

Transportation Staff Meeting

May 16, 2012

2:00 PM

CMGC 601

AGENDA

1. NCDOT 2040 Plan Update (Tyler Bray)

Description:

A draft Plan has been released for public review and a comment period is open until May 25.

The following section was highlighted in a recent e-mail from Julie White of the NC Metro Mayors Coalition. It can found on page ES-3 of the Strategic Policies, Processes & Programs Draft Technical Report.

Diversify Opportunity and Participation for Sub-regional Transportation Systems. In coordination and cooperation with our local and regional partners, NCDOT will study and examine the potential benefits to all parties of a possible transition or transfer of some portion of responsibility for funding and / or operation of some Subregional Tier transportation facilities (e.g., secondary roads) to some local governments. This approach will enhance flexibility for local and regional decision-makers.

[Click here](#) to view the full draft Plan.

Attachment: Presentation

2. Comprehensive Transportation Plan (Panicker)

Description:

Discussion of CTP Definitions for the Bicycle Map.

Attachment: CTP definitions

Access number: 704-432-5485

2040 Plan Update

MPO/RPO Briefing

April 2012



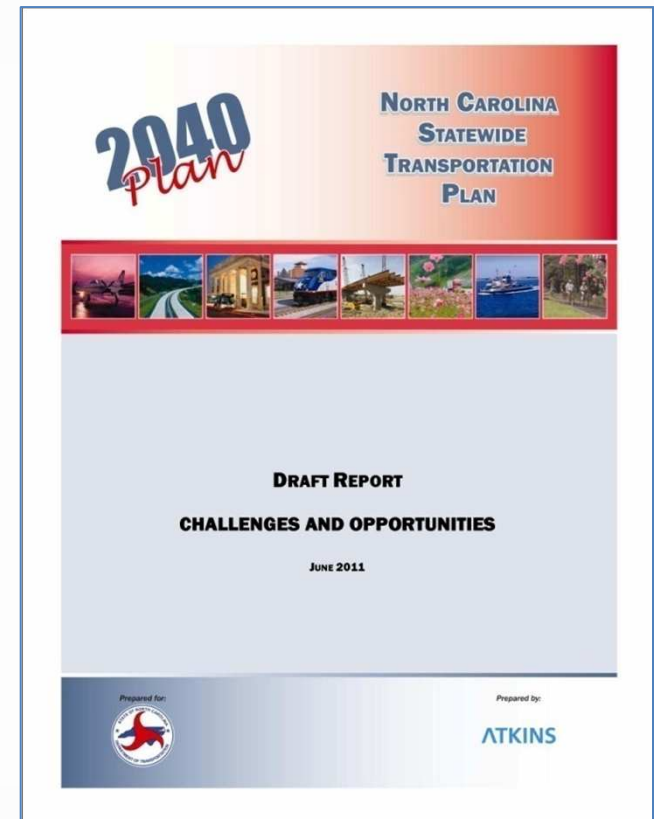
Briefing Topics

1. 2040 Plan Overview
2. Ongoing activities
3. Draft 2040 Plan

The 2040 Plan identifies:

1. Challenges & Opportunities
2. Long-term modal infrastructure and service needs
3. A sustainable financing strategy
4. Strategic investments and plan implementation

Schedule: adoption in Summer 2012



Ongoing Activities

2nd Round of Public Involvement Complete

- Statewide Stakeholder and Agency Coordination Group workshops
- Webinars with Regional Stakeholders
- Second public survey completed
- RPO and MPO Activities



NCDOT
From Policy to Projects
2040 Plan

Departamento de Transporte de Carolina del Norte 2º Cuestionario del Plan del 2040 – Septiembre del 2011
Llame al 1-877-DOT-4YOU (368-4968) o visite www.ncdot.gov para más información.
---importante para el Plan del 2040. Por favor conteste las siguientes preguntas sobre ---
---indico en la parte posterior, agregue estampa postal y envíelo por correo.

1. Please provide your zip code: _____

2. Although several billion dollars are expected to be available over the next 30 years for improvements for highways, bicycle and pedestrian facilities, passenger and freight rail, aviation and ferries, this amount is insufficient to address all needs. Given this limited funding, which of the following should NCDOT make its highest priority? Please select only one.

