INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N955
Indianapolis, Indiana 46204

PHONE: (317) 232-6779
FAX: (317) 234-5478

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Latest INDOT Traffic Adjustment Factors
Effective for 2019

The Indiana Department of Transportation (INDOT), through its Traffic Monitoring Section, collects, summarizes and interprets information on the traffic traveling on the state's highway system. The data is used to assess transportation needs, system performance and to develop highway planning and programming recommendations. Traffic data also plays a very important role in route planning and in the design of highway projects.

To collect this information, the Department operates two traffic monitoring systems:
Annual average daily traffic is the total volume for the year divided by 365 days. Only 135 of INDOT's 8,000 Traffic Sections are equipped with Continuous Traffic counters. The remaining sections are counted as part of the short term or "Coverage Count" program. The Coverage Count Program consists of more than 25,000 count locations, approximately one-third of which are counted annually. A minimum of 48 hours of count data is collected at each count location and, the 48 hour counts are then averaged to 24 before utilizing factors developed from Continuous Traffic Counters, an estimated AADT is developed. AADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways, and other purposes.

1. A Statewide Traffic Monitoring System consisting of 135 permanent continuous count stations that collect volume, speed and vehicle classification data 24 hours per day, 365 days per year. Some of these sites also utilize weigh-in motion (WIM) technology to collect continuous truck weight data. These sites are located throughout the state to monitor overall traffic trends. Information from these counters is used to determine ANNUAL TRAFFIC GROWTH trends as well as develop AXLE, WEEKDAY and SEASONAL adjustment factors used with the state's coverage count program to determine estimates of annual average daily traffic (AADT).

2. The statewide coverage count program utilizes portable pneumatic road-tubes traffic counters and laser counters to collect 48 hour traffic counts on all State Highway System traffic sections and in rural and small urban areas and all highway performance monitoring sections (HPMS). Video data collection is also deployed. The coverage count program operates on a two-year cycle for Interstates, a three-year cycle other State Owned routes and many non-state owned urban and highly traveled rural roads, and a six-year cycle for low volume rural Federal Aid Eligible routes. One-third of all sections are collected annually, or approximately 8,000 of the 25,000 count sites. Where possible, portable classifiers are used so that approximately 65% of all coverage counts collected are classification counts. Use of video data collection expands the reach of classification counts in urban areas. Additional counts are taken within this program to support specific state projects. In addition INDOT also contracts with some Metropolitan Planning Organizations (MPOs) and Regional Planning Organizations (RPOs) to collect coverage count data within their areas as well as contracting with Consultants. We are expanding the number of MPO and RPO counting partners in the future.

FUNCTIONAL CLASSIFICATION UPDATE

In 2010, The Federal Highway Administration (FHWA) revised its Functional Classification scheme. Prior to 2010, an interstate highway would have a different functional classification depending on whether it was in an urban or rural area. The 2010 scheme removed the urban/rural designation from the functional classification in favor to tracking that attribute separately. This reduced the number of classifications from 12 to 7. This change is reflected in numbers listed in the tables along with the classification description. For example, the Urban Interstates and Rural Interstates are both followed by the Functional Class (1)

FACTOR GROUPS

The Federal Highway Administration (FHWA) has seven classifications of roadways and four classifications of urban/rural nature. INDOT groups these 28 potential combinations of classification and urban/rural nature into Factor Groups. For the Seasonal, Weekday, and Growth INDOT uses two groups for all urban roadways and three groups for all rural roadways. For the Axle Adjustment, INDOT uses three groups for all urban roadways and three groups for all rural roadways.

ADJUSTMENT FACTORS

Adjustment factors are necessary to convert an Average Daily Traffic (ADT) volume into an Annual Average Daily Traffic (AADT) estimate. Depending on the type of counter, the seasonal period of the setting, multiple factors may be necessary. These include axle, weekday and seasonal adjustment factors. For the 2/3's of the system not counted in the current year, the previously derived AADTs can be adjusted to the current year by utilizing the annual growth factors.

