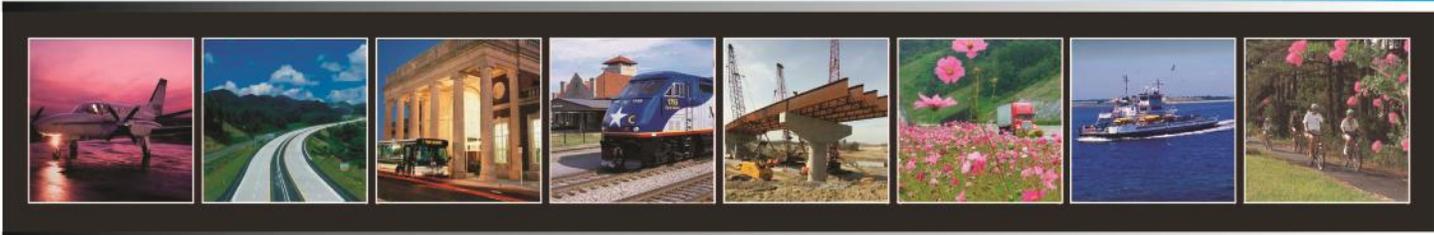


NCDOT
From Policy to Projects
2040 Plan

NORTH CAROLINA
STATEWIDE
TRANSPORTATION
PLAN



STRATEGIC POLICIES, PROCESSES AND PROGRAMS

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Executive Summary

The core objective of this effort was to *improve transportation planning in North Carolina over the 2040 Plan time horizon* of about thirty years. To do so, the task addressed three primary sub-objectives:

- Identified the principle planning policies, processes and programs in place throughout the State at all levels,
- Assessed how they may be better coordinated, and
- Recommended how they may be better integrated into the 2040 Plan initiatives.

Numerous meetings and/or conversations with select groups of agency representatives throughout the State provided major insight as to current transportation planning activities in North Carolina. Our interests therein included the agency's or company's role in conducting and participating in various transportation planning efforts: influencing, endorsing, funding, implementing, tracking, and identifying priorities.

This report deals with "operational" policies, processes and programs. That is, it does not address the highest level policies that direct the primary allocation of resources to transportation, the North Carolina Department of Transportation (NCDOT), and local government. Those decisions - most often made by the US Congress and the NC General Assembly - address issues such as the level of fuel taxation, how programmatically those revenues are to be spent and by whom, whether general fund revenue should be used for education, health care, or transit, aviation, and other transportation initiatives, and similar matters beyond the domain of transportation policy-makers for the most part.

Nine bold strategic changes to Departmental policies, processes and programs were identified to facilitate 2040 Plan implementation. They are summarized below. These initiatives will help the NCDOT deliver its projected work program more effectively and in line with changing funding and program objectives.

At this time, no priority order is implied by the listing. The NC Board of Transportation and NCDOT Executive Leadership and staff, in conjunction with NCDOT partners, will study and subsequently determine an appropriate prioritized work plan and scope to address the nine initiatives.

Summary Table Proposed Policies, Processes and Programs	
1	Focus Investment on Multimodal Facilities of Statewide Importance. Given that North Carolina’s financial resources are limited and infrastructure needs are extensive, we will place highest priority on investments within the Statewide tier, e.g., Strategic Highway Corridors and intercity rail passenger lines. Such projects will be defined by a regularly-updated North Carolina Multimodal Investment Network which will maximize Statewide tier safety, mobility and economic development as top priorities, and NCDOT will accomplish this by continuing to improve the State’s project priority processes. In considering this initiative, NCDOT will continue its support and funding of all modes at the Regional and Subregional tiers.
2	Work with Regional Planning Partners to Increase Flexibility and Responsiveness. North Carolina’s continued urbanization plus growing diversity of transportation needs across the State’s geographic regions calls for greater flexibility in addressing local and regional transportation needs. In order to strengthen and better integrate decision-making and planning, we will seek to further improve the MPO and RPO processes with a focus on improving relationships and communications. Among other options, this will include gaining more familiarity with local areas and issues while evaluating possible restructuring and consolidation.
3	Reward Entities that Better Integrate Land Use and Transportation Planning. There is widespread concern that the segregation of land use planning and transportation planning in North Carolina may lead to inefficient allocation of limited transportation funding resources, that transportation project development processes may not be supportive of local land use planning objectives, and that supplemental funding opportunities that could maximize effective investment and efficient resource management through the capture of increased property value stemming from public investment may be missed. To address these challenges we will initiate and stimulate changes in the way land use and transportation issues are integrated into the decision-making, planning and funding processes.
4	Expedite Project Development and Delivery Through Improved Efficiency and Flexibility. NCDOT has a mission to connect people and places safely and efficiently, with accountability and environmental sensitivity, to enhance the economy, health, and well-being of North Carolina. NCDOT strives to accomplish this mission while also delivering projects on time and within a realistic budget. To that end, NCDOT will continue to seek efficiencies and flexibility in the project development and delivery process, including system planning, programming, corridor planning, alternatives analysis, early consideration of issues related to the human and natural environment, preliminary engineering, final design, right-of-way, letting and construction.
5	Strengthen Planning Processes to Recognize North Carolina’s Diversity. Facing a growing and more diverse State population over the next 30 years, we will create transparent procedural and analytical approaches to ensure that transportation investments and impacts from the Statewide and local planning processes are appropriately considered from all perspectives of the human environment – including community, cultural, historic, and civic assets – and that they reflect proactive and expansive public involvement strategies. This includes minorities, low-income groups, elderly and disabled individuals, and other protected populations.

6	<p>Maximize Economic Opportunity and Job Creation via Improved Freight Initiatives. Through the work of the Governor’s Logistics Task Force, NCDOT and sister State agencies have become increasingly aware of the critical need to optimize the movement of freight. In order to use transportation investment as a way to support economic development, job creation, and commerce, we will work with freight logistics enterprises and local / regional planning partners to better integrate logistics needs into the transportation planning process.</p>
7	<p>Establish New Sources of Revenue for Transportation Investments. NCDOT has concluded that traditional transportation revenue streams are unsustainable and insufficient to meet both system preservation and improvement needs. We thus will establish a framework for promoting, endorsing, and supporting new and replacement revenue streams for transportation activities in addition to exploring other revenue opportunities, such as value capture.</p>
8	<p>Increase Funding Flexibility to Recognize Regional, Urban and Rural Differences. Growing and more diverse transportation system options demand greater flexibility in allocation of limited financial resources. We will analyze current transportation funding allocations and identify opportunities to further optimize funding in the State Transportation Improvement Program.</p>
9	<p>Embrace and Capitalize on Technological Advances. NCDOT should ensure that technological advances are pursued on at least two fronts:</p> <ol style="list-style-type: none"> 1. New applications in vehicle manufacturing, construction materials and construction processes, to address global challenges such as climate change and system management, and 2. As an opportunity to disseminate information in a timely and clear manner to the public. <p>These initiatives will require the establishment of on-going relationships with global vehicle and ITS technology suppliers, think-tanks, and universities, as well as the development of improved public communications techniques.</p>

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Chapter 1 Policies, Processes and Programs

Description and Examples

1.1 Purpose

This section provides an overview of the definition and the relationship among policies, processes and programs in the delivery of transportation infrastructure in North Carolina. Together, the hierarchy of comprehensive and meaningful transportation planning policies, processes and programs support economic development, public safety, and other social objectives, as well as the development, operation and maintenance of North Carolina's transportation network. In the development of the 2040 Plan, transportation planning *policies, processes and programs* are viewed as one of three critical legs of infrastructure delivery, the other two being *strategic program priorities ('needs')* and *sustainable funding*.

Within the development of the 2040 Plan, we are called upon initially to *evaluate* this hierarchy, and thus we began by providing practical definitions for policies, procedures and programs as they pertain to transportation planning initiatives in the State of North Carolina. Some historical background and current examples are provided, although we acknowledge 'shades of gray' among them, both in terms of how they are understood and how they are applied throughout the State.

1.2 Definitions

A *policy* is a guiding principle used to set direction in an organization. In government, policies generally are used to execute broad goals to accomplish various societal aims, and they often include general guidance on how they are to be implemented. Some policies are thousands of pages long and complicated, such as environmental policies, NASA space program policies, and foreign trade policies. Many policies have been in place for years and have simply been added to or updated periodically, especially with the advent of new technology and new or revamped funding mechanisms. Indeed, as practiced in our country and in North Carolina transportation planning circles, policies are meant to change gradually over time, and mostly they do.

The dictionary defines *process* as "...a series of actions directed at obtaining a particular result." A process thus is a series of global or specific steps to be followed as a consistent and repetitive approach to accomplish an end result, indeed, to help implement one or more policies. They are used to empower the individuals and agencies responsible for implementing policy guidance and to do so with the direction and consistency needed for successful outcomes.

Programs typically are written directions, plans or blueprints, spending schedules and specifications which tell the implementing individual or agency what to do next and often how to do it. They are the by-products, products or outcomes of the previously identified processes. Successfully implemented, a

program will result in the achievement of policies as delineated by superior governing bodies, and they will have been developed through adhering to the processes specified for doing so.

In the paragraphs below, we expound upon and provide a brief historical context and examples of the three primary hierarchical elements – policies, processes and programs.

1.3 Policies

Policies are legislative actions (federal and state), executive orders, and other actions approved by the Board of Transportation that guide the substance and production of the statewide transportation plan, among many other things.

Federal transportation law is a primary driver for transportation policy in North Carolina, as in other states. SAFETEA-LU, for example, is the most recent omnibus federal transportation law (2005). It serves as the primary driver for transportation planning, and it facilitates cooperative transportation decision-making in North Carolina. The eight broad policy areas of SAFETEA-LU that must be considered in the statewide planning process are as follows:

- *Support the economic vitality of the United States, the states, nonmetropolitan areas and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;*
- *Increase the safety of the transportation system for motorized and nonmotorized users;*
- *Increase the security of the transportation system for motorized and nonmotorized users;*
- *Increase the accessibility and mobility of people and freight;*
- *Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;*
- *Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;*
- *Promote efficient system management and operation; and*
- *Emphasize the preservation of the existing transportation system.*

At the State level, a cogent example of transportation policy is the Governor's Executive Order No. 2 – Reforming the Department of Transportation, January 2009. That order mandates a broad directive in changing the high level policy-setting approach to transportation decision-making. It states as follows:

WHEREAS, the State, through the Office of the Governor, has an obligation to assure that highway construction plans are developed and that projects are

awarded based on professional standards designed to meet the needs of citizens and communities across the State fairly, efficiently and effectively; and

WHEREAS, the present process for developing plans and approving projects needs to be reformed in order to assure that plans are developed and projects are awarded based on professional standards and not other considerations.

As a result of the Executive Order No. 2, NCDOT officials have developed a strategic process for transportation decision-making that focuses on accomplishing the department's long term goals of safety, mobility and infrastructure health. Known as "Policy to Projects," this process begins with long-range goals and investment decisions at the policy level and ends with a detailed work program that spells out specific projects needed to accomplish the policies. The intent is to result in a realistic transportation work plan that is both transparent and accountable.

1.4 Processes

Processes are groups of technical, management and administrative activities that are linked spatially and chronologically to implement federal and state transportation policies, including the development of the statewide transportation plan, the STIP, and many other initiatives. By way of example, according to federal and/or state mandates, this includes the active involvement of Metropolitan Planning Organizations (MPO) and Rural Planning Organizations (RPO) in the transportation process, which includes project development and project prioritization processes.

A *planning process* guided and approved by the respective MPO is required for all urbanized areas. These areas are designated by the US Census Bureau as being urban in nature and having a population of 50,000 or more, and they are required by the Federal-aid Highway Act of 1962 and subsequent updates to have a continuing, cooperative, and comprehensive ("3C") transportation planning process in order to qualify for federal transportation funds. In North Carolina, this planning requirement is carried out by the 17 federally-identified MPOs. Federal legislation also requires that NCDOT consult with non-metropolitan officials (non-MPOs) during the transportation planning process. In early 2000, NCDOT created the RPOs to assist in carrying out this requirement. Currently, 20 RPOs assist NCDOT in carrying out this requirement. Together, these organizations cover all 100 counties.

