



Maryland Green Building Council

Annual Report | 2016



Presented to
Governor Larry Hogan
and the Maryland General Assembly
November 1, 2016



ON THE COVER:

Coppin State University Science and Technology Center

PRODUCTION CREDITS:

Stephen Gilliss, Architect, Maryland Department of General Services

Donna Gardner, Graphic Design, Maryland Department of Human Resources

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor



Ellington E. Churchill, Jr.
Secretary

MARYLAND DEPARTMENT OF GENERAL SERVICES
OFFICE OF THE SECRETARY

November 1, 2016

The Honorable Larry Hogan
Governor of Maryland

The Honorable Thomas V. Mike Miller, Jr.
President of the Senate

The Honorable Michael E. Busch
Speaker of the House of Delegates

The Honorable Members of the General
Assembly of Maryland

RE: Maryland Green Building Council Annual Report

Ladies and Gentlemen:

The Maryland Green Building Council is pleased to submit to you its annual report for 2016.

This has been a year of transition for the Council as three new members from the private sector, including me, were recently appointed by Governor Hogan. I am pleased to say that these appointments have greatly increased the diversity of the Council and for the first time in its history, five of the six private sector members are women.

Several of the Council's departmental designees have also transitioned to other positions or life -phases bringing even more new members to our ranks.

I would like to thank all of the members who have moved on for their time and effort dedicated to the work of the Council. I also welcome the new members who are stepping in to carry on this important work.

As the new Chair, I will lead the Council to work on its primary tasks, one of which will be to update the state's High Performance Green Building Program in conjunction with the industry's transition to LEED v4. I also look forward to the opportunity to explore and recommend ways to promote even greater levels of sustainable design for the state's buildings. I am honored to serve the government and the citizens of Maryland.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Fulya Kocak'.

Fulya Kocak, LEED Fellow
Chair, Maryland Green Building Council





Coppin State SCI-TECH

TABLE OF CONTENTS

MARYLAND GREEN BUILDING COUNCIL MEMBERSHIP.....	2
INTRODUCTION.....	4
I. COUNCIL ACTIVITIES	6
II. LEGISLATIVE REPORT: Maryland General Assembly 2016 Session	8
III. STATE HIGH PERFORMANCE GREEN BUILDING PROGRAM UPDATE.....	9
IV. MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT	23



*Department of Juvenile Services Cheltenham Youth Detention Center
Prince George's County, Maryland*



MARYLAND GREEN BUILDING COUNCIL MEMBERSHIP

Appointees of Governor Larry Hogan

*Fulya Kocak, Chair, LEED Fellow, USGBC
Faculty, Well AP
National Association of Real Estate
Investment Trusts
Vice President, Environmental, Social &
Governance (ESG) Issues
1875 I St., N.W. Suite 600
Washington, D.C. 20006
202-739-9419 (direct dial)
202-739-9400 (main line)
fkocak@nareit.com*

*Tom Liebel, FAIA, LEED Fellow
Marks, Thomas Architects
1414 Key Highway, 2nd Floor
Baltimore, MD 21230
410-539-4300
TomL@marks-thomas.com*

*Lisa M. Ferretto, AIA, LEED AP BD+C
Hord Coplan Macht, Inc.
Senior Associate, Sustainability Coordinator
750 E. Pratt St. Suite 1100
Baltimore, MD 21202
443-451-2345 direct line
410-837-7311 main line
lferretto@hcm2.com*

*Christine Varney, P.E., LEED AP
The Sheward Partnership
Sustainability Projects Manager
1016 Morton Street
Baltimore, MD 21201
410-850-5425
ccv@tsparch.com*

*Nakita Reed, AIA, LEED AP BD+C, GGP
Principal, Encore Sustainable Design
2822 Solomons Island Road #201
Edgewater, MD 21037
301-965-0096
Nakita@EncoreSDesign.com*

*Cherise Y. Seals
Constellation Energy
Business Development Manager,
Distributed Energy
1310 Point Street, 13th floor
Baltimore, MD 21231
410-591-5714
cherise.seals@constellation.com*

Department Members/Designees

Department of General Services

*Ellington E. Churchill, Jr.
Secretary
301 W. Preston Street Room 1401
Baltimore, MD 21201
410-767-4960
ellington.churchill@maryland.gov*

*Stephen Gilliss, R.A.
DGS staff
410-767-4675
stephen.gilliss@maryland.gov*

Department of Budget and Management

*Susan Gore
Budget Analyst II
Office of Capital Budgeting
301 W. Preston Street, Suite 1209
Baltimore, MD 21201
410-767-4522
susan.gore@maryland.gov*



Maryland Energy Administration

Samuel Beirne

Energy Program Manager
Maryland Energy Administration
1800 Washington Blvd, Suite 755
Baltimore MD, 21230
410-537-4090
Samuel.beirne@maryland.gov

Maryland Department of Planning

Anne B. Raines, R.A.

Capital Grants & Loans Administrator
Maryland Historical Trust
100 Community Place
Crownsville MD 21032
410-514-7634 phone
anne.raines@maryland.gov

Maryland Department of Transportation

Laura Rogers

Environmental Program Manager
Office of Environment
7201 Corporate Center Drive
Hanover, MD 21076
410-865-1026
Lrogers1@mdot.state.md.us

**Department of Housing and
Community Development**

Ed Landon

Maryland Codes Administration
Department of Housing and Community
Development
7800 Harkins Road
Lanham, MD 20706
301-429-7650
ed.landon@maryland.gov

Department of Natural Resources

Currently no designee

Tawes State Office Building
580 Taylor Avenue
Annapolis, MD 21401

**Maryland Department of the
Environment**

Laura Armstrong

Pollution Prevention Coordinator
Montgomery Park Business Center
1800 Washington Boulevard
Baltimore, MD 21230-1718
410-537-4119
laura.armstrong@maryland.gov

University System of Maryland

Mark Beck

Director of Capital Planning
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783
301-445-1984
mbeck@usmd.edu

**Interagency Committee on School
Construction**

Arabia Davis

Assistant CIP Programs Manager
Public School Construction Program
200 West Baltimore Street
Baltimore, Maryland 21201
arabia.davis1@maryland.gov
410-767-2153 (office)



INTRODUCTION

The 2016 Annual Report of the Maryland Green Building Council (the Council) is written to comply with Chapter 116 of the 2007 Laws of Maryland, which directs the Council to report annually to the Governor and the General Assembly on the implementation and progress of the State High Performance Green Building Program. The plan for implementation of this program was submitted to executive and legislative leaders of the State of Maryland in January 2008 and was enacted into law as Chapter 124 of the 2008 Laws of Maryland. The primary purpose of this report is to provide a progress report, including brief updates on the 2016 green building related legislative efforts, activities of the Council for 2016 and updates on buildings and building projects complying with the High Performance Buildings Act as well as other High Performance Buildings in state service.

This year the Council's appointed membership underwent major changes as three new members were appointed to fill one vacant position and to replace members Prescott Gaylord and Anja Caldwell. Prescott served as a regular member before being elevated to Chair in 2014 and resigned from the Council in the spring of 2016 to pursue exciting opportunities in Singapore. Anja has served on the Council as its green schools expert since its founding in 2007 and regularly shared advanced green concepts from her native Germany. The Council would like to thank both Prescott and Anja for their work and efforts and wishes them well in their future endeavors. To fill the vacant positions, three women were nominated and subsequently appointed to the Council in the late summer. The Council welcomes these accomplished and passionate professionals to its ranks.

- The Council's new Chair, Fulya Kocak, has Master's degrees in architecture and architectural engineering. She has worked in the construction field in various capacities including Sustainability Director for a large regional contractor. She is currently serving as Vice President for Environmental, Social & Governance Issues for the National Association of Real Estate Investment Trusts. Fulya is also a LEED Fellow, USGBC faculty, a WELL Accredited Professional and recently authored the LEED AP BD+C Exam Preparation Guide for LEED V4.
- Nakita Reed, AIA, LEED AP BD+C, GGP, is a resident of Fort Washington, Maryland, and principal of Encore Sustainable Design, LLC, a design firm specializing in combining historic preservation and sustainable design. Nakita has earned her Master of Architecture degree as well as her Master of Science degree in Historic Preservation from the University of Pennsylvania.
- Cherise Y. Seals, MBA, is a resident of Woodstock, Maryland and serves as Business Development Manager for Constellation Energy Group where she manages development opportunities and energy strategies to assist customers in managing energy costs with core competencies in energy efficiency, conservation, project management and renewable energy. Cherise also has a Bachelor of Science degree in Electrical Engineering.



