

INDIANA DEPARTMENT OF TRANSPORTATION

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Eric Holcomb, Governor Joe McGuinness, Commissioner

Latest INDOT Traffic Adjustment Factors

Effective for 2020

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 as well as other public roads. 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:

- 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.

Annual average daily traffic is the total volume for the year divided by 365 days. Only 135 of INDOT's 8,000 Traffic Count Stations 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.



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 2020 calendar year and will be applied to all counts processed into the INDOT Traffic Count Database beginning on January 1, 2020, 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 2021 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 2016-2020*

	Urban - Inte	rstate (1)	, Principa	al Arterial	l (Freewa	ys and E	xpresswa	ıys) (2)					
G		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SWG	2020	0.922	0.897	1.052	1.504	1.202	0.954	0.914	0.935	0.916	0.92	0.998	1.003
S	2019	1.153	1.091	1.016	0.987	0.973	0.982	0.970	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
7	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
	5 YR AVG	1.126	1.032	1.009	1.100	1.020	0.949	0.950	0.946	0.970	0.961	0.999	1.041
	Urban - Oth	er Princip	oal Arteri	als (3), M	inor Arte	rials (4), (Collectors	s (5 & 6),	Locals (7	7)			
G		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SWG	2020	0.956	0.928	1.091	1.335	1.051	0.932	0.940	0.936	0.918	0.937	1.021	1.032
S	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
2	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
U2	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
	5 YR AVG	1.097	1.012	1.029	1.050	0.983	0.953	0.975	0.943	0.965	0.967	1.016	1.046
4	Rural - Inter						-		A 1	0	0.1	N. I	
G	2000	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SWGA	2020	0.999	0.968	1.094	1.583	1.168	0.916	0.839	0.866	0.891	0.890	0.988	1.015
S.	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
R	2017 2016	1.224 1.261	1.125 1.159	1.029	0.991 1.017	0.956 0.971	0.892	0.911	0.928	0.967	0.974	0.997	1.084 1.107
	5 YR AVG	1.196	1.106	1.027	1.122	0.971	0.911 0.907	0.888	0.941 0.910	0.951 0.953	0.968 0.953	1.040 1.009	1.069
	3 IN AVG	1.130	1.100	1.043	1.122	0.331	0.307	0.000	0.910	0.933	0.933	1.009	1.009
4	Rural - Prince												
SWGA		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
>	2020	1.027	0.998	1.126	1.343	1.056	0.900	0.903	0.914	0.899	0.908	1.012	1.059
S	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
R2	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
		1.143	1.052	1.058	1.066	0.975	0.926	0.957	0.935	0.937	0.954	1.018	1.070
٨	Rural - Majo							l. d	A	0	0-4	Nino	Date
G	2020	Jan 1.077	Feb 1.072	Mar	Apr 1.184	May 1.006	Jun 0.892	Jul 0.894	Aug 0.906	Sep 0.903	Oct 0.913	Nov 1.012	Dec 1.083
SWGA	2019		1.072	1.14 1.055	0.959	0.928	0.892	0.952	0.941		0.954	1.012	1.003
S	2019	1.197 1.213	1.134	1.055	0.959	0.928	0.942	0.952	0.941	0.961 0.952	0.954	1.034	1.097
က	2018		1.134			0.932			0.94	0.952			
R3_	2017	1.186 1.153	1.115	1.053 1.064	0.981	0.936	0.896 0.896	0.933	0.934	0.952	0.978	1.034 0.993	1.130
	5 YR AVG	1.165	1.115	1.064	1.008	0.937	0.896	0.936	0.965	0.951	0.943	1.017	1.114 1.101
	O TR AVG	1.103	1.034	1.077	1.000	0.340	0.303	0.330	0.337	0.344	0.347	1.017	1.101

