Appendix A – Vehicle Types

Appendix A. VEHICLE TYPES

Motorcycles – All two or three-wheeled motorized vehicles. Typical vehicles in this category have saddle type seats and are steered by handlebars rather than steering wheels. This category includes motorcycles, motor scooters, mopeds, motor-powered bicycles, and three-wheel motorcycles.

Passenger Cars – All sedans, coupes, and station wagons manufactured primarily for the purpose of carrying passengers and including those passenger cars pulling recreational or other light trailers.

Other Two-Axle, Four-Tire Single Unit Vehicles – All two-axle, four-tire, vehicles, other than passenger cars. Included in this classification are pickups, panels, vans, and other vehicles such as campers, motor homes, ambulances, hearses, carryalls, and minibuses. Other two-axle, four-tire single-unit vehicles pulling recreational or other light trailers are included in this classification. Because automatic vehicle classifiers have difficulty distinguishing class 3 from class 2, these two classes may be combined into class 2.

Buses – All vehicles manufactured as traditional passenger-carrying buses with two axles and six tires or three or more axles. This category includes only traditional buses (including school buses) functioning as passenger-carrying vehicles. Modified buses should be considered to be a truck and should be appropriately classified.

In reporting information on trucks, the following criteria should be used:

- Truck tractor units traveling without a trailer will be considered single-unit trucks;
- A truck tractor unit pulling other such units in a saddle mount configuration will be considered one single-unit truck and will be defined only by the axles on the pulling unit;
- Vehicles are defined by the number of axles in contact with the road. Therefore, floating axles are counted only when in the down position; and
- The term "trailer" includes both semi- and full trailers.

Two-Axle, Six-Tire, Single-Unit Trucks – All vehicles on a single frame including trucks, camping and recreational vehicles, motor homes, etc., with two axles and dual rear wheels.

Three-Axle Single-Unit Trucks – All vehicles on a single frame including trucks, camping and recreational vehicles, motor homes, etc., with three axles.

Four or More Axle Single-Unit Trucks – All trucks on a single frame with four or more axles.

Four or Fewer Axle Single-Trailer Trucks – All vehicles with four or fewer axles consisting of two units, one of which is a tractor or straight truck power unit.

Five-Axle Single-Trailer Trucks – All five-axle vehicles consisting of two units, one of which is a tractor or straight truck power unit.

Six or More Axle Single-Trailer Trucks – All vehicles with six or more axles consisting of two units, one of which is a tractor or straight truck power unit.

Five or Fewer Axle Multi-Trailer Trucks – All vehicles with five or fewer axles consisting of three or more units, one of which is a tractor or straight truck power unit.

Six-Axle Multi-Trailer Trucks – All six-axle vehicles consisting of three or more units, one of which is a tractor or straight truck power unit.

Seven or More Axle Multi-Trailer Trucks – All vehicles with seven or more axles consisting of three or more units, one of which is a tractor or straight truck power unit.

Figure A-1 lists the 13 vehicle category classifications used by FHWA.

FIGURE A-1 FHWA 13 VEHICLE CATEGORY CLASSIFICATION

FIGURE A-1 FHWA 13 VEHICLE CATEGORY CLASSIFICATION						
Class 1 Motorcycles		Class 7 Four or more	•••••			
Class 2 Passenger Cars		axle, single unit				
		Class 8 Four or less axle,	• • •			
		single trailer				
Class 3 Four tire,						
single unit		Class 9 5-Axle tractor semi-trailer	00 00 0			
		semi-trailer				
Class 4 Busses		Class 10 Six or more axle,				
	00	single trailer				
		Class 11 Five or less axle, multi-trailer				
Class 5 Two axle, six tire,		Class 12 Six axle, multi- trailer				
single unit						
		Class 13 Seven or more axle, multi-trailer	0 00 00			
Class 6 Three axle, single unit		axio, maiu-trailei	00 000 00			
difft			00 000 000			
Source: Fee	Apral Highway Administration					

Source: Federal Highway Administration

Certain truck configurations utilize axles that can be lifted when the vehicle is empty or lightly loaded. The position of these axles — sometimes called lift axles, drop axles, or tag axles — affects the classification category into which the vehicle falls. To maintain consistency between visual and axlebased counts, the *TMG* recommends that only axles that are in the dropped position be considered when classifying the vehicle. While this promotes consistency, it may induce difficulty when interpreting summary classification statistics at certain locations. For example, a site may exhibit directional differences in vehicle classification even though the same trucks may be travelling one direction loaded (with axles down) and the other direction empty (with axles lifted).