In additions to the changes in the ranks of the appointed Council members, several state agency designee members moved on this year. David St. Jean (MEA), David Lever (IAC), Meg Andrews (MDOT), Caroline Varney-Alvarado (DHCD) and Olivia Campbell and Helen Stewart (DNR) have moved on to other positions, responsibilities or retirement. The Council thanks them all for their valuable service over the years. They have been replaced with Samuel Bierne (MEA), Arabia Davis (IAC), Laura Rogers (MDOT) and Ed Landon (DHCD) respectively. A designee has not been provided by DNR at the time of this writing.

In spite of all of the changes in 2016, a busy schedule of meetings rounded out the Council's calendar for the year. For more details, see the Council Activities section which follows.

As in past years, this report serves to document and track the progress for most of the buildings which are required to comply with Maryland High Performance Building laws. The report also continues to track other state related projects which for certain reasons are not required to comply but have, nevertheless, been inspired to be developed as green buildings. The report also includes a list of many of the K-12 schools around the state which have been developed as High Performance Schools.



Enoch Pratt Free Library Central Branch Renovation, Baltimore, Maryland



I. COUNCIL ACTIVITIES

The Council held two meetings in 2015 after the release of the Annual Report and seven meetings to date in 2016. The Council's public meetings are typically held on the fourth Wednesday of each month, however, meetings were not held in January, May and August of 2016. The highlights of these meetings are described below. More detail is available in recent meeting summaries which can be found on the Department of General Services website under Green Building or in archived summaries which are available by request from the Council.

The October 2015 meeting of the Council focused on strategic planning concepts for fulfillment of the Council's recently developed vision statement.

The December 2015 meeting included a presentation by Barry Powell of the DGS Office of Energy Performance and Conservation on the many functions of this office. Energy performance contracts, fuel purchasing and an in depth look at the state's energy use database were among the topics presented and discussed. Elliott Campbell of the Department of Natural Resources appeared before the Council representing the Maryland Sustainable Growth Commission's Sustainable Forestry Subcommittee. The Council members were asked for their ideas to promote the use of Maryland timber in construction in the state.

In February 2016, the Council met at the LEED Gold certified headquarters of the Maryland Department of Transportation (MDOT) in Hanover, Maryland. The first topic of discussion included pending approval of the use of the International Green Construction Code (IgCC) in Montgomery County as well as issues Baltimore City has had with the IgCC since requiring it for all new buildings in the city over 10,000 gross square feet. The Council also discussed a possible review of DGS green leasing requirements, strategic planning ideas and current environmental bills being considered in the 2016 Legislative session. Chair Prescott Gaylord also announced that he would be leaving the Council for a new opportunity overseas with the March meeting being his last.

The March meeting at MDOT's headquarters included legislative updates and continued strategic planning including proposing a net zero building pilot project and recommendations for optimizing the state's existing building stock.

April's meeting was held in the Lowe House Office Building in Annapolis with Council member Tom Liebel serving as interim Chair. The Council was informed that nominations for Chair and two other vacant positions had been forwarded to the Governor's Appointments Secretary. In addition to a final legislative review and wrap-up, a committee was established for a possible future study of DGS green leasing standards. The meeting wrapped up with a discussion on enhancing building performance through the green building program rather than through legislation.

In June, the Council met at DNR's Tawes complex in Annapolis. James Keel, Acting Chief of DGS' Maintenance and Engineering Division, provided a presentation on a pilot project to assess and prioritize total building system and equipment updates for several state buildings. Jim asked the Council if it had any recommendations for the process. The Council also reviewed the first two waiver requests in its history. The first was for specific lighting requirements of the Council's



High Performance Green Building Program which are not practicable for the Public Safety Facility at Frostburg State University. The Council recommended the waiver. The second was for IgCC sound transmission requirements in a University of Maryland project. This second review was more of an exercise in that this building is not fully state funded and is therefore not required to comply with the green building regulations.

The July Council meeting was held at the State Center Office Complex in Baltimore. Wyatt Shiflett of the Maryland Clean Energy Center (MCEC) gave a presentation on this quasi-government organization which advances the adoption of clean energy, energy efficiency products, services and technologies. MCEC leverages private capital to help homeowners, businesses, and government entities reduce energy costs. Programs of the MCEC include Property Assessed Clean Energy loans (PACE) and the MarylandSAVES Green Community Program which provides subsidized financing to private commercial and industrial, non-profit institutional and local government borrowers for energy efficiency, renewable energy, alternative fueling, and other qualified conservation purposes across the State.

September brought the Council meeting back to the Tawes Building and signaled a new start as three new public sector appointees met the Council for the first time. As a way of becoming familiar with the Council, new Chair Fulya Kocak had all of the attendees give extended introductions of themselves along with their backgrounds and interests in the green building field. This was also the first meeting for new public members Nakita Reed and Cherise Seals. In addition to these public members, new designees Ed Landon (DHCD) and Arabia Davis (MD Department of Education IAC) attended their first meeting. DGS staff Stephen Gilliss gave a first-hand presentation of the history of the Council going back to its early days in 2001. Ms. Kocak completed the meeting with an exercise which surveyed Council members on their ideas for improving the energy and efficiency of state owned buildings.



Youth Detention Center at BCDC, Baltimore, Maryland



II. LEGISLATIVE REPORT:

Maryland General Assembly 2016 Session

The Maryland Green Building Council acts in an advisory capacity to the Governor and members of the General Assembly by reviewing legislation that pertains to high performance green building issues and provides assistance to policy makers when the General Assembly considers relevant legislation.

The Council as presently constituted views its function as one of providing current and well-researched information and advice on green building issues to those who are responsible for enacting laws and regulations in this area.

For 2016 there were no major legislative proposals *directly* related to state owned green buildings. However, there were a number of environment and building related bills the Council watched with interest but did not take a position on. These included:

SB 168-Installation of Electric Vehicle Recharging Equipment

HB 132-Pollinator Habitat Plans

SB 323 / House Bill 610-Greenhouse Gas Emissions Reduction Act, Reauthorization

HB 362-Veterans, Study for Photovoltaic System at Charlotte Hall Veterans Home

SB 921 / HB1106-Clean Energy Jobs Act, Renewable Energy Standards Revisions

SB 936 / HB 1145-Clean Energy Incentive Act

SB 726 / HB 705-MD Clean Energy Center, Task Force

HB 1276-Electric Universal Service Program, Solar Procurement Study

SB 1014-MD Clean Energy Jobs Act of 2016

HB 1472-Fire Safety Construction Act of 2016

SB 398 / HB 820-Reducing Environmental Degradation for the Underserved Through Community Engagement

HB 1130-Prince George's County-Authority to Impose Fees for Use of Disposable Bags

SB 57 / HB 31-Community Clean-up and Greening Act of 2016

SB 367 / HB 862-MD Redeemable Beverage Container Recycling Refund & Litter Reduction Act



III. STATE HIGH PERFORMANCE GREEN BUILDING PROGRAM UPDATE

The number of certified state owned High Performance Green Buildings continues to grow as more projects are completed. The High Performance Green Building spreadsheets have been updated as much as the available information allows. Of the 47 projects required to comply with the High Performance Building Act as fully state funded buildings, 21 have been completed while 10 are currently under construction and 16 are in various stages of planning and design. The 21 completed buildings have achieved or are anticipated to achieve 8 Silver ratings, 12 Gold ratings and 1 Platinum rating.

Of the 58 projects which are exempt but have been developed as high performance buildings, 43 are complete, 8 are under construction and 7 are in the planning and design phase. The completed buildings represent 1 LEED Certified, 26 which were designed to or achieved LEED Silver and 16 LEED Gold ratings. One new building included in this year's count is the University of Maryland's Shady Side Garage building which is anticipated to achieve the Green Garage Certification from Parksmart (formerly the Green Parking Council). Most of these projects are exempt only because they receive additional funding from sources outside of the state's capital budget.

For Fiscal Year 2017, the capital budget includes eight new projects qualified to be designed under the High Performance Green Building Program. These projects range in size from 10,500 gross square feet (gsf) to over 120,000 gsf and fulfill a variety of needs for the state.

- The Salisbury Animal Health Laboratory Replacement is a new project for the Maryland Department of Agriculture. The 28,592 gsf (gross square feet) lab will provide critical diagnostic and investigatory services that identify and contain various threats. This new laboratory, to be located in Wicomico County on State-owned property, will be constructed next to the current facility, which will be demolished after the new lab is completed. It will meet modern biosafety and accreditation requirements for laboratories and will provide an efficient space for staff with the ability to accommodate future growth. The building is expected to cost \$15,275,000 and has an anticipated completion date of August 1, 2018.
- The Maryland Department of Planning has received funding for improvements to the Patterson Center at the Jefferson Patterson Park and Museum in Calvert County. The funds will be used to design renovations to three historic buildings, totaling 11,554 gsf. Buildings to be renovated include the Main House, Pool House, and Garage. When renovations are complete, the Patterson Center will include a historic house museum, office space, and space for fundraising events and other public uses. These renovations will ensure continued access to the property while providing an opportunity for the site to become more self-sustaining. Construction costs for the renovations are estimated at \$6,071,000.