Another process example is *project planning*, especially the environmental planning component which has been the subject of focus of efforts to "streamline the process" for at least several decades. The NCDOT Project Development and Environmental Analysis Branch (PDEA) was formed in response to the *National Environmental Policy Act of 1969* (NEPA), which called for efforts to prevent or eliminate damage to the human and natural environment. Within the NCDOT, this branch was created to ensure that these policies, federal guidelines, and regulations are carried out in accordance with NEPA policy. This Act also established the basis for the Environmental Impact Statement (EIS) and established a Council on Environmental Quality (CEQ).

Project Prioritization is another element of the transportation planning process. As part of the NCDOT's new transportation reform process, a more data-driven approach is being used to rank projects across the State. The NCDOT's Strategic Planning Office for Transportation (SPOT) is leading the project prioritization effort. In order to rate projects against similar projects within NCDOT's new prioritization process, each project is classified under one of the Department's three primary goals (Safety, Mobility, or Infrastructure Health) and three tiers (Statewide, Regional, and Subregional). Projects classified as Infrastructure Health are further classified by Submode (Interstate Pavement, Modernization, and Highway Miscellaneous). The result of this process is the ranking of all projects (approximately 2,000) over a 10 year period.

NCDOT is building upon the successful efforts of the first prioritization process to refine and enhance the way transportation projects are rated and ranked. This continues to be an important component of NCDOT's reform process, and it provides a transparent way to understand the true need for transportation projects based on data and local input. NCDOT has solicited input from local planning partners and a working group of stakeholders and implemented these collective ideas into the next version of prioritization.

The MPO process, RPO process, project planning activities, and the prioritization process provide input into the 5-Year Work Program, the 10-Year Program and Resource Plan, and the Statewide Transportation Improvement Program – all of which are programs derived from high-level policies and vetted through various processes.

1.5 Programs

Programs are a group of activities that result in one or more products critical to the implementation of policies, including the update of the 2040 Plan. In the brief paragraphs below, we define five primary programs that are focused on transportation planning activities in the State. They are as follows:

- Local MPO Transportation Improvement Program,
- Local RPOs Transportation Priorities List,
- 5-Year Work Plan,
- 10-Year Program and Resource Plan, and the
- State Transportation Improvement Program (STIP).

Both the MPOs and the RPOs submit local prioritization of the transportation projects for their respective areas. Within metropolitan areas, the STIP is developed in consultation with the MPOs. Outside of metropolitan areas, the STIP is developed in consultation with the RPOs. The Metropolitan Transportation Improvement Program (MTIP) is a major product of the MPO planning process, as it is the local budget-constrained program of the transportation projects for the MPO area.

The 5-Year Work Program outlines specific funding levels for all NCDOT division activities. This relatively new approach is helping NCDOT achieve its goal of delivering 95 percent of projects when promised, as opposed to 60 percent of projects under the previous transportation decision-making model. Note that the *policy* is to deliver 95 percent of projects when promised, the *processes* are identified, activated, and further tasked to the NCDOT field divisions, and the *programs* specify specific activities and budgets for each division.

The 10-Year Program and Resource Plan is a program that contains revenue projections and proposed funding allocations across all modes of transportation (aviation, bicycle and pedestrian, ferry, highway, public transportation and rail) for planning, engineering, construction, maintenance, operations and administration over a 10 year period. Over the next ten years, NCDOT anticipates roughly \$45 billion in transportation funding will be available. More than 60 percent of this amount is allocated for construction and engineering, and approximately 25 percent is allocated for maintenance. The remainder will be split between operating the transportation network and administrative functions. As noted earlier, NCDOT uses a data-driven strategic prioritization process to help identify the need and inclusion of projects in the 10-Year Plan. These candidate projects are rated and ranked through a process that takes place every two years.

The priority projects identified in the 10-year Program & Resource Plan serve as the primary projects rolling into the STIP and the 5-Year Work Program. The STIP provides costs and schedules for each project. The STIP is generated by applying the investment strategy described above to a prioritized list of transportation needs identified by the stakeholders. Actual projects selected to meet this strategy were subject to funding, scheduling and legal constraints. The 5-Year Work Program and the 10-Year Program and Resource Plan thus culminate in the Statewide Transportation Improvement Program of projects for all modes. Again, the policy → process → program hierarchy is illustrated, first by the federal *policy* mandate, then by the *processes* employed, and finally by the outcome itself, the *program*.

1.6 Summary

The federal law serves as the primary mechanism for transportation planning and cooperative transportation decision-making in North Carolina and other states. Transportation planning policy is modified from time to time by the NC General Assembly, Governor's Executive Orders and actions of the NC Board of Transportation. The MPO, RPO and the project prioritization processes provide input into the 5-Year Work Program, the 10-Year Program and Resource Plan and the Statewide Transportation Improvement Program. The 5 Year Work Program and the 10-Year Program and Resource Plan culminate in the State Transportation Improvement Program of projects for all modes. The 2040 Plan provides the overall framework and policy for the 5-year Work Program, the 10-year Program and Resource Plan, and the 2040 Plan.

Evaluation of North Carolina transportation planning policies, processes and products forms one leg of a three-legged stool that will be reflected in the 2040 Plan and together establish the foundation for

improved infrastructure delivery. Along with *strategic program priorities* and *sustainable funding*, the evaluation of planning *policy, processes and programs* – and their collective integration with other national and state societal aims – will set the tone for maintaining and enhancing North Carolina’s transportation networks and facilities over the next several decades.

Chapter 2 Summary of Interviews

2.1 Introduction

The purpose of this section is to report on the results of discussions with a select group of agency representatives concerning transportation planning activities in North Carolina. (See listing in Appendix A.) Our interests included the agency's or company's role in conducting and participating in various transportation planning efforts: influencing them, endorsing them, funding them, implementing them, tracking them, and identifying priorities.

It should be noted that this report deals with "operational" policies, processes and products. That is, it does not address the highest level policies that direct the primary allocation of resources to transportation, to the NCDOT, and to local government. Those decisions - most often made by the US Congress and the NC General Assembly - address issues such as the level of fuel taxation, how programmatically those revenues are to be spent and by whom, whether general fund revenue should be used for education, health care, or transit, aviation, and other transportation initiatives, and similar matters beyond the domain of transportation policy-makers for the most part.

From a transportation planning perspective, federal, state and local transportation planning policy is mostly set by four organizations of duly elected or appointed officials: 1) the federal government, including Congress and the implementing federal agencies, 2), the NC General Assembly, 3) the NC Board of Transportation, and 4) local elected officials, in terms of ordinances and funding participation in various programs and projects. The respondents to our interview guide are primarily implementers of policy set by others or are regulated – as in the case of private shippers and carriers – by policies set by others. The interview results thus are limited mostly to those individuals and agencies that implement transportation planning policy, rather than set it. However, the interviewees were candid with regard to policies they wished to have revised, and these perspectives have been reported herein.

Prior to initiating the interview process, the Policies, Processes and Programs (PPP) Working Group identified an extensive list of candidate interviewees and/or interviewee groups. They approved a detailed interview guide which was applied rigorously during the interviews. Finally, they worked on defining and distinguishing among the three components, e.g., policies, processes and programs, in terms of their history, their nature and extent, and their place in accomplishing statewide and local transportation objectives.

The interview guide is specific with regard to the agencies' and companies' participation in transportation planning endeavors. It covers the following key attributes:

- Interactions with other planning agencies regarding the planning process
- Strongest attributes of the planning process

- Weakest links in the planning process
- Strategic planning in the planning process
- Organizational, structural and role changes in the planning process
- Communication changes
- Hurdles to be overcome
- Ways to expedite the transportation planning process
- Nature and extent of public vetting
- Improvement tools and techniques to enhance the transportation planning process

In the following section, summary information for each of these measures is provided, reporting on each major question in the interview guide (except two – one dealing with funding, covered elsewhere in the 2040 Plan, and one dealing with internal NCDOT organizational matters). The responses are those of the interviewees but generally reflect the attitude or position of the agency they lead. Most of the respondents have a long history with their organizations, and many have served in partner organizations during their careers, and they thus are well-trained, experienced, and committed. In our judgment, they have developed perspectives that are reflective of multiple points of view which appear to serve them well in inter-agency coordination.

2.2 Specific Responses and Findings

This section highlights the responses of the interviewees. In some cases, questions and responses have been combined when answers were highly interrelated. Also, various editorial comments by the interviewer are denoted in italics.

What individuals and/or groups do you and your staff interact with the most regarding transportation planning? In what ways and how often do you interact with them?

Internally to the NCDOT, the Transportation Planning Branch (TPB), Program Development Branch (PDB), Strategic Planning Office (SPOT) and the Governance Office have a weekly meeting referred to as “the data integration” group. This meeting deals in part with identifying and collecting the data elements that drive the NCDOT web site which are an important “face” of the NCDOT. The Project Development and Environmental Analysis Branch (PDEA) is not currently a member. These major NCDOT planning offices have a working relationship with other NCDOT organization entities, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Rail Administration (FRA), and the Environmental Protection Agency (EPA), state resource agencies, Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs) and local governments. They also have inter-organizational coordination roles but are frequently criticized as being organizational “silos.” More and more in recent years, the FHWA has become an overseer of funding and less a technical resource to

the state and local governments. However, FHWA technical sign-off is still required at various stages of the project development process.

As can be observed from the figures in Appendix C, MPOs have considerably more “primary” interaction with other planning or economic development organizations than do RPOs. In fact, they also have a higher level of “secondary” interaction with another tier of related organizations. The MPOs have frequent and sometimes constant contact with the primary NCDOT transportation planning units, as well as the major surface modal units and one or more of the 14 field divisions in their geographic area. A similar level of RPO contact with the same population of transportation and economic development organizations focuses on the TPB, the appropriate field division(s) of the NCDOT, and the regional economic partnerships. To some degree, this is indicative of the historical emphasis on passenger transportation, e.g., many more individuals reside and conduct business in MPO areas than in RPO areas. For both MPOs and RPOs, these emphases are shifting somewhat towards freight issues, as noted below.

Over the past decade – especially in recent years – there has been an increased interest in freight and logistics planning by NCDOT. In 2008 the State’s first Statewide Logistics Plan for North Carolina was developed. This report addresses long range economic, mobility and infrastructure needs, and it recommends various options for the creation of a statewide freight logistics organization to better focus such efforts.

In December 2009 Governor Beverly Perdue established the NC Logistics Task Force whose objective is to review transportation systems in North Carolina including roads and highways, airports, ports, multimodal transportation and railroads. A major component of their effort is the “Seven Portals Study” completed in December 2011.

[Ed.: With greater emphasis in freight and logistics planning at the State executive level, it may be expected that transportation planning at all levels will assume a broader focus than in previous years and an increased interaction between government agencies and freight carriers and shippers.]

What is the strongest component or attribute of transportation planning policies, processes and programs in North Carolina?

First, increased and improved state – local collaboration is by far the most improved and strongest attribute of the transportation planning process. This has resulted in improved local buy-in for the decision-making and funding processes, although they are not unanimously lauded. Certainly, NCDOT’s 50+ year commitment to transportation planning, beginning with thoroughfare plans and evolving into comprehensive transportation plans have laid a foundation for continued strong intergovernmental cooperation - cooperation where regional and local bodies have genuine input into program and project decision-making. One recent cited example is the “Complete Streets Policy” that enjoys excellent local buy-in. This policy is an approach to creating interdependent, multi-modal transportation networks that safely accommodate access and travel for motorists, transit users, bicyclists, and pedestrians.

Second, the North Carolina Multimodal Investment Network (NCMIN) stratification of all the components, facilities, and modes of North Carolina's transportation system has been well received. Components of the network are typically classified on the basis of how each contributes to serving a particular type of transportation movement. Some facilities serve statewide movements, while others are regional or subregional (localized). These classifications correspond to the level of state (NCDOT) or local interest in various facilities. The NCMIN system with emphasis on statewide and regional projects has encouraged a higher level of involvement by the NCDOT field divisions in transportation planning, which is a positive step for the state and local entities alike. The process is focused, prioritized, effective and transparent.

Third, the NCDOT has done an outstanding job of reaching out to stakeholders on behalf of cooperative project development between the federal, state and local agencies. This point is covered elsewhere in the sections dealing with public vetting and input from minority and low-income constituents.

What is the weakest link in transportation planning policies, processes and programs in North Carolina?

The responses to this question were numerous and varied widely. The interviewers' sense is that the respondents were candid, animated, beneficial, and sincere in the desire to see transportation policies, processes and programs improved.

