

INDOT Traffic Data Sources and Using Traffic Count Data System provided by MS2

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Goals

- Awareness of different data sources
- Introduction to newest tool, TCDS
- Learn how to use TCDS
- Learn how to use data from TCDS
 - AADT
 - Start Times



Available Traffic Data Resources

- **Traffic Statistics Internet Page**
- **Interactive Traffic Data Map**
- **Traffic Count Database System provided by Midwestern Software Solutions (MS2)**



Traffic Statistics Internet Page

- www.in.gov/indot/2720.htm



Indiana Department of Transportation

[INDOT](#) > [About INDOT](#) > [Central Office](#) > [Asset Data Collection](#) > [Traffic Statistics](#)

TRAFFIC STATISTICS


The Indiana Department of Transportation (INDOT), through its Traffic Statistics 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:


The first system is the Statewide Traffic Monitoring System consisting of over 100 permanent continuous count stations that can collect volume, speed, and vehicle classification data 24 hours per day, 365 days per year. Nearly fifty 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 and develop Axle, Weekday, and Seasonal adjustment factors used with the state's coverage count program to determine estimates of annual average daily traffic (AADT).

The second system is the Statewide Coverage Count Program which utilizes portable traffic 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). In 2010, this expanded to include non-state maintained high volume Federal Aid Routes; bringing the total number of short term counts to 48,000. The coverage count program operates on a three-year cycle, counting one-third of all sections annually. Meeting this need requires that 10,000 counts be collected on the state owned route system and that 6,000 counts be collected on the non-state owned Federal Aid Route System each year. INDOT uses portable classifiers whenever possible; 65% of all coverage counts are classified counts. Additional counts are taken within this program to support specific state projects. In addition, INDOT also contracts with Metropolitan Planning Organizations (MPOs) to collect coverage count data.

Related Links

- [Traffic Data](#)
- [Adjustment Factors](#)
- [Interactive Traffic Data Map](#) 

