Bureau of Planning and Research Transportation Planning Division

2024 Pennsylvania Traffic Data

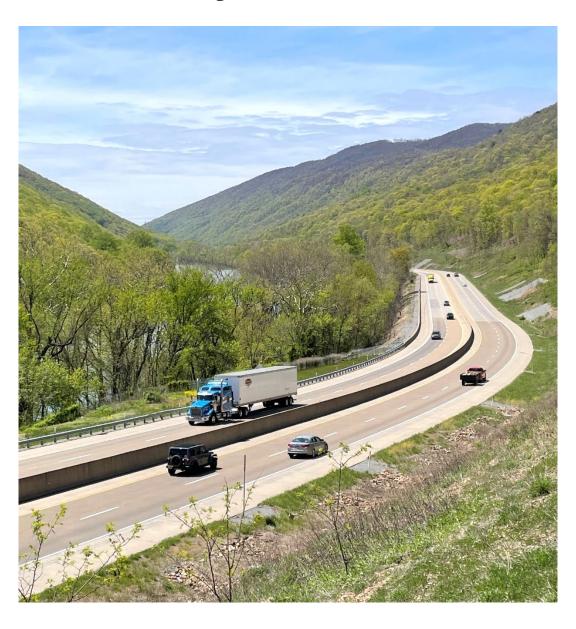




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Introduction

The "Pennsylvania Traffic Data Book" documents procedures for developing accurate estimates of highway traffic volumes based on sample traffic counts.

Traffic information is critical in transportation decision-making related to highway funding, traffic engineering, highway design, air quality analysis, planning and programming, as well as winter services, highway maintenance and construction.

The "Pennsylvania Traffic Data Book" provides current traffic expansion factors through the use of tables, charts, and graphs. Expansion factors allow the traffic professional to use a sample traffic count and develop reliable and comparable Annual Average Daily Traffic (AADT) estimates. All tables & charts in the "Pennsylvania Traffic Data Book" are derived from the data of permanent sites or short-term sites.

Some of the permanent sites are excluded on a year to year basis. Reasons for exclusion can be insufficient data due to construction projects or equipment malfunction.

How to Use this Booklet

This booklet provides current traffic expansion factors through the use of tables, charts, and graphs. All of the tables, charts, and graphs are listed in the Table of Contents. Refer to the description provided with each table, chart, and graph to ensure that the data presented is what you need.

Acronyms are used quite often throughout this publication. A complete list of acronyms and their meanings are located in the back of the booklet. In addition, an index was created for this booklet to help you find a particular topic quickly.

We would appreciate any comments or suggestions you can provide on information presented in this booklet. Questions or comments relating to data presented in this publication can be directed to:

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The 2024 Traffic Data Book and County Traffic Volume Maps are available free on our website! Traffic Volume Maps can also be purchased through our Maps and Publications Sales Store on the website.

www.pa.gov/penndot
Select: Research, Planning & Innovation

Select: Planning

Select: Maps for the County Traffic Volume Maps or select Traffic Information for the Traffic Data Book

New Developments

Permanent Site Installations

One new Continuous Automatic Vehicle Classification (CAVC) site was installed in the 2024 calendar year. The site collects classification data in all lanes of travel. The site is listed below, showing the location and when the site began collecting data.

• CAVC 23 – US 22 in Palmer Township, Northampton County, began in May.

Four Continuous Automatic Vehicle Classification (CAVC) sites were reinstalled in the 2024 calendar year. A list of the sites is below, showing their location and when the site began collecting data.

- CAVC 15 US 522 in Todd Township, Fulton County, began in July.
- CAVC 831 I-81 in Silver Spring Township, Cumberland County, began in June.
- CAVC 833 I-81 in East Pennsboro Township, Cumberland County, began in June.
- CAVC 851 PA 33 in Lower Nazareth Township, Northampton County, begin in May.



Installation of CAVC 833 on I-81 in Cumberland County

Traffic Data Collection

Traffic data is collected on 40,000 miles of PennDOT owned roads, 78,000 miles of municipal roads, and just under 3,800 miles of local federal aid roads in Pennsylvania. Approximately 15,000 raw traffic counts are collected per year by:

- 3 Bureau of Planning and Research (BPR) Field Staff
- PennDOT Engineering Districts 2-0 and 10-0
- 7 Metropolitan Planning Organizations (MPOs)
- Contractor

Volume: The majority of the counts taken as part of our statewide count program record volume of traffic on a roadway. Volume is usually expressed as Annual Average Daily Traffic (AADT), which represents traffic volume over an average 24-hour period.

Classification: One method of data collection used for our count program is vehicle classification. Vehicles are classified into 13 classes ranging from cars to trucks in accordance with the Federal Highway Administration vehicle classification scheme.

Weight: Truck weight data is collected from WIM stations.

Speed: Speed data is collected from permanent traffic recorders.



Short-Term classification count installed.

Traffic Data Collection Sources

Automatic Traffic Recorders (ATRs)

8 ATRs strategically located throughout the state count volume and speed data on a continuous basis 365 days per year. A map showing the locations of ATRs throughout the state is provided on page 13.

Short-Term In-Pavement Sites (STIP)

Approximately 12 inductive loop sites, referred to as STIP sites are installed throughout the state of Pennsylvania. Volume data is collected from these permanent sites for a 24-hour period.

Continuous Automatic Vehicle Classifier (CAVC)

120 CAVC sites collect continuous vehicle classification data. A map showing CAVC locations are provided on page 13.

Weigh-In-Motion (WIM)

22 WIM stations provide continuous truck weight and vehicle classification data. 14 of the 22 sites are VWIM. WIM stations are shown on the map on page 14.

Pneumatic Tubes

The majority of the counts are collected using pneumatic tubes. Axle counts are collected using a traffic counting device in association with a single pneumatic tube stretched across the roadway. An axle correction factor is applied to adjust vehicle axle base data for the incidence of vehicles with more than two axles.

Two tubes are used to count and classify vehicles by type based on axle configuration.

Manual Counts

Manual counts are taken on sections of roadways that are not accessible to automated data collection equipment or have safety limitations. Observers classify vehicles by type based on axle configuration.

Artificial Intelligence (AI) Counter Classification Systems

Al counters are automated video-based traffic monitoring systems positioned on sections of roadways where traditional automated data collection equipment and manual counts both have safety limitations.

Toll Receipts

The Delaware River Joint Toll Bridge Commission and the Delaware River Port Authority document traffic between Pennsylvania and New Jersey.

The Pennsylvania Turnpike Commission toll receipt surveys provide data on the Commonwealth's toll roads.

Permanent Traffic Recorders

Pennsylvania maintains permanent traffic recorders at 150 strategically selected locations throughout the state. These permanent sites collect traffic volume data on a continuous basis throughout the year. This data is used to develop daily and seasonal factors, as well as to identify changes in traffic patterns. Based on a research study performed by Pennsylvania State University and West Virginia University, it was determined that PennDOT locations in the traffic pattern groups were acceptable according to the FHWA Traffic Monitoring Guide.



CAVC 23 in Northampton County

The permanent sites use magnetic loops embedded in the pavement for vehicle detection. Additionally, CAVC sites utilize piezo sensors to classify and WIM sites utilize quartz or strip sensors to weigh. The data is stored on-site in traffic counters, prior to being automatically polled every night through the use of modems located at each permanent site.

Traffic Pattern Group (TPG)

Highway traffic characteristics can vary by geographical area, roadway type, and population density. Therefore, individual traffic volume counts are categorized into one of ten Traffic Pattern Groups (TPGs). The TPGs are based on highway functional classification, geographic area, and urban/rural characteristics. Each permanent site is associated with one of the ten TPGs listed below.

TRAFFIC PATTERN GROUP	DESCRIPTION
TPG 1	URBAN - INTERSTATE
TPG 2	RURAL - INTERSTATE
TPG 3	URBAN - OTHER PRINCIPAL ARTERIALS
TPG 4	RURAL - OTHER PRINCIPAL ARTERIALS
TPG 5	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS
TPG 6	NORTH RURAL - MINOR ARTERIALS
TPG 7	CENTRAL RURAL- MINOR ARTERIALS
TPG 8	NORTH RURAL - COLLECTORS AND LOCAL ROADS
TPG 9	CENTRAL RURAL- COLLECTORS AND LOCAL ROADS
TPG 10	SPECIAL RECREATIONAL

Permanent Site data is used in computing:

- Daily, monthly, and seasonal adjustment factors by highway functional classification and geographic location.
- Yearly growth factors which are used to update older counts in the Department's Roadway Management System (RMS).
- Design hour factors (peak hour, 30th highest, and 50th highest hour) used for the design of highways.

Permanent Site Locations

This chart lists the permanent site stations by number, county, municipality, traffic route number, state route (SR), segment, and also by a physical description of where the permanent site is located in the state.

SITE#	COUNTY	MUNICIPALITY	ROUTE	SR	SEGMENT	LOCATION
1	Erie	Springfield Twp.	US 20	20	10	0.4 mi. E of Ohio/Pennsylvania Line (West Springfield)
2	Crawford	Richmond Twp.	PA 77	77	270	0.5 mi. W of PA 408 (New Richmond)
3	Clearfield	Huston Twp.	PA 255	255	280	1.4 mi. N of PA 153 (Penfield)
4	Tioga	Delmar Twp.	US 6	6	410	0.3 mi. W of US 6/PA 287 Intersection (Wellsboro)
5	Bradford	Wysox Twp.	***	1043	10	0.1 mi. NW of SR 1041 (Towanda)
6	Clearfield	Lawrence Twp.	PA 879	879	200	1.0 mi. SW of SR 1001 (Hyde)
7	Wyoming	Eaton Twp.	PA 29	29	260	2.2 mi. S of US 6 (Tunkhannock)
8 *	Montgomery	Whitemarsh Twp.	PA 73	73	534	1.4 mi. NW of PA 309-Skippack Pike (Whitemarsh)
9	Bucks	West Rockhill Twp.	PA 563	563	50	0.4 mi. S of SR 4033 (Perkasie)
10	Chester	Lower Oxford Twp.	PA 10	10	60	0.6 mi. N of US 1 (Oxford)
11	Elk	Fox Twp.	PA 948	948	40	1.4 mi. W of PA 225 (Kersey)
12	Centre	Marion Twp.	I-80	80	1660	6.0 mi. E of I-99 (Nittany)
13	Bucks	Bensalem Twp.	I-95	95	330	1.4 mi. S of PA 63 (Torresdale)
14	Chester	East Nottingham Twp.	US 1	1	100	0.5 mi. S of PA 472 (Nottingham)
15	Fulton	Todd Twp.	US 522	522	550	1.3 mi. N of US 30 (McConnellsburg)
16	Bucks	Falls Twp.	US 1	1	190	2.0 mi. N of I-295 (Fairless Hills)
18	Butler	Summitt Twp.	PA 38	38	20	0.7 mi. NW of PA 68 (Butler)
19	Washington	Union Twp.	PA 88	88	750	0.4 mi. S of SR 1006 (Finleyville)
20	Lawrence	Shenango Twp.	PA 65	65	260	0.6 mi. S of US 422 (New Castle)
21	Lehigh	Hanover Twp.	US 22	22	220	0.8 mi. W of PA 987 (Lehigh Valley)
22	Luzerne	Hanover Twp.	PA 29	29	10	0.6 mi. N of I-81 (Suger Notch)
23	Northampton	Palmer Twp.	US 22	22	170	Between SR 33 and SR 248 (Palmer Heights)
24	Westmoreland	Derry Twp.	US 22	22	340	1.0 mi. E of PA 981 (New Alexandria)
27	Elk	Highland Twp.	PA 66/948	66	60	1.1 mi. E of PA 948 (Russell City)
29	Susquehanna	Rush Twp.	PA 267	267	190	0.9 mi. S of PA 706 (Lawton)
40	Schuylkill	Schuylkill Twp.	US 209	209	860	0.6 mi. S of PA 309 (Tamaqua)
48	Susquehanna	New Milford Twp.	US 11	11	420	0.8 mi. S of PA 848 (New Milford)
51	Potter	Eulalia Twp.	PA 44	44	700	1.3 mi. SW of PA 49 (Coudersport)
106 **	Berks	Windsor Twp.	I-78	78	330	2.3 mi. W of PA 143 (Hamburg)
126	Jefferson	Brookville Boro.	I-80	80	790	0.6 mi. E of PA 36 (Brookville)
158 **	Centre	Boggs Twp.	I-80	80	1580	0.6 mi. E of PA 150 (Milesburg)
203	Allegheny	Leetsdale Boro.	PA 65	65	270	0.5 mi. S of SR 4036 (Leetsdale)
205	York	Manchester Twp.	I-83	83	220	1.4 mi. S of PA 238 (North York)
206 *	Cumberland	Wormleysburg Boro.	***	1014	30	Harvey Taylor Bridge on west approach (Harvey Taylor Bridge)
208 *	Allegheny	Churchill Boro.	I-376	376	794	0.7 mi. W of PA 791 (Monroeville)
216	Susquehanna	Great Bend Twp.	I-81	81	2324	1.1 mi. N of PA 171 (Hallstead)
301 *	Erie	Lawrence Park Twp.	PA 5	5	680	0.5 mi. W of PA 955 (Erie)

^{*} Indicates ATR site

^{**} Indicates WIM site

^{***} Indicates road is not a PA, US, or Interstate Route

Permanent Site Locations (Continued)

SITE#	COUNTY	MUNICIPALITY	ROUTE	SR	SEGMENT	LOCATION
304 *	Lycoming	S. Williamsport Boro.	US 15	15	250	0.3 mi. S of I-180 (Williamsport)
306	Pike	Palmyra Twp.	PA 507	507	280	0.9 mi. S of US 6 (Hawley)
317 **	Blair	Freedom Twp.	I-99	99	214	1.0 mi. S of PA 36/PA 164 (East Freedom)
323	Bedford	Bedford Twp.	US 220	220	310	0.7 mi. S of Business US 220 (Bedford Springs)
324 **	Elk	Ridgway Boro.	PA 120	120	42	1.1 mi. E of US 219 (Ridgway)
326	Clarion	Paint Twp.	US 322	322	280	0.5 mi. E of PA 66 (Clarion)
328	Centre	Boggs Twp.	PA 150	150	194	1.1 mi. N of I -80 (Milesburg)
330 *	Bucks	Northampton Twp.	PA 532	532	130	1.4 mi. SW of PA 413 (Newtown)
334	York	W. Manchester Twp.	US 30	30	170	0.7 mi. W of PA 116 (Thomasville)
349 *	Lehigh	Upper Saucon Twp.	PA 309	309	30	0.7 mi. S of PA 378 (Coopersburg)
360	Clearfield	Bloom Twp.	US 219	219	670	3.2 mi. S of US 322 (Luthersburg)
362	York	North Codorus Twp.	PA 616	616	240	1.6 mi. N of PA 214 (New Salem)
363	McKean	Lafayette Twp.	US 219	219	290	0.1 mi. N of PA 59 (Lewis Run)
364	Lackawanna	Newton Twp.	PA 307	307	360	50 ft. W of SR 4017 (Clarks Summitt)
367	Union	West Buffalo Twp.	PA 45	45	250	0.6 mi. W of PA 104 (Mifflinburg)
370	Westmoreland	Rostraver Twp.	I-70	70	454	0.9 mi. W of PA 51 (Belle Vernon)
371	Fulton	Brush Creek Twp.	I-70	70	1522	1.1 mi. S of PA 915 (Crystal Springs)
372	Union	White Deer Twp.	I-80	80	2104	0.7 mi. E of US 15 (Milton)
374	Butler	Lancaster Twp.	I-79	79	884	1.8 mi. N of PA 68 (Zelienople)
375	Allegheny	N. Fayette Twp.	US 22/30	22	80	0.8 mi. E of PA 978 (Imperial)
376	Luzerne	Wilkes-Barre Twp.	I-81	81	1664	1.7 mi. N of PA 309-Exit 165A/165B (Wilkes-Barre)
377	Bucks	Middletown Twp.	I-295	295	10	0.6 mi. N of I 276 (Penndel)
378	Fayette	Redstone Twp.	US 40	40	160	1.0 mi. W of SR 4010 (Briar Hill)
379	Blair	Logan Twp.	***	4013	80	0.5 mi. E of SR 4015 (Altoona)
380	Berks	Exeter Twp.	PA 562	562	40	0.2 mi. W of SR 2033 (St. Lawrence)
381	Mercer	Hermitage City	***	3019	20	0.9 mi. N of PA 718 (Sharon)
382	Cambria	Lower Yoder Twp.	***	3005	30	1.5 mi. SW of PA 56 (Morrellville)
383	Clinton	Pine Creek Twp.	PA 150	150	360	0.5 mi. N of SR 1005 (Chatham Run)
384	Tioga	Lawence Twp.	***	4022	50	1.9 mi. E of PA 49 (Nelson)
385	Warren	Southwest Twp.	***	3002	30	0.7 mi. W of PA 27 (Enterprise)
386	Montour	Limestone Twp.	PA 254	254	10	2.0 mi. E of I-80 (Limestoneville)
387	Somerset	Brothers Valley Twp.	***	2031	120	2.0 mi. S of US 219 (Garrett)
388	Monroe	Ross Twp.	***	3004	170	0.4 mi. SW of SR 3015 (Saylorsburg)
389	Jefferson	Perry Twp.	PA 536	536	210	0.3 mi. W of SR 3011 (Frostburg)
390	Lancaster	Mount Joy Twp.	PA 230	230	20	1.7 mi. W of PA 743/PA 241 (Elizabethtown)
391	Chester	Warwick Twp.	PA 23	23	110	1.5 mi. E of PA 345 (Warwick Area)
392	Luzerne	Foster Twp.	I-80	80	2684	5.9 mi. E of PA 309 (White Haven)
393	Washington	Donegal Twp.	I-70	70	2	0.3 mi. E of W. Virginia/Pennsylvania Line (West Alexander)