- Some RPO's are struggling with their relationship and interaction with the TPB of the NCDOT.
- The NCDOT "Transformation Process" was intended to reduce silos but unfortunately has created more within the transportation planning process, especially in the area of communications between and among organizations. For example, both Program Development Branch and SPOT are sending the same or similar requests to other organizations who do not understand who has priority; fortunately, this has become less of a problem in recent years.
- It is a challenge to keep long range transportation plans current and meaningful because the external environment changes constantly. This has a deleterious impact on long range decision making and strategic policy setting.
- The non-highway modes are underrepresented in the transportation planning process, especially within the TPB.
- Direct communications with local elected officials is a continuing challenge due to their focus on immediate project needs and political realities.
- Communication and responsiveness with NCDOT's external partners regarding the "Policy to Projects Process" and the "Transformation Process" would seem to benefit from an increased level of understanding and more intensive internal training.

- The prioritization process would seem to benefit by the establishment of two approaches: one for new alignment projects and one for widening projects.
- NCDOT is over-designing some roads and bridges according primarily to the MPOs. The net result is seen as increased costs, increased time in project development and construction, and unnecessary physical and environmental impacts.
- The quality of travel demand model data from the MPOs varies although it should be more consistent with the statewide travel demand model currently forecasted for 2012. This is a critical point because MPO data impacts the priority process.
- The RPO's project priority list has had limited success acquiring funding. Some projects have been 'promised' for decades and not only have they not been built but they have yet to be funded. This remains a significant frustration in many areas.

[Ed.: As expected, criticisms of transportation planning policies, processes and programs continue to emulate from the NCDOT as well as their regional and local partners. Unfortunately, while progress has been made on some fronts, the expressed "weak links" are not new, and it is understandable why transportation practitioners at all levels would remain critical. Improvements have been made but there is more that can be done.]

Is there a sufficient strategic planning or strategic thinking component to setting transportation policy in North Carolina?

Most of the responses were affirmative, although there were several suggestions for improving and strengthening the strategic planning process at NCDOT:

- Strategic goals do not relate to the average worker's day-to-day activities. The workers thus do not see much need for strategic planning at all.
- The ability to forecast future needs should be improved, allowing the state and local entities to be more strategic in their thinking, planning and implementation.

Both the Strategic Highway Corridors initiative and the NCMIN were cited as good examples of strategic planning for the highway system.

What organizational, structural or role changes would you make to improve transportation planning policies, processes and programs?

Several important suggestions were made concerning organizational and role issues. Also, because some of the local agencies (MPOs, RPOs, etc.) are staffed by former NCDOT employees, and vice versa, those individuals have a unique perspective and particular insight as to what changes might be beneficial, both in terms of organization, structure, and intended or actual roles and responsibilities.

- The “Transformation Process” has actually created more, rather than fewer, silos in the transportation planning process, and communications and cooperation have suffered as a result. The key silos in question are the Program Development Branch, SPOT, the Governance Office and the TPB, i.e., units that are major players on the planning side of the project development process.
- While stretched thin, the TPB MPO Coordinators should spend more time with the MPO staff building relationships.
- One way to improve relationships is to physically locate MPO Coordinators in some of the larger MPO areas rather than in Raleigh. The only current example is the Mecklenburg-Union MPO Coordinator who has relocated to Charlotte.
- A critical “hand off” in the project development process is between TPB and PDEA. Improved knowledge transfer, e.g., historical understanding and project scoping, can contribute to reduced costs and time, strengthening and streamlining the project development process.
- Respondents – especially local entities – must deal with multiple agencies and sometimes confusing jurisdictional boundaries, especially for preconstruction purposes. One approach would be to align NCDOT field division boundaries with regional Economic Development Partnerships for preconstruction purposes.
- Cited as a “weak link” above, respondents believe the transportation planning process and programs would greatly benefit from increasing the level and capability of multi-modal (non-highway) expertise in the TPB. The planning capacity of NCDOT’s modal divisions is varied, and the staff is occupied with numerous administrative, management and operational activities considerably outside long range transportation planning initiatives. This exacerbates the NCDOT’s and MPO’s ability to focus on multi-modal solutions.

[Ed.: It is clear that individuals inside and outside the NCDOT believe that organizational and structure improvements would strengthen transportation planning over the long haul. The fact that it would mean un-doing some of the Transformation Process changes may be unfortunate, but perhaps necessary.]

What communication changes would you make to improve transportation planning policies, processes and programs?

Overall communications with external partners and the public is good; however, there are four areas suggested for improvement, as follows:

- Internal to the NCDOT, establish a better flow of information from the top of the organization. Higher-level managers would benefit from more brainstorming with executive management before critical and far-reaching decisions are made within the Department.

- On all fronts, work to simplify the message to the public.
- Continue the increase in electronic and social media for the public to provide input on projects.
- Provide more advance notice to MPOs concerning the handling of TIP amendments.

What hurdles must be overcome to improve transportation planning policies, processes and programs?

One of the long-standing hurdles that frustrate local officials and NCDOT managers alike is the need to institutionalize the transportation planning policies, processes and programs in order to help bridge political change both within and outside the NCDOT and local governmental entities. NC Board of Transportation policies could allow for such continuity, but with a new governor and concomitant changing Board members every four to eight years, it is a challenge. Also, there needs to be continuity in staff to continue to support policies, processes and programs over the long term. This is particularly true considering the length of the project development and construction processes.

Establishing policies, processes and programs that enjoy widespread State support, especially predictable and stable federal and/or State funding, would do much to overcome hurdles pertaining to project development. Changes in Congressional and Legislative transportation priorities detract from this long-term strategy. The 1989 Highway Trust Fund (state) legislation is an example of a successful institutionalized program that continues to fund projects 22 years later.

[Ed.: On the local level, some RPOs are struggling from a funding resources standpoint, even to the point where they and/or others may need to be merged. In some cases, they also are under-staffed and over-worked.]

Do you have ideas as to how the State may speed up or expedite the transportation planning process in NC?

As has been pointed out for years by politicians, stakeholders and practitioners alike, the environmental planning process takes too long, especially in North Carolina as compared with peer states in the southeast. Also, the “merger process” is not working, and NCDOT has given up too much authority to resource agencies, which are slow to respond and thus significantly slow down the transportation planning process. Although there have been numerous studies on expediting the environmental planning and review process, both nationally and in the state, they have been to little avail.

Plan-Design-Bid-Build, the traditional process, is managed by the Director of Preconstruction, and the Design-Build group is under the Technical Services Administrator in another organizational unit, creating a silo between the two delivery systems. The fact that the two delivery systems are not co-located may inhibit the evaluation of which approach is best for any given project.

Another way to speed up small projects is to have a consulting firm complete a turnkey Plan-Design project, then send it back to NCDOT to take bids on the project. This varies from the traditional process noted above in that the same firm would complete both the planning and design aspects.

[Ed.: This practice is increasingly common among other state DOTs.]

Do the results of transportation planning activities represent the ‘will of the people,’ i.e., do changes in transportation planning policies, processes and programs receive sufficient public vetting?

In response to the National Environmental Act of 1969 (NEPA), the public vetting process was developed and improved significantly over the decades. The responses to our interviews were, in general, overwhelmingly affirmative.

[Ed.: A more specific set of questions dealing with minority and low-income outreach efforts addressed this component of the public vetting process and is reported below.]

How can the transportation planning community properly identify the needs of, ensure the participation in, and consider the impacts of policies, processes and programs on minorities and/or low-income populations?

In terms of identifying the benefits and burdens to minority and low-income groups, it appears that the NCDOT, MPOs, and RPOs approach varies rather substantially among regions and types of planning and projects. On this point, it was noted that environmental justice considerations rarely occur in long-range transportation plans (LRTP) and comprehensive transportation plans (CTP). Others claim to conduct such analysis routinely through environmental justice mapping, but some MPOs and RPOs acknowledged very little attention to the identification of benefits and burdens outside of public transit planning. In some cases, MPOs and RPOs conduct a “high-level analysis” at the systems planning level, anticipating that much more attention will be drawn to these issues during the project planning stages. Accordingly, more than one MPO acknowledged an attention to environmental justice considerations during detailed highway feasibility studies for specific projects. Some MPOs, particularly, focused more than others on minority and low-income impacts, for example, using a “qualitative screening” to identify impacts during a highway project planning process. This was coupled with an overlay of transit routes to help determine minority, low-income and elderly accessibility to transit as an alternative to the highway project. In fact, it was noted that reaching minority and low-income groups is accomplished with much greater success in transit planning activities than in highway planning activities. In sum, planning for highway networks at the systems level draws little attention from these groups; planning bus services, however, receives much higher participation at the system and local levels.

One MPO was very clear as to their consideration of minority and low-income benefits and burdens, to wit: “...our Long-Range Transportation Plan identifies which projects will benefit / burden specific low-

income / minority populaces and those identifications are used to assist in analyzing which projects should be funded and which will require additional 'special studies'..."

Interviews suggested the following methods and techniques for helping to ensure that minority and low-income concerns are included in transportation policy, process and product development:

- Use all relevant media opportunities.
- Identify and work with and through selected “champions” who will greatly assist transportation planners in distributing an appropriate message regarding systems and projects under consideration.
- Ensure that outreach extends beyond usual efforts and does not rely too heavily on web-based approaches which may exclude certain populations.
- Take the issues to the community of concern where input is desired; use existing neighborhood events that citizens are likely to attend; offer incentives – such as child care – to encourage attendance at public meetings.
- Include minority and low-income representatives in Citizen Advisory Councils and similar groups and encourage their attendance and participation.
- Provide information in a clear and understandable manner.
- Leverage across other agencies that already have the trust and attention of minority and low-income populations.
- Do not wait until project development to involve vulnerable populations because they tend to create an “us” versus “them” mentality that is counter-productive.
- Ensure that the areas of concern to minority and low-income populations are mapped so that decision-makers can visualize areas of special interests (should be handled primarily at MPO/RPO level).
- Continual staff training and updates on how to better reach under-served populations; some MPOs and RPOs even called for modifications to current policies, guidelines and timelines for inclusion of such populations.
- Improved staff contact with community leaders on an on-going basis to ascertain the needs and concerns of minority and low-income groups.
- Increased requirements for the distribution of Spanish language information and increased requirements for distributing information and statistics regarding the disproportionate number of minorities involved in pedestrian accidents and fatalities.

Respondents representing various State and NCDOT organizations were somewhat more defensive in terms of the issue of minority and low-income populations, implying that requirements were being met

and that the system is working pretty well. MPO/RPO representatives, on the other hand, were open to the need for improved consideration of these groups and had suggestions for accomplishing them.

[Ed. The following comments were provided by the NCDOT Office of Civil Rights and Business Opportunity and Workforce Development:

The needs of minorities and low-income groups typically are identified through data mining (US Census data, socioeconomic maps, and field surveys) and project public involvement activities (community meetings, newsletters, surveys). Sometimes, an environmental justice data scan is conducted to identify census block groups with a higher than average profile for vulnerable populations. This helps identify targeted outreach needs. NCDOT depends mostly on MPOs and RPOs to ensure that plans and programs serve them fairly.

It should be noted that the NCDOT's needs-based prioritization process does not take disadvantaged groups into consideration for programming purposes but they are considered for specific project planning. It also has been noted by several resource agency representatives that they are unaware of considerations of minority and low-income groups or that such considerations appear to be inconsistent from project to project. State agency representatives involved in the interview process for this project defended NCDOT's outreach to minority and low-income groups as meeting federal requirements and providing "countless public meetings" for input from disadvantaged groups, both at the systems and project planning levels.

Most MPOs and RPOs use US Census data as a basis for identifying minority and low-income groups, including black, Hispanic, Asian, American Indian, low-income and elderly populations. Often, these data are mapped on "thematic" maps. Further, some organizations publish materials, such as a summary version of the Transportation Improvement Program in Spanish. Frequently, transportation planning meetings will be held in locations which enable likely interested constituents to more easily attend. Some MPOs and RPOs conduct additional outreach meetings for these purposes, and they advertise them in alternative newspapers and/or via flyers posted in neighborhood locations. A continuing challenge is to reach low-income groups who do not have routine access to Internet access, which impacts the use of surveys and announcements. It appears that minority and low-income populations are still proportionately under-represented, regardless of the efforts made by local officials and transportation planners. To some extent, this phenomenon has been labeled a "trust" issue.

Do you have ideas for improved techniques, technology and/or tools to enhance transportation planning policy-making, processes and programs?