AXLE ADJUSTMENT FACTORS

There are times when portable classifiers cannot be set due to number of lanes or the lack of free-flow speeds. In these cases, portable traffic counters utilizing single pneumatic road-tubes stretched across a lane or roadway are used. These types of counters register two axle impacts as one vehicle so when vehicles with three or more axles cross the road-tube they will be counted as multiple vehicles. Whenever possible axle adjustment factors should be developed from vehicle classification counters set on the same route within the vicinity of the axle counter and during the same relative time period. If this is not possible then the use of these factors applied by functional classification and volume groups are deemed acceptable.

WEEKDAY ADJUSTMENT FACTORS

The purpose of these factors is to normalize the variability of traffic counts that exists between counts taken during the weekday, Friday, Saturdays and/or Sundays. In developing the weekday factors we found no significant statistical difference in the Monday through Thursday trends and for this reason combine these into a weekday factor. This is further justified as counts taken for INDOT will usually span a Monday through Wednesday or a Tuesday through Thursday count period.

SEASONAL (MONTHLY) ADJUSTMENT FACTORS

Seasonal or monthly adjustment factors convert average daily traffic (ADT) to annual average daily traffic (AADT). Observed traffic volumes at a location often vary from month to month with higher summer traffic volumes and lower winter traffic volumes. To compare traffic volume data collected in different months, seasonal adjustment factors must be applied. The ADT is multiplied by the seasonal factor to obtain the AADT value. The continuous counter sites are grouped into five major factor groups (FG). Currently there are two urban factor groups and three rural factor groups which are based on grouped functional classifications.

ANNUAL GROWTH FACTORS

As not all road sections are counted each year, there are times when previous years AADTs will need to be factored in order to estimate current year values. Annual Growth Factors are used in these situations and are developed by comparisons of previous years AADTs at INDOT's 135 continuous counting telemetry sites and averaged for the five factor groups (FG).

New this year is the publication of the average of the most recent five (5) and ten (10) Annual Growth Factors for each Factor Group. These rates are sometimes used to make crude forecast estimates of future traffic in the absence of extensive historic data specific to a location. The average of the most recent ten (10) years' rates is used to estimate the Future Year AADT reported to the Federal Highway Administration (FHWA) as part of the annual submission of data to the Highway Performance Monitoring System (HPMS).

FACTOR APPLICATION

The new factors published herein were developed from data collected during the 2019 calendar year and will be applied to all counts processed into the INDOT Traffic Count Database beginning on January 1, 2019, retroactively. These factors will continue to be applied as the current factors until new factors are developed from all of the counts collected during the 2020 calendar year. Counts uploaded to the database have the most current factors applied until the development of new factors at which time; the newly developed factors are applied. Further, when the time comes to publish annual statistics for the Highway Performance Monitoring System (HPMS) submittal, the new factors are retroactively applied to all the short term counts for the respective calendar year. This will cause AADTs viewed for counts collected prior to the development of new factors to change when development is complete and the new factors are applied.

SEASONAL ADJUSTMENT FACTORS
BY FUNCTIONAL CLASSIFICATION 2015-2019*

U1_SWG — Urban - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	1.153	1.091	1.016	0.987	0.973	0.982	0.97	0.939	0.966	0.949	1.003	1.035
2018	1.189	1.072	1.002	0.986	0.96	0.941	0.952	0.945	0.989	0.958	0.985	1.038
2017	1.151	1.033	1.000	1.012	0.970	0.932	0.969	0.941	0.979	0.984	0.999	1.071
2016	1.213	1.067	0.977	1.011	0.996	0.934	0.943	0.969	1.001	0.992	1.008	1.058
2015	1.158	1.125	1.017	0.965	0.980	0.933	0.940	0.958	0.974	0.949	0.993	1.037
5 YR AVG	1.173	1.078	1.002	0.992	0.976	0.944	0.955	0.950	0.982	0.966	0.998	1.048