^{*} Indicates ATR site

^{**} Indicates WIM site

^{***} Indicates road is not a PA, US, or Interstate Route

Permanent Site Locations (Continued)

SITE#	COUNTY	MUNICIPALITY	ROUTE	SR	SEGMENT	LOCATION
394	Lehigh	Upper Saucon Twp.	I-78	78	614	1.1 mi. E of PA 309/PA 145/I-78 Interchange (Allentown)
395	Fayette	German Twp.	PA 21	21	230	0.1 mi. E of SR 3023 (Uniontown)
396 *	Washington	Canton Twp.	US 40	40	320	0.4 mi E of SR 3013 (Washington)
410 **	Tioga	Nelson Twp.	PA 49	49	520	0.5 mi. W of SR 4027 (Nelson)
501 **	Tioga	Liberty Twp.	US 15	15	142	2.7 mi. N of SR 2005 (Blossburg)
502 **	Mercer	Wolf Creek Twp.	I-80	80	220	1.4 mi. W of PA 173 (Barkeyville)
503 **	Warren	Youngsville Boro.	US 6	6	420	0.6 mi. E of Railroad St (Youngsville)
504 **	Delaware	Chadds Ford Twp.	US 202	202	114	0.8 mi. N of US 1 (Dilworthtown)
505 **	Perry	Howe Twp.	US 22	22	160	0.7 mi. E of PA 34 (Newport)
506 **	Blair	Allegheny Twp.	***	1001	30	0.2 mi. N of SR 1002 (Altoona)
600	Franklin	Southampton Twp.	I-81	81	244	0.7 mi. N of PA 696 (Shippensburg)
700 **	Indiana	Armstrong Twp.	US 422	422	120	0.5 mi. W of SR 4004 (Indiana)
701 **	Dauphin	East Hanover Twp.	I-81	81	774	0.75 mi. N of PA 39 Manada Hill/Hershey Interchange (Grantville)
702 **	Dauphin	East Hanover Twp.	I-81	81	810	0.7 mi. N of SR 2025 (Grantville)
703 **	Lancaster	Brecknock Twp.	US 222	222	1034	0.3 mi. S of Lancaster/Berks County Line (Adamstown)
704 **	Fulton	Bethel Twp.	I-70	70	1702	0.1 mi. N of Maryland/Pennsylvania Line (Warfordsburg)
705 **	Northampton	Williams Twp.	I-78	78	724	1.0 mi. E of SR 33 (Easton)
706 **	Greene	Perry Twp.	I-79	79	14	1.0 mi. N of SR 2002 (Mt. Morris)
709 **	Columbia	Mifflin Twp.	I-80	80	2444	2.7 mi. E of PA 339 (Columbia)
710 **	Butler	Cranberry Twp.	I-79	79	790	1.2 mi. N of PA 228 (Butler)
712 **	Franklin	Antrim Twp.	I-81	81	64	1.75 Mi. N of PA 16 (Greencastle)
713 **	Erie	Springfield Twp.	I-90	90	10	1.1 mi. E of Ohio/Pennsylvania Line (Cherry Hill)
800	Centre	Spring Twp.	I-99	99	800	1.2 mi. N of PA 150 (Bellefonte)
801	Dauphin	Lower Paxton Twp.	I-81	81	714	0.7 mi. S of SR 3019 (Paxtonia)
802	Monroe	Coolbaugh Twp.	PA 423	423	140	0.2 mi. E of I-380 (Tobyhanna)
803	Adams	Freedom Twp.	US 15	15	10	0.5 mi. N of Maryland/Pennsylvania Line (Gettysburg)
804	Washington	Canton Twp.	I -70	70	154	1.3 mi. E of US 40 (Washington)
805	Crawford	N. Shenango Twp.	PA 285	285	20	0.1 mi. E of SR 3007 (Espyville)
806	Westmoreland	Hempfield Twp.	US 30	30	170	0.2 mi. E of Strawberry Lane (Jeannette)
807	Washington	Twilight Boro.	I-70	70	390	0.6 mi. W of Exit 39 (Speers)
808	Indiana	W. Wheatfield Twp.	US 22	22	242	0.1 mi. E of Bethel Cemetery Rd. (Clyde)
809	McKean	Foster Twp.	US 219	219	594	0.1 mi. N of Tuna Crossroads Bridge (Foster Brook)
810	Bucks	Doylestown Twp.	US 611	611	130	0.3 mi. S of SR 4202 (Doylestown)
811	Cumberland	Hampden Twp.	PA 581	581	10	Between the I-81 Junction and Creekview Rd. Exit (Creekview)
812	Westmoreland	S. Greenburg Twp.	US 30	30	300	Between Exits for SR 119 and Cedar St. (Cedar Creek)
813	Cumberland	Camp Hill Boro.	PA 581	581	120	Between US 11/15 and I-83 (Camp Hill)
815	Columbia	Hemlock Twp.	PA 44	44	10	0.25 mi. W of PA 42 (Buckhorn)
816	Lebanon	South Annville Twp.	PA 241	241	120	1.1 mi. S of US 322 (Mt. Gretna)

^{*} Indicates ATR site

^{**} Indicates WIM site

^{***} Indicates road is not a PA, US, or Interstate Route

Permanent Site Locations (Continued)

SITE#	COUNTY	MUNICIPALITY	ROUTE	SR	SEGMENT	LOCATION
817	Jefferson	Winslow Twp.	***	1002	70	0.1 mi. E of SR 2033 (Reynoldsville)
818	Pike	Matamoras Boro.	I-84	84	540	0.1 mi. W of New York/Pennsylvania Line (Matamoras)
821	Tioga	Lawrence Twp.	US 15	15	774	0.1 mi. S of T-722 Tioga River Rd overpass (Lawrenceville)
822	Dauphin	Lower Swatara Twp.	PA 300	300	30	0.8 mi. W of PA 441 (Highspire)
823	Dauphin	Swatara Twp.	PA 283	283	4	1.1 mi. S of SR 441 (Swatara)
824	Chester	Uwchlan Twp.	PA 100	100	260	Between SR 1001 and PA 113 (Exton)
825	York	Shrewsberry Twp.	I-83	83	2	0.2 mi. N of Maryland/Pennsylvania Line (New Freedom)
826	Berks	Exeter Twp.	US 422	422	450	0.7 mi. E of I-176 (Exeter)
827	Union	White Deer Twp.	US 15	15	320	1.1 mi. N of SR 1004 (New Columbia)
828	Crawford	Vernon Twp.	I-79	79	1500	3.3 mi. N 0f US 6 (Meadville)
829	Mercer	Shenango Twp.	I-80	80	24	1.3 mi. W of I-376 (West Middlesex)
830	Cumberland	Middlesex Twp.	I-81	81	490	1.0 mi. N of PA 641 (Carlisle)
831	Cumberland	Silver Spring Twp.	I-81	81	554	1.4 mi. S of PA 114 (Silver Spring)
832	Berks	Robeson Twp.	I-176	176	74	At Morgantown Rd Overpass (Green Hills)
833	Cumberland	E. Pennsboro Twp.	I-81	81	634	0.8 mi. North of PA 944 (Enola)
834	Erie	North East Twp.	I-90	90	450	0.5 mi. E of US 20 (North East)
835	Erie	Greenfield Twp.	I-86	86	60	2.4 mi. E of PA 89 (Erie South Tier)
836	Mercer	Findley Twp.	I-80	80	164	2.4 mi. W. of I-79 (Mercer)
837	Schuylkill	Kline Twp.	I-81	81	1364	2.5 mi. N of SR 1017 (Delano)
838	Beaver	Brighton Twp.	I-376	376	344	1.2 mi. W of PA 4035 (Brighton)
839	Monroe	Coolbaugh Twp.	I-380	380	70	Between Exits for SR 940 and SR 423 (Pocono Summit)
840	Allegheny	Franklin Park Boro.	I-279	279	122	0.1 mi. S of I 79 (Franklin Park)
841	Cumberland	Lower Allen Twp.	I-83	83	400	0.5 mi. S of Exit 40B (New Cumberland)
842	Northumberland	Delaware Twp.	I-180	180	560	At 8th St. Drive overpass (Warrior Run)
843	Union	White Deer Twp.	1-80	80	2090	1.0 mi. W of US 15 (White Deer)
844	Lackawanna	South Abington Twp.	I-81	81	1924	1.2 mi. N of US 11 (Dickson City)
845	Blair	Allegheny Twp.	I-99	99	290	0.7 mi. N of SR 8004 (Hollidaysburg)
846	Cumberland	Upper Allen Twp.	***	2013	30	0.7 mi. E of Winding Hill Rd (Winding Hill)
848	Adams	Straban Twp.	US 15	15	250	1.7 mi. N of US 30 (Hunterstown)
849	Crawford	Summit Twp.	PA 618	618	72	0.3 mi. S of PA 18 (Conneaut Lake)
850	Berks	Penn Twp.	PA 183	183	210	0.3 mi. N of SR 3006 (Bernville)
851	Northampton	Lower Nazareth Twp.	PA 33	33	50	0.7 mi. S of PA 248 (Nazareth)
853	Bucks	Haycock Twp.	PA 563	563	240	3.0 mi. W of PA 412 (Lake Nockamixon)
854	York	West Manheim Twp.	PA 216	216	60	0.3 mi. E of SR 3045 (Lake Marburg)
855	Huntingdon	Penn Twp.	***	3011	110	0.3 mi. S of PA 26 (Raystown Lake)
856	Cambria	White Twp.	***	1026	40	3.8 mi. W of PA 53 (Glendale Lake)
985	Cambria	Richland Twp.	US 219	219	120	1.6 mi. N of PA 56 (St. Michael)

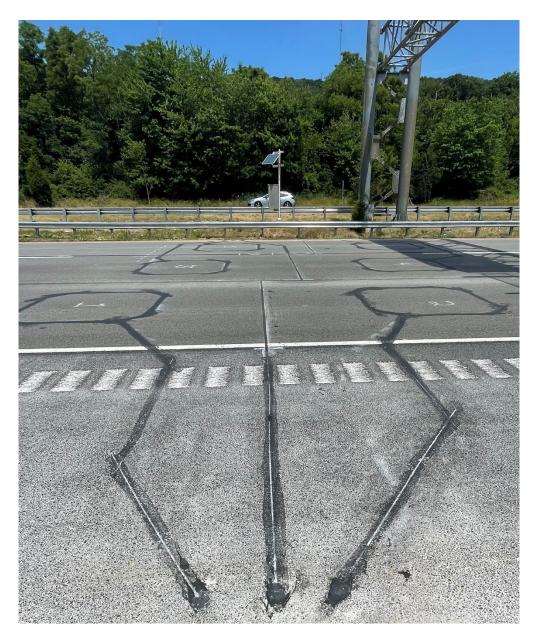
^{*} Indicates ATR site

^{**} Indicates WIM site

^{***} Indicates road is not a PA, US, or Interstate Route

ATR, CAVC and WIM Locations Map (Opposite)

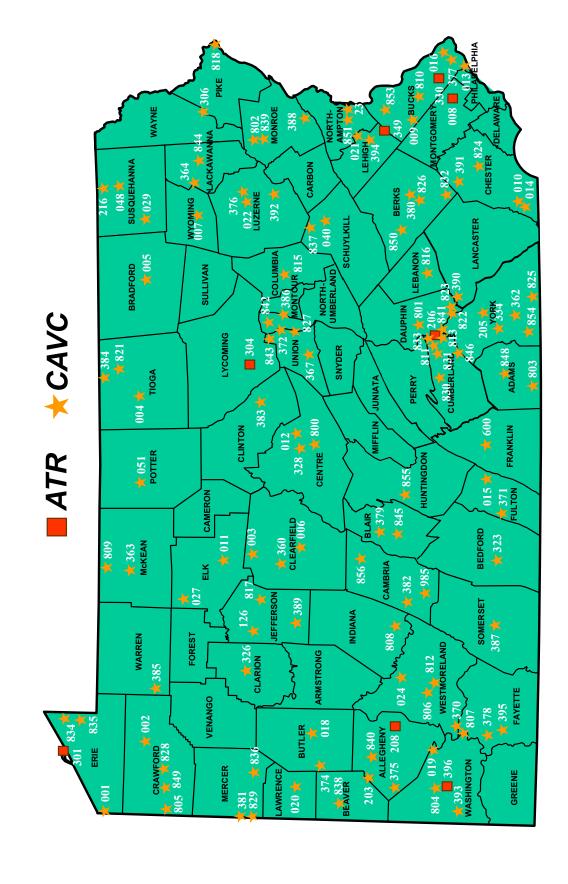
The ATR, CAVC, and WIM location maps of Pennsylvania, which are shown on the following two pages, give an overview of where all of the 150 ATR, CAVC and WIM sites are located. Symbols are used in addition to the site number to identify the location of the site.



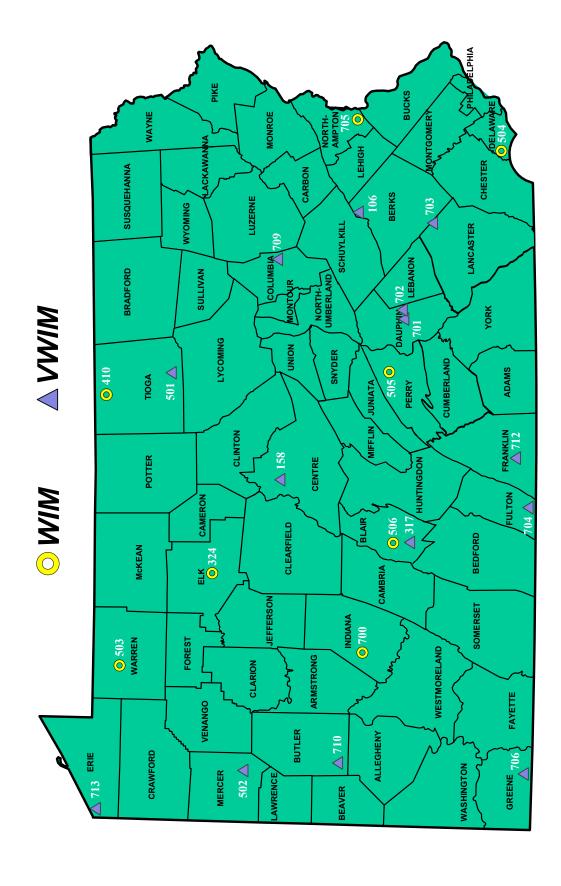
CAVC 833 Sensor Arrays on I 81 in Cumberland County

P e n n D O T

CONTINUOUS MONITORING SITES



CONTINUOUS MONITORING SITES



Permanent Site Locations by Traffic Pattern Group (TPG)

This chart groups the permanent site locations by Traffic Pattern Group. It gives the permanent site number, route, and the urban area or county depending on the TPG into which the permanent site falls. The Annual Average Daily Traffic (AADT) for each permanent site is also listed on this chart.

		PERM	ANENT SIT	TE LO	OCATIONS	BY TPG		
	TPG 1: U	JRBAN INTERSTATE				TPG 2: RI	URAL INTERSTATE	
SITE#	ROUTE	URBAN AREA	AADT		SITE#	ROUTE	COUNTY	AADT
13	I-95	PHILADELPHIA	153,265		12	I-80	CENTRE	24,771
205	I-83	YORK	59,070		106	I-78	BERKS	44,243
208	I-376	PITTSBURGH	81,026		126	I-80	JEFFERSON	25,270
317	I - 99	ALTOONA	14,345		158	I-80	CENTRE	24,315
372	I-80	MILTON-LEWISBURG	34,954		392	I-80	LUZERNE	25,860
374	I-79	PITTSBURGH	34,224		393	I-70	WASHINGTON	33,295
376	I-81	SCRANTON	62,323		502	I-80	MERCER	27,630
377	I-295	PHILADELPHIA	60,809		600	I-81	FRANKLIN	46,395
394	I-78	ALLENTOWN	63,459		706	I-79	GREENE	22,664
701	I-81	HARRISBURG	64,353		709	I-80	COLUMBIA	33,083
710	I-79	PITTSBURGH	50,614		712	I-81	FRANKLIN	51,420
801	I-81	HARRISBURG	88,579		713	I-90	ERIE	23,222
804	I-70	PITTSBURGH	51,001		800	I-99	CENTRE	23,617
818	I-84	PORT JERVIS	31,506		807	I-70	WASHINGTON	29,357
823	I-283	HARRISBURG	57,820		825	I-83	YORK	44,076
830	I-81	HARRISBURG	65,153		828	I-79	CRAWFORD	19,370
831	I-81	HARRISBURG	67,963		829	I-80	MERCER	30,039
833	I-81	HARRISBURG	76,180		834	I-90	ERIE	23,497
840	I-279	PITTSBURGH	50,247		835	I-86	ERIE	9,585
841	I-83	HARRISBURG	72,096		836	I-80	MERCER	29,149
844	I-81	SCRANTON	38,989		837	I-81	SCHUYLKILL	28,708
845	I-99	ALTOONA	34,342		838	I-376	BEAVER	24,408
					839	I-380	MONROE	28,215
					842	I-180	NORTHUMBERLAND	17,682
					843	I-80	UNION	24,384

Permanent Site Locations by TPG (Continued)

