DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

[HFWA Docket No. FHWA–2010–0010]

Reclassification of Motorcycles (Two and Three Wheeled Vehicles) in the Guide to Reporting Highway Statistics

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice, request for comments.

SUMMARY: This Notice proposes to update FHWA’s guidance regarding State reporting of motorcycle registration information disseminated to the public in FHWA’s annual publication Guide to Reporting Highway Statistics. The intent of these actions is to improve FHWA’s motorcycle registration data to assist in the analysis of crash data relating to these vehicles. Thus, it is critical that the motorcycle registration data collected and published by FHWA is accurate, comprehensive, and timely. FHWA’s Guide to Reporting Highway Statistics (Guide) is the guide by which FHWA instructs States on selected data required by FHWA to perform its mission of informing Congress, the highway community, and the general public on a wide variety of highway extent, condition, use, and performance measures.

DATES: Comments must be received on or before 90 days after date of publication in the Federal Register.

ADDRESSES: Mail or hand deliver comments to the U.S. Department of Transportation, Dockets Management Facility, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590, or submit electronically at http://www.regulations.gov. All comments should include the docket number that appears in the heading of this document. All comments received will be available for examination and copying at the above address. Comments received after the comment period closing date will be filed in the docket and will be considered to the extent practicable. In addition to late comments, the FHWA will also continue to file relevant information in the docket as it becomes available after the comment period closing date and interested persons should continue to examine the docket for new material.

Background

FHWA has collected motorcycle registration data since 1914. In the last few years, however, the population of motorcycles and related vehicle types has risen dramatically. Additionally, there has been an increase in motorcycle crashes due to factors including, but not limited to, rider inexperience, rider impairment, decreased use of helmets, and increased motorcycle use.

Data from the National Highway Traffic Safety Administration’s (NHTSA) Fatality Analysis Reporting System (FARS) indicates that in 2008, motorcycle rider fatalities increased for the eleventh consecutive year. From 2,116 in 1997 to 5,290 in 2008, an increase of 150 percent. Other trends include a dramatic rise in motorcycle ownership and changes in other factors such as motorcycle size and new designs for these vehicles. However, this increase in fatality data is disproportionate to reported increases in motorcycle registration and in reported miles traveled. Due to this disconnect, safety advocates have encouraged improving the data collection process in order to better analyze and identify rider exposure and crash causality.

On October 3, 2007, the National Transportation Safety Board (NTSB) sent a letter to FHWA containing an NTSB Safety Recommendation H–07–34, which States:

Following the 2007 Motorcycle Travel Symposium, develop guidelines for the States to use to gather accurate motorcycle registrations and motorcycle vehicle miles of travel data. The guidelines should include information on the various methods to collect registrations and vehicle miles traveled data and how these methods can be put into practice.

FHWA is committed to improving both sets of data. This notice addresses the NTSB recommendation to gather
more accurate motorcycle registration data. Specifically, related to vehicle registrations, FHWA has established an interagency review team consisting of experts from FHWA’s Offices of Safety and Research, and various NHTSA offices, to assist in the following activities:

1. Review State laws to determine the State of practice for motorcycle registrations by documenting State laws and practices;
2. Improve the definition of motorcycles in the Guide to Reporting Highway Statistics;
3. Develop guidelines for the States to use to gather and report more accurate motorcycle registration data;
4. Include information on the various methods to collect and report registrations in the guidelines; and
5. Initiate actions to bring the best methods in wider practice.

Current Status

FHWA’s current definition of a motorcycle is two-fold: (1) motorcycles and (2) motor bicycles and scooters. The current language for defining motorcycles is provided in FHWA’s Guide 2 as follows:

Item I.E.2. Motorcycles: This item includes two-wheeled and three-wheeled motorcycles. Sidecars are not regarded as separate vehicles—a motorcycle and sidecar are reported as a single unit.

Item I.E.3. Motor bicycles and scooters: Mopeds should be included with motor-driven cycles (motor bicycles) in the States that require their registration.

The Guide has approval from the Office of Management and Budget (OMB) under the control number 2125–0032. The information collected in accordance with the Guide is authorized under 23 U.S.C. 315, which authorizes the Secretary of Transportation to prescribe and promulgate rules and regulations to carry out the requirements of Title 23 of the U.S. Code. Under that authority, 23 CFR 1.5 provides FHWA with the ability to request information deemed necessary to administer the Federal-aid highway program. Data is used to relate highway system performance to investment under FHWA’s strategic planning and performance reporting process in accordance with the requirements of the Government Performance and Results Act. 3 Additionally, 23 CFR 420.105(b) requires States to provide data that support FHWA’s responsibilities to the Congress and the public.

