

Interagency Coordination Protocol for North Carolina's Transportation Planning Process

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Introduction

The North Carolina Department of Transportation (NCDOT) Transportation Planning Branch identified an opportunity to improve coordination between natural and cultural resource agencies (hereafter referred to as 'resource agencies') and the Project Engineer or Planner, in advance of project development. In 2012, NCDOT's Transportation Planning Branch contacted Institute for Transportation Research and Education (ITRE) to provide assistance in the development of an Interagency Coordination Protocol ('Protocol') that could be used to support a variety of long range transportation planning processes, including the Comprehensive Transportation Plan (CTP), the Metropolitan Transportation Plan (MTP), and other transportation plans.

In North Carolina, municipalities and MPOs are required to have a transportation plan by North Carolina General Statutes (NCGS 136-66.2) and Federal law (23 USC 134). These plans capture the community's current transportation system and anticipated changes 20-30 years in the future. This Protocol supplements guidance on developing CTPs provided by NCDOT and guidance on MTPs by the Federal Highway Administration (FHWA). This guidance is intended for use by NCDOT's Transportation Planning Branch (TPB) and process partners, such as Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs), FHWA, Federal Transit Administration (FTA), environmental resource agencies, local governments, land use agencies and other entities participating in the development of a long range transportation plan. The Project Engineer/ Planner will be the principal user of the guidance. Resource agency representatives may refer to this document to better understand the process and provide feedback on improving it.

Incorporation of resource agency considerations, priorities, regulatory, and resource management interests has long been an important goal of NCDOT. Initiatives and programs that reflect this endeavor have been labeled at the Federal level as Planning and Environmental Linkages (PEL), and support the strong focus of transportation legislation on streamlining and stewardship. The Protocol incorporates many of NCDOT's efforts to incorporate environmental interests, including a 2007 Coordinated Transportation Planning Workshop, the Integration Project, and the long-standing Merger process. Based on feedback from those efforts, it had become evident that additional guidance was necessary to effectively collaborate with partner agencies and organizations prior to Merger and NEPA/SEPA. Ultimately, the Protocol was developed to provide best practices for this coordination in the transportation planning process.

Background

The following section describes all engagement and input activities undertaken to develop the Protocol. These activities included extensive interviews, a webinar open to resource agencies across the state, a workshop hosted at ITRE for resource agencies and other planning partners, a workshop hosted by NCDOT's TPB for planners, and a survey sent to resource agency representatives across the state. These outreach efforts were used to inform resource agencies/organizations on the mechanics of the transportation planning process, obtain

information (including tools, data, and plans) that could be used in the planning process, identify roles and responsibilities, and develop methods for coordination. Information on the transportation planning process was shared in all outreach efforts in order to provide education.

All of the outreach efforts were critical in the development of the Protocol. The following short report summarizes what occurred in the Protocol development outreach effort, who was involved, and how that effort shaped the Protocol.

Interviews

Interviews were held with resource agencies, consultants, MPOs, RPOs, utilities, local governments, planning organizations, NCDOT, military personnel, and tribal representatives. Altogether, 46 individuals were interviewed over a two year period.

With regards to data, several interviewees representing resource agencies indicated they managed detailed information in the form of GIS data layers or online tools that planners could use in the development of transportation plans. Although planners may have an opportunity to review these tools independently, several interviewees observed that interpreting the data without the input of a subject matter expert may cause planners misinterpret the data or fail to understand the relative priority of resources for avoidance. Additional coordination would enable planners to better understand the value and quality of resources, and how to appropriately consider them in the planning process. As the Protocol was developed, the data managed by resource agencies became a major focus of the Protocol.

Many of the interviewees indicated that data used in resource plans may not necessarily be available to share as a GIS data layer, but could be accessed online (e.g., the Wildlife Resource Commission's Green Growth toolbox). Other agencies may not generate data, but use data produced by other agencies (e.g., NC Department of Commerce and NC Division of Public Health). Many resource agencies make use of GIS data layers that are currently included in a spreadsheet resource provided to planners, the *CTP GIS data layers spreadsheet*. This spreadsheet became a major focus of the Protocol guidance, as well as information on plans and tools managed by resource agencies.

Another significant finding of the interviews was that many of the resource agencies are working on initiatives that intersect or overlap. For example, the NC Department of Commerce supports rural communities developing economic development plans. Both the US Forest Service and Audubon Society investigate links between their managed resources and economic development opportunities, including related employment and ecological tourism. Through additional coordination, these groups have an opportunity to develop partnerships and leverage shared resources. Many of the proposed interactions in this guidance provide an opportunity for information sharing and collaboration between agencies.

Finally, almost all interviewees expressed a great deal of interest in greater coordination between resource agencies and planners in the Protocol, and believed that their participation would enable NCDOT to better address issues that may come up during project development.

Webinar

A webinar was held in August 2014 as a precursor to the workshop (held in September of 2014); resource agencies were introduced to the transportation planning process and goals of the Protocol. Because resource agencies have specific requirements for coordination that are distinct from some of the other groups interviewed (e.g., military and tribal connections), the webinar focused on resource agencies. Sixteen people attended the webinar, fourteen of whom had also been interviewed.

Over the course of the hour-long webinar, participants were asked a series of questions to gauge their understanding and current level of involvement in the long-range transportation planning process. Approximately 33% of participants had never been involved in a long-range transportation planning effort. The webinar provided an opportunity to educate these agencies, as well as further educate those previously involved, on the transportation planning process, using the framework documented for the Comprehensive Transportation Planning process.

After reviewing the transportation planning process, participants were asked which two steps were particularly important for their agency's involvement. Participants did not overwhelmingly select any two steps, but rather selected steps throughout the process in relatively equal measure. This feedback was incorporated into the Protocol by expanding the focus for coordination to include the entire planning process, and not any particular two steps.

Participants were also given an opportunity to comment on data that their agencies would be able to provide and suggest datasets that could be particularly useful. Participants indicated a wide range of data, including information on GIS data layers, land-use related data, and contacts with critical stakeholders. More than 92% of participants also indicated that their agency develops long-range and strategic plans. The Protocol provides many opportunities for planners and resource agencies to share information, and provides specific guidance for the data types identified in the webinar.

Workshop

A workshop was held in September 2014 to specifically identify and discuss the coordination and data sharing opportunities for resource agencies and planners in the transportation planning process. Sixteen people attended the workshop, twelve of whom had been interviewed previously. The workshop was designed to guide participants through a simulated planning effort and provide an opportunity for the two groups to interact. Participants also had an opportunity to share more information about tools and data specific to their agency or organization. For example, Allison Weakley shared information on the Natural Heritage

Program's NC Conservation Planning Tool, and Andy Henry presented on the Durham-Chapel Hill-Carrboro (DCHC) MPO's use of socioeconomic data in forecasting future land uses.

Participants were guided through a simplified transportation planning scenario. Participants were first asked to identify which types of data (e.g., water quality, critical habitat for threatened or endangered species, cultural) were important to consider over the course of the planning process. In the second part of the exercise, participants were asked to specifically list the questions that would best facilitate information exchange over the course of the planning process, and for which data types those questions were applicable. These questions were then coded according to several different schemes, including the type of coordination necessary to resolve the question and the type of concern raised in the question.

