic impact of the ICC in incorrect and it will cost millions of dollars more to acquire the Winchester Homes, Inc. property.

Montgomery County MNCPPC Development Review approved the proposed 24-lot Woodlawn Property subdivision after September 1, 2005 when the requirement that the land owner not develop had expired. However, SHA staff have met with the property owner, and have appraised the property, and are prepared to use advance land acquisition funds to purchase the entire 24-lot property when the ROD is published.

788 The Cost/Benefit Analysis should be part of the FEIS so that the public can validate the assumptions made and confirm that it shows advantage above the margin of error.

Cost-benefit analysis is a framework for considering a range of benefits and costs in monetary terms. Formal cost/benefit analyses are not typically performed for NEPA studies of transportation projects, largely due to the difficulty of estimating the monetary costs associated with environmental impacts (natural, social and cultural) and community impacts (such as displacing people or businesses). The ICC study did develop a methodology to monetize user

benefits and economic benefits for comparison to the project's construction cost. As shown in the Economic Impact Study conducted by the University of Maryland, user benefits are estimated to exceed $300 million annually, while the project cost is estimated to be approximately $2.45 billion. This information provides the public and project decision makers with quantified economic data regarding the project.

789 **The ICC should be built only if the government mandates the same standards used in European countries for fuel economy using vegetable (in warmer months) which would improve fuel economy standards significantly and reduce oil dependency.**

Thank you for your comment.

790 **The FEIS failed to address my comment on p. 17 of 58 of my letter regarding p. 111-26 of the Draft Environmental Impact Statement (DEIS). The FEIS, as with the DEIS, fails to compare the cost of constructing the ICC against the cost of building similar highways. The FEIS misleads the public by failing to point out that the ICC costs about twice per mile ($17.5 million/lane mile) to build than most other highways on a per mile basis (<$ 8 million/lane mile). If the cost of building the ICC is twice that of building an average access-controlled, grade separated, divided highway, then it is only fair that the benefits (time savings or some other performance measure) be twice that of an average access-controlled, grade-separated, divided highway, but the FEIS does not mention that.**

The average per-mile cost of a highway across the entire country is not necessarily indicative of the cost of constructing a complex project such as the ICC in a densely populated metropolitan region. It is not at all uncommon for major projects to cost as much or more than the ICC on a per-mile basis. For example, the Woodrow Wilson Bridge is $2.4 billion, and the 23-mile rail extension to Dulles International Airport is about $4 billion (the first phase of which, from the West Falls Church Station through Tysons Corner to the eastern edge of Reston, is about $1.5 billion). Other relevant examples from around the country include I-4 in Orlando (construction of 18 miles of the ultimate 43 mile project will cost of approximately $1.7 billion); the $3.0 billion Mon/Fayette Expressway Toll Facility that includes construction of a new 24-mile limited access toll road on new location; the $2.5 billion I-10/Katy Freeway which includes the reconstruction and widening of 23 miles of I-10 from I-610 (Houston) to Katy (providing 4 general-purpose through lanes and 3 frontage road lanes in each direction, plus managed lanes); and the Alameda Corridor, a 20-mile roadway linking the Los Angeles and Long Beach ports at a cost of approximately $2.4 billion.

In addition, the typical project does not include the extensive environmental mitigation and stewardship features that have been incorporated into the ICC. These measures have added hundreds of millions of dollars in cost to the project, but are justified based on their environmental benefits.

791 **The FEIS fails to make a statement about what the acceptable costs are for a project meeting the purpose and need; the consideration of acceptable cost is discussed on pages 3 and 5 of the Federal Highway Administration Memorandum, dated September 18, 1990, " 'Purpose and Need' in Environmental Documents." This failure is to identify acceptable costs is serious because of two factors: (i) cost was cited numerous times as an important issue in the public scoping meetings [see p. VII-141 and (ii) the purpose and need [on pp. I-1 and 1-41 calls for a cost-effective transportation infrastructure.**

Any major highway or transit project in the region would be an expensive one. The cost estimate for the Selected Alternative was developed with a state-of-the-practice estimating procedure (COSTEST) and was reviewed and found to be acceptable by the FHWA Mega Projects Review Team. In a NEPA study, the determination of whether a project is cost effective is not made by setting a cap or specific cost. Instead, the Lead Agencies have weighed the Selected Alternative's ability to respond to the major aspects of the purpose and need and determined

that the cost is reasonable. Moreover, the Lead Agencies have successfully developed a financing plan for the construction of the Selected Alternative that indicates its funding sources.

There is no established threshold for determining an "acceptable" cost for a highway project. Cost is recognized by FHWA as one factor that can, and should, be considered – along with impacts and benefits – when developing alternatives and when selecting a preferred alternative. The Lead Agencies followed that approach for this project, by considering cost along with other factors in all stages of the alternatives analysis.

The reference to "cost effectiveness" in the Purpose and Need statement did not mean that the project has to reach a particular benefit-cost ratio or meet a specific cost-effectiveness threshold. For this project, cost-effectiveness has been evaluated in qualitative terms, taking into account the full range of transportation, economic, and other benefits of the project. The Lead Agencies have concluded that, taken together, the benefits of the project outweigh the costs, and in that sense the project meets the goal of providing a cost-effective improvement to the transportation system.

792 SHA needs to acknowledge that MD 198 was an especially safe road until SHA built the much-too-fast Norbeck Connector, which has caused many deaths. How many deaths have there been on the Norbeck Connector and nearby MD 198, since SHA opened that stretch of road?

Norbeck Road Extended has allowed for increases in traffic, yet has not led to any geometric or safety related changes to the rest of the MD 198 route. The ICC FEIS does not include before and after accident statistics for Norbeck Road Extended. Safety is one of the elements of the ICC projects' Purpose and Need.

MD 28 from MD 115 to MD 182 experienced two fatalities between the years 2002 and 2005 and one between 1997 and 2000. MD 28 from MD 650 to I-95 experienced four fatalities between the years 2002 and 2005 and four between 1997 and 2000.

793 Comment 1179. This response could have included costs based on the sites that the Lead Agencies assessed. What is the cost to dig out all exotic invasive plants in parks and other public land in the ICC study area? What is the cost to remove such plants in parks and other public land in the rest of Montgomery County?

The Lead Agencies did not estimate the specific costs for plant removal, which are outside the scope of this project.

794 Has anyone taken into account the effect of sun glare on rush hour traffic, since this will be an east-west roadway?

The Lead Agencies have not considered the effect of sun glare. There are no commonly applied design standards for sun glare specific to east-west highways.

795 Please provide the results of the on-line survey conducted by the Maryland Transportation Authority and Resource Systems Group in May of 2005 that asked about travel habits, willingness to pay tolls, and opinions on the ICC. The results are not in the FEIS.

The subject work was a "stated preference survey," a preliminary part of the MdTA's traffic and revenue analysis that is used in conjunction with the anticipated sale of toll revenue bonds for the project. Prior to their issuance, toll revenue bonds are evaluated by bond rating agencies and are assigned ratings reflecting the financial strength of the party issuing the bonds. Traffic and revenue studies, undertaken independently from traffic analyses performed as part of the environmental approval process, are performed to provide a basis for this evaluation. This analysis has not been completed. Information developed as part of the studies would become

part of the official bond transcript and would be available for review at the time of bond issuance.

796 **Performance focused capacity and asset management could enable Maryland DOT and the Metropolitan Washington Council of Governments to meet their obligations to adopt state and regional transportation plans that achieve the statutory planning objectives established under Section 134(a) of the 2005 SAFETEA-LU.**

Rules designed to implement the planning provisions of SAFETEA-LU are yet to be proposed and the nature of how those requirements will play out with MWCOG's obligations is yet to be determined.

797 **There are many technical professionals at MNCPPC who have ardently worked to preserve, protect and restore the Paint Branch for decades and know the natural resources best. The technical input from these professionals has been suppressed; otherwise much stronger statements condemning the likely environmental impacts of the ICC would have come out of MNCPPC. The recent debacle over MNCPPC's handling of the Clarksburg Town Center Project and the findings of the Office of Legislature Oversight on this matter provide an example as to the unacceptable manner in which this agency is operating.**

The current Montgomery County Planning Board has been little more than a rubber stamp, blindly approving the reckless recommendations of a few pro-ICC zealots in upper management at MNCPPC. The previous planning board recognized that their technical staff was in a position to evaluate the potential impacts to the parkland for which they had stewardship responsibility, and chartered an independent assessment of environmental impacts on parkland. A figure from their study showing the extent of impacts beyond the 300 foot reservation appears in Appendix A. The impacts of the ICC as defined in the FEIS will similarly extend beyond the 300 foot reservation, beyond parkland jointly acquired, and into parkland that was acquired solely for conservation.

MNCPPC technical staff members regularly participated in the IAWG process. The Lead Agencies worked closely with staff from the MNCPPC, representing the areas of transportation, community, and environmental planning. The Lead Agencies also worked closely with the Planning Board, providing numerous briefings and work sessions. Furthermore, the Lead Agencies have coordinated with the MNCPPC to complete the Mandatory Referral process in summer 2006. The Mandatory Referral process, which is a state law that provides the MNCPPC the opportunity to provide input into the design of the Selected Alternative, will again give the Planning Boards and staff from both county planning organizations the opportunity to provide input on design elements and local perspectives on environmental protections.

Chapter V of the FEIS does include a description and results of the Section 4(f) Evaluation and includes a discussion of indirect impacts (impacts beyond those within the right-of-way, if applicable.

PM 2.5 Project Level Conformity Determination

798 **EPA established the PM 2.5 standard several years ago; it is not a new rule and should have been considered earlier. Citizens have urged SHA to conduct studies of the impacts of air pollution generated by the ICC. By conducting this study at the last minute, it appears that SHA is only concerned about meeting legal requirements, not protecting citizens from significant risks of air pollution.**

Page IV-307 of the FEIS recognizes that PM2.5 will apply in the project area as of April 5, 2006. It also notes that the transportation conformity rule had not been amended at the time of publication of the FEIS regarding the potential impact of any hot spot requirements for PM2.5. Without the amendments to the transportation conformity rule and the guidance that followed,

the Lead Agencies did not have the tools available to evaluate the likelihood of the project causing violations of the NAAQS. Once the transportation conformity rule was amended, a PM2.5 project level conformity determination was made for the project and released to the public on March 28, 2006.

799 The PM 2.5 analysis should not be reviewed in isolation; instead it should be assimilated and reviewed collectively with all other environmental and health impacts of the ICC. The proposed Project-level Conformity Determination for the ICC is a federal agency action that involves a significant impact on the human environment and threatens a violation of the PM 2.5 NAAQS.

The project level conformity determination is not a significant federal action, and is not subject to the environmental review process under NEPA. A project level conformity determination is not required until issuance of the final environmental documents (categorical exclusion (CE), finding of no significant impact (FONSI), or record of decision (ROD)).

In the PM2.5 project level analysis it was "determined that the ICC project met all project level conformity requirements, and that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation." Based on this finding in the PM2.5 qualitative hot spot analysis and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project will not have a significant impact on the PM2.5 air quality or public health in the region.

800 The EPA Transportation Conformity rule used to perform the Project-Level Conformity Determination for the ICC references qualitative PM 2.5 hot-spot guidance developed by the EPA and US DOT. This guidance is not yet available to the public; therefore, we request that the comment period for the PM 2.5 air quality study be suspended until the hot-spot guidance is made available to the public to ensure availability of all resources for public review. In addition, we request that a link to this guidance be provided on the ICC website.

EPA and FHWA's joint qualitative guidance (enclosed), now posted on the internet at http://www.epa.gov/otaq/stateresources/transconf/policy/420b06902.pdf, is based on the PM2.5 and PM10 hotspot requirements amended into the transportation conformity rule on March 10, 2006 (71 FR 12468). The guidance provides tools and assistance for local project sponsors to use and consider while conducting their analysis. The qualitative guidance does not add any new PM2.5 hot-spot analysis requirements not already included in the March 10, 2006 amended transportation conformity rule. It does not impose any legally binding requirements, and as with all guidance, EPA and FHWA retain the discretion to adopt approaches on a case-by-case basis that still comply with the Clean Air Act and the transportation conformity regulations. Any decision regarding a particular conformity determination or hot spot analysis is made based on the statute and regulations.

801 Interested in PM 2.5 analysis.

PM 2.5 Analysis Report sent.

802 The technical report CD that I received in December did not include the supplemental air toxics analysis.

The information you are referring to is included in the FEIS beginning on page IV-317. It is also included in an addendum to the Air Quality Technical Report, completed in January 2006. This report is also on the ICC web site (http://pdf.iccstudy.org/FEIS/pdfs/tech/AQReport.pdf) and at the public locations where documents can be reviewed.

803 The 30-day comment period for the PM 2.5 hot spot analysis is inadequate and in violation of public participation requirements under NEPA and applicable transportation conformity regulations (40 CFR § 93.105(e) and 58 FR 62188, 62209 (November 24, 1993).

The public comment period provided for the project level conformity determination for the ICC project is adequate. The comment period provided for the project level conformity determination was sufficient review under the conformity regulations, which require an opportunity for public comment on a conformity determination but do not specify a minimum number of days. The project level conformity determination is not a significant federal action, and is not subject to the environmental review process under NEPA.

804 SAFETEA-LU provides a separate review 60-day comment period for the Project-level Conformity Determination after publication in the Federal Register of notice date of public availability. Alternatively, if the PM 2.5 analysis is considered part of the ICC EIS, then under NEPA, it is considered a supplemental DEIS and should be given a 45-day comment period. At the time of submission of these comments (on April 11, 2006), a notice of availability for the proposed Project-level Conformity Determination has not been published in the Federal Register, creating serious questions about the adequacy of the public notice for PM 2.5 hot spot analysis.

The project level conformity determination is not a significant federal action, and is not subject to the environmental review process under NEPA. A project level conformity determination is not required until issuance of the final environmental documents (categorical exclusion (CE), finding of no significant impact (FONSI), or record of decision (ROD)). Therefore it is not subject to the governing rules of the draft environmental statement nor the SAFETEA-LU provision referenced by the commenter. The conformity regulations require an opportunity for public comment on a conformity determination but do not specify a minimum number of days. There is no requirement in the Clean Air Act or the conformity regulations to publish a notice of availability of a project-level conformity determination in the Federal Register.

805 The analysis appears to arrive at an estimate of the PM2.5 concentration for the proposed location 2 by scaling the annual concentration measured at the Muirkirk site (one of several listed in Appendix A, c(mur)=13.4 ug/m3) by the ratio of trucks on the latter (Nmur = 24,000 per day, p. 10) relative to the expected number of trucks for the proposed site (Nloc2 = 27,500 per day, p. 9). The analysis does not actually carry the calculation through by computing the projected annual PM2.5 concentration. If the concentration is expected to scale with the number of trucks as implied by this report, then the estimated concentration at the projected ICC location 2 is (Nmur/Nloc2) * c(mur) = (27,500/24000)*13.4 ug/m3 = 15.4 ug/m3 , which exceeds the NAAQS standard of 15 ug/m3.

The analysis does not scale concentrations with the number of trucks. The projected annual PM2.5 concentration cannot be calculated by the ratio of trucks at the baseline site to the expected number of trucks at the proposed site. On March 29, 2006, EPA and DOT issued joint qualitative guidance, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the guidance. The guidance states, "This method is a simple approach for demonstrating that a new project will meet statutory conformity requirements. It involves reviewing existing highway or transit facilities that were constructed in the past and built in locations similar to the proposed project and, whenever possible, near an air quality monitor (a "surrogate") to allow a comparison of PM2.5 or PM10 air quality concentrations." The PM2.5 hot-spot qualitative analysis for the ICC project level conformity determination compares the traffic characteristics at locations #1 and #2 to the traffic characteristics at the Muirkirk monitoring site.

Conclusions regarding future concentrations are based on additional factors besides truck traffic.

For example, the qualitative analysis takes into account the rapidly decreasing national and regional trends of PM2.5 motor vehicle emissions. (See p. 8 of The PM2.5 project level conformity determination for the Intercounty Connector Project.)