- The University of Maryland Eastern Shore has been funded to design a new building for Phase I of the School of Pharmacy and Health professions. The building will house the School of Pharmacy's Doctor of Pharmacy and Doctor of Pharmaceutical Sciences programs. Other proposed occupants of the 120,000 gross square foot building include the Graduate Physician Assistants program, and the Exercise Science Program (Kinesiology) program. The building construction is currently estimated to cost \$70,900,000.
- Frostburg State University will begin design on the 100,000 gross square foot Education Professions and Health Sciences Center. The new facility will serve the College of Education, the Exercise and Sports Science program and the Nursing Program and will include modern classrooms, laboratories, offices, and support space. The construction estimate for this new facility is \$71,387,000.
- The Maryland State Police have received funding to design a new barrack, garage, and radio tower to replace Barrack "C" in Cumberland. There are now 50 sworn and 15 civilian personnel assigned to the barrack. The new barrack is planned to be 12,185 gross square feet to be constructed at a cost of \$8,865,000.
- The New Academic Building and Auditorium at St. Mary's College of Maryland, a 52,289 gsf building, will be designed to provide space for the College's Music Department and Educational Studies Department and will include a learning commons study space and a 700-seat auditorium. Construction is expected to cost \$64,186,000.
- The Department of Public Safety and Corrections will design a new perimeter security system, new gatehouse with a central control center, four new guard towers and a new rear sally port tower at the Maryland Correctional Institution in Hagerstown (MCI-H). The project will also renovate and expand the visitor's center by 19,942 gsf. The total construction cost of the project is expected to be \$26,408,000.
- The New Science Facility at Towson University is being planned to accommodate the College of Science and Mathematics. The 316,000 gsf building will replace the inadequate and insufficient space in Smith Hall where the Jess and Mildred Fisher College of Science and Mathematics is currently housed. The new building will provide the highest level of integration of teaching and research space in a flexible layout which will support the projected enrollment growth of the College. The project is anticipated to cost \$160,800,000 in construction.



STATE PROJECTS DEVELOPED IN COMPLIANCE WITH THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING/ IgCC	TOTAL GSF	CONST COST	OPEN-ED	INFORMATION/REMARKS
Completed	St.Mary's College	Goodpaster Hall	DGS for SMC	Silver	52,000		2007	Classroom and laboratory building. Original green building pilot project
Completed	Gunpowder Falls State Park	Hammerman Beach Services Building	DGS for DNR	Silver	7,400		2007	Shower and bathing facilities, park offices and concessions. Original green building pilot project.
Completed	University of Maryland, Baltimore	Pharmacy Hall Addition	USM	Gold	128,591	\$81,000,000	2010	http://phaddition.blogspot.com/
Completed	Salisbury University	Perdue School of Business	USM	Gold	113,000	\$44,900,000	2011	http://www.salisbury.edu/perdue/
Completed	Towson University	Liberal Arts Complex	USM	Gold	253,000	\$147,500,000	07/2011	Construct a new building in two phases (the first, 100,000 GSF; the second 153,000 GSF) to consolidate and expand the units of the College of Liberal Arts that are now dispersed among three other buildings. http://mlis.state.md.us/2009RS/budget_docs/All/Capital/RB24A_-_Towson_Univ_New_College_of_Liberal_Arts_Complex.pdf
Completed	North Branch Correctional Facility	MCE Upholstery and Reupholstery Plant	DPSCS	Silver	20,000	\$4,400,000	11/ 2011	Construct a new Maryland Correctional Enterprises (MCE) building at the North Branch Correctional Institution (NBCI). The project will house an Upholstery and Re-Upholstery Plant with 100 inmate facility. NBCI currently does not have an MCE facility. Bushey Feight Morin Associates was the Architect.
Completed	Annapolis Campus	Lowe House Office Building	DGS	Gold	83,900	\$6,497,000	12/1/2011	States' first green renovation project includes upgrading HVAC and electrical systems and integration with recent new addition.
Completed	Western Correctional Institute	Vocational Education Building	DPSCS	Silver	25,932	\$14,749,000	3/2012	Classrooms, laboratories, computer labs, office space, to retrain inmates. ATI Inc. was the Architect
Completed	Morgan State University	Center for the Built Environment and Infrastructure Studies	Morgan State University	Gold	131,314	\$69,593,300	08/2012	Construct a new 68,009 NASF/126,129 GSF Center for the Built Environment and Infrastructure Studies. The Center houses the Institute for Architecture and Planning, the Department of Civil Engineering, and the Institute for Transportation Studies. For more information see http://www.morgan.edu/School_of_Architecture_and_Planning/Center_for_the_Built_Environment_and_Infrastructure_Studies_(CBEIS).html Green features include extensive use of photovoltaic panels and solar hot water, passive cooling, operable interconnected windows, bicycle facilities, daylighting, rain harvesting, green cleaning, educational green screen, pervious parking lot.
Completed	University of Maryland, Baltimore County	Performing Arts and Humanities Building, Phase I	USM	Silver (est)	91,100	\$84,200,000	2012	http://www.umbc.edu/pahb/



STATE PROJECTS DEVELOPED IN COMPLIANCE WITH THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING/ IgCC	TOTAL GSF	CONST COST	OPEN-ED	INFORMATION/REMARKS
Completed	University of Baltimore	John and Frances Angelos Law Center	USM	Platinum	190,000	\$114,300,000	4/2013	The UB School of Law is the 6th largest public law school in the country and possibly the greenest. The new building achieved LEED Platinum status with features such as revolutionary heating and cooling using an active slab system which keeps the structure temperature steady reducing the need for heating and cooling. The building also features rainwater harvesting, a green roof and automated windows. More info at http://www.ubalt.edu/template.cfm?page=2571
Completed	University of Maryland College Park	Physical Sciences Complex Phase 1	USM	Gold	160,246	\$118,474,123	2013	http://www.hdrinc.com/portfolio/physical-sciences-complex http://oxblue.com/open/gilbane/umcp
Completed	Frostburg State University	Center for Communications and Information Technology	USM	Gold	127,000	\$55,315,000	2014	http://www.frostburg.edu/budget/budget-resources/capital-budget-projects/
Completed	Deer's Head Hospital Center, Salisbury MD.	Kidney Dialysis Addition and Renovation	DGS for DHMH	Silver (est)	7,800 gsf new	\$4,760,000	04/01/14	Add new dialysis wing to increase the number and size of the existing dialysis stations.
Completed	Department of Health and Mental Hygiene	State Public Health Laboratory	MEDCO	Gold expected	196,000	\$165,000,000	4/19/2014	Replaces outdated labs located at State Center. Planned for six lab divisions, support services and administration
Completed	Cheltenham Youth Detention Center	Cheltenham Youth Facility, Prince George's County	DGS for DJS	Silver (est)	99,000	\$51,309,000	7/28/2016	Construct a new 72 bed juvenile detention center to replace the existing outdated facility. New facility will provide sleeping, dining, education, training, recreation, counseling, somatic and mental health services and visitation.
Completed	University of Maryland Eastern Shore	Aviation and Engineering Sciences Bldg	USM	Gold	163,000	\$78,116,000	2015	Construct a replacement facility for the existing Aviation Science and Engineering Building at the University of Maryland, Eastern Shore. The new facility will house the Aviation Science and Engineering program, the Departments of Computer Science, Mathematics, and Technology.
Completed	University of Maryland Center for Environmental Science - Chesapeake Biological Laboratory	Truitt Lab Replacement	USM	Silver (est)	20,764	\$17,314,000	2016	Demolish the existing RV Truitt Building and construct a new 2-story research laboratory building with modular wet laboratories with running fresh water and seawater, teaching laboratories, culture labs, faculty offices, conference room and seawater processing room/pumphouse.
Completed	Coppin State University	New Science and Technology Center	USM	Gold (est)	134,882	\$81,748,000	2015	Construct a new academic facility to house all science-related disciplines, including the Departments of Natural Sciences, Mathematics and Computer Science, and Management Science and Economics. Facility will contain faculty and staff offices, computerized laboratories, networking hardware and software systems, classrooms, class laboratories, conference areas, meeting rooms, and support areas. The facility will also include a satellite central utilities building. http://www.coppin.edu/info/200871/science_and_technology_center