		PERM	ANENT SIT	ELC	CATIONS	BY TPG		
Т	PG 3: URBA	N PRINCIPAL ARTER	IAL		TI	PG 4: RURAI	PRINCIPAL ARTERIA	AL
SITE#	ROUTE	URBAN AREA	AADT		SITE#	ROUTE	COUNTY	AADT
8	PA 73	PHILADELPHIA	19,379		4	US 6	TIOGA	2,749
14	US 1	PHILADELPHIA	17,449		19	PA 88	WASHINGTON	5,297
16	US 1	PHILADELPHIA	65,980		24	US 22	WESTMORELAND	21,605
21	US 22	ALLENTOWN	94,995		323	US 220	BEDFORD	4,532
22	PA 29	SCRANTON	25,594		360	US 219	CLEARFIELD	2,572
23	US 22	EASTON	49,938		363	US 219	MCKEAN	4,822
40	US 209	TAMAQUA	4,183		378	US 40	FAYETTE	7,215
203	PA 65	PITTSBURGH	19,967		505	US 22	PERRY	21,900
206	H. Taylor Br.	HARRISBURG	24,580		700	US 422	INDIANA	12,267
301	PA 5	ERIE	12,103		703	US 222	LANCASTER	41,433
326	US 322	CLARION	8,967		808	US 22	INDIANA	15,183
330	PA 532	PHILADELPHIA	10,305					
334	US 30	YORK	15,695					
349	PA 309	ALLENTOWN	36,357					
375	US 22	PITTSBURGH	24,815					
395	PA 21	UNIONTOWN	9,408					
396	US 40	PITTSBURGH	9,519					
803	US 15	EMMITSBURG	23,414					
806	US 30	PITTSBURGH	29,834					
809	US 219	BRADFORD	7,953					
811	PA 581	HARRISBURG	50,588					
813	PA 581	HARRISBURG	91,707					
821	US 15	TIOGA	11,437					
822	PA 300	HARRISBURG	60,473					
824	PA 100	PHILADELPHIA	34,993					
826	US 422	READING	50,171					
827	US 15	MILTON	15,840					
848	US 15	HANOVER	23,584					
851	PA 33	NORTHAMPTON	78,839					
985	US 219	CAMBRIA	10,752					

Permanent Site Locations by TPG (Continued)

		PERM	ANENT SIT	E LO	CATIONS	BY TPG						
TPG 5	: URBAN MI	NOR ARTERIAL/COLL	ECTOR		TPG	TPG 6: NORTH RURAL MINOR ARTERIAL						
SITE#	ROUTE	URBAN AREA	AADT		SITE#	ROUTE	COUNTY	AADT				
18	PA 38	BUTLER	5,671		2	PA 77	CRAWFORD	1,986				
20	PA 65	NEW CASTLE	6,689		3	PA 255	CLEARFIELD	5,213				
380	PA 562	READING	7,432		7	PA 29	WYOMING	8,186				
381	SR 3019	YOUNGSTOWN	400		11	PA 948	ELK	5,163				
390	PA 230	LANCASTER	6,570		27	PA 66	ELK	2,752				
506	SR 1001	ALTOONA	15,631		48	US 11	SUSQUEHANNA	4,709				
815	PA 44	BLOOMSBURG	3,734		51	PA 44	POTTER	2,676				
846	SR 2013	HARRISBURG	4,348		324	PA 120	ELK	4,085				
					410	PA 49	TIOGA	4,098				

		PERM	ANENT SIT	ELC	CATIONS	BY TPG					
TPG	7: CENTRA	L RURAL MINOR ART	ERIAL		TPG 8: NORTH RURAL COLLECTOR						
SITE#	ROUTE	COUNTY	AADT		SITE#	ROUTE	COUNTY	AADT			
1	US 20	ERIE	3,515		5	SR 1043	BRADFORD	1,636			
9	PA 563	BUCKS	7,485		29	PA 267	SUSQUEHANNA	1,188			
15	US 522	FULTON	4,937	4,937		PA 150	CLINTON	3,246			
367	PA 45	UNION	5,895		384	SR 4022	TIOGA	387			
391	PA 23	CHESTER	8,458		385	SR 3002	WARREN	1,891			
850	PA 183	BERKS	16,193		802	PA 423	MONROE	5,070			
853	PA 563	BUCKS	4,170		817	SR 1002	JEFFERSON	1,537			

		PERM	ANENT SIT	ELC	CATIONS	BY TPG					
TF	PG 9: CENTI	RAL RURAL COLLECT	TOR		TPG 10: SPECIAL RECREATIONAL						
SITE#	ROUTE	COUNTY	AADT		SITE#	ROUTE	COUNTY	AADT			
362	PA 616	YORK	6,150		306	PA 507	PIKE	5,739			
364	PA 307	LACKAWANNA	4,600		805	PA 285	CRAWFORD	3,036			
379	SR 4013	BLAIR	1,107		849	PA 618	CRAWFORD	1,619			
382	SR 3005	CAMBRIA	1,467		855	SR 3011	HUNTINGDON	1,484			
386	PA 254	MONTOUR	2,489		856	SR 1026	CAMBRIA	797			
387	SR 2031	SOMERSET	382								
389	PA 536	JEFFERSON	1,759								
816	PA 241	LEBANON	3,276								
854	PA 216	YORK	8,887								

2024 Peak Hour by Traffic Pattern Group (TPG)

				2	024 Peak H	our by Tra	affic	Patteri	n Group	(TPG)				
		TPG 1	l: Urbar	n Interstate)					TPG 2	: Rural	Interstate		
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
13	3/22	2:00 PM	Fri	11,583	7.56%	153,265		12	12/1	1:00 PM	Sun	4,617	18.64%	24,771
205	10/11	4:00 PM	Fri	5,700	9.65%	59,070		106	12/1	11:00 AM	Sun	4,560	10.37%	44,243
208	3/1	5:00 PM	Fri	7,281	8.99%	81,026		126	4/8	7:00 PM	Mon	3,367	13.32%	25,270
317	11/27	3:00 PM	Wed	1,839	12.82%	14,345		158	12/1	1:00 PM	Sun	2,734	11.24%	24,315
372	7/7	2:00 PM	Sun	3,930	11.24%	34,954		392	11/27	3:00 PM	Wed	2,940	11.37%	25,860
374	8/30	4:00 PM	Fri	4,323	12.63%	34,224		393	12/1	1:00 PM	Sun	4,226	12.69%	33,295
376	11/27	3:00 PM	Wed	6,057	9.72%	62,323		502	7/7	1:00 PM	Sun	3,479	12.59%	27,630
377	10/30	4:00 PM	Wed	5,810	9.55%	60,809		600	12/27	2:00 PM	Fri	4,565	9.84%	46,395
394	3/22	3:00 PM	Fri	6,143	9.68%	63,459		706	12/1	2:00 PM	Sun	2,954	13.03%	22,664
701	12/1	10:00 AM	Sun	6,011	9.34%	64,353		709	12/1	2:00 PM	Sun	5,263	15.91%	33,083
710	8/30	4:00 PM	Fri	5,649	11.16%	50,614		712	8/23	3:00 PM	Fri	4,997	9.72%	51,420
801	12/1	12:00 PM	Sun	7,825	8.83%	88,579		713	7/7	1:00 PM	Sun	3,883	16.72%	23,222
804	11/27	3:00 PM	Wed	5,325	10.44%	51,001		800	10/4	4:00 PM	Fri	2,995	12.68%	23,617
818	12/1	12:00 PM	Sun	3,928	12.47%	31,506		807	11/26	4:00 PM	Tue	3,163	10.77%	29,357
823	3/1	3:00 PM	Fri	4,998	8.64%	57,820		825	12/1	12:00 PM	Sun	4,461	10.12%	44,076
830	11/27	3:00 PM	Wed	5,959	9.15%	65,153		828	4/8	5:00 PM	Mon	2,991	15.44%	19,370
831	11/27	2:00 PM	Wed	6,150	9.05%	67,963		829	12/1	2:00 PM	Sun	4,042	13.46%	30,039
833	8/16	4:00 PM	Fri	7,711	10.12%	76,180		834	7/7	1:00 PM	Sun	3,288	13.99%	23,497
840	7/23	5:00 PM	Tue	5,677	11.30%	50,247		835	7/7	12:00 PM	Sun	1,559	16.26%	9,585
841	1/12	4:00 PM	Fri	6,547	9.08%	72,096		836	12/1	2:00 PM	Sun	4,072	13.97%	29,149
844	4/9	2:00 PM	Tue	4,157	10.66%	38,989		837	8/2	3:00 PM	Fri	3,376	11.76%	28,708
845	3/1	4:00 PM	Fri	3,927	11.43%	34,342		838	4/8	11:00 AM	Mon	2,674	10.96%	24,408
								839	8/23	4:00 PM	Fri	3,220	11.41%	28,215
								842	7/7	12:00 PM	Sun	2,256	12.76%	17,682
								843	12/1	1:00 PM	Sun	4,353	17.85%	24,384

2024 Peak Hour by TPG (Continued)

				2	024 Peak H	our by Tr	affi	c Patterr	Group	(TPG)				
		TPG 3: U	rban Pri	ncipal Arte	erial					TPG 4: R	ural Prir	ncipal Arte	rial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
8	1/10	8:00 AM	Wed	2,064	10.65%	19,379		4	7/7	12:00 PM	Sun	393	14.30%	2,749
14	12/1	1:00 PM	Sun	2,032	11.65%	17,449		19	7/2	4:00 PM	Tue	864	16.31%	5,297
16	8/29	5:00 PM	Thu	6,498	9.85%	65,980		24	12/1	3:00 PM	Sun	2,391	11.07%	21,605
21	5/11	12:00 PM	Sat	7,261	7.64%	94,995		323	8/30	5:00 PM	Fri	712	15.71%	4,532
22	4/24	3:00 PM	Wed	2,632	10.28%	25,594		360	8/14	4:00 PM	Wed	324	12.60%	2,572
23	7/22	4:00 PM	Mon	4,961	9.93%	49,938		363	4/8	4:00 PM	Mon	706	14.36%	4,822
40	5/8	4:00 PM	Wed	525	12.55%	4,183		378	5/3	4:00 PM	Fri	796	11.03%	7,215
203	10/31	3:00 PM	Thu	1,990	9.97%	19,967		505	12/1	2:00 PM	Sun	3,396	15.51%	21,900
206	4/19	4:00 PM	Fri	3,513	14.29%	24,580		700	11/1	3:00 PM	Fri	1,407	11.47%	12,267
301	5/10	3:00 PM	Fri	1,492	12.33%	12,103		703	10/18	4:00 PM	Fri	4,248	10.25%	41,433
326	6/13	4:00 PM	Thu	1,366	15.23%	8,967		808	12/1	3:00 PM	Sun	1,974	13.00%	15,183
330	7/17	8:00 AM	Wed	1,131	10.98%	10,305								
334	10/25	3:00 PM	Fri	1,482	9.44%	15,695								
349	10/25	3:00 PM	Fri	3,198	8.80%	36,357								
375	5/29	5:00 PM	Wed	2,924	11.78%	24,815								
395	9/6	3:00 PM	Fri	1,059	11.26%	9,408								
396	12/3	2:00 PM	Tue	1,284	13.49%	9,519								
803	7/7	2:00 PM	Sun	2,844	12.15%	23,414								
806	4/19	4:00 PM	Fri	2,992	10.03%	29,834								
809	4/8	5:00 PM	Mon	993	12.49%	7,953								
811	9/24	4:00 PM	Tue	5,137	10.15%	50,588								
813	6/26	11:00 AM	Wed	8,330	9.08%	91,707								
821	4/8	5:00 PM	Mon	2,111	18.46%	11,437								
822	7/23	4:00 PM	Tue	5,480	9.06%	60,473								
824	5/29	4:00 PM	Wed	3,882	11.09%	34,993								
826	2/1	4:00 PM	Thu	4,746	9.46%	50,171								
827	9/20	4:00 PM	Fri	1,675	10.57%	15,840								
848	7/14	1:00 PM	Sun	2,746	11.64%	23,584								
851	7/2	4:00 PM	Tue	6,829	8.66%	78,839								
985	9/11	4:00 PM	Wed	2,119	12.43%	10,752								

2024 Peak Hour by TPG (Continued)

				2	024 Peak H	our by Tr	affi	c Patteri	n Group	(TPG)				
	Т	PG 5: Urba	n Minor	Arterial/C	ollector					TPG 6: No	rth Rura	l Minor Art	erial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
18	10/22	4:00 PM	Tue	748	13.19%	5,671		2	8/23	5:00 PM	Fri	318	16.01%	1,986
20	4/18	4:00 PM	Thu	755	11.29%	6,689		3	11/29	2:00 PM	Fri	637	12.22%	5,213
380	5/24	12:00 PM	Fri	1,121	15.08%	7,432		7	11/29	12:00 PM	Fri	941	11.50%	8,186
381	7/17	3:00 PM	Wed	174	43.50%	400		11	11/5	3:00 PM	Tue	700	13.56%	5,163
390	3/20	4:00 PM	Wed	855	13.01%	6,570		27	4/8	5:00 PM	Mon	681	24.75%	2,752
506	12/23	12:00 PM	Mon	1,904	12.18%	15,631		48	4/26	3:00 PM	Fri	603	12.81%	4,709
815	7/17	4:00 PM	Wed	463	12.40%	3,734		51	8/30	3:00 PM	Fri	348	13.00%	2,676
846	5/31	3:00 PM	Fri	580	13.34%	4,348		324	4/26	3:00 PM	Fri	543	13.29%	4,085
								410	8/23	3:00 PM	Fri	532	12.98%	4,098

				2	024 Peak H	our by Tr	affi	c Patteri	n Group	(TPG)				
		TPG 7: Cer	tral Ru	ral Minor A	rterial					TPG 8: N	lorth Ru	ıral Collect	or	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
1	8/16	4:00 PM	Fri	578	16.44%	3,515		5	4/11	3:00 PM	Thu	247	15.10%	1,636
9	9/20	4:00 PM	Fri	1,081	14.44%	7,485		29	8/25	1:00 PM	Sun	161	13.55%	1,188
15	10/19	12:00 PM	Sat	757	15.33%	4,937		383	4/8	11:00 AM	Mon	447	13.77%	3,246
367	8/7	5:00 PM	Wed	738	12.52%	5,895		384	7/12	2:00 PM	Fri	82	21.19%	387
391	6/28	4:00 PM	Fri	1,011	11.95%	8,458		385	10/25	4:00 PM	Fri	296	15.65%	1,891
850	10/16	5:00 PM	Wed	1,619	10.00%	16,193		802	7/19	4:00 PM	Fri	891	17.57%	5,070
853	5/26	12:00 PM	Sun	576	13.81%	4,170		817	8/28	3:00 PM	Wed	234	15.22%	1,537

				2	024 Peak H	our by Tra	affi	c Patteri	Group	(TPG)				
		TPG 9: C	entral F	Rural Collec	ctor					TPG 10:	Special	Recreation	nal	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
362	10/8	4:00 PM	Tue	652	10.60%	6,150		306	7/5	12:00 PM	Fri	983	17.13%	5,739
364	6/6	4:00 PM	Thu	542	11.78%	4,600		805	5/26	12:00 PM	Sun	740	24.37%	3,036
379	3/3	12:00 PM	Sun	190	17.16%	1,107		849	10/12	2:00 PM	Sat	394	24.34%	1,619
382	5/13	4:00 PM	Mon	232	15.81%	1,467		855	6/8	10:00 PM	Sat	632	42.59%	1,484
386	4/26	6:00 PM	Fri	528	21.21%	2,489		856	10/6	12:00 PM	Sun	753	94.48%	797
387	1/22	6:00 PM	Mon	89	23.30%	382								
389	11/5	4:00 PM	Tue	237	13.47%	1,759								
816	11/25	3:00 PM	Mon	556	16.97%	3,276								
854	6/8	12:00 PM	Sat	1,043	11.74%	8,887								

2024 30th Highest Hour by Traffic Pattern Group (TPG)

				20	24 30th Hiç	ghest Hou	r b	y Traffic	Patterr	Group				
		TPG 1	l: Urbar	nInterstate)					TPG 2	: Rural	Interstate		
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
13	5/7	4:00 PM	Tue	11,230	7.33%	153,265		12	3/1	3:00 PM	Fri	2,322	9.37%	24,771
205	8/28	4:00 PM	Wed	5,328	9.02%	59,070		106	6/29	11:00 AM	Sat	3,908	8.83%	44,243
208	3/22	5:00 PM	Fri	6,813	8.41%	81,026		126	5/27	1:00 PM	Mon	2,308	9.13%	25,270
317	5/24	3:00 PM	Fri	1,569	10.94%	14,345		158	8/9	3:00 PM	Fri	2,265	9.32%	24,315
372	6/23	2:00 PM	Sun	3,319	9.50%	34,954		392	11/1	4:00 PM	Fri	2,599	10.05%	25,860
374	9/2	2:00 PM	Mon	3,900	11.40%	34,224		393	5/24	3:00 PM	Fri	3,261	9.79%	33,295
376	4/25	3:00 PM	Thu	5,778	9.27%	62,323		502	7/21	3:00 PM	Sun	2,799	10.13%	27,630
377	12/17	4:00 PM	Tue	5,450	8.96%	60,809		600	12/21	1:00 PM	Sat	4,168	8.98%	46,395
394	4/24	5:00 PM	Wed	5,721	9.02%	63,459		706	7/28	1:00 PM	Sun	2,395	10.57%	22,664
701	12/28	12:00 PM	Sat	5,550	8.62%	64,353		709	8/23	2:00 PM	Fri	3,432	10.37%	33,083
710	7/26	4:00 PM	Fri	5,254	10.38%	50,614		712	12/20	3:00 PM	Fri	4,624	8.99%	51,420
801	5/8	4:00 PM	Wed	7,508	8.48%	88,579		713	7/7	10:00 AM	Sun	2,913	12.54%	23,222
804	5/31	3:00 PM	Fri	4,799	9.41%	51,001		800	8/23	4:00 PM	Fri	2,612	11.06%	23,617
818	8/16	4:00 PM	Fri	3,247	10.31%	31,506		807	5/24	3:00 PM	Fri	2,897	9.87%	29,357
823	4/19	4:00 PM	Fri	4,570	7.90%	57,820		825	11/28	1:00 PM	Thu	3,956	8.98%	44,076
830	8/28	3:00 PM	Wed	5,666	8.70%	65,153		828	8/18	12:00 PM	Sun	2,290	11.82%	19,370
831	11/26	2:00 PM	Tue	5,797	8.53%	67,963		829	11/27	1:00 PM	Wed	2,742	9.13%	30,039
833	8/22	4:00 PM	Thu	7,301	9.58%	76,180		834	7/21	11:00 AM	Sun	2,859	12.17%	23,497
840	10/17	5:00 PM	Thu	5,056	10.06%	50,247		835	8/18	1:00 PM	Sun	1,194	12.46%	9,585
841	4/26	4:00 PM	Fri	6,258	8.68%	72,096		836	8/11	4:00 PM	Sun	2,723	9.34%	29,149
844	3/29	12:00 PM	Fri	3,682	9.44%	38,989		837	12/1	12:00 PM	Sun	2,796	9.74%	28,708
845	2/9	4:00 PM	Fri	3,526	10.27%	34,342		838	6/14	4:00 PM	Fri	2,517	10.31%	24,408
								839	12/1	12:00 PM	Sun	2,833	10.04%	28,215
								842	11/27	2:00 PM	Wed	1,906	10.78%	17,682
								843	12/22	2:00 PM	Sun	2,487	10.20%	24,384