- ___ Focus on funding highway maintenance only, with no expansions or new roadways, and no enhancements to other forms of transportation, such as bus and rail.
- ___ Focus on other forms of transportation, such as bus and rail.
- ___ Enhancements such as road widening.
- ___ Focus only on projects and programming, such as rail, bus, aviation, walking and bicycling. Instead of making highway transportation needs.
- ___ Focus resources on the interstate system and major state roadways, and reduce resources for city and county transportation needs.
- ___ Other (Please specify) _____

3. By 2040 there will be 3 million more people living in North Carolina – equal to the entire population of Iowa. Our residents will be older and more diverse, and more people will reside in and near large cities. Which of the following is the most important to address the transportation needs of our changing population? Please select only one.

- ___ Invest additional resources in public transportation (rail and buses).
- ___ Encourage development with higher numbers of people per acre.
- ___ Better coordinate transportation and land development.
- ___ Other (Please specify) _____

4. Which of the following contributes most to your quality of life and should be a priority for future transportation investments? Please select only one.

- ___ Improved air and water quality
- ___ Shorter commute times
- ___ Communities that accommodate walking and bicycling
- ___ Easily accessible public transportation (bus and rail) options
- ___ Enhanced aviation or ferry facilities
- ___ Other (Please specify) _____

Passenger rail is expensive, and North Carolina has limited funds to dedicate to rail. If additional funding can be used, which of the following should be the focus for future rail service? Please select only one.

- ___ Intercity passenger rail service between major cities.
- ___ Intercity passenger rail service between downtown and suburban communities.
- ___ Other (Please specify) _____

5. Which of the following will be the greatest benefit to economic prosperity. Please select only one of the following.

- ___ The blank.
- ___ Investments to better move people and freight
- ___ Transportation enhancements to better move people and freight
- ___ Investments to better move people and freight
- ___ Investments to better move people and freight (specify) _____

Major feedback themes captured in draft 2040 Plan

- Be more multi-modal
- Take care of what we have
- Integrate land use and transportation planning
- Streamline project development

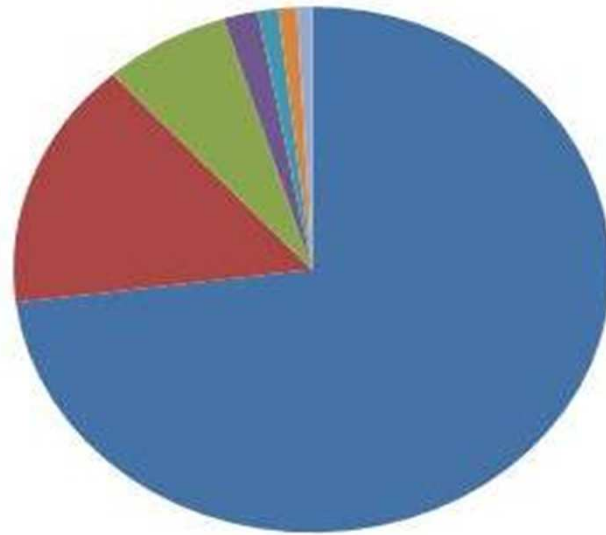
Major feedback themes captured in draft 2040 Plan

- Eliminate fund diversions
- Improve MPO/RPO coordination
- Recognize regionalism
- Improve education for stakeholders and the general public

3rd Round of Public Involvement initiated:

- Statewide Stakeholder Group
- Agency Coordination Group
- Regional Stakeholders
- MPOs and RPOs presentations
- Other presentations as requested

Modal Needs Estimates



- Highways
- Public Transportation
- Rail
- Aviation
- Ferry
- Ports
- Bicycle/Pedestrian

\$159 Billion (2011 Dollars)

- Needs based on optimal performance
- Includes today's \$45 Billion backlog
- Consistent with previous estimates

- Available funds for projects - \$54 Billion
- \$159 Billion (Transportation Needs)
- **\$105 Billion gap (BEST!)**
- \$76 Billion (better)
- \$40 Billion (good—current level)

Conclusion: NCDOT's current funding model is not sufficient and sustainable.

Finance – Can the Funding Gap be closed?

Revenue options that have been considered

- System tolling of Interstate highways and urban loops
- Fee on vehicle miles travelled
- Local vehicle property tax
- Local option sales tax
- Fee on automobile insurance
- Increased motor fuel tax rate and registration fees

How much revenue would these options generate?

