

Greater Charlotte Regional Freight Mobility Plan

Coordinating Committee Meeting #5



Welcome

April 28, 2016

9:00am—11:00am



Agenda

- Welcome and Introductions
- Plan Schedule and Progress Report
- General Comments from Committee on Existing Conditions
- Region's Freight Vision, Goals and Objectives Finalization
(DECISION)
- Freight Network Definition Finalization **(DECISION)**
- Preliminary Land Use Analysis and Bridges to Economic Development
- Next Steps

Project Status

■ Complete
■ Working

Existing Conditions

- Bottlenecks
- Commodity Flows
- O-D Analysis and Freight Corridors
- Network Identification
- Economic Impacts
- Truck Parking

Land Use, Facility, Infrastructure & Regulatory Gaps

- Existing Land Uses
- Regional Freight Land Use Policies and Regulations
- Truck Parking Capacity and Needs
- Road/Rail Network Corridor Demand

Best Practices

- Technology Trends
- Safety and Security
- Public Private Partnerships

Prioritizing Regional Needs

- Bottlenecks & LOS
- Pavement/Bridge Conditions
- High Crash Location
- Economic Opportunity
- Rail/Truck Grade Crossings
- Intermodal Connections

Performance Measures

- Goals Addressed
- Freight Impacted, Related or Focused
- Quantifiable and Trackable



Greater Charlotte Regional Freight Mobility Plan

Stakeholder Engagement

Task	2015							2016												2017	
	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Task 0: Project Management and Stakeholder Involvement																					
Task 0.1: Develop a Project Management Plan and Stakeholder Involvement Plan																					
Task 1: Analysis of Existing Conditions for Truck and Rail Freight Mobility in the Region																					

ID	Task Name	Q3 15			Q4 15			Q1 16			Q2 16			Q3 16			Q4 16			
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Task 0: Project Management and Stakeholder Involvement	[Gantt bar spanning all months]																		
2	Task 1: Analysis of Existing Conditions for Truck and Rail Freight Mobility in the Region	[Gantt bar from Jul 2015 to Mar 2016]																		
3	Task 2: Land Use, Facility, Infrastructure and Regulatory Gap/Future Demand Analysis	[Gantt bar from Aug 2015 to Mar 2016]																		
4	Task 3: Best Practices in Freight Mobility Efficiency, Safety and Technology (ITS)	[Gantt bar from Nov 2015 to May 2016]																		
5	Task 4: Prioritize List of Regional Needs	[Gantt bar from Dec 2015 to Jun 2016]																		
6	Task 5: Develop Regional Freight Performance Measures in Accordance with USDOT/MAP-21 Recommendations and State Strategic Freight Plan Requirements	[Gantt bar from Apr 2016 to Sep 2016]																		
7	Task 6: Develop Draft and Final Greater Charlotte Freight Mobility Plan Report	[Gantt bar from May 2016 to Feb 2017]																		

Task 6.3: Present Draft at Public Meetings for Review/Comment
 Task 6.4: Submit Final Report Incorporating Comments to CCOG



Existing Conditions Comments

Overarching Comments on Existing Conditions

- Inconsistent use of terminology and acronyms
- Sentence structure and wording
- Documentation vs. recommendations
- Provide higher resolution mapping
- Add the completion of I-485 to all mapping
- Include updated economic data since FAF data is available only for 2012
- Confusion on whether this is the tech memo or the full plan being written based on the table of contents listing



Draft Freight Goals and Objectives

Draft Vision

“With its unique logistical and global competitive advantage for domestic and international commerce, the Charlotte region enhances economic competitiveness by collaboratively developing and investing in an integrated, multimodal freight transportation system that provides safe, reliable, efficient and sustainable freight mobility and by coordinating transportation and land use decisions across the region. This goods movement system supports the region’s economy, creates jobs, and provides the mechanisms to maintain and improve quality of life for the region’s residents.”

