TDOT Traffic Data

TNMUG

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Traffic Data

Type of Data	Description	Primary Uses	
Roadway Volume (Average Daily Traffic)	A count of the two-way, 24-hour traffic volume at a spot location on a segment of roadway.	Roadway design, crash rate calculations, traffic growth & forecasts, operational level of service, pavement design, travel demand model calibration	
Vehicle Classification	A breakdown of the roadway volume into the various types of vehicles using the roadway segment (passenger cars, single-unit trucks, multi-unit trucks, etc.). Pavement design, freight analysis, operational level of service		
Intersection Volume	A count of each individual turning movement at an intersection over a set period of time.	Operational level of service, roadway design, traffic control design	
Travel Time	A measurement of the average travel time between two locations along the study roadway segment.	Operational level of service, traffic growth (if measured regularly), speed determination	
Vehicle Occupancy	A count of the number of passengers in each vehicle at a spot location on the study roadway.	Various travel study uses (HOV, transit, etc.).	
Truck Weight	A measurement of axle loads of commercial vehicles at spot locations on the study roadway.	Bridge design, pavement design, resurfacing forecasts	

State Comparison –Coverage

State	Miles of Roadway Monitored	Continuous Count Stations	Coverage Count Stations
TN	95,500	60	12,300
GA	105,500	229	27,000
VA	100,000	322	17,000
TX	311,000	160	60,000 - 80,000
NM	68,000	122	14,800
MN	29,100	70	32,000
NJ	39,000	145	9,400

State Comparison – Frequency

State	Frequency of Coverage Counts	Frequency of Classification Counts
TN	All counts annual	600 sites every 3 years
GA	Averages three years	229 sites daily
VA	Three year	
TX	State Routes annual, others 5 years	650 sites annually
NM	Three year (rural minor collectors and local are six year)	122 sites annually
MN	State routes bi-annual, others 4 years (transitioning to 12 year cycle where AADT<100)	30 sites monthly 2,000 sites every 6 years
NJ	Three year (ramps are six year)	50 sites monthly

State Comparison – Duration

State	Coverage Count Duration	Classification Count Duration
TN	24 hours	24 hours
GA	48 hours	24 hours
TX	24 hours	Most 24 hours, some 48 hours
NM	48 hours	48 hours (manual counts at 9 hours)
MN	48 hours	48 hours (manual counts at 4 hours)
NJ	48 hours	7 days

FHWA only requires 24 hours of AADT data, but they recommend that data be based on 48-hour counts. Seven-day counts are preferred.

Questions to Consider

- Should statewide counts be made at more locations, but less often?
- How would reduction in frequency affect data users?
- Should some stations (NHS) continue to be counted annually?
- Is more vehicle class data needed? Any particular type of facility?
- Would other travel data (like travel times) be beneficial?