Revenue Enhancement Options

- Continue motor fuel tax indexing - \$19 Billion
- Increase registration/license fees - \$6 Billion
- Eliminate Highway Fund transfers - \$4 Billion
- Redirect vehicle lease fee to NCDOT - \$1 Billion
- Increase Highway Use Tax - \$3 Billion
- Local vehicle property tax - \$1 Billion
- Auto insurance surcharge - \$12 Billion
- Wholesale motor fuels tax - \$12 Billion
- Interstate tolling - \$42 Billion
- VMT Fee - \$27 Billion

Funding Gap Closure Strategies

Four revenue scenarios evaluated

(Objective not to choose, but to demonstrate power and limitations of different strategies)

- Interstate tolling to supplement existing taxes/fees
- VMT fee to replaces motor fuel tax in 2020
- Existing revenue sources with indexing & increases gap
- New revenue sources

Key Study Findings and Conclusions: Modal Needs and Finance

- **Transportation needs remain large and challenging**
- **Current transportation funding is insufficient and non-sustainable**
 - Current funding insufficient even to maintain status quo
 - Current funding model is not sustainable
- **Improve current quality of service**
- **Revenue options are available and feasible to address needs**

Draft 2040 Plan:

- Key Preliminary Findings & Recommendations

Strategic Investments and Policy Recommendations

1. Establishes investment priorities in a funding-challenged environment:
 - Priority for safety and taking care of existing system
 - Emphasis on Statewide Tier
 - Emphasis on addressing logistics needs
 - Recognition of regional and urban/rural diversity of needs

Strategic Investments and Policy Recommendations

2. Endorses recent/ongoing major policy and process initiatives:
 - Transportation Reform and Project Prioritization
 - Value of making transportation investments that address the logistics needs of the state's economy
 - Sustainability Blueprint

Strategic Investments and Policy Recommendations

3. Endorses proposed Policy, Process, and Program recommendations

- Place highest priority on investments within the Statewide Tier
- Improve the MPO and RPO processes with a focus on improving relationships and communications
- Encourage integration between land use and transportation planning
- Expedite project delivery times
- Strengthen planning processes to ensure all perspectives of the human environment are considered

Strategic Investments and Policy Recommendations

3. Endorses proposed Policy, Process, and Program recommendations (Cont'd)

- Better integrate logistics needs into transportation planning process
- Establish new sources of revenue for transportation investments
- Recognize differences in regional, urban and rural needs
- Embrace and capitalize on technology advances
- Diversify opportunity and participation for subregional transportation systems

Discussion Q&A

Thank you

Visit 2040 Plan website:

<http://www.ncdot.org/performance/reform/2040Plan/>

For more information or to submit additional comments:

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Mark Boggs, PE, Atkins, mark.boggs@atkinsglobal.com

Appendix B

Comprehensive Transportation Plan Definitions

Highway Map

For visual depiction of facility types for the following CTP classification, visit <http://www.ncdot.gov/doh/preconstruct/tpb/SHC/facility/>.

Facility Type Definitions

- **Freeways**

- Functional purpose – high mobility, high volume, high speed
- Posted speed – 55 mph or greater
- Cross section – minimum four lanes with continuous median
- Multi-modal elements – High Occupancy Vehicles (HOV)/High Occupancy Transit (HOT) lanes, busways, truck lanes, park-and-ride facilities at/near interchanges, adjacent shared use paths (separate from roadway and outside ROW)
- Type of access control – full control of access
- Access management – interchange spacing (urban – one mile; non-urban – three miles); at interchanges on the intersecting roadway, full control of access for 1,000ft or for 350ft plus 650ft island or median; use of frontage roads, rear service roads
- Intersecting facilities – interchange or grade separation (no signals or at-grade intersections)
- Driveways – not allowed

- **Expressways**

- Functional purpose – high mobility, high volume, medium-high speed
- Posted speed – 45 to 60 mph
- Cross section – minimum four lanes with median
- Multi-modal elements – HOV lanes, busways, very wide paved shoulders (rural), shared use paths (separate from roadway but within ROW)
- Type of access control – limited or partial control of access;
- Access management – minimum interchange/intersection spacing 2,000ft; median breaks only at intersections with minor roadways or to permit U-turns; use of frontage roads, rear service roads; driveways limited in location and number; use of acceleration/deceleration or right turning lanes
- Intersecting facilities – interchange; at-grade intersection for minor roadways; right-in/right-out and/or left-over or grade separation (no signalization for through traffic)
- Driveways – right-in/right-out only; direct driveway access via service roads or other alternate connections