U2_SWG — Urban - Other Principal Arterials (3), Minor Arterials (4), Collectors (5 & 6), Locals (7)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	1.188	1.058	1.032	0.973	0.951	0.954	0.951	0.936	0.965	0.966	1.032	1.064
2018	1.135	1.047	1.013	1.000	0.960	0.958	0.975	0.939	0.998	0.976	1.015	1.054
2017	1.105	1.000	1.008	0.997	0.969	0.948	1.009	0.943	0.970	0.986	1.013	1.054
2016	1.099	1.026	1.000	0.947	0.984	0.973	1.002	0.961	0.972	0.969	1.000	1.026
2015	1.128	1.076	1.034	0.966	0.968	0.980	0.971	0.955	0.959	0.970	1.036	1.048
5 YR AVG	1.131	1.041	1.017	0.977	0.966	0.963	0.982	0.947	0.973	0.973	1.019	1.049

R1_SWGA — Rural - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	1.256	1.142	1.040	1.008	0.948	0.911	0.896	0.899	0.983	0.973	1.019	1.049
2018	1.239	1.137	1.023	1.010	0.943	0.906	0.898	0.916	0.975	0.961	1.000	1.088
2017	1.224	1.125	1.029	0.991	0.956	0.892	0.911	0.928	0.967	0.974	0.997	1.084
2016	1.261	1.159	1.027	1.017	0.971	0.911	0.897	0.941	0.951	0.968	1.040	1.107
2015	1.232	1.182	1.056	1.000	0.950	0.909	0.888	0.915	0.965	0.954	0.997	1.053
5 YR AVG	1.242	1.149	1.035	1.005	0.954	0.906	0.898	0.920	0.968	0.966	1.011	1.076

R2_SWGA — Rural - Principal Arterials (3), Minor Arterials (4)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	1.168	1.055	1.043	0.996	0.946	0.944	0.963	0.940	0.953	0.973	1.029	1.066
2018	1.180	1.077	1.052	1.011	0.952	0.938	0.975	0.922	0.959	0.954	1.010	1.091
2017	1.136	1.027	1.025	1.014	0.959	0.927	0.981	0.944	0.955	0.979	1.025	1.071
2016	1.202	1.102	1.046	0.965	0.963	0.923	0.964	0.954	0.921	0.958	1.013	1.062
2015	1.174	1.119	1.081	0.994	0.958	0.961	0.948	0.930	0.914	0.972	1.055	1.090
	1.172	1.076	1.049	0.996	0.956	0.939	0.966	0.938	0.940	0.967	1.026	1.076

R3_SWGA — Rural - Major Collectors (5), Minor Collectors (6), Locals (7)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	1.197	1.085	1.055	0.959	0.928	0.942	0.952	0.941	0.961	0.954	1.034	1.097
2018	1.213	1.134	1.072	0.994	0.932	0.918	0.945	0.94	0.952	0.946	1.014	1.083
2017	1.186	1.064	1.053	0.981	0.936	0.896	0.933	0.934	0.952	0.978	1.034	1.130
2016	1.153	1.115	1.064	0.921	0.937	0.896	0.956	0.965	0.951	0.943	0.993	1.114
2015	1.138	1.103	1.058	0.965	0.915	0.943	0.961	0.951	0.950	0.963	1.022	1.043
5 YR AVG	1.177	1.100	1.060	0.964	0.930	0.919	0.949	0.946	0.953	0.957	1.019	1.093

The seasonal adjustment factors are used to expand average 24-hour volumes to estimated Annual Average Daily Traffic (AADT).

WEEKDAY FACTORS
BY FUNCTIONAL CLASSIFICATION 2019*

U1_SWG — Urban - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Weekday	0.943	0.946	0.920	0.927	0.934	0.956	0.938	0.957	0.944	0.937	0.951	0.947	0.957
Monday	0.976	0.959	0.950	0.964	0.962	1.044	0.971	0.966	0.978	1.013	0.989	0.949	0.967
Tuesday	0.945	0.981	0.922	0.927	0.933	0.938	0.943	0.937	0.955	0.926	0.949	0.938	0.985
Wednesday	0.931	0.965	0.922	0.911	0.927	0.933	0.930	0.922	0.925	0.912	0.940	0.898	0.981
Thursday	0.920	0.879	0.886	0.904	0.915	0.910	0.909	1.001	0.918	0.895	0.926	1.004	0.893
Friday	0.865	0.826	0.875	0.844	0.886	0.857	0.855	0.908	0.863	0.850	0.870	0.897	0.843
Saturday	1.172	1.293	1.154	1.160	1.187	1.159	1.143	1.164	1.205	1.138	1.193	1.195	1.072
Sunday	1.396	1.579	1.504	1.439	1.398	1.370	1.331	1.269	1.393	1.360	1.390	1.380	1.335

