

State Highway Administration of Maryland

ROAD IMPROVEMENT REPORT

(Explanation of Use of Form HPS-20)

Instructional Memorandum HPS-1

With the completion of the road inventory, much of the value of the data collected and assembled would be lost were it not kept current.

Certain forms have been prepared for use in keeping those records up-to-date. Among these are Forms HPS-5 and HPS-20. These forms are revised from time to time to meet requirements as the accumulation of the data continues.

Form HPS-5 is a "Bridge Sheet" designed to supply the minimum information required for each bridge with a center line length of 20 feet or more, including those under and over highways and railroads, as well as those over streams. Again, these reports are to be submitted only for bridges with a center line length of 20 feet or more that have been newly built, improved, or materially changed in a way that would affect (favorably or adversely) their clearance, load carrying capacity, design, class, etc.

Form HPS-20 is the "Road Improvement Report", and the one that will be most generally used in making annual reports on road improvements, additions and changes. Improvements to all roads and bridges will be listed on this form and Form HPS-5 submitted, as explained, to give more detailed information when required. It is requested that you only report improvements, additions and/or deletions to those roads that come under your jurisdiction.

Forms and maps will be supplied by this office. Each District Engineer, County Authority and Municipal Authority will receive a sufficient number of forms and maps so that they may be prepared, in duplicate, retaining one set for their records and forwarding a completed set to this office.

The forms and maps for reporting and showing all changes and improvements to all roads and bridges on the State, County, and Municipal road systems, whether accomplished by maintenance, construction or reconstruction, and whether done by State, County, or Municipal forces, will be mailed to the District Engineers, County Authorities and Municipal Authorities by October 15th of each calendar year.

To insure the interpretation and completion of submitted reports is uniform from year to year, it is requested that the District Engineers, County Authorities, and Municipal Authorities assign this task to one most familiar with the roadway network and the improvement and construction programs in their appropriate jurisdiction.

If there have been any changes in the corporate limits of a municipality since last year, will you please include with your Form HPS-20 a map or plat showing the most recent boundaries, as well as the location of the improvements reported. It is recognized that a supply of maps is not always available so that one may be submitted annually with this report. If you will request its return to you, the same map may be used each year until it becomes obsolete through use.

Letters requesting payment of the Gasoline Tax and Motor Vehicle Revenue Funds accruing to a municipality are to be sent, IN DUPLICATE, to the State Highway Administration. It is suggested that you enclose this letter and duplicate with the Form HPS-20 which should be returned whether or not any changes have been made to your municipal street system.

As the work progresses, or immediately after completion of each project, it is most desirable that the forms be filled out and its location shown accurately on the map. As soon as possible after November 1st, but no later than December 31st, all forms and maps should be forwarded to:

Mr. John T. Neukam, Chief
Bureau of Highway Statistics
State Highway Administration
Post Office Box 717
Baltimore, MD 21203

Before submitting the forms and maps, they should be reviewed for completeness and accuracy.

Explanation of How to Complete Forms HPS-20

ROAD NUMBER
(Column 1)

In this column insert the Interstate, U.S., State, County or Municipal route number of the road on which work was done. On new roads insert the word (New) in the column and this office will assign a number.

ROAD NAME
(Column 2)

In this column insert the road name on which work was done. If a road name has changed, it too should be shown in this column and the old name, if known, indicated in the Remarks column (12).

LOCATION
(Column 3)

In this column give the definite points between which change, improvement, construction, or reconstruction applies. Reference the termini to some known intersection or feature shown on a map. Survey stations are not acceptable as termini.

MAP DESIGNATION
(Column 4)

When reports for a county or municipality are made and returned to this office, they should be accompanied by one of the maps of the county or municipality supplied for that purpose,

MAP DESIGNATION
(Continued)

showing location and identification of each road and/or bridge change, improvement, construction or reconstruction in its exact location. Those municipalities who prepare their own maps are requested to use them.

In the absence of a designation that will identify the road on a form, as well as on a map, there should be inserted in this column an identifying symbol or designation. For this purpose a good system to use is the year, a hyphen and a numeral; such as, 80-1, 80-2, etc. it is important that the designation in this column corresponds respectively with those on the map.