The following suggestions were made:

- Enterprise Content Management is a pilot program for electronic sharing of documents for review and approval that will greatly reduce paper consumption and facilitate efficiencies. This system will allow project planning to better utilize data from the long range plan.
- More emphasis on GIS by providing additional layers to the GIS system. Improved GIS also should hopefully translate into an expedited environmental planning process.
- There are opportunities to be more innovative in presenting projects to decision makers by using visuals, animation, 3D flyovers and videos to describe the project.
- The statewide travel demand model that is being developed will be helpful in the prioritization. (The statewide travel demand model results for the statewide tier of the NCMIN system should be available in early 2012.)
- TREDIS is an economic impact model that the Strategic Planning Office has just started to use. This model will be helpful in projecting economic impacts of projects.

2.3 Summary and General Observations

Respondents were asked generally “what’s working?” and “what’s not working?” in terms of transportation planning policies, processes and products in the State. As expected, even those who think it is working well have suggestions for improvements. This section serves as a summary of their high-level perspectives in this regard. (These questions were posed at both the beginning and the end of each interview in order to provide an opportunity for the respondent to enhance his/her response following the discussion.)

In general, what is working well in transportation planning policies, processes and programs in NC?

The MPO leadership is generally pleased with the structure, alignment and processes that support their roles and responsibilities and occupy much of their endeavors in transportation planning.

The TPB cooperatively develops CTPs in concert with counties, municipalities and MPOs. These processes and products are viewed as working well. Requiring a new STIP project to come from a CTP is an added incentive for local governments to focus on a strong transportation planning process.

Respondents have been pleased with the strategic prioritization process as well. There is more transparency to the process and it is more objective, both of which are positive developments.

The NCMIN stratification of all the components, facilities, and modes of North Carolina’s transportation system is viewed as a high quality approach by the NCDOT.

In general, what is not working so well in transportation planning policies, processes and programs in NC?

Some respondents feel that improved coordination between the TPB and the RPOs would be beneficial to both local governments and the NCDOT as well.

The TPB MPO Coordinators would be well-advised to spend more time with the MPO staff building relationships. One way to facilitate improving their relationship would be to locate MPO Coordinators in some of the larger MPO areas, as is the current case in the Mecklenburg-Union MPO.

As the MPOs are transitioning from traditional thoroughfare plans (highway-oriented) to the CTPs now required by NCDOT, there occasionally are issues regarding the definition of how various roads are classified, e.g., major thoroughfares versus boulevards. It also was noted by some MPOs that the CTPs, as a major planning work element, are more appropriate for non-urbanized areas (towns and cities less than 50,000 population) than they are for large urbanized areas.

Respondents also referred to the weakness embodied in communities' inability to tie transportation planning policies and processes to land use planning – a long-standing challenge. Improved coordination at the MPO level between transportation planners and land use planners and greater involvement of the land use planners in transportation planning would help address this connection. One example cited is the transit-oriented development that occurs in warehouse districts which must be coordinated with freight terminal planning.

As noted elsewhere, the environmental planning process takes too long, consuming valuable time and funding resources. The NCDOT and other participants in transportation planning policy, process and program development must find ways to shorten the environmental process while allowing for adequate input on environmental matters.

According to the respondents, "needs analysis" is weak for all modes except highways and rail, which means that CTPs are comparatively weak for the other modes. A statewide forecasting model would help with forecasting future needs in rural areas to aid transportation planning within RPO jurisdictions.

There are little or no performance measures to aid transportation planning processes for the bike/pedestrian, transit, rail and ferries modes.

The NCDOT "Transformation Process" was intended to reduce silos but has unfortunately created a confusion of organizational alignment and roles and responsibilities within and among some transportation planning entities at NCDOT.

Another weakness in the transportation planning process is the embryonic – but gradually improving - connection between economic development and freight logistics.

The NC Board of Transportation has not effectively transformed from a projects-oriented board to a primarily visionary, strategic and policy board. It also is unclear in some cases as to how the board expects policies affecting the transportation planning arena to be implemented by staff. This may call for the development of an implementation plan for board review, just to ensure that the board and staff are following the same intent and working to accomplish the same overall goals and objectives.

[Ed.: Some RPOs are struggling significantly, and there is a wide variation among them in terms of capabilities and successes. Indeed, some appear to be barely operating. There also is a significant disparity between MPOs and RPOs in terms of what they are able to accomplish. Obviously, resource availability varies widely, which affects this disparity in a major way.]

Chapter 3 Strategic Policies, Processes and Programs

3.1 Introduction

The overall purpose of this section is to identify and elaborate on potential strategic policies, processes and programs that will support future investment in North Carolina’s transportation infrastructure and assist in the delivery of the 2040 Plan and other on-going transportation planning initiatives at NCDOT.

With regard to NCDOT transportation planning policy, process and program changes pursuant to the 2040 Plan, the following recommendation was identified therein.

Recommendation 3: Pursue Policy, Process, and Program Changes for 2040 Plan Implementation

Implementation of 2040 Plan recommendations will require consideration of substantive enhancements to NCDOT’s policies and processes. As NCDOT moves to implement the 2040 Plan, we will work closely with our stakeholders and program delivery partners to address strategic policies, processes and programs. These 2040 Plan implementation elements will support future investment in North Carolina’s transportation infrastructure and assist in the delivery of exceptional transportation facilities and service.

The summary table below includes transportation planning policy, process and program targets covering the 2012 – 2040 timeframe. These initiatives will help NCDOT deliver its projected work program more effectively and in line with changing funding and program objectives. These strategic initiatives will be adopted by the North Carolina Board of Transportation as part of the 2040 Plan and implemented by the NCDOT staff. The initiatives are in line with NCDOT’s expanded Mission statement and reflect the Principles and Objectives.

3.2 Summary of Strategic Policies, Processes and Programs

Each of the nine initiatives is elaborated by a supporting table found in section 3.3 which provides an initial framework for pursuing selected policy, process, and program changes. No priority order is implied by the 1 – 9 listing; the Board of Transportation will determine priority after considering each initiative in greater detail.

Summary Table Proposed Policies, Processes and Programs	
1	Focus Investment on Multimodal Facilities of Statewide Importance. Given that North Carolina’s financial resources are limited and infrastructure needs are extensive, we will place highest priority on investments within the Statewide tier, e.g., Strategic Highway Corridors and intercity rail passenger lines. Such projects will be defined by a regularly-updated North Carolina Multimodal Investment Network which will maximize Statewide tier safety, mobility and economic development as top priorities, and NCDOT will accomplish this by continuing to improve the State’s project priority processes. In considering this initiative, NCDOT will continue its support and funding of all modes at the Regional and Subregional tiers.
2	Work with Regional Planning Partners to Increase Flexibility and Responsiveness. North Carolina’s continued urbanization plus growing diversity of transportation needs across the State’s geographic regions calls for greater flexibility in addressing local and regional transportation needs. In order to strengthen and better integrate decision-making and planning, we will seek to further improve the MPO and RPO processes with a focus on improving relationships and communications. Among other options, this will include gaining more familiarity with local areas and issues while evaluating possible restructuring and consolidation.
3	Reward Entities that Better Integrate Land Use and Transportation Planning. There is widespread concern that the segregation of land use planning and transportation planning in North Carolina may lead to inefficient allocation of limited transportation funding resources, that transportation project development processes may not be supportive of local land use planning objectives, and that supplemental funding opportunities that could maximize effective investment and efficient resource management through the capture of increased property value stemming from public investment may be missed. To address these challenges we will initiate and stimulate changes in the way land use and transportation issues are integrated into the decision-making, planning and funding processes.
4	Expedite Project Development and Delivery Through Improved Efficiency and Flexibility. NCDOT has a mission to connect people and places safely and efficiently, with accountability and environmental sensitivity, to enhance the economy, health, and well-being of North Carolina. NCDOT strives to accomplish this mission while also delivering projects on time and within a realistic budget. To that end, NCDOT will continue to seek efficiencies and flexibility in the project development and delivery process, including system planning, programming, corridor planning, alternatives analysis, early consideration of issues related to the human and natural environment, preliminary engineering, final design, right-of-way, letting and construction.
5	Strengthen Planning Processes to Recognize North Carolina’s Diversity. Facing a growing and more diverse State population over the next 30 years, we will create transparent procedural and analytical approaches to ensure that transportation investments and impacts from the Statewide and local planning processes are appropriately considered from all perspectives of the human environment – including community, cultural, historic, and civic assets – and that they reflect proactive and expansive public involvement strategies. This includes minorities, low-income groups, elderly and disabled individuals, and other protected populations.

6	<p>Maximize Economic Opportunity and Job Creation via Improved Freight Initiatives. Through the work of the Governor’s Logistics Task Force, NCDOT and sister State agencies have become increasingly aware of the critical need to optimize the movement of freight. In order to use transportation investment as a way to support economic development, job creation, and commerce, we will work with freight logistics enterprises and local / regional planning partners to better integrate logistics needs into the transportation planning process.</p>
7	<p>Establish New Sources of Revenue for Transportation Investments. NCDOT has concluded that traditional transportation revenue streams are unsustainable and insufficient to meet both system preservation and improvement needs. We thus will establish a framework for promoting, endorsing, and supporting new and replacement revenue streams for transportation activities in addition to exploring other revenue opportunities, such as value capture.</p>
8	<p>Increase Funding Flexibility to Recognize Regional, Urban and Rural Differences. Growing and more diverse transportation system options demand greater flexibility in allocation of limited financial resources. We will analyze current transportation funding allocations and identify opportunities to further optimize funding in the State Transportation Improvement Program.</p>
9	<p>Embrace and Capitalize on Technological Advances. NCDOT should ensure that technological advances are pursued on at least two fronts:</p> <ol style="list-style-type: none"> 1. New applications in vehicle manufacturing, construction materials and construction processes, to address global challenges such as climate change and system management, and 2. As an opportunity to disseminate information in a timely and clear manner to the public. <p>These initiatives will require the establishment of on-going relationships with global vehicle and ITS technology suppliers, think-tanks, and universities, as well as the development of improved public communications techniques.</p>

3.3 Supporting Tables: Strategic Policy, Process and Program Initiatives

For each of the nine potential strategies, supporting tables have been developed that provide additional detail to help explain and clarify each strategy in terms of benefits and performance to be gained, impact on accelerating economic development, consequences of not pursuing, and changes in policies, processes and/or programs that might be required to implement the initiative. As the recommendations are more fully developed and implemented, performance metrics consistent with the department’s Mission, Goals, Principles and Objectives will be considered. The supporting table for each initiative follows.

Supporting Tables: Development of Strategic Policy, Process and Program Initiatives

<p>Initiative 1</p>	<p>Focus Investment on Multimodal Facilities of Statewide Importance. Given that North Carolina’s financial resources are limited and infrastructure needs are extensive, we will place highest priority on investments within the Statewide tier, e.g., Strategic Highway Corridors and intercity rail passenger lines. Such projects will be defined by a regularly-updated North Carolina Multimodal Investment Network which will maximize Statewide tier safety, mobility and economic development as top priorities, and NCDOT will accomplish this by continuing to improve the State’s project priority processes. In considering this initiative, NCDOT will continue its support and funding of all modes at the Regional and Subregional tiers.</p>
<p>NCDOT Principles and Objectives</p>	<p>Moving People and Goods: Efficient transportation network Prosperity: Economic growth and development Choices: Options in how to travel</p>
<p>Elaboration of the lead statement</p>	<p>The Statewide tier of the North Carolina Multimodal Investment Network (NCMIN), which is a stratification of all the components, facilities, and modes of North Carolina’s transportation system, is the backbone of mobility in North Carolina. Statewide tier highway facilities serve long-distance trips, connect regional centers, support efficient movement of people and goods, have the highest usage and mostly provide a mobility function as opposed to a land access function. A review and update of the NCMIN will be undertaken. This will include coordination with NCDOT’s planning partners (MPO/RPO/local governments), other state and Federal agencies, and the public consistent with the Unified Public Engagement Process (UPEP). By focusing investment in multimodal facilities of statewide importance, Initiative 1 will support economic prosperity and the effective use of funds to meet long-term transportation needs.</p>