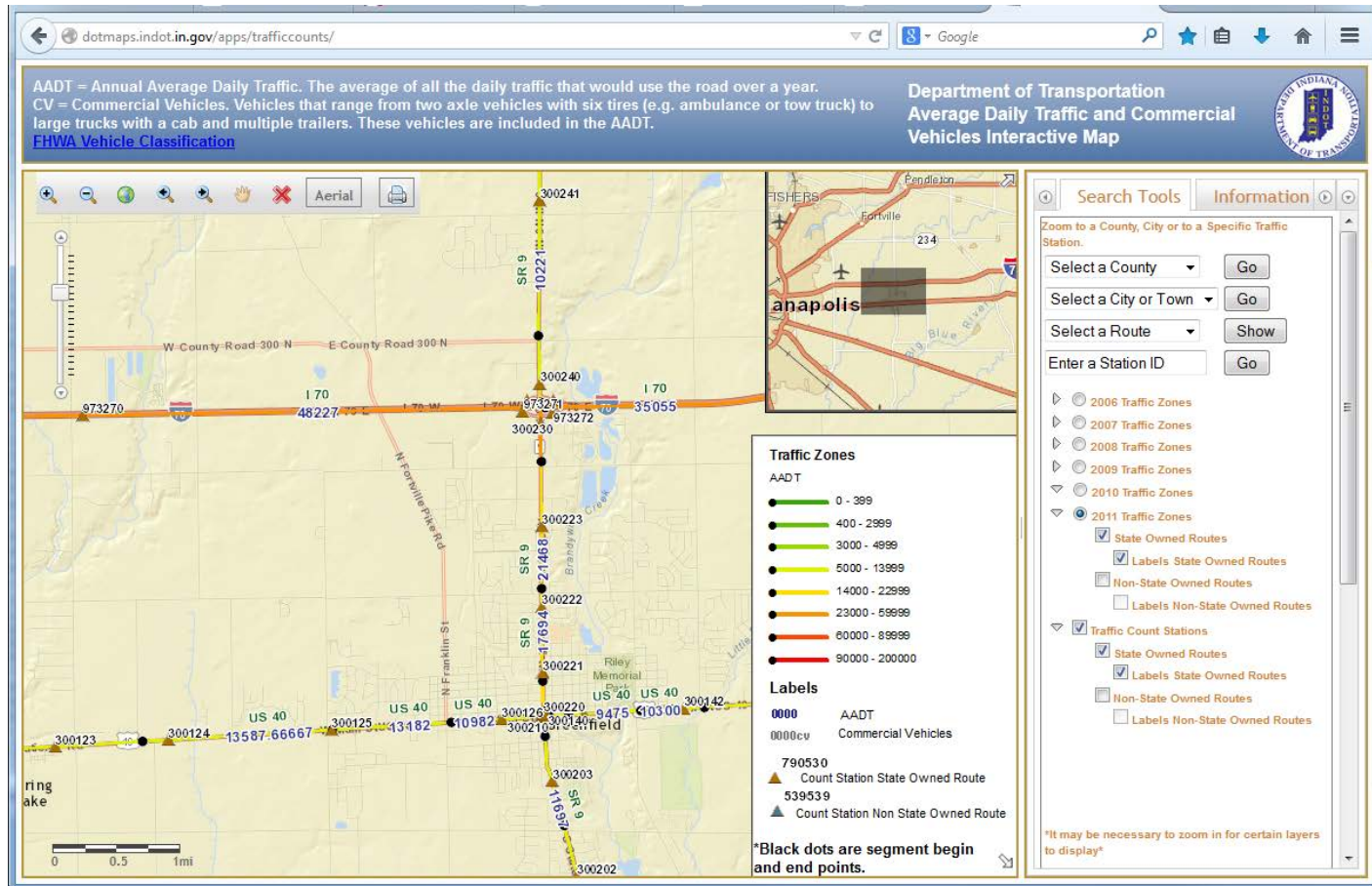
Contact Information

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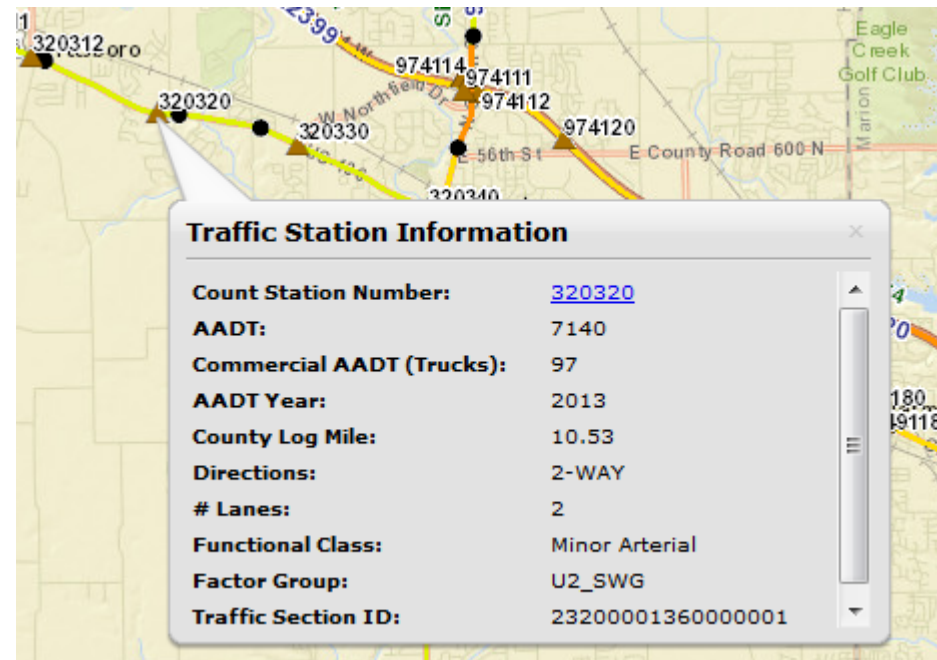
Interactive Traffic Data Map

■ <https://entapps.indot.in.gov/TrafficCounts/>



Interactive Traffic Data Map

- Clicking on a Traffic Count Station opens an information bubble with more current count information
- Count Station Number is a hyperlink to the detailed information in TCDS



■ Indot.ms2soft.com

Indiana Department of Transportation
Traffic Count Database System (TCDS)