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

WEEKDAY FACTORS BY FUNCTIONAL CLASSIFICATION 2020*

	Urban - Interstate	(1), Princ	ipal Ar	terial (Freew	ays an	d Expr	esswa	ys) (2)					
		Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
(J	Average Weekday	0.936	0.934	0.927	0.915	0.892	0.927	0.958	0.955	0.945	0.961	0.956	0.928	0.928
ΙŠ	Monday	0.970	0.945	0.950	0.951	0.919	1.018	0.987	0.989	0.983	1.023	0.998	0.942	0.938
S	Tuesday	0.932	0.900	0.921	0.934	0.879	0.922	0.968	0.966	0.956	0.962	0.969	0.906	0.899
	Wednesday	0.928	1.005	0.934	0.890	0.885	0.894	0.955	0.946	0.935	0.944	0.940	0.893	0.910
1	Thursday	0.912	0.885	0.903	0.884	0.884	0.872	0.921	0.917	0.907	0.913	0.918	0.970	0.965
	Friday	0.878	0.861	0.840	0.868	0.897	0.865	0.873	0.902	0.865	0.855	0.864	0.875	0.967
	Saturday	1.194	1.279	1.162	1.349	1.346	1.164	1.139	1.182	1.125	1.136	1.155	1.150	1.142
	Sunday	1.389	1.444	1.432	1.431	1.715	1.438	1.298	1.264	1.292	1.327	1.314	1.346	1.363

	Urban - Other Prin	ncipal Art	erials ((3), Mir	or Art	erials ((4), Col	lectors	s (5 & 6	6), Loc	als (7)			
		Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	Average Weekday	0.954	0.949	0.956	0.929	0.927	0.963	0.959	0.963	0.956	0.983	0.973	0.946	0.938
ĮŠ	Monday	0.982	0.963	0.961	0.946	0.930	1.036	0.983	1.006	0.986	1.066	1.013	0.944	0.948
S	Tuesday	0.946	0.920	0.942	0.943	0.907	0.958	0.962	0.961	0.960	0.977	0.978	0.917	0.927
	Wednesday	0.947	0.997	0.967	0.915	0.938	0.937	0.963	0.954	0.950	0.953	0.957	0.911	0.925
U2	Thursday	0.938	0.916	0.954	0.912	0.931	0.920	0.929	0.931	0.928	0.934	0.943	1.010	0.952
	Friday	0.888	0.881	0.863	0.876	0.894	0.872	0.883	0.899	0.872	0.866	0.876	0.889	0.982
	Saturday	1.103	1.181	1.070	1.194	1.160	1.034	1.077	1.140	1.056	1.066	1.063	1.083	1.107
	Sunday	1.339	1.371	1.328	1.350	1.511	1.329	1.333	1.330	1.263	1.288	1.312	1.323	1.324

	Rural - Interstate	(1), Princi	ipal Ar	terial (Freewa	ays and	d Expr	esswa	ys) (2)					
_		Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
X	Average Weekday	0.990	0.99	1.001	0.962	0.907	0.97	1.01	1.021	1.023	1.025	1.021	0.98	0.968
9	Monday	1.029	1.016	1.014	1.042	0.960	1.041	1.042	1.052	1.066	1.044	1.063	1.023	0.986
5	Tuesday	1.004	0.985	1.010	0.987	0.900	0.991	1.037	1.068	1.049	1.064	1.053	0.964	0.942
ι (N	Wednesday	0.981	1.024	1.026	0.919	0.891	0.949	1.012	1.017	1.018	1.038	1.017	0.925	0.940
\sum_{i}	Thursday	0.944	0.934	0.952	0.901	0.878	0.898	0.947	0.946	0.957	0.953	0.951	1.006	1.002
~	Friday	0.867	0.854	0.822	0.842	0.916	0.856	0.845	0.872	0.854	0.821	0.838	0.899	0.981
	Saturday	1.105	1.155	1.066	1.178	1.284	1.084	1.064	1.148	1.029	1.022	1.097	1.069	1.068
	Sunday	1.169	1.201	1.193	1.253	1.508	1.246	1.115	1.060	1.053	1.094	1.069	1.108	1.124