Draft Goals and Objectives

GOAL 1: ECONOMIC COMPETITIVENESS AND EFFICIENCY

Support economic competitiveness by making investment decisions for freight transportation modes that make the most efficient use of resources, and pursue sustainable funding possibilities.

OBJECTIVES

- Develop, integrate, and support a freight transportation system supporting the region's position as a major freight hub via a network of highways, railroads and airports
- Encourage regional efforts to maximize the region's competitiveness in freight and logistics
- Formulate a relationship between the private and public sectors to leverage available public and private revenue resources

Draft Goals and Objectives

GOAL 2: SAFETY AND SECURITY

Improve the safety and security of the freight transportation system.

OBJECTIVES

- Assist regional emergency management agencies to be better prepared in the event of crashes on the freight system, and in response to hazardous material incidents
- Expand the use of technology to increase regional freight safety and security
- Reduce the number of high crash locations that involve trucks or at rail grade crossings

Draft Goals and Objectives

GOAL 3: INFRASTRUCTURE PRESERVATION AND MAINTENANCE

Improve the state of good repair of the freight transportation system.

- *OBJECTIVE*
 - Maintain regionally significant streets, highways and bridges to a state of good repair to minimize truck travel times and cargo damage

Draft Goals and Objectives

GOAL 4: ENVIRONMENTAL STEWARDSHIP

Reduce adverse environmental and community impacts of the freight transportation system.

- *OBJECTIVES*
 - Encourage land use planning that supports and promotes the efficient movement of freight
 - Reduce the emissions resulting from freight congestion and excessive vehicle/train idling

Draft Goals and Objectives

GOAL 5: CONGESTION AND RELIABILITY

Reduce travel times and increase the reliability of the freight transportation system.

OBJECTIVES

- Reduces the frequency of recurring and non-recurring congestion on the freight system

Draft Goals and Objectives

GOAL 6: PERFORMANCE AND ACCOUNTABILITY

Develop methods to track and improve performance and accountability of the operations and maintenance of the freight transportation system.

OBJECTIVES

- Decrease the costs of freight movement by reducing empty backhaul movements
- Improve freight system operations and information sharing to benefit regional planning and decision making through improvements in technology
- Increase freight knowledge and expertise by planners and elected officials throughout the region
- Implement a performance-based tracking process to determine how well the freight system is functioning relative to freight investments

Draft Goals and Objectives

GOAL 7: REGIONAL COORDINATION

Establish/Improve the coordination of regional public and private sector organizations to improve freight planning and policy and project implementation

OBJECTIVES

- Improve coordination among regional agencies responsible for freight transportation planning and implementation
- Engage private sector freight stakeholders to inform freight transportation planning and decision making

Freight Network Definition

Freight Network Identification

- The identification of the regional freight network may be based on the following questions:
 - Is the network on an existing freight system (federal or state)
 - Is this network responsible for movement of significant numbers of goods between cities and trade centers within the region and/or beyond its borders?
 - Does the network play a significant role in the economy or the region?
 - Does the network provide access to important intermodal facilities or freight origins/destinations?
 - Is the roadway eligible for CUFC or CRFC designation?