STATE PROJECTS DEVELOPED IN COMPLIANCE WITH THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING/ IgCC	TOTAL GSF	CONST COST	OPEN-ED	INFORMATION/REMARKS
Completed	Coppin State University	New Science and Technology Center	USM	Gold (est)	134,882	\$81,748,000	2015	Construct a new academic facility to house all science-related disciplines, including the Departments of Natural Sciences, Mathematics and Computer Science, and Management Science and Economics. Facility will contain faculty and staff offices, computerized laboratories, networking hardware and software systems, classrooms, class laboratories, conference areas, meeting rooms, and support areas. The facility will also include a satellite central utilities building. http://www.coppin.edu/info/200871/science_and_technology_center
Substantially Complete	Morgan State University	Business Management Complex at Northwood Shopping Center	MSU	Gold (est)	138,000	\$79,663,000	2015	Construct a new School of Business Complex at the Northwood Shopping Center. The proposed building will house the School of Business and Management which includes the Hospitality Management program. Features include green roof, daylighting, green cleaning, energy and water conservation, operable windows, bike facilities, reserved parking for efficient vehicles.
Construction	Maryland State Department of Education	Western Maryland Regional Library		Silver (est)	91,000	\$24,500,000	no schedule provided	Renovate and expand the W MD Regional Library that serves Garrett, Allegany and Washington Counties
Construction	St. Mary's College	Anne Arundel Hall	SMCM	Gold (est) Silver (min)	39,119	\$36,396,000	Completion Spring 2016	LEED features include 20kv photovoltaic array, heating and AC via geothermal heatpumps, incorporates sinker cypress and other green building products.
Construction (95% complete)	Harriet Tubman Underground Railroad State Park	Harriet Tubman Underground Railroad Interpretive Center	DGS for DNR	Silver (est)	15,000	\$14,600,000 + (\$1.7M for exhibits)	March 2017 est	Exhibit space, orientation film theater, library, gift shop and multipurpose meeting space. Memorial garden, trails, picnic pavilion and information kiosk.
Construction (60% complete)	Baltimore City Detention Center	Baltimore Youth Detention Center	DPSCS	Gold (est) Preliminary Design Review	60,342	\$37,383,000	2/2017 (est)	Construct Youth Detention Center in Baltimore City Detention Center, to separate youth detainee completely from Adult population. The existing Baltimore Pre-Release Unit is demolished to construct a new facility in its place and a portion of the adjacent Occupational Skills Training Center is renovated for new Youth Detention Center. The upgraded and improved facility will include detainee housing, educational services, administration, program services (counseling, drug treatment, etc.), visitation, medical, recreation, and food services areas for 60 youth detainees.
Construction	Bowie State University	Natural Sciences, Mathematics and Nursing Center	USM	Gold (est)	149,930	\$84,342,000	2017	This building replaces the Crawford Science Building and addresses numerous facility problems such as insufficient class laboratories and support space, lack of specialized class laboratories, insufficient office space and inadequate building systems. The building will be located at the former site of the Wiseman Center and includes the demolition of the existing Crawford Bldg.
Construction (30% Complete)	University of Maryland, Baltimore	Health Sciences Facility III	USM	Gold (est)	435,000	\$305,000,000	10/1/2017	Construct a new research building for the Schools of Medicine, Pharmacy and Dentistry. The facility will be located on the site presently occupied by Hayden-Harris Hall at 666 West Baltimore Street http://www.budget.umaryland.edu/capitalbudget/health_sciences_facility.html



STATE PROJECTS DEVELOPED IN COMPLIANCE WITH THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING/ IgCC	TOTAL GSF	CONST COST	OPEN-ED	INFORMATION/REMARKS
Bidding/ Construction	Board of Public Works - Judiciary	Catonsville District Court	DGS	Silver	125,000	\$61,000,000	2018	The building will house eight new courtrooms in Catonsville, Baltimore County. This will be the State's first courthouse built under the high performance building act.
Construction (10% complete)	State Library Resource Center	Central Branch Enoch Pratt Free Library System	DGS for EPFLS	Silver (est)	290,000	\$85,570,000	05/ 2019	Alteration work to modernize building systems, accommodate new programs and improve accessibility; and renovation work to preserve historic architecture.
Construction	Morgan State University	Jenkins Behavioral Sciences Center	MSU	Gold (goal)	141,000	\$79,404,000	2017	Construct a new building to house the Behavioral and Social Sciences. The proposed facility will replace the existing Jenkins Behavioral and Social Sciences Building.
Construction	University of Maryland Shady Grove	Biomedical Education Facility	USM	Silver (est)	220,000	\$164,000,000	2019	Design and construct a Biomedical Sciences and Engineering Education Facility. Building will provide specialized laboratory space to support new academic programs such as Engineering and Dentistry, additional space for Pharmacy, Nursing, classrooms, laboratories, clinical training, faculty and staff offices and academic support space is also being provided.
Design	Frostburg State University	Public Safety Facility	USM	Silver (min)	10,745	\$3,105,000	2017	New 10,735 GSF facility to house FSU's Police Department which will include spaces for public operations such as communications, report writing, and holding cells. It also will include specialized storage for evidence, recovered property, weapons, sally port and records. Support spaces include network server, locker and shower rooms, fitness room, break room and kitchen.
Design Development	Department of Juvenile Services	New Female Detention Center	DJS	Silver (est)	92,803	\$51,835,000	12/1/2018	This 48 bed facility, to be located on the grounds of the former O'Farrell Center in Carroll County will serve female youth pending court disposition or post-adjudication placement.
Design	St. Mary's College	New Academic Building and Auditorium	SMCM	TBD	52,289	\$64,186,000	7/15/2022	Construct a new 30,856 NASF/52,289 GSF academic building to provide space for the College's Music department, Educational Studies department, a learning commons study space, and a 700-seat auditorium.
Design	Towson University	New Science Facility	USM	Silver (min)	316,000	\$187,819,000	2020	Construct new science facility to align all of the departments and programs of the Fisher College of Science and Mathematics into two adjacent buildings.
Design - Pending	Southern Maryland	Southern Maryland Higher Education Center	SMHEC/ USM	Silver (est)	TBD	\$62,050,000	2020	Construct a third academic building on the Southern Maryland Higher Education Center campus to address space deficiencies due to increased enrollment and the expansion of programs offered at the facility. Partners in the development are the SMHEC, the University System of Maryland and the Southern Maryland Navy Alliance.
Design-Pending	MD Department of Agriculture	Salisbury Animal Health Laboratory	DGS	Silver (min)	28,592	\$15,275,000	8/1/2018	The lab provides critical diagnostic and investigatory services that identify and contain various threats. This new laboratory will be constructed next to the current facility in Wicomico County on State-owned property, which will be demolished after the new lab is completed. It will meet modern biosafety and accreditation requirements for laboratories and will provide an efficient space for staff with the ability to accommodate growth.



STATE PROJECTS DEVELOPED IN COMPLIANCE WITH THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING/ IgCC	TOTAL GSF	CONST COST	OPEN-ED	INFORMATION/REMARKS
Design-Pending	MD Correctional Institute - Hagerstown	Perimeter security Upgrades	DPSCS	Silver (min)	29,727	\$26,408,000	4/15/2020	Design and construct a new perimeter security system, new gatehouse with a central control center, four new guard towers, and a new rear sally port tower and renovate/expand the visitor's registration by 12,628 NSF/19,942 GSF for a new visiting center at the Maryland Correctional Institution-Hagerstown (MCI-H).
Design-Pending	Cumberland MD	New Barrack C and Garage	DGS	TBD	12,185	\$8,865,000	1/1/2019	Construct a barrack, garage, and radio tower to replace Barrack "C" in Cumberland. There are now 50 sworn and 15 civilian personnel assigned to the barrack.
Design-Pending	Frostburg State University	Education & Health Sciences Center	USM	Silver (est)	100,000	\$66,000,000	2021	Design and construct an Education & Health Sciences Center to house the College of Education, College of Liberal Arts and Science's Professional health programs, several pre-professional health programs, the Center for Rural Health and student health and wellness services.
Design-Pending	University of Maryland Eastern Shore	School of Pharmacy & Allied Health	USM	Silver (est)	120,000	\$78,400,000	2021	Construct a new building for the School of Pharmacy and Allied Health Professions. The building will house the School of Pharmacy's Doctor of Pharmacy and Doctor of Pharmaceutical Sciences program.
Design - Pending	Jefferson Patterson Park, St. Leonard MD	Jefferson Patterson Park and Museum	DGS	TBD	10,500	\$6,071,000	9/1/2020	Construct renovations to three historic buildings, totaling 10,416 NSF/11,554 GSF, at the Patterson Center at the Jefferson Patterson Park and Museum in Calvert County. Buildings to be renovated include the Main House, Pool House, and Garage. When renovations are complete, the Patterson Center will include a historic house museum, office space, and space for fundraising events and other public uses. These renovations will ensure continued access to the property while providing an opportunity for the site to become more self-sustaining.
Planning	Board of Public Works	Annapolis Post Office renovation and addition	DGS	Silver	22,000	\$13,470,000	no schedule provided	This project will renovate the existing Annapolis Post Office Building to provide office space for State agencies currently leasing space.
Planning	Springfield Hospital Center	Secure Evaluation and Therapeutic Treatment Center (SETT)	DGS for DHMH	Silver (min)	35,000	TBD		Construct a 32 bed facility to house individuals with development disabilities and forensic involvement.
Planning	University of Maryland Center for Environmental Science - Chesapeake Biological Laboratory	Chesapeake Collaborative Building	USM	Silver (est)	12,600	\$14,200,000	2020	This 12,600 GSF building will provide library and computer services to the CBL faculty and graduate students and serve as an information resource and database of environmental issues for other local research institutions, museums, and the general community.
Planning	Morgan State University	New Student Services Support Building	MSU	Silver (min)	138,220	\$80,962,000		Construct a new 138,220 GSF/ 71,595 NSF building to house the student support services functions of the University on the site of the old Soper Library.
Planning	University of Maryland Baltimore County	Interdisciplinary Life Sciences Building	USM	Silver (min)	131,000	\$123,452,000		Construct a new building for interdisciplinary STEM learning and life sciences research. The facility will include active learning classrooms, multi-disciplinary teaching labs, and technology-equipped seminar rooms that will allow course redesign to enhance student learning and success, leading to increased degree production in high need areas of STEM programs.