	Rural - Principal A	Arterials (3), Min	or Arte	erials (4)								
		Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ΙX	Average Weekday	0.940	0.929	0.941	0.905	0.905	0.932	0.961	0.962	0.948	0.980	0.965	0.927	0.922
9	Monday	0.971	0.945	0.947	0.934	0.906	1.023	0.992	0.989	0.983	1.062	1.009	0.933	0.934
S	Tuesday	0.930	0.902	0.917	0.912	0.898	0.917	0.971	0.969	0.947	0.969	0.971	0.893	0.895
ולטן	Wednesday	0.933	0.982	0.960	0.888	0.909	0.906	0.954	0.957	0.940	0.961	0.947	0.892	0.904
R 2	Thursday	0.923	0.887	0.941	0.884	0.906	0.880	0.927	0.931	0.921	0.926	0.931	0.991	0.955
I CE	Friday	0.865	0.854	0.838	0.845	0.887	0.858	0.861	0.891	0.848	0.837	0.849	0.870	0.946
	Saturday	1.153	1.252	1.131	1.260	1.282	1.109	1.106	1.172	1.085	1.058	1.087	1.137	1.159
	Sunday	1.438	1.500	1.469	1.523	1.668	1.443	1.356	1.353	1.363	1.335	1.394	1.413	1.444

	Rural - Major Collect	ors (5), Mir	or Colle	ectors (6), Loca	ls (7)								
		Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
₹	Average Weekday	0.954	0.935	0.959	0.935	0.939	0.966	0.969	0.966	0.948	0.993	0.971	0.939	0.930
9	Monday	0.993	0.967	0.978	0.964	0.964	1.040	1.001	0.999	1.003	1.084	1.015	0.954	0.941
S	Tuesday	0.945	0.908	0.934	0.928	0.920	0.958	0.985	0.973	0.953	0.976	0.978	0.910	0.913
ולטן	Wednesday	0.945	0.970	0.969	0.933	0.923	0.962	0.958	0.956	0.924	0.969	0.952	0.907	0.911
83	Thursday	0.935	0.893	0.956	0.913	0.948	0.904	0.932	0.937	0.913	0.943	0.939	0.984	0.954
œ	Friday	0.880	0.875	0.856	0.872	0.887	0.884	0.877	0.895	0.871	0.858	0.869	0.878	0.939
	Saturday	1.094	1.239	1.094	1.199	1.069	1.027	1.055	1.048	1.077	1.021	1.033	1.091	1.177
	Sunday	1.358	1.454	1.358	1.354	1.468	1.285	1.288	1.318	1.293	1.263	1.384	1.472	1.354

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

Source: Indiana Department of Transportation Division of Engineering and Asset Management Office of Asset Planning

AXLE ADJUSTMENT FACTORSBY FUNCTIONAL CLASSIFICATION 2016-2020*

	Urban	- Inters	tate (1)										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
⋖,	2020	0.861	0.860	0.840	0.819	0.847	0.847	0.857	0.848	0.844	0.849	0.846	0.846
<u> </u>	2019	0.863	0.856	0.874	0.861	0.870	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	0.830	0.855	0.867	0.843	0.843	0.817	0.846	0.854

	Urban	- Freew	ays and	d Expre	ssways	s (2) Pri	ncipal A	Arterial	s (3)				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$^{\triangleleft}$	2020	0.941	0.946	0.925	0.919	0.936	0.934	0.944	0.940	0.933	0.927	0.929	0.933
<u> 2</u> '	2019	0.952	0.943	0.949	0.949	0.952	0.957	0.954	0.953	0.956	0.960	0.962	0.960
	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

	Urban	- Minor	Arteria	ls (4), C	ollecto	rs (5 &	6), Loc	als (7)					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
◀	2020	0.973	0.977	0.961	0.954	0.957	0.962	0.967	0.969	0.954	0.965	0.934	0.978
<u>ന</u> '	2019	0.964	0.963	0.964	0.953	0.935	0.936	0.931	0.933	0.929	0.921	0.910	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	0.927	0.935	0.936	0.940	0.936	0.934	0.929	0.935	0.935

Ø	Rural -	Interst	ate (1),	Princip	al Arter	ial (Fre	eways	and Exp	pressw	ays) (2)			
<u>ල</u>		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Š	2020	0.676	0.682	0.663	0.618	0.686	0.708	0.712	0.701	0.700	0.704	0.697	0.665
(v.	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	0.740	0.755	0.772	0.776	0.790	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

4	Rural -	Other I	Principa	al Arteri	ials (3),	Minor A	Arterial	s (4)					
O O		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Š	2020	0.903	0.912	0.886	0.871	0.903	0.910	0.919	0.911	0.900	0.896	0.895	0.902
S.	2019	0.899	0.907	0.910	0.904	0.913	0.918	0.926	0.924	0.909	0.909	0.918	0.921
2	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
<u>~</u>	2017	0.911	0.910	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