U2_SWG — Urban - Other Principal Arterials (3), Minor Arterials (4), Collectors (5 & 6), Locals (7)

	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Weekday	0.969	0.949	0.941	0.939	0.949	0.981	0.949	0.957	0.963	0.950	0.962	0.953	0.963
Monday	0.968	0.946	0.976	0.969	0.976	1.062	0.978	0.964	0.992	1.014	0.993	0.969	0.953
Tuesday	0.950	0.977	0.948	0.934	0.948	0.970	0.943	0.939	0.973	0.941	0.956	0.935	0.986
Wednesday	0.940	0.978	0.939	0.928	0.935	0.951	0.945	0.921	0.950	0.932	0.953	0.910	1.006
Thursday	0.902	0.894	0.901	0.923	0.936	0.939	0.929	1.002	0.938	0.913	0.944	0.996	0.906
Friday	0.991	0.810	0.882	0.864	0.886	0.869	0.864	0.905	0.872	0.861	0.879	0.883	0.854
Saturday	1.224	1.271	1.114	1.106	1.104	1.080	1.098	1.118	1.101	1.072	1.116	1.111	1.062
Sunday	1.335	1.428	1.426	1.391	1.356	1.313	1.279	1.326	1.282	1.321	1.299	1.322	1.281

R1_SWGA — Rural - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Weekday	1.004	0.954	0.959	0.991	0.993	1.013	1.012	1.023	1.048	1.005	1.019	0.998	1.035
Monday	1.043	0.976	1.001	1.046	1.041	1.053	1.049	1.036	1.099	1.035	1.043	1.096	1.036
Tuesday	1.028	0.986	0.965	1.015	1.012	1.035	1.044	1.041	1.076	1.028	1.039	0.989	1.104
Wednesday	0.994	0.950	0.960	0.973	0.985	1.013	1.013	0.985	1.039	1.011	1.018	0.918	1.068
Thursday	0.952	0.902	0.909	0.930	0.933	0.952	0.943	1.030	0.976	0.947	0.976	0.989	0.932
Friday	0.842	0.799	0.849	0.826	0.843	0.825	0.836	0.890	0.844	0.840	0.829	0.883	0.844
Saturday	1.089	1.361	1.089	1.078	1.106	1.078	1.059	1.063	1.062	1.058	1.067	1.063	0.984
Sunday	1.134	1.321	1.317	1.202	1.136	1.167	1.079	0.998	1.063	1.093	1.040	1.164	1.023

R2_SWGA — Rural - Principal Arterials (3), Minor Arterials (4)

	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Weekday	0.964	0.937	0.945	0.945	0.957	0.988	0.961	0.974	0.984	0.968	0.976	0.965	0.963
Monday	0.997	0.936	0.983	0.982	0.990	1.055	0.987	0.991	1.023	1.035	1.018	0.993	0.973
Tuesday	0.964	0.961	0.942	0.940	0.961	0.979	0.959	0.965	1.000	0.956	0.964	0.962	0.981
Wednesday	0.954	0.962	0.949	0.928	0.938	0.964	0.966	0.938	0.967	0.951	0.966	0.927	0.987
Thursday	0.939	0.889	0.906	0.930	0.940	0.955	0.930	1.001	0.947	0.928	0.956	0.978	0.911
Friday	0.854	0.790	0.866	0.847	0.882	0.849	0.863	0.885	0.855	0.846	0.854	0.871	0.842
Saturday	1.092	1.298	1.096	1.096	1.106	1.065	1.078	1.087	1.066	1.017	1.064	1.087	1.043
Sunday	1.354	1.530	1.461	1.409	1.391	1.302	1.327	1.288	1.320	1.289	1.288	1.312	1.325