- **Boulevards**

- Functional purpose – moderate mobility; moderate access, moderate volume, medium speed
- Posted speed – 30 to 55 mph
- Cross section – two or more lanes with median (median breaks allowed for U-turns per current NCDOT *Driveway Manual*)
- Multi-modal elements – bus stops, bike lanes (urban) or wide paved shoulders (rural), sidewalks (urban - local government option)
- Type of access control – limited control of access, partial control of access, or no control of access
- Access management – two lane facilities may have medians with crossovers, medians with turning pockets or turning lanes; use of acceleration/deceleration or right turning lanes is optional; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – at grade intersections and driveways; interchanges at special locations with high volumes
- Driveways – primarily right-in/right-out, some right-in/right-out in combination with median leftovers; major driveways may be full movement when access is not possible using an alternate roadway

- **Other Major Thoroughfares**

- Functional purpose – balanced mobility and access, moderate volume, low to medium speed
- Posted speed – 25 to 55 mph
- Cross section – four or more lanes without median (*US and NC routes may have less than four lanes*)
- Multi-modal elements – bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- Type of access control – no control of access
- Access management – continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – intersections and driveways
- Driveways – full movement on two lane roadway with center turn lane as permitted by the current NCDOT *Driveway Manual*

- **Minor Thoroughfares**

- Functional purpose – balanced mobility and access, moderate volume, low to medium speed
- Posted speed – 25 to 55 mph
- Cross section – ultimately three lanes (no more than one lane per direction) or less without median
- Multi-modal elements – bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- ROW – no control of access

- Access management – continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – intersections and driveways
- Driveways – full movement on two lane with center turn lane as permitted by the current NCDOT *Driveway Manual*

Other Highway Map Definitions

- **Existing** – Roadway facilities that are not recommended to be improved.
- **Needs Improvement** – Roadway facilities that need to be improved for capacity, safety, or system continuity. The improvement to the facility may be widening, other operational strategies, increasing the level of access control along the facility, or a combination of improvements and strategies. “Needs improvement” does not refer to the maintenance needs of existing facilities.
- **Recommended** – Roadway facilities on new location that are needed in the future.
- **Interchange** – Through movement on intersecting roads is separated by a structure. Turning movement area accommodated by on/off ramps and loops.
- **Grade Separation** – Through movement on intersecting roads is separated by a structure. There is no direct access between the facilities.
- **Full Control of Access** – Connections to a facility provided only via ramps at interchanges. No private driveway connections allowed.
- **Limited Control of Access** – Connections to a facility provided only via ramps at interchanges (major crossings) and at-grade intersections (minor crossings and service roads). No private driveway connections allowed.
- **Partial Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections shall be defined as a maximum of one connection per parcel. One connection is defined as one ingress and one egress point. These may be combined to form a two-way driveway (most common) or separated to allow for better traffic flow through the parcel. The use of shared or consolidated connections is highly encouraged.
- **No Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways.

Public Transportation and Rail Map

- **Bus Routes** – The primary fixed route bus system for the area. Does not include demand response systems.
- **Fixed Guideway** – Any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail, monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
 - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
 - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
 - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
 - Existing – Corridor where high speed rail service is provided (there are currently no existing high speed corridor in North Carolina).
 - Recommended – Proposed corridor for high speed rail service.
- **Rail Stop** – A railroad station or stop along the railroad tracks.
- **Intermodal Connector** – A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location or a bus station.
- **Park and Ride Lot** – A strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.
- **Existing Grade Separation** – Locations where existing rail facilities and are physically separated from existing highways or other transportation facilities. These may be bridges, culverts, or other structures.
- **Proposed Grade Separation** – Locations where rail facilities are recommended to be physically separated from existing or recommended highways or other transportation facilities. These may be bridges, culverts, or other structures.

Bicycle Map

- **On Road-Existing** – Conditions for bicycling on the highway facility are adequate to safely accommodate cyclists.
- **On Road-Needs Improvement** – At the systems level, it is desirable for an existing highway facility to accommodate bicycle transportation; however, highway improvements are necessary to create safe travel conditions for the cyclists.
- **On Road-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate bicycle transportation. The highway should be designed and built to safely accommodate cyclists.

- **Off Road-Existing** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- **Off Road-Needs Improvement** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment.
- **Off Road-Recommended** – A facility needed to accommodate only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.
- **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

Pedestrian Map

- **Sidewalk-Existing** – Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.

- **Sidewalk-Needs Improvement** – Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.
- **Sidewalk-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation **or** to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.
- **Off Road-Existing** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.
- **Off Road-Needs Improvement** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way that will not adequately serve future pedestrian needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), improved horizontal or vertical alignment, and meeting ADA requirements.
- **Off Road-Recommended** – A facility needed to accommodate only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.
- **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

- **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.