Traffic Forecasts Certified for Design

What’s Changing

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What is “Certified Traffic”? 

- Slang which developed over the years which is often misused.

- **Original Definition:**
  Traffic forecasts developed or approved by the ODOT Office of Technical Services for use in roadway design.

- **Current Definition:**
  Traffic forecasts developed or approved by the ODOT Office of Statewide Planning and Research – Modeling & Forecasting Section for use in roadway planning and design.
Typical Project Forecast

- Travel demand forecast model (statewide, regional MPO)
- Traffic statistics
- Traffic counts

Process

Spreadsheets, other forecasts, Analyst experience and judgement, Smoothing, etc.

Project Opening Year and Design Year Traffic Forecast (20-25 years)

Certified Traffic – What’s Changing?
Example Project Forecast

Certified Traffic – What’s Changing?
Design Traffic Usage at ODOT

- Office Of Roadway Engineering
  - Geometrics Section uses for lanes, shoulders, clearance, widths, etc.
  - Studies Section uses for IMS/IJS, TIS

- Office of Traffic
  - Signal Warrants

- Office of Environmental Services
  - NEPA-Planning Phase: Evaluate existing to establish purpose and need
  - NEPA-Preliminary Engineering Phase: Identify feasible alternatives
  - MSAT Analysis

- Office of Structural Engineering/Office of Pavement Engineering
  - Use simplified growth rate processes for bridge/pavement design UNLESS: new road or Interstate bridge, which come to Modeling & Forecasting Section
Task Force

September 2015 forecasts certified for design task force formed.

August – September 2016 task force recommendations presented.

September 2016 Office of Statewide Planning developed an implementation plan.
New Role

_module

Changing our role from service provider to process owner
Plans (implementation began ~Sept.)

Still providing service but will be focusing our resources on PDP path 3, 4, and 5 projects.

SFY 2017 to 2022 Project Counts by PDP Path
As of 7/14/2016
Increasing emphasis on documenting assumptions such as including counted traffic on the forecasted volume diagrams.

Providing notes on uncertainty on provided forecasts in certain situations

(See Greg Giaimo’s presentation, session 27)
# PDP

## ODOT's Project Development Process

### How to Choose Your Path

Click a path below to view the tasks for that path or Click Here to see other task view options:

<table>
<thead>
<tr>
<th>Path 1</th>
<th>Path 2</th>
<th>Path 3</th>
<th>Path 4</th>
<th>Path 5</th>
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<tbody>
<tr>
<td>Path 1 projects are defined as &quot;simple&quot; transportation improvements generated by traditional maintenance and preventative maintenance. They involve minor structure and roadway maintenance work with no ROW/utility impacts. These are typically NEPA exempt or CE Level 1 NEPA documents.</td>
<td>Path 2 projects are also simple projects that may be similar in work type to Path 1 projects. They include minor structure and roadway work. Some examples may include culvert and bridge replacement/reconstruction, resurfacing and addition of turn lanes/shoulders. These jobs can involve non-complex ROW acquisition (strip takes, temporary easements and/or channel easements). These jobs are typically CE Level 1 documents.</td>
<td>Path 3 projects involve a higher level of complexity than projects in Path 1 and 2. They include moderate roadway and structure work including intersection and minor interchange upgrades, minor realignments, reconstruction, median widenings, etc. They can involve utility and ROW acquisition including relocations. These projects are usually CE Level 2 or higher level NEPA documents.</td>
<td>Path 4 projects involve complex roadway and structure work that may add capacity. Path 4 projects typically have multiple alternatives. Projects may include highway widening, new alignments in suburban or rural settings, reconstruction, access management, complex bridge replacement and/or multiple intersection/interchange alternatives. They may have substantial utility and/or ROW relocations/impacts. These are typically CE Level 3 or higher level NEPA documents.</td>
<td>Path 5 projects have the highest complexity and typically add capacity. They involve projects like new capacity ROW relocations/impacts, complex utility issues, multiple alternatives and access management issues. These projects are typically higher level NEPA documents.</td>
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Certified Traffic – What’s Changing?
Plans Continued

Expanding data and toolsets available

Certified Traffic – What’s Changing?
Plans Continued

- Expanding district role (PDP Path 1, 2, 3) & require backup design traffic coordinator.

- Increasing use of consultants

- Updating & expanding manuals & documents, developing training courses (maybe 4 or 5 different courses & pre-qual)

- Developing standard scope template(s)
Plans Continued

- Early involvement of M & F on path 3, 4, 5 projects (PDP change)
  - Coordinate data collection (install ATR if needed)
  - Agreement process on collected counts.

- Update roadway design guides to reflect changes

- New ELLIS milestones
Plans Continued

- Standardizing travel demand models
- Expanding Metropolitan Planning Organization’s roles and responsibilities in travel demand modeling
- More emphasis on research and working with Universities
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