MILES
(Column 5)

Enter in this column the actual length of the reported changes, improvement, construction or reconstruction in miles, tenths, and hundredths.

In the case of bridges with center line lengths of 20 feet or more, the information should be entered on Form HPS-20 and detailed information reported on HPS-5.

TYPE
(Column 6)

In order that those assigned to prepare and submit the "Road Improvement Report" may more accurately classify the road after improvement, types are defined on the accompanying Instructional Memorandum HPS-2, "Road Types and Definition".

It is desirable that the classification, after improvement, be made by one who is familiar with its construction and improvement. For example, if a road is improved to a "bituminous penetration road, the surface course of which is one inch or greater and less than seven inches in compacted thickness composed of gravel, stone, and sand or similar material, bound with bituminous penetration material", reference to Instructional Memorandum HPS-2, "Road Types and Definitions", identifies the improvement as Type 53. In this instance, you would enter the number "53" in column 6.

WIDTH
(Column 7)

It must be remembered that for surfaced roads (those better than Type 40) the width refers to that of the pavement, or actual paved surface. For roads of Type 40 class and lower, the width refers to the roadway, the travelled way or the graded width between shoulders and/or ditches that is actually usable to vehicles.

In Column 7, insert the surface or travelled way width after improvement. If curb and/or gutter exist, place C-G after width in column 7.

SYSTEM
(Columns 8 & 9)

For the purpose of these reports, the systems will be:

State
County
Municipal
Other Public
Private

Transfers from one system to another, by mutual agreement, should be reported in columns 8 & 9.

Example: If a road is transferred from State to County, insert the word (State) in column 8 and (County) in column 9.

The "Other Public" system comprises those roads which are open to unrestricted public use, yet which are not officially acknowledged as part of the County, State or any other publicly owned system of roads. The greater percentage of these roads are ones constructed by developers.

The "Private" system comprises roads that may serve one or more properties, but are recognized as privately serving these properties and can, by action of the property owners, be closed to or excluded from public use.

When roads are added to the State System, they come from County, Municipal, Other Public, or Private road systems and it is very important that the system from which the road is transferred be definitely ascertained and reported. If in an entirely new location where a road did not exist prior to the advent of the State highway and it came from private property by the purchase or condemnation, then, for purposes of our records, it would be considered a change from private to State System. Similarly, roads added to the County or Municipal Systems should also be so reported. Most of them come from Other Public or Private Systems and should be correctly reported.

MILEAGE ADDITIONS
(Column 10)

In this column indicate the miles of highway added to the system by way of new construction or to replace an existing highway, or by mutual transfer agreement between political subdivisions. The system from which it was taken, as well as that to which it was added, should be noted in columns 8 and 9 respectively.

MILEAGE ABANDONED
(Column 11)

In this column, indicate the mileage of highways abandoned as a result of construction of a new facility, relocation of any existing facility, or an outright abandonment of any public highway. The system from which the abandoned mileage came should be noted in column 8.

REMARKS
(Column 12)

This column can be used in conjunction with column 2 to report the old name of a road, if known, and/or to clarify an improvement; such as, shoulder work only, resurfacing, reconstruction, bridge location, bridge reconstruction, culverts, additional lanes, turning lanes, safety improvements, etc.

H.P.M.S. SAMPLE CHANGES (Reverse Side)

This section is designed to include improvements to H.P.M.S. sampled sections only. Please refer to your H.P.M.S. listing and map to find out if an improvement has been made on an H.P.M.S. sample.

SAMPLE NUMBER

In this column, insert the H.P.M.S. sample number of the road on which work was done.

NUMBER OF SIGNALS

This data item pertains to the type of traffic controls on the H.P.M.S. sample and not those of an intersecting route. Only those controls facing (controlling) the sample are counted. The traffic controls shall be shown as follows:

Signals - A signal that cycles through red, yellow and green for all or a portion of the day shall be counted as a signalized intersection. Enter the number of signalized intersections. If none, enter "00".