<p><i>Impact of the initiative</i></p>	<p>This strategy will promote increased safety, reduced congestion, more efficient movement of people and goods and increased economic activity on the highest tier of transportation facilities Statewide. The current STIP has \$20.6 billion in funding for Statewide tier projects which translates into about 64% of all funds expected to be available. If the Statewide tier projects funding were increased to the 80% level, the funding of the Regional tier and the Subregional tier would be reduced to about 10% each.</p> <p>It will be infeasible to apply this initiative with complete rigor because non-highway modes would essentially be unfunded or realize a sizeable decrease in funding – contrary to input received during the public involvement process. For example, only 2% of bike/pedestrian needs are reflected on the Statewide tier, of which 90% of them are Subregional. This same impact would apply to other non-highway modes such as public transportation, where very few services are on the Statewide tier, and most are on the Subregional. Thus, placing the highest priority on the Statewide tier would still allow for other modal projects to be funded at an appropriate level and would therefore support multimodal choices.</p>
<p><i>Benefits and performance</i></p>	<p>By giving highest priority to the Statewide tier, we are focusing on a primary goal of emphasizing mobility and promoting the economic well-being for the State. This emphasis is consistent with recommendations of the NC Logistics Task Force’s Seven Portal Study which describes ways in which North Carolina’s transportation infrastructure investments will facilitate economic development and job creation. The Statewide tier of proposed projects supplements the State-federal Interstate System and is critical to transportation mobility, safety and economic development.</p>
<p><i>Consequences of not pursuing the initiative</i></p>	<p>Valuable infrastructure funds will be diluted, and mobility and economic activity will not be maximized. As North Carolina’s population becomes more mobile, especially in terms of journey-to-work or other commuting patterns, the need for Statewide transportation linkages will be even more critical. Also, in increasingly competitive world economic development scenarios, the State must accelerate its investment in facilities that help meet freight and other economic development requirements.</p>
<p><i>Potential changes in policy, processes and programs</i></p>	<p>This policy change can be accomplished by modifying the Prioritization Process to make Statewide tier facilities a higher priority in the application of prioritization criteria. This may imply a restructuring of the Highway Trust Fund such that it is primarily rededicated to transportation needs that include the Statewide tier.</p>

Initiative 2	Work with Regional Planning Partners to Increase Flexibility and Responsiveness. North Carolina’s continued urbanization plus growing diversity of transportation needs across the State’s geographic regions calls for greater flexibility in addressing local and regional transportation needs. In order to strengthen and better integrate decision-making and planning, we will seek to further improve the MPO and RPO processes with a focus on improving relationships and communications. Among other options, this will include gaining more familiarity with local areas and issues while evaluating possible restructuring and consolidation.
<i>NCDOT Principles and Objectives</i>	Accountability: Balance of needs and interests with available resources
<i>Elaboration of the lead statement</i>	Improved coordination between the Transportation Planning Branch (TPB) and the Rural Planning Organizations (RPOs) and Metropolitan Planning Organizations (MPOs) will be beneficial to both local governments and the NCDOT. Over the next 30 years, the transportation community should continue to improve how planning, decision-making, funding, and prioritization of projects in all regions of the State are accomplished. The Department will work with local governments through the MPOs and RPOs to ensure that as local priorities change NCDOT is responsive to these changes in our plans and programs. For improved efficiency, some RPOs may need to be combined with others, be partially or fully annexed to MPOs, or be otherwise restructured.
<i>Impact of the initiative</i>	<p>It is likely that RPOs and MPOs will oppose any structural change proposals that will lessen their participation in the planning and decision-making process. Thus it may be that a major assessment of the NCDOT Transportation Planning Branch (TPB), MPOs, RPOs, the seven economic development regions, and the local economic development commissions should be conducted with an eye towards clarifying and simplifying the roles and responsibilities, boundaries, processes and products. In addition, there are new knowledge and skill areas that we will address to assist the TPB Coordinators and MPO/RPO staff, including these State initiatives that are imminent:</p> <ul style="list-style-type: none"> • Freight planning and improved, more consistent contact with private shippers and carriers • Economic development regions where job creation is a focus for the foreseeable future • Improved understanding of and decision-making concerning land use and transportation coordination and integration questions at the local level.

<i>Benefits and performance</i>	The RPOs and MPOs will be more effective and more successful in the transportation planning and decision-making processes. Improved coordination between the RPOs, MPOs, and TPB will result in increased transportation planning efficiencies and better results.
<i>Consequences of not pursuing the initiative</i>	Some RPOs will continue to struggle and not be as effective as they can be. This will tend to affect the quality of planning and decision-making, as well as the nature and extent and timing of locally-recommended projects. Eventually, insufficient coordination will lead to inefficient and ineffective transportation planning processes in MPO and RPO areas. Lack of resources and inadequate integration between the MPOs, RPOs, and TPB coordinators may precipitate poor communication, misunderstanding, and disagreement concerning transportation planning and decision-making.
<i>Potential changes in policies, processes and programs</i>	Some of the initiatives will require only changes in the transportation planning process and thus could be implemented administratively without any policy change. However, in the case of alterations affecting roles and responsibilities, funding, etc., state legislation may be necessary.

<p>Initiative 3</p>	<p>Reward Entities that Better Integrate Land Use and Transportation Planning. There is widespread concern that the segregation of land use planning and transportation planning in North Carolina may lead to inefficient allocation of limited transportation funding resources, that transportation project development processes may not be supportive of local land use planning objectives, and that value capture supplemental funding opportunities that could maximize effective investment and efficient resource management through the capture of increased property value stemming from public investment may be missed. To address these challenges we will initiate and stimulate changes in the way land use and transportation issues are integrated in the decision-making, planning and funding processes.</p>
<p>NCDOT Principles and Objectives</p>	<p>Connectivity: Integration of transportation and land use</p>
<p>Elaboration of the lead statement</p>	<p>Tying transportation planning policies, processes and programs to land use planning is a long-standing challenge. Change has been very slow, with transportation projects and commercial development leap-frogging one another towards an insidious level of sprawl and wasted resources and infrastructure. Clearly, at the planning level, both transportation planners at NCDOT, MPOs and RPOs must continue to work on improved coordination, and land use planners at the local level must be invited to participate in a meaningful way. Further, planners at all levels will require the support of local elected and appointed officials to engender policies that are in the interests of the community at large and not reactive to a single developer’s or politician’s interests. At some point, personal desires must be compromised in order to improve land use and transportation coordination. This is a significant challenge and calls for education, commitment, and leadership to help create more efficient and effective transportation facilities and services and more sustainable development.</p> <p>Value capture opportunities as have been applied most extensively in urban rail transit station locations, for example, need to become part of the routine assessment of transportation investment in facilities and services. This will form the basis for the use of real estate taxes, impact fees, and other fees levied on developers and landowners to accrue to the public, “capturing” a portion of each investment that generates economic value. This initiative exemplifies the use of transportation investment to support economic development, as well as the identification of ways to leverage effective funding strategies to meet long-term needs.</p>

<i>Impact of the initiative</i>	Coordination of land use and transportation planning begins with a willingness for local elected officials to understand, insist upon, and implement improved land use / transportation policies. This will mean working with the private developers to establish compromises in joint land use / transportation decisions which are in the best interests of the community at large, and not just the site in question. The central barriers to this seminal change are the influencers of policy and the policy-makers, not the planners.
<i>Benefits and performance</i>	Improved transportation / land use coordination could result in enhanced transportation network connectivity, less auto trip making, more transit trips and reduced average trip lengths, as well as reduced congestion in major corridors, reduced energy consumption and air emissions, and more sustainable development. Additionally, more effective comprehensive planning and integration of transportation and land use decision-making could be pursued to support improved outcomes for communities, regions and the state.
<i>Consequences of not pursuing the initiative</i>	Increased traffic congestion and more sprawl will be the likely outcome. This will inhibit mobility, reduce safety, negatively affect communities' ability to plan and implement strong economic development initiatives and potentially increase negative impacts to the human and natural environments. Neither the NCDOT nor the local governments <i>alone</i> have the authority or implementation tools to solve these problems.
<i>Potential changes in policy, processes and programs</i>	A change in the coordination of local land use and transportation policies will be dependent on a re-education of planners, developers and decision-makers such that the best interests of the greater region may be served. It may be that as-yet undefined legislative changes will be needed to precipitate improved land use and transportation coordination.

<p>Initiative 4</p>	<p>Expedite Project Delivery Through Improved Efficiency and Flexibility. NCDOT has a mission to connect people and places safely and efficiently, with accountability and environmental sensitivity, to enhance the economy, health, and well-being of North Carolina. NCDOT strives to accomplish this mission while also delivering projects on time and within a realistic budget. To that end, NCDOT will continue to seek efficiencies and flexibility in the project development and delivery process, including system planning, programming, corridor planning, alternatives analysis, early consideration of issues related to the human and natural environment, preliminary engineering, final design, right-of-way, letting and construction.</p>
<p>NCDOT Principles and Objectives</p>	<p>Accountability: Balance of needs and interests with available resources (improve performance-based program delivery)</p> <p>Resource Protection: Protection and conservation of natural resources</p> <p>Healthy Communities: Livable communities and improved quality of life</p>
<p>Elaboration of the lead statement</p>	<p>Much progress has already been made towards this initiative by a group of leaders in agencies that are integrally involved in the planning, development and implementation of North Carolina’s transportation system, the Interagency Leadership Team (ILT). The ILT came together in 2004 with the mission to develop an interagency leadership plan for North Carolina to balance successfully mobility, natural and cultural resource protection, community values, and economic vitality at the confluence of the agencies’ missions.</p> <p>Several initiatives to expedite the project development and delivery process, both nationally and in the State, are underway. These include: Integration (linking long range transportation planning and NEPA/SEPA), the streamlined Merger process (looking for efficiencies internal to NCDOT), and Every Day Counts (EDC – federal initiative to improve project delivery). Integration promotes the inclusion of environmental agencies and environmental information in the long range transportation planning process to ensure a balance between meeting the transportation demand in an area and reducing impacts to the natural and human environment. Integration provides the opportunity to use information from the long range transportation planning process in project development process. Streamlining the Merger process involves using as much existing data as possible, including GIS data, and only generating data that is truly needed to evaluate and analyze the project. EDC is designed to identify and deploy innovation aimed at shortening project delivery. We will continue these efforts as priorities and identify additional creative ideas that build upon them to be explored, implemented and measured, as appropriate. Collaboration with the FHWA and other federal, State and local government partners, including the ILT, will underpin this work.</p>

<i>Impact of the initiative</i>	This strategy will support the concept articulated by the ILT that it is essential, and possible, to develop future transportation projects in a collaborative, interdisciplinary approach that involves all stakeholders and protects scenic, historic, natural environment and community resources and values while efficiently meeting the mobility, economic and safety needs of citizens. Additionally, the use of value management tools and analyses can minimize risk, protect resources and enhance accountability.
<i>Benefits and performance</i>	The major benefit of continuing to find efficiencies and flexibility in the project development and delivery process through these initiatives is a savings in time and money, which in turn will result in more timely and efficient completion of major projects. This has substantial cost implications as well as significant customer service benefits.
<i>Consequences of not pursuing the initiative</i>	The project development process will continue to take longer than it needs to, which slows project delivery and escalates project costs.
<i>Potential changes in policy, processes and programs</i>	Process initiatives are underway to improve efficiencies and flexibility while continuing to meet State and Federal environmental processes requirements. We will continue to work with leadership from the various agencies so that the partnerships at the executive level will continue to improve and support on-going joint initiatives that are now underway.