2024 30th Highest Hour by TPG (Continued)

				20)24 30th Hiç	ghest Hou	r by	y Traffic	Patterr	Group				
		TPG 3: U	rban Pri	incipal Arte	erial					TPG 4: R	ural Prin	ncipal Arte	rial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
8	2/21	8:00 AM	Wed	1,963	10.13%	19,379		4	9/2	12:00 PM	Mon	301	10.95%	2,749
14	10/11	3:00 PM	Fri	1,828	10.48%	17,449		19	5/28	4:00 PM	Tue	599	11.31%	5,297
16	4/23	5:00 PM	Tue	5,564	8.43%	65,980		24	7/26	3:00 PM	Fri	2,100	9.72%	21,605
21	5/11	2:00 PM	Sat	7,017	7.39%	94,995		323	9/20	4:00 PM	Fri	501	11.05%	4,532
22	9/12	4:00 PM	Thu	2,497	9.76%	25,594		360	10/15	4:00 PM	Tue	297	11.55%	2,572
23	10/10	5:00 PM	Thu	4,314	8.64%	49,938		363	8/2	1:00 PM	Fri	551	11.43%	4,822
40	10/9	2:00 PM	Wed	416	9.95%	4,183		378	11/1	3:00 PM	Fri	749	10.38%	7,215
203	12/17	3:00 PM	Tue	1,898	9.51%	19,967		505	9/6	5:00 PM	Fri	2,587	11.81%	21,900
206	4/16	4:00 PM	Tue	2,867	11.66%	24,580		700	3/1	3:00 PM	Fri	1,285	10.48%	12,267
301	5/22	4:00 PM	Wed	1,367	11.29%	12,103		703	8/30	3:00 PM	Fri	3,836	9.26%	41,433
326	6/14	4:00 PM	Fri	1,170	13.05%	8,967		808	9/13	3:00 PM	Fri	1,536	10.12%	15,183
330	7/16	8:00 AM	Tue	1,054	10.23%	10,305								
334	3/20	3:00 PM	Wed	1,317	8.39%	15,695								
349	11/6	4:00 PM	Wed	3,061	8.42%	36,357								
375	8/20	4:00 PM	Tue	2,398	9.66%	24,815								
395	11/19	4:00 PM	Tue	981	10.43%	9,408								
396	3/1	4:00 PM	Fri	1,021	10.73%	9,519								
803	7/14	5:00 PM	Sun	2,412	10.30%	23,414								
806	5/20	4:00 PM	Mon	2,851	9.56%	29,834								
809	10/11	2:00 PM	Fri	871	10.95%	7,953								
811	6/4	4:00 PM	Tue	4,875	9.64%	50,588								
813	3/28	3:00 PM	Thu	7,302	7.96%	91,707								
821	9/2	1:00 PM	Mon	1,477	12.91%	11,437								
822	4/17	4:00 PM	Wed	5,272	8.72%	60,473								
824	5/28	4:00 PM	Tue	3,381	9.66%	34,993								
826	5/29	4:00 PM	Wed	4,525	9.02%	50,171								
827	5/11	12:00 PM	Sat	1,561	9.85%	15,840								
848	5/27	2:00 PM	Mon	2,347	9.95%	23,584								
851	9/11	4:00 PM	Wed	6,609	8.38%	78,839								
985	5/7	4:00 PM	Tue	1,897	11.12%	17,052								

2024 30th Highest Hour by TPG (Continued)

				20)24 30th Hig	ghest Hou	r b	y Traffic	Patterr	Group				
	Т	PG 5: Urba	n Minor	Arterial/C	ollector					TPG 6: Nor	th Rura	l Minor Art	erial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
18	2/9	4:00 PM	Fri	632	11.38%	5,552		2	5/23	3:00 PM	Thu	229	11.53%	1,986
20	5/31	4:00 PM	Fri	682	10.54%	6,471		3	7/11	4:00 PM	Thu	549	10.53%	5,213
380	4/9	3:00 PM	Tue	858	11.95%	7,179		7	8/15	3:00 PM	Thu	818	9.99%	8,186
381	7/6	9:00 PM	Sat	51	12.62%	404		11	4/25	3:00 PM	Thu	620	12.01%	5,163
390	11/8	3:00 PM	Fri	807	12.15%	6,641		27	5/24	4:00 PM	Fri	373	13.55%	2,752
506	12/23	11:00 AM	Mon	1,695	10.46%	16,198		48	5/17	3:00 PM	Fri	522	11.09%	4,709
815	5/22	4:00 PM	Wed	403	10.76%	3,745		51	7/5	12:00 PM	Fri	309	11.55%	2,676
846	8/20	4:00 PM	Tue	592	12.84%	4,611		324	5/29	3:00 PM	Wed	498	12.19%	4,085
								410	9/24	3:00 PM	Tue	454	11.08%	4,098

				20)24 30th Hig	ghest Hou	r b	y Traffic	Patterr	Group				
		TPG 7: Cen	tral Rui	ral Minor A	rterial					TPG 8: N	lorth Ru	ıral Collect	or	
Site #	1 7/7 2:00 PM Sun 427 12.15%							Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
1	7/7	2:00 PM	Sun	427	12.15%	3,515		5	8/19	3:00 PM	Mon	217	13.26%	1,636
9	5/2	4:00 PM	Thu	869	11.61%	7,485		29	6/6	5:00 PM	Thu	128	10.77%	1,188
15	11/20	3:00 PM	Wed	572	11.59%	4,937		383	3/14	4:00 PM	Thu	365	11.24%	3,246
367	4/18	4:00 PM	Thu	608	10.31%	5,895		384	7/10	8:00 AM	Wed	64	16.54%	387
391	3/22	3:00 PM	Fri	903	10.68%	8,458		385	12/1	1:00 PM	Sun	228	12.06%	1,891
850	9/19	4:00 PM	Thu	1,509	9.32%	16,193		802	8/28	4:00 PM	Wed	711	14.02%	5,070
853	6/15	12:00 PM	Sat	476	11.41%	4,170		817	2/7	3:00 PM	Wed	200	13.01%	1,537

				20	024 30th Hig	ghest Hou	r b	y Traffic	Pattern	Group				
		TPG 9: 0	entral F	Rural Collec	ctor					TPG 10:	Special	Recreation	nal	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
362	6/12	4:00 PM	Wed	611	9.93%	6,150		306	7/26	2:00 PM	Fri	736	12.82%	5,739
364	9/5	4:00 PM	Thu	502	10.91%	4,600		805	5/25	9:00 AM	Sat	540	17.79%	3,036
379	4/18	4:00 PM	Thu	129	11.65%	1,107		849	5/26	3:00 PM	Sun	222	13.71%	1,619
382	2/9	4:00 PM	Fri	177	12.07%	1,467		855	7/5	5:00 PM	Fri	321	21.63%	1,484
386	6/27	4:00 PM	Thu	278	11.17%	2,489		856	6/22	2:00 PM	Sat	165	20.70%	797
387	10/18	7:00 AM	Fri	49	12.83%	382								
389	4/26	4:00 PM	Fri	197	11.20%	1,759								
816	11/12	4:00 PM	Tue	444	13.55%	3,276								
854	9/4	4:00 PM	Wed	961	10.81%	8,887								

2024 50th Highest Hour by Traffic Pattern Group (TPG)

				20	24 50th Hig	jhest Hou	r b	y Traffic	Patterr	Group				
		TPG 1	l: Urbar	n Interstate)					TPG 2	: Rural	Interstate		
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
13	5/17	2:00 PM	Fri	11,168	7.29%	153,265		12	12/1	7:00 PM	Sun	2,198	8.87%	24,771
205	8/21	4:00 PM	Wed	5,268	8.92%	59,070		106	8/15	2:00 PM	Thu	3,807	8.60%	44,243
208	4/5	5:00 PM	Fri	6,717	8.29%	81,026		126	6/21	4:00 PM	Fri	2,249	8.90%	25,270
317	3/28	4:00 PM	Thu	1,521	10.60%	14,345		158	8/4	2:00 PM	Sun	2,205	9.07%	24,315
372	7/12	3:00 PM	Fri	3,269	9.35%	34,954		392	8/16	2:00 PM	Fri	2,511	9.71%	25,860
374	11/8	4:00 PM	Fri	3,775	11.03%	34,224		393	7/28	1:00 PM	Sun	3,201	9.61%	33,295
376	4/24	4:00 PM	Wed	5,734	9.20%	62,323		502	8/18	1:00 PM	Sun	2,705	9.79%	27,630
377	11/20	4:00 PM	Wed	5,393	8.87%	60,809		600	11/26	3:00 PM	Tue	4,044	8.72%	46,395
394	1/23	4:00 PM	Tue	5,631	8.87%	63,459		706	7/28	2:00 PM	Sun	2,303	10.16%	22,664
701	12/1	1:00 PM	Sun	5,454	8.48%	64,353		709	5/3	3:00 PM	Fri	3,288	9.94%	33,083
710	9/27	3:00 PM	Fri	5,105	10.09%	50,614		712	8/30	5:00 PM	Fri	4,548	8.84%	51,420
801	8/7	4:00 PM	Wed	7,414	8.37%	88,579		713	6/23	3:00 PM	Sun	2,766	11.91%	23,222
804	6/14	2:00 PM	Fri	4,721	9.26%	51,001		800	5/7	4:00 PM	Tue	2,559	10.84%	23,617
818	11/30	3:00 PM	Sat	3,173	10.07%	31,506		807	10/2	4:00 PM	Wed	2,866	9.76%	29,357
823	4/4	4:00 PM	Thu	4,532	7.84%	57,820		825	10/18	3:00 PM	Fri	3,865	8.77%	44,076
830	8/16	4:00 PM	Fri	5,607	8.61%	65,153		828	7/27	12:00 PM	Sat	2,234	11.53%	19,370
831	8/16	4:00 PM	Fri	5,732	8.43%	67,963		829	8/30	4:00 PM	Fri	2,636	8.78%	30,039
833	9/17	4:00 PM	Tue	7,208	9.46%	76,180		834	7/28	4:00 PM	Sun	2,748	11.70%	23,497
840	4/19	4:00 PM	Fri	4,999	9.95%	50,247		835	7/5	12:00 PM	Fri	1,152	12.02%	9,585
841	5/8	4:00 PM	Wed	6,201	8.60%	72,096		836	8/30	3:00 PM	Fri	2,613	8.96%	29,149
844	6/21	3:00 PM	Fri	3,587	9.20%	38,989		837	8/23	4:00 PM	Fri	2,734	9.52%	28,708
845	2/29	4:00 PM	Thu	3,424	9.97%	34,342		838	7/12	3:00 PM	Fri	2,474	10.14%	24,408
								839	8/23	2:00 PM	Fri	2,770	9.82%	28,215
								842	7/3	4:00 PM	Wed	1,853	10.48%	17,682
								843	10/18	2:00 PM	Fri	2,333	9.57%	24,384

2024 50th Highest Hour by TPG (Continued)

				20	024 50th Hiç	ghest Hou	r b	y Traffic	Patterr	Group				
		TPG 3: U	rban Pri	incipal Arte	erial					TPG 4: R	ural Prii	ncipal Arte	rial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
8	10/24	7:00 AM	Thu	1,948	10.05%	19,379		4	8/11	12:00 PM	Sun	291	10.59%	2,749
14	10/25	4:00 PM	Fri	1,770	10.14%	17,449		19	4/9	4:00 PM	Tue	583	11.01%	5,297
16	11/12	4:00 PM	Tue	5,521	8.37%	65,980		24	8/2	3:00 PM	Fri	2,065	9.56%	21,605
21	4/18	3:00 PM	Thu	6,966	7.33%	94,995		323	11/15	3:00 PM	Fri	488	10.77%	4,532
22	9/4	3:00 PM	Wed	2,469	9.65%	25,594		360	8/15	4:00 PM	Thu	289	11.24%	2,572
23	12/13	4:00 PM	Fri	4,258	8.53%	49,938		363	4/6	2:00 PM	Sat	527	10.93%	4,822
40	4/19	3:00 PM	Fri	408	9.75%	4,183		378	9/20	3:00 PM	Fri	737	10.21%	7,215
203	4/25	7:00 AM	Thu	1,870	9.37%	19,967		505	12/22	11:00 AM	Sun	2,488	11.36%	21,900
206	9/19	4:00 PM	Thu	2,818	11.46%	24,580		700	11/8	3:00 PM	Fri	1,246	10.16%	12,267
301	9/12	3:00 PM	Thu	1,354	11.19%	12,103		703	11/21	4:00 PM	Thu	3,775	9.11%	41,433
326	5/17	3:00 PM	Fri	1,140	12.71%	8,967		808	10/6	3:00 PM	Sun	1,497	9.86%	15,183
330	5/22	5:00 PM	Wed	1,039	10.08%	10,305								
334	4/9	2:00 PM	Tue	1,299	8.28%	15,695								
349	9/4	4:00 PM	Wed	3,009	8.28%	36,357								
375	6/5	4:00 PM	Wed	2,306	9.29%	24,815								
395	9/5	4:00 PM	Thu	973	10.34%	9,408								
396	3/8	4:00 PM	Fri	1,001	10.52%	9,519								
803	5/19	2:00 PM	Sun	2,375	10.14%	23,414								
806	5/13	4:00 PM	Mon	2,800	9.39%	29,834								
809	4/5	4:00 PM	Fri	848	10.66%	7,953								
811	11/6	5:00 PM	Wed	4,800	9.49%	50,588								
813	5/30	7:00 AM	Thu	7,250	7.91%	91,707								
821	6/28	2:00 PM	Fri	1,412	12.35%	11,437								
822	10/18	3:00 PM	Fri	5,199	8.60%	60,473								
824	10/10	4:00 PM	Thu	3,357	9.59%	34,993								
826	9/6	4:00 PM	Fri	4,491	8.95%	50,171								
827	3/1	3:00 PM	Fri	1,522	9.61%	15,840								
848	3/29	3:00 PM	Fri	2,291	9.71%	23,584								
851	9/10	4:00 PM	Tue	6,574	8.34%	78,839								
985	10/22	3:00 PM	Tue	1,869	10.96%	17,052								

2024 50th Highest Hour by TPG (Continued)

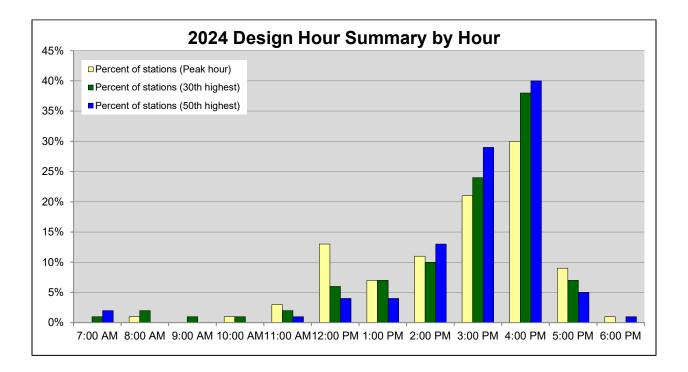
				20	024 50th Hig	ghest Hou	r b	y Traffic	Patterr	Group				
	т	PG 5: Urba	n Minor	Arterial/C	ollector					TPG 6: No	rth Rura	l Minor Art	terial	
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
18	2/21	4:00 PM	Wed	612	11.02%	5,552		2	9/4	4:00 PM	Wed	224	11.28%	1,986
20	6/6	4:00 PM	Thu	671	10.37%	6,471		3	10/19	3:00 PM	Sat	521	9.99%	5,213
380	12/18	3:00 PM	Wed	843	11.74%	7,179		7	9/20	3:00 PM	Fri	803	9.81%	8,186
381	5/18	12:00 PM	Sat	47	11.63%	404		11	12/18	3:00 PM	Wed	605	11.72%	5,163
390	7/17	3:00 PM	Wed	790	11.90%	6,641		27	10/6	1:00 PM	Sun	354	12.86%	2,752
506	6/28	4:00 PM	Fri	1,675	10.34%	16,198		48	7/3	2:00 PM	Wed	510	10.83%	4,709
815	8/30	2:00 PM	Fri	387	10.33%	3,745		51	10/4	4:00 PM	Fri	302	11.29%	2,676
846	10/9	3:00 PM	Wed	561	12.17%	4,611		324	10/16	3:00 PM	Wed	488	11.95%	4,085
								410	5/20	3:00 PM	Mon	444	10.83%	4,098

