

DATA DICTIONARY FOR ARIZONA STATE HIGHWAY SYSTEM K D AND T FACTORS - OCTOBER 2010

Definitions or meanings of the column headings used in the K, D and T Traffic Factor pdf and spreadsheet files are as follows:

CNTLOCID is a 6-digit count location identifier used to reference locations where traffic data are collected. This number can be used to view and obtain more detailed information about traffic collected at the Traffic Count Stations displayed in a graphical interface application being developed by the Department. It can also be used to join tables of other traffic measurements available on this website, such as Current AADT volumes and 20 year AADT Projections.

ROUTE is the alpha-numeric route designation of the highway. Additional descriptive information about this field appears below.

Definitions of Alpha-Numeric Route Designations:

- I is an Interstate Route signed with an Interstate Highway shield
- US is a US Route signed with a US Highway shield
- SR is a State Route signed with a State Highway shield
- The Number is the signed route number of the highway appearing on the shield

The following are Signed Route Qualifiers where:

- A is an Alternate Route
- B is a Business Route
- L Is Loop Route
- S is a Spur Route
- T is a Truck Route
- X is a Temporary Route
- Y is a Wye Leg Route
- (N) indicates the numerical sequence of a discontinuous route. They are usually associated with Interstate Business Loop (B) routes.

BMP stands for beginning milepost. It is the highway milepost location of where the Traffic Count Section begins. BMP locations are stated to the nearest one hundredth of a mile.

START is a literal description of where the Traffic Count Section begins. This beginning point is generally an intersecting road or street, and usually defines the west or south terminus of the section.

EMP stands for ending milepost. It is the highway milepost location of where the Traffic Count Section ends; also expressed to the nearest one hundredth of a mile.














END is a literal description of where the Traffic Count Section ends. Like a start point, the end point is also typically an intersecting road or street, and usually defines the east or north terminus of the section.

K Factor is the 30th highest hourly volume of the year (out of 8,760 possible hours in a calendar year) expressed as a percentage of the AADT volume. K Factors (also known as Design Hour Volumes) are commonly used in highway project assessments and/or design concept reports. They are also needed for calculating key highway congestion and performance indicators, such as Volume-to-Capacity Ratios or Level of Service measurements. K Factors are reported for both 2008 and 2009.

D Factor is the percentage of traffic moving in the peak travel direction during the 30th highest hourly volume of the year. It is calculated by dividing the higher directional volume occurring in the 30th highest hour by the total roadway volume for that hour. D Factors are another basic requirement for development of highway project assessments or design concept reports. They are also used in the derivation of highway congestion measurements. D Factors are reported for both 2008 and 2009.

T Factor is the percentage of the AADT volume generated by trucks or commercial vehicles. Like K and D Factors, T Factors are needed for assessment and advance design of highway projects and in the calculation of congestion or performance measurements. T Factors are reported for both 2008 and 2009.

A further distinction about the presence of trucks in a traffic stream is based on their physical configuration:

FHWA Scheme F Vehicle Classification			
NON COMMERCIAL VEHICLE			
1 Motorcycles	2 Passenger Cars	3 Two Axle, 4 Tire Single Unit	
			
SINGLE TRUCK			
4 Buses	5 Two Axle, Six Tire Single Unit	6 Three Axle Single Unit	7 Four or More Axle Single Unit
			
COMBO TRUCK			
8 Four or Less Axle Single Trailers	9 Five Axle Single Trailers	10 Seven or More Axle Single Trailers	
			
11 Five or Less Axle Multi-Trailers	12 Six Axle Multi-Trailers	13 Seven or More Axle Multi-Trailers	
			

Single Trk (Class 4 to Class 7) is the percentage of the AADT volume generated by single-unit commercial vehicles. These are light to medium weight straight-bodied trucks consisting of one motorized unit with six or fewer axles. Examples would include local delivery, dump and garbage trucks. Buses of all kinds are included in these classes of vehicles.

Combo Trk (Class 8 to Class 13) is the percentage of the AADT volume generated by multi-unit or combination commercial vehicles. These are heavy weight trucks with two or more units - typically tractor-trailer combinations such as those used by over-the-road motor freight carriers.

Single and combination truck percentages are reported for 2009 only.

Please note: The K, D and three T measurements defined above are calculated from extensive traffic data recorded at continuous traffic counter stations. Once developed, they are then assigned to other highway segments thought to exhibit similar traffic behavior patterns. A null or blank cell appearing in any of the data fields denotes that the information is currently unknown or unavailable for this location. No estimate has otherwise been made.