



Statewide Transportation Plan - Background & Purpose -

- Develop Policy Guidance & Strategic Direction for NCDOT
- Federally Mandated (ISTEA & TEA-21)
- 2000 Transportation Finance Commission recommendation -- Efficiency Study # 8
- Inventory 25-year Needs
- Forecast Available Revenues
- Solicit Public & Stakeholder Interest
- Determine long-term Investment Priorities



Statewide Transportation Plan - Who has been involved? -

- Board of Transportation
 - Statewide Plan Committee
- Senior NCDOT Management
- Technical Steering Committee (all modes)
- Division Engineers
- Stakeholder Groups / Citizens
 - Regional Forums / Newsletters / Outreach Events / Website
- Transportation Planning Branch Staff
 - Consultant Team



Statewide Transportation Plan - Key Issues -

- \$84 Billion in Needs vs. \$55 Billion in Revenue
- Limited ability to address <u>pressing</u> needs
 - spending restrictions on state/federal dollars
 - flexibility is essential
- Maintenance Backlog
 - 4K miles of state highways & 260 bridges added each yr
- Demographic/Travel Trends
 - 1990-2000 population increased 21%; VMT increased nearly 40%
 - By 2020 population expands additional 25%



Statewide Transportation Plan - Key Issues con't-

- Regional Differences and Needs
- Quality of life goals
 - air quality, environmental & community enhancement
- Lack of Performance Measuring
 - need goals, tracking systems, reporting mechanisms
- Department must Prioritize w/ Limited Resources
 - NCDOT cannot be all things to all people





Statewide Transportation Plan - What North Carolinians said -

- More emphasis on having a modern, well-maintained system
- Willing to pay for smart, efficient, effective transportation improvements
- Quality transportation and an enhanced environment are paramount
- Assure economic competitiveness and balance
- Provide more transportation options





Statewide Transportation Plan - How were the needs quantified? -

Highways & Bridges

- HPMS Highway Performance Monitoring System
- BNIP Bridge Needs & Investment Process
- Maintenance Condition Assessment Report
- Non-hwy Modes
 - Source documentation (ex. Transit 2001, NC Rail Plan)
 - Significant staff input
- System-oriented analysis; not project/geographic specific





Statewide Transportation Plan - Needs per Mode -

\$84 Billion (all modes; \$2001)

- 25-year "snapshot"
 - Highways & Bridges \$66.6 billion
 - ITS (Intelligent Transportation Systems) \$1.1 billion
 - Public Transportation \$10.6 billion
 - Rail (Passenger & Freight) \$4 billion
 - Ferry \$1.1 billion
 - Bicycle / Pedestrian \$300 million
 - Aviation \$1 billion*





^{*} funding is self-contained; not in final scenario



Statewide Transportation Plan - How were the needs illustrated? -

Improvement/Investment Categories

- <u>Maintenance / Preservation</u> routine treatments that restore to adequate level or sustain the condition of an asset & activities / treatments that protect the infrastructure and extend service life
- Modernization upgrades to system safety, functionality, & operational efficiency w/o adding physical capacity
- Expansion new construction/new services (beyond existing)
 and/or physically expanding capacity to an existing facility



Statewide Transportation Plan - Safety Related Needs -

- \$5.3 Billion annual cost to NC motorists
- NC's traffic fatality rate is 13% higher than national average
- 32,000 miles of deficient pavement (40% of the system)
- 7,000 state bridges structurally deficient
- 8,800 miles--narrow lanes & shoulders; sharp curves
- Future needs almost uniformly split b/w: Expansion
 Maintenance/Pres. & Modernization
 - Future maintenance/preservation needs (over the next 25 year)
 expected to be almost \$25 billion
 - Future modernization needs (over the next 25 years) expected to be almost \$20 billion