<p>Initiative 5</p>	<p>Planning Processes to Recognize North Carolina’s Diversity. Facing a growing and more diverse State population over the next 30 years, we will create transparent procedural and analytical approaches to ensure that transportation investments and impacts from the Statewide and local planning processes are appropriately considered from all perspectives of the human environment—including community, cultural, historic, and civic assets—and that they reflect proactive and expansive public involvement strategies. This includes minorities, low-income groups, elderly and disabled individuals, and other protected populations.</p>
<p>NCDOT Principles and Objectives</p>	<p>Healthy Communities: Livable communities and improved quality of life (enhance public awareness and opportunities for participation with an emphasis on engaging traditionally underserved populations)</p>
<p>Elaboration of the lead statement</p>	<p>Transportation provides the critical link between home and community. In 30 years, North Carolina will see notable shifts in its demographics. An aging population and the concentration of ethnically and linguistically diverse groups around metropolitan areas will likely increase the need and demand for multi-modal transportation solutions. It will become increasingly important to provide equitable transportation options for all travelers, including transit-dependent populations and users of all capabilities. The approach and analytical methods for assessing the benefits and burdens of transportation system investments for different socio-economic groups will include the following:</p> <ul style="list-style-type: none"> • Establishing a Statewide demographic profile for that includes the locations and resources of special socio-economic groups. • Developing a data review process to assess infrastructure health, safety and mobility of the State transportation system and its benefits and burdens on low-income and minority populations. • Ensuring documented information-sharing and collaboration between the Department and all partners and stakeholders in transportation planning occurs for the purpose of meeting this goal. <p>Further, the Department will continue to revisit its public involvement process, including its allocated resources, to ensure the appropriate outreach and feedback loops exist to adequately capture issues and document concerns to sufficiently guide the planning and decision-making processes. These efforts will emphasize engagement of traditionally underserved populations.</p>

<i>Impact of the initiative</i>	The Department will continue to make tough decisions in transportation planning whereas infrastructure, safety and mobility needs are great and varied across the State, yet funding and resources remain scarce. This initiative will create a process to ensure that community resources are protected and that no one group receives more benefits or burdens from transportation investments at the expense of another group throughout the planning process.
<i>Benefits and performance</i>	Public officials and practitioners will benefit from such uniform guidance when making tough choices. In addition to thoroughly identifying and involving various socio-economic groups and specific transportation system needs across the State, this initiative will also position the Department to be proactive, as well as hopefully increase public buy-in and consensus throughout the planning process.
<i>Consequences of not pursuing the initiative</i>	We have assured USDOT that we will carry out our programs, services and activities in a nondiscriminatory manner and, where necessary, take affirmative action as a recipient of federal assistance. Without this initiative, our ability to ensure, demonstrate and substantiate compliance with federal nondiscrimination requirements is weakened. Further, failing in this initiative could mean a decrease in safety among older drivers or a negative impact on transportation mobility and access for other groups because imbalances cannot be identified. It also could lessen the potential for attracting economic development where multi-modal transportation options are increasingly more important.
<i>Potential changes in policy, processes and programs</i>	This initiative will likely require a number of modifications to the transportation planning process, and policies may need to be created or updated. Most of the changes will be enhancements to work products and process improvements, to include technical analysis, data collection and evaluation measures, that will require close coordination and collaboration among key internal business units. We will also need to consider a documented process for working with external stakeholders, MPOs and RPOs, other government agencies, and community organizations, to achieve the goals of this initiative.

Initiative 6	Maximize Economic Opportunity and Job Creation via Improved Freight Initiatives. Through the work of the Governor’s Logistics Task Force, NCDOT and sister State agencies have become increasingly aware of the critical need to optimize the movement of freight. In order to use transportation investment as a way to support economic development, job creation, and commerce, NCDOT will work with freight logistics enterprises and local/regional planning partners to better integrate logistics needs into the transportation planning process.
NCDOT Principles and Objectives	Prosperity: Economic growth and development Moving People and Goods: Efficient transportation network
Elaboration of the lead statement	This initiative supports greater emphasis on freight planning to advance the recommendations of the Governor’s Logistics Task Force. The Seven Portals Study describes ways in which North Carolina’s transportation infrastructure investments can help with economic development and the creation of jobs especially in the agricultural, military, aerospace, transportation and logistics, manufacturing, health and wellness, and tourist economic sectors. The ideas unify regional interests in economic development and infrastructure investment in order to create an overarching vision of how transportation investments can help expand the State’s economy by supporting economic development, job creation and commerce. The State is in a natural location to play a prominent role in logistics along the eastern seaboard, and international portals can help tie the State to the world. This includes ocean-side ports as well as inland ports – locations where goods can pass through US Customs. Via these portals and the Statewide tier of the transportation system, North Carolina will be in a stronger position to engage more directly in international commerce.
Impact of the initiative	Expanded freight logistics planning, financing and implementation will be a relatively new undertaking for the NCDOT and its planning partners. It will require new expertise, improved communication and coordination with industry, and willingness of decision-makers to set aside revenue to support potentially non-traditional projects.
Benefits and performance	This initiative will result in a more effective, proactive approach to recruiting new industries to North Carolina, taking advantage of approved development sites near our railroads and the Strategic Highway Corridors. It will support a more effective process for providing job creation and economic opportunities and in some cases require transportation funding.

<p><i>Consequences of not pursuing the initiative</i></p>	<p>Failing to recognize and act upon freight logistics plans and investment strategies will result in less than optimal economic development opportunities. By not planning ahead, the State and local communities will be reactive to site consultants which in turn will lead to mixed results. Failure to capture freight facilities in competition with other states, as well as to provide freight services, also will negatively impact job creation.</p>
<p><i>Potential changes in policy, processes and programs</i></p>	<p>Policy changes have been initiated by Governor Executive Order 85 which - among other things - expands NCDOT's role in freight planning to include increased coordination and collaboration with the Department of Commerce as a part of the transportation planning process.</p>

Initiative 7	Establish New Sources of Revenue for Transportation Investments. NCDOT has concluded that traditional transportation revenue streams are unsustainable and insufficient to meet both system preservation and improvement needs. NCDOT thus will establish a framework for promoting, endorsing, and supporting new and replacement revenue streams for transportation activities in addition to exploring other revenue opportunities, such as value capture.
NCDOT Principles and Objectives	Prosperity: Economic growth and development (leverage effective transportation funding strategies to meet long-term needs)
Elaboration of the lead statement	State and federal transportation revenues will decrease due to energy costs and CAFE standards, requiring alternate sources of revenues. The issue of a significant gap between transportation needs and revenue and the unsustainability of current transportation revenue sources is not a new issue in North Carolina or in the United States. This has been a consistent message since the development of the North Carolina Long-Range Statewide Multimodal Transportation Plan adopted in 2004. We need to develop performance standards for the transportation system and take a proactive lead in supporting long term revenue sources that allow the State to meet these performance standards now and into the future.
Impact of the initiative	New funding strategies will be pursued to effectively meet long-term transportation needs. These strategies may include new revenue sources to replace or supplement the declining gas tax revenue.
Benefits and performance	Improving the existing revenue sources will enable North Carolina to meet performance expectations of the transportation system, thus meeting the Department’s mission and supporting economic growth in the future.
Consequences of not pursuing the initiative	We will not be able to adequately maintain existing facilities or build new facilities. As our transportation system becomes more congested, economic opportunities will diminish.
Potential changes in policy, processes and programs	These revenue options will require legislative action and in some cases Federal approval. In addition, it is generally conceded that some initiatives, such as a VMT fee, will be more efficient and effective revenue sources if implemented nationally rather than on a Statewide basis.

<p>Initiative 8</p>	<p>Increase Funding Flexibility to Recognize Regional, Urban and Rural Differences. Growing and more diverse transportation system options demand greater flexibility in allocation of limited financial resources. We will analyze current transportation funding allocations and identify opportunities to further optimize funding in the State Transportation Improvement Program.</p>
<p>NCDOT Principles and Objectives</p>	<p>Prosperity: Economic growth and development (leverage effective transportation funding strategies to meet long-term needs)</p>
<p>Elaboration of the lead statement</p>	<p>Current State and Federal law establishes multiple categories of transportation funds whose use is limited to specific facilities and / or purposes. For example, the Federal-aid program consists of more than 100 separate categories, each with its own eligibility constraints. At the same time, over 40 percent of STIP funding is limited to specific designated projects, comprising fewer than 1,500 miles out of a total State-maintained system of nearly 80,000 miles. Some Congressional reauthorization proposals currently would greatly reduce the number of Federal programs, signaling recognition that greater funding flexibility is needed in the Federal-aid program. Today, a State statutory distribution formula ensures geographic dispersion of funding across the State, but changing demographics are hindering the formula’s ability to accomplish its original intent.</p>
<p>Impact of the initiative</p>	<p>This initiative will consider the extent to which the existing funding allocation mechanisms either support or hinder our mission and goals and the effective delivery of needed system improvements, and it will recommend policy and statutory changes that will promote the most efficient and effective use of available funds in meeting long-term transportation needs.</p>
<p>Benefits and performance</p>	<p>STIP programming could be more closely aligned with the highest-ranked identified system needs and with established goal / tier investment targets.</p>
<p>Consequences of not pursuing the initiative</p>	<p>There will continue to be some degree of disconnect, often substantial, between the most pressing transportation needs and the ability to fund them.</p>
<p>Potential changes in policy, processes and programs</p>	<p>Further optimization of funding allocation will necessitate State and Federal legislative action. Flexibility in spending Federal funds will need to be part of reauthorization of the transportation program.</p>

<p>Initiative 9</p>	<p>Embrace and Capitalize on Technological Advances. NCDOT should ensure that technological advances are pursued on at least two fronts:</p> <ol style="list-style-type: none"> 1. New applications in vehicle manufacturing, construction materials and construction processes, to address global challenges such as climate change, and system management, and 2. As an opportunity to disseminate information in a timely and clear manner to the public. <p>These initiatives will require the establishment of on-going relationships with global vehicle and ITS technology suppliers, think-tanks, and universities, as well as the development of improved public communications techniques.</p>
<p>NCDOT Principles and Objectives</p>	<p>Organizational Responsibility: A sustainable organization (improve information technology products and services to facilitate efficient and effective business operations)</p>
<p>Elaboration of the lead statement</p>	<p>For North Carolina, the first component of this initiative is relatively new except in some cases of collaboration among the NCDOT research program, NCSU and other universities’ engineering departments, the Institute for Transportation Research and Education and similar research programs. State policy has been to focus on immediate application of research and technology developments, generally leaving more advanced and long-range State-of-the-art initiatives to others in the transportation research community and private sector. This initiative calls for a long-term change in the relationships with ITS technology suppliers, automobile manufacturers, toll technology, and other emerging technology programs such that North Carolina becomes a leader in transportation technology development. Other branches of engineering (i.e., non-transportation) have done so, notably through North Carolina’s public and private university systems.</p> <p>On the second component, NCDOT is in the process of making good use of social media, among other means of information dissemination according to the framework established a in more comprehensive public involvement effort. The Department will be continuously challenged to stay on the cutting edge of tools and techniques to ensure the viability and intent of this program.</p>
<p>Impact of the initiative</p>	<p>This initiative will accelerate the Department’s technology-advanced applications, allowing the Department to accomplish more. In the face of total projected needs valued at \$123 billion (in 2011 dollars) over the next 30 years, more aggressive technology solutions will replace traditional improvements. Examples include “smart roads” (freeway monitoring, ramp meters, tolling with congestion pricing, variable message signs, etc.) and “connected vehicles” (vehicles that communicate with the roadway and each other).</p>

<p><i>Benefits and performance</i></p>	<p>With the number of worldwide vehicles forecasted to increase from 1 billion to 4 billion over the next 40 years, alternative technology solutions may lessen the pressure for new facilities while approximating the same positive benefits of improved mobility, economic development and safety. Advanced technology applications may enable the Department to either meet mobility, safety and/or development needs sooner or offer a technology-based solution that is less expensive and just as effective.</p>
<p><i>Consequences of not pursuing the initiative</i></p>	<p>There will be continued push for construction and rehabilitation of new and existing roads and multi-modal facility upgrades to the possible exclusion of technology solutions.</p>
<p><i>Potential changes in policy, processes and programs</i></p>	<p>We will administer the recommended changes through the establishment of a small program within the NCDOT that is tasked with tracking technological initiatives worldwide for possible application in North Carolina through organizations such as ITS America, the National Academy of Engineering, federal programs such as those sponsored by NASA and DOD, and the Automobile Manufacturers Association.</p>

Appendix A

Candidate Interview Agencies and Selected Interviews

A.1 Overview

This technical memorandum identifies candidate and selected organizations and groups for interviews regarding the evaluation of existing NC transportation planning policies, processes and products. It is broken into two sections: a) candidate organizations identified from several sources, including the Policies, Processes and Products Working Group, and b) an initial list of proposed target interviewees (and/or organizations, in cases where the consulting team does not have a ready contact).

A.2 Candidate Organizations

This listing contains agencies/organizations that are involved in transportation planning policy, process and/or product in NC.