Resource agencies often asked questions that applied to many types of data and to many steps of the planning process. The workshop clearly illustrated that resource agencies have a strong interest in information developed over the course of the planning process, and agencies should not be included for only a part of the planning process. Many participants also indicated that they would find it very challenging to provide relevant information to planners without more information on either the planning study area or the planning process itself, suggesting that coordination would need to also require planners to transmit information to resource agencies in addition to gathering information from resource agencies.

Some of the questions the resource agency representatives asked lent themselves to different types of coordination. For example, agencies can be told via email whether the study area has been defined, and agencies can also alert planners that a resource plan has been updated by email. However, a meeting may be more appropriate to explain how certain alternatives were chosen, or to identify the most critical resources in a study area. The different types of coordination, and sometimes the questions themselves, are incorporated into the Protocol.

At the end of the workshop, participants were asked to fill out a short questionnaire asking their preferred method for coordination through the planning process and during the drafting of a transportation plan. Workshop participants indicated that a relatively wide range of methods would be appropriate, and a large percentage indicated that email (via email distribution list), individual meetings, and phone calls would all be appropriate. Methods that were preferred by the largest groups of people are prioritized in the Protocol.

TPB & FHWA Focus Group

The Transportation Planning Branch hosted a focus group with eight representatives of the Transportation Planning Branch and the Federal Highway Administration (FHWA). This meeting was held as an open discussion of key issues and opportunities that planners have encountered while coordinating with resource agencies.

Planners shared that downloading individual data layers from the *CTP GIS Data Layers spreadsheet* was tedious and expressed a desire to make the process of incorporating those layers more efficient. To make users aware of functionality that has been added to ArcGIS, instructions on using batch processing have been added to the Protocol.

The planners generally reported that better coordination would be a great benefit to the quality of the transportation plan. Planners wanted to know which contacts would be the most appropriate early in the process, and also identified groups that were not the focus of this version of the Protocol (i.e., educational and university contacts). As the Protocol evolves and is updated, additional groups may be incorporated. Planners found it challenging to identify the correct person to contact at resource agencies and, to address this concern, a specific list of representatives has been included in the Protocol.

The group also indicated that it would be useful to have more guidance from resource agencies on when it was most appropriate to coordinate. The specific, step-by-step instructions included in the Protocol were developed specifically in response to this feedback.

A number of questions planners would like to see answered were incorporated into the Protocol as well (e.g., concerns with existing TIP projects, knowing whether agencies have existing plans, determining the best mechanism for regular information sharing, concerns about where growth is anticipated). Some of these questions were addressed with language included in sample emails, or by providing step-by-step instructions on sharing information. One worksheet on resource agency plans included in the Protocol Companion Tables, titled 'Plans,' was developed in order to provide planners with a complete list of plans developed by resource agencies in the state.

This group also provided very detailed information on documentation, and recommended that responses be saved in a widely-readable format (PDF) so that other planners and NCDOT's Project Development and Environmental Analysis Branch (PDEA) would be able to easily access them. Guidance on saving information to the CTP project file was added to the Protocol to address this feedback. The group also recommended the use of a survey and a spreadsheet for documentation. The 'Documentation' worksheet in the Protocol Companion Tables was developed to consolidate documentation for all agencies, and also provide information on plans and layers that relate to the agency listed. A survey was also developed to send to resource agencies at the close of the transportation planning process to provide feedback on the quality of coordination.

Survey

Forty-three (43) representatives of resource agencies responded to a survey, distributed from November 2014 to March 2015. Respondents included representatives from fifteen (15) agencies/organizations in the state. A major focus of the survey concerned the GIS data layers included in the *GIS Data Layers spreadsheet*. Respondents were asked to identify layers that

were of interest to their agency and to identify whether they would be the most appropriate person to answer questions about the layer selected.

The survey results were used to develop a targeted list of resource agency representatives who would be able to interpret information contained in the data layers. The results were also used to determine which layers are of interest to each resource agency. All respondents who self-identified as an appropriate contact for their agency have been included in the Protocol. In order to allow planners to either address questions associated with a particular layer or to provide information to resource agencies on layers of interest, new spreadsheets have been developed and provided to planners in the Protocol Companion Tables. One worksheet, 'Documentation', lists all resource agencies with their interested layers. Another worksheet, 'Report Maps', lists all of the layers included in the CTP GIS Data layers spreadsheet and an appropriate contact information.

The survey also revealed a number of newly-identified map layers that could, in the future, be provided to planners in the *GIS Data layers spreadsheet*. It also was used to identify resource agencies' plans for resources under their supervision. These plans were incorporated into the Protocol Companion Tables 'Plans' worksheet.

The survey was also used to update agency contact information that changed over the course of the development of the Protocol. Because much of the information gathered over the course of the development of the Protocol changed even over the course of only two years, this document is not likely to remain relevant as individuals leave positions, or as agency regulatory responsibilities evolve and internal structure changes. This document includes instructions to the Transportation Planning Branch on updating the Protocol, which would include updating contacts and refining the recommendations as appropriate.

Procedure Guidance

Description

The purpose of this procedure is to provide a consistent methodology for completing and documenting interagency coordination and facilitating the exchange of information in comprehensive transportation and long range planning. While this document was created to support the Comprehensive Transportation Planning (CTP) process, it can be used to support other transportation planning processes, including the fiscally-constrained Metropolitan Transportation Plans (MTP) prepared by Metropolitan Planning Organizations. **This document does not replace other guidance in CTP procedures, and should be used in conjunction with other guidance on the CTP process.** Accompanying documents listed with different steps refer to the CTP, but may be changed to reflect other planning processes.

The Protocol includes six procedures (referred to as Protocol 1, Protocol 2, Protocol 3, etc.). Within each of these procedures, a series of steps provides specific instructions to the Project Engineer/ Planner. The procedures roughly correspond to the five phases of a typical transportation planning process: develop vision, conduct needs assessment, analyze alternatives, develop final plan, and adopt plan.

Responsibility

It is the responsibility of the Project Engineer/ Planner (s) (referred to hereafter as ‘planner(s)’) to:

- Mutually agree upon which duties will be performed by NCDOT’s TPB and the MPO/ RPO
- Follow the procedures outlined in this document
- Refer to accompanying documents where indicated, including:
 - Appendices
 - Protocol Companion Tables
 - CTP GIS Data Layers spreadsheet

*Note that the Protocol Companion Tables are contained within the CTP GIS Data Layers spreadsheet as posted on the TPB Procedures Manual effective 2/5/16.

- In Appendix material, replace text fields (for example: [Name]) with the text or material indicated
- Document results from each step as instructed

It is requested that resource agencies:

- Participate in the transportation planning process as they are able and deem appropriate. While resource agencies are under no obligation to engage in this process, the Protocol was designed to support consideration of resource agency priorities in long range transportation planning, and we believe that this document will play a supporting role in each agency’s objectives.