R3_SWGA — Rural - Major Collectors (5), Minor Collectors (6), Locals (7)

	Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Weekday	0.953	0.938	0.937	0.934	0.950	0.976	0.942	0.962	0.976	0.956	0.960	0.956	0.949
Monday	0.994	0.936	0.983	1.000	0.994	1.042	0.994	0.999	1.009	1.029	1.018	0.955	0.963
Tuesday	0.953	0.972	0.924	0.926	0.926	0.964	0.924	0.949	1.018	0.941	0.948	0.975	0.971
Wednesday	0.936	0.956	0.927	0.912	0.937	0.946	0.926	0.921	0.946	0.934	0.946	0.918	0.968
Thursday	0.928	0.886	0.913	0.898	0.942	0.950	0.925	0.977	0.932	0.918	0.926	0.975	0.892
Friday	0.874	0.801	0.885	0.861	0.906	0.879	0.870	0.903	0.877	0.869	0.902	0.892	0.843
Saturday	1.092	1.333	1.077	1.103	1.085	1.062	1.085	1.071	1.081	1.011	1.055	1.090	1.052
Sunday	1.365	1.613	1.408	1.410	1.387	1.336	1.316	1.300	1.292	1.355	1.299	1.306	1.356

Weekday factors are used to normalize the variability of traffic counts that exists between counts taken on the Weekdays, Friday, Saturday and/or Sunday.

AXLE ADJUSTMENT FACTORS
BY FUNCTIONAL CLASSIFICATION 2015-2019*

U1_A — Urban - Interstate (1)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.863	0.856	0.874	0.861	0.87	0.874	0.873	0.867	0.863	0.855	0.863	0.872
2018	0.826	0.814	0.845	0.844	0.847	0.851	0.852	0.851	0.851	0.838	0.851	0.852
2017	0.833	0.828	0.836	0.870	0.826	0.830	0.858	0.844	0.846	0.843	0.843	0.852
2016	0.774	0.727	0.794	0.812	0.83	0.855	0.867	0.843	0.843	0.817	0.846	0.854
2015	0.789	0.758	0.797	0.819	0.827	0.826	0.813	0.796	0.79	0.798	0.799	0.772

U2_A — Urban - Freeways and Expressways (2) Principal Arterials (3)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.952	0.943	0.949	0.949	0.952	0.957	0.954	0.953	0.956	0.96	0.962	0.96
2018	0.942	0.938	0.941	0.949	0.959	0.952	0.945	0.942	.940	0.935	0.931	.940
2017	0.967	0.964	0.950	0.959	0.963	0.981	0.971	0.984	0.968	0.968	0.970	0.972
2016	0.963	0.968	0.968	0.958	0.967	0.966	0.969	0.967	0.969	0.968	0.970	0.937
2015	0.940	0.939	0.928	0.925	0.963	0.955	0.961	0.952	0.93	0.935	0.959	0.957

U3_A — Urban - Minor Arterials (4), Collectors (5 & 6), Locals (7)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.964	0.963	0.964	0.953	0.935	0.936	0.931	0.933	0.929	0.921	0.91	0.946
2018	0.936	.950	0.961	0.954	0.964	0.962	.940	0.955	0.937	0.947	0.929	0.958
2017	0.926	0.925	0.936	0.928	0.925	0.922	0.924	0.926	0.927	0.928	0.932	0.933
2016	0.936	0.937	0.935	0.9265	0.935	0.936	0.94	0.936	0.934	0.929	0.935	0.935
2015	0.935	0.931	0.931	0.926	0.927	0.93	0.929	0.928	0.925	0.93	0.936	0.936

R1_SWGA — Rural - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.682	0.676	0.714	0.717	0.733	0.741	0.769	0.746	0.721	0.724	0.723	0.751
2018	0.700	0.707	0.723	0.722	0.732	0.759	0.756	0.749	0.723	0.697	0.705	0.715
2017	0.742	0.747	0.74	0.755	0.772	0.776	0.79	0.763	0.766	0.758	0.762	0.771
2016	0.702	0.704	0.702	0.738	0.744	0.758	0.774	0.745	0.748	0.741	0.748	0.748
2015	0.688	0.664	0.688	0.688	0.712	0.695	0.742	0.731	0.719	0.712	0.716	0.689