	2024 50th Highest Hour by Traffic Pattern Group													
TPG 7: Central Rural Minor Arterial								TPG 8: North Rural Collector						
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
1	6/16	3:00 PM	Sun	414	11.78%	3,515		5	4/23	3:00 PM	Tue	210	12.84%	1,636
9	11/5	4:00 PM	Tue	853	11.40%	7,485		29	8/29	4:00 PM	Thu	124	10.44%	1,188
15	8/15	4:00 PM	Thu	556	11.26%	4,937		383	5/24	4:00 PM	Fri	355	10.94%	3,246
367	8/5	4:00 PM	Mon	592	10.04%	5,895		384	7/4	1:00 PM	Thu	60	15.50%	387
391	5/24	3:00 PM	Fri	886	10.48%	8,458		385	4/5	4:00 PM	Fri	216	11.42%	1,891
850	11/1	5:00 PM	Fri	1,491	9.21%	16,193		802	9/3	4:00 PM	Tue	683	13.47%	5,070
853	5/21	3:00 PM	Tue	465	11.15%	4,170		817	8/28	5:00 PM	Wed	197	12.82%	1,537

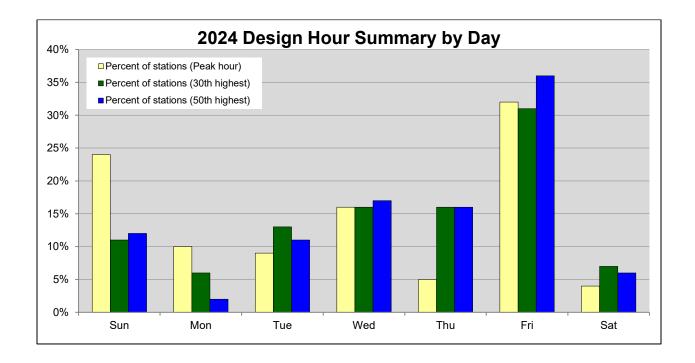
	2024 50th Highest Hour by Traffic Pattern Group													
TPG 9: Central Rural Collector							TPG 10: Special Recreational							
Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT		Site #	Date	Hour (start)	DOW	Volume	% AADT	AADT
362	5/1	4:00 PM	Wed	602	9.79%	6,150		306	8/10	11:00 AM	Sat	706	12.30%	5,739
364	9/4	3:00 PM	Wed	492	10.70%	4,600		805	9/1	2:00 PM	Sun	512	16.86%	3,036
379	12/17	4:00 PM	Tue	125	11.29%	1,107		849	6/15	12:00 PM	Sat	198	12.23%	1,619
382	8/30	6:00 PM	Fri	170	11.59%	1,467		855	7/14	5:00 PM	Sun	304	20.49%	1,484
386	10/24	4:00 PM	Thu	268	10.77%	2,489		856	6/15	3:00 PM	Sat	154	19.32%	797
387	7/30	2:00 PM	Tue	46	12.04%	382								
389	5/23	3:00 PM	Thu	192	10.92%	1,759								
816	5/16	4:00 PM	Thu	435	13.28%	3,276								
854	5/17	4:00 PM	Fri	942	10.60%	8,887								

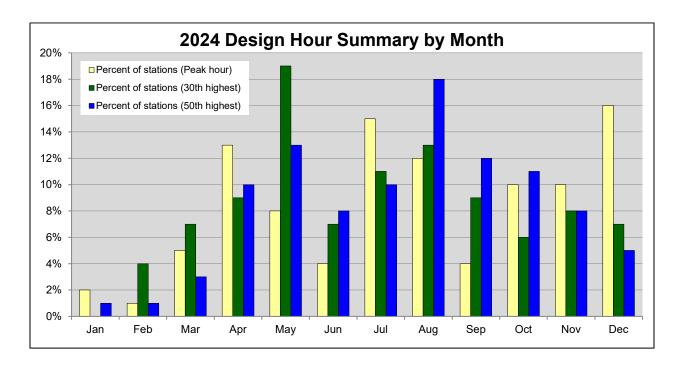
2024 Design Hour Summaries: Peak, 30th and 50th Highest Hour

Design Hour Volume (DHV) is the hourly traffic volume used in the design of highways. The DHV is usually represented by the 30th highest hourly volume of the future year chosen for design. The following three graphs show the peak, 30th and 50th highest hour summary by hour, day, and month.



2024 Design Hour Summaries: Peak, 30th and 50th Highest Hour





Five Year Summary of Annual Average Daily Traffic (AADT) from Permanent Sites

This chart shows the permanent site station numbers and their Annual Average Daily Traffic (AADT) for the past five years, 2020 through 2024. The percent change is also given for 2023 to 2024 and 2020 to 2024, showing where traffic has increased or decreased.

*Indicates there is no data available.

	there is no t	Percent	Percent Change				
Site #	2020	2021	2022	2023	2024	2023-2024	2020-2024
1	3,655	3,741	3,637	3,647	3,515	-3.6%	-3.8%
2	1,871	2,017	1,869	1,953	1,986	1.7%	6.1%
3	4,864	4,989	**	**	5,213	N/A	7.2%
4	2,301	2,486	2,615	2,752	2,749	-0.1%	19.5%
5	1,602	1,640	1,692	1,695	1,636	-3.5%	2.1%
6	*	7,593	**	**	**	N/A	N/A
7	*	8,271	8,062	8,450	8,186	-3.1%	-1.0%
8	14,940	17,202	18,352	18,818	19,379	3.0%	29.7%
9	*	7,722	7,454	7,372	7,485	1.5%	-3.1%
10	*	9,728	9,572	**	**	N/A	-1.6%
11	*	5,231	5,218	5,219	5,163	-1.1%	-1.3%
12	*	*	26,234	27,367	24,771	-9.5%	-5.6%
13	*	*	145,981	150,600	153,265	1.8%	5.0%
14	*	*	17,281	16,708	17,449	4.4%	1.0%
15	4,616	4,927	4,981	5,159	4,937	-4.3%	7.0%
16	*	*	61,448	64,323	65,980	2.6%	7.4%
18	5,271	5,759	5,662	5,671	5,552	-2.1%	5.3%
19	4,675	5,195	5,332	5,426	5,297	-2.4%	13.3%
20	6,294	6,662	6,563	6,689	6,471	-3.3%	2.8%
21	*	*	96,804	96,574	94,995	-1.6%	-1.9%
22	*	*	24,191	25,030	25,594	2.3%	5.8%
23	*	*	*	*	49,938	N/A	N/A
24	17,440	20,238	20,449	21,582	21,605	0.1%	23.9%
27	2,489	2,680	2,712	2,768	2,752	-0.6%	10.6%
29	1,234	1,327	1,395	1,278	1,188	-7.0%	-3.7%
40	3,958	4,116	4,108	4,137	4,183	1.1%	5.7%
48	4,596	4,810	4,864	5,038	4,709	-6.5%	2.5%
51	2,702	2,859	2,781	2,788	2,676	-4.0%	-1.0%
106	35,828	40,146	38,664	41,417	44,243	6.8%	23.5%
126	23,132	25,765	24,103	26,603	25,270	-5.0%	9.2%
158	**	24,999	24,306	24,164	24,315	0.6%	-2.7%
203	17,107	18,872	18,411	19,712	19,967	1.3%	16.7%
205	48,723	**	**	**	59,070	N/A	21.2%
206	19,888	21,972	23,286	24,522	24,580	0.2%	23.6%
208	76,180	85,580	85,935	87,140	81,026	-7.0%	6.4%
216	21,317	25,726	29,096	25,988	**	N/A	21.9%
301	11,200	**	11,576	11,988	12,103	1.0%	8.1%

Five Year Summary of AADT from Permanent Sites (Continued)

*Indicates there is no data available.

	s there is no t	Percent	Change				
Site #	2020	2021	2022	2023	2024	2023-2024	2020-2024
304	25,126	27,917	27,501	**	**	N/A	9.5%
306	5,473	5,886	5,660	5,696	5,739	0.8%	4.9%
317	11,856	12,559	13,735	14,334	14,345	0.1%	21.0%
323	3,920	4,481	4,475	4,606	4,532	-1.6%	15.6%
324	3,974	4,158	4,131	4,184	4,085	-2.4%	2.8%
326	7,348	8,498	8,276	8,116	8,967	10.5%	22.0%
328	4,488	4,909	**	**	**	N/A	9.4%
330	8,504	9,714	10,240	10,480	10,305	-1.7%	21.2%
334	13,998	15,237	15,500	15,874	15,695	-1.1%	12.1%
349	31,363	34,305	34,248	36,282	36,357	0.2%	15.9%
360	2,496	2,650	2,626	2,610	2,572	-1.5%	3.0%
362	5,572	5,882	5,840	6,169	6,150	-0.3%	10.4%
363	4,024	4,441	4,724	4,886	4,822	-1.3%	19.8%
364	4,310	4,649	4,576	4,523	4,600	1.7%	6.7%
367	5,457	6,047	5,909	5,863	5,895	0.5%	8.0%
370	25,949	29,416	29,196	**	**	N/A	12.5%
371	15,103	18,582	18,003	**	**	N/A	19.2%
372	27,006	32,058	32,811	35,931	34,954	-2.7%	29.4%
374	27,523	32,309	32,128	34,032	34,224	0.6%	24.3%
375	22,903	24,852	24,176	25,094	24,815	-1.1%	8.3%
376	**	**	60,260	61,793	62,323	0.9%	3.4%
377	45,871	53,517	55,410	58,399	60,809	4.1%	32.6%
378	6,877	7,116	6,950	7,181	7,215	0.5%	4.9%
379	1,250	1,246	**	1,110	1,107	-0.3%	-11.4%
380	6,742	6,850	6,974	7,432	7,179	-3.4%	6.5%
381	335	339	369	400	404	1.0%	20.6%
382	1,432	1,545	1,494	1,457	1,467	0.7%	2.4%
383	3,202	3,339	3,298	3,258	3,246	-0.4%	1.4%
384	460	441	417	420	387	-7.9%	-15.9%
385	1,641	1,761	1,781	1,855	1,891	1.9%	15.2%
386	2,178	2,262	2,333	2,457	2,489	1.3%	14.3%
387	504	**	405	400	382	-4.5%	-24.2%
388	2,350	2,548	2,508	**	**	N/A	6.7%
389	1,712	1,811	1,776	1,804	1,759	-2.5%	2.7%
390	6,939	7,105	6,487	6,570	6,641	1.1%	-4.3%
391	7,196	8,090	7,575	8,323	8,458	1.6%	17.5%
392	**	27,688	24,246	26,864	25,860	-3.7%	-6.6%
393	28,708	31,682	30,163	33,170	33,295	0.4%	16.0%
394	55,957	65,964	66,623	66,648	63,459	-4.8%	13.4%
395	**	8,846	9,218	9,400	9,408	0.1%	6.4%

Five Year Summary of AADT from Permanent Sites (Continued)

*Indicates there is no data available.

maroato		Annual Ave	rage Daily Tr	affic (AADT)		Percent Change		
Site #	2020	2021	2022	2023	2024	2023-2024	2020-2024	
396	10,258	10,977	10,167	10,191	9,519	-6.6%	-7.2%	
410	3,862	4,272	3,965	3,882	4,098	5.6%	6.1%	
501	**	**	**	**	**	N/A	N/A	
502	24,764	**	28,012	29,810	27,630	-7.3%	11.6%	
503	**	**	**	**	**	N/A	N/A	
504	**	**	**	**	**	N/A	N/A	
505	**	**	**	**	21,900	N/A	N/A	
506	14,783	16,174	16,158	15,631	16,198	3.6%	9.6%	
600	35,814	43,497	44,909	45,942	46,395	1.0%	29.5%	
700	**	**	11,732	12,033	12,267	1.9%	4.6%	
701	54,467	**	65,279	63,307	64,353	1.7%	18.2%	
702	51,887	60,061	58,845	**	**	N/A	13.4%	
703	**	**	**	**	41,433	N/A	N/A	
704	**	**	**	**	**	N/A	N/A	
705	58,501	68,052	**	**	**	N/A	16.3%	
706	20,638	23,455	**	25,839	22,664	-12.3%	9.8%	
709	27,697	32,635	32,332	33,726	33,083	-1.9%	19.4%	
710	**	**	47,577	49,986	50,614	1.3%	6.4%	
712	42,383	49,155	49,490	50,439	51,420	1.9%	21.3%	
713	*	*	23,641	23,937	23,222	-3.0%	-1.8%	
800	19,685	21,590	22,928	24,337	23,617	-3.0%	20.0%	
801	69,787	**	79,718	84,570	88,579	4.7%	26.9%	
802	4,910	5,256	4,915	4,984	5,070	1.7%	3.3%	
803	18,148	22,532	23,085	23,902	23,414	-2.0%	29.0%	
804	42,655	47,346	47,943	50,281	51,001	1.4%	19.6%	
805	2,761	2,921	2,889	2,946	3,036	3.1%	10.0%	
806	25,537	28,774	29,221	30,061	29,834	-0.8%	16.8%	
807	23,741	28,556	28,358	28,857	29,357	1.7%	23.7%	
808	11,945	13,925	14,341	15,288	15,183	-0.7%	27.1%	
809	6,385	**	7,683	7,962	7,953	-0.1%	24.6%	
810	28,306	32,930	**	**	**	N/A	16.3%	
811	42,172	46,475	47,171	49,285	50,588	2.6%	20.0%	
812	37,069	43,672	43,939	44,013	**	N/A	18.7%	
813	78,163	89,372	89,833	91,140	91,707	0.6%	17.3%	
815	3,308	3,710	3,663	3,734	3,745	0.3%	13.2%	
816	2,852	3,060	3,070	3,226	3,276	1.5%	14.9%	
817	1,577	1,611	1,588	1,620	1,537	-5.1%	-2.5%	
818	26,420	30,421	28,833	30,919	31,506	1.9%	19.3%	
821	8,677	10,581	10,788	11,278	11,437	1.4%	31.8%	
822	*	53,581	56,629	59,327	60,473	1.9%	12.9%	

Five Year Summary of AADT from Permanent Sites (Continued)

*Indicates there is no data available

maicates	s there is no o	Percent	Change				
Site #	2020	2021	2022	2023	2024	2023-2024	2020-2024
823	44,618	51,153	56,341	57,140	57,820	1.2%	29.6%
824	29,937	33,576	33,006	34,046	34,993	2.8%	16.9%
825	35,944	41,298	42,275	44,434	44,076	-0.8%	22.6%
826	42,297	47,944	48,044	49,664	50,171	1.0%	18.6%
827	18,379	20,375	18,944	16,172	15,840	-2.1%	-13.8%
828	15,099	17,526	17,724	19,129	19,370	1.3%	28.3%
829	26,305	30,127	29,829	30,169	30,039	-0.4%	14.2%
830	54,411	63,671	63,470	65,989	65,153	-1.3%	19.7%
831	58,628	66,545	66,449	69,999	67,963	-2.9%	15.9%
832	17,230	19,028	19,557	20,827	**	N/A	20.9%
833	58,598	67,290	70,295	**	76,180	N/A	30.0%
834	15,230	20,015	16,338	21,720	23,497	8.2%	54.3%
835	**	9,457	9,263	9,519	9,585	0.7%	1.4%
836	25,152	28,287	27,917	28,665	29,149	1.7%	15.9%
837	21,699	26,160	26,114	27,746	28,708	3.5%	32.3%
838	19,334	22,638	22,802	23,688	24,408	3.0%	26.2%
839	23,093	26,990	27,584	27,904	28,215	1.1%	22.2%
840	38,346	44,134	47,687	50,093	50,247	0.3%	31.0%
841	59,581	68,081	68,626	70,637	72,096	2.1%	21.0%
842	13,561	**	15,379	16,907	17,682	4.6%	30.4%
843	20,081	23,504	23,528	24,322	24,384	0.3%	21.4%
844	**	39,318	38,620	37,456	38,989	4.1%	-0.8%
845	29,805	34,259	33,666	35,520	34,342	-3.3%	15.2%
846	3,827	4,140	4,234	4,348	4,611	6.0%	20.5%
848	19,168	22,169	22,359	23,567	23,584	0.1%	23.0%
849	1,665	1,850	1,694	1,663	1,619	-2.6%	-2.8%
850	13,232	15,344	15,667	15,748	16,193	2.8%	22.4%
851	63,960	74,206	72,698	71,168	78,839	10.8%	23.3%
853	3,792	4,134	4,111	4,131	4,170	0.9%	10.0%
854	8,170	8,802	8,640	8,834	8,887	0.6%	8.8%
855	1,909	1,601	1,475	1,490	1,484	-0.4%	-22.3%
856	981	830	789	798	797	-0.1%	-18.8%
985	16,269	17,323	16,789	17,264	17,052	-1.2%	4.8%

^{* 6, 7, 9, 10, 11, &}amp; 822 2021 was first full year of data

^{* 12, 13, 14, 16, 21, 22, &}amp; 713 2022 was first full year of data

^{* 23 2024} was first full year of data

^{**} Site inactive or full year of data unavailable.

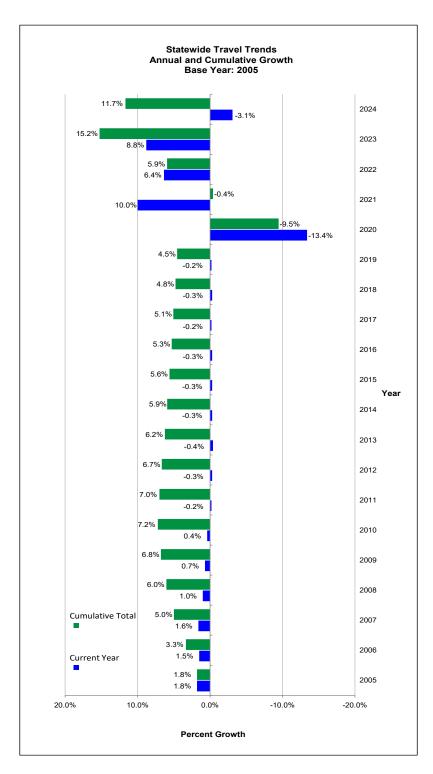
Statewide Traffic Trends: Annual and Multi-Year Change By Traffic Pattern Group

This table shows percent change for the traffic pattern groups at one-year intervals starting with 2019/2020 up to 2023/2024. An overall change in growth over the 5 year period for the traffic pattern groups is also shown on this table.

