

North Carolina Strategic Transportation Corridor Framework

Note to reviewers: the intended purpose of the Strategic Transportation Corridor Framework is to establish a vision, a set of driving goals, and identification criteria that can define a system of strategic corridors and facilities that serve the state's high-level economic development and travel mobility needs. Proposed vision and goals are shown below. Reflecting that vision, two additional Framework elements are identified:

- Structure for identifying activity centers to be linked by strategic corridors
- Enhanced structure (the NC Transportation Network) for defining and achieving modal mobility objectives.

Staff intent is to present this framework to the Board of Transportation at the December BOT meeting.

STRATEGIC STATEWIDE AND REGIONAL TRANSPORTATION CORRIDORS VISION AND GOALS

Strategic Corridors Vision: to provide North Carolina with a network of high-priority, multimodal transportation corridors and facilities that connect statewide and regional activity centers to enhance economic development, promote highly-reliable, efficient mobility and connectivity, and support good decision-making.

Strategic Corridor Goals:

- *Promote economic prosperity:* invest NC's transportation resources to maximize economic opportunity.
- *Provide mobility and connectivity:* promote efficient, reliable movement of people and goods between activity centers of statewide or regional strategic significance
- *Enhance decision making:*
 - Preserve and enhance natural and cultural resources by maximizing the use of the existing transportation infrastructure to improve quality of life and ensure public safety related to transportation activity
 - Identify long-term high-priority investment needs to achieve Strategic Corridors Vision.

Corridor Identification Criteria (performance measures to assess these criteria are to be developed)

- Focus connectivity on groupings of activity centers of statewide or regional significance, including principal national or global centers critical to NC economic opportunity
- In linking activity centers, identify corridors offering highest opportunity for high levels of mobility and reliability.
- Maximize consolidation and minimize redundancy in corridor identification.

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Activity Center Stratification North Carolina Strategic Transportation Corridors

Note to reviewers: the intended purpose of activity center stratification is to scale defined activity center types to differentiate between those centers that are critical to overall statewide well-being and those with more of a regional focus. The identification and stratification shown below reflects internal NCDDOT work sessions, input from the study Advisory Committee and from the MindMixer collaboration, and Board of Transportation guidance. Comments are welcome.

Activity Centers	Statewide	Regional
Primary Employment Centers	High employment density: Census tracts of more than 3,000 employees / sq. mile	Medium employment density: Census tracts of 1,500 - 3,000 employees / sq. mile
High Priority Economic Development Sites (as defined in Seven Portals Study)	Identified Logistics Villages with highest preparedness and economic sector participation <ul style="list-style-type: none"> • Elizabeth City/Coast Guard Air Sta. • Rocky Mount/Kingsboro-Rose Megasite • Global TransPark • Wilmington International Airport • Port of Wilmington • Research Triangle Park • Burlington-Alamance Airport • Aerotropolis Village • Heart of NC Megasite (Moore/Montgomery) • Charlotte-Douglas airport area • Asheville Village 	Identified Logistics Villages with high preparedness and economic sector participation <ul style="list-style-type: none"> • Edenton NE Airport • Martin Co Airport • Jacksonville Ellis Airport • Morehead City Port • Fayetteville Airport • Laurinburg-Maxton Airport • Sanford-Lee Co Airport • US 29 Industrial Site (Davidson Co) • Smith-Reynolds Airport • Monroe/Legacy Park • Salisbury/Summit Corp Center • Statesville Airport
Major Military Bases	Bases having or supporting major troop or equipment deployments: <ul style="list-style-type: none"> • Fort Bragg Army Base • Seymour Johnson Air Force Base • Sunny Point Army Military Ocean Terminal • New River Marine Corps Air Station • Camp Lejeune Marine Base • Cherry Point Marine Corps Air Station 	Coast Guard Air Station (Elizabeth City)