R2_SWGA — Rural - Other Principal Arterials (3), Minor Arterials (4)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.899	0.907	0.91	0.904	0.913	0.918	0.926	0.924	0.909	0.909	0.918	0.921
2018	0.855	0.859	0.869	0.866	0.861	0.869	0.884	0.866	0.863	0.856	0.857	0.869
2017	0.911	0.91	0.885	0.902	0.913	0.919	0.917	0.913	0.915	0.909	0.919	0.906
2016	0.940	0.944	0.925	0.921	0.931	0.925	0.927	0.936	0.906	0.902	0.923	0.913
2015	0.915	0.884	0.915	0.912	0.928	0.93	0.882	0.855	0.883	0.881	0.882	0.913

R3_SWGA — Rural - Major Collectors (5), Minor Collectors (6), Locals (7)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	0.955	0.96	0.958	0.958	0.96	0.963	0.96	0.962	0.959	0.953	0.964	0.965
2018	0.892	0.883	0.894	0.906	0.916	0.919	0.911	0.907	0.912	.900	0.926	0.931
2017	0.922	0.891	0.903	0.925	0.912	0.907	0.925	0.906	0.904	0.895	0.902	0.912
2016	0.946	0.937	0.943	0.973	0.956	0.967	0.938	0.932	0.935	0.912	0.928	0.928
2015	0.904	0.923	0.932	0.938	0.953	0.964	0.93	0.937	0.96	0.933	0.926	0.925

*Axle Adjustment Factors are applied to counts taken with portable counters utilizing a single pneumatic road tube. This type of counter registers two axle impacts as one vehicle. The axle factor is used to account for vehicle types having more than two axles, typically trucks with three or more axles.

ANNUAL GROWTH FACTORS
BY FUNCTIONAL CLASSIFICATION 2009 - 2019*

U1_SWG — Urban - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

Year To	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2009	-	0.996	0.981	0.973	0.984	0.963	0.922	0.919	0.927	0.914	0.912
2010	1.004	-	0.985	0.976	0.988	0.967	0.925	0.923	0.930	0.917	0.916
2011	1.019	1.015	-	0.991	1.003	0.982	0.939	0.936	0.944	0.931	0.929
2012	1.028	1.024	1.009	-	1.012	0.990	0.948	0.945	0.952	0.939	0.937
2013	1.016	1.012	0.997	0.988	-	0.978	0.936	0.934	0.942	0.929	0.927
2014	1.038	1.034	1.019	1.010	1.022	-	0.957	0.954	0.962	0.948	0.946
2015	1.085	1.081	1.065	1.055	1.068	1.045	-	0.997	1.005	0.991	0.989
2016	1.088	1.084	1.068	1.058	1.071	1.048	1.003	-	1.008	0.994	0.992
2017	1.079	1.075	1.059	1.050	1.062	1.040	0.995	0.992	-	0.986	0.984
2018	1.094	1.090	1.074	1.065	1.077	1.055	1.009	1.006	1.014	-	0.999
2019	1.096	1.092	1.076	1.067	1.079	1.057	1.011	1.008	1.016	1.001	-

U2_SWG — Urban - Other Principal Arterials (3), Minor Arterials (4), Collectors (5 &6), Locals (7)