Perce	nt Change	Per Year, 2	2019 - 2024			
TRAFFIC PATTERN GROUPS	2019-20	2020-21	2021-22	2022-23	2023-24	2019-24
TPG 1 Urban Interstate	-19.0%	14.3%	8.8%	11.5%	-1.4%	14.3%
TPG 2 Rural Interstate	-18.0%	16.5%	6.4%	9.3%	-1.9%	12.3%
TPG 3 Urban Principal Arterial	-18.7%	13.2%	8.4%	8.8%	-2.4%	9.3%
TPG 4 Rural Principal Arterial	-15.8%	13.2%	8.7%	10.6%	-3.1%	13.6%
TPG 5 Urban Minor Arterials or Collectors	-17.2%	7.8%	5.4%	7.5%	-3.4%	0.1%
TPG 6 North Rural Minor Arterials	-11.8%	6.9%	4.3%	8.9%	-5.9%	2.4%
TPG 7 Central Rural Minor Arterials	-10.6%	10.0%	6.6%	8.4%	-2.6%	11.8%
TPG 8 North Rural Collectors	-5.8%	4.9%	4.9%	6.6%	-4.8%	5.9%
TPG 9 Central Rural Collectors	-11.5%	6.5%	3.3%	9.0%	-2.2%	5.1%
TPG 10 Special Recreational	-6.0%	6.9%	6.8%	7.3%	-3.7%	11.3%
Statewide	-13.4%	10.0%	6.4%	8.8%	-3.1%	8.6%

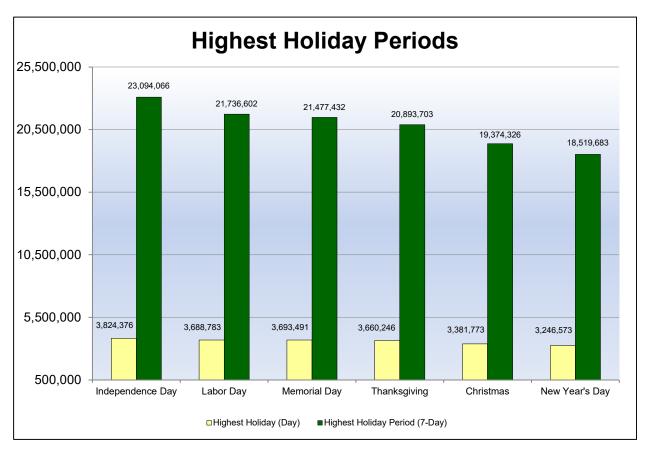
Statewide Traffic Trends

This chart shows yearly changes from 2005 to 2024 and a 20-year cumulative trend for the same period.



Heaviest Holiday Travel Periods: 2024

The permanent sites were used to calculate the holidays having the highest seven-day periods of traffic. The highest seven-day holiday periods and the highest day within the seven-day holiday period (total traffic at all permanent site stations) are shown on the chart below:



The chart indicates that Independence Day had the highest seven-day holiday period in 2024 with a total volume of 23,094,066. Labor Day ranked second (21,736,602) followed by Memorial Day (21,477,432) and Thanksgiving (20,893,703). Christmas Day and New Year's Day ranked fifth (19,374,326) and sixth (18,519,683) respectively.

The highest day during a seven-day holiday period in 2024 was the Wednesday before Independence Day (July 3, 2024), which had a volume of 3,824,376. The second highest day was the Friday before Memorial Day (May 24, 2024), which had a volume of 3,693,491. The Friday before Labor Day (August 30, 2024) ranked third with 3,688,783, while the Wednesday before Thanksgiving Day (November 27, 2024), ranked fourth with 3,660,246. The Thursday before Christmas (December 19, 2024) ranked fifth with 3,381,773, while the Friday before New Year's Day (December 29, 2023) ranked sixth with 3,246,573.

Heaviest Holiday Travel Period Comparisons: 2023-2024

	Highest Holiday (Day)											
2023			2024									
Holiday Total Volume			Holiday	Total Volume								
1. Independence Day	3,763,168		1. Independence Day	3,824,376								
2. Memorial Day	3,725,541		2. Memorial Day	3,693,491								
3. Labor Day	3,556,799		3. Labor Day	3,688,783								
4. Thanksgiving	3,487,730		4. Thanksgiving	3,660,246								
5. Christmas	3,416,526		5. Christmas	3,381,773								
6. New Year's Day	3,208,141		6. New Year's Day	3,246,573								

Highest Holiday Period (7-Day)											
2023			2024								
Holiday Total Volume			Holiday	Total Volume							
1. Memorial Day	22,001,191		1. Independence Day	23,094,066							
2. Independence Day	21,556,359		2. Labor Day	21,736,602							
3. Thanksgiving	20,671,911		3. Memorial Day	21,477,432							
4. Labor Day	20,455,957		4. Thanksgiving	20,893,703							
5. Christmas	19,133,447		5. Christmas	19,374,326							
6. New Year's Day	18,910,450		6. New Year's Day	18,519,683							

Factoring Process: Traffic Adjustment Factors

Traffic Adjustment Factors

Traffic Adjustment Factors are numbers that are used to create traffic statistics representing an average day. Factors are generated by applying statistical methods and programs to raw traffic counts. The different procedures used to factor counts depend on the following outcomes:

24-Hour Total Traffic and Truck Traffic Estimation

Count data less than 24-hours (short term counts) must first be expanded to a 24-hour total, which is accomplished through the use of hourly percentage tables. Separate tables are utilized for total vehicles and truck data application.

AADT and ADTT Estimation

A 24-hour count is processed to an Annual Average Daily Traffic (AADT) and Average Daily Truck Traffic (ADTT) through the application of a "day of week by month" factor. Separate tables are utilized for total vehicle and truck data application.

Axle Correction

Axle volume count data is collected by counting the number of axles striking a single pneumatic tube stretched across a section of highway and dividing by two. This type of data must be corrected to compensate for vehicles containing more than two axles (specifically truck data) to obtain a representative number of vehicles actually traveling that road section. This representation is obtained through the application of an axle correction factor.

Equivalent Single Axle Load Adjustment (ESAL)

ESAL adjustment factors are applied to the ADTT for each type of truck classification, to determine the loading effect these truck classes have on the pavement. Two separate calculations are performed: one for rigid type pavement (concrete) and one for flexible type pavement (bituminous). The AASHTO Mechanistic Empirical Pavement Design Guide has incorporated improved methods of determining loading effects of traffic termed axle-load spectra. In the future, these new methods will supersede the use of ESAL factors.

Growth Factor

If the count to be analyzed was taken earlier than the current year, a county growth trend is applied to project the older count data to a representative current year estimate. County growth trends are established based on Traffic Pattern Group (TPG).

Design Hour Volume Factor, DHV (K)

The K-factor represents the percentage of AADT during the design hour. It is calculated by dividing the peak hour volume by the AADT. A 24-hour count is required to calculate the K-factor. If this condition is not met (in the case of manual counts), a default value is applied. The default value is calculated from permanent site stations using the 30th highest hour and is established based on TPG.

Table 350 Hourly Percentages Compiled for Total Vehicles

The following table shows hourly percentages of total vehicles sorted by Traffic Pattern Group (TPG) for the year 2024. Factors from this table are applied to raw traffic counts of less than 24 hours, which may include volume counts (axle and loop), automatic vehicle classification (AVC), or manual classification counts. Hourly percentages from this table are applied to the known hour periods of the raw count, converting it to a 24-hour total.

The factors were developed using the Department's Traffic Data System (TDS) Statistical Analysis tool. Raw count data from AVC counts, collected statewide, was assigned to the respective TPG and a summary was produced showing the hourly percentage tables by direction (applied to divided roadways).

		Hourl	y Percentag	es: Total Ve	hicles		
	TP	G 1			TP	G 2	
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL
1	1.21%	1.13%	1.17%	1	1.41%	1.31%	1.36%
2	0.89%	0.83%	0.85%	2	1.16%	1.02%	1.09%
3	0.82%	0.74%	0.78%	3	1.07%	0.94%	1.01%
4	0.92%	0.87%	0.89%	4	1.15%	1.05%	1.10%
5	1.29%	1.33%	1.31%	5	1.51%	1.49%	1.50%
6	2.42%	2.59%	2.51%	6	2.39%	2.48%	2.43%
7	4.08%	4.27%	4.18%	7	3.46%	3.69%	3.57%
8	5.47%	5.34%	5.40%	8	4.22%	4.71%	4.47%
9	5.48%	5.27%	5.37%	9	4.56%	4.93%	4.74%
10	5.32%	5.24%	5.28%	10	5.11%	5.34%	5.23%
11	5.61%	5.50%	5.56%	11	5.72%	5.91%	5.81%
12	5.92%	5.82%	5.87%	12	6.19%	6.33%	6.26%
13	6.15%	6.11%	6.13%	13	6.45%	6.51%	6.48%
14	6.32%	6.30%	6.31%	14	6.65%	6.66%	6.66%
15	6.79%	6.75%	6.77%	15	7.01%	6.91%	6.96%
16	7.23%	7.20%	7.21%	16	7.35%	7.19%	7.27%
17	7.31%	7.36%	7.34%	17	7.35%	7.13%	7.24%
18	6.76%	6.85%	6.81%	18	6.66%	6.46%	6.56%
19	5.38%	5.50%	5.44%	19	5.34%	5.26%	5.30%
20	4.18%	4.42%	4.30%	20	4.37%	4.27%	4.32%
21	3.44%	3.65%	3.55%	21	3.66%	3.52%	3.59%
22	2.86%	2.93%	2.89%	22	2.99%	2.87%	2.93%
23	2.37%	2.31%	2.34%	23	2.39%	2.27%	2.33%
24	1.78%	1.69%	1.74%	24	1.83%	1.75%	1.79%
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%

Table 350
Hourly Percentages Compiled for Total Vehicles (Continued)

		Hourl	y Percentag	es: Total Ve	hicles		
	TP	G 3			TP	G 4	
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL
1	0.89%	0.83%	0.86%	1	0.83%	0.71%	0.76%
2	0.62%	0.57%	0.60%	2	0.59%	0.50%	0.54%
3	0.56%	0.55%	0.55%	3	0.52%	0.47%	0.49%
4	0.68%	0.68%	0.68%	4	0.64%	0.63%	0.63%
5	1.19%	1.23%	1.21%	5	1.12%	1.32%	1.23%
6	2.46%	2.58%	2.52%	6	2.18%	2.84%	2.53%
7	4.31%	4.47%	4.39%	7	3.90%	4.06%	3.98%
8	5.58%	5.91%	5.75%	8	5.45%	4.84%	5.13%
9	5.47%	5.69%	5.58%	9	5.59%	4.97%	5.27%
10	5.30%	5.42%	5.36%	10	5.84%	5.26%	5.54%
11	5.51%	5.62%	5.57%	11	6.31%	5.83%	6.06%
12	5.93%	6.01%	5.97%	12	6.55%	6.33%	6.43%
13	6.25%	6.29%	6.27%	13	6.73%	6.70%	6.72%
14	6.36%	6.45%	6.40%	14	6.86%	6.92%	6.89%
15	6.87%	6.86%	6.87%	15	7.31%	7.36%	7.33%
16	7.51%	7.36%	7.43%	16	7.74%	7.98%	7.87%
17	7.67%	7.55%	7.61%	17	7.80%	8.10%	7.96%
18	7.10%	6.90%	7.00%	18	6.86%	7.13%	7.00%
19	5.58%	5.43%	5.50%	19	5.08%	5.30%	5.20%
20	4.35%	4.18%	4.26%	20	3.83%	4.16%	4.01%
21	3.54%	3.43%	3.48%	21	2.99%	3.32%	3.16%
22	2.74%	2.67%	2.71%	22	2.26%	2.45%	2.36%
23	2.05%	1.99%	2.02%	23	1.75%	1.70%	1.72%
24	1.48%	1.33%	1.41%	24	1.27%	1.12%	1.19%
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%

Table 350
Hourly Percentages Compiled for Total Vehicles (Continued)

		Hourl	y Percentag	es: Total Ve	hicles		
	TP	G 5			TP	G 6	
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL
1	0.44%	0.42%	0.43%	1	0.49%	0.50%	0.49%
2	0.28%	0.30%	0.29%	2	0.32%	0.32%	0.32%
3	0.25%	0.39%	0.34%	3	0.29%	0.31%	0.30%
4	0.28%	0.36%	0.33%	4	0.44%	0.47%	0.46%
5	0.58%	0.77%	0.70%	5	0.95%	0.93%	0.94%
6	2.00%	1.95%	1.97%	6	2.48%	2.28%	2.38%
7	3.34%	3.75%	3.59%	7	4.46%	4.28%	4.37%
8	5.38%	5.68%	5.57%	8	5.68%	6.05%	5.87%
9	5.50%	5.59%	5.56%	9	5.30%	5.59%	5.45%
10	5.71%	5.36%	5.49%	10	5.72%	5.68%	5.70%
11	6.09%	5.68%	5.83%	11	6.40%	6.32%	6.36%
12	6.68%	6.28%	6.43%	12	6.72%	6.65%	6.68%
13	7.15%	6.77%	6.92%	13	6.99%	6.92%	6.95%
14	6.87%	6.67%	6.74%	14	6.90%	7.01%	6.96%
15	7.49%	7.37%	7.41%	15	7.67%	7.51%	7.59%
16	8.53%	8.25%	8.35%	16	8.43%	8.60%	8.52%
17	8.51%	8.56%	8.54%	17	8.38%	8.01%	8.19%
18	7.75%	7.67%	7.70%	18	6.90%	6.70%	6.79%
19	5.55%	5.79%	5.70%	19	4.87%	4.80%	4.83%
20	4.17%	4.48%	4.36%	20	3.62%	3.88%	3.75%
21	3.15%	3.43%	3.33%	21	2.75%	2.79%	2.77%
22	2.13%	2.28%	2.23%	22	1.99%	1.98%	1.99%
23	1.36%	1.39%	1.38%	23	1.38%	1.42%	1.40%
24	0.81%	0.81%	0.81%	24	0.87%	1.00%	0.94%
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%

Table 350
Hourly Percentages Compiled for Total Vehicles (Continued)

		Hourl	y Percentag	es: Total Ve	hicles		
	TP	G 7			TP	G 8	
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL
1	0.53%	0.51%	0.52%	1	0.57%	0.52%	0.54%
2	0.33%	0.36%	0.35%	2	0.39%	0.33%	0.36%
3	0.39%	0.43%	0.41%	3	0.34%	0.44%	0.39%
4	0.41%	0.63%	0.53%	4	0.42%	0.47%	0.45%
5	1.18%	1.53%	1.36%	5	1.09%	1.03%	1.06%
6	2.64%	3.43%	3.07%	6	3.32%	1.96%	2.61%
7	5.07%	4.63%	4.83%	7	5.05%	3.81%	4.40%
8	5.72%	5.91%	5.82%	8	5.58%	5.25%	5.41%
9	5.24%	5.55%	5.41%	9	5.11%	5.26%	5.19%
10	5.13%	5.46%	5.31%	10	5.31%	5.46%	5.39%
11	5.59%	5.71%	5.65%	11	5.82%	6.10%	5.97%
12	5.98%	6.04%	6.02%	12	6.27%	6.61%	6.44%
13	6.32%	6.30%	6.30%	13	6.53%	6.89%	6.72%
14	6.48%	6.32%	6.39%	14	6.49%	6.78%	6.64%
15	7.14%	6.86%	6.99%	15	7.16%	7.51%	7.34%
16	8.23%	8.08%	8.15%	16	8.38%	8.89%	8.65%
17	8.56%	8.32%	8.43%	17	8.40%	9.69%	9.07%
18	7.73%	7.49%	7.60%	18	7.15%	7.35%	7.25%
19	5.76%	5.65%	5.70%	19	5.24%	5.07%	5.15%
20	3.92%	3.74%	3.83%	20	4.09%	3.77%	3.92%
21	3.11%	2.83%	2.96%	21	3.02%	2.89%	2.95%
22	2.16%	2.03%	2.09%	22	1.99%	1.90%	1.95%
23	1.47%	1.36%	1.41%	23	1.36%	1.20%	1.28%
24	0.91%	0.83%	0.87%	24	0.92%	0.82%	0.87%
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%

Table 350
Hourly Percentages Compiled for Total Vehicles (Continued)

		Hourl	y Percentag	es: Total Ve	hicles		
	TP	G 9			TPO	G 10	
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL
1	0.52%	0.39%	0.45%	1	0.34%	0.35%	0.34%
2	0.30%	0.28%	0.29%	2	0.18%	0.20%	0.19%
3	0.30%	0.27%	0.28%	3	0.13%	0.15%	0.14%
4	0.41%	0.46%	0.44%	4	0.17%	0.16%	0.17%
5	1.02%	1.13%	1.08%	5	0.41%	0.29%	0.35%
6	2.36%	3.21%	2.83%	6	1.25%	0.84%	1.04%
7	4.15%	5.13%	4.69%	7	2.61%	1.94%	2.27%
8	5.38%	6.43%	5.96%	8	5.72%	3.94%	4.81%
9	5.04%	5.93%	5.52%	9	5.54%	4.58%	5.05%
10	5.03%	5.59%	5.33%	10	6.46%	5.36%	5.90%
11	5.43%	5.70%	5.58%	11	7.33%	6.50%	6.90%
12	6.10%	6.09%	6.09%	12	7.80%	7.44%	7.62%
13	6.58%	6.27%	6.41%	13	7.93%	7.99%	7.96%
14	6.54%	6.28%	6.40%	14	7.84%	7.97%	7.91%
15	7.28%	7.05%	7.15%	15	7.64%	8.40%	8.03%
16	8.67%	7.95%	8.27%	16	7.74%	8.89%	8.32%
17	9.12%	8.39%	8.72%	17	7.91%	8.47%	8.19%
18	7.84%	7.47%	7.64%	18	7.08%	7.85%	7.47%
19	5.67%	5.32%	5.48%	19	5.35%	5.93%	5.64%
20	4.24%	3.78%	3.99%	20	4.11%	4.79%	4.46%
21	3.39%	2.89%	3.12%	21	2.94%	3.66%	3.31%
22	2.33%	1.93%	2.11%	22	1.88%	2.29%	2.09%
23	1.39%	1.30%	1.34%	23	1.05%	1.33%	1.20%
24	0.91%	0.76%	0.83%	24	0.59%	0.68%	0.64%
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%

Table 360 Hourly Percentages Compiled for Truck Traffic

The following four tables and two charts show hourly percentages of truck traffic sorted by Maintenance Functional Class (MFC). These tables are applied separately to raw truck data of less than 24-hours, including both automatic vehicle classification (AVC) and manual counts. Manual classification counts are the primary source of data using these tables. The hourly percentages are calculated from these tables and applied to the sum of the known hour periods and in turn converted to a 24-hour truck total.