- Refer project engineers/planners to the correct contact within their organization, if the individual named is no longer correct
- Represent the priorities of their organizations during coordination, whether by email or at meetings

Scheduling and time constraints

For a transportation planning study, the Project Engineer/ Planner should engage resource agencies to identify sensitive and critical resources in the planning area and share any available information concerning the transportation planning schedule or time constraints. The process described in this Protocol should be initiated at the very beginning of the transportation planning process and is continuous throughout the process

Documentation

Documentation of the coordination that occurs between resource agencies and planners during a transportation planning study is critical to capturing the input that was received, and for showing how that information informed decision making. Documentation is required throughout the coordination process. It is recommended that all documents be saved in PDF format to enable staff in other organizations and business units to easily access them. For a Comprehensive Transportation Plan (CTP), Project Engineers/ Planners should save responses in the CTP project file to all emails of substance (those relevant to decisions made during the planning process). Please visit the following link for more information on the project file: <https://connect.ncdot.gov/projects/planning/TPB%20Documents/IP-CTP-Guidelines.pdf>.

For other transportation planning processes, a similarly-named project file can be used to save and reference information gathered over the course of coordination.

Protocol 1: Initiate Contact

Objectives

- Notify agencies that the planning process is beginning and provide information on the process
- Educate agencies on the planning process
- Develop an email distribution list to enable regular updates throughout the plan development
- Initiate documentation procedures for coordination with resource agencies

Procedure

Step	Action	Accompanying Documents
1	Create a list of all group members who will receive regular, ongoing updates about the planning process. See Appendix 1 for contact names and emails.	Appendix 1
2	Establish an appropriate tag for all emails sent out to this group (e.g., “[Hilltown CTP]”) including all resource agency representatives.	
3	Send an email informing group members of the creation of the email distribution list (see Appendix 2 for a sample email). If a previous comparable plan has been done for the area, provide a link to the previous plan or send the plan as an attachment. If no comparable plan has been done, please provide as much information about the study area as possible (e.g. a list of counties affected, a map, etc.). Also provide some brief background information about the purpose of a long range transportation plan and the process used to develop or update the plan. For CTPs, Appendix 3 may be used as the background information. Copy the content of the appendix into a new document, save this document as ‘Overview of CTP’, and attach that document to the email.	Appendix 2, Appendix 3
4	Save a copy of this email, in PDF, to the project file; also, update any contact information in the ‘Report Maps,’ ‘Documentation,’ and ‘Plans’ tabs in the CTP GIS Data Layers spreadsheet.	CTP GIS Data Layers[date]-Documentation.xlsx
5	Regular updates sent to resource agencies should include: <ul style="list-style-type: none"> • Notice of public meetings • Notice of and summaries from steering committee meetings • Other outreach as appropriate 	

Approved: 2/5/16

Revised: _____

Version 1

Linkage to CTP Step(s)

This step should be initiated at the beginning of CTP1a: Hold Initial Meetings, Assemble Existing Data.

Protocol 2: Coordinate with Agencies on Data and Goals

Objectives

- Gather information on resource agency plans, data, and tools
- Verify that relevant plans, tools, and GIS data layers under consideration have been gathered and are up-to-date
- Develop a basic understanding of information included in GIS data layers
- Develop a baseline understanding of critical plans and tools in the transportation plan study area
- Collect resource agency feedback on measures of effectiveness

Procedure

Step	Action	Accompanying Documents
1	Ensure you are using the most current copy of CTP GIS Data Layers.xlsx, according to the Procedure 'Collection and Presentation of Environmental Data' [https://connect.ncdot.gov/projects/planning/TransPlanManuals/Collect_Environmental_Data.pdf]. The Data Layers spreadsheet can be obtained from S:\Shared\TPB Reference\Comprehensive Transportation Plan, or by contacting your TPB coordinator (for MPOs/ RPOs).	CTP GIS Data Layers[date].xlsx
2	Send an initial email to members of the email distribution list to ask whether a specific vision exists (i.e., goals or plans for the resources in the area) for the area in question, and to identify whether members are engaged in any planning efforts that will affect land use plans in the transportation planning study area. In your email to the email distribution list, please include: <ul style="list-style-type: none"> • The study area details/boundary (as a GIS data layer, if possible) • Community Understanding Report for the area (if available) • A list of the GIS data layers under consideration • A list of plans and tools under consideration (if different from list included in Community Understanding Report) • Other data as appropriate 	Appendix 4, CTP GIS Data Layers[date]-Plans.xlsx, CTP GIS Data Layers[date]-Report Maps.xlsx
3	Add new GIS data layers, plans, or tools to the 'Documentation' tab in the CTP GIS Data Layers spreadsheet.	CTP GIS Data Layers[date]-Documentation.xlsx

4	Review relevant plans, GIS data layers, and tools that contain information on the transportation planning study area and save notes (in PDF) to CTP project file.	CTP GIS Data Layers[date]-Plans.xlsx
5	<p>Develop the Environmental Features Map for the transportation planning area according to the Procedure 'Collection and Presentation of Environmental Data.'</p> <p>Note: It is possible to add multiple layers in a single operation called 'batch processing.' In ArcMap 10, all geoprocessing tools have a batch mode. To use batch, right click the tool and click 'batch.' This process can be used to add multiple fields at one time. It is similarly possible to run the Clip tool once for several input datasets.</p> <p>For more information, please visit http://webhelp.esri.com/arcgisdesktop/9.2/tutorials/GP_3_8.htm</p>	
6	Review GIS data layers to ensure a basic level of understanding. For questions about a specific layer, use the contact information in the CTP GIS Data Layers.xlsx to coordinate with the appropriate resource agency staff.	CTP GIS Data Layers[date].xlsx
7	Provide information to resource agencies on measures of effectiveness to be used in transportation planning process and solicit feedback/recommendations; save all responses in PDF to the project file.	Appendix 5

Linkage to CTP Step(s)

This step should be completed in conjunction with the following steps:

- CTP1e: Develop CTP Goals/Objectives
- LU9: Identify Land Use Strategies to be Tested
- CTP 1f: Identify CTP Measures of Effectiveness
- LU 11: Develop Land Use Performance Targets
- CTP 1g: Develop Performance Targets
- CTP1h: Agreement on Tools and Data Needs
- CTP 2b: Collect/Update Data
- MM8: Develop Multi-modal Performance Targets
- LU 20: Endorse Fiscal Year Land Use Data

Protocol 3: Validating Resource and Transportation Priorities

Objectives

- Share information with resource agencies on the transportation planning study area and information on transportation deficiencies
- Identify areas of opportunity and areas that should be avoided
- Consider resource agency priorities (as expressed through plans, data layers, maps, and feedback) while developing transportation system alternatives