Year To	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2009	-	0.993	0.975	0.976	0.990	0.981	0.938	0.935	0.927	0.923	0.922
2010	1.007	-	0.982	0.983	0.997	0.987	0.945	0.943	0.934	0.930	0.929
2011	1.025	1.018	-	1.001	1.015	1.005	0.962	0.959	0.951	0.947	0.945
2012	1.024	1.017	0.999	-	1.014	1.004	0.961	0.958	0.950	0.946	0.944
2013	1.010	1.003	0.985	0.986	-	0.990	0.948	0.945	0.936	0.933	0.931
2014	1.020	1.013	0.995	0.996	1.010	-	0.978	0.976	0.967	0.963	0.962
2015	1.066	1.058	1.040	1.041	1.055	1.022	-	0.997	0.988	0.984	0.982
2016	1.069	1.061	1.043	1.044	1.058	1.025	1.003	-	0.991	0.987	0.985
2017	1.079	1.071	1.052	1.053	1.068	1.034	1.012	1.009	-	0.996	0.994
2018	1.083	1.075	1.056	1.057	1.072	1.038	1.016	1.013	1.004	-	0.994
2019	1.085	1.077	1.058	1.059	1.074	1.040	1.018	1.015	1.006	1.006	-

R1_SWGA — Rural - Interstate (1), Principal Arterial (Freeways and Expressways) (2)

Year To	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2009	-	1.004	1.002	0.982	0.983	0.972	0.930	0.918	0.926	0.927	0.925
2010	0.996	-	0.998	0.978	0.979	0.968	0.927	0.915	0.923	0.923	0.922
2011	0.998	1.002	-	0.980	0.981	0.970	0.929	0.917	0.924	0.925	0.923
2012	1.018	1.022	1.020	-	1.001	0.989	0.947	0.935	0.943	0.943	0.942
2013	1.017	1.021	1.019	0.999	-	0.988	0.945	0.933	0.941	0.942	0.940
2014	1.029	1.033	1.031	1.011	1.012	-	0.961	0.948	0.955	0.956	0.954
2015	1.075	1.079	1.077	1.056	1.058	1.041	-	0.987	0.995	0.996	0.994
2016	1.089	1.093	1.091	1.070	1.072	1.055	1.013	-	1.008	1.009	1.007
2017	1.08	1.084	1.082	1.061	1.063	1.047	1.005	0.992	-	1.001	0.999
2018	1.079	1.083	1.081	1.06	1.062	1.046	1.004	0.991	0.999	-	0.984
2019	1.081	1.085	1.083	1.062	1.064	1.048	1.006	0.993	1.001	1.016	-

R2_SWGA — Rural - Other Principal Arterials (3), Minor Arterials (4)

Year To	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2009	-	1.003	1.002	0.995	0.964	0.951	0.910	0.894	0.890	0.887	0.885
2010	0.997	-	0.999	0.992	0.961	0.948	0.907	0.892	0.887	0.883	0.882
2011	0.998	1.001	-	0.993	0.962	0.949	0.908	0.893	0.888	0.884	0.883
2012	1.005	1.008	1.007	-	0.969	0.956	0.914	0.898	0.894	0.890	0.889
2013	1.037	1.040	1.039	1.032	-	0.986	0.943	0.928	0.923	0.920	0.918
2014	1.052	1.055	1.054	1.046	1.014	-	0.981	0.965	0.961	0.957	0.955
2015	1.099	1.102	1.101	1.094	1.060	1.019	-	0.983	0.978	0.975	0.973
2016	1.118	1.121	1.120	1.113	1.078	1.036	1.017	-	0.995	0.991	0.989
2017	1.124	1.127	1.126	1.119	1.083	1.041	1.022	1.005	-	0.996	0.994
2018	1.128	1.132	1.131	1.123	1.087	1.045	1.026	1.009	1.004	-	0.995
2019	1.130	1.134	1.133	1.125	1.089	1.047	1.028	1.011	1.006	1.005	-

R3_SWGA — Rural - Major Collectors (5), Minor Collectors (6), Locals (7)