Statewide Transportation Plan - Revenue Forecast -

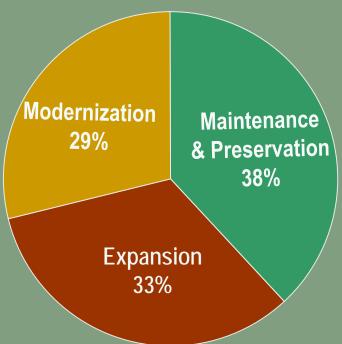
- \$55 Billion
- Assumptions made:
 - No new revenue sources over 25-years
 - Con't growth of state user fee "transfers"
 - Increases in fed/state funding at a conservative rate
 - Based on historical patterns; input from state office of planning and budget
 - Inflation assumed but discounted back to 2001 \$

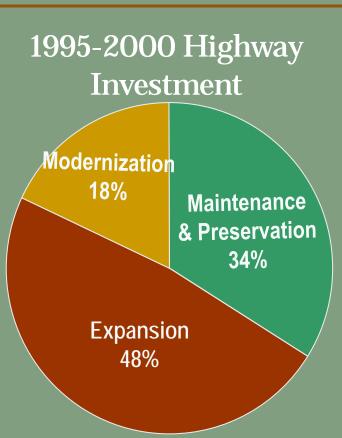




How Do NC <u>Highway</u> Needs Compare with Recent Highway Investment?

25-Year Highway Needs





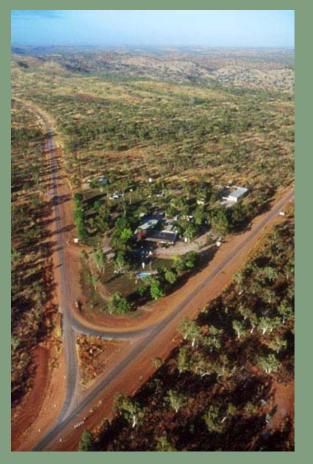




Statewide Transportation Plan - Determining a Direction -

Revenue = \$55 Billion

Needs = \$84 Billion







Statewide Transportation Plan

- What is an Investment Scenario? -

- Long-range Statewide Investment Strategy
 - program / capital goals
 - allocation of expected \$ within categories
 - financial framework; points to emphasis areas
- Fiscally constrained
- Investments reflect priorities
- Trade-offs (can retire only 2/3 of needs)





Statewide Transportation Plan - Scenarios Considered -

Modal Choice / Highway Preservation

- Large increase for non-highway modes
- Trade-offs: Hwy. Expansion and Modernization



Statewide Facilities / Highway Expansion

- Large increase in meeting Statewide travel needs
- Most Hwy. Expansion needs met



Modernization First

- Majority of major Modernization needs met
- Trade-offs: highway expansion, preservation





Statewide Transportation Plan - Recommended Scenario -

A <u>new</u> Investment Direction:

- Underscores importance of <u>Safety</u> in all investments
- Creates a focus on preserving/upgrading the <u>EXISTING</u> transportation system
- Targets investment in statewide mobility
- Extends intent & emphases of Moving Ahead!
- Creates more transportation options
- Only addresses 2/3 of all projected needs





Statewide Transportation Plan - Recommended Scenario -

Specifics - page 20 & 21 in Plan Report

- 75% of Maintenance & Preservation needs met
 - **\$22.6B** = **10%** increase from past
- 65% of Modernization needs met
 - \$15.6B = nearly 25% increase from past





Modernization improvement - BEFORE





Modernization improvement - AFTER





Statewide Transportation Plan - Recommended Scenario -

Specifics - page 20 & 21 in Plan Report

- 75% of Maintenance & Preservation needs met
 - represents 10% increase from past
- Major Modernization emphasis (2/3 of needs met)
 - represents nearly 25% increase from past
- 2/3 of Highway Expansion needs met
- Increases investment in non-hwy modes (7% to 17%)





Statewide Transportation Plan - Implementation -

- 2 Implementation Leadership Teams
 - Senior Management & BOT Statewide Plan Committee
- Pursue Greater Flexibility in Transportation Funding
- Improve Project Selection Process
- Monitor & Report Progress
- Establish Revision Cycles
- Implement <u>Strategic Highway Corridors</u> Concept
 - First tangible Action Item



What are Strategic Highway Corridors?