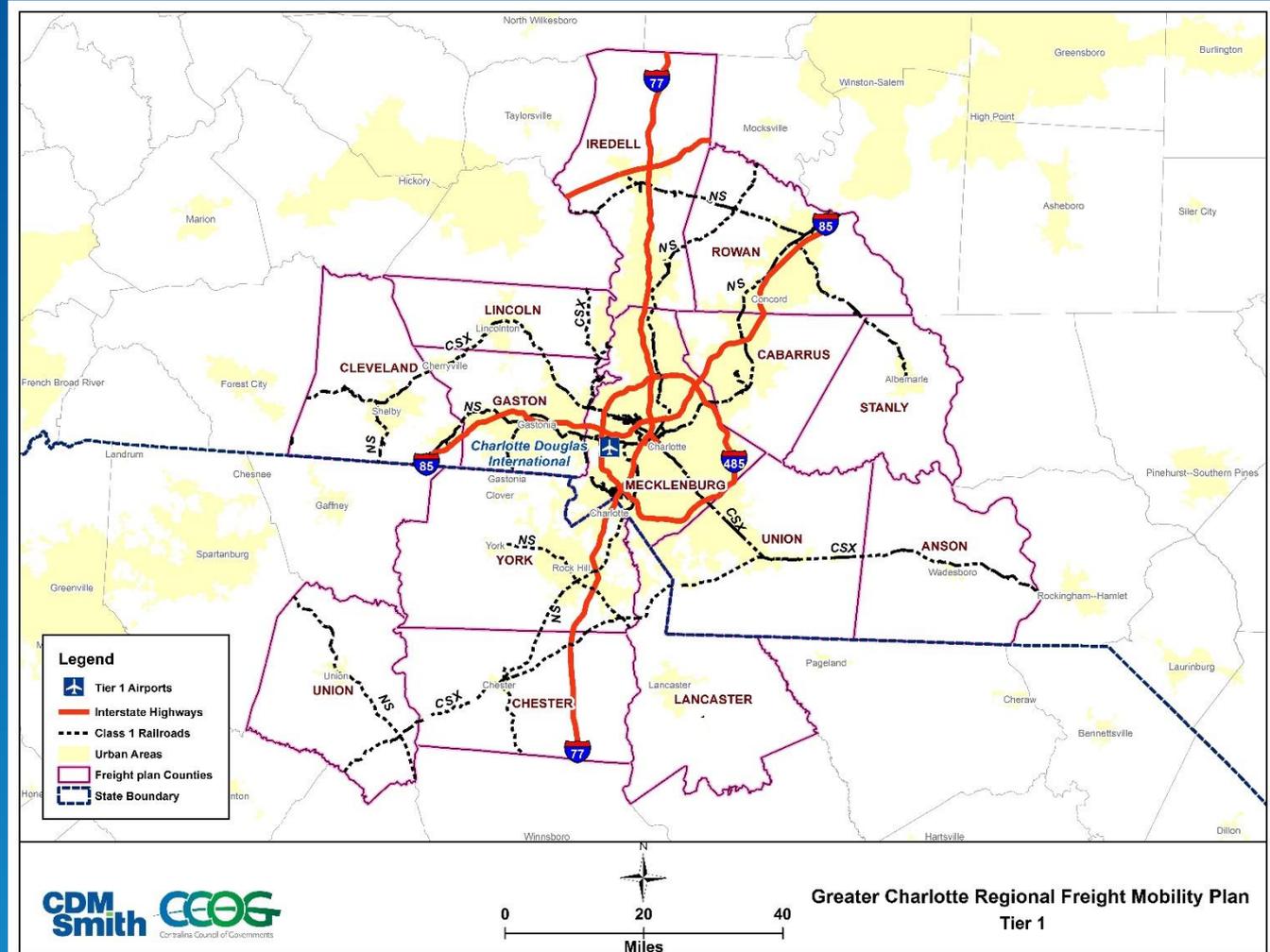
Draft Tier Criteria

- Tier 1
 - All interstate Highways
 - Class I Railroads and Terminals
 - Charlotte-Douglas International Airport
- Tier 2
 - Non-Tier 1 roadways with a minimum truck percentage of 10% and at least 1,000 trucks/day or 20% trucks and at least 250 to 999 trucks/day.
 - Shortline Railroads and Terminals
 - Other commercial service airports
- Tier 3
 - Connecting/switching Railroads, Strategic general aviation airports
 - Those transportation related nodes or links important freight that link Tier 1 and Tier 2 nodes or links.