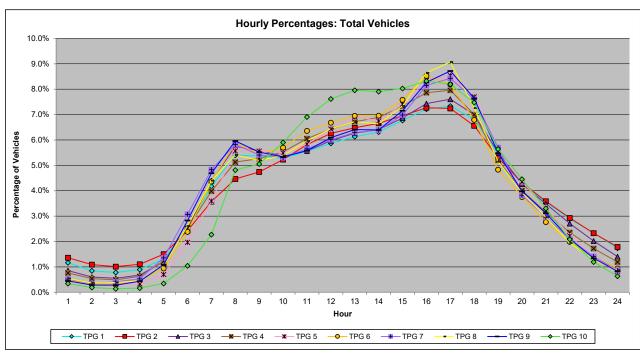
The factors were developed using AVC counts that were collected and verified. The raw count data was assigned to the respective Traffic Pattern Group (TPG), the truck data was extracted by vehicle type, and the TDS Statistical Analysis tool generated a summary showing the hourly percentage table by direction (applied to divided roadways). Truck data is tabulated according to MFC. Hourly weekday truck distribution provides evidence that the hourly percentage changes by MFC provide a valid breakdown of groups. Therefore, a summary was produced converting the TPGs to comparable MFC groups to be consistent with the characteristics of the 2024 Hourly Percentages (Truck Traffic) tables.

	TPG	1 & 2			TPG	3 & 4				
MAIN	TENANCE FUI	NCTIONAL CL	ASS A	MAN	TENANCE FU	NCTIONAL CLA	ASS B			
	(INTERS	STATES)		(PRINCIPAL ARTERIALS)						
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL			
1	1.79%	1.60%	1.70%	1	0.98%	0.91%	0.95%			
2	1.47%	1.30%	1.38%	2	0.75%	0.70%	0.72%			
3	1.39%	1.22%	1.30%	3	0.71%	0.69%	0.70%			
4	1.51%	1.39%	1.45%	4	0.84%	0.90%	0.87%			
5	1.82%	1.85%	1.83%	5	1.31%	1.47%	1.39%			
6	2.54%	2.75%	2.65%	6	2.56%	2.66%	2.61%			
7	3.64%	4.01%	3.82%	7	4.48%	4.38%	4.43%			
8	4.60%	4.89%	4.74%	8	5.90%	5.86%	5.88%			
9	5.01%	5.12%	5.07%	9	5.81%	5.77%	5.79%			
10	5.31%	5.30%	5.31%	10	5.64%	5.43%	5.53%			
11	5.68%	5.66%	5.67%	11	5.79%	5.59%	5.69%			
12	5.97%	5.94%	5.95%	12	6.12%	6.05%	6.08%			
13	6.11%	6.13%	6.13%	13	6.38%	6.36%	6.37%			
14	6.21%	6.28%	6.24%	14	6.39%	6.63%	6.51%			
15	6.40%	6.43%	6.42%	15	6.77%	6.90%	6.84%			
16	6.62%	6.56%	6.59%	16	7.23%	7.19%	7.21%			
17	6.58%	6.49%	6.53%	17	7.13%	7.38%	7.26%			
18	6.13%	6.05%	6.09%	18	6.52%	6.52%	6.52%			
19	5.17%	5.20%	5.18%	19	5.19%	5.12%	5.16%			
20	4.31%	4.38%	4.35%	20	4.10%	4.05%	4.07%			
21	3.69%	3.73%	3.71%	21	3.34%	3.41%	3.37%			
22	3.16%	3.11%	3.14%	22	2.59%	2.66%	2.63%			
23	2.69%	2.56%	2.63%	23	1.95%	1.99%	1.97%			
24	2.20%	2.05%	2.12%	24	1.52%	1.38%	1.45%			
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%			

Table 360 Hourly Percentages Compiled for Truck Traffic (Continued)

	TPG 5	5, 6 & 7		TPG 8 & 9						
MAIN	TENANCE FUI	NCTIONAL CL	ASS C	MAINTEN	NANCE FUNCT	TIONAL CLASS	D, E & F			
	(MINOR A	RTERIALS)		(RURAL COLLECTORS)						
HOUR	DIR 1	DIR 2	TOTAL	HOUR	DIR 1	DIR 2	TOTAL			
1	0.61%	0.63%	0.62%	1	0.70%	0.56%	0.63%			
2	0.61%	0.56%	0.58%	2	0.59%	0.54%	0.56%			
3	0.59%	0.62%	0.61%	3	0.62%	0.53%	0.57%			
4	0.74%	0.94%	0.85%	4	0.80%	0.77%	0.79%			
5	1.24%	1.72%	1.51%	5	1.51%	1.40%	1.45%			
6	2.57%	3.14%	2.89%	6	3.47%	3.14%	3.30%			
7	4.61%	5.35%	5.03%	7	4.62%	5.14%	4.90%			
8	6.37%	6.85%	6.65%	8	6.22%	6.72%	6.48%			
9	6.57%	7.16%	6.90%	9	6.42%	6.66%	6.55%			
10	6.84%	6.92%	6.88%	10	6.35%	6.62%	6.49%			
11	7.20%	7.20%	7.20%	11	6.67%	6.79%	6.74%			
12	7.25%	7.26%	7.26%	12	6.82%	7.01%	6.92%			
13	7.27%	7.17%	7.21%	13	6.89%	7.01%	6.95%			
14	7.14%	7.08%	7.11%	14	6.81%	6.93%	6.87%			
15	7.47%	7.22%	7.33%	15	6.93%	7.28%	7.11%			
16	7.82%	7.21%	7.48%	16	7.50%	7.51%	7.51%			
17	7.22%	6.27%	6.68%	17	7.04%	7.37%	7.21%			
18	5.62%	5.06%	5.30%	18	6.01%	5.62%	5.80%			
19	3.89%	3.58%	3.71%	19	4.54%	3.99%	4.25%			
20	2.80%	2.67%	2.73%	20	3.16%	2.91%	3.03%			
21	2.16%	2.05%	2.09%	21	2.50%	2.17%	2.33%			
22	1.58%	1.49%	1.53%	22	1.77%	1.52%	1.64%			
23	1.06%	1.07%	1.07%	23	1.18%	1.09%	1.13%			
24	0.77%	0.78%	0.78%	24	0.88%	0.72%	0.79%			
TOTAL	100.00%	100.00%	100.00%	TOTAL	100.00%	100.00%	100.00%			

Hourly Percentages Charts



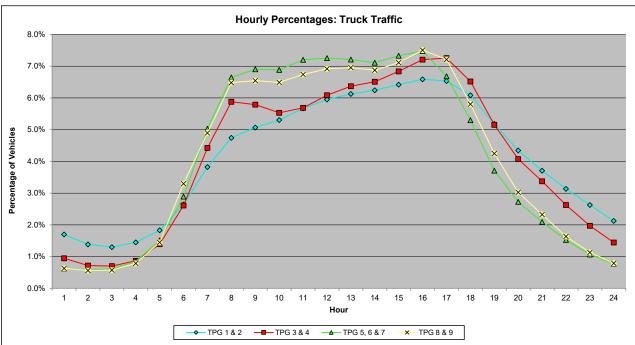


Table 355 Average Day of Week by Month Factors Compiled for Total Vehicles

The following 12 tables show average day of week factors by month compiled for total vehicles for the year 2024. Current year permanent site traffic data is assembled and the data is placed in the respective TPG. Annual Average Daily Traffic (AADT) is tabulated individually for each of permanent site stations utilized in 2024. A factor is calculated for each day from each station and a list is tabulated by month and day of the week. This data is assembled by day and TPG for each station. The result is a group factor, which can be applied to a 24-hour raw traffic count taken during any day of the year to develop an AADT volume.

	January 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10			
Monday	0.950	0.967	1.095	1.213	1.208	1.108	1.160	1.290	1.241	1.745			
Tuesday	0.974	1.058	0.973	1.096	1.027	0.998	1.084	1.233	1.111	1.749			
Wednesday	0.855	0.920	0.899	1.021	0.939	0.960	0.968	1.040	1.008	1.593			
Thursday	0.804	0.879	0.876	0.986	0.892	0.856	0.944	1.021	0.968	1.413			
Friday	1.003	0.815	0.882	0.917	0.967	0.829	0.884	0.927	0.922	1.300			
Saturday	1.275	1.117	1.237	1.286	1.254	1.326	1.151	1.472	1.490	1.543			
Sunday	1.309	1.249	1.494	1.628	1.537	1.840	1.511	1.774	1.684	2.044			
DAY OF MONTH	1.024	1.001	1.065	1.164	1.118	1.131	1.100	1.251	1.203	1.627			

	February 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10			
Monday	0.832	0.874	0.898	1.005	0.968	0.916	0.991	1.016	1.015	1.444			
Tuesday	0.869	0.930	0.866	1.020	0.915	0.883	0.980	1.014	1.019	1.475			
Wednesday	0.812	0.873	0.854	0.974	0.905	0.915	0.911	0.966	0.973	1.401			
Thursday	0.781	0.853	0.842	0.957	0.889	0.891	0.936	0.973	0.954	1.383			
Friday	0.742	0.793	0.805	0.890	0.876	0.820	0.891	0.895	0.915	1.222			
Saturday	0.946	1.045	1.032	1.205	1.202	1.183	1.102	1.263	1.244	1.452			
Sunday	1.071	1.113	1.244	1.344	1.377	1.326	1.319	1.383	1.427	1.593			
DAY OF MONTH	0.865	0.926	0.934	1.056	1.019	0.991	1.019	1.073	1.078	1.424			

Table 355
Average Day of Week by Month Factors Compiled for Total Vehicles
(Continued)

	March 2024											
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.802	0.885	0.881	0.987	0.924	0.923	0.947	1.004	0.981	1.299		
Tuesday	0.790	0.876	0.847	0.968	0.903	0.909	0.920	0.984	0.946	1.283		
Wednesday	0.770	0.836	0.833	0.945	0.883	0.871	0.898	0.969	0.922	1.263		
Thursday	0.735	0.779	0.810	0.901	0.862	0.844	0.889	0.923	0.894	1.177		
Friday	0.689	0.732	0.784	0.856	0.846	0.804	0.837	0.889	0.877	1.115		
Saturday	0.923	0.970	1.038	1.152	1.143	1.152	1.112	1.238	1.207	1.328		
Sunday	0.960	0.990	1.205	1.298	1.316	1.350	1.231	1.369	1.326	1.550		
DAY OF MONTH	0.810	0.867	0.914	1.015	0.982	0.979	0.976	1.054	1.022	1.288		

April 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.789	0.818	0.845	0.924	0.885	0.831	0.917	0.961	0.924	1.092		
Tuesday	0.806	0.816	0.818	0.922	0.855	0.800	0.890	0.948	0.893	1.101		
Wednesday	0.791	0.822	0.814	0.933	0.869	0.869	0.877	0.974	0.903	1.198		
Thursday	0.761	0.784	0.796	0.902	0.823	0.796	0.865	0.934	0.879	1.129		
Friday	0.712	0.707	0.753	0.827	0.827	0.769	0.811	0.862	0.851	0.946		
Saturday	0.855	0.866	0.931	1.032	1.029	0.997	0.977	1.136	1.074	0.927		
Sunday	0.908	0.872	1.102	1.146	1.173	1.176	1.117	1.228	1.175	0.997		
DAY OF MONTH	0.803	0.812	0.866	0.955	0.923	0.891	0.922	1.006	0.957	1.056		

May 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.882	0.825	0.930	0.965	0.953	0.867	0.982	0.920	0.994	0.879		
Tuesday	0.814	0.825	0.799	0.882	0.808	0.765	0.841	0.850	0.831	0.952		
Wednesday	0.790	0.788	0.789	0.862	0.805	0.767	0.821	0.851	0.826	0.939		
Thursday	0.743	0.737	0.763	0.831	0.762	0.743	0.819	0.809	0.819	0.876		
Friday	0.721	0.675	0.736	0.779	0.760	0.694	0.773	0.762	0.795	0.722		
Saturday	0.913	0.885	0.931	0.988	1.010	0.946	0.937	0.989	1.020	0.698		
Sunday	0.990	0.903	1.073	1.073	1.161	1.093	1.105	1.105	1.169	0.821		
DAY OF MONTH	0.836	0.805	0.860	0.911	0.894	0.839	0.897	0.898	0.922	0.841		

Table 355
Average Day of Week by Month Factors Compiled for Total Vehicles
(Continued)

June 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.796	0.775	0.807	0.900	0.862	0.792	0.878	0.873	0.894	0.851		
Tuesday	0.776	0.780	0.782	0.896	0.835	0.778	0.852	0.869	0.865	0.828		
Wednesday	0.768	0.749	0.777	0.881	0.844	0.760	0.826	0.864	0.854	0.844		
Thursday	0.738	0.706	0.753	0.837	0.821	0.722	0.820	0.803	0.843	0.768		
Friday	0.705	0.667	0.731	0.792	0.834	0.678	0.773	0.754	0.818	0.648		
Saturday	0.853	0.838	0.922	0.969	1.005	0.901	0.864	0.939	0.981	0.577		
Sunday	0.908	0.813	1.054	1.090	1.177	1.032	1.040	1.036	1.144	0.734		
DAY OF MONTH	0.792	0.761	0.832	0.909	0.911	0.809	0.865	0.877	0.914	0.750		

July 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.766	0.755	0.839	0.897	0.888	0.786	0.878	0.830	0.894	0.808		
Tuesday	0.761	0.778	0.807	0.884	0.866	0.770	0.860	0.836	0.853	0.819		
Wednesday	0.744	0.745	0.787	0.857	0.841	0.749	0.824	0.823	0.833	0.798		
Thursday	0.801	0.780	0.878	0.930	0.934	0.810	0.888	0.839	0.921	0.714		
Friday	0.710	0.689	0.777	0.810	0.861	0.700	0.804	0.737	0.828	0.583		
Saturday	0.812	0.810	0.951	0.966	1.035	0.862	0.892	0.911	0.987	0.525		
Sunday	0.850	0.759	1.081	1.043	1.185	0.954	1.016	0.960	1.134	0.624		
DAY OF MONTH	0.778	0.759	0.874	0.912	0.944	0.804	0.880	0.848	0.922	0.696		

August 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.802	0.773	0.855	0.889	0.859	0.779	0.871	0.867	0.895	0.898		
Tuesday	0.791	0.801	0.832	0.881	0.837	0.764	0.847	0.873	0.862	0.914		
Wednesday	0.776	0.778	0.813	0.852	0.828	0.727	0.820	0.849	0.847	0.888		
Thursday	0.746	0.712	0.796	0.824	0.801	0.729	0.809	0.805	0.847	0.823		
Friday	0.722	0.677	0.789	0.785	0.832	0.689	0.800	0.785	0.841	0.701		
Saturday	0.855	0.825	0.980	0.971	1.026	0.870	0.917	0.965	1.025	0.628		
Sunday	0.902	0.810	1.120	1.053	1.165	1.007	1.059	1.082	1.152	0.722		
DAY OF MONTH	0.799	0.768	0.883	0.894	0.907	0.795	0.875	0.889	0.924	0.796		

Table 355 Average Day of Week by Month Factors Compiled for Total Vehicles (Continued)

September 2024													
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10			
Monday	0.876	0.846	0.929	0.940	0.943	0.847	0.951	0.956	0.986	0.987			
Tuesday	0.829	0.846	0.826	0.886	0.820	0.760	0.874	0.887	0.877	1.019			
Wednesday	0.823	0.831	0.818	0.880	0.830	0.758	0.847	0.887	0.864	1.005			
Thursday	0.784	0.795	0.802	0.836	0.790	0.720	0.842	0.851	0.847	0.917			
Friday	0.742	0.714	0.767	0.772	0.785	0.673	0.781	0.779	0.817	0.788			
Saturday	0.904	0.908	0.967	0.985	0.984	0.893	0.939	1.033	1.034	0.769			
Sunday	0.990	0.897	1.152	1.103	1.181	1.045	1.100	1.114	1.205	0.894			
DAY OF MONTH	0.850	0.834	0.894	0.915	0.905	0.814	0.905	0.930	0.947	0.911			

October 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.801	0.817	0.852	0.890	0.883	0.811	0.900	0.937	0.917	1.075		
Tuesday	0.808	0.831	0.825	0.888	0.836	0.794	0.868	0.914	0.873	1.083		
Wednesday	0.806	0.827	0.811	0.874	0.812	0.779	0.827	0.882	0.850	1.031		
Thursday	0.784	0.790	0.797	0.841	0.791	0.746	0.823	0.836	0.837	0.978		
Friday	0.715	0.691	0.758	0.768	0.782	0.693	0.772	0.771	0.799	0.779		
Saturday	0.859	0.871	0.935	0.940	0.975	0.866	0.878	0.978	0.984	0.707		
Sunday	0.906	0.840	1.109	1.064	1.167	1.074	1.063	1.168	1.171	0.936		
DAY OF MONTH	0.811	0.809	0.869	0.895	0.892	0.823	0.876	0.926	0.919	0.941		

