Long Range Transportation Planning

Alena R. Cook, PE, CPM
Transportation Planning Staff Engineer

NCDOT Pre-Construction Workshop
May 8-9, 2018
Transportation Planning Division

**Mission:** To identify long range regional and statewide transportation deficiencies and propose solutions using a data driven, customer engaged, and result oriented process with accountability and environmental sensitivity.

- **Highlighted Products:**
  - Comprehensive Transportation Plans (CTPs)
  - Administration of Planning Programs, working closely with 19 MPOs and 18 RPOs
  - Various long range plans: Statewide Transportation Plan, Statewide Freight Plan, etc.
  - Traffic Surveys (AADT maps, etc.)
  - Traffic Forecasts
Transportation Plans

**Comprehensive Transportation Plan (CTP) & the Metropolitan Transportation Plan (MTP)**

(may be combined into a single long range transportation plan in urban areas)

- Is **Long-Range** (20-30 years)
- Is **Multimodal**: Highway, Public Transportation/ Rail, Bicycle and Pedestrian
- Is developed cooperatively with NCDOT, the MPO or RPO, County and Municipal stakeholders, and the public.

*It is important to note that CTP/ MTP recommendations are Concepts and each project proposal will go through a thorough more detailed environmental review & design before a final alignments are determined.*
Comprehensive Transportation Plans

Series of Maps

Study Documentation
Long Range Transportation Planning

• **CTPs**
  - Developed cooperatively with MPOs/ RPOs
  - CTP 2.0 is effort underway to update and improve products
  - Information is shared (i.e. through Scoping, etc.)
    Sharing this information is called....

• **Integration**
  - Federal regulation refers to as “Planning and Environmental Linkages”
  - Training being developed for 2018-2019
  - Some products already available to help project delivery
Purpose of CTP 2.0 Effort

- To properly reflect changes that have occurred:
  - Complete Streets
  - STI / Prioritization
  - Changes to online mapping applications
  - Customer feedback (external/ internal)

- To optimize limited resources & improve customer service

- To ensure CTPs are RELEVANT & USEFUL
What “Integration” Is...

...a planning process that provides a seamless connection between long-range transportation planning and project development that ultimately leads to supporting the timely delivery of projects.
Integration Project
Linking Long Range Transportation Planning and Project Development

"Planning and Environmental Linkages"

The North Carolina Department of Transportation has undertaken a major process improvement to integrate the long range transportation planning process with the project development process. In North Carolina the long range transportation planning process is called the Comprehensive Transportation Planning process and leads to the development of Comprehensive Transportation Plans (CTP). In MPO areas, there are additional federal requirements for long range transportation plans, including for plans to be fiscally constrained (often called Metropolitan Transportation Plans or MTPs). The project development process in North Carolina is handled through the Section 404/NEPA Merger 01 process (called the Merger process) or other means to follow the National Environmental Policy Act (NEPA) and its state counterpart, State Environmental Policy Act (SEPA).

The Integration Project was designed to improve the linkage between any type of long range transportation plan (CTPs or MTPs) and project development, whether handled through the Merger process or other means.

The Integration Project was designed through the work of a multi-agency ‘Integration Team.’ This work resulted in the identification of multiple ‘linkages,’ or topic areas, between long range planning and project development, where products from the CTP process could inform or serve as the starting point for NEPA/SEPA. An ‘Integration Implementation Team’ (IIT) was formed to direct the implementation of the Integration Project. Under the leadership of the IIT, small working groups designed best standards and practices for accomplishing the goals of integration. Integration
Problem Statement to Purpose and Need

- **Purpose**
  - Communicate the need, context, and concept for project proposals (all modes) from a long range transportation plan (MTP/CTP)

- **Intent**
  - Form substantial core of purpose and need
  - Save time in preparing and/or agreeing to the purpose and need in project development
Proposal Name/ Location
Proposal At A Glance
Identified Need
Recommendation Briefly Described
Facility Volume/ Capacity Information
Map- Geographic Location/ Facility Type
Integration - Problem Statement

Planning cross section/existing photograph

Modal/Transit Information

Project History/Linkage to Other Plans

CTP Goal Analysis

Potential Impacts

Other Information

NC 96 Youngsville Bypass

From NC 96 (at Knollwood Lane) to US 1 Alternate

Capital Area MPO

2014 Franklin County & Louisburg CTP

Additional information

Sidewalks

Existing

Proposed

Shoulders

Existing

Proposed

Wide Shoulders

Existing

Proposed

Bicycle Lanes

Existing — Bike Route

Proposed

Multimodal Paths

Existing

Proposed

Transit Corridor

Existing — Rail

Proposed — Rail

Project History/Linkage to Other Plans

Youngsville prefers a bypass as far east as possible from town to accommodate future growth along Tarboro Road (SR 1100). This modifies the alignment proposed in the Youngsville Thoroughfare Plan (revised 2006) and other alternative locations east of town. In consideration of environmental impacts and town growth, the recommended bypass is close to the original 1991 Youngsville Thoroughfare Plan alignment.

The proposed bypass directly connects to proposed improvements of existing NC 96 (FRANR0016-H) and FRANR0017-H, Cedar Creek Road (SR 1116) Extension (FRANR0028-H), and Southeast High Speed Rail (SEHSR) improvements (TIP No. P-3819) in the Youngsville area.