Year To	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2009	-	1.004	1.000	1.000	0.993	0.983	0.941	0.936	0.941	0.959	0.957
2010	0.996	-	0.996	0.996	0.989	0.979	0.937	0.933	0.937	0.955	0.953
2011	1.000	1.004	-	1.000	0.993	0.983	0.941	0.936	0.941	0.959	0.957
2012	1.000	1.004	1.000	-	0.993	0.983	0.941	0.936	0.941	0.959	0.957
2013	1.007	1.011	1.007	1.007	-	0.990	0.948	0.943	0.948	0.966	0.964
2014	1.017	1.021	1.017	1.017	1.010	-	0.994	0.989	0.994	1.013	1.011
2015	1.063	1.067	1.063	1.063	1.055	1.006	-	0.995	1.000	1.019	1.017
2016	1.068	1.072	1.068	1.068	1.060	1.011	1.005	-	1.005	1.025	1.022
2017	1.063	1.067	1.063	1.063	1.055	1.006	1.000	0.995	-	1.019	1.017
2018	1.043	1.047	1.043	1.043	1.035	0.987	0.981	0.976	0.981	-	0.998
2019	1.045	1.049	1.045	1.045	1.037	0.989	0.983	0.978	0.983	1.002	-

Factors in this table are used to adjust previous year AADTs to a more current year for similarly classed roads (e.g. to adjust a 2014 urban interstate AADT to a 2017 equivalent, you would multiply the 2014 AADT by 1.040).

Average of Annual Growth Rates

Factor Group	U1_SWG	U2_SWG	R1_SWGA	R2_SWGA	R3_SWGA
Average of Last Five (5) Annual Growth Rates	1.011	1.009	1.012	1.010	0.998
Average of Last Ten (10) Annual Growth Rates	1.009	1.006	1.009	1.010	1.001

TRANSITION FROM OLD TO NEW FUNCTIONAL CLASSIFICATION AND FACTOR GROUPS

Old Functional Class Code	2010 Functional Class Code	2010 Funcional Class Description	Rural Code	Factor Group - Seasonal, Weekday, and Growth	Factor Group - Axle
01	1	Interstates	0	R1_SWGA	R1_SWGA
Not Applicable	2	Principal Arterial (Freeways and Expressways)	0	R1_SWGA	R1_SWGA
02	3	Other Principal Arterials	0	R2_SWGA	R2_SWGA
06	4	Minor Arterials	0	R2_SWGA	R2_SWGA
07	5	Major Collectors	0	R3_SWGA	R3_SWGA
08	6	Minor Collectors	0	R3_SWGA	R3_SWGA
09	7	Locals	0	R3_SWGA	R3_SWGA
11	1	Interstates	1	U1_SWG	U1_A
12	2	Principal Arterial (Freeways and Expressways)	1	U1_SWG	U2_A
14	3	Other Principal Arterials	1	U2_SWG	U2_A
16	4	Minor Arterials	1	U2_SWG	U3_A
17	5	Major Collectors	1	U2_SWG	U3_A
Not Applicable	6	Minor Collectors	1	U2_SWG	U3_A
19	7	Locals	1	U2_SWG	U3_A
11	1	Interstates	2	U1_SWG	U1_A
12	2	Principal Arterial (Freeways and Expressways)	2	U1_SWG	U2_A
14	3	Other Principal Arterials	2	U2_SWG	U2_A
16	4	Minor Arterials	2	U2_SWG	U3_A
17	5	Major Collectors	2	U2_SWG	U3_A
Not Applicable	6	Minor Collectors	2	U2_SWG	U3_A
19	7	Locals	2	U2_SWG	U3_A
01	1	Interstates	3	R1_SWGA	R1_SWGA
Not Applicable	2	Principal Arterial (Freeways and Expressways)	3	R1_SWGA	R1_SWGA
02	3	Other Principal Arterials	3	R2_SWGA	R2_SWGA
06	4	Minor Arterials	3	R2_SWGA	R2_SWGA
07	5	Major Collectors	3	R3_SWGA	R3_SWGA
08	6	Minor Collectors	3	R3_SWGA	R3_SWGA
09	7	Locals	3	R3_SWGA	R3_SWGA

Factor Initial	
S = Seasonal Adjustment	
W = Weekday Adjustment	
G = Annual Growth	
A = Axle Adjustment	

Rural Code	
0 = Outside Urban Area Boundary, Outside Corporation Boundary	
1 = Inside Urban Area Boundary, Inside Corporation Boundary	
2 = Inside Urban Area Boundary, Outside Corporation Boundary	
3 = Outside Urban Area Boundary, Inside Corporation Boundary	