Earl G. Graves School of Business Management, Morgan State University, Baltimore, Maryland

Morgan Business Center





STATE BUILDING PROJECTS DEVELOPED INDEPENDENT OF THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING	TOTAL GSF	PROJECT COST	OPENED	INFORMATION/REMARKS
Completed	MDOT Headquarters Anne Arundel County	Harry R. Hughes Building	MDOT	Gold	22,000	unavailable	2002	Houses the Office of the Secretary and several divisions of MDOT. Promotes Transit-Oriented-Development. Uses 48% less energy than the ASHRAE baseline. Incorporates rapidly renewable, recycled content, post-industrial, post-consumer materials. Water conservation is achieved through the use of waterless urinals and sensors and aerators on showers and faucets. A state-of-the-art storm-water management system was utilized to create zero net increase in storm-water runoff; recharges wetlands which are permanently preserved by a conservation easement.
Completed	Coppin State University	Physical Education Complex	USM	Silver	246,359	\$127,663,000	2010	The Physical Education building received a LEED silver rating. The PEC has 2,040 roof-mounted crystalline photovoltaic solar panels, that supply more than 600,000 kilowatt-hours of electricity annually. http://www.coppin.edu/capitalplanning/PEC.aspx
Completed	Frostburg State University	Lane Student Center Renovation & Expansion	USM	Gold	76,000	\$19,285,000	2011	http://www.frostburg.edu/budget/lane-center-renovation/
Completed	Salisbury University	Pocomoke Hall Renovation	USM	Gold	22,000	\$6,941,026	2010	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Salisbury University	Manokin Hall Renovation	USM	Gold	22,000	\$5,837,504	2010	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Salisbury University	Wicomico Hall Renovation	USM	Gold	22,000	\$6,878,205	2011	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Salisbury University	Nanticoke Hall Renovation	USM	Gold	36,000	\$11,094,364	2011	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Towson University	West Village Housing	USM	Silver	159,000	\$35,000,000	2011	http://www.towson.edu/adminfinance/facilities/archengconst/campusconstruction/AECCurrent-Projects2_000.asp
Completed	Towson University	West Village Commons	USM	Silver	85,000	\$41,000,000	2011	http://www.towson.edu/adminfinance/facilities/archengconst/campusconstruction/AECCurrent-Projects2_000.asp
Completed	Universities at Shady Grove	Camille Kendall Academic Center	USM	Gold	195,000	\$54,586,521	2007	http://www.shadygrove.umd.edu/about/campus-sustainability/sgiii/green-features
Completed	University of Maryland Eastern Shore	Somerset Hall Renovation for School of Pharmacy	USM	Gold	22,000	\$6,800,000	2010	http://www.delmarvanow.com/article/20110731/BUSINESS/107310318/UMES-hall-goes-green
Completed	University of Maryland University College	Marriott Inn and Conference Center	USM	Certified	110,000	\$21,000,000	2004	http://www.marriott.com/hotels/travel/wasum-the-marriott-inn-and-conference-center-university-of-maryland-university-college/
Completed	University of Maryland University College	Center of Academic Operations (Largo)	USM	Gold	236,000	\$60,000,000	2009	http://www.umuc.edu/visitors/news/pressreleases/news321.cfm
Completed	Bowie State University	Wiseman Student Center	USM	Gold	95,685	\$34,440,000	2013	http://www.bowiestate.edu/campus-life/wiseman-student-center/
Completed	Salisbury University	Teacher Education Technology Center	USM	Silver	165,000	\$62,100,000	2008	http://www.salisbury.edu/newsevents/fullstoryview.asp?id=3691



STATE BUILDING PROJECTS DEVELOPED INDEPENDENT OF THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING	TOTAL GSF	PROJECT COST	OPENED	INFORMATION/REMARKS
Completed	Salisbury University	Seagull Square Development	USM	Silver	285,000	\$40,862,109	2011	http://www.salisbury.edu/fpcp/sgs/factsheet.html
Completed	Towson University	Tiger Arena	USM	Silver (est)	110,000	\$50,000,000	2012	http://www.tigerarena.com/TigerArena.dbml?DB_OEM_ID=21300
Completed	University of Maryland, Baltimore County	Research Park Building	USM	Silver	110,400	\$25,000,000	2008	http://www.bwtechumbc.com/pdf/5520_fact-sheet_rev09.pdf
Completed	University of Maryland, College Park	M Square	USM	Silver	120,000	\$23,000,000	2007	http://www.newsdesk.umd.edu/uniini/release.cfm?articleID=1661
Completed	University of Maryland, College Park	M Square	USM	Silver	120,000	\$29,000,000	2009	http://www.newsdesk.umd.edu/uniini/release.cfm?articleID=1661
Completed	University of Maryland, College Park	John S. & James L. Knight Hall	USM	Gold	53,400	\$24,800,000	2010	http://www.merrill.umd.edu/deadline/index.php/2010/08/27/knight-hall-certified-as-first-green-building-at-university-of-maryland-college-park/
Completed	University of Maryland, College Park	Denton Dining Hall	USM	Silver	43,859	\$17,384,922	2010	http://www.sustainability.umd.edu/content/campus/dining.php#Denton
Completed	University of Maryland, College Park	Fraternity/Sorority Renovations Ph. 9	USM	Silver	22,278	\$13,730,000	2012	http://greek.umd.edu/2013/08/08/sorority-houses-achieve-lead-silver-rating/
Completed	University of Maryland, College Park	Shuttle Bus Building	USM	Silver	10,906	\$7,303,332	2012	http://www.sustainability.umd.edu/content/campus/green_buildings.php#ShuttleUM
Completed	University of Maryland, College Park	University House	USM	Gold	14,025	\$7,200,000	2012	https://umdrightnow.umd.edu/news/university-house-achieves-lead-gold-certification
Completed	University of Maryland, College Park	Chincoteague Hall Renovation	USM	Gold	22,648	\$7,826,463	2012	http://www.umdrightnow.umd.edu/news/umds-chincoteague-hall-renovation-project-wins-gold-lead-certification
Completed	University of Maryland, College Park	Oakland Hall (Residence)	USM	Gold	231,704	\$74,873,285	2011	http://reslife.umd.edu/halls/denton/oakland/
Completed	University of Maryland, College Park	Fraternity/Sorority Renovations Ph. 8	USM	Silver	20,645	\$10,607,487	2010	http://greek.umd.edu/2013/08/08/sorority-houses-achieve-lead-silver-rating/
Completed	Maryland National Guard Facility, Salisbury MD	Salisbury Readiness Center	DGS for MDNG	Silver certified 2013	38,055	\$13,400,000	2012	Construct a 20,826 GSF addition and renovate the existing 17,229 GSF Westminster Readiness center to support the newly acquired Combat military Police Company.
Completed	South Mountain Welcome Center	Maryland Department of Transportation	State Highway Administration	Silver certified	20,240 total sf in 4 buildings	\$21,000,000	2010	The South Mountain rest areas are used by nearly 1.5 million travelers annually. The new Welcome Centers are each approximately 3,940 square feet and the new restrooms are 6,180 square feet. The new buildings will reduce energy consumption and lower operating costs with the use of lower energy use lighting, sensors to monitor water usage and an onsite wastewater treatment plant.
Completed	University of Maryland College Park	Building and Landscape Service Building (Wye Oak)	USM	Silver & Three Green Globes	12,774	\$5,909,000	2014	This two story building houses units of the department of Building and Landscape Management Department. This building has achieved dual certification with LEED and Green Globes.