States annually report data to FHWA from their motor vehicle registration systems. As a result, such data is based on the definitions developed by States which may or may not approximate FHWA’s definition of motorcycles, motor bicycles, or scooters.

FHWA researched State legislation (including the District of Columbia, but not Puerto Rico) for definitions of motorcycles and similar vehicles. We found several characteristics that specifically differentiated motorcycle-type vehicles from other vehicle types. Several States further defined the difference between motorcycles and mopeds, or in a few States, motor scooters. The characteristics for defining motorcycles included vehicles: with two to three wheels in contact with the ground (48 States), with a seat or saddle for the passenger(s) (36 States), with a sidecar or trailer (4 States), and with a steering handlebar (2 States). Additionally, one State defined motorcycles as having no enclosure on the vehicle for the operator (driver) or passenger.

The following characteristics were used by some States to define the difference between motorcycles, mopeds, and in a few cases, motor scooters: speeds not in excess of 25 to 45 miles per hour (MPH) (3 States mention 25 MPH, 13 mention 30 MPH, 1 State each mentions 35 or 45 MPH); engine displacement of not greater than 50 to 150 cubic centimeters (cc) (21 States mention 50 cc, 1 State mentions 55 cc, and 1 State mentions 150 cc). Some States used brake horsepower (HP) instead of, or in addition to, displacement to identify vehicle power (4 States mention 1.5 HP, 12 mention 2.0 HP, 1 State mentions 2.7 HP, and 1 State mentions 5 HP). Wheel diameter for differentiating motorcycles and mopeds from motor scooters is mentioned by 5 States (2 States mention wheel diameter greater than 10 inches, 1 State mentions wheel diameter greater than 14 inches, and 2 States mention wheel diameter greater than 16 inches); and 4 States mentioned a platform or deck for a standing driver as a characteristic of a motor scooter.

Another identifier for vehicle type is provided by the Vehicle Identification Number (VIN) which is recorded by States when vehicles are registered for highway use. The VIN is a unique 17 digit standardized serial number used by the motor vehicle industry to identify individual motor vehicles. The standards are set by the International Organization for Standardization (ISO) 3779 (1979) and 3780 (1980). These standards are due for major revision in 2010.

The United States uses a compatible but somewhat different implementation of these ISO standards for domestic use. Title 49, Code of Federal Regulations, Transportation, Part 565, Vehicle Identification Number Requirements, 565.15 Content, describes VIN characteristics as follows: The VIN consists of four sections of characters which are grouped according to given specifications. The first section consists of three characters that occupy positions one through three in the VIN. These numbers uniquely identify the manufacturer, make, and type of the motor vehicle. The second section consists of five characters, which occupy positions four through eight in the VIN. This section identifies attributes of the vehicle. For motorcycles, this would typically include the manufacturer’s brand, model designation, engine type (displacement for liquid fueled engines), net brake horsepower (less than or greater than 2 HP), and vehicle weight. All motorcycles would fall in the grouping of vehicles weighing less than 3,000 pounds. The placement of characters within this section is determined by the manufacturer, but the specified attributes must be decipherable with information supplied by the manufacturer in accordance with 49 CFR 565.15. In addition, the model year, in place 10 of the 17 digit VIN code, may also be useful for motorcycle registration information for identifying vehicle age. The remaining sections of the VIN would not provide the type of information needed to identify motorcycle vehicle types.

Reference Material

The Guide to Reporting Highway Statistics is FHWA’s guidance to the States for reporting a variety of data items, including two categories of motorcycles: motorcycles and motorized bicycles.

The American National Standards Institute (ANSI) D 16.1 4 defines a motorcycle as any motor vehicle having a seat or saddle for the use of its operator and designed to travel on not more than three wheels in contact with the ground. This includes large motorcycles, motor-driven cycles, speed limited motor-driven cycles, mopeds, motor scooters, and motorized or motor assisted bicycles.

The definitions of motorcycle type vehicles found in 49 CFR 571.3 state that:

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3 Government Performance and Results Act of 1993 (GPRA), Sec. 3 and 4, Public Law 103–62.

4 American National Standards Institute, http://webstore.ansi.org/source=google&adgroup=ansi&keyword=ansi&glid=CPcrrZm5JfCfQ7 NSQodzXVxG.
Motorcycle means a motor vehicle with motive power having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground.

Motor-driven cycle means a motor vehicle with a motor that produces 5-brake horsepower or less.

