

Supporting Statement Highway Performance Monitoring System (HPMS)

INTRODUCTION: This is to request the Office of Management and Budget's (OMB) renewed three-year approved clearance for the Highway Performance Monitoring System (HPMS) information collection, OMB No. 2125-0028. This information collection was last cleared in June 2006, and is due to expire on June 30, 2009.

A. Justification

1. Circumstances that make the collection of information necessary.

The reports and procedures outlined in the "HPMS Field Manual for the Continuing Analytical and Statistical Data Base" are authorized under 23 U.S.C. 315, which places the responsibility on the Secretary of Transportation for management decisions which affect transportation. In addition, 23 CFR 1.5 and 49 CFR 1.48 provide the Federal Highway Administrator with authority to request such information deemed necessary to administer the Federal-aid highway program. Estimates of future highway needs of the Nation are mandated by Congress on a biennial basis (23 U.S.C 502(g)). Data are used for assessing highway system performance under FHWA's strategic planning and performance reporting process in accordance with requirements of the Government Performance and Results Act (GPRA, Sections 3 and 4) and for apportioning Federal-aid highway funds under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law 109-59, enacted August 10, 2005. Finally, 23 CFR 420.105(b) requires States to provide data that support FHWA's responsibilities to the Congress and the public.

The HPMS is not only a data collection and reporting system, but an analytical system that consists of a series of interrelated simulation models designed to serve the needs of the policy decision-making process of the agency. The HPMS data base, in concert with the inventory of the Nation's structures, consists of the continuing source of data used to prepare the legislatively mandated biennial report to Congress, *Status of the Nation's Surface Transportation System: Condition and Performance*. In addition, the HPMS serves as the single continuing data source used to carry out a host of special studies and operational functions including:

- Various State management systems.
- Vehicle size and weight studies.
- Federal-aid program apportionments and allocations.
- Environmental Protection Agency's (EPA's) Section 187, VMT Forecasting and Tracking Guidance (attachment not available) and Transportation Conformity Rule (40 CFR Parts 51 and 93-Attachment H) for urbanized areas that are National Ambient Air Quality Standards (NAAQS) non-attainment areas.
- FHWA publications including *Highway Statistics* and *Our Nation's Highways*.

Length, lane-mile, and travel data are also used for the apportionment and allocation of Federal-aid funds [23 U.S.C. 104(b)-Attachment I]. Numerous special travel data reports are prepared in response to requests from within the FHWA and National Highway Traffic Safety Administration (NHTSA). Offices from within the Department of Transportation, EPA, Department of Defense, Congress, State governors and legislators, and numerous organizations and individuals in the private sector, as well as the general public, also request these data. The data collected in accordance with the *HPMS Field Manual* are unique in that they directly tie together roadway physical, operational, use (travel), pavement, condition, and performance data that can be analyzed and summarized at the sub-State¹, statewide, regional, and national levels. The HPMS is also unique in that it makes effective use of statistically based sampling. These data are not obtainable from any other known source.

This information collection supports the DOT Strategic Goals of Mobility and Safety. The HPMS data is used as a basis for developing improvements to the overall highway system. The resulting improvements facilitate the mobility of the highway users while enhancing the economic growth and trade opportunities on the part of providers of goods and services and consumers.

2. How, by whom, and for what purpose is the information used.

The HPMS data is used by FHWA to assess the performance of the Nation's highway transportation system as well as identify future highway system needs. HPMS data are extensively used by various agencies of the Federal, State, and local governments, institutions of higher learning, industry, consultants, professional organizations, and the public for a host of purposes. Data are used for assessing highway system performance under FHWA's strategic planning and performance reporting process developed in accordance with requirements of the GPRA and for apportioning Federal-aid highway funds under SAFETEA-LU. The HPMS data collected are essential to FHWA and Congress in evaluating effectiveness of the Federal-aid highway program providing miles, lane-miles, and travel components of apportionment formulae. The information is used by FHWA to develop and implement legislation and by State and Federal transportation officials to adequately plan, design, and administer effective, safe, and efficient transportation systems.

The vehicle-miles of travel data, which represent annual travel on the Nation's highways, serve as the basis for FHWA estimation of annual travel (use) by truck type and for highway allocation among the various vehicle classes. Estimates of travel by vehicle type and vehicular weight are the basis for the estimation of pavement loadings (equivalent axle loadings) and are the fundamental input to pavement design, pavement management and administration of vehicular weight enforcement laws.

HPMS universe data are essential to comprehensive evaluations of the National Highway System (NHS) and are needed for the entire Principal Arterial System (PAS) to enable tracking of the

¹ ? HPMS is also designed to estimate travel for EPA-designated NAAQS non-attainment and maintenance areas.

system to determine whether it is providing service to all areas warranting NHS service. This is a necessity because of changing demographics, industrialization, market places, and other strategic activities.

The standard sample data collected via the HPMS are essential to the HPMS Highway Economic Requirement System (HERS), which are extensively used for the development of the legislatively mandated biennial report to Congress, *Status of the Nation's Surface Transportation System: Condition and Performance*. In general, the models are used to:

- Estimate backlog and future accruing highway system deficiencies (needs).
- Estimate the cost of overcoming deficiencies.
- Test alternative investment levels and strategies.
- Establish highway investment/performance relationships.
- Calculate related impacts.