Home TSMS TCLS TTDS PMS PMDS RSMS PCDS PMMS WOTS RTTV
Backup Admin Login Logout +Locate +Locate All

Quick Search Advanced Search Map Search Tools

TCDS Quick Search

County: Select County
Community: Select Community
Located On (Road): Select On Road
Location ID: Select Location ID
Count Year: [Dropdown]

Search Clear

Station Data

Station Type	Continuous	Short	WIM
Total	103	20,199	40
AAADT	98	17,763	37
Volume	96	17,890	38
Class	94	13,225	37
Speed	96	9,827	38
Gap	0	0	0
WIM	39	0	39

Percent of Data by Type

Traffic Volume Index and Growth Rate

Change Index

2 10%

Map data ©2014 Google 1 km

TCDS Advantages

- Access to most current data
- View raw data
- View data by roadway, direction, or individual lane
- Customize lists using advanced search tools
- Shortened turnaround time for data availability
- Data from partner Agencies (MPO/RPO)



TCDS Features

- **Search and Advanced Search**
- **Summary of current and historic data**
- **Map Layers**
- **List View and Export**
- **Calendar View**
- **Reports (Users with login credentials)**



TCDS Features

■ Search and Advanced Search

[AUTO-locate URL](#)

Quick Search		Advanced Search		Map Search		Tools			
TCDS Advanced Search									
Select search criteria below, then click the "Search" button.						Search		Reset Search	
<input type="checkbox"/> Search Master Locations Only									
Jurisdiction									
District									
County	Tippecanoe								
Community								<input type="checkbox"/> Exact Match	
Location ID								<input checked="" type="radio"/> Exact Match <input type="radio"/> Starts With <input type="radio"/> Ends With <input type="radio"/> Contains	
Type	ALL								
Located On ¹								<input type="checkbox"/> Exact Match	
Route Type	ALL								
Route	I-65							<input type="checkbox"/> Exact Match	
Crossroad ¹								<input type="checkbox"/> Exact Match	
From Road ¹								<input type="checkbox"/> Exact Match	
To Road ¹								<input type="checkbox"/> Exact Match	