STATE BUILDING PROJECTS DEVELOPED INDEPENDENT OF THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING	TOTAL GSF	PROJECT COST	OPENED	INFORMATION/REMARKS
Completed	Westminster Readiness Center	Maryland National Guard	DGS for MDNG	Designed to LEED Silver standard - not certified	33,249	\$8,157,903	2015	Additions and renovations to the existing Westminster Armory
Completed	Maryland House	MDOT	MDOT-public Private Partnership	Silver	42,000	\$30,000,000	2014	The new travel plaza is LEED Silver certified and includes "green" features such as high albedo material covers 80 percent of the building roof area to minimize heat island effect, natural light and high efficiency interior lighting, building systems and envelope design for a building energy performance that is 26% more efficient than the baseline case, and a 40% reduction in water usage in the building is accomplished through low-flow fixtures.
Completed	Chesapeake House	MDOT	MDOT-public Private Partnership	Silver	30,000	\$26,000,000	2014	The new travel plaza is LEED Silver certified and includes "green" features such as high albedo material covers 100 percent of the building roof area to minimize heat island effect, natural light and high efficiency interior lighting, building systems and envelope design for a building energy performance that is 26% more efficient than the baseline case, and a 35% reduction in water usage in the building is accomplished through low-flow fixtures.
Completed	Salisbury University	Choptank Hall Renovation	USM	Silver	48,118	\$7,500,000	2013	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Salisbury University	Chester Hall Renovation	USM	Silver	48,118	\$7,500,000	2013	http://www.salisbury.edu/fpcp/housing/overview.html
Completed	Jessup Community Correctional Facility	Dorsey Run Correctional Facility	DPSCS	Certified SSB, Silver Housing Unit #1, Silver Housing Unit #2 (3 certifications) (estimate)	83,306 Phase I	\$24,000,000 Phase I.	July 2013 for Phase I	Construct a new minimum security complex consisting of two adjacent minimum security compounds for 560 inmates each. The new facility will contain housing, inmate transition services, educational, and recreational functions. Project is being done as a design - build construction delivery method. The Certified rating will be achieved on the Services Support Building and Silver on the 2 Housing Units. Construction submittal review is ongoing.
Completed	Jessup Community Correctional Facility	Dorsey Run Correctional Facility - Phase II	DPSCS	Silver (est) Design Final Review completed	82,000 Phase II	\$26,264,000 Phase II	10/2016 (est)	Similar to Phase I above - additional 560 bed facility including three buildings, Support Services and 2 Housing Units (#3 and #4).
Completed	University of Maryland, College Park	Pocomoke Building Renovation	USM	Gold	27,000	\$9,480,000	2013	The Pocomoke Building Renovation involves demolition of existing spaces on all three floors. The historic building will undergo a complete replacement of HVAC and electrical systems.
Construction	University of Maryland, College Park	Prince Frederick Hall (Residence)	USM	Gold	154,085	\$70,291,000	2014	http://www.resnet.umd.edu/princefrederick/
Completed	LaPlata Readiness Center	Maryland National Guard	DGS for MDNG	Designed to LEED Silver standard - not certified	28,630	\$9,910,906	2015	Construct a new readiness center in La Plata. The proposed readiness center will house the 253rd Engineer Company that was transferred to the La Plata Readiness Center as part of the national "Grow the Army Initiative."



STATE BUILDING PROJECTS DEVELOPED INDEPENDENT OF THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING	TOTAL GSF	PROJECT COST	OPENED	INFORMATION/REMARKS
Completed	Dundalk Readiness Center	Maryland National Guard	DGS for MDNG	Designed to LEED Silver standard - not certified	65,930	\$15,430,903	2015	Additions and renovations to the existing Dundalk Armory
Completed	Salisbury University	East Campus Athletic Stadium	USM	Silver (est)	30,931	\$15,696,000	2016	Construction of a new athletic stadium on the East Campus where the existing Sea Gull Stadium is located. Stadium will include locker rooms, concessions, retail area, box office, storage room, equipment and training room, restrooms, press box, Varsity Club, catering areas and a seating capacity of 3,000. Project also includes associated site improvements, exterior lighting, walkways, parking and service roads.
Completed	University of Maryland Shady Grove	Parking Garage II	USM	Green Garage Certification by the Green Parking Council (est)	202,280	\$20,200,000	2016	This project was the first to be registered with the Green Parking Council under their new Green Garage Certification program.
Construction	University of Maryland College Park	Edward St. John Learning and Teaching Center	USM	Silver (min)	180,744	\$91,874,000	2017	https://www.facilities.umd.edu/ESJ-LTC/default.aspx
Construction	University of Maryland College Park	A. James Clark Bioengineering Building	USM	Silver (min)	184,715	\$124,517,000	2017	Construction of a new Bioengineering Building to house the Robert E. Fischell Department of Bioengineering and the Robert E. Fischell Institute for Biomedical Devices.
Construction	Salisbury University	Academic Commons	USM	Gold (est)	221,037	\$96,868,680	2016	New Academic commons and Library Facility on the site of Carruthers Hall http://www.salisbury.edu/newsevents/fullstoryview.asp?ID=5337
Construction	University of Maryland College Park	New Cole Fieldhouse	USM	Silver (est)	281,400	\$115,500,000	2019	This project will convert and expand Cole Field House to create a Human Performance and Academic Research Facility which will contain an indoor practice facility, a football training complex, and a Center for Sports Medicine, Health and Human Performance.
Construction	University of Maryland College Park	H.J. Patterson Wing 1 Renovation	USM	LEED CI Silver (est)	42,200	\$13,252,000	2017	Renovate first, second, third, and fourth floors of Wing 1. Work includes gutting of floors, new AHUs, fire protection system including sprinklers, replacement of windows and addition of an elevator.
Construction	University of Maryland College Park	Brendan Iribe Center (formerly Computer Science Building)	USM	2012 IgCC	216,600	\$111,964,000	2018	This project will house the Department of Computer Science and the University of Maryland Institute for Advanced Computer Studies. Project will support the growth of the department teaching and research programs, facilitate the integration of modern teaching and research activities, improve the ability of students and faculty to collaborate, and promote collaboration with industrial and community partners.
Construction	Havre de Grace Readiness Center	Maryland National Guard	DGS for MDNG	Silver (min)	59,800	\$16,000,000	2017	Construct a new Maryland Army National Guard Readiness Center in Havre de Grace. The new Havre de Grace Readiness Center will contain unit administrative offices, equipment storage areas, locker rooms, toilet/shower facilities, classrooms, soldier training areas, an assembly hall, and other support spaces constructed to the current, modern Readiness Center standards.



STATE BUILDING PROJECTS DEVELOPED INDEPENDENT OF THE HIGH PERFORMANCE BUILDING ACT

STATUS	FACILITY LOCATION	PROJECT NAME	DEVELOPER	LEED RATING	TOTAL GSF	PROJECT COST	OPENED	INFORMATION/REMARKS
Design	Freedom Readiness Center	Maryland National Guard	DGS for MDNG	Silver (min)	67,098	\$25,784,000	2020	Design and construct a new Army National Guard Readiness Center in Sykesville, Maryland. The prospective facility will contain functional spaces to meet all requirements for two National Guard units, including administrative offices, equipment storage areas, locker rooms, toilet/shower facilities, classrooms, soldier training areas, an assembly hall, and other support spaces.
Design	Easton Readiness Center	Maryland National Guard	DGS for MDNG	Silver (min)	42,779	\$15,978,000	2018	Construct a new Army National Guard Readiness Center in Easton to replace insufficient and functionally inadequate space in the current facility. The current facility was built in 1976 for an all-male, small National Guard Company. The facility now houses two units, both units contain a significant number of positions open to females.
Schematic Design	Department of Natural Resources	Wellington Wildlife Management Area Shop and Offices	DGS	not certified	not provided	\$2,876,000	no schedule provided	New construction portion of the project is too small for LEED certification however the project will include green enhancements such as geothermal HVAC and green roof.
Design-Pending	University of Maryland College Park	School of Public Policy	USM	Silver (est)	69,700	\$41,655,000	2020	This project is for the construction of an office/classroom building which will provide the space required for the School of Public Policy to meet its Strategic Plan goals for growth and become one of the top ten public policy programs in the nation.
Development	Towson University	Newell/Richmond Halls Renovation	USM	Silver (est)	90,000	\$29,000,000		http://www.towson.edu/housing/prospective/halls/richmond.asp
Development	University of Maryland, Baltimore County	Patapsco Hall Renovation & Addition	USM	Gold (est)	53,500	\$15,500,000		http://www.umbc.edu/reslife/news/pat_addition.html
Planning	Towson University	University Union Addition & Renovation	USM	Silver (min)	80,000/168,203	\$103,770,000	2020	This project, as proposed, is for an addition (80,000 GSF/45,000 NASF) and complete renovation of the existing building (168,203 GSF/109,044 NASF).