Analytical tools of this nature, which rely upon the HPMS data base as input, are essential to sound, prudent policymaking practices and are paramount to efficient and effective program evaluation and development activities. In addition, HPMS standard sample data serve as the basic input to the Highway Economic Requirement System-State version (HERS-ST) model, which selects and prioritizes simulated highway improvements (needs) on the basis of benefit-cost relationships for use by individual States.

Information received from the current collection have been used for:

- (1) Measuring performance/FHWA and DOT programs
- (2) FHWA apportionment purposes.
- (3) *Status of the Nation's Surface Transportation System: Condition and Performance*; used for appropriations.
- (4) *Highway Statistics* (5,000+ recipients): used for planning, programming, budgeting, etc.
- (5) Internet data base.
- (6) State/private sector/academic/general public analysis purposes.
- (7) *Our Nation's Highways, Selected Facts and Figures*.
- (8) Cost Allocation Study.
- (9) Truck size and weight study

3. Extent of automated information collection.

All information for the HPMS is submitted electronically via the Internet to the FHWA by the State highway agencies. Reliance on electronic reporting of data was adopted in order to extend the power of dwindling staff resources at both the State and Federal levels. With the large data file requirements of the HPMS, electronic submission has become unavoidable. The HPMS enhancements also include the use of additional, up-to-date information technology including the ability to append HPMS data with Geographical Information System (GIS) Linear Reference System (LRS) information to operate in the GIS environment.

All data summarization, processing, modeling, etc., are fully automated on state-of-the-art personal computers. Revised software packages have been developed for use by State highway agencies, MPO, FHWA field offices, and Headquarters to accommodate the data requested in the *HPMS Field Manual*.

The HPMS is a dynamic system that undergoes periodic reassessment to assure that each data element collected continues to be needed and that the data collected is sensitive to emerging agency needs, goals and issues.

4. Describe efforts to identify duplication.

The identification and elimination of duplication are two critical goals as we manage the HPMS. Continued HPMS coordination throughout the transportation community has ensured that duplication does not exist. Over time, several HPMS Working Groups have been used to address various HPMS data issues, including avoidance of duplication, urban congestion, HPMS redevelopment, pavement data needs, etc. The Working Groups included representatives of State highway agencies, MPOs, AASHTO, the National Association of Regional Councils (NARC), FHWA field offices, and other Federal agencies and professional organizations. Current activities are directed at improving data partnerships between States, MPOs, and other local governments to implement a “collect it once, use it often” philosophy.

5. Efforts to minimize the impact on small businesses.

There is no impact on small businesses since the HPMS data is collected only from State and local governments.

6. Impact of less frequent collection of information.

It is essential that the HPMS data continue to be collected on an annual basis rather than less frequently. The annual collection of HPMS data is required to facilitate the FHWA’s continuous addressing of issues regarding the preservation of the Nation’s highway transportation infrastructure, air quality, and EPA’s requirements for NAAQS non-attainment areas to annually measure travel via HPMS. Less frequent data collection would fail to keep FHWA and EPA abreast of the continuing changes taking place on the Nation’s streets and highways on a timely basis. The results of current Federal-aid highway program projects and actions, including activities designed to improve air quality, cannot be properly evaluated based on data that is collected less frequently. The determination of the consequence of future alternative changes in policies or programs would be made with out-of-date information. (Chapter VI of the *HPMS Field Manual* provides realistic schedules for updating each piece of HPMS data, thus avoiding the need to update each data item each year.)

Further, legal mandates for annual System length, lane-mile and travel data for the apportionment of Federal-Aid Highway Program funds, Clean Air Act requirements for travel tracking and conformity; fund transferability issues, etc., necessitate the continuation of annual HPMS data collection.

Highway conditions, travel, urban congestion, pavement deterioration, air quality, and many other highway use and performance indicators and statistics are constantly changing. Consequently, it is imperative that we continually monitor change to determine the effectiveness of Federal-aid highway programs. Urban highway congestion is an important national issue and its alleviation is of critical concern because of the economic costs of delay and the additional harmful emissions that are produced.

7. Special circumstances.

There are no special circumstances related to this information collection.

8. Compliance with 5 CFR 1320.8

The FHWA published a 60-day Federal Register Notice on December 18, 2008 (Volume 73, No: 244, page 77103). One response to the Notice was received (Docket # FHWA – 2008-0176-0002) as follows:

“The Minnesota Department of Transportation (Mn/DOT) appreciates the opportunity to comment on the estimated time commitments associated with FHWA national data collection efforts. The focus of this response pertains to the estimated time related to data collection requirements for the Highway Performance Monitoring System (HPMS).

In the information included with the docket announcement, FHWA estimates that on average each state spends a total of 1,440 hours for the annual collection and processing of HPMS related data. Our experience indicates that Mn/DOT may be above the national average with approximately 1,850 hours required for current HPMS related activities.

