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

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.
TCDS

- Indot.ms2soft.com
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

![Advanced Search Interface](image-url)
## TCDS Features

- Summary of current and historic data

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

- Map and Layers
TCDS Features

- **List View and Export**

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<tr>
<th>Loc ID</th>
<th>County</th>
<th>Factor Group</th>
<th>On</th>
<th>Dir</th>
<th>Latest AADT</th>
<th>AADT Year</th>
<th>Last Collection Date</th>
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<td>2-WAY</td>
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<td>Grant</td>
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<td>36362</td>
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TCDS Features

- Calendar View

![Calendar View Image]
TCDS Features

- **Reports** (login required)

[Image of a screenshot of the TCDS platform showing various report options and settings.]
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

  \[ \text{AADT} = \text{ADT} \times \text{SF} \times \text{WF} \times \text{AF} \]

  - 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.
Questions