Federal Agencies

- Environmental Protection Agency
- Federal Aviation Administration
- Federal Highway Administration
- Federal Railroad Administration
- Federal Transit Administration
- Housing and Urban Development
- National Park Service
- U.S. Army Corps of Engineers
- U.S. Bureau of Indian Affairs
- U.S. Bureau of Land Management
- U.S. Coast Guard
- U.S. Department of Agriculture
- U.S. Department of Commerce, NOAA Fisheries Service
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- North Carolina Department of Crime Control and Public Safety
- North Carolina Department of Cultural Resources
- North Carolina Department of Environment and Natural Resources
- North Carolina Department of Health and Human Services
- North Carolina NC Office
- North Carolina Department of Labor
- North Carolina Commission of Indian Affairs
- North Carolina Wildlife Resources Commission

North Carolina State Agencies, other than NC DOT

- North Carolina Department of Agriculture and Consumer Services
- North Carolina Department of Commerce (including NC State Ports Authority)

Tribal Governments

- Eastern Band of Cherokee Indians (Federally Recognized)

North Carolina Local Governments

- Airport Authorities
- Cities
- Counties
- Local Economic Development Agencies (EDAs)

- Metropolitan Planning Organizations (MPOs)
- NCAMPO
- NCRTPO
- Rural Planning Organizations (RPOs)
- Transit Agencies

North Carolina DOT

- Executive Leadership Team
- PDEA
- SPOT
- TPB
- TIP

University Transportation Centers

- Institute for Transportation Research and Education (ITRE)
- UNCC Transportation Research Center

Industry Representatives

- Associated General Contractors
- Chambers of Commerce, including the North Carolina Chamber
- Ports
- Railroads

A.3 Selected Target Interviewees

The listing below identifies the group of 27 individuals and organizations that were actually interviewed and that gave a broad variety of perspectives concerning transportation planning policies, processes and products in North Carolina. In our judgment, for the most part they are the individuals most involved with transportation planning and most knowledgeable of the planning policies, processes and programs in the State.

1. Piedmont Triad Partnership – David Hauser
2. RPO Focus Group
 - a. Land of Sky RPO – Carrie Runser-Turner
 - b. Piedmont Triad RPO – Hannah Cockburn
 - c. Eastern Carolina RPO – Alex Rickard
 - d. Unifour RPO – John Marshall
 - e. Kerr-Tar RPO – Mike Ciriello
3. MPO Focus Group
 - a. Capital Area MPO – Ed Johnson
 - b. MUMPO – Robert Cook
 - c. Greensboro Urban Area MPO – Tyler Meyer
 - d. Wilmington MPO – Mike Kozlosky
 - e. Greater Hickory MPO – John Tippet
4. NCDNER – Laura Booth
5. NCDOT – Calvin Leggett/TIP
6. NCDOT – Don Voelker/SPOT
7. NCDOT – Jim Westmoreland/Deputy Secretary for Transit
8. NCDOT – Mike Bruff/TPB
9. NCDOT – Terry Gibson/State Highway Administrator
10. NCDOT/Commerce – Jed McMillan

- | | |
|--|---|
| 11. NCRR – Scott Saylor | 14. Triangle Transit Authority – David King |
| 12. Piedmont Area Rapid Transit – Brent McKinney | 15. US Army Corps of Engineers – Monte Matthews |
| 13. Regional (Triangle area) Transportation Alliance – Joe Milazzo | 16. US HUD – Emily Williams |
| | 17. US EPA – Chris Militscher |
| | 18. NC Ports Authority – Stephanie Ayers |

Appendix B

Interview Guidelines

B.1 Purpose

The interview guidelines are for use by the interviewees in conducting telephone or face-to-face interviews with selected individuals that are involved with NC transportation planning policies, processes and programs (PPP). The results should provide a) some history of PPP development and application, b) an indication which characteristics are considered successful and why, c) opportunities for improvement and why, and d) a collective evaluation of the interviews' perspectives.

B.2 Introduction

The consulting team provided a "policies, processes and programs" white paper (in effect, Chapter 1 of this report) in advance to each interviewee, along with a general description of the questions that may be discussed. This enabled the interviewee to better understand the comprehensive nature and extent of existing transportation planning policies, processes and programs as well as the attempt to distinguish among them.

B.3 Interview Guidelines Script and Probes

Identify interviewer and date: _____

"Thank you for taking a few minutes to talk with me about transportation planning policies, processes and programs in North Carolina. You were selected for this interview because of the depth of your experience in the field and/or your responsibilities for implementing or participating in various transportation planning activities in the State. In this regard, we are interviewing representatives from business and industry (carriers and shippers), government agencies at all levels, including cities and counties, MPOs, RPOs, resources agencies, and units within the NC DOT."

GENERAL 'WARM UP' QUESTIONS

1. In general, what is **working well** in transportation planning policies, processes, and products in NC?
2. In general, what is **not working so well** in transportation planning policies, processes, and products in NC?

PROBING QUESTIONS:

3. Briefly, what is your **background and experience** in transportation planning policies, processes, and programs?
4. What individuals and/or groups do you and your staff **interact with** the most regarding transportation planning?

5. In **what ways and how often** do you interact with them?
6. What is the **strongest component or attribute** of transportation planning policies, processes and programs in NC?
7. What is the **weakest link** in transportation planning policies, processes and programs in NC?
8. Is there a **sufficient 'strategic planning' or 'strategic thinking'** component to setting transportation policy in NC?
9. What **organizational, structural or role changes** would you make to improve transportation planning policies, processes and products?
10. What **communication changes** would you make to improve transportation planning policies, processes and products?
11. What **hurdles** must be overcome to improve transportation planning policies, processes and products in NC?
12. Do the transportation planning policies, processes and products adequately address **funding stability** considerations? If not, what should be changed?
13. How can the transportation planning community properly **identify the needs of, ensure the participation in, and consider the impacts of** policies, processes and products on minorities and/or low-income populations?
14. Do you have ideas as to how the State may **speed up or expedite** the transportation planning process in NC?
15. Do the results of transportation planning activities represent the 'will of the people,' i.e., do changes in transportation policies, processes and products receive **sufficient public vetting**?
16. Do you have ideas for **improved techniques, technology and/or tools** to enhance transportation planning policy-making, processes and/or products?
17. Is the NCDOT **'transformation process'** as it applies to transportation planning having the desired effect?

SUMMARY QUESTION:

18. Now that we've discussed transportation planning elements and issues, do you have anything to add or change regarding **'What's working'** or **'What's not working?'** regarding transportation planning policies, processes and products in NC?

Thank you very much for your time. If you have follow-up ideas or comments, I may be reached at (phone) _____ or (email) _____."

Appendix C

MPO and RPO Programs in North Carolina

C.1 Introduction

A *planning process* guided and approved by the respective Metropolitan Planning Organizations (MPO) is required for all urbanized areas. These areas are designated by the US Census Bureau as being urban in nature and having a population of 50,000 or more, and they are required by the Federal-aid Highway Act of 1962 and subsequent updates to have a continuing, cooperative, and comprehensive (“3C”) transportation planning process in order to qualify for federal transportation funds. In North Carolina, this planning requirement is carried out by the 17 federally-identified MPOs. Federal Legislation also requires that NCDOT consult with non-metropolitan officials (non-MPOs) during the transportation planning process. In early 2000, NCDOT created the Rural Planning Organizations (RPOs) to assist in carrying out this requirement. Currently, 20 RPOs assist NCDOT in carrying out this requirement. Together, these organizations cover all 100 counties.

The MPOs typically are represented by two principal committees carrying out the policy directives of the MPOs: the Transportation Advisory Committee (TAC) and the Technical Coordinating Committee (TCC).

- The TAC is the governing policy board for the MPO. The TAC’s membership includes elected officials, members of local government, the area’s representative on the NC Board of Transportation, an advisory member from FHWA, and other members as may be designated. The TAC provides direction for the planning process, solicits appropriate public involvement, and guides the development of a comprehensive multi-modal transportation program for the urban area (both long range plans and funding programs).
- The TCC is comprised of staff representatives of the various member local, state, and federal government agencies, transit providers, and other agencies with an interest in transportation planning. The TCC has the responsibility of making technical recommendations to the Transportation Advisory Committee on decisions pertaining to transportation planning, including the 3C process, and the multi-modal Comprehensive Transportation Plan.

RPOs were established by the North Carolina General Assembly in 2000, and they were mandated to address transportation planning in rural areas outside MPO jurisdictions. There are 20 RPOs in the State, which – together with the MPOs – cover all 100 counties and thus every square mile of the State.

Although organized and tasked in a manner very similar to MPOs, RPOs are required by state law to carry out the following four core duties:

- Develop, in cooperation with the NCDOT, transportation plans in the non-MPO areas.
- Provide a forum for non-metropolitan officials and public participation in the transportation planning process.

- Develop and prioritize suggestions for projects that the organization believes should be included in the Statewide Transportation Improvement Program.
- Provide transportation-related information to local governments and other interested organizations and persons.

A 'lead planning agency' is designated for each RPO to provide staff support. Typically, staff is assigned from the appropriate Council of Government, county, city or other entity. A TAC and TCC for each RPO serve similar functions as do those in MPO regions, as follows:

- The TAC is the governing policy board for the RPO. The TAC's membership includes elected officials, members of the local governments, the area's representative on the NC Board of Transportation and other members as may be designated. The TAC provides policy direction for the planning process, facilitates communication and coordination among the member jurisdictions, and guides the development of a comprehensive multi-modal transportation program for the rural area.
- The TCC role is to support and advise the TAC. It is comprised of staff representatives of the various member governments, NCDOT, transit providers, and other agencies with an interest in transportation planning. The TCC – with the assistance of the NCDOT Transportation Planning Branch – has the responsibility of supervising and coordinating their four core duties by making technical recommendations to the TAC on decisions pertaining to that process.

C.2 MPO and RPO Agency Interactions

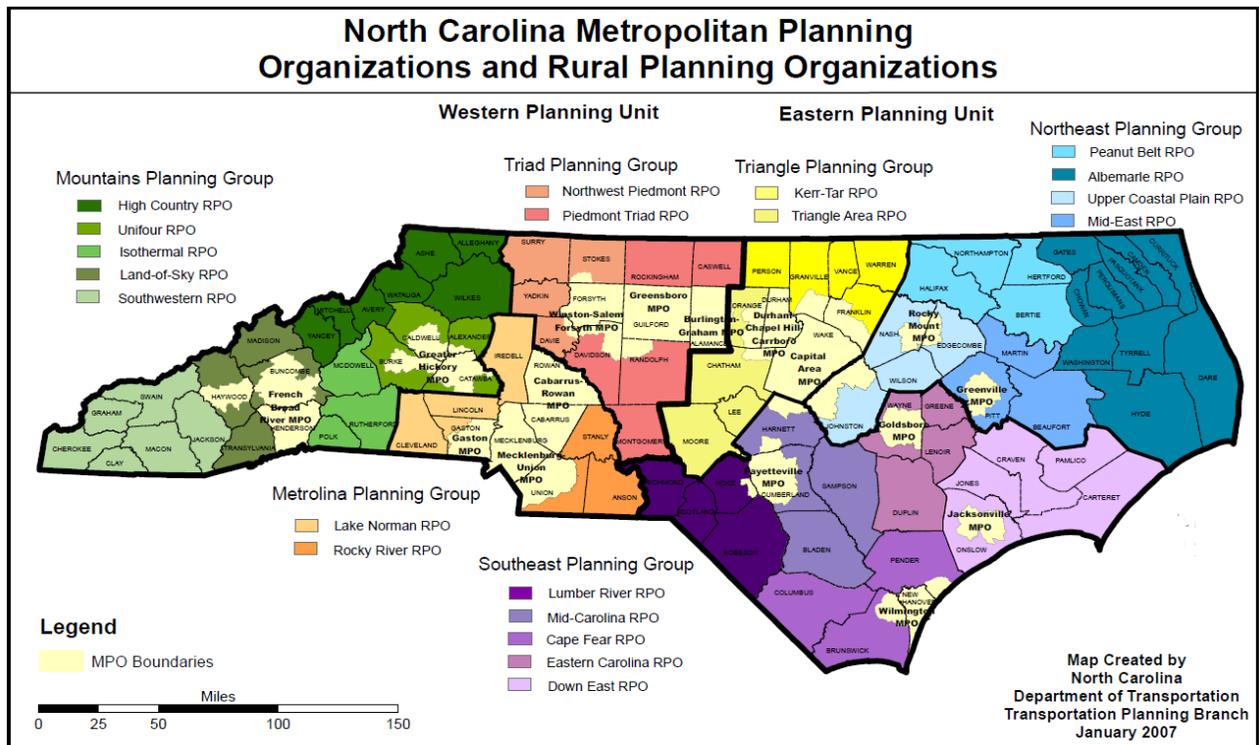
There are currently 17 MPOs in North Carolina which participate in the 3-C transportation planning process. They are centered on the following communities and shown on the map on page C-3:

- French Broad River
- Burlington-Graham
- Cabarrus-Rowan
- Mecklenburg-Union
- Durham-Chapel Hill-Carrboro
- Fayetteville
- Gastonia
- Goldsboro
- Greensboro
- Greenville
- Greater Hickory
- High Point
- Jacksonville
- Capital Area
- Rocky Mount
- Wilmington
- Winston-Salem

There are 20 RPOs in the state which – together with the MPOs – cover all 100 counties. The jurisdiction of the RPOs also is shown on the map on page C-3:

- Albemarle
- Cape Fear
- Down East
- Eastern Carolina
- High Country
- Isothermal
- Kerr-Tar
- Lake Norman
- Land of Sky
- Lumber River
- Mid-Carolina
- Mid-East
- Northwest Piedmont
- Peanut Belt
- Piedmont Triad
- Rocky River
- Southwestern
- Triangle Area
- Unifour
- Upper Coastal Plain

As can be seen, the MPO and RPO boundaries do not follow county lines; rather, boundaries have been established to meet US Bureau of the Census regulations, reflect political realities, and join like-communities regardless of county lines. This can complicate some of the decision-making processes, but the net result is that every citizen in the state is represented by one of the above 37 organizations. Thus every North Carolinian has an avenue via the MPOs and RPOs to express his/her opinions about transportation planning and programming issues.