₫	Rural -	Major	Collecto	ors (5),	Minor C	Collecto	rs (6), I	Locals ((7)				
l \eth		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ì	2020	0.950	0.957	0.955	0.955	0.935	0.925	0.933	0.934	0.932	0.921	0.922	0.937
S.	2019	0.955	0.960	0.958	0.958	0.960	0.963	0.960	0.962	0.959	0.953	0.964	0.965
၂ က	2018	0.892	0.883	0.894	0.906	0.916	0.919	0.911	0.907	0.912	0.900	0.926	0.931
<u> </u>	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

^{*}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.

Source: Indiana Department of Transportation

Division of Asset Planning

Office of Engineering and Asset Management

ANNUAL GROWTH FACTORS BY FUNCTIONAL CLASSIFICATION 2010 - 2020*

				Urban - Inter	state (1), Prir	ncipal Arteria	ıl (Freeways	and Express	sways) (2)			
							Year From					
	Year To	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	2010	-	0.985	0.976	0.988	0.967	0.925	0.923	0.930	0.917	0.916	1.043
45	2011	1.015	-	0.991	1.003	0.982	0.939	0.936	0.944	0.931	0.929	1.058
9	2012	1.024	1.009	-	1.012	0.990	0.948	0.945	0.952	0.939	0.937	1.067
SW	2013	1.012	0.997	0.988	-	0.978	0.936	0.934	0.942	0.929	0.927	1.056
اردا	2014	1.034	1.019	1.010	1.022	-	0.957	0.954	0.962	0.948	0.946	1.078
<u>=</u>	2015	1.081	1.065	1.055	1.068	1.045	-	0.997	1.005	0.991	0.989	1.126
	2016	1.084	1.068	1.058	1.071	1.048	1.003	-	1.008	0.994	0.992	1.130
	2017	1.075	1.059	1.050	1.062	1.040	0.995	0.992	-	0.986	0.984	1.121
	2018	1.090	1.074	1.065	1.077	1.055	1.009	1.006	1.014	-	0.999	1.138
	2019	1.092	1.076	1.067	1.079	1.057	1.011	1.008	1.016	1.001	-	1.139
	2020	0.959	0.945	0.937	0.947	0.928	0.888	0.885	0.892	0.879	0.878	-

			Urbar	- Other Prin	cipal Arteria	ls (3), Minor	Arterials (4),	Collectors (5 &6), Locals	(7)		
							Year From					
	Year To	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	2010	-	0.982	0.983	0.997	0.987	0.945	0.943	0.934	0.930	0.929	1.057
40	2011	1.018	-	1.001	1.015	1.005	0.962	0.959	0.951	0.947	0.945	1.076
9	2012	1.017	0.999	ı	1.014	1.004	0.961	0.958	0.950	0.946	0.944	1.075
SW	2013	1.003	0.985	0.986	-	0.990	0.948	0.945	0.936	0.933	0.931	1.060
U	2014	1.013	0.995	0.996	1.010	-	0.978	0.976	0.967	0.963	0.962	1.095
72	2015	1.058	1.040	1.041	1.055	1.022	-	0.997	0.988	0.984	0.982	1.119
	2016	1.061	1.043	1.044	1.058	1.025	1.003	-	0.991	0.987	0.985	1.122
	2017	1.071	1.052	1.053	1.068	1.034	1.012	1.009	-	0.996	0.994	1.133
	2018	1.075	1.056	1.057	1.072	1.038	1.016	1.013	1.004	-	0.994	1.133
	2019	1.077	1.058	1.059	1.074	1.040	1.018	1.015	1.006	1.006	-	1.133
	2020	0.946	0.929	0.930	0.943	0.913	0.894	0.891	0.883	0.883	0.883	-