Procedure

Step	Action	Accompanying Documents
1	Coordinate with resource agencies to review the study area priorities and obtain their input. Most often, the agencies will be engaged through a workshop located in the study area, which may be held in conjunction with a steering committee meeting. A workshop is recommended but other methods may be used.	Appendix 6
2	<p>Prepare information to share with resource agencies. Prepared documentation and GIS data should be shared with resource agencies 2 weeks in advance of the meeting.</p> <p>Prepare the following documents:</p> <ul style="list-style-type: none"> • A meeting agenda, including the purpose and objective of the meeting • The transportation planning study area • The Environmental Features Maps <p>Documentation addressing the following questions:</p> <ul style="list-style-type: none"> • Where is growth anticipated? • What deficiencies have already been identified? • Are there any existing project proposals and if so, where did they come from (i.e. previous transportation plans, land use plans, etc.)? <p>Document this information in advance of coordination and include the documentation in the project file. Much of the relevant information will be in the Community Understanding Report (CUR), if one has been developed for the transportation planning study.</p>	
3	At this meeting/workshop, share the prepared information. It is	

	<p>recommended that you:</p> <ul style="list-style-type: none"> • Summarize work on the transportation plan to date (as of the time of this workshop or other outreach method) • Allow resource agencies to identify key resources in the area (a map or series of maps that can be drawn on may be helpful) • Allow resource agencies to interpret resource plans for the benefit of planners • Establish a timeframe for review by agencies 	
4	<p>Document agencies' interpretation of the resources in the project file in PDF form. If a map is used, include documentation of the map in the project file as well (in the form PDF or an image file).</p> <p>In particular, document resource agencies' answers to the following questions:</p> <ul style="list-style-type: none"> • Which resources are most critical to avoid impacting? • Are there any particular issues or opportunities agencies would like to highlight? • What are the mitigation challenges associated with the resource? • Which areas contain habitat for rare, threatened, or endangered species? • What are the issues around habitat fragmentation in the area? 	
5	<p>Refer to information in the project file, feedback received in previous steps, and maps developed in workshop while developing transportation system alternatives for the transportation plan. Revise Environmental Features Maps as needed.</p>	

Linkage to CTP Step(s)

This step should be completed in conjunction with the following steps:

- CTP2c: Quality Check Data
- CTP3a: Evaluate Constraints
- CTP 3b: Identify Key Priorities
- LU23: Determine Viable Land Use Scenarios to be Carried Forward
- MM16: Identify Multi-modal Alternatives

Protocol 4: Coordinate on Project Proposals and Alternatives Analysis

Objectives

- Gather input from resource agencies on project proposals and alternatives under consideration

Procedure

Step	Action	Accompanying Documents
1	Send an email to email distribution list members to introduce the project proposals and alternatives analysis review process. Solicit request for participation at one of two meetings: one at a local transportation plan steering committee meeting, and one in Raleigh. Prepared documentation and GIS data should be shared with resource agencies 2 weeks in advance of the meeting.	Appendix 7
2	<p>Meet with resource agencies to receive feedback on potential project proposals and alternatives. Use advice on small group meetings tools from the Public Engagement Toolkit to develop an approach to the meeting (see https://connect.ncdot.gov/projects/toolkit/Pages/default.aspx).</p> <p>At this meeting, show the deficiencies map for resource agencies to review along with identified deficiencies that resulted from the study's vision, goals and objectives, and explain what needs are being addressed with proposed changes to the system, by doing the following:</p> <ul style="list-style-type: none"> • Define the problem (using information from draft Problem Statements, being developed according to the Procedure 'Development of Problem Statement' https://connect.ncdot.gov/projects/planning/TransPlanManuals/Problem_Statement_FINAL.pdf) • Reference the Environmental Features Maps, including input received during coordination as part of Protocol Step 3 • Explain how and why the project proposals and alternatives that are being considered were developed; explain the needs being addressed (using information from the draft Problem Statements) • For those project proposals for which an alternatives analysis is being conducted, describe the difference between the 	

	<p>potential alternatives in terms of impacts and the degree to which they solve the identified problem</p> <ul style="list-style-type: none"> • Ask resource agencies to provide information on legal protections and regulatory constraints for each resource 	
3	<p>Obtain agencies' input on the project proposals and alternatives. At a minimum, document responses to the following questions in the project file:</p> <ul style="list-style-type: none"> • Are there any specific criteria that would make a solution unreasonable (either professional judgment or regulatory)? • Comments on potential impacts • Potential challenges with proposed solutions • Ideas for other solutions or alternatives <p><i>Please note that agency participation in long range planning does not circumvent statutory requirements that are mandated to specific agencies.</i></p>	
4	<p>Compile agency input into a meeting summary. Follow up with the meeting participants (and others, as needed) to get clarification on the input received. Save this to the project file.</p>	
5	<p>Distribute the meeting/input summary through the email distribution list and verify that the information captured is accurate and complete. Save the summary to the project file.</p>	
6	<p>Use agency input as alternatives analysis is completed and project proposals are finalized for a draft transportation plan. Clearly document how comments and input were considered and what modifications were made as a result of the input. Share this information with email distribution list members.</p>	

Linkage to CTP Step(s)

This step should be completed in conjunction with the following steps:

- CTP3c: Identify Alternatives and CTP Scenarios
- CTP3d: Evaluate Alternatives and CTP Scenarios

Protocol 5: Submit Draft Transportation Plan for Review

Objectives

- Share draft transportation plan with resource agencies
- Collect comments from resource agencies on the draft transportation plan

Procedure

Step	Action	Accompanying Documents
1	Distribute draft transportation plan to the email distribution list, as maps in both PDF and GIS formats. If it has not been shared earlier, include information regarding how comments and input from prior coordination (in particular, Protocol 4, Step 6) were considered and what modifications were made to the draft transportation plan as a result of the input. If recommendations were not included, please provide an explanation for why those recommendations were not followed. Include shapefiles of proposed transportation improvements to those who request it.	Appendix 8
2	Compile resource agency comments for use as appropriate in finalizing the transportation plan and document clearly in the CTP project file.	

Linkage to CTP Step(s)

This step should be completed in conjunction with the following steps:

- CTP4a: Draft Implementation Strategy (Financial Plan)
- CTP 4b: Develop CTP Maps

Protocol 6: Submit Final Transportation Plan

Objectives

- Share the final transportation plan with resource agencies

Procedure

Step	Action	Accompanying Documents
1	Distribute the final transportation plan to email distribution list.	Appendix 9
2	Distribute a survey to resource agency partners to gather feedback on the coordination process. Include summary results in CTP project file. Send the summary results to the TPB staff engineer.	Appendix 10

Linkage to CTP Step(s)

This step should be completed in conjunction with the following steps:

- CTP5a: Adopt Air Quality Conformity
- CTP 5b: Adopt CTP (MPO)

Procedure to Update the Protocol

Description

The purpose of this procedure is to provide the Transportation Planning Branch with a consistent methodology for maintaining current information from resource agency partners and for updating the Interagency Coordination Protocol based on their feedback. This guidance stands apart from the Comprehensive Transportation Planning process.