806 Furthermore, the monitor data in Appendix A are from 2005 and the reductions only provide estimates for 2002 and 2010 and later. If most of the reductions have already been realized, i.e., occurred between 2002 and 2005, where the latter year is when the monitor data were collected, then there will be much less further reduction (between now and 2010) to offset the predicted PM2.5 levels that will exceed the limit without the emission reductions.

Both national and regional trends were used to determine that emissions would be highest in 2010. Exhibit 1 of the Project-level Conformity Determination for the Intercounty Connector Project in Maryland, which was taken from the "Fine Particles (PM2.5) Standards Air Quality Conformity Assessment (December 21, 2005, National Capital Regional Transportation Planning Board, Metropolitan Washington Council of Governments), shows a steady decrease in PM2.5 within the metropolitan area in 2002, 2010, and 2020, with levels in 2030 remaining well below 2010 levels. Therefore, we conclude that most of the reductions will not be realized before 2010, and will continue in the latter years. Much further reductions past 2010 will be realized due to the implementation of control measures such as the Heavy-Duty Diesel and Engine standards, which will continue to provide reductions with fleet turnover.

807 Also, on p. 7, the report states, "…PM2.5 emissions rates from vehicles will drop by almost 50% between 2010 (the anticipated ICC opening year) and 2030 (the ICC design year)." This is not consistent with the graph in Exhibit 1 which shows that the emissions are 933 and 800 tons/yr in 2010 and 2030, respectively.

Exhibit 1 depicts total emissions, while the statement quoted is discussing emissions rates. Emissions rates estimates where generated using MOBILE6.2 for 2004, 2005, 2010, and 2030, although only 2010 and 2030 results were cited in the hotspot analysis. Most of the MOBILE6.2 model inputs were national defaults, since the only purpose of the analysis was to project a trend. The resulting PM2.5 emissions rates were 0.0269 grams per mile in 2010 and 0.0137 grams per mile in 2030. This represents a decline between 2010 and 2030 of 49.07%.

Exhibit 1 shows that regional PM2.5 emissions are 933 tons/yr and 800 tons/yr in 2010 and 2030, respectively. This figure comes from the Metropolitan Washington Council of Governments' Fine Particulates (PM2.5) Standards Air Quality Conformity Assessment. These emissions estimates were calculated using local inputs to show the regional trend.

808 Further, at the time of drafting these comments, FHWA and SHA reportedly are in the process of conducting a required air quality analysis for fine particulate matter ("PM2.5") hotspots for the ICC project. Thus, we are waiting to review a critical analysis of one of the ICC's potentially most significant environmental impacts, an analysis that should be part of the FEIS so all aspects may be considered together.

The PM2.5 project level conformity determination for the Intercounty Connector Project in Maryland released for public comment on March 28, 2006 demonstrates that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation. Based on this finding in the PM2.5 qualitative hot spot analysis and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project will not have a significant impact on the PM2.5 air quality in the region and does not require additional review under NEPA.

809 Although we understand that a PM 2.5 analysis is forthcoming, it is still worthwhile to explore the initial failure of the Lead Agencies to consider the impacts of the proposed

action on PM 2.5 in the study area both in the DEIS and the FEIS because this failure demonstrates a misunderstanding of NEPA that permeates the EIS. The NEPA rules impose an obligation to determine whether the proposed action will comply with standards established to protect the human environment. 40 C.F.R. § 1502.2(d). Thus, even without a new Transportation Conformity rule promulgated by EPA, an analysis of PM 2.5 impacts of a new six lane highway should have been performed on a project level in the EIS to evaluate the likelihood of the project causing violations of the regional air quality protection program. This analysis is required under NEPA.

Page IV-307 of the FEIS recognizes that PM2.5 will apply in the project area as of April 5, 2006. It also notes that the transportation conformity rule had not been amended at the time of publication of the FEIS regarding the potential impact of any hot spot requirements for PM2.5. Without the amendments to the transportation conformity rule and the guidance that followed, the Lead Agencies did not have the tools available to evaluate the likelihood of the project causing violations of the NAAQS. Once the transportation conformity rule was amended, a PM2.5 project level conformity determination was made for the project and released to the public on March 28, 2006.

810 **Further, the Lead Agencies claim in the FEIS that "Federal agencies such as FHWA are not in the position to analyze the PM 2.5 hotspot modeling validity…" (FEIS, App. R-8 at 106). This response implicitly challenges the reliability of the emissions model developed by EPA to estimate PM 2.5 emissions. Because the Lead Agencies raise the issue of availability of models and information in other places in the FEIS, such as the MSAT analysis, as a rationale for not performing analysis for public health impacts, it is noteworthy that existing emissions models will be used for the forthcoming PM 2.5 analysis. Thus this concern of the Lead Agencies regarding model availability appears to have been fabricated.**

FHWA is not challenging the reliability of MOBILE6.2 to estimate regional PM2.5 emissions. However, as EPA notes in their preamble to the March 10, 2006 final rule appropriate tools and guidance still need to be developed to ensure credible and meaningful PM2.5 hot-spot analyses for conformity purposes. The preamble to the March 10, 2006 final rule (71 FR 12498) states, "EPA is finalizing the proposal [to not apply quantitative PM2.5 and PM10 hot-spot requirements] because we continue to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses. Before such analyses can be performed, technical limitations in applying existing motor vehicle emission factor models must be addressed, and proper federal guidance for using dispersion models for PM hotspot analysis must be issued. With the release of MOBILE6.2, state and local transportation agencies now have an approved model for estimating regional PM2.5 and PM10 emissions factors in SIP inventories and regional emissions analyses for transportation conformity. However, MOBILE6.2 has significant limitations that make it unsatisfactory for use in microscale analysis of PM2.5 and PM10 emissions as necessary for quantitative hot-spot analysis."

For relevant portions of the qualitative PM2.5 analysis, MOBILE6.2 generated emissions factors and results from its application at a regional level were examined where such information provided insight to PM2.5 trends on a regional or per-vehicle basis. MOBILE6.2 was not applied in any way as an input to a dispersion model.

811 **There is no indication that the PM2.5 analysis will also include consideration of coarse particulate matter ("PM 10") impacts from the proposed ICC. Additionally, the FEIS does not analyze the ICC's impact on other pollutants for which National Ambient Air Quality Standards ("NAAQS") have been established, such as Nitrogen Oxide ("NOx") and Sulfur Dioxide ("SO2"), which may also adversely affect the environment and human health or create or worsen NAAQS violations. Combined, these flawed analyses and omissions of critical information regarding air quality impacts on the environment and public health**

fail to satisfy NEPA's requirement to take a "hard look" at environmental consequences.

There is not expected to be any significant impact on the levels of any of these pollutants, and thus it was unnecessary in the EIS to discuss them beyond saying the project area is attainment for these pollutants.

The Washington, DC-MD-VA region is significantly below the NAAQS for nitrogen dioxide, sulfur dioxide and coarse particulate matter (PM10). The region has not exceeded any of the NAAQS for these three pollutants in the last 11 years.

The Metropolitan Washington Council of Governments' (MWCOG's) Air Quality Trends Washington DC Region 1993-2004, dated August 2005 states, "A general characterization of SO2 concentrations in the Washington, DC region is that levels are low and declining…The data show that in recent years the highest SO2 levels in the region have been approximately one-fourth of the federal health standard value of 0.03 ppm. Additionally, there have not been any recorded exceedances of the 24-hour federal health standard of 0.14 ppm at any of the monitors during the entire analysis period (1993-2004)." (Page 16)

"There is no discernable trend in the annual NO2 values in the region. However, during the past ten years, the maximum annual average NO2 levels are approximately half of the federal standard at the highest recording monitor in the region." (Page 17)

"All monitors in the metropolitan area are well within each of the PM10 NAAQS." (Page 20) The data shows that since 1993, the maximum levels of PM10 are less than 40 µg/m3 for the Annual Average and approximately 80 µg/m3 for the 24-hour maximum. The S/NAAQS are 50 µg/m3 for the Annual Average and approximately 150 µg/m3 for the 24-hour maximum.

Also, with the implementation national engine and fuel standards, on-road emissions, especially those of NOx and SOx are expected to decline dramatically.

812 **In the current required study of PM2.5 hot spots associated with the proposed ICC project, the Lead Agencies should include consideration of hot spots along the portion of I-95, I-495, and I-270 in the study area, in addition to hot spots along the ICC. Significant portions of each of these major highways are within the study area and the traffic modeling for the ICC shows increased annual average daily traffic ("AADT") along some segments of each of these highways. Although the FEIS fails to disclose actual traffic volumes by motor vehicle classification, preliminary examination of the SHA travel model files by Smart Mobility shows that selected segments of these highways currently carry, and are forecast to continue to carry, a substantial volume of trucks and heavy duty diesel vehicles. Adding traffic to these already congested highways will contribute to increased motor vehicle emissions, including PM2.5.**

The preferred build alternative will only have a slight effect on traffic levels on I-95, I-495, and I-270. The small increase in overall traffic in the preferred build alternative does not equate to a "significant increase in diesel vehicle traffic," and therefore does not require additional PM2.5 hot-spot analyses.

A comparison of the 2030 ADTs in the "ICC Travel Analysis Technical Report" for the preferred build alternative versus the no-action alternative on the three highways noted by the commenter do not show a significant change in ADT. The maximum increase on I-495 is 1.67% and on I-270 is 1.28%. There are several segments along both I-495 and I-270 that show a slight decrease in ADT with the preferred build alternative. On I-95 between I-495 and MD 212 the ADT decreases for all the build alternatives and between MD198 and MD 216 the ADT varies by less the 0.5%.

The PM2.5 "Project Level Conformity Determination for the Intercounty Connector Project in Maryland" released for public comment on March 28, 2006 does consider the effect of the preferred build alternative on traffic levels of related facilities such as I-95 and I-270, and

includes a hot spot analysis for the two locations along the ICC where emissions impacts are likely to be the greatest. The location with the overall highest traffic impact in the corridor is where the I-370/ICC meets I-270 and includes the expected traffic volumes from MD 355. The other location, where the ICC intersects with I-95, has the highest truck percent and includes the expect traffic volumes from US 1.

813 The Lead Agencies must include a pre-project baseline condition for PM2.5 along I-95, I-270, and I-495 in order to adequately assess the air quality impact of the proposed ICC. This baseline condition is particularly important for the proposed ICC project because it is located in a region designated by EPA for nonattainment for PM2.5, and because local monitors in the vicinity of I-95, I-270, and I-495 show PM2.5 concentration to be only slightly below the NAAQS. Based on our query of EPA's AirData website, four PM2.5 monitors are located at three different monitoring sites in the Montgomery and Prince George's Counties region. None of the monitoring sites are within 300 meters of a major traffic facility. Three of the monitors are marginally in attainment of the NAAQS annual mean standard (15.0 µg/m3), and one monitor exceeds this standard. The results of our query of EPA's AirData database are of particular concern given the findings of the Northern Bus Garage Air Quality Monitoring Study.

The baseline condition for PM2.5 in the project area was determined and is discussed in the PM2.5 hot-spot analysis. The data contained on EPA's AirData website for Maryland in 2005 only contains monitoring data for three quarters of the year. FHWA and SHA obtained the full year of data from Maryland Department of Environment. With a full year of data, the three neighborhood-scale monitor locations in the Washington, DC-MD-VA PM2.5 nonattainment area, in Maryland, show PM2.5 concentrations below the annual and 24-hour NAAQS. The regional emissions analysis for the nonattainment area shows direct on-road mobile source PM2.5 annual emissions are expected to decrease 56% between 2002 and 2010 and almost 50% between 2010 (the anticipated ICC open to traffic year) and 2030 (the ICC design year). The PM2.5 qualitative hot spot analysis relied primarily upon 2005 monitoring data to evaluate the existing air quality conditions in the project area. FHWA and SHA also reviewed the monitoring data from 2003 and 2004. The Muirkirk monitor site was specifically used in the analysis because it is located within the project area; best matched the overall traffic impacts, truck percentages and traffic characteristics as the ICC. This site is located near I-95, US 1 and the Baltimore-Washington Parkway. Based on the qualitative analysis conducted for the PM2.5 hot spot analysis, it was determined that the ICC project would not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

The selection of the analysis locations for the ICC hot-spot analysis was consistent with the March 29, 2006 guidance, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." In particular, the ICC PM2.5 hot-spot analysis describes the baseline air quality conditions consistently with the discussion on page 19 of the guidance. "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the MWCOG, MDE, EPA, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, MNCPPC - Montgomery County, and MNCPPC - Prince George's County.

814 The Northern Bus Garage Study was established by the Washington Metropolitan Area

Transit Authority ("WMATA") and the D.C. Department of Health to respond to community concerns regarding the impact of Northern Bus Garage emissions activities on local air quality…This research shows that particulate matter emissions attributable to level of AADT typical of smaller corridors – e.g., 14th Street, which carries approximately 8,200 vehicles according to the District of Columbia Department of Transportation's average annual daily traffic statistics – can contribute to 1 µg/m3 to ambient PM2.5 levels…it is highly likely that the proposed ICC project will cause or contribute to PM2.5 concentrations that will violate the NAAQS throughout the ICC corridor and adjacent segments of I-95, I-270, and I-495 corridors. Consequently, it is critical that the FEIS include a modeling assessment to provide the best estimate of the magnitude of the NAAQS violations likely to occur at the points of greatest concentrations ("hot spots"), and identify and evaluate the effectiveness of mitigation strategies to reduce emissions to avoid the NAAQS violation.

EPA is not requiring quantitative PM2.5 hot-spot analyses for conformity purposes since quantitative hot-spot modeling techniques and associated EPA modeling guidance do not exist. As discussed in the March 10, 2006 final rule (71 FR 12498), "EPA is finalizing the proposal [to not apply quantitative PM2.5 and PM10 hot-spot requirements] because we continue to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses." Therefore an actual "modeling assessment" of the ICC is not required under the transportation conformity regulations. Instead, in accordance with the final rule, a qualitative hot-spot analysis was performed. The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation. The PM2.5 hot spot analysis for the ICC meets the transportation conformity requirements in 40 CFR 92.123.

Since the PM2.5 hot spot analysis shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation, mitigation strategies are not required to meet the PM2.5 NAAQS.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 nonattainment areas for projects of air quality concern. In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available studies looking at particle concentrations near roadways." The study mentioned in the comment was considered by EPA in developing the final rule (71 FR 12493).

815 **The East Bay Children's Health Study showed that mean PM2.5 measured in a schoolyard, 60 meters downwind from a freeway with annual average daily trips (AADT) of 190,000, was 15 µg/m3, 3 µg/m3 above the levels reported at the regional scale monitors operated by the Air District (12 µg/m3). By comparison, 10-12 lane freeways include within the MATES-II study carry in excess of 320,000 AADT. It is clear that a moderate sized freeway of six lanes can add significantly to local concentrations of PM2.5. Larger freeways can be expected to add significantly greater concentration, and highways of 4 lanes or larger can be expected to contribute at least 1 µg/m3 or more to local concentrations of PM2.5.**

The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation. The PM2.5 hot spot analysis for the ICC meets the transportation conformity requirements in 40 CFR 92.123.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 nonattainment areas for projects of air quality concern. In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available

studies looking at particle concentrations near roadways." The study mentioned in the comment was considered by EPA in developing the final rule (71 FR 12493).

816 The conformity rule also requires that "the total concentration must be estimated and analyzed at appropriate receptor locations in the area substantially affected by the project (40 CFR 93.123(c)). These locations should be situated in places where project emissions are likely to have the greatest impact on ambient air quality. In order to select these locations, baseline data is necessary to determine where current highway emissions may be causing higher concentrations than those reported at the regional PM2.5 monitoring stations referenced above.

Receptor locations are not required to be determined through monitoring stations. Instead, receptor locations are located where the maximum total project concentration is likely to occur, where the general public is likely to have access and where it is reasonable in terms of proximity to the intersection or roadway. Based on the traffic levels and existing and future development in the ICC project area, it was determined that the appropriate receptor locations were where the emissions impacts were likely to be the greatest. Two locations were chosen, the location with the overall highest traffic impact in the corridor where the I-370/ICC meets I-270 and the location with highest truck percent where the ICC intersects with I-95.

817 A research project to investigate the contribution of transportation sources to black carbon ("BC"), elemental carbon ("EC") and PM2.5 concentrations undertaken by the Puget Sound Clean Air Agency demonstrates similar results.