Table 355 Average Day of Week by Month Factors Compiled for Total Vehicles (Continued)

November 2024													
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10			
Monday	0.832	0.857	0.861	0.957	0.885	0.842	0.928	0.943	0.928	1.285			
Tuesday	0.799	0.824	0.827	0.927	0.839	0.806	0.876	0.903	0.876	1.229			
Wednesday	0.786	0.794	0.813	0.906	0.849	0.796	0.858	0.889	0.878	1.210			
Thursday	0.894	0.878	0.979	1.050	1.079	0.985	1.003	1.058	1.031	1.461			
Friday	0.770	0.749	0.820	0.887	0.868	0.765	0.872	0.900	0.944	1.182			
Saturday	0.891	0.907	0.997	1.070	1.083	1.030	0.996	1.091	1.113	1.239			
Sunday	1.003	0.972	1.225	1.240	1.244	1.242	1.218	1.272	1.354	1.537			
DAY OF MONTH	0.854	0.854	0.932	1.005	0.978	0.924	0.964	1.008	1.018	1.306			

December 2024												
DAY	TPG 1	TPG 2	TPG 3	TPG 4	TPG 5	TPG 6	TPG 7	TPG 8	TPG 9	TPG 10		
Monday	0.836	0.861	0.881	0.974	0.927	0.965	0.960	0.998	0.999	1.389		
Tuesday	0.871	0.955	0.915	0.998	0.924	0.979	0.963	1.002	0.994	1.396		
Wednesday	0.972	1.071	1.082	1.132	1.156	1.343	1.110	1.170	1.108	1.675		
Thursday	0.802	0.854	0.871	4.702	0.911	1.035	0.921	1.032	1.029	1.494		
Friday	0.750	0.791	0.813	0.895	0.859	0.929	0.855	0.979	0.932	1.251		
Saturday	0.906	0.939	1.020	1.096	1.108	1.213	1.074	1.222	1.175	1.410		
Sunday	1.020	0.951	1.224	1.331	1.327	1.438	1.313	1.349	1.456	1.754		
DAY OF MONTH	0.880	0.917	0.972	1.590	1.030	1.129	1.028	1.107	1.099	1.481		

Monthly Variation Charts by Traffic Pattern Group (TPG)

The chart below shows the different variations between months and traffic pattern groups (TPG). The seasonal factors, which are the data this chart is derived from, show the percentage difference between the raw data count and the annual average daily traffic (AADT). The seasonal factors data can be found in Table 355.

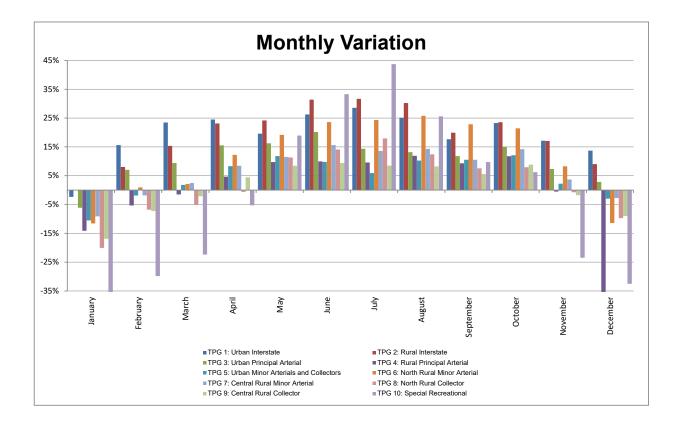


Table 365 Average Day of Week by Month Factors Compiled for Truck Traffic

The following table shows average day of week factors by month compiled for truck traffic. This data is used to convert 24-hour truck data to Average Daily Truck Traffic (ADTT). The ADTT is determined by applying the appropriate factor for the day of week and month to the truck traffic. Truck seasonal variation charts, which are based on truck traffic studies, indicate that truck traffic varies little for both the Interstate and Non-Interstate systems. On the other hand, day of week distribution does indicate a variation between weekdays (Monday through Friday) versus weekend (Saturday through Sunday) truck flow.

AVERAGE DAY OF WEEK BY MONTH FOR TRUCK TRAFFIC MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY												
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY					
JANUARY	1.04	0.67	0.62	0.59	0.63	1.41	1.99					
FEBRUARY	0.68	0.65	0.71	0.69	0.67	1.68	2.47					
MARCH	0.93	0.88	0.90	0.87	0.99	3.22	4.87					
APRIL	0.85	0.80	0.85	0.80	0.83	2.14	2.95					
MAY	1.12	0.69	0.70	0.67	0.73	2.05	2.95					
JUNE	0.76	0.73	0.75	0.72	0.74	1.83	2.44					
JULY	0.79	0.78	0.75	1.16	0.85	1.92	2.35					
AUGUST	0.80	0.77	0.77	0.72	0.82	2.03	2.61					
SEPTEMBER	1.02	0.73	0.72	0.70	0.72	1.95	2.74					
OCTOBER	0.76	0.75	0.73	0.71	0.73	1.97	2.71					
NOVEMBER	0.87	0.82	0.86	2.55	1.13	2.74	4.20					
DECEMBER	1.21	1.31	5.50	1.85	1.06	3.22	5.42					

Table 370 Yearly Growth Factors

The yearly growth factors (shown in the following tables) are used to compute the current estimated average daily traffic for count data that is older than the current year. The factor application is applied by Traffic Pattern Group (TPG) and is used to calculate total vehicles and truck estimates. A limited amount of count data is processed through the Yearly Growth Factor table, since most traffic counts are for the current year.

To use this table, select the base year of the count from the "YEAR" column and multiply it by the percentage under the corresponding "TPG" row.

For example, to determine the current year estimate (2024) of a 2014 base year count having a TPG 5, multiply 0.941 (-5.9%) by the AADT of the 2014 count.

Yearly Growth Factors: 2015-2024													
TPG	14-15 (2015)	15-16 (2016)	16-17 (2017)	17-18 (2018)	18-19 (2019)	19-20 (2020)	20-21 (2021)	21-22 (2022)	22-23 (2023)	23-24 (2024)			
TPG 1	0.5%	0.8%	0.9%	1.1%	0.8%	-19.0%	14.3%	8.8%	11.5%	-1.4%			
TPG 2	1.3%	1.0%	1.1%	1.1%	1.2%	-18.0%	16.5%	6.4%	9.3%	-1.9%			
TPG 3	-0.8%	-0.7%	-0.7%	-0.8%	-0.7%	-18.7%	13.2%	8.4%	8.8%	-2.4%			
TPG 4	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-15.8%	13.2%	8.7%	10.6%	-3.1%			
TPG 5	-0.8%	-0.7%	-0.7%	-0.8%	-0.7%	-17.2%	7.8%	5.4%	7.5%	-3.4%			
TPG 6	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-11.8%	6.9%	4.3%	8.9%	-5.9%			
TPG 7	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-10.6%	10.0%	6.6%	8.4%	-2.6%			
TPG 8	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-5.8%	4.9%	4.9%	6.6%	-4.8%			
TPG 9	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-11.5%	6.5%	3.3%	9.0%	-2.2%			
TPG 10	-0.5%	-0.5%	-0.5%	-0.6%	-0.5%	-6.0%	6.9%	6.8%	7.3%	-3.7%			

The table below shows yearly growth percentages by TPG for 2015 through 2024.

Percent Growth: 2015-2024													
TPG	14-22 (2015)	15-22 (2016)	16-22 (2017)	17-22 (2018)	18-22 (2019)	19-22 (2020)	20-22 (2021)	21-22 (2022)	22-23 (2023)	23-24 (2024)			
TPG 1	15.3%	14.8%	13.9%	12.8%	11.6%	10.7%	36.7%	19.6%	9.9%	-1.4%			
TPG 2	15.4%	13.9%	12.7%	11.5%	10.3%	9.0%	33.0%	14.1%	7.3%	-1.9%			
TPG 3	2.2%	3.0%	3.7%	4.5%	5.3%	6.0%	30.4%	15.2%	6.3%	-2.4%			
TPG 4	8.3%	8.8%	9.4%	9.9%	10.6%	11.1%	32.0%	16.6%	7.2%	-3.1%			
TPG 5	-5.9%	-5.1%	-4.4%	-3.8%	-3.0%	-2.3%	18.0%	9.4%	3.8%	-3.4%			
TPG 6	-1.8%	-1.3%	-0.8%	-0.3%	0.3%	0.8%	14.2%	6.9%	2.4%	-5.9%			
TPG 7	7.8%	8.3%	8.9%	9.4%	10.1%	10.7%	23.8%	12.5%	5.5%	-2.6%			
TPG 8	2.6%	3.1%	3.6%	4.1%	4.8%	5.3%	11.7%	6.5%	1.5%	-4.8%			
TPG 9	1.1%	1.6%	2.1%	2.6%	3.2%	3.7%	17.2%	10.1%	6.6%	-2.2%			
TPG 10	8.0%	8.6%	9.1%	9.7%	10.3%	10.9%	17.9%	10.3%	3.3%	-3.7%			

Functional Class Groups

Traffic volume data displayed in PennDOT's Roadway Management System (RMS) is projected to a current estimate year (2024) based on County/Functional Class Group (FCG). This provides the user with trends relative to a specific county. The factors are applied annually to the Department's Roadway Management System (RMS) to produce the current year traffic volume estimate values.

The first table shows the PennDOT FCG's with a description and corresponding Functional Class Codes (FCCs). The second table shows the FHWA revision of highway functional classifications. FHWA finalized the functional class guidelines in 2013. RMS was updated to reflect these changes in late summer 2016.

FCG	DESCRIPTIVE NAME	FCC
FCG 1	URBAN INTERSTATE	FCC 11
FCG 2	RURAL INTERSTATE	FCC 01
FCG 3	URBAN - OTHER FREEWAYS/EXPRESSWAYS	FCC 12
	URBAN - OTHER PRINCIPAL ARTERIALS	FCC 14
	URBAN - MINOR ARTERIALS	FCC 16
	RAMPS	FCC 99
FCG 4	RURAL - OTHER FREEWAYS/EXPRESSWAYS	FCC 03
	RURAL - OTHER PRINCIPAL ARTERIALS	FCC 02
	RURAL - MINOR ARTERIAL	FCC 06
FCG 5	URBAN - MAJOR COLLECTOR	FCC 17
	URBAN - MINOR COLLECTOR	FCC 18
	URBAN - LOCAL	FCC 19
FCG 6	RURAL - MAJOR COLLECTOR	FCC 07
	RURAL - MINOR COLLECTOR	FCC 08
	RURAL - LOCAL	FCC 09

FCC	DESCRIPTIVE NAME	OLD FCC
1	INTERSTATE	01-11
2	OTHER FREEWAY / EXPRESSWAY	03-12
3	OTHER PRINCIPAL ARTERIAL	02-14
4	MINOR ARTERIAL	06-16
5	MAJOR COLLECTOR	07-17
6	MINOR COLLECTOR	08-18
7	LOCAL	09-19

^{**} The Federal Functional Classification of a ramp reflects the highest order of Federal Functional Classification of the roadways to which the ramp connects. As an example, Adams County, SR 8001 is the interchange at US 15, a principal arterial, and SR 3001, a minor arterial; therefore, the segments associated with SR 8001 are assigned a Federal Functional Classification of principal arterial.

Table 380 Axle Correction Factors

Axle volume count data is collected by counting vehicle axles (two axle strikes equals one vehicle).

Since these counts may include a number of trucks with more than two axles, they must be corrected to represent the actual volume of total vehicles. The axle correction factors are applied to raw axle volume count data, adjusting it to a correct representative volume.

2024 Axle Correction Factors are shown in the table below.

TPG	Axle Correction Factor
1	83.63%
2	69.60%
3	91.45%
4	89.28%
5	97.86%
6	91.51%
7	94.74%
8	93.31%
9	96.89%
10	96.45%

Table 385 Design Hour Factor Default Values

The design hour factor (K-factor) represents the percent of Annual Average Daily Traffic (AADT) occurring in the peak hour. This value is important in the design of roadways and capacity analysis studies.

Count data less than 24-hours and/or data not having directional volumes will not have the necessary raw data required to compute actual K-factor values. The K-factor default values were produced to complete unknown values not generated through the raw count factoring process, and to satisfy Highway Performance Monitoring System (HPMS) reporting requirements. They were developed by processing the actual hourly data from permanent site stations to identify the 30th highest hour; this hourly volume was divided by the AADT for each station, producing a K-factor. The factors were then averaged by Traffic Pattern Group (TPG).

During the raw count factoring process, the K-factor value is programmatically inserted into the Roadway Management System (RMS) database if the raw count data is insufficient to calculate an actual K-factor.

2024 K-Factors and corresponding TPGs are shown in the table below.

TPG	K factor default value
1	9%
2	10%
3	9%
4	10%
5	11%
6	11%
7	11%
8	13%
9	11%
10	16%

Tables 390 and 395 Equivalent Single Axle Load Factors

Equivalent Single Axle Load (ESAL) tables are used to calculate pavement loadings (rigid and flexible types) to produce a common parameter for design and planning purposes.

ESAL factors used in RMS were derived through a composite of data obtained from AASHTO guidelines and test data collected from historical Loadometer Surveys. Data obtained through WIM equipment is under review at this time and will be considered in development of future ESAL factors. The AASHTO Mechanistic Empirical Design Guide (MEPDG) has incorporated improved methods of determining loading effects of traffic termed axle-load spectra. In the future, these new methods will supersede the use of ESAL factors.

2024 ESAL factors for rigid pavements are shown by Traffic Pattern Group (TPG) and vehicle classification in **Table 390**, below.

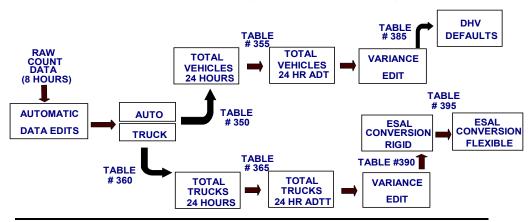
RIGID ESAL FACTORS										
CLASS	TPG 1	TPG2	TPG3	TPG4	TPG 5	TPG 6	TPG 7	TPG8	TPG 9	TPG 10
BUS	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240
2 AXLE SIX TIRE	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240
3 AXLE SINGLE UNIT	1.150	1.150	1.150	1.150	1.150	1.150	1.150	1.150	1.150	1.150
4 AXLE SINGLE UNIT	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000
3 AXLE WITH TRAILER	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600
3 AXLE MULTI-AXLE TRAILER	1.590	1.590	1.590	1.590	1.590	1.590	1.590	1.590	1.590	1.590
6 AXLE SINGLE TRAILER	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421
5 AXLE MULTI TRAILER	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400
6 AXLE MULTI TRAILER	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421
7 AXLE MULTI TRAILER	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421	1.421

2024 ESAL factors for flexible pavements are shown by Traffic Pattern Group (TPG) and vehicle classification in **Table 395**, below.

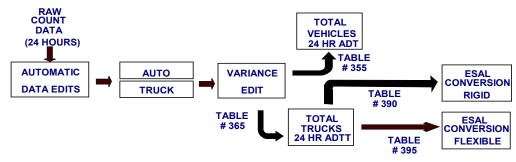
FLEXIBLE ESAL FACTORS										
CLASS	TPG1	TPG 2	TPG3	TPG4	TPG 5	TPG 6	TPG 7	TPG8	TPG9	TPG 10
BUS	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240
2 AXLE SIX TIRE	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.240
3 AXLE SINGLE UNIT	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820
4 AXLE SINGLE UNIT	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
3 AXLE WITH TRAILER	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440
3 AXLE MULTI-AXLE TRAILER	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6 AXLE SINGLE TRAILER	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5 AXLE MULTI TRAILER	2.330	2.330	2.330	2.330	2.330	2.330	2.330	2.330	2.330	2.330
6 AXLE MULTI TRAILER	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276
7 AXLE MULTI TRAILER	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276	1.276

Roadway Management System Factor Table Application Flow Chart

I. MANUAL COUNT (LESS THAN 24 HOURS)

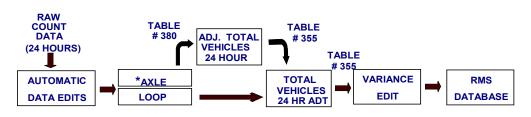


II. AUTOMATIC VEHICLE CLASSIFICATION COUNT



Note: DHV is computed from the raw count data.

III. AXLE AND LOOP VOLUME COUNTS



* Total Vehicles are computed by counting axles (2 axles equals 1 Vehicle)

Acronyms

AADT Annual Average Daily Traffic

AASHTO American Association of State Highway & Transportation Officials

ADT Average Daily Traffic

ADTT Average Daily Truck Traffic

Al Artificial Intelligence

ATR Automatic Traffic Recorder
AVC Automatic Vehicle Classification
BPR Bureau of Planning and Research

CAVC Continuous Automatic Vehicle Classification

DHV Design Hour Volume

DOW Day of Week

DRJTBC Delaware River Joint Toll Bridge Commission

ESAL Equivalent Single Axle Load
FCC Functional Classification Code
FCG Functional Classification Group
FHWA Federal Highway Administration

HPMS Highway Performance Monitoring System
MEPDG Mechanistic Empirical Design Guide
MFC Maintenance Functional Classification
MPO Metropolitan Planning Organization

RPO Rural Planning Organization
RMS Roadway Management System

SR State Route

STIP Short-Term In-Pavement
TDS Traffic Data System
TMG Traffic Monitoring Guide
TPG Traffic Pattern Group
WIM Weigh-in-Motion
VWIM Virtual Weigh-in-Motion

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