"A set of <u>Existing</u> Highways Vital to Moving People and Goods within and just outside North Carolina"



SHC Goals

- ➤ Efficient, safer, & improved mobility between <u>Activity Centers</u>:
 - •Urban Areas with a Population of 20,000 or greater
 - State Ports
 - Major Military Bases
 - •Major Intermodal Terminals
 - University of North Carolina System Campuses
 - •Major Hospitals/Trauma Centers
 - Major Tourist Attractions



SHC Goals

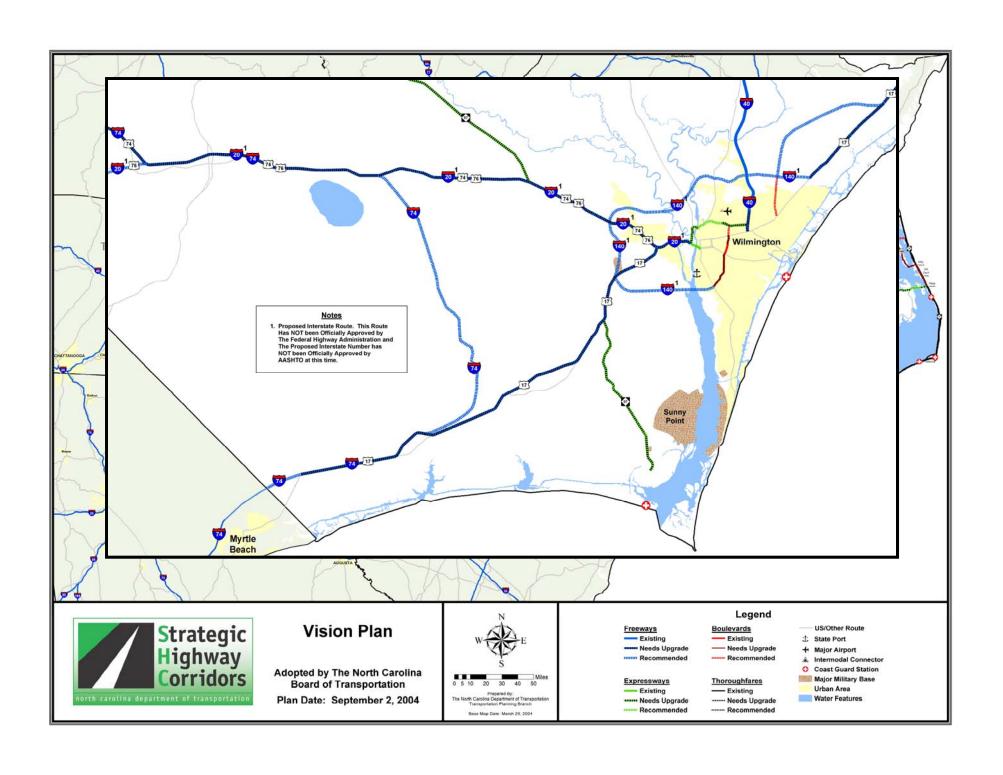
- > Create Broad based Vision for each Corridor
- > Affect Long-Term Decision Making
 - Systems Planning
 - Funding Decisions
 - Project Planning Decisions
 - Design Decisions
 - Day to Day Decisions (ex: Driveway Permits)
 - Local Land Use Decisions