Based on its review of the wide range of available research studies, EPA promulgated the March 10, 2006 final rule requiring specific PM2.5 hot-spot analysis only for those projects of air quality concern. The interagency partners determined that the ICC met the definition in the Transportation Conformity rule as a project of air quality concern. A PM2.5 hot spot analysis for the ICC was released for public comment on March 28, 2006. The PM2.5 hot spot analysis for the ICC meets the transportation conformity requirements in 40 CFR 92.123, and shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

818 Thus various sources of data confirm that heavily trafficked highways can be expected to contribute an increment to urban background annual PM2.5 in the range of at least 2 to 3 µg/m3 in neighborhoods near the freeway traffic lanes.

In developing the final transportation conformity rule, EPA completed a thorough review of more than 70 studies including those that examined particle concentration near roadways. Based on its review of the wide range of available research studies, EPA promulgated the March 10, 2006 final rule requiring specific PM2.5 hot-spot analysis only for those projects of air quality concern. The interagency partners determined that the ICC met the definition in the Transportation Conformity rule as a project of air quality concern. A PM2.5 hot spot analysis for the ICC was released for public comment on March 28, 2006. The PM2.5 hot spot analysis for the ICC meets the transportation conformity requirements in 40 CFR 92.123, and shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

819 The proposed ICC project corridor is located where no ambient air quality monitoring station is providing data that meets EPA monitoring siting criteria. Those criteria require that monitors sited for the purpose of measuring the ambient impact of highway emissions be located 5-15 meters from the closest traffic lane (40 CFR Part 58, Appendix E, paragraph 8.3.)…The locations that the Washington metro area PM 2.5 monitors are measuring do not provide relevant air quality data for the purpose of assessing the impact of highway emissions on air quality because those monitors were not sited for that purpose based upon EPA's guidelines in Part 58 Appendix E…Therefore LEAD

AGENCIES must establish monitors at expected hot spot locations that satisfy EPA's siting criteria for the purpose of identifying baseline concentrations to be used for a quantitative impact analysis for PM 2.5.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." The interagency consultation was used to select the comparison monitor, and the reasons for its selection are detailed in the conformity determination.

The Lead Agencies are not required to site monitors specifically for measuring the impacts of highway emissions for conformity purposes. The Lead Agencies are also not required to place new monitors specifically to monitor suspected hot spot locations along a proposed roadway. The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. However, the EPA monitor siting criteria is not applicable to qualitative PM2.5 hot-spot analyses, but is instead applicable for State and local air agencies establishing monitor locations. Additional monitoring is not required for PM2.5 hot-spot analyses.

Air quality monitoring stations are established by state air agencies, with oversight from EPA. FHWA and SHA have no authority to enforce or review the compliance of any individual monitoring site with the criteria spelled out in 40 CFR Part 58. While Part 58 spells out criteria for microscale monitoring sites, it does not appear to require states to establish and operate them; in fact, EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2). As the commenter notes, only a small number of the PM2.5 monitoring sites nationwide were established to meet the Part 58 microscale criteria. However, the transportation conformity regulations currently require qualitative hotspot analysis for PM2.5, and the EPA guidance for hotspot analysis specifies the qualitative analyses should include a discussion of monitored air quality data in the vicinity of the project.

820 **The response of the Lead Agencies provides no defense for their failure to disclose the recent evidence showing that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS. Nor does the FEIS provide any finding that public exposure to emissions expected from increased traffic in the ICC highway corridor will be below the levels associated with risks of adverse health effects considered to be significant from a public health perspective. When an agency cannot make a finding of no significant impact, NEPA requires that the impact be addressed in an EIS.**

EPA proposed revisions to the current 1997 PM2.5 and PM10 air quality standards on January 17, 2006 (71 FR 2620). The notice of proposed rulemaking was issued after the FEIS was approved on January 3, 2006. With regards to the primary standards PM2.5, EPA proposes to revise the 24-hour standard to 35 µg/m3 and to retain the level of the annual PM2.5 standard at 15 µg/m3. EPA also solicited comments on alternative levels for both the 24-hour and annual standards of PM2.5.

The PM2.5 project level conformity determination for the Intercounty Connector Project in Maryland released for public comment on March 28, 2006 demonstrates that the proposed ICC project will not cause or contribute to a new violation of the current PM2.5 NAAQS, or increase the frequency or severity of a violation. Based on this finding in the PM2.5 qualitative hot spot analysis and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project will not have a significant impact on the PM2.5 air quality in the region and does not require additional review under NEPA.

The Muirkirk monitor is also showing a 24-hour reading of 32 µg/m3. Based on the assumptions made in the PM2.5 qualitative hot spot analysis, it is reasonable to assume that had the proposed 24-hour standard been in place, as proposed by EPA on January 17, 2006, the project would still be able to demonstrate conformity.

821 **EPA's 1996 criteria document for particulate matter, which was the basis for the 1997 air quality standard for PM2.5, assessed four endpoints (short and long-term mortality, hospital admissions for all respiratory causes, and respiratory symptoms) using concentration-response parameters derived from epidemiologic studies. Similar concentration response parameters could be established for projected changes in PM2.5 due to the construction of the Intercounty Connector, yielding estimates of changes in health effects for individuals in affected neighborhoods.**

The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS, which are health based standards. Based on this finding in the PM2.5 qualitative hot spot analysis, the project will not have a significant impact on the PM2.5 air quality in the region and will not have any significant impacts on health from PM2.5.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment). Since, the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, it does meet the requirements of the Clean Air Act.

822 **The 15 day review and comment period for the study is inadequate for meaningful review. We reiterate our request for at least 60 days to review the study and its impact on the environmental analysis in the FEIS.**

The PM2.5 project level conformity determination has been available on the ICC project website since March 24, 2006, The comment period for the PM2.5 analysis was extended to April 26, 2006. With this extension, the total comment period for the project-level conformity determination for the ICC was 30 days. Your letter requested that the public comment period be extended to 60 days. We believe that sufficient time was provided for review of the 14 page conformity determination.

823 **In the US 95 settlement, FHWA agreed that "whether national trends are appropriate to predict the rate of change in emissions at the corridor level depends on local factors such as the rate of local trip growth in a corridor, the rate of vehicle replacement, and local changes in vehicle engine and fuel type (e.g., adding more diesel engine vehicles to a highway segment over time may increase local emissions)." Sierra Club v. U.S. Department of Transportation, No. CV-S-02-0578 (D.NV), Settlement Agreement, Appendix A, Background, p. 1 (approved by the Court June 30, 2005).**

The quoted statement in the appendix to the settlement agreement is simply part of a background discussion regarding scope of a research effort that FHWA agreed to undertake pursuant to the agreement. Nothing in the appendix or elsewhere in the settlement agreement constitutes a finding or admission by FHWA regarding the likelihood that local PM2.5 concentrations will deviate from national trends.

824 **In the proposed project level conformity determination, SHA and FHWA content that they highest emission year is expected to be 2010 because of national emission trends.**

The PM2.5 hot-spot analysis for the ICC does not rely solely on national trends for predicting emissions trends in the project-area. The hot spot analysis also considered the regional trend of

on-road PM2.5 emissions as referenced from the National Capital Regional Transportation Planning Board's "Fine Particulates (PM2.5) Standards Air Quality Conformity Assessment."

825 **[W]e request the data used and other information relied upon in preparing the PM 2.5 hot spot analysis to estimate the percentage and number of heavy duty diesel trucks and other traffic expected to use the Intercounty Connector in 2010 and subsequent years, and the number of trucks expected to use adjacent highways identified in the analysis during 2010 and subsequent years, the portion of such trucks that will continue to operate with current engine technology, and other data relevant to quantifying the factors that FHWA identified as relevant to determining emissions trends at the corridor level.**

Percentage of Trucks. The 2010 truck percentage used in the PM2.5 analysis was taken from the current SHA truck volume maps for facilities considered in this analysis. The current truck percentages were also used for the future years (post 2010) based on the assumption, commonly made in forecasting exercises that any changes in land use would not result in a change to the percentage of trucks. The number of trucks however, would increase with the future traffic volumes.

Percentage of Diesel Trucks. When collecting truck counts, SHA does not distinguish diesel trucks from gasoline trucks. Therefore, the specific percentage of diesel trucks in the corridor was not available for the hot-spot analysis. FHWA and SHA instead considered the percentage of all trucks when developing the analysis/ Since using total trucks would actually assume higher percentage of trucks than actual diesel trucks, this provides for a more conservative approach. Furthermore, the hot-spot analysis is a qualitative approach. The percentage and number of diesel truck traffic, as well as to identify an appropriate comparison monitor. Please refer to Attachment 1, which shows the locations and data.

Engine Technology. As stated above, FHWA and SHA considered both national and regional emissions trends in developing the hot-spot analysis. The engine technology for each calendar year for the national emissions trends can be derived from the MOBILE6.2 defaults. The vehicle mix and engine technology for the regional emissions trends can be derived from the inputs used by the National Capital Regional Transportation Planning Board in their regional conformity analysis mentioned above. Attachment 2 discusses additional MOBILE6.3 modeling that was conducted to establish emissions trends. A copy of the MOBILE6 Users Guide showing national default values is enclosed as Attachment 3.

826 **One of the likely hot spot locations identified in the proposed Determination is described as Location #1 and lists information for "I-270," "I-370/ICC," and "MD 355." The other likely hot spot is described as "Location #2" and lists information for "US 1," "I-95," and the "ICC." We request information about the specific roadway segments of these highways on which these volumes and percentages of trucks and buses were estimated, as this information is not provided in the proposed Project-level Conformity Determination or anywhere in the main body or technical reports of the FEIS.**

The specific existing roadway segments considered in this analysis along with volumes and truck percentages are included in Attachment 5. The roadways used were major roadways within two miles of air monitoring sites. Roadways used for PM2.5 analysis at worse case locations are included in Table 1 of the Project-level Conformity Determination. ICC traffic volumes for 2010 are also included in Attachment 5. Additional traffic data are available in the travel analysis Technical report (TATR). Following is the list of roadway segment that were considered in the analysis. I-97 North of MD 3BU; MD 2 North of Cape Sinclair Road; MD 100 East of MD 295; MD 173 North of Meadow Road (ATR #20); I-95 North of Old Gunpowder Road; US 1 North of I-95; MD 115 West of Grist Mill Drive; MD 28 East of MD 97; MD 97 South of Randolph Road; MD 214 West of US 301; US 301 South of MD 4; MD 4 South of I-495; I-270 North of I-370; MD 355 South of MD 118.

827 **Please provide information about the estimated share or number of these 'trucks' that are light-duty gasoline vehicles vs. heavy duty diesel vehicles, as this is important to an analysis of emissions of PM 2.5.**

For the hot-spot analysis, FHWA and SHA considered total heavy-duty trucks when developing the analysis. Furthermore, the hot-spot analysis is a qualitative approach and an actual emissions estimate is not calculated. The traffic levels and percentage of trucks are used to identify the receptor locations that would most likely have the highest percentage and number of diesel truck traffic, as well as to identify an appropriate comparison monitor. The conclusions of the hot-spot analysis are based on the consistent vehicle data and assumption between the receptors and the comparison monitors.

828 **Share of "trucks" on these facilities at these locations in 2010 are described as varying between 6 and 12 percent and disparate values for locations such as US 1 and I-95, which are said to have highly divergent truck and bus traffic shares, are averaged to produce a "weighted truck average percent," although these roads lie nearly 2 miles apart. Neither the proposed Project-level Conformity Determination nor the FEIS provide any information about the source of these estimates for 2010 average daily traffic or truck and bus traffic shares. We request all available information on how SHA and FHWA determined the truck and bus traffic shares for 2010, including the source data from traffic modeling, any adjustments to that source data for all types of traffic, and any base year validation data used to evaluate the integrity of truck traffic modeling.**

As stated in response to Issue # 1 above, the truck percentages used in the PM 2.5 analysis were taken from the SHA truck volume maps, which are updated annually and are based on actual counts; these truck percentages are shown on Attachment 1. The existing truck percentages were also used 2010 and for future years (post 2010), based on the assumption any changes in land use would not result in a change to the percentage of trucks.

829 **The proposed Project-level Conformity Determination also identifies no analysis of traffic volumes and vehicle emissions to support its conclusion that aggregate emissions will be highest in 2010 and not in any succeeding year between 2010 and 2020. Please provide all data, estimates and analyses performed, considered, or obtained to estimate gasoline and diesel vehicle Annual Average Daily Traffic volumes for each annual period between 2010 and 2020, and the annual change in annual emissions rates and annual aggregate emissions for each such year. Please provide the assumptions used with respect to the rate of replacement for pre-2007 model-year diesel engines in the fleet of diesel vehicles predicted to use the corridor for each year from 2010 to and including 2020.**

As stated above, both national and regional trends were used to determine that emissions would be highest in 2010. Exhibit 1 of the Project-level Conformity Determination for the Intercounty Connector Project in Maryland, which was taken from the "Fine Particles (PM2.5) Standards Air Quality Conformity Assessment (December 21, 2005, National Capital Regional Transportation Planning Board, Metropolitan Washington Council of Governments), shows a steady decrease in PM2.5 within the metropolitan area in 2002, 2010, and 2020, with levels in 2030 remaining well below 2010 levels. The portion of the trucks that operate with current engine technology and replacement rates are considered by the MOBILE6.2 "Diesel Sales" input items. Please see Attachment 2 for analysis performed by FHWA regarding emissions trends, as well as the National Capital Regional Transportation Planning Board's PM2.5 regional conformity analysis. The hot-spot analysis is a qualitative approach and an actual emissions estimate is not required.

830 **We request also any documentation that is available about the truck traffic model and model setups used to produce these estimates. We request the Mobile 6.2 emission model setups, if any, that may have been used to document the assumptions used for the**

hot spot analysis and for the evaluation at the study area level of mobile source air toxics.

No truck traffic model was used in the hot-spot analysis. The truck traffic is based on actual truck counts. Truck traffic percents were primarily obtained from the Maryland Highway Information Systems Division (HISD)'s Traffic Monitoring System (TMS). Maryland Truck Volume Maps and classified counts for special requests taken over the years were used for deriving truck percentages. The Truck Volume Maps depict the average percentages of truck at various locations on Maryland's roadways by county. Class data are collected from a percentage of the 3000+ program count stations and automated traffic recorders (ATR) throughout the state. Program count data is collected for both directions, at regular locations on a three year cycle (one-third of these being calculated each year). The truck data are split into two categories according to the FHWA guidelines, Single Units (Class 4-7) and Combination Units (Class 8-13). The percentages are averaged if there are multiple counts at a station. In addition to this, class counts obtained as part of other projects are continuously made part of the TMS. These were also used to derive truck percentages. The MOBILE6.2 files for PM2.5 are contained in the previously referenced FHWA Memorandum. Please see the National Capital Regional Transportation Planning Board's PM2.5 regional conformity analysis for MOBILE6.2 files. Mobile source air toxics are not considered in the PM2.5 hot-spot analysis and are discussed in the FEIS. Transportation conformity does not apply to air toxics. However, the MOBILE6 files for MSATs are enclosed as Attachment 4.

831 **The requested information is relevant to the proposed Project-level Conformity Determination because it supports the agencies' rationale for determining that the Preferred Alternative would not create a violation of the PM2.5 NAAQS. Therefore, we request that the comment period on the PM2.5 hot spot analysis be suspended until this relevant information is made available to the public at which time the comment period on the proposed Project-level Conformity Determination should be re-started. Moreover, the 15 day comment period for the PM2.5 analysis is wholly inadequate. Project level conformity determinations are to be conducted under the National Environmental Policy Act ("NEPA")... Therefore we demand that SHA/FHWA cause to be issued in the Federal Register notice of this proposed Project-level Conformity Determination and extend the comment period for sixty days from the date of such publication. Alternatively, if the PM2.5 hot spot analysis is considered part of the environmental review process of the ICC project under NEPA, a minimum 45 day public comment period would be required for the Project-level Conformity Determination.**

The comment period for the PM2.5 analysis was extended to April 26, 2006. With this extension, the total comment period for the project-level conformity determination for the ICC is 30 days. This comment period is sufficient review under the conformity regulations, which require an opportunity for public comment on a conformity determination but do not specify a minimum number of days. The comment period required for a DEIS under NEPA does not apply to this document, because a project-level conformity determination does not constitute a DEIS. In addition, a conformity determination is not subject to notice and comment rulemaking in the Federal Register.