				Rural - Inters	state (1), Prir	ncipal Arteria	I (Freeways	and Express	ways) (2)			
							Year From					
	Year To	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	2010	-	0.998	0.978	0.979	0.968	0.927	0.915	0.923	0.923	0.922	1.049
⋖	2011	1.002	-	0.980	0.981	0.970	0.929	0.917	0.924	0.925	0.923	1.052
l O	2012	1.022	1.020	-	1.001	0.989	0.947	0.935	0.943	0.943	0.942	1.073
≥	2013	1.021	1.019	0.999	-	0.988	0.945	0.933	0.941	0.942	0.940	1.071
ω.	2014	1.033	1.031	1.011	1.012	-	0.961	0.948	0.955	0.956	0.954	1.087
	2015	1.079	1.077	1.056	1.058	1.041	-	0.987	0.995	0.996	0.994	1.133
~	2016	1.093	1.091	1.070	1.072	1.055	1.013	-	1.008	1.009	1.007	1.147
	2017	1.084	1.082	1.061	1.063	1.047	1.005	0.992	-	1.001	0.999	1.138
	2018	1.083	1.081	1.06	1.062	1.046	1.004	0.991	0.999	-	0.984	1.121
	2019	1.085	1.083	1.062	1.064	1.048	1.006	0.993	1.001	1.016	-	1.145
	2020	0.953	0.951	0.932	0.934	0.920	0.883	0.872	0.879	0.892	0.873	-

				Ru	ral - Other Pr	incipal Arter	ials (3), Mino	r Arterials (4)			
							Year From					
	Year To	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	2010	-	0.999	0.992	0.961	0.948	0.907	0.892	0.887	0.883	0.882	1.004
⋖	2011	1.001	-	0.993	0.962	0.949	0.908	0.893	0.888	0.884	0.883	1.005
G	2012	1.008	1.007	-	0.969	0.956	0.914	0.898	0.894	0.890	0.889	1.012
SW	2013	1.040	1.039	1.032	-	0.986	0.943	0.928	0.923	0.920	0.918	1.046
S.	2014	1.055	1.054	1.046	1.014	-	0.981	0.965	0.961	0.957	0.955	1.088
2	2015	1.102	1.101	1.094	1.060	1.019	-	0.983	0.978	0.975	0.973	1.107
2	2016	1.121	1.120	1.113	1.078	1.036	1.017	-	0.995	0.991	0.989	1.126
	2017	1.127	1.126	1.119	1.083	1.041	1.022	1.005	-	0.996	0.994	1.133
	2018	1.132	1.131	1.123	1.087	1.045	1.026	1.009	1.004	-	0.995	1.134
	2019	1.134	1.133	1.125	1.089	1.047	1.028	1.011	1.006	1.005	-	1.080
	2020	0.996	0.995	0.988	0.956	0.919	0.903	0.888	0.883	0.882	0.926	-

				Rural	- Major Colle	ctors (5). Mi	nor Collecto	rs (6). Locals	(7)			
		1		114141	ajo: ooo	(c),	Year From	· · · (•), = • • • · ·	(•)			
	Year To	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	2010	-	0.996	0.996	0.989	0.979	0.937	0.933	0.937	0.955	0.953	1.086
∢	2011	1.004	-	1.000	0.993	0.983	0.941	0.936	0.941	0.959	0.957	1.089
l Ø	2012	1.004	1.000	-	0.993	0.983	0.941	0.936	0.941	0.959	0.957	1.089
	2013	1.011	1.007	1.007	-	0.990	0.948	0.943	0.948	0.966	0.964	1.099
S	2014	1.021	1.017	1.017	1.010	-	0.994	0.989	0.994	1.013	1.011	1.152
၂ က	2015	1.067	1.063	1.063	1.055	1.006	-	0.995	1.000	1.019	1.017	1.159
2	2016	1.072	1.068	1.068	1.060	1.011	1.005	-	1.005	1.025	1.022	1.164
	2017	1.067	1.063	1.063	1.055	1.006	1.000	0.995	-	1.019	1.017	1.159
	2018	1.047	1.043	1.043	1.035	0.987	0.981	0.976	0.981	-	0.998	1.136
	2019	1.049	1.045	1.045	1.037	0.989	0.983	0.978	0.983	1.002	-	1.094
	2020	0.921	0.918	0.918	0.910	0.868	0.863	0.859	0.863	0.880	0.914	-

*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	0.978	0.981	0.979	0.991	0.979			
Average of Last Ten (10) Annual Growth Rates	0.997	0.994	0.997	1.003	0.992			

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