Potential Multimodal Freight Network

Tier 1

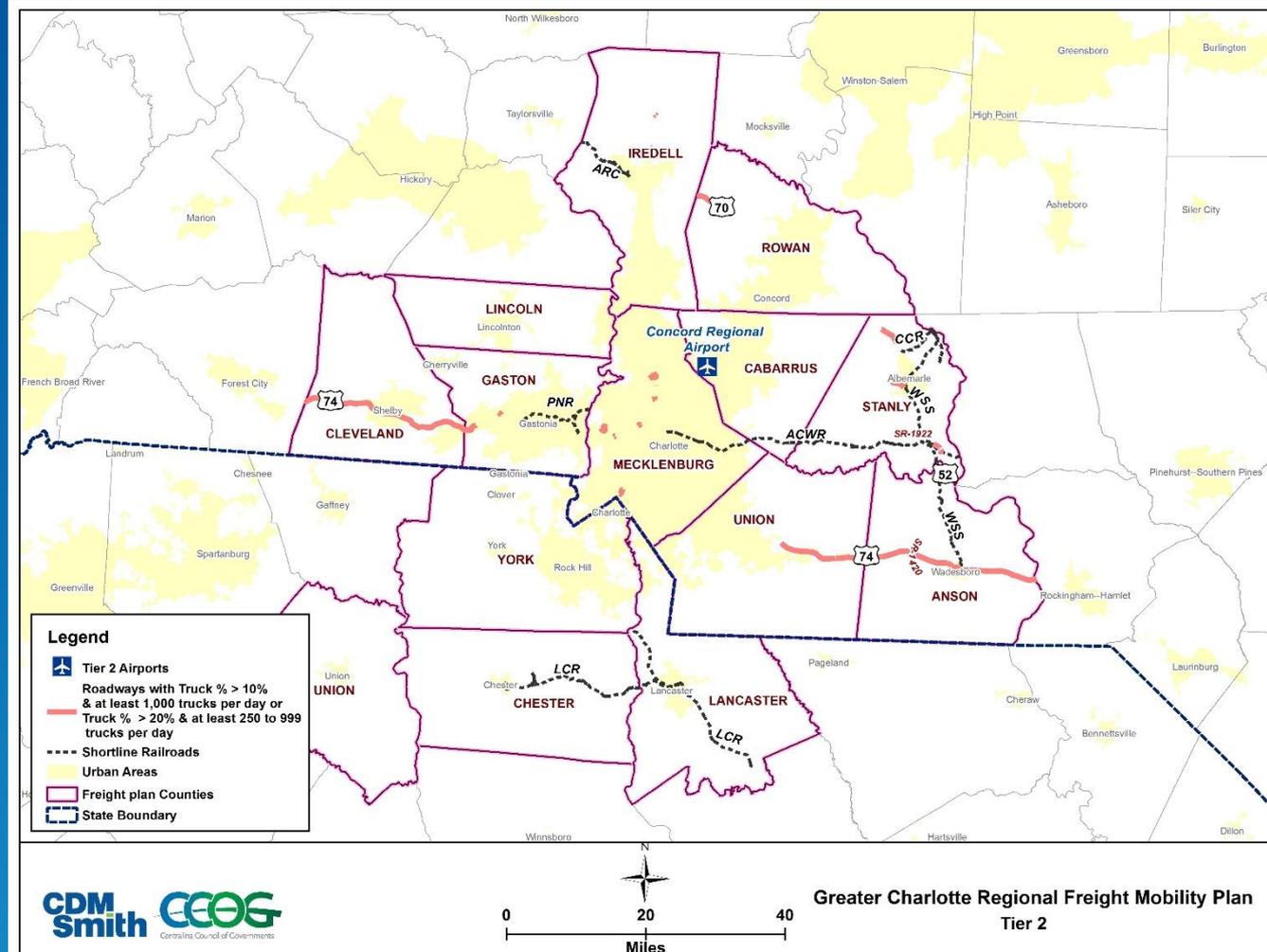
- 563 miles of Interstates
- 929 miles of Railroads
- 1 Airport



Potential Multimodal Freight Network

Tier 2 (Option 1)