832 **Should SHA/FHWA not provide the requested information under the conformity determination regulations, 40 C.F.R. § 93.105(e), please consider this a request under the Maryland Public Information Act ('PIA'), State Government Article §§10-611 to 628 and/or the Freedom of Information Act ('FOIA'), 5 U.S.C. § 552.**

As explained above, we have provided the requested information to the extent that such information exists, and where it does not exist, we have explained why that information was not developed as part of the project-level conformity finding for the ICC project. We believe this response obviates the need to consider your letter as a public records request under FOIA or

under the PIA. Even if the letter were treated as a FOIA or PIA request, we believe our response meets and exceeds the requirements of those laws.

833 **Yesterday, the public comment period for the Project-level Conformity Determination for the Intercounty Connector project in Maryland… was extended for twelve days, providing a 33 day comment period on the Project-level Conformity Determination. However, for the same reasons that I outlined in my April 8, 2006 letter, this extended comment period is still inadequate under federal law. Therefore we request that the Lead Agencies extend the comment period to meet the minimum 45 day comment period required by law.**

The public comment period provided for the project level conformity determination for ICC project is adequate. The comment period provided for the project level conformity determination was sufficient review under the conformity regulations, which require an opportunity for public comment on a conformity determination but do not specify a minimum number of days. There is no requirement for a minimum 45-day comment period under the transportation conformity regulations.

834 **Because the Project-level Conformity Determination is a significant federal action and because heretofore it has not been included in an environmental impact statement, the proposed Project-level Conformity Determination qualifies for its own, separate public review and comment period as a draft environmental impact statement on the proposed ICC. The recently enacted Safe, Accountable, Flexible, Efficient Transportation Equity Act" A Legacy for Users ("SAFETEA-LU") provides a 60 day comment period after publication in the Federal Register of notice of the date of public availability. § 6002(g)(2)(A). Notice of the availability of the Project-level Conformity Determination has yet to be published in the Federal Register. Therefore we demand that SHA/FHWA cause to be issued in the Federal Register notice of this Project-level Conformity Determination and extend the comment period for sixty days from the date of such publication.**

The project level conformity determination is not a significant federal action, and is not subject to the environmental review process under NEPA. A project level conformity determination is not required until issuance of the final environmental documents (categorical exclusion (CE), finding of no significant impact (FONSI), or record of decision (ROD)). Therefore it is not subject to the governing rules of the draft environmental statement nor the SAFETEA-LU provision referenced by the commenter. The conformity regulations require an opportunity for public comment on a conformity determination but do not specify a minimum number of days. There is no requirement in the Clean Air Act or the conformity regulations to publish a notice of availability of a project-level conformity determination in the Federal Register.

835 **Because the Project-level Conformity Determination is a supplement to the FEIS, it is subject to this rule governing public comment period for draft environmental impact statements and a minimum 45 day public comment period should be provided until May 9, 2006. As a supplement to the FEIS, the Project-level Conformity Determination also triggers the NEPA requirement to consider alternatives and mitigation measures to prevent or minimize the adverse health effects associated with concentrations of PM 2.5.**

The project level conformity determination is not considered a part of the environmental review process under NEPA nor is it considered a supplement to the FEIS. A supplemental EIS is necessary when new information relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. In the PM2.5 project level analysis it was "determined that the ICC project met all project level conformity requirements, and that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation." Based on this finding in the PM2.5 qualitative hot spot analysis and the project's inclusion in the National Capital Region's conforming transportation plan and transportation improvement program, the project will not have a significant impact on the PM2.5 air quality in

the region and does not require additional review under NEPA. Therefore, it is not considered a supplement to the EIS nor does it trigger the NEPA requirement to consider alternatives or minimize the adverse health effects.

836 **The U.S. Environmental Protection Agency has proposed new, more stringent NAAQS for PM 2.5 which would strengthen the 24-hour PM 2.5 standard from 65 to 35 µg/m3, having found that "the current primary PM 2.5 standards, taken together, are not requisite to protect public health with an adequate margin of safety and that revision is needed to provide increased public health protection." 71 Fed. Reg. at 2,643... Based on the findings made by EPA in adopting its proposed standard, the ICC project will create hazardous levels of PM 2.5 pollution that can be expected to create serious adverse health effects among residents in the study area.**

EPA proposed revisions to the current 1997 PM2.5 and PM10 air quality standards on January 17, 2006 (71 FR 2620). EPA proposes to revise the 24-hour standard to 35 µg/m3 and to retain the level of the annual PM2.5 standard at 15 µg/m3. EPA also solicited comments on alternative levels for both the 24-hour and annual standards of PM2.5.

The Clean Air Act section 176(c)(1)(B) states that transportation projects must not cause or contribute to any new violation of any standard in any area, or increase the frequency or severity of any existing violation of any standard in any area. The PM2.5 project level conformity determination for the Intercounty Connector Project in Maryland released for public comment on March 28, 2006 demonstrates that the proposed ICC project will not cause or contribute to a new violation of the current PM2.5 NAAQS, or increase the frequency or severity of a violation, and thus met the Clean Air Act requirements.

Although the EPA is proposing to revise the current PM2.5 standards, under the Clean Air Act, the process of establishing standards to protect human health has not yet been completed for the proposed revisions. Until the process of updating the standards is complete, it cannot be determined that the 1997 NAAQS do not protect human health, or that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS. The Muirkirk monitor is also showing a 24-hour reading of 32 µg/m3. Based on the assumptions made in the PM2.5 qualitative hot spot analysis, it is reasonable to assume that had the proposed 24-hour standard been in place, as proposed by EPA on January 17, 2006, the ICC project would still be able to demonstrate conformity.

837 **The Lead Agencies violated NEPA by 1) failing to disclose the severe adverse health effects associated with exposure to short-term concentrations of PM 2.5 below 65 ug/m3 that have been identified by EPA in its revised Criteria Document for Particulate Matter, 2) failing to disclose the likelihood that emissions from the project will exceed levels associated with these harmful lower concentrations of PM 2.5, 3) failing to disclose that EPA has proposed a revision to the PM NAAQS that would be violated by emissions from the Project, and 4) failing to consider alternatives and mitigation measures that can prevent or minimize the adverse health effects associated with concentrations of PM 2.5 lower than the current, inadequate 24-hour standard for PM 2.5.**

The Clean Air Act section 176(c)(1)(B) states that transportation projects must not cause or contribute to any new violation of any standard in any area, or increase the frequency or severity of any existing violation of any standard in any area. The PM2.5 project level conformity determination for the Intercounty Connector Project in Maryland released for public comment on March 28, 2006 demonstrates that the proposed ICC project will not cause or contribute to a new violation of the current PM2.5 NAAQS, or increase the frequency or severity of a violation, and thus met the Clean Air Act requirements. Based on this finding, the project will not have a significant impact on the PM2.5 air quality in the region and does not require additional review under NEPA. Therefore, it does not trigger the NEPA requirement to consider alternatives or

minimize the adverse health effects.

The Clean Air Act and the transportation conformity regulations require that conformity be met for all NAAQS for a given pollutant. Therefore, a conformity determination must address all relevant standards for a given pollutant, unless meeting conformity for the controlling standard would ensure that the Clean Air Act requirements are met for all standards. ("Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas," FHWA and EPA) In the Washington, DC-MD-VA region, the current annual PM2.5 standard is considered the controlling standard.

FHWA is aware that EPA is currently evaluating the adequacy of the 1997 NAAQS, and has proposed to revise the 24-hour standard to 35 µg/m3 and to retain the level of the annual PM2.5 standard at 15 µg/m3. EPA also solicited comments on alternative levels for both the 24-hour and annual standards of PM2.5.

However, under the Clean Air Act, the process of establishing standards to protect human health has not yet been completed for the proposed revisions. Until the process of updating the standards is complete, it cannot be determined that the 1997 NAAQS do not protect human health, or that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS. The Muirkirk monitor is also showing a 24-hour reading of 32 µg/m3. Based on the assumptions made in the PM2.5 qualitative hot spot analysis, it is reasonable to assume that had the proposed 24-hour standard been in place, as proposed by EPA on January 17, 2006, the ICC project would still be able to demonstrate conformity.

838 **Lastly, the proposed ICC project corridor is located where no ambient air quality monitoring station is providing data that meets EPA's monitor siting criteria for the measurement of the impact of highway emissions on ambient air concentrations of PM 2.5. Those criteria require that monitors sited for the purpose of measuring the ambient impact of highway emissions be located 5-15 meters from the closest traffic lane… Air quality measured at monitors that do not satisfy the siting criteria for highways are relevant to showing that increased emissions from the highway threaten to cause new or more serious violations of the NAAQS, but are not adequate for the purpose of establishing reliable baseline concentrations for use in making the conformity determination… Therefore the Lead Agencies must establish monitors at expected hot spot locations that satisfy EPA's siting criteria for the purpose of identifying baseline concentrations to be used for a quantitative air quality impact analysis for PM 2.5.**

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." The interagency consultation was used to select the comparison monitor, and the reasons for its selection are detailed in the conformity determination.

The Lead Agencies are not required to site monitors specifically for measuring the impacts of highway emissions for conformity purposes. The Lead Agencies are also not required to place new monitors specifically to monitor suspected hot spot locations along a proposed roadway. The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. However, the EPA monitor siting criteria is not applicable to qualitative PM2.5 hot-spot analyses, but is instead applicable for State and local air agencies establishing monitor locations. Additional monitoring is not required for PM2.5 hot-spot analyses

Air quality monitoring stations are established by state air agencies, with oversight from EPA. FHWA and SHA have no authority to enforce or review the compliance of any individual monitoring site with the criteria spelled out in 40 CFR Part 58. While Part 58 spells out criteria for microscale monitoring sites, it does not appear to require states to establish and operate them;

in fact, EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2). The transportation conformity regulations currently require qualitative hotspot analysis for PM2.5, and the EPA guidance for hotspot analysis specifies the qualitative analyses should include a discussion of monitored air quality data in the vicinity of the project.

839 The PM2.5 report is seriously flawed and is a clear violation of EPA guidelines. A study must be conducted again following EPA guidelines.

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas."

840 I wish to comment the following on the ICC/air pollution study completed. I believe it is flawed as the SHA did not adequately analyze the amount of pollution the ICC would likely cause. Instead of measuring the pollution coming off a highway that is similar to the planned ICC, the SHA used measurements from a pollution monitor that is over one mile from one highway and over two miles from another--adding up the number of cars on those highways and pretending that the pollution that reaches the monitor is equivalent to the pollution that would be near the ICC. This is a clear violation of EPA guidelines and I protest, especially since the ICC would cut in two my neighborhood and since I already suffer tremendously from air pollution.

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" and met the transportation conformity requirements.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

On page 19 the guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital

Parks and Planning Commission - Prince George's County.

841 The main problem with the PM 2.5 study is that SHA did not adequately analyze the amount of particulate pollution the ICC would likely cause. Instead of measuring the pollution coming off a highway that is similar to the planned ICC, the SHA used measurements from a pollution monitor that is over one mile from one highway and over two miles from another--adding up the number of cars on those highways and pretending that the pollution that reaches the monitor is equivalent to the pollution that would be near the ICC. This is a clear violation of EPA guidelines.

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" and met the transportation conformity requirements.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

On page 19, the guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County.

842 This report states that effective growth management strategies have been implemented, but the ever worsening traffic belies that assumption. An ICC will accelerate the trend in ineffective growth control much the same way as the widened I-270.

The FEIS considered the effects of Secondary and Cumulative Effects with the sensitivity analysis described in Chapter IV.J, of the FEIS. SHA determined the effect of Cooperative Forecast Land Use 6.4A on the ICC, and established that there will be sufficient capacity available on the ICC to accommodate the additional traffic associated with this land use forecast.

The Selected Alternative is consistent with long-standing land use and master plans in the area. Local governments have developed these plans to strike a balance between preservation and long term sustainable growth. The accommodation of this planned growth requires infrastructure improvement, of which the ICC is a significant contributor. Many elements of the local master

plans indicate that the Selected Alternative of the ICC is somewhat of a planning boundary between more urbanized medium density development areas and the lower density portions of upper eastern Montgomery County. The Selected Alternative will increase study area mobility and safety, while relieving traffic congestion on more than 50 miles of local roadways and at dozens of study area intersections.

843 Another questionable assumption is that only 6% to 10% of ICC traffic will be trucks. The percentage may go much higher as cars avoid the tolls (in this climate of high gas prices) and trucks fill the gap.

Based on the Lead Agencies' analysis, as tolls increase the share of trucks will not increase. For most cases truck percent remains the same in the future unless future land use calls for more trucks. This would occur if there is a quarry or landfill planned in the area. The toll analysis in the FEIS identifies an expected trend that as tolls increase, the volume on the ICC will decrease. The volume will decrease because drivers will attempt to avoid the monetary cost associated with the tolls. This is true of all drivers, including drivers of trucks. Additionally, truck tolls are higher than car tolls, which will affect truck drivers' decisions to use the ICC. Therefore, as tolls increase, all vehicle traffic is expected to decrease.

The percentage of trucks modeled for the ICC was based on existing roads in the study area. Of the exiting parallel roads in the study area such as MD 198 and MD 115, MD 198 had the highest daily share of heavy trucks in 2002, 3 percent. Since none of the parallel roads are access controlled it is likely that ICC will have greater truck traffic than any of the existing east-west routes in the study area. Hence the study team also looked at trucks on the Capital Beltway. In 2002, 4.8 percent of the capital beltway's traffic at US 29 was truck traffic. The ICC is estimated to have 6 percent of its daily traffic be heavy trucks. Therefore the truck percent used for the ICC study are high enough to account for increased truck traffic. However based on other observed data of truck volumes in the area, it is likely that the actual rates will be lower.

844 The analysis is biased - conducted for the Preferred Alternative only. No analysis for No-Action alternative and other build alternative.

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas," and met the transportation conformity requirements.

Clean Air Act section 176(c)(1)(B) states that federally-supported transportation projects must not "cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area." The qualitative PM2.5 hot spot analysis is a comparison of the Selected Alternative's expected emissions to the PM2.5 standard, not how it compares to the no-action or other build alternatives.

845 Data is presented for two air quality monitors only. The Montgomery county monitor is located at the Lathrop E. Smith Environmental Education Center in a rural recreational area of local 2-lane roads. The Muirkirk monitor is also in an area of local roads. The data is therefore seriously skewed.

The data for all eleven air quality monitors in the Washington, DC-MD-VA nonattainment area was included in Appendix A and Appendix C of the "Project Level Conformity Determination for the Intercounty Connector Project in Maryland." Appendix A is a table of 2005 PM2.5 air quality monitoring data. Appendix C is a table of the traffic volume impact and weighted truck percentage at each of the monitoring sites.

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issues on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." On page 19 the guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County. We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis.

846 Assumptions concerning reduced PM-2.5 emission reductions for the future despite heavy increases in traffic volume are based on projections related to new EPA standards for heavy-duty engines and highway diesel fuel that are supposed to take effect in 2007. Soaring fuel prices, probable interruptions in both the supply of crude oil and refinery production, plus the White house's desires to relax EPA standards may push that date back significantly.

The analysis cannot be based on supposition at what might occur in the future with regard to the factors cited by the commenter. The Clean Air Act requires that conformity determinations be based on the latest planning assumptions. The heavy-duty engine and fuel standards are in place and there is no reason to assume that they will not be implemented.

847 The analysis states that the proposed ICC will have a "significant level of diesel vehicles", that the "Preferred Alternative would include eight interchanges" and that local roads in the study area will experience a substantial increase in traffic between 2000 and 2030. The final EIS has made it clear that the proposed ICC will result in increased levels of traffic congestion on many local roads near the interchanges. It is unrealistic to anticipate a reduction in PM-2.5 emissions in areas of Montgomery and Prince George's Counties where no ICC currently exists.

The analysis does not conclude that there will be a reduction in PM2.5 emissions in areas where no ICC currently exists. Instead, the analysis considered the level of PM2.5 emissions in respect to the PM2.5 National Ambient Air Quality Standards, which are based on human health. The analysis concluded that the ICC would not cause new violations, worsen existing violations, or delay timely attainment of the Standards. The analysis qualitatively considered a number of factors, including the rapidly declining regional and national PM2.5 motor vehicle emissions.