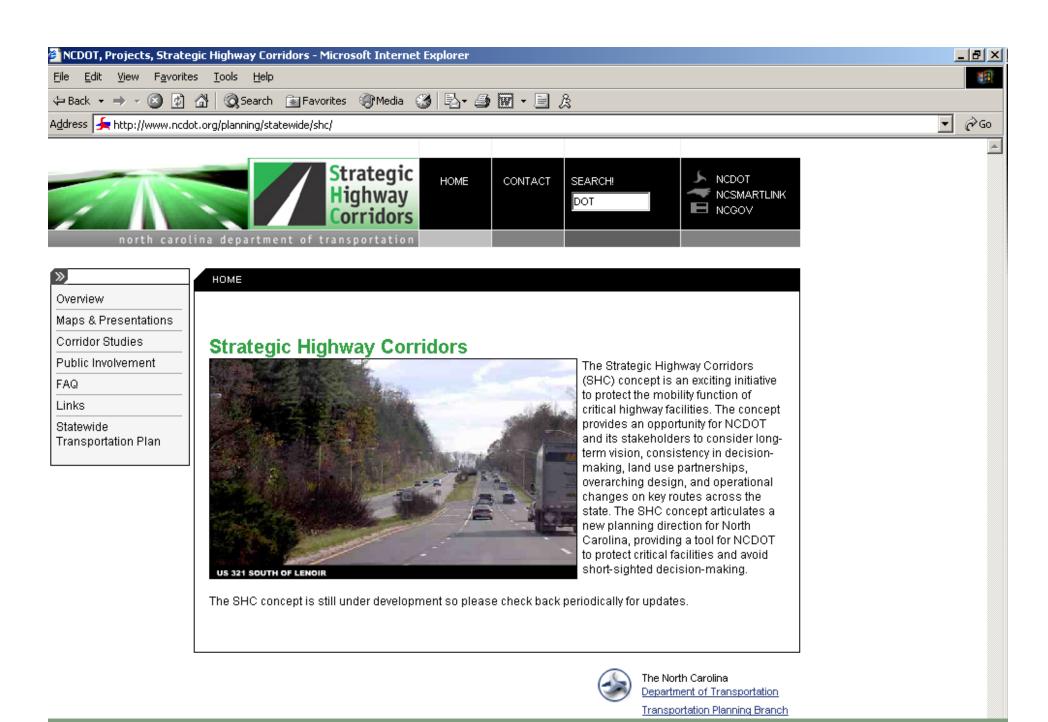


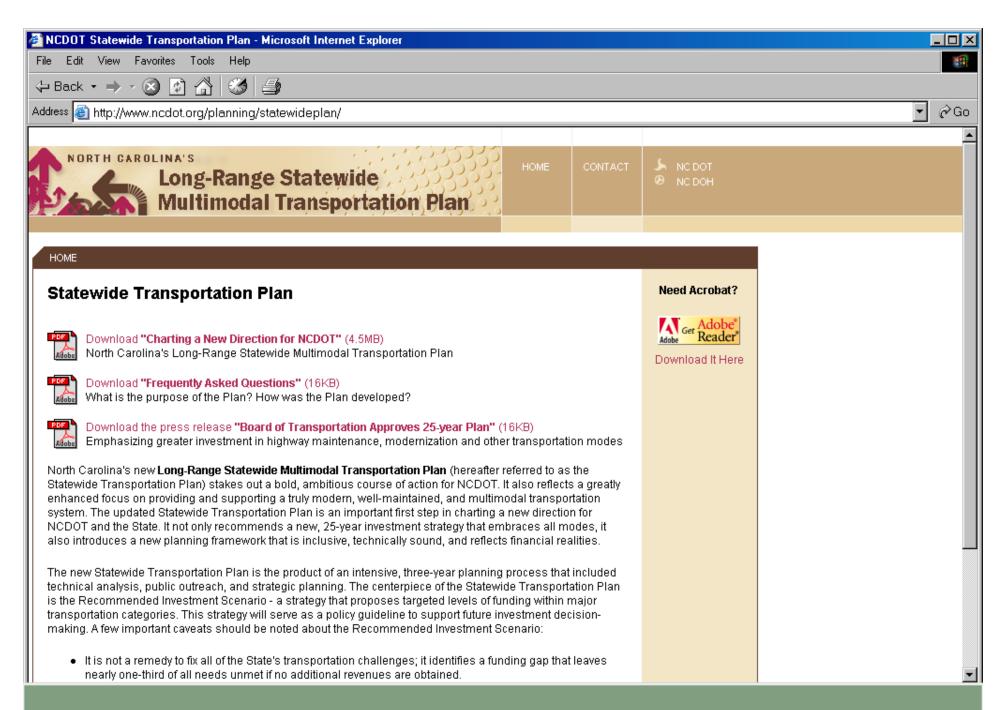












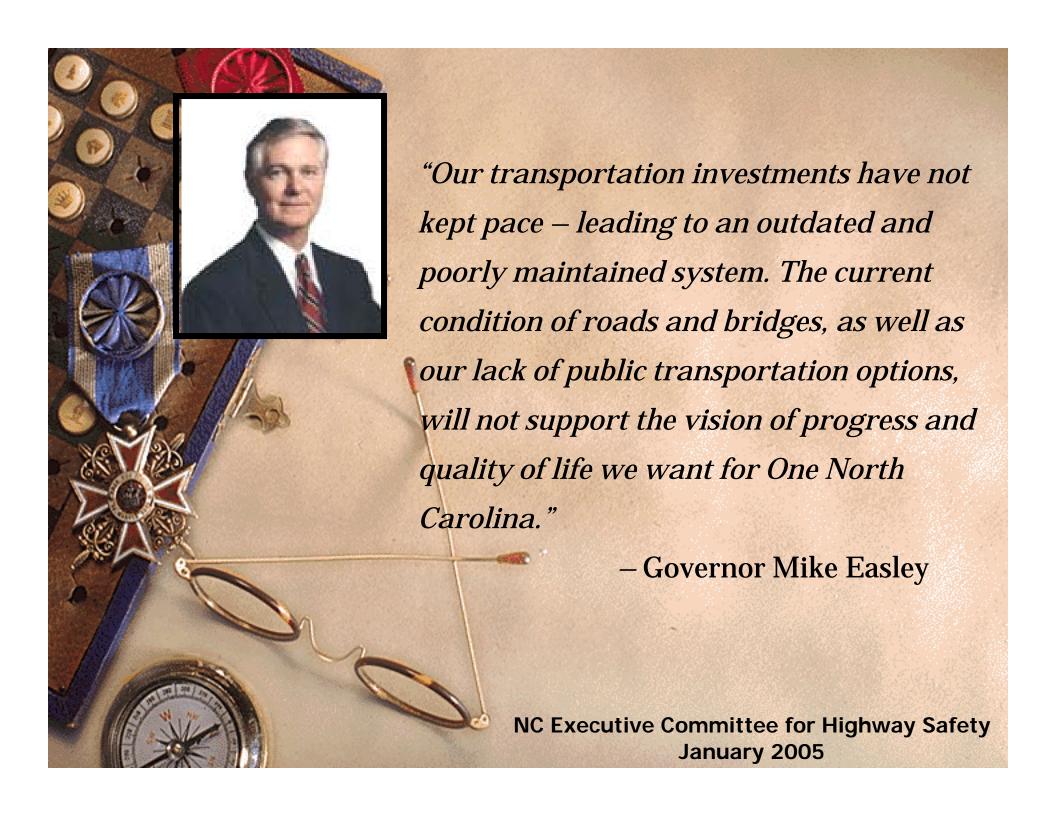
http://www.ncdot.org/planning/statewideplan



Statewide Transportation Plan - Summary -

- Plan is a long-term Investment Blueprint
 - visionary; overarching policy for capital investment
- Only meets 2/3 of all projected needs
- Underscores the need for investment flexibility & maximizing the use of existing resources
- Plan is a "living document" -- updated every 4 years
- Implementation is the KEY!
 - Series of Action items must be sustained to achieve goals







Statewide Transportation Plan- Final Thoughts -

