Collecting Existing Traffic Data for a CTP

Description

The purpose of this procedure is to provide a consistent methodology for collecting existing traffic data during the Conduct Needs Assessment phase of the Comprehensive Transportation Plans (CTP) process.

Responsibility

The TPB Project Engineer (PE) – to collect existing traffic volumes published annually by the Traffic Survey Group.

Scheduling and Time Constraints

The collection of existing traffic data should be completed prior to the CTP deficiency analysis is conducted on the highway system as a whole, as part of the CTP Study.

Procedures

<table>
<thead>
<tr>
<th>Step</th>
<th>Collecting Traffic Data from the GIS Shapefiles and TFU</th>
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| 1    | To collect the AADT information use links from the CTP GIS Data Layers spreadsheet located at S:\Shared\TPB Reference\Comprehensive Transportation Plan\. Choose Recourses tab and select available Layers for download:  
- Average Annual Daily Traffic (AADT) 2011  
- Historical AADT 1990-2006 (*Unofficial*)  
  **Note** that SR roads are not counted every year; they are counted every other year.  
  The data set will need to be investigated carefully for outliers. An outlier is an observation that lies an abnormal distance from other values in a data set. Before considering the possible elimination of these points from the data, one should try to understand why they appeared and whether it is likely similar values will continue to appear. |
| 2    | More information about available traffic survey data could be found at Traffic Survey group website : http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/  
Traffic volumes maps could be found at the http://www.ncdot.gov/travel/statemapping/trafficvolumemaps/default.html |
| 3    | The downloaded shapefiles have statewide coverage and should be clipped to your county or planning area. |
| 4    | Download and save to your hard drive latest Traffic Forecasting Utility (TFU) spreadsheet from S:\Traffic Forecast Tools\TFU. TFU has filters that allow users to sort by a number of different features. For example you can sort by Unique ID, Division, County, or Facility name. The following shows the steps necessary to filter all the traffic volumes for a designated road. After filtering, you may copy and paste them into the Input tab.  
Select the AADT Data East Tab  
Click on the drop menu next to CO_NAME and select the county of interest. This will |
narrow the results down to just the roads in that county.
To select all the traffic volumes for a specific road, click on the drop menu next to RouteID and select (Custom...)
The Custom AutoFilter box will appear. Under RouteID click on the drop menu and select “contains”. In the box to the right of that type in the number of the road. Then click OK.
TFU will sort by all the RouteIDs that contain that number.
At the top of the screen click on the button that says, "Clear Input Tab & Copy Results"
All your filter results are now pasted to the Input tab.

5 If you would like to select additional roads, repeat step 4 (with the following modification).
Select the button that says, "Copy Results Below Last Row."
This will paste your filter results below the previous entry.
Continue selecting roads until all the traffic data for the project area has been copied into the AADT Input Tab.

6 Select the AADT Input Tab.
Examine the data for correctness.
To eliminate an unwanted row of data:
Click on the "Delete a Row" button.
A text box will pop up. Enter the beginning row number and the ending row number and Click "OK"
A verification box will pop up and ask if you are sure. Click "Yes"
Continue entering row numbers until all the unwanted rows have been removed. Then click on the "X" on the top right side of the box.
Your data is now ready for analysis.

Policy, Regulatory, and Legal Requirements
No specific policy exists for the collection of crash data for CTP studies.

Resources
- http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/
- S:\Traffic Forecast Tools\TFU

Background
Analyzing existing traffic data over the previous 20 years will help determine the growth rates for your road network. With those growth rates, future traffic volumes can be estimated. Also, you can compare the existing and estimated traffic volumes with capacity volumes to determine which portions of the road network are over capacity and will need improvements in the future. This information can be used as the basis for developing Comprehensive Transportation Plans.
Flowchart
None

Record of Revision

The information contained in this procedure is deemed accurate and complete when posted. Content may change at any time without notice. We cannot guarantee the accuracy or completeness of printed copies. Please refer to the online procedure for the most current version.

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<td>2</td>
<td>Procedures</td>
<td>Reorganized procedure to reflect changes in the data collection process and requests for traffic counts. Updated links and contacts.</td>
<td>10/02/2012</td>
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<td>3</td>
<td>Entire procedure</td>
<td>New template</td>
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