848 The large number of spelling and grammatical errors in the fourteen-page report suggests that the agencies preparing it did not spend sufficient time and effort on the task. The document does not achieve the high standards of most government reports.

Thank you for your comment.

849 Under "Preferred Alternative" (p.3), the report states that "Corridor 1 follows the general alignment proposed for the ICC by Montgomery and Prince George's counties in their Master Plans." This is incorrect. The Corridor 1 route deviates from the Master Plan,

specifically in the areas of Cashell Estates and Winters Run in Montgomery County. This change would put a great many more residents within close proximity of the ICC, potentially subjecting them to greater risk from PM 2.5 particles than the original Master Plan would do.

The conformity analysis considers the effect of the preferred build alternative. The Selected Alternative does generally follow the Master Plan, but deviates at certain locations (Rock Creek Option C and Northwest Branch Option A). Since the analysis considers the two locations along the ICC where emissions impacts are likely to be the greatest, the deviation mentioned by the commenter would not affect the analysis or the conclusions. The location with the overall highest traffic impact in the corridor is where the I-370/ICC meets I-270 and includes the expected traffic volumes from MD 355. The other location has the highest truck percent where the ICC intersects with I-95 and includes the expect traffic volumes from US 1.

850 **Under "Existing Conditions" (p. 6), and under "Analytical Considerations" (p. 10), the report states that monitor #240330030 is in proximity to the Baltimore-Washington Parkway. No details are given. Based on Appendix B, "Map of Muirkirk PM2.5 Monitoring Site (Number 240330030)," this monitor appears to be more than two miles from the Baltimore-Washington Parkway. If so, this fact is in direct contradiction to Appendix C, "Monitoring Sites Assessment," which states that the major roads for which traffic impact volumes are included are "within approximately two miles of the monitor." Question: Exactly how close is monitor #240330030 to the Baltimore-Washington Parkway?**

The Baltimore-Washington Parkway is approximately two miles from the Muirkirk site. This is consistent with the table footnote in Appendix C which states, "Based on major roadways within approximately two miles of the monitor."

851 **The best way to determine whether an ICC would contribute to a new violation of the PM 2.5 NAAQS or increase the severity of a violation would be to place a new monitor at a location specifically chosen to mimic the worst-case traffic on a potential ICC. Using such a monitor would allow the potential impact of an ICC on PM 2.5 concentrations to be measured as accurately as possible.**

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." On page 19 the guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and

air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

852 **The choice of monitor #240330030 for comparison of PM 2.5 values to those of a potential ICC is not justified. This monitor appears to be more than two miles from the Baltimore-Washington Parkway... A better choice from among the existing monitors would be monitor 110010041 at RFK Stadium (34th & Dix), DC. This location has a traffic impact volume of 235,600 and a truck percentage of 5.4. These numbers are below the numbers for the ICC worst-case scenario, so one would expect that the PM 2.5 values at this monitor would be slightly lower than would be predicted for the ICC. However, one of the two monitors at this location has monitored PM 2.5 concentrations that are above the 24-hour standard, while the other monitor has monitored concentrations that are above the annual standard. Because of these values, the ICC does not meet the project level conformity requirements. The Intercounty Connector could contribute to a new violation of the PM 2.5 NAAQS or increase the severity of a violation. The conclusions of the report are not valid and are not in line with EPA rules.**

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas," and met the transportation conformity requirements.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." We looked at all the monitors in the nonattainment area, including the monitor 110010041 at RFK Stadium when trying to select an appropriate monitor and decided to use the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway. The Baltimore-Washington Parkway is approximately two miles from the Muirkirk site.

On page 19 the guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the MWCOG, MDE, EPA, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, MNCPPC - Montgomery County, and

853 The proposed conformity determination prepared by the Maryland State Highway Administration ("SHA") and the Federal Highway Administration ("FHWA") released on March 24, 2006, fails to demonstrate that emissions from the proposed Intercounty Connector ("ICC") project will not cause or contribute to new, more frequent or more severe violations of the PM2.5 National Ambient Air Quality Standards ("NAAQS"). In addition, it does not even discuss whether the ICC will delay timely attainment of any standards or any required interim emissions reductions or other milestones in any area.

The ICC will not delay the timely attainment of the PM2.5 standard in the Washington, DC-MD-VA nonattainment area. Section 176(c) of the Clean Air Act and the federal conformity rule require that transportation plans and programs conform to the intent of the state air quality implementation plan (SIP) through a regional emissions analysis in PM2.5 nonattainment areas. The National Capital Region 2005 Constrained Long Range Transportation Plan (CLRP) and the 2006-2011 Metropolitan Transportation Improvement Program (MTIP) have been determined to conform to the intent of the SIP. The US Department of Transportation made a PM2.5 conformity determination on the CLRP and the MTIP on February 21, 2006, and thus there is a currently conforming transportation plan and TIP in accordance with 40 CFR 93.114. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. The ICC project was included in the regional emissions analysis and there have been no significant changes in the project's design concept or scope, as used in the conformity analyses.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment). Since the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, it does meet the requirements of the Clean Air Act. The PM2.5 project-level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations, or delay timely attainment of the PM2.5 NAAQS, which are health based standards.

At this point, there is no PM2.5 attainment plan for the Washington, DC-MD-VA area. As such, and in light of the conclusions of emissions trends and our conclusions regarding the potential to cause or worsen violations, there is no evidence that indicates that PM2.5 attainment will be delayed.

854 Commenters believe that the failure of FHWA to use recognized modeling tools that are available for the purpose of predicting the impact of emissions for the project on the ambient air in the neighborhoods near the Project is not authorized NEPA and the Clean Air Act.

A quantitative PM2.5 hot spot analysis is not required for conformity purposes until EPA issues approved quantitative modeling technique and guidance.

In the preamble to the March 10, 2006 transportation conformity final rule, EPA recognized that the significant limitations of the current emissions factor model, MOBILE6.2, make it "unsatisfactory for use in microscale analysis of PM2.5 and PM10 emissions as necessary for quantitative hot-spot analysis." EPA also "continues to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses. Before such analyses can be performed, technical limitations in applying existing motor vehicle emission factor models must be addressed, and proper federal guidance for using dispersion models for PM hotspot analysis must be issued." (71 FR 12498)

EPA further states, "The final rule requires a qualitative PM2.5 hot-spot analysis to be competed for project-level conformity determinations for projects of air quality concern completed in PM2.5 nonattainment areas on or after April 5, 2006, when PM2.5 conformity requirements apply. Quantitative analyses are not required for these projects at this time since EPA is not requiring quantitative PM2.5 hot-spot analyses under §93.123(b)(4) since quantitative hot-spot modeling techniques and associated EPA modeling guidance still do not exist. Qualitative PM2.5 hot-spot analyses should be completed according to joint EPA and DOT guidance." (71 FR 12471)

The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" and met the transportation conformity requirements.

855 It is unlawful to ignore the impact of emissions from other highway projects in the Washington, DC/Virginia/Maryland Nonattainment Area on ambient violations of the PM2.5 NAAQS at numerous monitors in the Nonattainment area.

The impact of emissions from other highways in the area has been considered in the PM2.5 regional emissions analysis. The ICC project was included in the regional emissions analysis for the Washington, DC-MD-VA nonattainment area and there have been no significant changes in the project's design concept or scope, as used in the conformity analyses. The National Capital Region 2005 Constrained Long Range Transportation Plan (CLRP) and the 2006-2011 Metropolitan Transportation Improvement Program (MTIP) have been determined to conform to the intent of the SIP. The US Department of Transportation made a PM2.5 conformity determination on the CLRP and the MTIP on February 21, 2006, and thus there is a currently conforming transportation plan and TIP in accordance with 40 CFR 93.114. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93.

856 Violations of PM2.5 NAAQS have been measured by monitors in the Washington metropolitan area that are sited in close proximity to major highways. These data create a strong inference that violations of the NAAQS also currently occur adjacent to I-95 and I-370 at locations where the ICC will connect to these large freeways. The additional emissions at these locations that will be generated from the incremental traffic associated with the ICC must contribute to additional or more severe violations of the PM2.5 NAAQS at these locations.

The analysis specifically considered the two locations referenced by the commenter See page 9 of the, "Project-Level Conformity Determination for the Intercounty Connector Project in Maryland." The commenter does not consider the effects of existing controls that are rapidly decreasing the emissions rates of PM2.5. The analysis considered the current monitored values, but also considered other factors consistent with the March 29, 2006 guidance, including air quality trends. A qualitative consideration of all factors, not just current levels, concludes that the project will not cause new violations or worsen existing violations at these two locations.

857 [T]he Project does not conform as required by the CAA, and that mitigation strategies must be considered. Available and reasonable mitigation strategies, including alternative alignments, high occupancy toll lanes and transit facilities, have not been evaluated to identify measures that will prevent NAAQS violations, or contribute to reducing existing NAAQS violations.

The qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, and it does meet the requirements of the Clean Air Act. Therefore, further strategies as mentioned by the commenter are not necessary.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects

of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment).

858 **The test in (1)(B)(iii) also requires a showing that emissions from the Project "will no delay timely attainment of the [NAAQS]."... This necessarily calls for a showing that the additional emissions from the Project have been accounted for in the State Implementation Plan for the pollutant, and will be offset by other reductions in the control strategy adopted for the nonattainment area... This provision also requires a showing that even if there is no net increase in emissions, the emissions from the Project will not delay timely attainment by continuing to contribute to on-going violations of the NAAQS. No discussion of this statutory test is included in the conformity determination.**

The ICC will not delay the timely attainment of the PM2.5 standard in the Washington, DC-MD-VA nonattainment area. Section 176(c) of the Clean Air Act and the federal conformity rule require that transportation plans and programs conform to the intent of the state air quality implementation plan (SIP) through a regional emissions analysis in PM2.5 nonattainment areas. The National Capital Region 2005 Constrained Long Range Transportation Plan (CLRP) and the 2006-2011 Metropolitan Transportation Improvement Program (MTIP) have been determined to conform to the intent of the SIP. The US Department of Transportation made a PM2.5 conformity determination on the CLRP and the MTIP on February 21, 2006, and thus there is a currently conforming transportation plan and TIP in accordance with 40 CFR 93.114. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. The ICC project was included in the regional emissions analysis and there have been no significant changes in the project's design concept or scope, as used in the conformity analyses.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment). Since, the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, and shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation, it does meet the requirements of the Clean Air Act.

At this point, there is no PM2.5 attainment plan for the Washington, DC-MD-VA area. As such, and in light of the emissions trends and our conclusions regarding the potential to cause or worsen violations, there is no evidence that indicates that PM2.5 attainment will be delayed.

859 **[T]he construction of subparagraph (c)(1)(A) adopted by the D.C. Circuit also requires demonstration that the Project "will contribute to 'eliminating or reducing the severity and number of violations of the [NAAQS] and achieving expeditious attainment of the standards,' 42 U.S.C. 7506(c)(1)(A)."... Under these circumstances, the transportation agencies must consider and adopt a Project that will contribute to emissions reductions in the area. The ICC Project, as currently proposed, does not satisfy this statutory test.**

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 and PM10 nonattainment areas for projects of air quality concern. EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity, including 42 U.S.C. 7506(c)(1)(A). Since the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, and shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation, it does meet the requirements of the Clean Air Act.

860 **The rule prescribes the starting point for an analysis that satisfies this requirement is to determine the "current background" concentration at these receptor locations...NEPA regulations also require that an agency obtain data that accurately describes the baseline conditions of the environment to be affected by a project... The proposed ICC project corridor is located where no ambient air quality monitoring station is providing data that meets EPA monitoring siting criteria... Air quality measured at monitors that are near highways but do not satisfy the siting criteria for measuring the impact of emissions from highways are relevant to showing that increased emissions from highways in the region cause new or more serious violations of the NAAQS, but are not adequate for the purpose of establishing actual baseline concentrations in the area affected by the ICC project for use in making the conformity determination. Therefore SHA must establish monitors at expected hot spot locations that satisfy EPA's siting criteria for the purpose of identifying baseline concentrations.**

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." The interagency consultation was used to select the comparison monitor, and the reasons for its selection are detailed in the conformity determination.

The ICC PM2.5 hot-spot analysis describes the baseline air quality conditions consistently with the discussion on page 19 of the March 29, 2006, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." The guidance states, "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County.

We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

The Lead Agencies are not required to site monitors specifically for measuring the impacts of highway emissions for conformity purposes. The Lead Agencies are also not required to place new monitors specifically to monitor suspected hot spot locations along a proposed roadway. The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. However, the EPA monitor siting criteria is not applicable to qualitative PM2.5 hot-spot analyses, but is instead applicable for State and local air agencies establishing

monitor locations. Additional monitoring is not required for PM2.5 hot-spot analyses.

861 These requirements for quantitative analysis of PM2.5 are limited by 93.123(b)(4) which states that "[t]he requirements for quantitative analysis contained in this paragraph (b) will not take effect until EPA releases modeling guidance on this subject and announces in the Federal Register that these requirements are in effect." EPA has announced in the Federal register the availability of MOBILE6.2 as the emission factor model to be used for PM2.5 conformity determinations... EPA's technical guidance for MOBILE model explains that it can be applied to estimate emissions from a specific highway project once information is obtained regarding the vehicles that will be using that particular highway segment... Thus MOBILE 6.2 can provide useful emissions data when information regarding traffic load and vehicle type is available for a highway link... EPA has published the availability of a dispersion model for use in predicting the ambient concentrations of primary pollutants emitted from highways...FHWA is required by the revised conformity hot spot rule to undertake quantitative analysis of the impact of emissions from the ICC on PM2.5.

EPA is not requiring quantitative PM2.5 hot-spot analyses for conformity purposes since quantitative hot-spot modeling techniques and associated EPA modeling guidance do not exist. As discussed in the March 10, 2006 final rule (71 FR 12498), "EPA is finalizing the proposal [to not apply quantitative PM2.5 and PM10 hot-spot requirements] because we continue to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses." Therefore an actual "modeling assessment" of the ICC is not required under conformity. Instead, in accordance with the final rule, a qualitative hot-spot analysis was performed. The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

The preamble to the March 10, 2006 discusses at length why the MOBILE6.2 model is not appropriate for use in microscale analysis of PM2.5 emissions as necessary for quantitative PM2.5 hot-spot analyses.

862 To the extent that a determination is made that the modeling tools that EPA has determined to be available for determining the impact of new highway emissions on PM2.5 are not found not to be appropriate for the current conformity determination, then the Appendix W provides the methodology to be used in applying monitoring tools... In the SHA draft conformity determination, monitoring data were used from monitors that were not sited to satisfy any of the criteria in Appendix W...The monitors used for the analysis appear to have been selected because they are located far from any major highway, and are useful only for characterizing background air quality in nearly rural locations not affected by emissions from heavily trafficked freeways.

Air quality monitoring stations are established by state air agencies, with oversight from EPA EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2). The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. However, the EPA monitor siting criteria is not applicable to qualitative PM2.5 hot-spot analyses, but is instead applicable for State and local air agencies establishing monitor locations.

Additional monitoring is not required for PM2.5 hot-spot analyses. The ICC PM2.5 hot-spot analysis is consistent with EPA and DOT's joint guidance issued on March 29, 2006, entitled, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10

Nonattainment and Maintenance Areas," and met the transportation conformity requirements.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." We looked at all the monitors in the nonattainment area when trying to select an appropriate monitor and used the information from the two monitors in the project area in our analysis. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County.

863 FHWA agreed in the settlement agreement with the Sierra Club that resolved the US 95 litigation, that a monitor located more than 1000 meters from a freeway provides information regarding the urban background, and does not reflect the impact of emissions for a highway.

The terms of US 95 Settlement Agreement are relevant only to that case and its contents do not constitute an agreement or admission related to any other project. The monitor siting recommended in the Settlement Agreement applies only to the research effort described in the Agreement for microscale monitoring sites. (US 95 Settlement Agreement, Part IV, #3).

EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2).

