Diurnal Distribution of Traffic

Again from the database of ATR stations, the hour-by-hour distribution of AADT over the 24-hour period was computed for each TPG as an average of the distributions pertaining to the respective ATR stations within the TPG. The computations were made separately for weekday and weekend traffic only, and for the total traffic. These tables can be found on pages xxvi through xxviii.

As explained earlier, when the diurnal distribution of traffic on a roadway segment or link is required, it is necessary to find the TPG to which the roadway segment belongs. Then referring to the aforesaid tables, the hour by hour distribution of AADT over the 24-hour period can be obtained for that roadway segment.

VEHICLE CLASSIFICATION

All highway vehicles are classified in accordance with the current FHWA Vehicle Classification scheme, which includes 13 vehicle classes as follows:

FHWA Vehicle Classification
1. Motorcycles (Optional)
2. Passenger Cars
3. Other Two Axle, 4 Tire Single Units
4. Buses
5. Two Axle, 6 Tire Single Units
6. Three Axle Single Units
7. Four or More Axle Single Units
8. Four or Less Axle Single Trailers
9. Five Axle Single Trailers
10. Six or More Axle Single Trailers
11. Five or Less Axle Multi-Trailers
12. Six Axle Multi-Trailers
13. Seven or More Axle Multi-Trailers

The vehicle classification data pertinent to a Functional System represents the weighted average composition of vehicle classes at all sites within that Functional System. Therefore, when the vehicle classification data on a roadway segment is required, it is necessary to determine the Functional Classification or System of Highways to which the roadway segment belongs, and then obtain the percentages of vehicle composition from the vehicle classification table for that Functional System.

However, such vehicle classification data should be used with caution, because the Seasonal Adjustment Factors are not established and applied to the vehicle composition and the data are not supported by statistical analysis of permanent classifier stations for system adequacy.

DelDOT has installed 23 permanent Automated Vehicle Classifiers (AVC) and Weigh in Motion (WIM) stations throughout the Road Inventory network. These permanent monitoring stations are collecting classification and axle-weight data.