TCDS Features

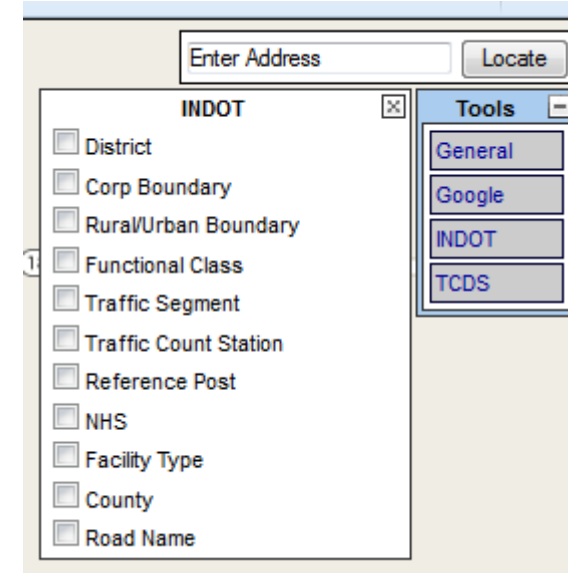
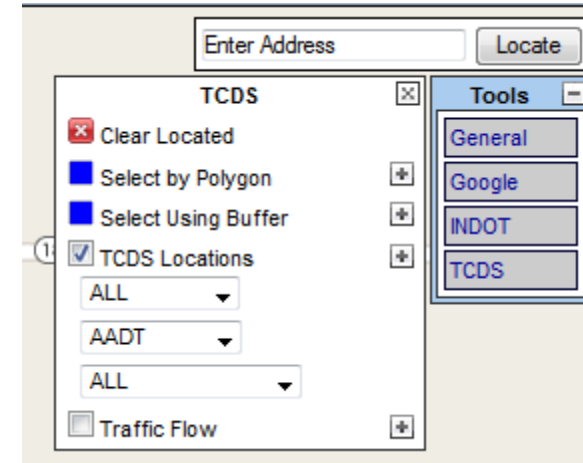
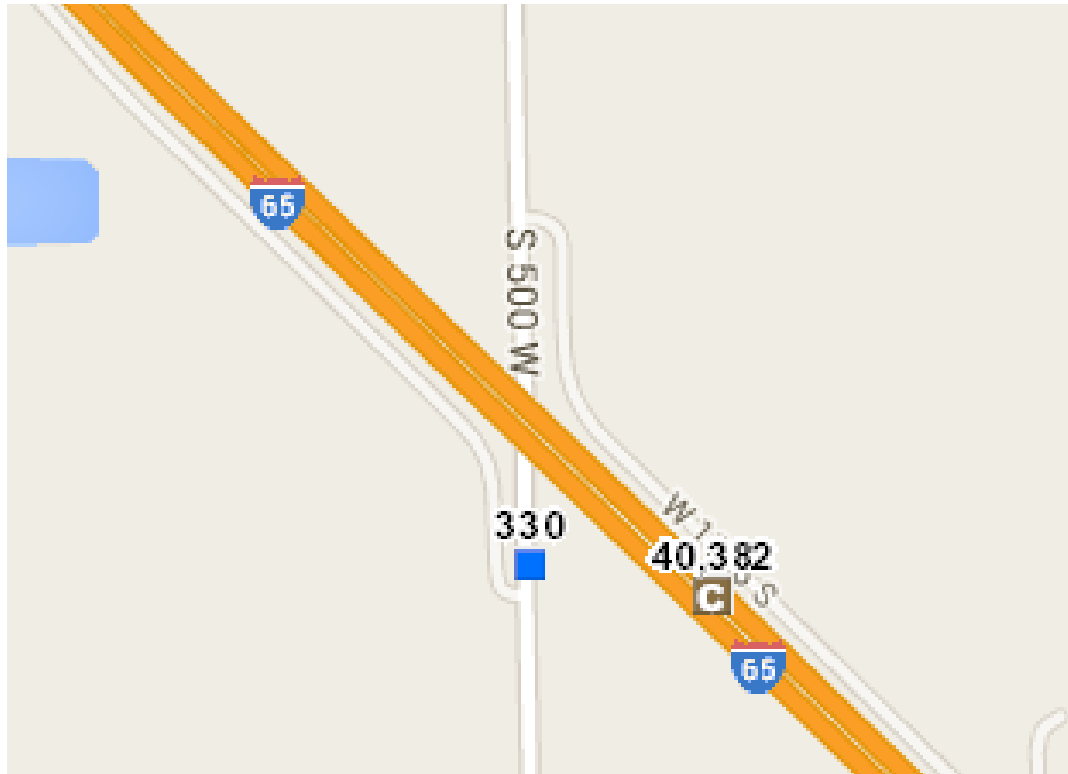
- Summary of current and historic data

AADT ?								
	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2014	45,057	4,462	10	52	29,369 (65%)	15,688 (35%)	
	2013	46,230	4,622	10	56	31,463 (68%)	14,766 (32%)	
	2012	48,550				29,320 (60%)	19,229 (40%)	
	2011	45,162						
	2010	43,881						

<< < > >> 1-5 of 16

TCDS Features

■ Map and Layers



TCDS Features

■ List View and Export

Search Criteria

Form View

316 Records Found

Export Master Locations Only

Loc ID	County	Factor Group	On	Dir	Latest AADT	AADT Year	Last Collection Date
951100	Tippecanoe	R1_SWGA	I 65 1.25 MI N SR 25 (MM 175.9)	2-WAY	45057	2014	03/04/2015
951200	Vermillion	R1_SWGA	I 74 WIM SITE 951200 0.60 MI E of SR 63	2-WAY	16471	2014	02/28/2015
952000	DeKalb	R1_SWGA	WIM 952000 I 69 3.52 MI N OF US 6	2-WAY	27506	2014	03/04/2015
952300	Grant	R1_SWGA	WIM 952300 I 69 4.13 MI N OF SR 18	2-WAY	27538	2014	03/04/2015
953300	Marion	U1_SWG	I 465 SB MM 10.0	2-WAY	97228	2014	03/04/2015
953400	Marion	U1_SWG	I 65 NB MM 102.5	2-WAY	86460	2014	05/20/2014
953500	Marion	U1_SWG	I 465 N OF I 70 EAST SIDE	2-WAY	160662	2014	03/04/2015
953600	Hancock	R1_SWGA	I 70 EB MM 108.0	2-WAY	38192	2014	03/04/2015
953700	Wayne	U1_SWG	I 70 2.00 MI E OF SR 227	2-WAY	36062	2014	03/04/2015
954000	Lake	U1_SWG	I 80/ 90 MM 6 EB	2-WAY	170221	2014	03/04/2015
954100	Jasper	R1_SWGA	I 65 0.50 MI N OF SR 14	2-WAY	36362	2014	06/16/2014