Stop Signs - Enter the number of intersections controlled by stop signs. A continuously operating flashing red ball shall be counted as a stop sign control. If none, enter "00".

Other or No Controls - Enter the number of intersections controlled by other types of signing or having no controls. A continuously operating flashing yellow signal ball shall be considered as other or no control. If none, enter "00".

INTERSECTING ROAD
NAME

Enter the intersecting road name at which the traffic control is located.

TYPE OF SIGNAL Enter the appropriate code that best describes the signal system on the sample section.

<u>Code</u>	<u>Description</u>
1	Uncoordinated fixed time
2	Traffic actuated
3	Progressive
4	No signal system

PERCENT OF GREEN TIME Enter the typical percent of green time in effect during peak hours at the signalized intersections on the sample section. Enter "00" if no signalized intersections exist.

POSTED SPEED LIMIT Enter the daytime speed limit for automobiles posted or legally mandated on the greater part of the sample section.

TYPE OF OPERATION Enter the appropriate code that best describes the type of operation of a sample section.

<u>Code</u>	<u>Description</u>
1	One-way - a roadway with traffic moving in one direction only.
2	Two-way - a road with two-way traffic during non-rush hours.
3	One-way couplet - a pair of one way streets serving the same traffic corridor and performing as a divided facility.

PARKING RESTRICTIONS Enter the appropriate code reflecting the type of parking for the peak hour situation, that is allowed or exists on the sample section. If parking regulations are routinely ignored, use the code reflecting the actual situation rather than the regulations.

Peak Parking

<u>Code</u>	<u>Description</u>
1	One side
2	Both sides
3	None

PAVEMENT CONDITION

Enter the pavement condition, actual Present Serviceability Rating (PSR) or equivalent, to the nearest tenth, for all paved sections. A decimal point is implied between the two positions. For unpaved sections, code "00". The ratings are equivalent to those used in making a PSR, so recent PSR and present Serviceability index (PSI) ratings may be used where available. Also, if current sufficiency ratings of pavement condition (but excluding geometrics) are available, a correlation between the sufficiency rating scale and the PSR scale or rating factors may be developed so that such existing ratings may be used. If there are no recent PSR, PSI, or sufficiency ratings that can be adapted, the section should be rated from the following table. In view of the growing national concern regarding pavement deterioration, careful attention to realistic pavement condition ratings is strongly suggested. Estimates to the nearest tenth within the applicable range should be made; e.g., 2.3. This is most important for comparisons to prior years.

Pavement Condition Rating

(Use full range of values)

PSR	Verbal Rating	Description
5.0	Very Good	Only new (or nearly new) pavements are likely to be smooth enough and sufficiently free of cracks and patches to qualify for this category. All pavements constructed or resurfaced during the data year would normally be rated very good.
4.0	Good	Pavements in this category, although not quite as smooth as those described above, give a first class ride and exhibit few, if any visible signs of surface deterioration. Flexible pavements may be beginning to show evidence of rutting and fine random cracks. Rigid pavements may be beginning to show evidence of slight surface deterioration, such as minor cracks and spalling.
3.0	Fair	The riding qualities of pavements in this category are noticeably inferior to those of new pavements, and may be barely tolerable for high speed traffic. Surface defects of flexible pavements may include rutting, map cracking, and more or less extensive patching. Rigid pavements in this group may have a few joint failures, faulting and cracking, and some pumping.
2.0	Poor	Pavements that have deteriorated to such an extent that they are in need of resurfacing.
1.0	Very Poor	Pavements that are in an extremely deteriorated condition and may even need complete reconstruction.
0.0		

EXISTING RIGHT-OF-WAY
WIDTHS

Enter the prevailing right-of-way width in whole feet for the sample section. Where data is unavailable, estimates are sufficient. In heavily built up areas; such as the central business district, where the only space between the curbs and building is the sidewalk area, enter the curb to curb width. Code "999" where the right-of-way is 1,000 feet or greater.