Responsibility

It is the responsibility of the Transportation Planning Branch staff engineer to:

- Distribute an annual survey to resource agencies to update current contact information, GIS information, and resource agency plans
- Update the Contact Information Template
- Provide this updated Contact Information Template to Project Engineers/ Planners

Scheduling and time constraints

Separate from any transportation plan study, the TPB staff engineer should engage resource agencies at least once a year to update contact information, incorporate new or updated GIS data layers, and identify current plans. This process should occur at a specified time each year, with the understanding that the update process will be a significant undertaking, particularly depending on response rate to the survey and the follow up coordination that may be necessary. A work group to address significant updates to the GIS data layers and to make decisions related to data layer use may be needed.

Documentation

Performing this procedure will primarily result in changes to this Protocol, and to the Protocol Companion Tables within the GIS Data Layers spreadsheet. After completing revisions to both, TPB staff should update the record of revision included at the end of this section.

Procedure

Step	Action	Accompanying Documents
1	Prepare to contact the resource agencies to solicit their input on any needed modifications to the Protocol. Update the survey in Appendix 11 to reflect current data layers. Review input received through surveys and other documentation collected over the course of the year.	Appendix 11
2	Distribute the Annual Coordination Process Survey to resource agency partners.	Appendix 11
3	Compile and analyze the results of the coordination survey.	
4	Update the <i>CTP GIS Data Layers spreadsheet</i> with current layers and download instructions.	CTP GIS Data Layers[date].xlsx
5	Update the Protocol Companion Tables within the GIS Data Layers spreadsheet with current plans and contact information for layer contacts.	CTP GIS Data Layers[date]-Plans.xlsx
6	Update the Protocol with current email list (Appendix 1). Modify steps as needed.	Protocol (docx and pdf)

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. Contact TPB Staff Engineer with all the questions about this procedure.

Version	Section Affected	Description	Effective Date

Appendix 1: Email Distribution List

The eastern region includes NCDOT Divisions 1, 2, 3, 4, 5, 6, and 8. The western region includes Divisions 7, 9, 10, 11, 12, 13, and 14. For more information, see the following:

https://connect.ncdot.gov/resources/Environmental/Documents/PDEA_Information_Map_June2015.pdf

The email addresses included in the list below should be included in all communication for their region and additional contacts may be identified specific to the planning area. Additional information about the agency contacts is contained in the CTP GIS Data Layers[date].xlsx.

Eastern

cathy.brittingham@ncdenr.gov
 travis.wilson@ncwildlife.org
 kathryn_matthews@fws.gov
 gary_jordan@fws.gov
 director@rluac.com
 csmalling@audubon.org
 wgolder@audubon.org
 tim.johnson@nc.gov
 joshua.levy@nccommerce.com
 david.welch@ncagr.gov
 daniel.madding@ncagr.gov
 robert.hosford@ncagr.gov
 renee.gledhill-earley@ncdcr.gov
 dolores.hall@ncdcr.gov
 bethany.georgoulas@ncdenr.gov
 anne.deaton@ncdenr.gov
 amy.chapman@ncdenr.gov
 cam.mcnutt@ncdenr.gov
 rich.gannon@ncdenr.gov
 cyndi.karoly@ncdenr.gov
 amin.davis@ncparks.gov
 nancy.daly@ncdenr.gov
 suzanne.mason@ncdenr.gov
 john.amoroso@ncparks.gov
 erin.lawrence@ncparks.gov
 lori.rhew@dhhs.nc.gov
 ruth.petersen@dhhs.nc.gov
 david.jones@ncagr.gov
 kcompton@fs.fed.us
 durbrow.rick@epa.gov
 brad.e.shaver@usace.army.mil
 eric.c.alsmeyer@usace.army.mil
 sarah.e.hair@usace.army.mil
 tracey.l.wheeler@usace.army.mil
 thomas.a.steffens@usace.army.mil

Western

marla.chambers@ncwildlife.org
 travis.wilson@ncwildlife.org
 marella_buncick@fws.gov
 csmalling@audubon.org
 wgolder@audubon.org
 tim.johnson@nc.gov
 joshua.levy@nccommerce.com
 david.welch@ncagr.gov
 daniel.madding@ncagr.gov
 robert.hosford@ncagr.gov
 renee.gledhill-earley@ncdcr.gov
 dolores.hall@ncdcr.gov
 bethany.georgoulas@ncdenr.gov
 anne.deaton@ncdenr.gov
 amy.chapman@ncdenr.gov
 cam.mcnutt@ncdenr.gov
 rich.gannon@ncdenr.gov
 cyndi.karoly@ncdenr.gov
 amin.davis@ncparks.gov
 nancy.daly@ncdenr.gov
 suzanne.mason@ncdenr.gov
 john.amoroso@ncparks.gov
 erin.lawrence@ncparks.gov
 lori.rhew@dhhs.nc.gov
 ruth.petersen@dhhs.nc.gov
 david.jones@ncagr.gov
 kcompton@fs.fed.us
 durbrow.rick@epa.gov
 david.e.bailey2@usace.army.mil
 john.t.thomas.jr@usace.army.mil
 crystal.c.amschler@usace.army.mil
 andrew.e.williams2@usace.army.mil
 steve.l.kichiefski@usace.army.mil
 loretta.a.beckwith@usace.army.mil

Appendix 2: Establishing Email Distribution List

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Creating an email distribution list for plan update

All,

I am writing to inform you that planning will soon begin for the [Hilltown] Comprehensive Transportation Plan (CTP). This study area includes: [the attached map (include a shapefile of the study area boundary if available)/the following counties in whole or in part]. The most recent CTP for this area was completed in [year]. The link to the plan is located online at [link to plan]. [Insert here any information available about the schedule or deadline established for the transportation plan].

The CTP is a mutually adopted legal document between the state of North Carolina and local area partners, and consists of multi-modal maps and accompanying documentation that represents a community's consensus on future transportation needs. Maps include the current transportation system and needs 25-30 years in the future. Please see the attached document on the CTP for more information.

We would like to engage with resource agencies that may have data, insights, and information that should be considered as part of this planning process. We would also like to include your agency's feedback as we consider the plans of future transportation projects. If you are aware of other partners who should be kept informed over the course of this process, please let me know.

Regular updates will be distributed with the following tag: [Hilltown CTP]. These emails will include information on the current status of the CTP process and invitations for additional consultation at critical points in the CTP process. We are also interested in identifying other partners who should be kept informed over the course of this process.

Please feel free to call me at [telephone number] or email me at [email address] or [supervisor's name] at [supervisor's email address] if you have any questions. Please let me know if others at your agency should be added to the email distribution list.

Best,

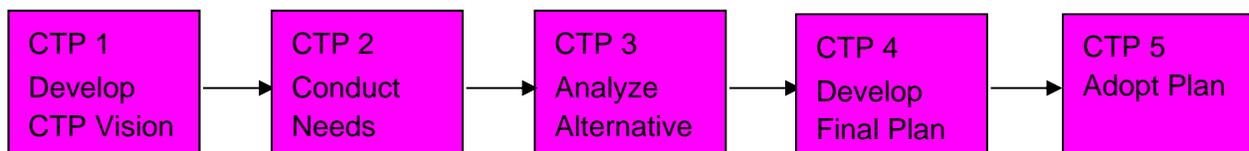
[Name]

Appendix 3: CTP Overview

Comprehensive Transportation Plan (CTP) Process

In North Carolina (NC), a Comprehensive Transportation Plan (CTP) shows a community's transportation system, both current and 25-30 years in the future. Municipalities and MPOs are required by General Statute to prepare a CTP; counties may also prepare a CTP in cooperation with NCDOT. The CTP represents a community's consensus on future transportation needs to support anticipated growth and development, and is a mutually adopted legal document between the state and the local area partner(s). When a CTP is adopted by North Carolina Department of Transportation (NCDOT) it represents the state's concurrence with the identified transportation needs and proposed recommendations. The final plan is multi-modal, and will include current and future plans for highways, public transportation, rail, bicycle, and pedestrian facilities.