Maryland School for the Blind



*Autism-Blind Classroom and Cottage Buildings, Maryland School for
the Blind, Parkville, Maryland*



IV. MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

The Maryland Green Building Council is pleased to report on the progress made in recent years by the state's public school programs to construct High Performance Green Schools. The Interagency Committee on School Construction (IAC) reports that in the 20 of 25 districts reporting, as of September 2016, a total of at least ninety-seven (97) K-12 high performance schools were in various phases of planning or design, construction, or occupancy.

Fifty-four (54) schools have been completed and are occupied, twenty-four (24) are under construction and nineteen (19) schools are in the planning or design phase.

Thirty seven (37) of the ninety seven (97) schools are believed to have received their final LEED certification. Of these, thirteen (13) achieved LEED Silver while twenty four (24) achieved LEED Gold.

The previous summary is limited to information provided to the IAC by the reporting districts and to certain assumptions made. Therefore, it is likely that more schools have been completed, occupied and have received their LEED certification as of this writing.

A highlight of the progress being made in the public school construction program is the planning and construction of the state's first two NetZero schools. The following two major school replacement projects are made possible through grants from the Maryland Energy Administration (MEA) for schools to be constructed within the BGE service area. Wilde Lake Middle School is now under construction. Grants are available for a third net zero school however only Prince George's County has expressed interest and none of the school sites proposed are within the BGE service area.

The following spread sheet itemizes these Maryland High Performance Schools by location, phase, certification and high performance features.

2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT							
LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
Allegany County	Allegany HS (Replacement)	Construction	Silver (est)				The roof system has been engineered for and all conduits will be installed to the roof for future solar panel installation. Proposed occ. 8/18
Anne Arundel County	Lothian ES	Construction	Silver	8/10/2015			Geothermal System
	Severna Park HS	Construction	Silver (est)				
	Rolling Knolls ES	Construction	Silver (est)	3/29/2016			Geothermal System
	Arnold ES	Planning/ Design	Silver (est)				Geothermal System
	Jessup ES	Planning/ Design	Silver (est)				Geothermal System
	Crofton Area HS	Planning/ Design	Silver (est)				



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
Baltimore City	Waverly PK-8 (Replacement)	Completed	Silver	7/6/1905	Y	Y	
	Holabird PK-8 (Replacement)	Planning/ Design	Silver (est)				
	Graceland Park O'Donnell Heights PK-8 (Replacement)	Planning/ Design	Silver (est)				\$2.7 M grant through Maryland Energy Administration to achieve Net Zero Building. Maryland's 2nd NZB school facility
	Fort Worthington PK-8 (Replacement)	Planning/ Design	Silver (est)				
	Arundel PK-5 (Replacement)	Planning/ Design	Silver (est)				
	Patterson HS (Replacement)	Planning/ Design	Silver (est)				
	Cherry Hill Gr. 3-8 (Renovation / Addition)	Planning/ Design	Silver (est)				
	Frederick ES (Renovation / Addition)	Planning/ Design	Silver (est)				
	John Eager Howard PK-5 (Renovation / Addition)	Planning/ Design	Silver (est)				
	Lyndhurst PK-8 (Renovation / Addition)	Planning/ Design	Silver (est)				
Baltimore County	West Towson ES (New School)	Completed	Silver	8/1/2014	Y		Green roof
	George Washington Carver School for Arts and Technology (Replacement High School)	Completed	Silver (est)	8/1/2014			
	Dundalk/Sollers Point HS (Replacement High School)	Completed	Silver (est)	8/1/2014			
	Mays Chapel ES (New School)	Completed	Silver (est)	8/1/2015			
Calvert County	Northern HS (Replacement)	Planning/ Design	Silver (est)				Proposed occ. 10/1/2020
Carroll County	Mt. Airy MS (Replacement)	Completed	Silver (est)	8/1/2014			Geothermal HVAC, achieved 28% energy cost savings
Cecil County	Perryville ES (Renovation)	Completed	Silver or gold (est)	8/29/2016			green materials used throughout;
	Gilpin Manor (Replacement)	Construction	Silver (est)				Proposed Occ. 8/1/2018
Charles County	St. Charles HS 2013 (New)	Completed	Silver or Gold (est)	8/1/2014			Rainwater harvesting, geothermal HVAC, reflective cool roof, and enhanced commissioning
Dorchester County	North Dorchester HS (Replacement)	Planning/ Design	Silver (est)				
Frederick County	Lincoln ES (Renovation / Addition)	Completed	Silver	8/1/2001			



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
	North Frederick ES (Replacement)	Construction	Silver				
	Frederick HS (Replacement)	Construction	Silver (est)				
Harford County	Joppatowne ES (Replacement)	Completed	Silver	1/1/2010			
	Youth Benefit ES (Replacement)	Construction	Silver (est)				Porous concrete
Howard County	Northfield ES (Renovation / Addition)	Completed	Silver	8/2011	Y		Geothermal System, Green Roof
	Thunder Hill ES (Renovation / Addition)	Completed	Silver	8/2012			
	Bollman Bridge ES (Renovation / Addition)	Completed	Silver	8/2013			Geothermal System
	Atholton HS (Renovation)	Completed	Gold	8/2015			Geothermal System
	Stevens Forest ES (Renovation)	Completed	Silver	12/2013			Geothermal System
	Phelps Luck ES (Renovation / Addition)	Completed	Silver	8/2013			Geothermal System
	Ducketts Lane ES (New ES #41) (New)	Completed	Gold	8/2013			Geothermal System
	Thomas Viaduct MS (New MS #20) (New)	Completed	Silver	8/2014			Geothermal System
	Longfellow ES (Renovation / Addition)	Completed	Silver	8/2015			
	Patuxent Valley MS (Renovation / Addition)	Construction	Certified (est)				Under construction; completion Aug 2017
	Wilde Lake MS (Replacement)	Construction	Gold (est)			Y	Geothermal System, Maryland's 1st New Zero Building school facility, 625 KW PV system with 425 KW on roof and 200 KW on ground. Under construction; completion (including demo of existing school, fields and parking) Aug 2017.
	Swansfield ES (Renovation/ Addition)	Construction	Certified (est)				Completion Dec 2017.
	Waverly ES (Renovation/ Addition)	Construction	Certified (est)				Completion Aug 2018.
	Elementary School #42 (New)	Construction	Silver (est)				Completion Aug 2018.
	Deep Run ES (Renovation/ Addition)	Construction	Certified (est)				Under construction; completion Dec 2016
Montgomery County	Carderock Springs ES (Replacement)	Completed	Gold	8/1/2010			



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
	Cresthaven ES (Replacement)	Completed	Gold	8/1/2010			
	Cabin John MS (Replacement)	Completed	Gold	5/1/2011			
	Farmland ES (Replacement / Renovation)	Completed	Gold	8/1/2011	Y		Green roof
	Paint Branch HS (Replacement)	Completed	Gold	8/1/2012	Y		Green roof
	Garrett Park ES (Replacement)	Completed	Gold (est)	1/1/2012	Y		Green roof
	Cannon Road ES (Replacement)	Completed	Gold	9/1/2012	Y		Green roof
	Seven Locks ES (Replacement)	Completed	Gold	12/1/2012			
	Gaithersburg HS (Replacement / Renovation)	Completed	Gold	8/1/2013	Y		Green roof
	Hoover MS (Replacement)	Completed	Gold	8/1/2013	Y		Green roof
	Beverly Farms ES (Replacement / Renovation)	Completed	Gold	1/1/2013	Y		Green roof
	Weller Road ES (Renovation / Addition)	Completed	Gold	8/1/2013	Y		Green roof
	Flora M Singer ES (New)	Completed	Gold	8/1/2012	Y		Green roof
	Glenallen ES (Replacement)	Completed	Gold	8/1/2013	Y		Green roof
	Bel Pre ES (Replacement)	Completed	Gold	8/1/2014	Y		Green roof
	Wilson Wims ES (New)	Completed	Gold	8/1/2014	Y		Green roof
	Rock Creek Forest ES (Replacement)	Completed	Gold	1/1/2015	Y		Green roof
	Candlewood ES (Replacement)	Completed	Silver	1/1/2015	Y		Green roof
	William Farquhar MS (Replacement)	Completed	Silver (est)	8/1/2016	Y		Green roof
	Hallie Wells MS (New)	Completed	Gold (est)	8/1/2015	Y		Green roof
	Wayside ES (Replacement)	Construction	Silver (est)				
	Wheaton Woods ES (Replacement)	Construction	Silver (est)		Y		Green roof
	Seneca Valley HS (Replacement)	Planning/ Design	Silver (est)		Y		Green roof
	Brown Station ES (Replacement)	Construction	Silver (est)				
	Bethesda-Chevy Chase MS (New)	Construction	Silver (est)		Y		Green roof