TCDS Features

■ Calendar View

Location: 951100 - Year: 2015

Total Counts: 45 Record <<< < 1 > >>> of 316

Select Year: 2015 Show Type: Volume Class Speed Gap Weight Update

Directions: **2-WAY** NEG POS ?

1 2 1 2

Count Exists
 # Count Missing Interval Data
 No Counts Exist
 # Flagged Counts in bold Red

Counts in January = 26

January						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Counts in February = 17

February						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28



TCDs Features

■ Reports (login required)

Report : None
Dates : None

Process : Immediately Submit Job (long running reports)

Home Go Back

Locations Reports Options Output Previous Next

- Station >
- Volume > **Detail Reports**
 - AA DT and AA DT Trucks by Year (Chart)
 - AA DT by Year by Direction (Chart)
 - AA DT by Year Comparison (Chart)
 - AA DT by Year Comparison Matrix (Chart)
 - AD T by Day of Week by Month for Year
 - Avg Hourly Traffic by Day of Week for Year
 - High Hourly Volumes by Year
 - High Hourly Volumes for Year
- Class >
- Length >
- Speed >
- WIM >
- HPMS >
- MEPDG >
- Export >
- Admin >
- Top 10 This User >
- Top 10 All Users >

Home TSMS TCLS TTDS PMS PMDS RSMS NMDS PMMS WOTS RTTV

Backup Admin Login Logout + Locate + Locate All Email This

New: Link | Spot | Reports: Locs | Vol | Class | Gap | Speed | WIM | Latest: Vol / AADT

[edit flowmap](#) [auto-locate OFF](#)

Disclaimer: The data is provided pursuant to the Indiana Open Records Act. It represents accurate reproductions of the records on file with the Indiana Department of Transportation; however, [... more](#)

Ad-Hoc Rpts Graphs/Rpts

List View All DIRs Report Center Save Search Load Search Build Search



Using Data from TCDS - AADT

- **AADT = Annual Average Daily Traffic**
 - Ideal: Collect data continuously all year, divide total by 365.
 - Reality: Permanent sites malfunction or data doesn't pass Quality Control; Too expensive to collect everywhere all the time.
 - Solution: Short Term Counts and Adjustment Factors



Using Data from TCDS - AADT

■ Calculating AADT

$$\text{AADT} = \text{ADT} * \text{SF} * \text{WF} * \text{AF}$$

- ADT: Average Daily Traffic (minimum 2 days)
 - SF: Seasonal Adj. Factor based on Month data collected.
 - WF: Weekday Adj. Factor based on day of week data collected.
 - AF: Axle Adj. Factor to remove excess vehicles from unclassified counts.
- ## ■ Adjustment Factors developed from permanent sites



Using Data from TCDS – Start Times

- TCDS manages data in 24 hour blocks
- TCDS lists start date and time
- Hourly Data above start time actually occur on following day.
- Only relevant if trying to calculate AADT since different day of week factor would be applied.

COUNT DATA INFO	
Count Status	Accepted <input type="checkbox"/>
Start Date	Tue 8/26/2014
End Date	Wed 8/27/2014
Start Time	11:00:00 AM
End Time	11:00:00 AM
Direction	

8:00-9:00	2,002
9:00-10:00	2,766
10:00-11:00 <input type="checkbox"/>	2,634
<input checked="" type="checkbox"/> 11:00-12:00	2,680
12:00-13:00	2,802
13:00-14:00	2,977
14:00-15:00	3,168
15:00-16:00	3,882



Questions