864 Appendix W calls for the establishment of a monitoring network that includes the collection of meteorological data in order to obtain the data needed to identify the point of greatest impact from existing sources so that the cumulative impact of new emissions from the Project can be determined using reliable information. The Guideline requires that the network be established after consultation with appropriate air quality expert agencies. None of these steps have been followed by the transportation agencies.

Air quality monitoring stations are established by state air agencies, with oversight from EPA. EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2).

Additional monitoring including collection of on-site meteorological data is not required for PM2.5 hot-spot analyses and conformity determination.

865 [C]ommenters employed the services of an expert consultant to conduct a survey of the literature to identify studies that show the impact of emissions from major freeways of comparable size on PM2.5 concentrations by measuring only the black carbon component of fine particles, the component attributed primarily to motor vehicle emissions.

In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available studies looking at particle concentrations near roadways." (71 FR 12493).

Based on its review of the wide range of available research studies, EPA promulgated the March 10, 2006 final rule requiring specific PM2.5 hot-spot analysis only for those projects of air quality concern. The interagency partners determined that the ICC met the definition in the Transportation Conformity rule as a project of air quality concern. The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation, and met the requirements of the Clean Air Act.

866 **[C]ommenters performed an independent analysis of likely air quality concentrations based upon monitors located close to heavily trafficked freeways in other portions of the Washington metropolitan area… Those data, when scaled to account for difference in traffic loads and distances from nearby roadways, demonstrate that the NAAQS for PM2.5 is being exceeded in neighborhoods adjacent to the roadway, and that therefore the additional emissions resulting from the additional traffic joining these existing facilities will exacerbate these violations.**

A review of the study showed that the approach noted by the commenter is flawed in that it does not consider other factors that will impact PM2.5 concentrations near the ICC, including regional and national emissions trends. In addition, the commenter appears to be making conclusions as if the ICC was open to traffic today. This is not the case.

The hot-spot analysis considered the traffic levels, but also considered the other factors that will affect PM2.5 concentrations. This qualitative approach, unlike the commenter's, is consistent with the March 29, 2006 guidance, and concludes that the ICC will not cause or worsen existing violations.

867 **EPA and FHWA concurred in the determination that conformity determinations will be made through the NEPA process. 58 FR 62209 (November 24, 1993). Since then, all hot spot conformity determinations have been made as a part of the NEPA process... In addition, the cumulative impact of emissions from the ICC in the vicinity of adjacent and connecting roadways on the NAAQS for PM2.5 and on human health is a significant impact on the human environment that was not addressed in the Draft or Final EIS.**

Under normal circumstances, project conformity determinations will be made as part of the NEPA process, as indicated in 58 FR 62209 (November 24, 1993) The hot-spot analysis in support of the project level conformity determination for the ICC project was completed after the FEIS was released in January 2006, since the conformity rule and the hot-spot qualitative analysis guidance were not released until March, 2006.

However, it is important to note that a project level conformity determination is not required until issuance of the final environmental documents (categorical exclusion (CE), finding of no significant impact (FONSI), or record of decision (ROD)). The project level conformity determination for the ICC project will be completed before the issuance of the ROD.

The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation and will not have a significant impact on the PM2.5 air quality in the region.

868 **The proposed ICC Project will significantly increase air pollution, as a result FHWA has a vital obligation to disclose the resulting human health risks…Thus, NEPA requires agencies to consider "whether any negative health effects could be associated with increased... emissions" from a proposed action... Here, the FHWA violated NEPA in**

failing to consider negative health effects associated with increased emissions of PM2.5 and toxic air pollutants emitted by motor vehicles.

The PM2.5 hot-spot qualitative analysis included in the project level conformity determination for the Intercounty Connector Project in Maryland released for public comment on March 28, 2006 demonstrates that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation. Based on this finding the project will not have a significant impact on the PM2.5 air quality in the region.

The FEIS identified the health effects of MSATs and through a quantitative analysis found that based on "the large reductions in MSATs expected by the design year for all alternatives, the small variation in differences in reductions between alternatives, the uncertainty associated with the absolute emissions estimates, and difficulty assessing exposure at the project level and associated health impacts, FHWA does not believe that there will be significant adverse impacts on the human environment from mobile source air toxics as a result of the ICC" (FEIS, IV-328).

The level of MSAT analysis conducted on the ICC would not have been required by the subsequently released Federal Highway Administration memorandum, Interim Guidance on Air Toxic Analysis in NEPA Documents, February 3, 2006, because of the low potential for MSAT effects on highways with traffic volumes consistent with ICC traffic projections.

869 **Based on the most recent health effects research data that has become available since the PM2.5 standards were adopted in 1997, EPA has concluded that 24-hour concentrations over (35 mg/m3) pose a major human health risk… the ICC Project will create hazardous levels of PM2.5 pollution that can be expected to cause increased mortality, hospitalizations and other serious adverse health effects among the residents of the ICC corridor. Specifically, monitors near highways in the Washington metropolitan area are reporting 24-hour concentrations that will exceed the revised NAAQS, emissions from the existing I-95 and I-370 are likely exceeding the proposed NAAQS as well, and additional emissions from the ICC will exacerbate these levels.**

The Clean Air Act section 176(c)(1)(B) states that transportation projects must not cause or contribute to any new violation of any standard in any area, or increase the frequency or severity of any existing violation of any standard in any area.

EPA is currently evaluating the adequacy of the 1997 NAAQS, and has proposed some revisions to the standard. However, under the Clean Air Act, the process of establishing standards to protect human health has not yet been completed for the proposed revisions. Until the process of updating the standards is complete, it cannot be determined that the 1997 NAAQS do not protect human health, or that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS.

870 **The FEIS merely reports that PM2.5 emissions will be "below applicable" Wyoming Ambient Air Quality Standards ("WAAQS") and National Ambient Air Quality Standards ("NAAQS")... However, the FHWA could not reasonably rely on the NAAQS to assume that PM2.5 emissions will be harmless from a human health standpoint...FHWA has an obligation under NEPA to disclose to the decision maker and the public that based upon this large body of compelling scientific evidence, anticipated PM2.5 emissions from the ICC project will exceed levels shown by the research to cause significant serious adverse health effects.**

The FEIS did not report that PM2.5 emissions will be "below applicable" Wyoming Ambient Air Quality Standards ("WAAQS") since WAAQS do not apply.

The PM2.5 hot spot analysis shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation,

FHWA is aware that EPA is currently evaluating the adequacy of the 1997 NAAQS, and has

proposed to revise the 24-hour standard to 35 µg/m3 and to retain the level of the annual PM2.5 standard at 15 µg/m3. EPA also solicited comments on alternative levels for both the 24-hour and annual standards of PM2.5.

However, under the Clean Air Act, the process of establishing standards to protect human health has not yet been completed for the proposed revisions. Until the process of updating the standards is complete, it cannot be determined that the 1997 NAAQS do not protect human health, or that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS. The Muirkirk monitor is also showing a 24-hour reading of 32 µg/m3. Based on the assumptions made in the PM2.5 qualitative hot spot analysis, it is reasonable to assume that had the proposed 24-hour standard been in place, as proposed by EPA on January 17, 2006, the ICC project would still be able to demonstrate conformity.

871 **FHWA has a duty to disclose to the decision maker and the public that even if the project can be found to conform under the current NAAQS, emissions allowed by the Project will likely become unlawful in 5 months, and that the ROD approving the Project will then need to be withdrawn until a supplemental EIS is prepared to address the changed legal standard that will govern development of the Project. 40 CFR 1502.9(c). If this disclosure had been made, the decision maker and the affected public might well have decided to develop mitigation strategies to prevent the expected health effects and to avoid delays that will occur when the NAAQS is revised. Therefore FHWA has violated the directive of NEPA that the EIS "shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 CFR 1502.1.**

FHWA is aware that EPA is currently evaluating the adequacy of the 1997 NAAQS, and has proposed to revise the 24-hour standard to 35 µg/m3 and to retain the level of the annual PM2.5 standard at 15 µg/m3.in a January 17, 2006 proposed rulemaking. EPA also solicited comments on alternative levels for both the 24-hour and annual standards of PM2.5. FHWA has included this information in its monthly newsletter, Transportation Conformity Highlights which is widely distributed among transportation decision makers and stakeholders.

However, under the Clean Air Act, the process of establishing standards to protect human health has not yet been completed for the proposed revisions. Until the process of updating the standards is complete, it cannot be determined that the 1997 NAAQS do not protect human health, or that adverse health effects will likely occur at levels of PM2.5 that meet EPA's 1997 NAAQS.

872 **[M]obile source air toxics ("MSATs") also cause or contribute to significant adverse health effects… These effects may be reduced if EPA issues new regulation that will apply to new vehicles after the ICC Project is opened for service in 2010, but will not provide protection for residents and travelers in the corridor before existing vehicles are replaced with new vehicles that meet the new standards. Furthermore, EPA does not claim that reduced emissions of MSATs will eliminate all significant health risks for those exposed to emissions from heavily trafficked freeways. Those health risks, even after more stringent emission standards take effect, must be considered and mitigated by FHWA.**

The comment does not seem to take into account recent trends in MSAT emissions. With EPA regulations covering fine PM and volatile organic compounds, MSATs have declined over the past 30 years from mobile sources. The trends are expected to continue to 2030 due to the new vehicle and fuel regulations that EPA has implemented despite increases in vehicular travel. We expect that MSAT emissions will continue a smooth decline in and outside of the project area.

At this point in time, the only reasonable conclusion we can reach is that cancer risk will decline

as MSAT emissions in the project area decline. We believe that estimates of exposure and cancer risk would be too uncertain at the project level to yield useful information under NEPA. These effects should be considered at larger levels of analysis and take into account all sources of these emissions.

873 **Section 109(h) of the Federal-Aid Highway Act requires a three-step evaluation of air quality impacts and mitigation measures to ensure that "final decisions on the project are made in the best overall public interest."…None of these obligations have been performed by FHWA with respect to the adverse impacts of air pollution from the project even though they are required to be addressed in the EIS for a project. Id. The EIS is deficient for its failure to consider the adverse impacts on health, and adopt mitigation needed to prevent adverse health impacts.**

By satisfying their obligations under NEPA and the Clean Air Act, FHWA and SHA have also satisfied their obligation under Section 109(h) of the Highway Act. Section 109(h) does not impose obligations on state and federal agencies beyond what is required under NEPA and the Clean Air Act, and does not mandate a separate public interest determination, as suggested by the commenter. While not part of mitigation to meet one of the NAAQS, SHA will implement a Diesel Emissions Reduction Program as part of the Project Performance Specifications. SHA Standard Specifications also specify Dust and Moisture Dust Control during construction. In light of significant environmental and public concerns associated with the ICC, the project RFP will include detailed requirements and practices that will reduce or prevent the surface and air transport of dust during construction.

874 **[T]he Maryland Department of Transportation ("MDOT") and SHA emphasized that EPA's MOBILE6.2 emissions model was not designated specifically to estimate emissions at project level, has not undergone any validation at that level, and is not officially approved or recommended for that purpose by EPA. The Federal Aviation Administration within the U.S. Department of Transportation has incorporated MOBILE 6.2 emission factors into its Emissions and Dispersion Modeling System which is used to conduct project-level analysis.**

We would emphasis that Mobile 6.2 was used to estimate MSAT emissions on the ICC project. Nonetheless, the commenter is correct that we have some concerns about its use at the project level since the model is more accurate at larger geographic scales. These concerns are detailed elsewhere in our responses to these comments. Further, we cannot speak to personal conversations that have been held on this subject, but the model cannot be approved for use by EPA since NEPA analysis is the responsibility of FHWA, as the Agency has indicated. Finally, FAA's approach, according to their experts, is largely in line with our own with respect to MSAT analysis and use of Mobile 6.2.

On February 24, 2004, EPA's Director of the Office of Transportation and Air Quality released "Policy Guidance on the Use of MOBILE6.2 and the December 2003 AP-42 Method for Re-Entrained Road Dust for SIP and Transportation Conformity." This guidance speaks directly to EPA's position on MOBILE6.2 and MSAT analyses for NEPA analysis. "While MOBILE6.2 is EPA's best available tool for quantifying toxics emissions from on-road vehicles, its availability has no direct bearing on the administration for the National Environmental Policy Act (NEPA). The Department of Transportation has responsibility for implementing NEPA for Federally funded or approved transportation projects, and it is currently developing a policy on how mobile source air toxics should be addressed in NEPA analysis, in consultation with EPA." The MSAT analysis for the ICC was consistent with FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents (February 3, 2006). The policy was developed with input from EPA. It was also developed with input from the President's Council On Environmental Quality, which has ultimate responsibility to ensure federal agency compliance with NEPA. We do not have documentation of the "personal conversation" with EPA staff cited by the commenter in the footnote, although we are aware that individuals at EPA may have opinions not completely in

line with our guidance or with EPA's own previously stated position. However, the official position of EPA documented in the February 24, 2004 guidance does not conflict with the air toxics analysis in the FEIS.

The FAA uses its Emissions Dispersion Modeling System (EDMS) to support airport Environmental Assessments and Environmental Impact Statements. According to FAA officials, the system incorporates MOBILE6.2 emission factors for on-road vehicle emissions within the boundary defined by the airport and employs the EPA AERMOD/MET models for EDMS dispersion analysis, though dispersion analysis is not a routine part of the analytical framework. FAA officials note that dispersion analysis is conducted on a case-by-case basis, usually tied to a specific issue or where a need is identified through the scoping process.

Common practice on airport analyses includes speciation at the emissions inventory level but does not include dispersion, population exposure, or health risk [due to the many technical uncertainties]. Officials also noted that dispersion analysis is conducted on a case-by-case basis, but is limited to situations where local conditions demand such an assessment.

During the interagency coordination process for the development of FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents, FAA officials commented that FHWA's draft guidance was similar to their agency's approach to assessing MSATs. The FAA supported the FHWA's position that quantitative analysis should be confined to total or gross emissions, as opposed to dispersion analysis and concentrations. In addition, the FAA noted that it did not intend to expand its assessment protocol to include human exposures or health risk due to what it cited as a lack of reliable data or applicable health risk standards.

875 **While EPA plans to undertake additional research to refine the evaluation of the emissions characteristics of heavy duty diesel vehicles in the future to produce greater precision in the estimates of particulate emissions in the future emission models that succeed MOBILE6.2, the current release of the model has been used in a number of scientifically-accepted project-level hotspot analyses documented through peer reviewed scientific studies. EPA and state and local agencies have applied the MOBILE6.2 link-based methodology in Portland, Oregon to evaluate near-road pollution "hotspot" exposures... The Portland study also demonstrates that certain limitations of the MOBILE6.2 model can be addressed during MOBILE6.2 post-processing steps.**

FHWA does not contest that MOBILE6.2 can be used to calculate emissions by link, and in fact, the model was used to generate emissions for individual roadway links for CO hotspot analysis. In the preamble to the March 10, 2006 transportation conformity final rule, EPA recognized that the significant limitations of the current emissions factor model, MOBILE6.2, make it "unsatisfactory for use in microscale analysis of PM2.5 and PM10 emissions as necessary for quantitative hot-spot analysis." EPA also "continues to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses. Before such analyses can be performed, technical limitations in applying existing motor vehicle emission factor models must be addressed, and proper federal guidance for using dispersion models for PM hotspot analysis must be issued." (71 FR 12498)

The cited Portland study is an urban scale study. The commenter misinterprets the Portland methodology. Page 4 of the cited report notes that diesel particulate emissions do not vary by speed, and page 8 of the report notes that the link-based calculations were based directly on MOBILE6.2 emissions rates for those toxics where emissions do not vary by speed. The speed curve equations were used to more accurately assign link-specific emissions rates for those pollutants for which emissions do vary by speed. Thus the limitations of MOBILE6.2 for PM emissions were not addressed in the Portland study.

876 **Dispersion Modeling could have been used by the Lead Agencies to translate outputs from MOBILE6.2 into estimates of likely particulate emissions concentrations that would**

be experienced by children and adults breathing the air in locations close to highways such as the ICC, I-370 or I-95, where traffic and emissions will increase as a result of a decision to build the ICC. The Lead Agencies should have used dispersion models such as the CAL3QHC model, which has been published by EPA as available for evaluating line sources.

