# NCDOT 2024 Traffic Segment Shapefile

The traffic data event shapefile contains Annual Average Daily Traffic (AADT) and Vehicle Class (VC) estimates. This data resource includes what was submitted to FHWA for Highway Performance Monitoring System (HPMS) for AADT and VC data reporting for 2024. We report AADT on all highways functionally classified (FC) above Local. Full coverage is provided for these routes where AADT segmentation is based on network configuration, travel patterns, and land use. Where divided highways occur, the AADT total for both directions is referenced on the inventory direction. Data is provided for ramps also. The ramp data does not cover all ramp segments but all major traffic flows at interchanges are reported. Some maintained traffic segments require multiple records due to route ID changes at the county boundary in the linear referencing system (LRS). Traffic statistics for these segments are the same on each side of the county boundary but are maintained in this format to preserve the different locations referencing data.

Supplemental AADT is provided on the routes that are Local FC. These are not maintained in the maintenance table described above. A reference is generated through a spatial join between the monitoring station point and the LRS Arc it falls on. The extent of highway this AADT represents has not been determined. This process captures the AADT for Local routes into the published table without requiring a comprehensive maintenance process. The AADT on Local routes may extend beyond the arc used to report it. The user must exercise their judgment in determining the extent of highway for an AADT in this case.

VC data is provided for those segments where vehicle classification data was collected. Truck volume data is collected at stations and the volumes are annualized. Annualized truck percentages for Single Unit (SU) and Multi Unit (MU) trucks are generated from this data. These truck percentages are applied to the 2024 AADT estimates to generate 2024 truck volume estimates. The truck percentage and volume estimates are provided on 12,640 segments in the shapefile. The VC coverage includes the National Highway System (NHS) and the NC Truck Network. VC data is not collected on routes, not part of these systems, and truck statistics are not provided on those segments.

The referencing provided is based on the 2024 End of Year quarter 4 publication of the NCDOT Linear Referencing System (LRS) maintained by the GIS Unit. This is the official 2024 data set reported for HPMS routes, is the basis for the highway mileage reports, and was used to estimate vehicle miles of travel (VMT) for 2024.

Differences in the arcs and references will occur when using other quarterly publications with this data set.

<u>Attribute Table Fields</u>

The traffic data provided is seasonally factored to an estimate of an Annual Average of Daily Traffic (AADT). The statistics provided are:

**RouteID**: GIS 11-digit unique route identifier
**BeginMp**: Route milepost at the beginning of the reference
**EndMp**: Route milepost at the end of the reference
**VolStaID:** Also known as LocationID in the station point shapefile. This station provides short-term volume collection data. This is Traffic Survey's 10-character unique station identifier. Digits 1-3 are the county code beginning with 001 and ending with 100 and digits 4-10 are the station number for the indicated county
**AADT_Year**: Year of the traffic statistics estimates; this is 2024 for this publication
**AADT**: Estimated Annual Average Daily Traffic for 2024
**SU_AADT**: Estimated annual average daily Single Unit trucks for 2024
**MU_AADT**: Estimated annual average daily Multi Unit trucks for 2024
**SU_PCT**: Percent of AADT that are Single Unit trucks (FHWA Class 4 – 7)
**MU_PCT**: Percent of AADT that are Multi Unit trucks (FHWA Class 8 – 13)
**AADTT**: Estimated annual average daily total trucks for 2024
**ClassStaID:** Also known as LocationID. This station provides short-term vehicle classification collection data associated with VolStaID. This is Traffic Survey's 10-character unique station identifier. Digits 1-3 are the county code beginning with 001 and ending with 100 and digits 4-10 are the station number for the indicated county. Not all VolStaIDs have associated ClassStaID.  Only those route segments where vehicle classification data was collected will have a ClassStaID.

The segment location data are suitable for relating the AADT/VC data to other data by spatial association using the arcs or event association using the Route/Mileposts.

If additional information is needed, or an issue with the data is identified, please contact the Traffic Survey Group at (919) 814-4842 or contact us at:

https://apps.dot.state.nc.us/ContactUs/PostComment.aspx?Unit=TrafficCnt

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