WIDENING FEASIBILITY

Enter the appropriate code to indicate the extent to which it is feasible to widen the existing road. Consider the physical features along the roadway section; such as building, severe terrain, cemeteries and park land. Do not consider restrictions because of current right-of-way width, State practices concerning widening, or projected traffic.

<u>Code</u>	<u>Description</u>
1	No
2	Yes, less than one lane
3	Yes, one lane
4	Yes, two lanes
5	Yes, more than two lanes

SN or D -- Pavement Section

Enter the appropriate code to indicate that the structural number (SN) for flexible pavements or the slab thickness (D) for rigid pavements is known or enter the code for the type of pavement section (heavy, medium, light) where SN or D are not reported. The SN or D, as appropriate, are required for Interstate, Other Freeways and Expressways and Other Principal Arterials. Where available, code SN or D for all functional systems. A roadway with at least 1 inch of compacted flexible overlay (disregarding short patches) is considered a flexible pavement for purposes of this code.

To assist in determining the type of pavement section for those sections where SN or D, as appropriate, are not required or are not available, Table IV-2 has been prepared showing typical pavement sections. This guide includes typical thicknesses of surface, base and subbase. Unpaved facilities are those designated as unimproved, graded and drained earth, gravel or stone.

<u>Code</u>	<u>Description</u>
0	Unpaved
1	"SN" known
2	"D" known
3	Heavy
4	Medium
5	Light

Table IV-2

Pavement Section Coding

		Flexible Pavement			Rigid Pavement	
Code	Type of Section	"SN" Range	Surface Type & Min. Thick.	Base Type & Min. Thick.	Subbased Type & Min. Thick.	Range in Pavement Thickness "D"
3	Heavy	4.6-6.0	6" Asphaltic Concrete	12" Aggregate	13" Aggregate	>9.0" (8" if continuously reinforced)
			-----or-----			
			4" Asphaltic Concrete	8" Asphaltic Concrete	8" Aggregate	
4	Medium	3.1-4.5	4" Asphaltic Concrete	8" Aggregate	8" Aggregate	7.1 - 9.0" (6" if continuously reinforced)
			-----or-----			
			3" Asphaltic Concrete	6" Asphaltic Concrete		
5	Light	1.0-3.0	Surface Treatment	4" Aggregate	4" Aggregate	6.0 - 7.0"
			-----or-----			
			2" Asphaltic Concrete	6" Aggregate		

Overlay or Pavement Thickness (Length = 3 -- xx.x -- implied decimal)

Enter the overlay pavement thickness or the pavement thickness (for new pavements) to the nearest tenth (in inches) when an improvement has been completed on the section. This item is intended to be coded when resurfacing is accomplished as part of any improvement or when the pavement is completely reconstructed.

AADT -- Annual Average Daily Traffic (AADT) (Required for all Sample Sections

Enter the section's AADT (total, both directions for two-way facilities and directional if part of a one-way couplet or just one-way) for the given year. Since many applications, including VMT estimates, will be based on sample section AADT's, the States are encouraged to concentrate on counts for sample sections of the highway system, and to provide "actual counts" adjusted to represent AADT rather than "estimates".

The reported AADT values are to be annually updated. Current traffic data taken from sites near/adjacent to continuous automatic traffic recorders (ATR's) are the preferred source in lieu of coverage counts. AADT values that are derived from pneumatic tube counts should include the application of seasonal, weekday/weekend, and growth factors (if not current year counts), as well as corrections for vehicles with more than 2-axles.

IMPROVEMENT TYPE ANALYSIS FOR SAMPLE SECTION ONLY

TYPE OF IMPROVEMENT

This item is coded, as defined below, for all improvements completed during the reporting year. If completed improvements overlap, use the one with the highest priority (lowest code). If no improvements were completed during the reporting year, this item is not coded.

If only a portion of the section was improved and completed during the reporting year, the section should be split into two or more segments. Use one of the following codes:

CodeImprovement Type Definitions

20 RELOCATION -- Construction of a facility on new location that replaces an existing route to the extent that the old route is abandoned.