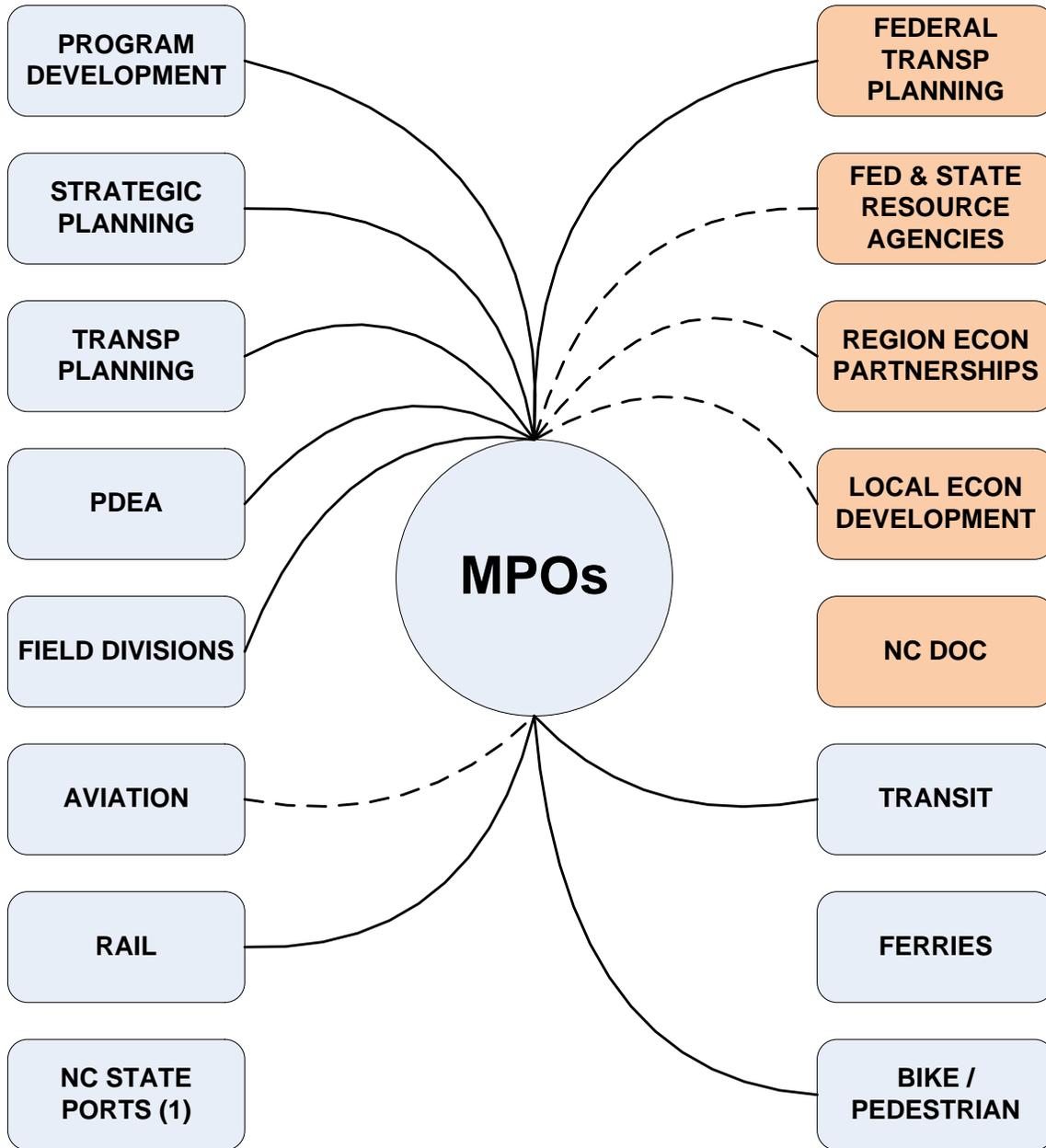
The MPOs have established working relationships with the agencies as highlighted in the figure on the next page. The RPOs have a working relationship with fewer agencies, and those relationships also are highlighted below in the second figure.

In both figures, we denote levels of “primary” and “secondary” interaction, the first by a solid line and the second by a dashed line. The absence of a solid or dashed line indicates “sporadic” interaction. While there are exceptions, we define these levels of interaction in the following way:

- *Primary.* Routine, frequent interaction and inter-dependence needed to accomplish strategic goals.
- *Secondary.* Much less frequent – but important – interaction, often precipitated by specific projects or programs. Some MPOs / RPOs may not interact at all with the designated agency(ies), depending on geography, interests, programs, etc.
- *Sporadic.* Little or no interaction except in unusual circumstances or exceptional cases.

The primary, secondary and sporadic interactions shown on the two charts are typical of MPOs and RPOs in the State, e.g., there are a few exceptions to these designations. Also, a considerable amount of judgment is required to categorize the nature and extent of the interaction which may shift from time to time.

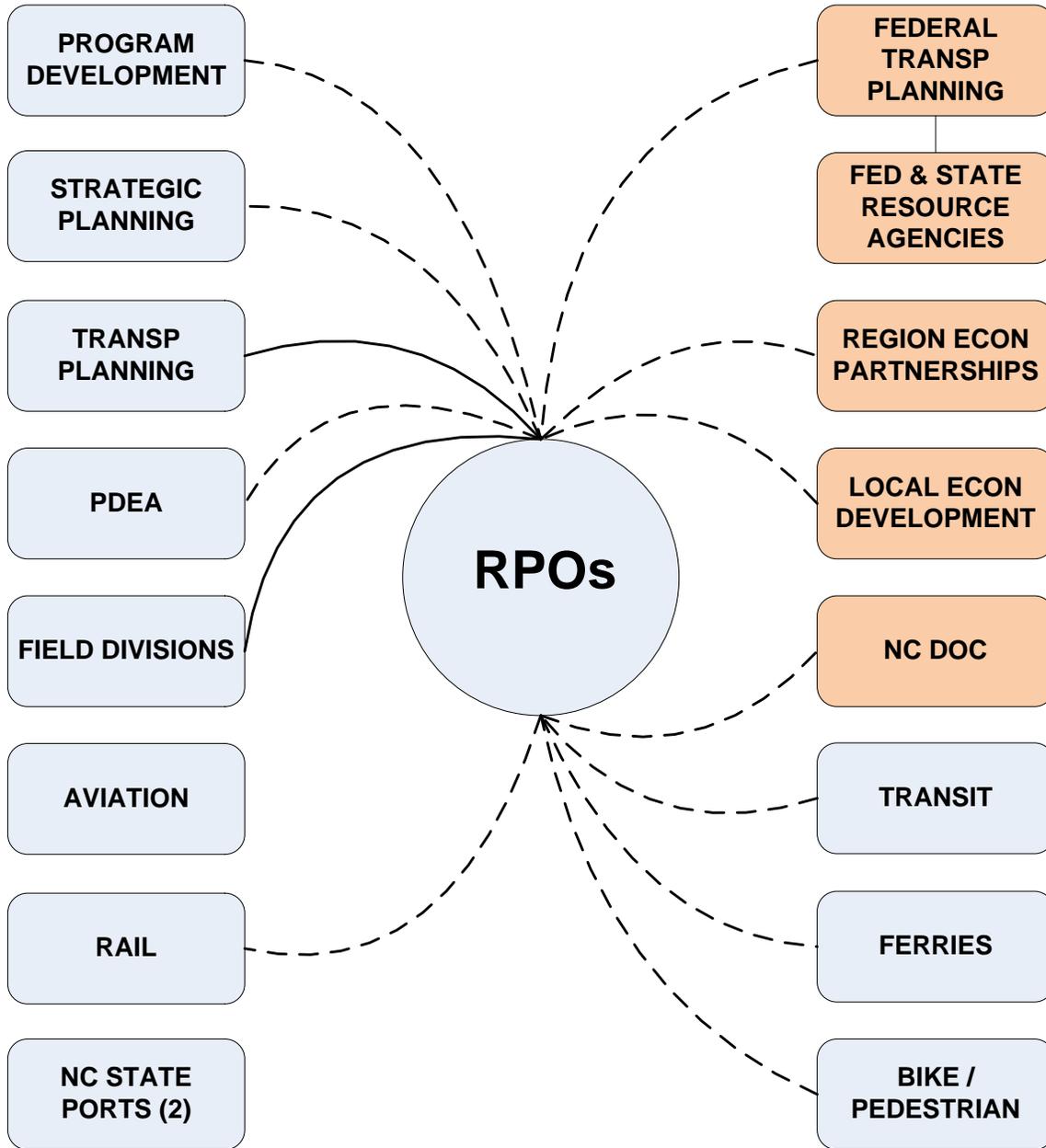
**TYPICAL MPO AGENCY INTERACTIONS
for TRANSPORTATION PLANNING**



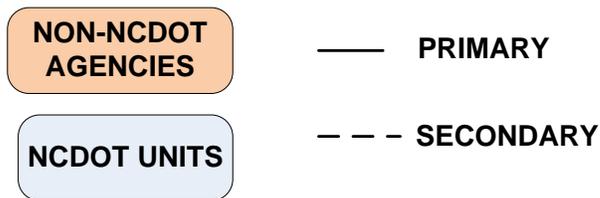
(1) WILMINGTON MPO: WILMINGTON PORT



**TYPICAL RPO AGENCY INTERACTIONS
for TRANSPORTATION PLANNING**



(2) DOWN EAST RPO: MOREHEAD CITY PORT



As can be observed from the figures, MPOs have considerably more “primary” interaction with other planning or economic development organizations than do RPOs. In fact, they also have a higher level of “secondary” interaction with another tier of related organizations. The MPOs have frequent and sometimes constant contact with the primary NCDOT transportation planning units, as well as the major surface modal units and one or more of the 14 field divisions in their geographic area. A similar level of RPO contact with the same population of transportation and economic development organizations focuses on the TPB, the appropriate field division(s) of the NCDOT, and the regional economic partnerships. To some degree, these observations are indicative of the historical emphasis on passenger transportation, e.g., many more individuals reside and conduct business in MPO areas than in RPO areas. This emphasis is shifting somewhat towards freight issues, noted below. Of course, there are exceptions to these subjective criteria, and one may argue the definition of “primary” versus “secondary.”

Over the past decade there also has been an increased interest in freight and logistics planning by NCDOT. In 2008 the state’s first *Statewide Logistics Plan for North Carolina* was developed. This report addresses long range economic, mobility and infrastructure needs, and it recommends various options for the creation of a statewide freight logistics organization to better focus such effort. In December 2009 Governor Beverly Perdue established the Governor’s Logistics Task Force whose objective is to review transportation systems in North Carolina including roads and highways, airports, ports, multimodal transportation and railroads. A major component of their effort is the *Seven Portals Study* completed in December 2011. With greater emphasis in freight and logistics planning at the state executive level, it may be expected that transportation planning at all levels will assume a broader focus than in previous years and an increased interaction between government agencies and freight carriers and shippers.