EPA is not requiring quantitative PM2.5 hot-spot analyses for conformity purposes using dispersion modeling since quantitative hot-spot modeling techniques and associated EPA modeling guidance do not exist. As discussed in the March 10, 2006 final rule (71 FR 12498), "EPA is finalizing the proposal [to not apply quantitative PM2.5 and PM10 hot-spot requirements] because we continue to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses." Therefore an actual "modeling assessment" using dispersion models for the ICC is not required under conformity. Instead, in accordance with the final rule, a qualitative hot-spot analysis was performed. The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

The preamble to the March 10, 2006 discusses at length why the MOBILE6.2 model is not appropriate for use in microscale analysis of PM2.5 emissions as necessary for quantitative PM2.5 hot-spot analyses using dispersion models.

877 **Studies demonstrate that the current science of air quality modeling has advanced to a state that allows for appraisals of fine particulate emissions to be conducted on a localized basis at sites along highway corridors. Those appraisals can be conducted by integrating the MOBILE6.2 model using emissions estimates at the roadway link-level with dispersion models, such as CAL3QHC... Yet, SHA does not use modeling to assess the impact of incremental emissions added by the proposed ICC project. Commenters reiterate that the failure to perform such analysis to make the demonstrations required by 93.116 is unlawful.**

FHWA does not contest that MOBILE6.2 can be used to calculate emissions by link and together with dispersion model can assess localized air quality impact for certain pollutants. In fact, the models were used to generate for CO hotspot analysis. However, In the preamble to the March 10, 2006 transportation conformity final rule, EPA recognized that the significant limitations of the current emissions factor model, MOBILE6.2, make it "unsatisfactory for use in microscale analysis of PM2.5 and PM10 emissions as necessary for quantitative hot-spot analysis." EPA also "continues to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses. Before such analyses can be performed, technical limitations in applying existing motor vehicle emission factor models must be addressed, and proper federal guidance for using dispersion models for PM hotspot analysis must be issued." (71 FR 12498)

EPA is not requiring quantitative PM2.5 hot-spot analyses for conformity purposes since quantitative hot-spot modeling techniques and associated EPA modeling guidance do not exist. Instead, in accordance with the final rule, a qualitative hot-spot analysis was performed. The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

878 **Recent review of ambient monitoring data from the Washington, DC metropolitan area demonstrates that sites strongly influenced by motor vehicle emissions are responsible for detecting concentrations that exceed the NAAQS for PM2.5. As evidence, commenters submit a Mobile Hot Spot Regression Study that evaluates the relationship between measurements of annual PM2.5 in the DC-MD-VA nonattainment area and the proximity of the monitors to major freeways. The study demonstrates a significant relationship between the traffic density weighted distance of the roadway to the monitor even when the frequency that winds will transport emissions from the freeway to the monitor are not**

taken into account.

The Lead Agencies were not able to locate the study mentioned by the commenters in the attachments to the comment letter. However, EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 nonattainment areas for projects of air quality concern. In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available studies looking at particle concentrations near roadways."

EPA determined that the final rule met the requirements of the Clean Air Act for project-level conformity (i.e., that the project would not cause new violations, worsen existing violations, or delay timely attainment). Since, the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, it does meet the requirements of the Clean Air Act. The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS, which are health based standards.

Only a small number of the PM2.5 monitoring sites nationwide were established to meet the Part 58 microscale criteria. The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. Air quality monitoring stations are established by state air agencies, with oversight from EPA. While Part 58 spells out criteria for microscale monitoring sites, it does not appear to require states to establish and operate them; in fact, EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2).

879 Neighborhoods located new highways are likely exposed to significantly higher concentrations of PM2.5 (from 2.0 to 2.5 mg/m3) than neighborhoods located at greater distances from heavily trafficked highway sources. This raises major issues of environmental justice.

The Lead Agencies analyzed the potential impacts on environmental justice populations and found that "individually, no single environmental effect would cause a disproportionate high and adverse effect on any single environmental justice population area. The communities of Longmead, Tanglewood, and Avonshire would experience multiple adverse effects, however other non-environmental justice areas would experience similar multiple adverse impacts" (FEIS, IV-27). Therefore, the ICC is not a project of environmental justice concern.

The qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule and it does meet the requirements of the Clean Air Act. The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS, which are health based standards.

Based on this finding the project will not have a significant impact on the PM2.5 air quality in the region and should not raise an issue of environmental justice.

880 Selectively relying upon concentrations from monitors located in rural or residential areas distant from major freeways, while ignoring nonattainment concentrations found at monitors located nearby to major freeways, provides no adequate basis for determining "current background concentration" under the PM2.5 Hot Spot rule 40 CFR 93.123(c)(2)

The selection of the analysis locations for the ICC hot-spot analysis was consistent with the March 29, 2006 guidance, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" and met all transportation

conformity requirements.

In particular, the ICC PM2.5 hot-spot analysis describes the baseline air quality conditions consistently with the discussion on page 19 of the guidance. "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." There are two monitors that are in close proximity to the proposed alignment of the ICC. Monitor #240313001 in Rockville, MD is located in the vicinity of the western portion of the ICC at the Lathrop E. Smith Environmental Education Center. Monitor #240330030 in Muirkirk, MD is located in the vicinity of the eastern terminus of the ICC. The Monitor at the Muirkirk site best matched the worst-case traffic characteristics on the ICC corridor for overall traffic impact, truck percentage, and similarity in traffic characteristics. This monitor is located in proximity of three major roadways: I-95, US-1 and Baltimore-Washington Parkway.

Interagency consultation was used in the selection of this monitor, including the MWCOG, MDE, EPA, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, MNCPPC - Montgomery County, and MNCPPC - Prince George's County.

881 Given the relationship between the proximity of monitors to freeways, traffic density on the freeway and the magnitude of reported PM2.5 concentrations, it is apparent that a true baseline concentration at existing highways where connections with the proposed Project will create emission hot spots cannot be demonstrated if no monitor in the nonattainment area is sited in accord with EPA's guidance in Part 58 Appendix E, 8.3 to measure the impact of emissions from existing major freeways at the hot spot location.

The ICC PM2.5 qualitative analysis utilizes the "Comparison to another location with similar characteristics" method as discussed on page 17 of the March 29, 2006 guidance. The guidance states, "The interagency consultation process would be used to determine what project(s) and air quality monitor(s) are appropriate to be used as a surrogate for the air quality impacts of the proposed project." The interagency consultation was used to select the comparison monitor, and the reasons for its selection are detailed in the conformity determination.

The Lead Agencies are not required to site monitors specifically for measuring the impacts of highway emissions for conformity purposes. The Lead Agencies are also not required to place new monitors specifically to monitor suspected hot spot locations along a proposed roadway. The Maryland Department of Environment does not site monitors to specifically consider roadway influences. Most monitors are sited beyond the influence of any one source as part of the siting guidelines. However, the EPA monitor siting criteria is not applicable to qualitative PM2.5 hot-spot analyses, but is instead applicable for State and local air agencies establishing monitor locations. Additional monitoring is not required for PM2.5 hot-spot analyses.

Air quality monitoring stations are established by state air agencies, with oversight from EPA. FHWA has no authority to enforce or review the compliance of any individual monitoring site with the criteria spelled out in 40 CFR Part 58. While Part 58 spells out criteria for microscale monitoring sites, it does not appear to require states to establish and operate them; in fact, EPA's guidance for PM2.5 network design recommends that monitors be sited outside of the zone of influence of nearby roadways for the annual PM2.5 standard (Guidance for Network Design and Optimum Site Exposure for PM2.5 and PM10, December 1997, page 5-2).

882 The analysis does not provide a quantitative analysis of changes in traffic on specific

roadway segments that would be caused by the ICC.

The PM2.5 "Project Level Conformity Determination for the Intercounty Connector Project in Maryland" released for public comment on March 28, 2006 does consider the changes in traffic on specific roadway segments that would be caused by the ICC, and includes a qualitative hot spot analysis for the two locations along the ICC where emissions impacts are likely to be the greatest. The location with the overall highest traffic impact in the corridor is where the I-370/ICC meets I-270 and includes the expected traffic volumes from MD 355. The other location, where the ICC intersects with I-95, has the highest truck percent and includes the expect traffic volumes from US 1.

883 **The analysis assumes that the ICC will not induce traffic growth in the corridor through any of the well documented mechanisms by which new highways like the ICC are well understood to generate additional traffic over time.**

The traffic projections for the ICC account for the effects of Secondary and Cumulative Effects with the sensitivity analysis described in Chapter IV.J, of the FEIS. This would account for induced traffic growth.

The Selected Alternative is consistent with long-standing land use and master plans in the area. Local governments have developed these plans to strike a balance between preservation and long term sustainable growth. The accommodation of this planned growth requires infrastructure improvement, of which the ICC is a significant contributor. Many elements of the local master plans indicate that the Selected Alternative of the ICC is somewhat of a planning boundary between more urbanized medium density development areas and the lower density portions of upper eastern Montgomery County. The Selected Alternative will increase study area mobility and safety, while relieving traffic congestion on more than 50 miles of local roadways and at dozens of study area intersections.

884 **The analysis assumes that 2010 will be the peak year of PM2.5 emissions, disregarding that traffic growth in the early years after the project opens will likely grow rapidly, causing emissions to grow after 2010 growth in miles driven outpaces the reduction of emissions rates per mile due to gradual adoption of cleaner vehicle technologies.**

Page10 of the "Project-level Conformity Determination for the Intercounty Connector in Maryland," states "As clarified in the preamble to the July 1, 2004 revision to the transportation conformity rule (64 FR

40056), the conformity rule requires that project-level analyses consider the year of expected peak emissions from the project. For PM2.5, this is expected to be a near-term year, such as the first year of operation of the project, because emission rates from vehicles are predicted to decline between the opening year (2010) and the design year (2030) due in part to improvements in tailpipe emissions and national vehicle emissions control programs. As indicated in Exhibit 1, the regional PM2.5 emissions are much higher in 2010 than in 2020 and 2030, and demonstrate that emissions rates are declining faster than growth in travel. Since regional emission is a good indicator of the overall emissions trends in the region, therefore it is expected that 2010 would be the year of peak emissions from the project and other emissions sources that affect the project area."

885 **The analysis assumes that the share of traffic in the area that is heavy-duty trucks, which generate far more PM2.5 than light duty vehicles per mile driven, will remain constant over time at the same levels in the past, contradicting local and national data indicating continual significant growth of the share of traffic that is trucks which contribute a growing share of total particulate emissions.**

The analysis assumptions are based on the fact that ICC is proposed as a tolled facility, and

therefore may not reflect the national trend of truck traffic. Based on the toll analysis in the FEIS, as tolls increase the share of trucks will not increase. For most cases, truck percentages remain the same in the future unless future land use calls for more trucks. This would occur if there is a quarry or landfill planned in the area. The Lead Agencies do not see either of these land uses planned for the project area.

The toll analysis in the FEIS identifies an expected trend that as tolls increase, the volume on the ICC will decrease. The volume will decrease because drivers will attempt to avoid the monetary cost associated with the tolls. This is true of all drivers, including drivers of trucks. Additionally, truck tolls are higher than car tolls, which will affect truck drivers' decisions to use the ICC. Therefore, as tolls increase, all vehicle traffic is expected to decrease.

The assumptions of the percent truck traffic for the analysis are based on continuous collection of truck percentages as a portion of all traffic on major State highways. Review of this data over the past several years shows a similar truck percentage year by year, and not a significant increase in truck percentage as suggested in the comment.

886 The Lead Agencies must perform analyses to determine whether the proposed ICC will cause or worsen NAAQS violations along the ICC and I-95, I-495, and I-270 for PM2.5… Although the FEIS fails to disclose actual traffic volumes by motor vehicle classification, preliminary examination of the SHA travel model files by Smart Mobility shows that selected segments of these highways currently carry and are forecast to carry a substantial volume of trucks and heavy duty vehicles. Adding traffic to these already congested highways will contribute to increased motor vehicle emissions, including PM2.5

The preferred build alternative will only have a slight effect on traffic levels on I-95, I-495, and I-270. The small increase in overall traffic in the preferred build alternative does not equate to a "significant increase in diesel vehicle traffic," and therefore does not require additional PM2.5 hot-spot analyses.

A comparison of the 2030 ADTs in the "ICC Travel Analysis Technical Report" for the preferred build alternative versus the no-action alternative on the three highways noted by the commenter do not show a significant change in ADT. The maximum increase on I-495 is 1.67% and on I-270 is 1.28%. There are several segments along both I-495 and I-270 that show a slight decrease in ADT with the preferred build alternative. On I-95 between I-495 and MD 212 the ADT decreases for all the build alternatives and between MD198 and MD 216 the ADT varies by less the 0.5%.

The PM2.5 "Project Level Conformity Determination for the Intercounty Connector Project in Maryland" released for public comment on March 28, 2006 does consider the effect of the preferred build alternative on traffic levels of related facilities such as I-95 and I-270, and includes a hot spot analysis for the two locations along the ICC where emissions impacts are likely to be the greatest. The location with the overall highest traffic impact in the corridor is where the I-370/ICC meets I-270 and includes the expected traffic volumes from MD 355. The other location, where the ICC intersects with I-95, has the highest truck percent and includes the expect traffic volumes from US 1.

Based on the finding of the qualitative hot-spot analysis, the ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS.

887 Neither the proposed Project-level Conformity Determination nor the FEIS provide any information about the source of these estimates for 2010 average daily traffic or truck and bus traffic shares.

The percentage of trucks modeled on ICC was based on existing roads in the study area. Of the exiting parallel roads in the study area such as MD 198 and MD 115, MD 198 had the highest daily share of heavy trucks in 2002, 3 percent. Since none of the parallel roads are access

controlled it is likely that ICC will have greater truck traffic than any of the existing east-west routes in the study area. Hence the study team also looked at trucks on the Capital Beltway. In 2002, 4.8 percent of the capital beltway's traffic at US 29 was truck traffic. The ICC is estimated to have 6 percent of its daily traffic be heavy trucks. Therefore the truck percent used for the ICC study are high enough to account for increased truck traffic. However based on other observed data of truck volumes in the area, it is likely that the actual rates will be lower.

The 2010 truck percentage used in the PM 2.5 analysis was taken from the current SHA truck volume maps for the facilities considered in this analysis. The SHA Highway Information Services Division prints truck volume maps every year. The maps are based on actual vehicle counts. The latest available maps, which were issued on April 22, 2005, were used in this analysis. The current truck percentages were also used for the future years (post 2010) based on the assumption, commonly made in forecasting exercises that any changes in land use would not result in a change to the percentage of trucks. The number of trucks however, would increase with the future traffic volumes.

888 **Without knowing the specific roadway segments that were considered in the project level conformity analysis, it was not possible for the public to evaluate the character or quality of the assumptions used by the Lead agencies… the Lead Agencies provided additional information not available elsewhere. This new information reveals the specific locations considered in the analysis. Unfortunately, the less than one week that these commenters have had access to this information has not been sufficient to enable us to use this information to independently review this analysis.**

The comment period for the PM2.5 analysis had one extension to make the total comment period for the project-level conformity determination for the ICC 30 days. This comment period was sufficient review under the conformity regulations, which require an opportunity for public comment on a conformity determination but do not specify a minimum number of days.

889 **The April 19, 2006, SHA/FHWA letter to us reveals that the project level conformity analysis assumed EPA MOBILE model default rates that were used in a regional analysis from December 2005. With more time, we would have investigated this data, which is not available on the web, and compared these assumptions with how truck traffic shares have changed historically on specific highways in the study area. However, the one day to less than one week that these commenters have had access to this information has not been sufficient to enable us to use this information to independently review this analysis.**

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890 **Project level conformity analysis should reflect the induced traffic impacts of the ICC, taking into account impacts on land use, average trip length and trip distribution, use of different travel modes, and toll levels. The analysis released by SHA/FHWA fails to do**

this. Thus, the traffic volumes listed as "worse case" on page 9 of the project level conformity analysis likely understate the actual traffic volumes that would be experienced in the vicinity of the ICC.

The traffic projects for the ICC account for the effects of Secondary and Cumulative Effects with the sensitivity analysis described in Chapter IV.J, of the FEIS. This would account for land use impacts, average trip length and trip distribution.