CTPs are developed using the CTP process.



The CTP process consists of five (5) High-Level Steps that outline the sequence of major activities. The basic flow of the process is to: establish the framework for the CTP study (Step 1 – Develop CTP Vision); collect data and identify existing and future transportation deficiencies (Step 2 – Conduct Needs Assessment); identify and evaluate various options for addressing the deficiencies (Step 3 – Analyze Alternatives); finalize CTP proposals and document the process (Step 4 – Develop Final Plan); and conduct the final review and adoption process (Step 5 – Adopt Plan).

Develop CTP Vision (CTP 1)

The first step of the CTP process is “Develop CTP Vision”. It is important to recognize that the purpose of this step is to set the foundation for the partnerships that are needed to develop a CTP that fits into a community's vision. A key element of this step is educating all partners and policy officials of the key linkage between land use and transportation decisions, as well as the need to be aware of environmental opportunities and constraints (human and natural) as land use and transportation planning decisions are made. Consensus, active participation, and clearly defined goals and objectives would demonstrate successful implementation of this part of the process.

Conduct Needs Assessment (CTP 2)

The second step of the CTP process is “Conduct Needs Assessment”. This is primarily data collection, data projection (for socioeconomic data), and an analysis of the current transportation system. This step begins with agreement by the planning partners of the roles, responsibilities, and schedule for developing the CTP and concludes with agreeing upon the future transportation system deficiencies. Success in CTP 2 is demonstrated by agreement on data, participation by all planning partners, and agreement on base and future year deficiencies.

Alternatives Analysis (CTP 3)

The third High-Level Step of the CTP process focuses on developing and evaluating different CTP strategies that address the transportation deficiencies. In evaluating different strategies to handle these deficiencies, it is necessary to look at environmental issues (opportunities and constraints) – both human and natural, and community/ public desires – relating back to the community’s vision and the transportation benefit. Alternatives and scenarios that are fully evaluated against the performance measures, documented, agreed upon, and tied to the vision are indicators of success in this part of the CTP process. For alternatives and scenario analysis, the following definitions are important:

- *Alternatives* – Options studied for the scope, concept, and location of a transportation proposal to serve a specific deficiency or need
- *Scenarios* – Options studied for groupings of multi-modal transportation proposals (alternatives) with land use assumptions to address the various needs throughout the area being studied

Develop Final Plan (CTP 4) and Adopt Plan (CTP 5)

The final two High-Level Steps in the CTP process are the mechanism to move the plan through the adoption process and complete the air quality conformity determination process (for nonattainment/ maintenance areas only). Success in these two final phases of the CTP process is evidenced by mutual adoption of the CTP by NCDOT and the Metropolitan Planning Organization (MPO) or local governments in non-MPO areas, good documentation, and a plan that is implementable and representative of the community’s vision.

Comprehensive Transportation Plan (CTP) Process Flow

CTP1 - Develop CTP Vision:

In the initial phase of the CTP process, everyone that should be included in the CTP development is identified – transportation professionals (local, state, and federal), land use professionals, resource agencies, and other staff/ professionals that may be unique to an area. While everyone does not necessarily need to attend study initiation meeting(s), they should be notified and informed of the initiation of a CTP study. This is not a single activity or point in time, rather, it is a series of activities, including gathering existing data, preparing initial information, and holding meetings in order to initiate the CTP study.

In many instances, the planning process is driven by a need to complete a plan by a certain date – usually relating to air quality (AQ) conformity or Metropolitan Planning Organization (MPO) plan update cycle. It is important to establish early in the CTP process critical deadlines and the consequences of not meeting these deadlines.

The various land development plans in the area are gathered and reviewed to see if they are adequate for transportation planning. It is important to determine whether there is consistency across the planning area – particularly since most CTP study areas in North Carolina (NC) have multiple jurisdictions. In addition, it is important to identify inconsistencies between the land development plans within the area that would hinder a unified land use and transportation vision. These inconsistencies and conflicts between existing plans must be resolved and a consistent community land use vision developed for the planning area. Once there is a consistent community vision for the planning area it is important to clarify any multi-modal components that are a part of that vision.

Building upon the land use vision for the planning area, and using input from planning partners and the public, a CTP (or transportation) vision is developed. As with the land use vision, it is important to recognize that different communities and planning partners within the planning area may have inconsistent transportation visions. It is necessary to find common ground between planning partners to develop the CTP vision before moving forward with the CTP study. The CTP vision will be the framework for developing, analyzing, and evaluating transportation options during the CTP process.

It is also necessary to determine how the land use and transportation plans will help achieve the community vision, as expressed through land use, multi-modal and overall CTP Goals and Objectives. Measures of effectiveness (MOEs) and performance targets establish the criteria for determining if the land use and transportation plans meet the community vision. The measures of effectiveness will allow decision makers to see how well the future land development patterns and transportation system work together to achieve the vision for the planning area.

CTP2 – Conduct Needs Assessment:

The validity of the CTP depends on getting accurate data and developing good planning tools. This means gathering a wide range of data from multiple sources and partners including base year land use data and transportation system data (for example, roadway attributes, transit, pedestrian, or bicycle information), financial data (costs and revenue) and environmental information (GIS or other forms). After accuracy checks, the base year land use and transportation system data and analysis tool(s) are endorsed by the planning partners.

Once the base year information has been endorsed, future year data is needed to evaluate the transportation system deficiencies and possible solutions. This data can be forecasted as

multiple land use scenarios, with each land use scenario representing a distinct allocation of data to the zonal or district level, in order to evaluate the relationship between various options for future land use choices and possible transportation improvements. Prior to moving forward and identifying future year deficiencies, the planning partners will endorse the future year land use scenarios to be evaluated.

The planning partners also agree on identified problem areas that need some type of transportation service improvement (for example, roadway capacity improvement, transit service, bicycle or pedestrian facilities). It is possible that deficiencies in the transportation system, especially in regards to the non-highway modes, may be identified by a lack of service or facilities.

CTP3 – Alternatives Analysis:

Before evaluating constraints it is important to identify the broad range of solutions that will be considered. It is also important to ensure that the land use policies and desires match desired multi-modal alternatives and there is an analysis tool(s) available to evaluate various alternatives.

It is important to identify environmental areas to where impacts should be avoided/ minimized when developing different alternatives, whether that is natural environmental resources or built environments, such as neighborhoods and community facilities. This may include resources or features that have special local importance. It is also important to identify areas that need to be served (for example, a proposed industrial park, major commercial development, or other strategies aimed to promote a defined economic development).