RECONSTRUCTION -- Construction on approximate alignment of an existing route where the pavement structure is substantially removed and replaced. Such reconstruction may include widening to provide additional through lanes, adding grade separations, and replacing other highway elements. Adjustment to existing horizontal and vertical alignment can be made. Code one of the following types of reconstruction (Codes 31 to 35). The last digit of each code corresponds to the FMIS codes.

- 31 RECONSTRUCTION TO FREEWAY -- complete reconstruction to freeway design standards on substantially existing alignment. This improvement type always includes the addition of full control of access. It may include the addition of lanes, dualizing, addition of interchanges or grade separations, or widening of lanes, depending on what was required to bring the facility to freeway standards.
- 32 RECONSTRUCTION WITH MORE LANES -- Complete reconstruction on substantially the same alignment with the addition of lanes to the existing section. Alignment, shoulder, and drainage deficiencies are corrected.
- 33 RECONSTRUCTION TO WIDER LANES -- Complete reconstruction on substantially the same alignment with lanes at least one foot wider than the existing section. Alignment, shoulder, and drainage deficiencies are corrected.
- 34 PAVEMENT RECONSTRUCTION WITH ALIGNMENT IMPROVEMENTS -- Reconstruction of the highway section to correct a pavement deficiency. Specific horizontal or vertical alignment deficiencies are also corrected.
- 35 PAVEMENT RECONSTRUCTION -- Complete reconstruction on substantially the same alignment without widening the pavement structure. Drainage deficiencies and minor alignment deficiencies are corrected.

CodeImprovement Type Definitions

- 40 MAJOR WIDENING -- The addition of lanes or dualization of an existing facility where the existing pavement is salvaged. Also included, where necessary, is the resurfacing of existing pavement and other incidental improvements such as drainage and shoulder improvements.
- 50 MINOR WIDENING -- The addition of more width per lane to the roadway of an existing facility without adding through lanes. The existing pavement is salvaged. In many cases, the improvement will include resurfacing the existing pavement and other incidental improvements such as shoulder and drainage improvements.
- 60 RESTORATION AND REHABILITATION -- Work required to return an existing pavement (including shoulders) to a condition of adequate structural support or to a condition adequate for placement of an additional stage of construction. There may be some upgrading of unsafe features or other incidental work in conjunction with restoration and rehabilitation. Typical improvements would include replacing spalled or malfunctioning joints; substantial pavement stabilization prior to resurfacing; grinding/grooving of rigid pavements; replacing deteriorated materials; reworking or strengthening bases or subbases, and adding underdrains. If this type of improvement is done in preparation for resurfacing, it should be reported separately only if the resurfacing is not completed in the year for which the data is reported.
- 71 RESURFACING WITH SHOULDER IMPROVEMENTS AND PORTLAND CEMENT CONCRETE PAVEMENT RESTORATION -- Placement of additional portland cement concrete material over the existing roadway to improve serviceability or to provide additional strength. Shoulders are widened or reconstructed to provide additional strength. There may be some upgrading of unsafe features and other incidental work. This code should also be used when concrete restoration includes techniques such as sub-sealing, joint repair, diamond grinding, etc. Where surfacing is constructed by separate project as a final stage of construction, the type of improvement should be the same as that of the preceding stage -- relocation, reconstruction, minor widening, etc.
- 72 RESURFACING WITH SHOULDER IMPROVEMENTS AND BITUMINOUS PAVEMENT RESTORATION -- Placement of at least 1 inch of compacted bituminous material over the existing roadway to improve serviceability or to provide additional strength. Shoulders are widened or reconstructed to provide additional strength. There may be some upgrading of unsafe features and other incidental work. Where surfacing is constructed by separate project as a final stage of construction, the type or improvement should be the same as that of the preceding stage --- relocation, reconstruction, minor widening, etc.

Code

Improvement Type Definitions

77 RESURFACING WITH PORTLAND CEMENT CONCRETE PAVEMENT RESTORATION -- Placement of additional portland cement concrete material over the existing roadway to improve serviceability or to provide additional strength. There may be some upgrading of unsafe features and other incidental work in conjunction with resurfacing. This code should also be used when concrete restoration includes techniques such as sub-sealing, joint repair, diamond grinding, etc. Where surfacing is constructed by separate project as a final stage of construction, the type of improvement should be the same as that of the preceding stage -- relocation, reconstruction, minor widening, etc.