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
	Wheaton HS (Replacement)	Completed	Silver (est)	1/1/2016	Y		Green roof
	Thomas Edison HS (replacement)	Construction	Silver (est)		Y		Green roof
	Richard Montgomery #5 (new)	Planning/ Design	Silver (est)		Y		Green roof
Prince George's County	Vansville ES (New)	Completed	Gold	8/1/2008			Building designed with east-west orientation; large windows and sloping ceiling to maximize natural daylight; eco friendly and Low VOC materials and paint and sealers used, waterless urinals, dual flush toilets and low flow faucets, geothermal wellfield system (no boilers/chillers); white energy star roof; construction waste management (75-80% waste recycled)
	Barack Obama ES (New)	Completed	Gold	8/1/2010			Building designed with east-west orientation; large windows and sloping ceiling to maximize natural daylight; eco friendly and Low VOC materials and paint and sealers used, waterless urinals, dual flush toilets and low flow faucets, geothermal wellfield system (no boilers/chillers); white energy star roof; construction waste management (80-87% diverted from landfill); recycled content of materials used 25%, Roof drainage collected in rain barrels for use on school grounds.
	Avalon ES (Replacement)	Completed	Gold (est)	8/1/2013			Sustainable design objectives included site design for managing stormwater runoff, rain gardens, reducing heat island effect; maximizing open space and reduction of light pollution. Water efficiency measures included efficient landscaping with native and adaptive vegetation that require no irrigation.
	Henry G. Ferguson ES (Replacement)	Completed	Gold (est)	1/1/2014	Y		High-efficiency chilled beam system energized by geothermal wellfield, pervious pavement and shallow gravel wetlands. Daylighting controls to maximize use of natural daylight, green roof.
	Glenarden Woods ES (Renovation)	Planning/ Design	Gold (est)				Geothermal wellfield; Bicycle storage and changing facilities; preferred parking for low emitting/fuel efficient vehicles; protection of habitat zones; maximize open space; stormwater quality control; reduction of heat island effect due to roof surfaces; light pollution reduction; joint use of facilities; water efficient landscaping; water use reduction; ground source heat pumps; enhanced building commissioning; enhanced refrigeration management; recycled content building materials; regional building materials; construction indoor air quality management plan; low emitting materials; indoor chemical and pollutant source control; controllability of thermal and lighting systems; post-occupancy thermal comfort survey; daylighting of 90% of core learning spaces; mold prevention plan; school as a teaching tool. Proposed occupancy 8/2017.



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
	Edward M. Felegy ES (New)	Completed	Gold (est)	8/1/2014	Y		Geothermal wellfield; Stormwater collection for toilet flushing; low water consuming plumbing fixtures and waterless urinals; daylighting; construction waste management; local materials; recycled content of materials; low VOC materials; vegetated roof; bicycle storage.
	Greenbelt MS (Replacement)	Completed	Gold	8/1/2012			Community connectivity; public transportation access; bicycle storage and changing facilities; preferred parking for low emitting/fuel efficient vehicles; protection of habitat zones; parking minimization; open space; stormwater quality control; reflective roofing to reduce heat island effect; light pollution reduction; joint use of facilities; water efficient landscaping (no irrigation); 55% indoor water use reduction (exemplary); dual-flush toilets and 1/8 gpf urinals; energy efficiency (28.5% by cost, 32% by energy); geothermal heat pump system; high efficiency motors; energy recovery ventilation units; enhanced building commissioning; enhanced refrigerant management; 94% construction waste recycling; 30.6% recycled content value in building materials; 32.7% regional building materials; 69% certified sustainably harvested wood; indoor air quality management during construction; MERV 13 outdoor air intake filters; low-emitting materials; controllability of thermal and lighting systems; post-occupancy thermal comfort survey; low-mercury lighting; school as a teaching tool.
	Oxon Hill HS (Replacement)	Completed	Gold (est)	8/1/2014			Geothermal wellfield; storage and collection of recyclables; stormwater collection for irrigation; daylighting; low water consuming plumbing fixtures; construction waste management; use of building materials manufactured within 500 miles; light control systems; gray water collection for toilet flushing; building materials with low VOCs and high recycling content; design includes 15 bioretention facilities.
	Fairmont Heights HS (Replacement)	Construction	Gold (est)				Geothermal wellfield; vegetated roof; pervious pavement, and bioretention. Eco friendly and low VOC materials and paint and sealers used; waterless urinals, dual flush toilets and low flow faucets; white energy star roof; construction waste management (80-87%) diverted from land-fill; recycled content of materials used 25%; FSC certified wood 90%; GREEN education initiative included with indoor and outdoor signage. Low mercury content in lamps, low energy elevator, green cleaning policy in the building, reduced noise levels throughout the building to enhance student concentration and teacher legibility. Proposed occupancy 8/2017
	Crossland HS (Renovation/ Addition)	Completed	Gold (est)	1/1/2014			Geothermal well field storage and collection of recyclables; stormwater collection for irrigation and bio-retention ponds; water efficient landscaping and maximization of site open space; construction waste management; use of regional materials and certified wood; light and thermal control systems; building materials with low VOCs and high recycling.



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
	Tulip Grove ES (Renovation/ Addition)	Construction	Gold (est)				Sustainable design objectives include geothermal well field; green roof, micro-bioretenion areas, rain barrels, increased ventilation, efficient water fixtures, sustainable lighting features (controls, light pollution reduction, low mercury bulbs), enhanced commissioning, regional and recycled materials, and an interior living wall. Proposed occupancy 8/2018
	Eugene Burroughs MS (Renovation)	Construction	Gold (est)	8/1/2016			High-efficiency chilled beam system energized by geothermal wellfield; pervious pavement and shallow gravel wetlands; pervious concrete pavement is utilized in vehicular parking; vegetative roof on bus drop-off canopy; daylighting controls to maximize use of natural daylight. All facilities meet Environmental Site Design to the maximum extent.
Queen Anne's County	Sudlersville MS (Replacement)	Completed	Gold	4/27/2012			
	Stevensville MS	Completed	Silver (est)				
St. Mary's County	Evergreen ES (New)	Completed	Gold	11/3/2009	Y	Y	The building has a Green Roof with a system of trays that contain drought resistant plants that can absorb 3/4" of a 1" rainfall; two 15,000 gallon wooden cisterns collect rainwater from the roof and are utilized to flush all of the toilets in the building. In conjunction with low flow faucets, dual flush toilets and waterless urinals, water consumption is reduced by 92%; there are 26 solar panel that provide 7kw or 1.5% of the school's power. Wind technology on the outdoor 2nd story environmental lab powers an outlet in the science lab.
	Captain Walter Francis Duke ES (New)	Construction	Gold (est)	8/1/2015	Y	Y	The building has a Green Roof with a system of trays that contain drought resistant plants that can absorb 3/4" of a 1" rainfall; two 15,000 gallon wooden cisterns collect rainwater from the roof and are utilized to flush all of the toilets in the building. In conjunction with low flow faucets, dual flush toilets and waterless urinals, water consumption is reduced by 50%; LED exterior lighting; there are 26 solar panel that provide 7kw or 1.5% of the school's power. Wind technology on the outdoor 2nd story environmental lab powers an outlet in the science lab.
Somerset County	J. M. Tawes Center (Replacement)	Planning/ Design	Silver (est)				
Washington County	Bester ES (Replacement)	Completed	Silver				
	Jonathan Hager ES (former West City ES (New)	Construction	Silver (est)	8/16/2016			Project is in final post occupancy completion mode (i.e. addressing punchlist items, etc.)



2016 MARYLAND PUBLIC SCHOOLS GREEN SCHOOLS REPORT

LOCAL EDUCATION AGENCY	NAME OF SCHOOL (PROJECT TYPE)	STATUS	LEED RATING	OCCUPANCY DATE	GREEN ROOF (Y/N)	ROOF SOLAR PANELS (Y/N)	INFORMATION / REMARKS
Wicomico County	Bennett MS (Replacement)	Completed	Gold	8/1/2015	Y	Y	Photovoltaic system on gym roof; two green roof outdoor classrooms accessible from the 2nd floor academic wing; geothermal / variable refrigerant flow HVAC system.
	Salisbury Elementary (Replacement)	Planning/ Design	Silver (est)				
Maryland School for the Blind	Autism Blind Classroom and Cottage Buildings (Replacement)	Construction	Silver (est)	9/1/2016			



MARYLAND GREEN BUILDING COUNCIL
2016 ANNUAL REPORT