CTP Goal Analysis

Lower speeds along NC 96 are conducive to local vehicular traffic, but make it inefficient for automobile and truck through trips. Youngsville wants to maintain its existing infrastructure and small town characteristics like the wide two-laned NC 96 (Main Street) with on-street parking. The proposed bypass will provide a new route for through trips, lessening congestion on existing NC 96.

Other Information

The NCDOT Rail Division’s Southeast High Speed Rail (SEHSR) Corridor project (TIP No. P-3819) study would provide high-speed passenger rail service from Washington, DC to Charlotte, North Carolina. The project would provide new and/or improved freight access, lessen the growth rate of congestion on major parallel highway routes and provide other passenger service opportunities which could serve smaller communities. This project, many at-grade railroad crossings in Youngsville would be closed to increase speeds and eliminate at-grade railroad crossing safety concerns.

The existing NC 96 (Main Street) will be improved to a grade-separated crossing of the railroad, part of the NC 96 Bypass would be constructed on the north side of Youngsville. A new grade-separated crossing of the railroad, and two grade-separated multi-use crossings will be constructed at Franklin and Pine Streets per the SEHSR project.

Since the study is still underway, the grade-separated crossings and other corresponding SEHSR projects are not yet finalized. For more information, see the SEHSR website (http://www.sehsr.org/).
Alternatives and Scenario Analysis

• Intent
  - Input into project development alternatives to help inform decision of which to study in detail and those to eliminate
  - May also help with scoping/ cost estimate/ scheduling/ etc.

• Products (Alternatives for select Project Proposals)
  - Evaluation documented in Appendix
  - Alternatives Impacts Table (GIS level screening)
  - Alternatives Evaluation Table
Community Impacts Assessment

• Intent
  - Identify, include, and address community attributes and potential community impacts in transportation decision-making
  - Input into CIAs, background info for P&N and Alts

• Products
  - Potential Committee Members Lists
  - Potential Stakeholders Lists
  - Committee Member/ Stakeholder Table
  - Community Understanding Report
**Indirect and Cumulative Effects**

Product 1: Existing Conditions Assessment  
Product 2: Future Growth Potential Assessment  
Product 3: Indirect & Cumulative Effects Screening  
Product 4: Best Management Practices Recommendations

ICE in Long Range Planning results in 4 Products
Regional and Project Proposals Screenings
Welcome to the North Carolina Department of Transportation’s Public Engagement Toolkit. This toolkit provides practical information for project managers looking for ways to better engage the public as part of a plan, project or study process.

Public Engagement Techniques
Searchable list of public engagement techniques with detailed descriptions
Read More →

Public Engagement Resources
Constantly expanding library of public engagement related resources. These may be websites, articles, manuals, case studies, and more
Read More →

Public Engagement Glossary
Terms and definitions to assist users in better understanding conversations, resources, and materials found in this toolkit.
Read More →

Register & Participate
This toolkit is meant to be a collaborative effort and we need your help to continually make it better. By registering you can actively participate in the enhancement of the content of this toolkit. Registration will allow you to view sample files that other users have uploaded, post comments and initiate new discussions, and submit new information that will help keep this toolkit up-to-date and relevant for all users.

Register Login
Interagency Coordination Protocol

- NC Dept. of Environmental Quality
  - Division of Water Resources
  - Division of Coastal Management
  - Division of Marine Fisheries
- NC Dept. of Natural & Cultural Resources
  - State Archaeology Office
  - State Historic Preservation Office
  - NC Wildlife Resources Commission
- US Army Corps of Engineers
- US Fish and Wildlife Service
- EPA
- US Forest Service
- National Park Service
- NOAA- National Marine Fisheries
- NC Dept. of Agriculture-NC Forest Service, Farmlands
- NC DHHS
- NC Dept. of Commerce
- Tennessee Valley Authority
Where Do I Find This Info For MY Project??

https://connect.ncdot.gov/projects/planning/Pages/Comprehensive-Transportation-Plans.aspx
Comprehensive Transportation Plans
Long term, long range transportation plans for municipalities, counties and large metropolitan areas (MPOs).
### Where is Information in the CTP?

<table>
<thead>
<tr>
<th>Type of Information</th>
<th>Location in CTP Documentation¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Statements</td>
<td>Chapter 2, ‘Problem Statements’</td>
</tr>
<tr>
<td>Alternatives/ Scenarios Analysis</td>
<td>Appendix I, ‘Alternatives &amp; Scenarios Studied’</td>
</tr>
<tr>
<td>Multi-modal Analysis</td>
<td>Ch.1, ‘Public Transportation and Rail’ and ‘Bicycles and Pedestrians’ sections</td>
</tr>
<tr>
<td>Land Use related to CTP²</td>
<td>Ch.1, ‘Land Use’ section</td>
</tr>
<tr>
<td>Community Understanding Report (CUR)</td>
<td>Some info in Ch.2 Problem Statement, Full CUR- request from TPD contact</td>
</tr>
<tr>
<td>Public Involvement</td>
<td>Appendix H, ‘Public Involvement’</td>
</tr>
<tr>
<td>Environmental Considerations &amp;</td>
<td>Ch.1, ‘Consideration of the Natural and Environmental Features Map Human Environment’ section</td>
</tr>
</tbody>
</table>
Connecting Long Range Planning to Project Development

Land Use Planning and Community Vision

Long Range Transportation Planning

Project Planning (NEPA)

https://connect.ncdot.gov/projects/planning/Pages/Integration-Project.aspx

Alena R. Cook, PE, CPM | arcook@ncdot.gov | 919.707.0910