The identification and evaluation of alternatives and scenarios is an iterative process. Various alternatives are developed based on the community's vision, avoidance/ minimization of natural and human environmental impacts, and addressing identified deficiencies (as assessed using the agreed upon MOEs). As a part of the documentation associated with these steps, it is important to denote alternatives that were not considered (for example, it did not make sense to actually propose a project in the critical watershed or there was no reason to propose a project in a location that would not serve the transportation need). The documentation should also include a description of how the planning partners balanced meeting the community's vision, addressing future travel demand, and avoiding/ minimizing impacts to the natural and human environment.

In addition to evaluating alternatives individually, the various project proposals across the entire planning area are combined and paired with the appropriate land use scenario(s). The agreed upon MOEs and performance targets are used to evaluate these scenarios. Based upon this evaluation and input from the planning partners and the public, a scenario is ultimately selected as the draft CTP.

CTP4 & CTP5 – Develop Final Plan & Adopt Plan:

The CTP includes recommendations for a transportation system that addresses existing and future travel demand. As the local governments within the planning area identify the transportation system desired, the associated land use scenario may contain differences from their current land development plans. These differences are identified and the local land use/ land development plan(s) need to be changed to be consistent with the proposed CTP.

Recommended implementation strategies that are part of the CTP may include those related to land development (e.g. zoning requirements), and/ or those to protect environmentally sensitive areas and reduce the potential for indirect and cumulative effects (ICE).

For areas that are designated nonattainment or maintenance for one of the National Ambient Air Quality Standards, a conformity determination is required for all transportation plans, transportation improvement programs, or projects. Transportation Conformity includes a technical evaluation of the impacts of the transportation projects on air quality and involves interagency coordination between the state and local transportation and air quality partners, EPA, FHWA, and FTA with public involvement before federal approval is ultimately made.

The CTP process concludes with mutual adoption of the CTP maps by NCDOT and the MPO or local governments in non-MPO areas. Once the maps are approved it is essential to provide feedback to the land use agencies, especially where the adopted CTP is based on a land use scenario with some differences from the adopted land use/ land development plan(s). A CTP report documents the study process and recommendations, including recommended land use strategies to support the transportation plan.

Appendix 4: Data, Plans, and Tools Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Data, plans, tools and other information

All,

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. As part of the Comprehensive Transportation Planning process, the planning team in Hilltown is collecting any information relevant to the CTP study area that could inform the development of CTP goals, objectives and measures of effectiveness. This study area includes: [the attached map/the following counties in whole or in part]. The Community Understanding Report (CUR) is also attached for your reference. A shapefile of the study area and/or layers referenced in the CUR may also be available upon request.

A list of plans or tools that we have on file is included below. If you have additional or updated layers, plans, or tools that are not included in this list, please inform me as soon as possible.

- GIS Data Layers (document attached)
- Plans and tools (document attached)
- [Other data as appropriate]

Finally, we would like to collect any additional information your agency may have that is relevant to the CTP study area that could inform the development of CTP goals and objectives. Specifically, we would like your feedback to better understand your agency's vision for the CTP study area. Your comments would be appreciated prior to this date: [include date].

Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,

[Name]

Appendix 5: Measures of Effectiveness Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Measures of effectiveness

All,

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. I am writing to inform you that measures of effectiveness have been selected for the Hilltown Comprehensive Transportation Plan (CTP). These measures will be used later in the planning process to help define the criteria used when evaluating alternative courses of action.

These measures include:

[Include list of measures]

Please provide any feedback on these measures that you may have prior to [date].

Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,

[Name]

Appendix 6: Workshop Invitation Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Invitation to workshop to be held [insert date]

All,

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. To better understand the natural resources and information contained in plans concerning the CTP study area, we would like to invite you to a one-day workshop to be held [date, time, and location].

In this workshop, we will discuss current information on the CTP in the area, review plans, tools, and data currently used by your agency, and develop mapped areas that represent resource agency/organization highest priorities. We will also share where growth is anticipated and transportation deficiencies that have been identified. The goal for this meeting is to allow a free exchange of ideas.

Please RSVP by reply e-mail by [insert date]. Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,
[Name]

Appendix 7: Alternatives Analysis Meeting Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Alternatives Analysis Meetings

[Resource agency name],

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. The following two dates have been set to facilitate your agency's review of the alternatives under consideration for various project proposals in the Hilltown transportation plan update that is underway. This effort will support other review processes and generally facilitate a better understanding of resource agency priorities in transportation planning, but please note that this does not replace other environmental review processes (e.g., NEPA, 404 merger, etc.).

Local CTP steering committee meeting:

[Date 1]

[Time]

[Location]

Raleigh meeting:

[Date 2]

[Time]

[Location]

This is one of the most important steps in the transportation planning process, and we strongly encourage you to participate. Please RSVP to one of the dates above so that we can make every effort to include your agency's interests. If you cannot attend, please consider identifying another staff member to attend.

Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,

[Name]

Appendix 8: Submit Draft Transportation Plan Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Draft CTP

[Resource agency name],

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. The attached document is a draft of the Hilltown CTP, for your review and comment. This draft plan includes projected system changes to highway, public transportation, rail, bicycle, and pedestrian facilities. Please feel free to share with your local contacts.

Please pay particular attention to issues that may have come out through earlier feedback, and please send me your comments by [date].

If you are interested in shapefiles of the proposed transportation improvements, please send me an email and I will provide the files to you.

Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,

[Name]

Appendix 9: Submit Final Transportation Plan Email

TO: [Email distribution list]
FROM: [Name]
DATE: [Date]
SUBJECT: [Hilltown CTP] Draft CTP

[Resource agency name],

Previously, you indicated an interest in being included on the email distribution list for the Hilltown CTP. The attached document is the adopted Hilltown CTP, and includes projected system changes to highway, public transportation, rail, bicycle, and pedestrian facilities. Please update your records and feel free to share with appropriate contacts.

I appreciate your participation in this planning effort and the input you were able to share. [If recommendations were not incorporated explain them briefly here, if they have not been communicated already. Indicate that the feedback will still support later project development and review processes]. Furthermore, we understand that your participation does not guarantee that future projects will be automatically permitted.

Please email me at [email address] or [supervisor's name & email] for additional questions. Please indicate if others at your agency should be added to the email distribution list.

Best,

[Name]

Appendix 10: Post Transportation Plan Survey

Shortly after the completion of the transportation plan update, the following survey is distributed to participants in the process (see Protocol 6 for additional information). Tools that may be used include Qualtrics, Google Forms, Survey Gizmo, Survey Monkey, etc.

For use by the NCDOT's Transportation Planning Branch, please replace 'planner' in the text below to 'TPB project engineer'.