Activity Centers	Statewide	Regional
Major Airports	International airports or major cargo hubs: <ul style="list-style-type: none"> • Charlotte/Douglas International Airport • Raleigh-Durham International Airport • Piedmont Triad International Airport • Wilmington International Airport 	Other commercial airports: <ul style="list-style-type: none"> • Asheville Regional Airport • Fayetteville Regional Airport • Pitt-Greenville Airport • Albert J. Ellis Airport • Carolina Regional Airport
Seaports and Inland Terminals	Sea ports: <ul style="list-style-type: none"> • Port of Wilmington • Port of Morehead City 	Port Authority Inland Terminals: <ul style="list-style-type: none"> • Global TransPark • Charlotte Inland Terminal • Piedmont Triad Inland Terminal
Major Universities and Colleges	Major research universities or > 15,000 on-campus enrollment): <ul style="list-style-type: none"> • North Carolina State University • UNC -Chapel Hill • East Carolina University • UNC - Charlotte • Duke University • Wake Forest University • Appalachian State University • UNC - Greensboro 	Regional colleges (5,000-15,000 on-campus enrollment) and Community colleges (> 5,000 main-campus enrollment): <ul style="list-style-type: none"> • UNC - Wilmington • North Carolina Agriculture and Technical State University • Central Piedmont Community College • Wake Technical Community College • Fayetteville Technical Community College • Guilford Technical Community College • Western Carolina University • North Carolina Central University • Cape Fear Community College • Forsyth Technical Community College • Campbell University • Asheville Buncombe Technical Community College • Pitt Community College • Fayetteville State University • UNC – Pembroke • Winston-Salem state University • Durham Technical Community College • Rowan-Cabarrus Community College - North Campus • Gaston College

Activity Centers	Statewide	Regional
<p>Trauma Centers</p>	<p>Level I Trauma Centers:</p> <ul style="list-style-type: none"> • Carolinas Medical Center (Charlotte) • Duke University Medical Center (Durham) • UNC Hospital (Chapel Hill) • University Health Systems of Eastern Carolina (Greenville) • Wake Forest University Baptist Medical Center (Winston-Salem) • Wake Med Health & Hospitals (Raleigh) 	<p>Level II & III Trauma Centers:</p> <ul style="list-style-type: none"> • Mission Hospitals (Asheville) • Moses Cone Health System (Greensboro) • New Hanover Regional Medical Center (Wilmington) • CaroMont Regional Medical Center (Gastonia) • Cleveland Regional Medical Center (Shelby) • High Point Regional Hospital (High Point) • Northeast Medical Center (Concord)
<p>Major Tourist Destinations</p>	<p>Top 10 Travel/Tourism counties by total tourism expenditures (from TTD):</p> <ul style="list-style-type: none"> • Mecklenburg • Wake • Guilford • Dare • Buncombe • Forsyth • Durham • Cumberland • New Hanover • Swain 	<p>2nd 10 Travel/Tourism counties:</p> <ul style="list-style-type: none"> • Brunswick • Moore • Cabarrus • Carteret • Nash • Catawba • Henderson • Gaston • Watauga • Iredell
<p>External centers linked to State-critical import/export or employment activity</p>	<p>Close-proximity deepwater ports:</p> <ul style="list-style-type: none"> • Norfolk • Charleston <p>Major employment centers within 50 miles of state border:</p> <ul style="list-style-type: none"> • The Hampton Roads region, VA • Myrtle Beach, SC • Spartanburg, SC • Chattanooga, TN 	<p>Regional employment centers within 25 miles of state border:</p> <ul style="list-style-type: none"> • Danville, VA • Rock Hill, SC • Johnson City, TN <p>Level 1 Trauma centers within 50 miles of state border if similar facility is not located closer in NC:</p> <ul style="list-style-type: none"> • Sentara Norfolk General Hospital (Norfolk, VA) • Johnson City Medical Center (Johnson City, TN) • Spartanburg Regional Health System (Spartanburg, SC)

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North Carolina Transportation Network Structure and Mobility Definitions

Note to reviewers: the intended purpose of NCTN Structure and Mobility Definitions is to provide a planning tool, with definition consistent across all modes of NC’s transportation system (highways, aviation, public transportation, freight and passenger rail, bicycle/pedestrian facilities, ferries, and ports) that reflects needed mobility and land access levels for three types of corridors or facilities: statewide, regional, and local. Modal definitions are intended to be consistent with a general stratified definition of mobility that also captures the need for land access.