78 RESURFACING WITH BITUMINOUS PAVEMENT RESTORATION -- Placement of at least 1 inch of compacted bituminous material over the existing roadway to improve serviceability or to provide additional strength. There may be some upgrading of unsafe features and other incidental work in conjunction with resurfacing. Where surfacing is constructed by separate project as a final stage of construction, the type of improvement should be the same as that of the preceding stage -- relocation, reconstruction, minor widening, etc.

REMARKS: This space can be used in conjunction with the sample number to clarify an improvement.

State Highway Administration of Maryland

ROAD IMPROVEMENT REPORT

(Explanation of Use of Form HPS 20)

Instructional Memorandum HPS 1

With the completion of the road inventory much of the value of the data collected and assembled would be lost were it not kept current.

Certain forms have been prepared for use in keeping those records up-to-date. Among these are Forms HPS 5 and HPS 20. These forms are revised from time-to-time to meet requirements as the accumulation of the data continues.

Form HPS 5 is a "Bridge Sheet" designed to supply the minimum information required for each bridge with a center line length of 20 feet or more, including those under and over highways and railroads, as well as those over streams. Again, these reports are to be submitted only for bridges with a center line length of 20 feet or more that have been newly built, improved, or materially changed in a way that would affect (favorably or adversely) their clearance, load carrying capacity, design, class, etc.

Form HPS 20 is the "Road Improvement Report," and the one that will be most generally used in making annual reports on road improvements, additions and changes. Improvements to all roads and bridges will be listed on this form and Form HPS 5 submitted, as explained, to give more detailed information when required. It is requested that you only report improvements, additions and/or deletions to those roads that come under your jurisdiction.

Forms and maps will be supplied by this office. Each District Engineer, County Authority and Municipal Authority will receive a sufficient number of forms and maps so that they may be prepared, in duplicate, retaining one set for his records and forwarding a completed set to this office.

The forms and maps for reporting and showing all changes and improvements to all roads and bridges on the State, County, and Municipal road systems--whether accomplished by maintenance, construction or reconstruction, and whether done by State, County, or Municipal forces--will be mailed to the District Engineers, County Authorities, and Municipal Authorities by October 15th of each calendar year.

In order that interpretations may be uniform and records accurate, it is requested that the District Engineers, County Authorities, and Municipal Authorities assign someone most familiar with the highway, road and streets within their District, County, or Municipality and the improvement and construction programs in each County.

If there have been any changes in the corporate limits of a municipality since last year will you please include with your Form HPS 20 a map or plat showing the most recent boundaries, as well as the location of the improvements reported. It is recognized that a supply of maps is not always available so that one may be submitted annually with this report. If you will request its return to you, the same map may be used each year until it becomes obsolete through use.

Letters requesting payment of the Gasoline Tax and Motor Vehicle Revenue Funds accruing to a municipality are to be sent, IN DUPLICATE, to the State Highway Administration. It is suggested that you enclose this letter and duplicate with the Form HPS 20 which should be returned whether or not any changes have been made to your municipal street system.

As the work progresses, or immediately after completion of each project, it is most desirable that the forms be filled in and its location shown accurately on the map. As soon as possible after November 1st, but no later than December 31st, all forms and maps should be forwarded to:

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Bureau of Highway Statistics
State Highway Administration
P. O. Box 717
Baltimore, Maryland 21203

Before submitting the forms and maps, they should be reviewed for completeness and accuracy.