This estimate includes time spent on the maintenance of HPMS sample sections, pavement data collection, traffic volume collection, data processing, and quality control efforts. Any work that would have been done by Mn/DOT in any of these areas in the absence of HPMS requirements was not included in this estimate.

Implementation of new HPMS Reassessment provisions will likely require additional time commitments for Minnesota and other states. For instance, changing data formats will require additional work to develop and update data processes. Further, requiring new data elements and expanding the extent of existing data elements will increase data collection efforts. Some of these additional tasks will be one-time investments, such as developing new processes and applications for the extraction and preparation of new HPMS data formats. Other new requirements will require a continued increase in the overall workload, such as the collection of motorcycle volumes and the addition of ramps and ramp data. The long-term impacts of these additional requirements are yet to be determined, but have potential to significantly increase HPMS-related time commitments.

Mn/DOT appreciates the value and importance of FHWA national data collection efforts, such as HPMS. The department encourages FHWA to focus on strengthening the quality, consistency and utility of existing data efforts before adding new requirements. We look forward to continuing our work with FHWA to more fully understand and consider the costs, benefits and challenges associated with HPMS data collection requirements.”

In response, FHWA notes and acknowledges that while a particular State (Minnesota) may have a burden-hour estimate above ours, there are States which have a lesser burden-hour estimates due to the relative size of a State as compared to Minnesota, different data collection and reporting processes in place, and more/less staff dedicated to their respective HPMS programs. A revision of the burden hour estimate is considered (per below) as the States prepare to implement a forthcoming reassessed HPMS and will likely dedicated additional time to this effort for the near future.

9. Payment or gifts to respondents.

There will be no payments or gifts to the State and local government respondents.

10. Assurance of confidentiality.

The information to be collected is not confidential in nature; there is no need for an assurance of confidentiality.

11. Justification for collection of sensitive information.

The information to be collected is not sensitive in nature.

12. Estimate of burden hours for information requested.

Respondent	No. of Respondents	Frequency of Responses	Annual Hour Burden	Total Annual Hour Burden
State Transportation Agencies, Wash., DC & Puerto Rico (Includes MPOs)	52	Annually	1,800	93,600
TOTAL	52		1,800	93,600

The estimated total annual burden hours on the 52 responding agencies for the collection of HPMS data is 93,600 hours. This respondent burden is based on the average annual activities

necessary for the 50 States, Washington, DC, and Puerto Rico to comply with the HPMS data requirements. The total annual salary cost to the 52 responding agencies is \$3,121,560, based on an average of \$33.35 per hour, as indicated in Table 445 of the *2009 Statistical Abstract of the United States* (Attached).

13. Estimate of total annual costs to respondents.

Other than the salary costs indicated in item 12 there are no additional cost burdens to the responding agencies since the HPMS data are obtained from the normal business records maintained by the State and local governments that are a basic part of their day-to-day business activities.

14. Estimate of annualized cost to the Federal Government.

The estimated annual cost to the Federal Government for this HPMS information collection is \$675,538, which is calculated as follows:

(7) FHWA Headquarters staff x 2,000 hours each @ \$33.35 per hour	=	\$ 466,900
(60) FHWA field office staff x 48 hours each @ \$33.35 per hour	=	\$ <u>96,048</u>
		\$ 562,948 (subtotal)
plus overhead @ 20%	=	\$ <u>112,590</u>
		\$ 675,538 (total)

Note: The printing costs for the various reports and publications associated with the HPMS are covered in the existing OMB clearance for the *Guide for Reporting Highway Statistics*, OMB control number 2125-0032.

15. Explanation of program changes or adjustments.

The estimated cost to the data respondents and the Federal Government have increased per the updating of the average hourly salary. Estimates for the data respondents also increased due to the HPMS program activities pertaining to the reassessment effort of this program. The reassessed HPMS will incorporate a new geospatial data base and will require some near term additional effort in transitioning from the current requirements and software.

16. Publication of results of data collection.

The results of the data collected are published in the reports to Congress, and are also published in the *Highway Statistics*; and they are posted on the Internet. The data to be submitted on June 15 of each year is assembled and/or collected by the States and MPOs to reflect data as of December 31 of the previous year. The data received is processed by FHWA between June and September 15 of each year, with final data tables, charts, and graphs being readied for publication by October 1. The publication is generally received from the printer and

distributed/posted on the Internet by December 1. This is an annual activity.

17. Approval for not displaying the expiration date for OMB approval.

No such approval is being requested for this information collection.

18. Exceptions to the certification statement.

No exceptions to the certification statement are being requested.

ATTACHMENTS

- . *Highway Performance Monitoring System Field Manual*
 - 23 U.S.C. 315
 - 23 CFR 1.5
 - 49 CFR 1.48
 - 23 U.S.C. 502(g)
 - Government Performance and Results Act (GPRA), Sections 3 and 4
 - 23 CFR 420.105(b)
 - 40 CFR Parts 51 and 93
 - 23 U.S.C. 104(b)
 - Federal Register Notice dated December 18, 2008
 - Table 445 of the *2009 Statistical Abstract of the United States*.