Mode	Statewide Corridors/Facilities	Regional Corridors/Facilities	Local Corridors/Facilities
	Highest (unimpeded)←-----Mobility Levels -----→ (Land Access) Lowest		
Mobility Definition (Proposed)	<i>Corridors, facilities or services with primary function of linking activity centers of statewide significance, supporting high-value, interstate and inter-regional movement of people and goods in pursuit of statewide economic development objectives, generally with higher speed/higher capacity facilities and services. Statewide facilities provide managed land access.</i>	<i>Corridors, facilities or services with primary function of serving major intra-regional movements of people and goods in support of regional or local economic activity (work, education, medical, etc.). Regional facilities and services provide direct access to activity centers of regional significance such as major employment centers.</i>	<i>Corridors, facilities or services with primary function of providing land access and to lesser degree supporting shorter distance local travel. Local facilities comprise the largest part of the Transportation Network.</i>
Examples	<p>Highway: I-95, US 70, US 64, SR 24</p> <p>Aviation: RDU, PTIA, Wilmington</p> <p>Transit: Any Greyhound route</p> <p>Rail Freight: CSX A Line, NS Crescent line, NCR, CSX Intermodal Yard (Charlotte)</p> <p>Rail Passenger: All interstate (Amtrak) or NC inter-regional (e.g., Piedmont) service</p> <p>Ferry: Cedar Island - Ocracoke</p> <p>Bike/Ped: Mountains to Sea Trail</p> <p>Ports: Port of Morehead City, Port of Wilmington</p>	<p>Highway: US 15/501, SR 1010, NC 50</p> <p>Aviation: Asheville, New Bern</p> <p>Transit: Express bus routes (e.g., PART Triad Express route)</p> <p>Rail Freight: NCDOT GSMR line from Murphy to Canton</p> <p>Rail Passenger: Any intra-state or inter-county commuter rail service</p> <p>Ferry: Cherry Branch-Minnesott Beach</p> <p>Bike/Ped: Lake Norman Regional Bike Route, Neuse River Greenway, Triangle Bicycle Commuter Route</p> <p>Ports: Charlotte Inland Terminal</p>	<p>Highways: SRs not defined as regional corridors</p> <p>Aviation: General aviation airports</p> <p>Transit: Local bus routes</p> <p>Rail Freight: None</p> <p>Rail Passenger: None</p> <p>Ferry: Currituck-Knotts Island</p> <p>Bike/Ped: Little Sugar Creek Greenway and Stream Restoration (Charlotte)</p> <p>Ports: none</p>

Mode	Statewide Corridors/Facilities	Regional Corridors/Facilities	Local Corridors/Facilities
Highways	<p>Interstate highways and other freeways or principal arterial highways serving activity centers of statewide significance (1).</p> <p>Facility type: freeway or expressway</p>	<p>Principal arterial highways or major collector roadways not identified as Statewide corridors but serving activity centers of regional significance, providing major commuter corridors, and access to major freight intermodal facilities.</p> <p>Facility type: expressway or boulevard</p>	<p>Collector or local roads that primarily provide access to adjacent land uses and serve shorter distance trips.</p> <p>Facility type: boulevard or thoroughfare</p>
Aviation	<p>Commercial service airports serving international service, or with at least 375,000 annual enplanements or major cargo operations. (2).</p>	<p>Commercial service airports with fewer than 375,000 annual enplanements (2).</p>	<p>All general aviation airports (2).</p>
Public Transportation	<p>Bus service and associated station facilities that serve out-of-state travel.</p>	<p>Intra-regional express bus and vanpool service and associated station facilities that serve commuters and other travelers between two or more counties.</p>	<p>Local bus service and associated station facilities and passenger amenities that serve commuters within a county.</p>
Rail (Passenger and Commuter)	<p>Any inter-regional passenger rail service (including out-of-state) and station facilities associated with inter-regional services.</p>	<p>Intra-regional commuter rail and light rail services and associated station facilities.</p>	<p>None</p>
Rail (Freight)	<ul style="list-style-type: none"> • STRACNET (defense) rail lines (1) • Lines essential for viability of the freight rail system: <ul style="list-style-type: none"> • > 10,000 originating or terminating carloads / yr. • Serving power plant or Strategic emerging markets • Carrying significant loads of hazardous materials • Lines with connections to state ports and Statewide Tier inland terminals/intermodal facilities • Statewide inland terminals/intermodal facilities 	<p>All other rail lines and intermodal or transload facilities</p>	<p>None</p>
Ferry	<p>Ferry routes connecting Statewide corridors/facilities.</p>	<p>Ferry routes connecting Regional corridors/facilities.</p>	<p>Ferry routes connecting Local corridors/ facilities.</p>

Mode	Statewide Corridors/Facilities	Regional Corridors/Facilities	Local Corridors/Facilities
Bicycle and Pedestrian	<i>North Carolina state bicycle routes (on-road); bicycle or pedestrian routes spanning more than 4 counties or 75 contiguous miles (on or off-road)</i>	<i>Bicycle or pedestrian routes spanning more than one county or multiple jurisdictions with a length of at least 20 miles (on or off-road)</i>	<i>Town, city, or single county bicycle or pedestrian route (on or off-road) with a length shorter than 20 miles sidewalk projects. local bike lanes and greenway segments</i>
Ports	<i>Maritime ports</i>	<i>State-owned inland terminals.</i>	<i>None</i>
<ol style="list-style-type: none"> 1. Civil rail lines important to national defense including connector lines to military bases 2. Airport must be included in the current Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS) Report. 			

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