Explanation of How to Complete Forms HPS 20

- ROAD NUMBER**
(Column 1)
- In this column insert the Interstate, U.S., State, County or Municipal route number of the road on which work was done. On new roads insert the word (New) in the column and this office will assign a number.
- ROAD NAME**
(Column 2)
- In this column insert the road name on which work was done. If a road name has changed, it, too, should be shown in this column and the old name, if known, indicated in the Remarks column (12).
- LOCATION**
(Column 3)
- In this column give the definite points between which change, improvement, construction or reconstruction applies. Reference the termini to some known intersection or feature shown on a map.
- MAP DESIGNATION**
(Column 4)
- When reports for a county or municipality are made and returned to this office, they should be accompanied by one of the maps of the county or municipality supplied for that purpose, showing location and identification of each road and/or bridge change, improvement, construction or reconstruction in its exact location. Those municipalities who prepare their own maps are requested to use them.
- In the absence of a designation what will identify the road on a form, as well as on a map, there should be inserted in this column an identifying symbol or designation. For this purpose a good system is to use the year, a hyphen, and a numeral, as: 74-1, 74-2, etc. It is important that the designation in this column correspond respectively with those on the map.
- MILES**
(Column 5)
- Enter in this column the actual length of the reported change, improvement, construction or reconstruction in miles, tenths, and hundredths.

In case of bridges with center line lengths of 20 feet or more, the information should be entered on Form HPS 20, and detailed information reported on Form HPS 5.

TYPE
(Column 6)

In order that those assigned to prepare and submit the Road Improvement Report may more accurately classify the road after improvement, types are defined on the accompanying Instructional Memorandum HPS 2, "Road Types and Definitions."

It is desirable that the classification, after improvement, be made by one who is familiar with its construction and improvement. For example, if a road is improved to a "bituminous penetration road on a soil surface base with or without stabilizing admixtures," reference to Instructional Memorandum HPS 2, "Road Types and Definitions," identifies the improvement as Type H. In this instance you would enter the letter "H" in column 6.

WIDTH
(Column 7)

It must be remembered that for surfaced roads (those better than Type E) the width refers to that of the pavement, or actual paved surface. For roads of Type E class and lower, the width refers to the roadway, the traveled-way, or the graded width between shoulders and/or ditches that is actually usable to vehicles.

In column 7, insert the surface or traveled-way width after improvement. If curb and/or gutter exist, place C-G after width in column 7.

SYSTEM
(Columns 8 & 9)

For the purpose of these reports, the systems will be:

- State
- County
- Municipal
- Other Public
- Private

Transfers from one system to another, by mutual agreement, should be reported in columns 8 & 9.

Example: If a road is transferred from State to County, insert the word (State) in column 8 and (County) in column 9.

The "Other Public" system comprises those roads which are open to unrestricted public use, yet which are not officially acknowledged as part of the County, State, or any other publicly owned system of roads. The greater percentage of these roads are ones constructed by Developers.

The "Private" system comprises roads that may serve one or more properties, but are recognized as privately serving these properties and can, by action of the property owners, be closed to or excluded from public use.

When roads are added to the State system, they come from County, Municipal, Other Public, or Private road systems and it is very important that the system from which the road is transferred be definitely ascertained and reported. If in an entirely new location where a road did not exist prior to the advent of the State highway, and it came from private property by the purchase or condemnation, then, for purposes of our records, it would be considered a change from Private to State System. Similarly, roads added to the County or Municipal Systems should be so reported. Most of them come from Other Public or Private systems and should be correctly reported.

When a road is added to one system, it is most important to the accuracy of our records that the system from which the transfer occurred be reported.

MILEAGE ADDITIONS
(Column 10)

In this column indicate the miles of highway added to the system by way of new construction, or to replace an existing highway, or by mutual transfer agreement between political sub-divisions. The system from which it was taken, as well as that to which it was added, should be noted in columns 8 and 9 respectively.

MILEAGE ABANDONED
(Column 11)

In this column indicate the mileage of highways abandoned as a result of construction of a new facility, relocation of an existing facility, or an outright abandonment of any public highway. The system from which the abandoned mileage came should be noted in column 8.

REMARKS
(Column 12)

This column can be used in conjunction with column 2 to report the old name of a road, if known, and/or to clarify an improvement such as shoulder work only, resurfacing, reconstruction, bridge location, bridge reconstruction, culverts, additional lanes, turning lanes, safety improvements, etc.