The Model Minimum Uniform Crash Criteria (MMUCC) defines a motorcycle as a two or three-wheeled motor vehicle designed to transport one or two people. Included are motor scooters, mini-bikes, and mopeds.

The FARS and National Automotive Sampling System (NASS) General Estimates System (GES) follows the ANSI D 16.1 definition. The FARS and GES data are used in traffic safety analyses by NHTSA as well as other public and private entities. The information is used to estimate how many motor vehicle crashes of different kinds take place, and is also used in the analyses by researchers and highway safety professionals in order to determine the factors involved in the crashes.

Discussion of the Proposal

FHWA is seeking to provide improved registration data to agencies and the public to assist in the analysis of crash data relating to these vehicles. For FHWA, the issue is two-fold: FHWA must provide the States complete and comprehensive instructions on the data FHWA needs to collect to perform its responsibilities, and FHWA must work with the States to assure that they are providing accurate data to the extent that they can in accordance with FHWA instructions. A corollary to both issues is that FHWA must provide instructions that allow the States to provide accurate and collectable data.

FHWA proposes to revise its definition of motorcycles and two-and-three-wheeled vehicles to better differentiate motorcycles, mopeds, and motor scooters. Further, FHWA proposes to build on the various existing State definitions and to work with the States to build consensus towards a uniform definition of these types of vehicles. An example of potential revised definitions include the following:

Item i.e.2. Motorcycles: This item includes vehicles with the following characteristics:

1. Two or three wheels in contact with the ground (excluding trailers suitable for motorcycle hauling).
2. A seat or saddle for rider (operator) and passengers (if any).
3. A steering handle bar.
4. Motor capacity exceeding 5 Horsepower.
5. Wheel rim diameters exceeding 10 inches.
6. Do not include a full enclosure for the rider (operator) or passengers.
7. Sidecars and trailers are not regarded as separate vehicles—a motorcycle and sidecar or trailer is reported as a single unit.

Item i.e.3. Mopeds or motor bicycles: this item includes vehicles with the following characteristics:

1. Two wheels in contact with the ground.
2. A seat or saddle for rider (operator) and passengers (if any).
3. A steering handle bar.
4. Pedals for operation without motor assistance.
5. Do not include a full enclosure for the rider (operator) or passengers.
6. Have a brake horsepower not exceeding 5 Horsepower.

Item i.e.4 Motor scooters: this item includes vehicles with the following characteristics:

1. Two wheels in contact with the ground.
2. Has a platform or deck for the use of a standing rider (operator).
3. A steering handle bar.
4. Do not include a full enclosure for the rider (operator) or passengers (if any).
5. Have a brake horsepower not exceeding 5 Horsepower.
6. Have a direct drive energy transmission from the engine to the drive wheel(s) (no transmission).

In addition, FHWA seeks comments on the issues of identifying vehicles with the following characteristics:

1. Two or three wheels in contact with the ground (excluding trailers suitable for motorcycle hauling).
2. A seat for driver and passengers.
3. Wheel diameters exceeding 10 inches.
4. An enclosure for the driver or passengers.
5. Sidecars and trailers are not regarded as separate vehicles—a motorcycle and sidecar or trailer is reported as a single unit.

FHWA also seeks comment regarding the types of three-wheeled vehicles that are small and lightweight, with a minimal chassis and body that may or may not be fully enclosed by doors and/or windows. Examples include commercial vehicles such as the Zapcar and T-Rex. FHWA seeks comments on all revised definitions above and on any other definitions that would provide value.

Another approach would be for FHWA to request the States to report additional information on the relevant sections of the VIN of every motorcycle type vehicle registered with the States. FHWA could request States to report the relevant digits of the VIN of the registered motorcycle to gather additional details on the motorcycle characteristics and avoid digits that indicate a specific vehicle. By only asking for the characteristic-relevant digits, FHWA would avoid gathering any unique identifier of the vehicle (and the owner of the vehicle). FHWA seeks comments on whether the collection of this information would raise privacy concerns.

Discussion with experts in the field indicates that motorcycle attributes contained in the VIN are less standardized than those for auto or truck type vehicles. This implies that VIN data may not be as helpful in classifying motorcycle type vehicles as some may believe. The VIN approach also adds considerable cost to FHWA’s data collection and analysis program and may not provide significantly new or additional information. FHWA seeks comments on whether the collection of information contained in the VIN would provide useful or valuable information and if that information is useful, whether that information could be collected in another way.

FHWA seeks comments on these proposed revisions and methods of reporting.

Issued on: March 8, 2010.
Victor M. Mendez,
Administrator.