Post transportation plan survey to resource agencies:

1. Did you receive an email introducing the transportation plan process? (yes/no/n/a)
2. Did that email include the boundaries of the transportation plan study area? (yes/no/n/a)
3. Did your agency have an opportunity to share information on your agency's plans for the transportation plan study area? (yes/no/n/a)
4. Were you asked to provide additional GIS data layers to be used in the transportation plan process? (yes/no/n/a)
5. How was information on your agency's plans solicited? (phone/email/other)
6. Please indicate which of the following best describes your interaction with the planners and please explain your selection:
 - a. Information I provided to planners was well understood and my agency's interests were considered during development of the transportation plan. [text answer]
 - b. Information I provided to planners was well understood but my agency's interests were not considered during development of the transportation plan. [text answer]
 - c. Information I provided was not well understood but my agency's interests were considered during development of the transportation plan. [text answer]
 - d. The information I provided was not well understood and my agency's interests were not considered during development of the transportation plan. [text answer]
 - e. Other: [text entry]
7. Did your agency have an opportunity to provide feedback on project proposals and alternatives introduced in the transportation plan study area? (Yes/No)
If No, why not? [text entry]
8. In emails from planners, did you generally receive the information you needed to respond appropriately? (yes/no/n/a)
9. Please share any additional information that might be used to improve interagency coordination in the future.

Appendix 11: Annual Coordination Process Survey

Annually a survey is conducted to gather feedback on the coordination process (see the *Procedure to Update the Protocol*), in addition to surveys distributed at the end of each transportation plan update. Tools that may be used include Qualtrics, Google Forms, Survey Gizmo, Survey Monkey, etc. Skip logic should be utilized to tailor the survey questions based on respondents' responses on early questions. For example, if a respondent indicates that they do not manage resources that are viewable by map, they will be asked no questions about GIS data layers.

1. {ANSWER REQUIRED} Name: [Text entry]
2. {ANSWER REQUIRED} Please select your agency/division from the following list:
 - Audubon NC
 - NC Center for Geographic Information and Analysis
 - NC Department of Commerce
 - NC Department of Cultural Resources (NCDCCR)
 - NC Division of Energy, Mineral, and Land Resources (NCDEMLR)
 - NC Division of Water Resources (NCDWR - NCDENR)
 - NC Division of Coastal Management (NCDCM - NCDENR)
 - NC Division of Mitigation Services (NCDMS - NCDENR)
 - NC Natural Heritage Program (NCNHP – NCDENR)
 - NC Division of Marine Fisheries (NCDMF – NCDENR)
 - NC Division of Waste Management (NCDWM – NCDENR)
 - NC Forest Service (NCFS – NCDA&CS)
 - NC Wildlife Resources Commission (NCWRC)
 - North Carolina Division of Public Health (NCDPH)
 - Regional Land Use Advisory Commission (RLUAC)
 - US Army Corps of Engineers (USACE)
 - US Department of Agriculture (USDA)
 - US Fish and Wildlife Service (USFWS)
 - US EPA
 - Other: [Text entry]
3. {ANSWER REQUIRED} Work phone:
 - [Text Entry]
4. Please select the area of your agency and division's interest.
 - Statewide
 - Mountains
 - Piedmont
 - Coast
 - Metropolitan area: [Text entry]

- These counties only: [Text entry]
5. {ANSWER REQUIRED} Are these resources viewable by map? *(Only one selection allowed)*
- Yes
 - No
6. {DISPLAY IF: ANSWER TO 5 IS 'YES'} What is the best way to view these resources? *(Only one selection allowed)*
- Import data layers into GIS
 - Visit web-based tool: [Text entry]
 - Other
7. {DISPLAY IF: IF ANSWER TO 5 IS YES} Does your agency/organization have expertise to share on resources represented in any of the following data layers? {multiple selections allowed}
- 24k Hydro Lines
 - Airport Boundaries
 - APNEP - Submerged Aquatic Vegetation
 - Churches and Cemeteries
 - Colleges and Universities (Points)
 - Conservation Tax Credit Properties
 - Critical Habitat for Threatened and Endangered Species
 - Historic Resources- National Register (NR) & Determined Eligible (DE) points
 - Historic Resources- National Register (NR) & Determined Eligible (DE) polygons
 - Hospitals
 - Hydrography - 1:24,000-scale (polygons)
 - Landscape Habitat Indicator Guilds (LHIGs)
 - Managed Areas
 - National Wetlands Inventory (poly)
 - NC-CREWS: N.C. Coastal Region Evaluation of Wetland Significance
 - NCDOT Maintained Mitigation Sites
 - Railroads (1:24,000)
 - Recreation Projects - Land and Water Conservation Fund
 - Schools - Non-Public
 - Schools - Public
 - Significant Natural Heritage Areas
 - State Parks
 - Target Local Watersheds - EEP
 - Unique Wetlands
 - 303D Streams
 - Anadromous Fish Spawning Areas
 - Beach and Waterfront Access
 - Benthic Habitat

- Bicycle Routes
 - Boating Access
 - Emergency Operation Centers
 - Fish Nursery Areas
 - Hazard Substance Disposal Sites (points)
 - Hazard Substance Disposal Sites (Polys)
 - Hazardous Waste Facilities
 - High Quality Waters and Outstanding Resource Water Management
 - Natural Heritage Element Occurrences
 - Regional Trails
 - Sanitary Sewer Systems - Treatment Plants
 - State Natural and Scenic Rivers
 - Trout Streams (DWQ)
 - Trout Waters WRC (arcs)
 - Trout Waters WRC (polygons)
 - Water Distribution Systems - Tanks
 - Water Distribution Systems - Treatment Plants
 - Water Supply Watersheds
 - Archaeological Sites (points) - Restricted
 - Archaeological Sites (polys) - Restricted
 - Geology
 - Geology - Dikes
 - Geology - Faults
 - Historic Resources - Other Categories Points
 - Historic Resources - Other Categories Polygons
 - Historic Resources - Other Categories Local Landmarks/Districts
 - Sanitary Sewer Systems - Discharges
 - Sanitary Sewer Systems - Land Application Areas
 - Sanitary Sewer Systems - Pipes
 - Sanitary Sewer Systems - Pumps
 - Water Distribution Systems - Pipes
 - Water Distribution Systems - Pumps
 - Water Distribution Systems - Wells
 - FEMA Buyout Properties
 - Census Environmental Justice (2010)
8. {ANSWER REQUIRED IF ANSWER TO 5 IS YES} For the layers selected, are you the correct person to help transportation planners interpret and understand the resource?
NB: We are not seeking help from a GIS specialist here, but the best person in your agency to relate how your agency's plans relate to these mapped resources.

9. {ANSWER REQUIRED IF ANSWER TO 5 IS NO} For the resources managed by your agency, are you the correct person to help transportation planners interpret and understand the resources?
10. {ANSWER REQUIRED} Who would be the best person to contact with additional questions?
11. Please provide the email address and phone number for the person listed.
12. What plans does your agency/organization use to develop strategies to protect the resources that your agency/organization manages?
13. Who is the best point of contact for questions related to these plans?
14. Please describe these plans in 1-2 sentences. When were they last updated?
15. Please list any additional GIS layers that could contribute to the transportation planning process.
16. If you have been involved in interagency coordination over the course of a recent Transportation Plan update, please share any observations you have about that process: [Text entry]