891 **The biggest flaw is the use of a single land use forecast for the build and no-build scenario, failing to reflect that the ICC will cause substantial changes in the pattern and character of job and housing development in the study area and beyond, as is admitted by the Secondary Impact Analysis discussions in the EIS. The EIS and project-level conformity analysis relies on the 2010 and 2030 Round 6.3 Cooperative forecast for most of its transportation analysis (FEIS, page IV-345), even though these forecasts do not take into account the construction of the ICC.**

Round 6.3, was used for the EIS and a sensitivity analysis was performed with the next approved land use, Round 6.4A.

The FEIS considered the effects of Secondary and Cumulative Effects with the sensitivity analysis described in Chapter IV.J, of the FEIS.

Cooperative Land Use Round 6.4A was adopted by the Metropolitan Washington Council of Governments and does include the ICC. The Round of forecasts that were developed for the ICC technical studies were based upon the regionally adopted land use forecasts at the time, which was Round 6.3. For the PM 2.5 studies tolled forecasts were used for both 2010 and 2030 and, for consistency basis, were developed from the Round 6.3 forecasts. The study team performed a sensitivity analysis to compare Round 6.3 and 6.4A and found that the results of the technical study would not have been substantively affected. More information about the forecasts and the sensitivity studies is included in FEIS Chapter IV.J.

892 **The level of tolls on roads has a major influence on traffic levels and hence pollution from roads. The influence of possible toll levels on traffic levels in 2010 is not evaluated in the project level; conformity analysis, although it is considered for 2030 in the FEIS.**

Tolls were included in the project-level air quality analysis for 2010.

893 **It is quite plausible that if the ICC is built, the tolls would be set at a level far below the high levels evaluated in the FEIS, due to popular pressure. It is unclear what toll level was assumed by the Lead Agencies for the project-level conformity analysis for 2010.**

The baseline level of tolls were included in the travel forecasts for the PM 2.5, which is $0.17 per mile in the peak period and $0.13 per mile in the off peak period. These toll rates are expressed in 2004 dollars.

894 **Both Table IV-117 in the FEIS and the Travel Analysis Technical Report's Table IV-91 show the 2030 traffic volume on the segment of the ICC from I-270 to I-370 as 128,000 AWDT under Corridor 1 Build and 127,000 ADWT under Corridor 2, compared with 96,000 AWDT under the No-Build Scenario. There is no analysis of the share of diesel truck traffic on the ICC in the FEIS or project-level conformity analysis. This increased traffic will lead to significantly higher PM emissions along the highway and in nearby neighborhoods, in 2010 and years that follow.**

The PM2.5 analysis is conservatively based on total truck traffic, which includes trucks (diesel and gasoline) and buses. In accordance with the final conformity rule, a qualitative hot-spot analysis was performed for the worse case location along the ICC. Based on traffic volumes and truck percentages the worse case locations were determined to be the interchange of I-270 and I-370/ICC on the west side and the interchange of I-95 and the ICC on the east side. The results

of the qualitative hot spot analysis show that the proposed ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation.

Page10 of the "Project-level Conformity Determination for the Intercounty Connector in Maryland," states "As clarified in the preamble to the July 1, 2004 revision to the transportation conformity rule (64 FR 40056), the conformity rule requires that project-level analyses consider the year of expected peak emissions from the project. For PM2.5, this is expected to be a near-term year, such as the first year of operation of the project, because emission rates from vehicles are predicted to decline between the opening year (2010) and the design year (2030) due in part to improvements in tailpipe emissions and national vehicle emissions control programs. As indicated in Exhibit 1, the regional PM2.5 emissions are much higher in 2010 than in 2020 and 2030, and demonstrate that emissions rates are declining faster than growth in travel. Since regional emission is a good indicator of the overall emissions trends in the region, therefore it is expected that 2010 would be the year of peak emissions from the project and other emissions sources that affect the project area."

Therefore, it is not expected that there will be significantly higher PM emissions in the years following 2010. The 2010 truck percentage used in the PM 2.5 analysis was taken from the current SHA truck volume maps for the facilities considered in this analysis. The current truck percentages were also used for the future years (post 2010) based on the assumption, commonly made in forecasting exercises that any changes in land use would not result in a change to the percentage of trucks. The number of trucks however, would increase with the future traffic volumes.

895 The project level conformity analysis assumes that 2010 will be the peak year for emissions of PM2.5 in the study area, without providing any analysis to document that this is a reasonable assumption… This traffic in the period from 2010 to 2020, when the road is first planned to be open to traffic, might grow faster than the rate at which motor vehicle emission rates for PM2.5 fall due to motor vehicle fleet turnover.

Page 10 of the "Project-level Conformity Determination for the Intercounty Connector in Maryland," states "As clarified in the preamble to the July 1, 2004 revision to the transportation conformity rule (64 FR 40056), the conformity rule requires that project-level analyses consider the year of expected peak emissions from the project. For PM2.5, this is expected to be a near-term year, such as the first year of operation of the project, because emission rates from vehicles are predicted to decline between the opening year (2010) and the design year (2030) due in part to improvements in tailpipe emissions and national vehicle emissions control programs. As indicated in Exhibit 1, the regional PM2.5 emissions are much higher in 2010 than in 2020 and 2030. Since regional emission is a good indicator of the overall emissions trends in the region, therefore it is expected that 2010 would be the year of peak emissions from the project and other emissions sources that affect the project area."

896 The presumption that truck traffic will grow at no greater pace than other traffic in the ICC study area defies evidence from several sources, which suggests that truck traffic will grow faster than other traffic flows. This will lead to higher emissions per vehicle mile traveled in 2010 and years thereafter than would be estimated assuming that truck traffic shares are constant.

The analysis assumptions are based on the fact that ICC is proposed as a tolled facility. Based on the Lead Agencies' analysis, as tolls increase with additional traffic, the share of trucks will not increase. For most cases truck percent remains the same in the future unless future land use calls for more trucks. This would occur if there is a quarry or landfill planned in the area. The Lead Agencies do not see either of these land uses planned for the project area.

The toll analysis in the FEIS identifies an expected trend that as tolls increase, the volume on

the ICC will decrease. The volume will decrease because drivers will attempt to avoid the monetary cost associated with the tolls. This is true of all drivers, including drivers of trucks. Additionally, truck tolls are higher than car tolls, which will affect truck drivers' decisions to use the ICC. Therefore, as tolls increase, all vehicle traffic is expected to decrease.

The percentage of trucks is not arbitrary. Instead, the truck percentage used in the PM 2.5 analysis was taken from the current SHA truck volume maps for the facilities considered in this analysis. The current truck percentages were also used for the future years (post 2010) based on the assumption, commonly made in forecasting exercises that any changes in land use would not result in a change to the percentage of trucks. The number of trucks however, would increase with, not greater than the future traffic volumes.

897 **The graphics shown as "Figure 3" and "Figure 4," from the FHWA website, illustrate this sharp growth in estimated future truck traffic by 2020. These indicate approximately a doubling of truck volumes on both I-95 and I-270 in the vicinity of where the ICC would intersect these roads. This needs to be accounted for in the ICC project-level conformity analysis by adjusting the assumed truck traffic shares that are inputs to the MOBILE emission factor model.**

The project level conformity analysis use consistent truck percentages in the PM2.5 hot spot analysis on page 9, the Metropolitan Washington Council of Government's regional emissions analysis that includes the ICC and with the design concept and scope in the FEIS.

Based on the Lead Agencies' analysis, as tolls increase the share of trucks will not increase. For most cases truck percent remains the same in the future unless future land use calls for more trucks. This would occur if there is a quarry or landfill planned in the area. The toll analysis in the FEIS identifies an expected trend that as tolls increase, the volume on the ICC will decrease. The volume will decrease because drivers will attempt to avoid the monetary cost associated with the tolls. This is true of all drivers, including drivers of trucks. Additionally, truck tolls are higher than car tolls, which will affect truck drivers' decisions to use the ICC. Therefore, as tolls increase, all vehicle traffic is expected to decrease.

898 **This evidence suggests that the SHA/FHWA assumptions for the project level conformity analysis of a fixed 10.5 percentage for truck volumes in the "Location 1" … are arbitrary and capricious and not supported by fact. Similarly the assumption of a fixed 6.6 percent truck volume at "Location 2"... is arbitrary and capricious. SHA/FHWA must make use of reasonable and supported assumptions in evaluating air quality impacts of the ICC and make those assumptions and the evidence to support them public, with adequate opportunity for review and comment, whether using quantitative or qualitative methods of analysis. The analysis presented for public comment fails these tests.**

The percentage of trucks modeled for the ICC was based on existing roads in the study area. Of the exiting parallel roads in the study area such as MD 198 and MD 115, MD 198 had the highest daily share of heavy trucks in 2002, 3 percent. Since none of the parallel roads are access controlled it is likely that ICC will have greater truck traffic than any of the existing east-west routes in the study area. Hence the study team also looked at trucks on the Capital Beltway. In 2002, 4.8 percent of the capital beltway's traffic at US 29 was truck traffic. The ICC is estimated to have 6 percent of its daily traffic be heavy trucks. Therefore the truck percent used for the ICC study are high enough to account for increased truck traffic. However based on other observed data of truck volumes in the area, it is likely that the actual rates will be lower. These data were used in the PM2.5 qualitative hot-spot analysis, which was released for public comment on March 28, 2006.

899 **Given the findings of the Northern Bus Garage Study, the background PM2.5 concentrations which demonstrate that compliance with PM2.5 NAAQS in the project area is within less than 1 mg/m3 of violating the NAAQS, and estimated Annual Average Daily**

Traffic ("AADT') levels fort he ICC corridor which significantly exceed the traffic levels on 14th Street that were found to contribute a 1 mg/m3 increase to local PM, it is highly likely that the proposed ICC project will cause or contribute to PM2.5 concentrations that will violate the NAAQS throughout the ICC corridor and adjacent segments of the I-95, I-270, and I-495 corridors. Consequently, it is critical that the FEIS include modeling assessment to provide the best estimate of the magnitude of the NAAQS violations likely to occur at the points of greatest concentrations ("hot spots"), and identify and evaluate the effectiveness of mitigation strategies to reduce emissions to avoid the NAAQS violation.

EPA is not requiring quantitative PM2.5 hot-spot analyses for conformity purposes since quantitative hot-spot modeling techniques and associated EPA modeling guidance do not exist. As discussed in the March 10, 2006 final rule (71 FR 12498), "EPA is finalizing the proposal [to not apply quantitative PM2.5 and PM10 hot-spot requirements] because we continue to believe that appropriate tools and guidance are necessary to ensure credible and meaningful PM2.5 and PM10 hot-spot analyses." Therefore an actual "modeling assessment" of the ICC is not required under the transportation conformity regulations. Instead, in accordance with the final rule, a qualitative hot-spot analysis was performed. The results of the qualitative hot spot analysis show that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation. The PM2.5 hot spot analysis for the ICC meets the transportation conformity requirements in 40 CFR 92.123.

Since the PM2.5 hot spot analysis shows that the ICC project will not cause or contribute to a new violation of the PM2.5 NAAQS, or increase the frequency or severity of a violation, mitigation strategies are not required to meet the PM2.5 NAAQS.

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 nonattainment areas for projects of air quality concern. In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available studies looking at particle concentrations near roadways." The study mentioned in the comment was considered by EPA in developing the final rule (71 FR 12493).

900 Given the non-attainment status of the metro Washington region with respect to PM2.5 NAAQS, SHA/FHWA should evaluate the impact of construction emissions as part of the PM2.5 conformity analysis and identify strategies to mitigate these adverse pollution impacts, taking all possible steps to avoid creating local pollution hot spots that harm public health in the area.

Emissions resulting from construction of the project are not required to be considered in the hotspot analysis if such emissions are considered temporary according to 40 CFR §93.123(c)(5). Construction emissions associated with the ICC are considered to be temporary because they will last less than five years at any given site.

901 SHA/FHWA should evaluate strategies to ensure that no residents, workers, or visitors to parks and other public or private facilities or lands near the ICC will be affected by particulate pollution levels in excess of the NAAQS.

The Clean Air Act section 176(c)(1)(B) states that transportation projects must not cause or contribute to any new violation of any standard in any area, or increase the frequency or severity of any existing violation of any standard in any area. Since, the qualitative PM2.5 hot spot analysis performed for the ICC meets the requirements in 40 CFR Part 93 as amended by the March 10, 2006 rule, it does meet the requirements of the Clean Air Act. The PM2.5 project level conformity determination demonstrates that the proposed ICC project will not cause new violations, worsen existing violations or delay timely attainment of the PM2.5 NAAQS, which are health based standards. Based on this finding in the PM2.5 qualitative hot spot analysis, the

project will not have a significant impact on the PM2.5 air quality in the region. The project will not have any significant impacts on health from PM2.5.

902 It selectively excludes from its analysis of air quality data in the region all the monitors located in close proximity to similarly sized highways that are the monitors that violate the NAAQS for PM2.5;

The selection of the comparison air quality monitor for the ICC hot-spot analysis was consistent with the March 29, 2006 guidance, "Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas." In particular, the ICC PM2.5 hot-spot analysis describes the baseline air quality conditions consistently with the discussion on page 19 of the guidance. "Summarize PM2.5 or PM10 design values from nearby monitors in the nonattainment or maintenance area. Determine if a monitoring station is near the project that will provide data on local air quality conditions, including PM2.5 and PM10 concentrations. Monitors closer to the project location, but still within the nonattainment or maintenance area are preferable to those further away. In the absence of a nearby monitor, other appropriate monitors in the nonattainment or maintenance area can also be used. Interagency consultation would be used to select appropriate monitors for a given project, when monitoring information is necessary for a hot-spot analysis." Interagency consultation was used in the selection of the monitors used, including the Metropolitan Washington Council of Governments, the Maryland Department of Environment, the US Environmental Protection Agency, the Montgomery County Department of Public Works and Transportation, the Prince George's County Department of Public Works and Transportation, the Maryland National Capital Parks and Planning Commission - Montgomery County, and the Maryland National Capital Parks and Planning Commission - Prince George's County.

The Muirkirk monitor site was specifically used in the analysis because it best matched the overall traffic impacts, truck percentages and traffic characteristics as the ICC. This site is located near I-95, US 1 and the Baltimore-Washington Parkway.

903 It fails to evaluate the evidence in the peer-reviewed scientific literature showing that emissions of PM2.5 (measured as black carbon [BC]) from highways carrying as many motor vehicles as are expected to travel the ICC Project in the vicinity of the termini at I-95 and I-370 are likely to add 2.0 to 2.5 µg/m3 to baseline concentrations in the near-roadway atmosphere;

EPA amended the Transportation Conformity rule on March 10, 2006, requiring a hot spot analysis as part of project-level conformity in PM2.5 nonattainment areas for projects of air quality concern. In developing the final rule EPA notes in the preamble (71 FR 12472) that "they completed a thorough review of more than 70 studies representing a cross-section of available studies looking at particle concentrations near roadways."

Based on its review of the wide range of available research studies, EPA promulgated the March 10, 2006 final rule requiring specific PM2.5 hot-spot analysis only for those projects of air quality concern. The interagency partners determined that the ICC met the definition in the Transportation Conformity rule as a project of air quality concern. A PM2.5 hot spot analysis for the ICC was released for public comment on March 28, 2006. The hot spot analysis for the ICC demonstrated that transportation conformity requirements in 40 CFR 92.123 were met. No new violations were created and no existing violations were worsened.

904 It fails to use U.S. Environmental Protection Agency (EPA)-approved modeling tools that are readily available for estimating future emissions from the highway.

A quantitative PM2.5 hot spot analysis is not required for conformity purposes until EPA issues approved quantitative modeling technique and guidance. The preamble to the March 10, 2006 final rule (71 FR 12471) states, "The final rule requires a qualitative PM2.5 hot-spot analysis to be competed for project-level conformity determinations for projects of air quality concern

completed in PM2.5 nonattainment areas on or after April 5, 2006, when PM2.5 conformity requirements apply. Quantitative analyses are not required for these projects at this time since EPA is not requiring quantitative PM2.5 hot-spot analyses under §93.123(b)(4) since quantitative hot-spot modeling techniques and associated EPA modeling guidance still do not exist. Qualitative PM2.5 hot-spot analyses should be completed according to joint EPA and DOT guidance."