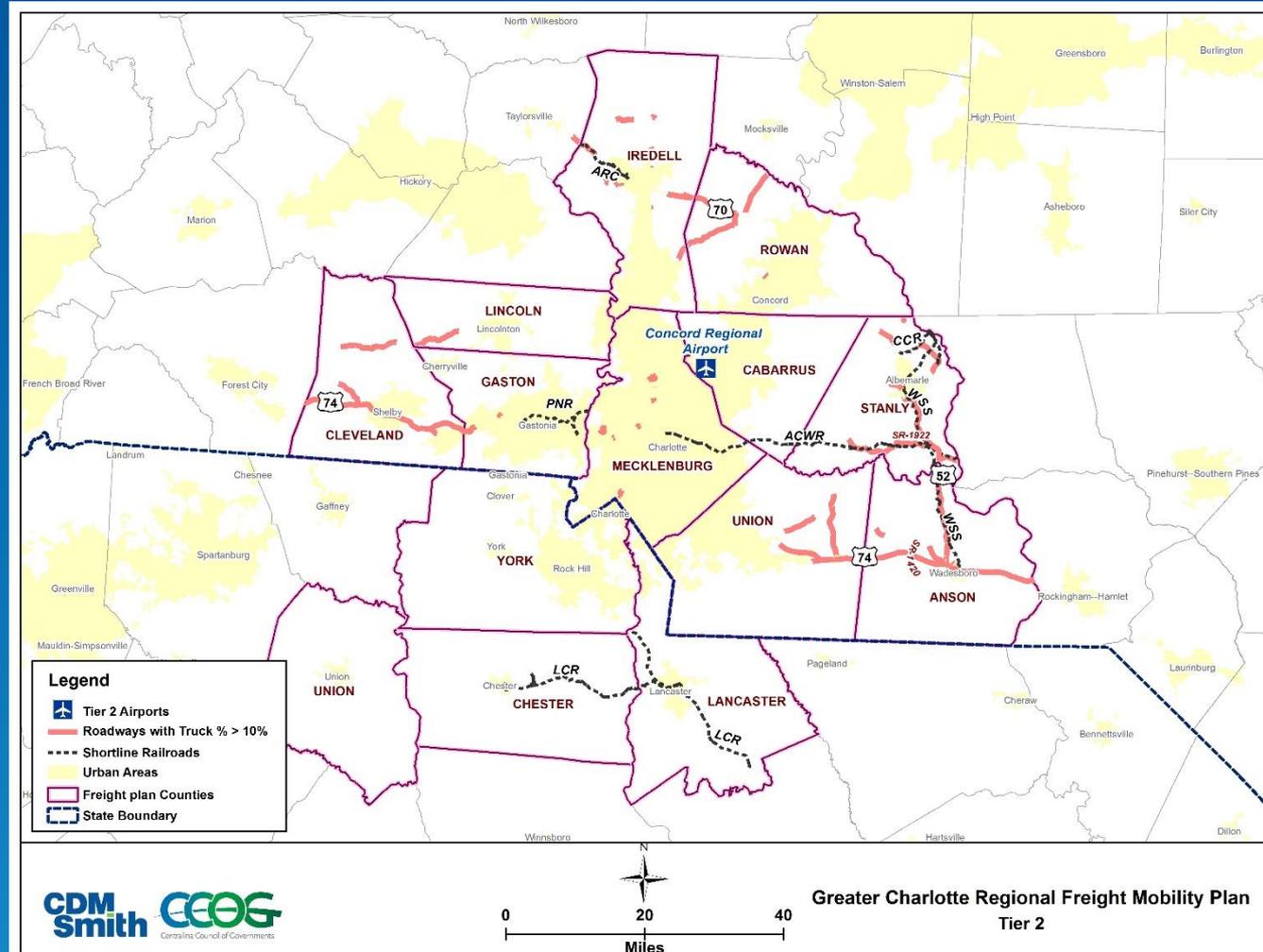
- 202 miles of Railroads
- 1 Airport
- Non-Tier 1 roadways with: a minimum truck percentage of 10% and at least 1,000 trucks/day or 20% trucks and at least 250 to 999 trucks/day.



Potential Multimodal Freight Network

Tier 2 (Option 2)

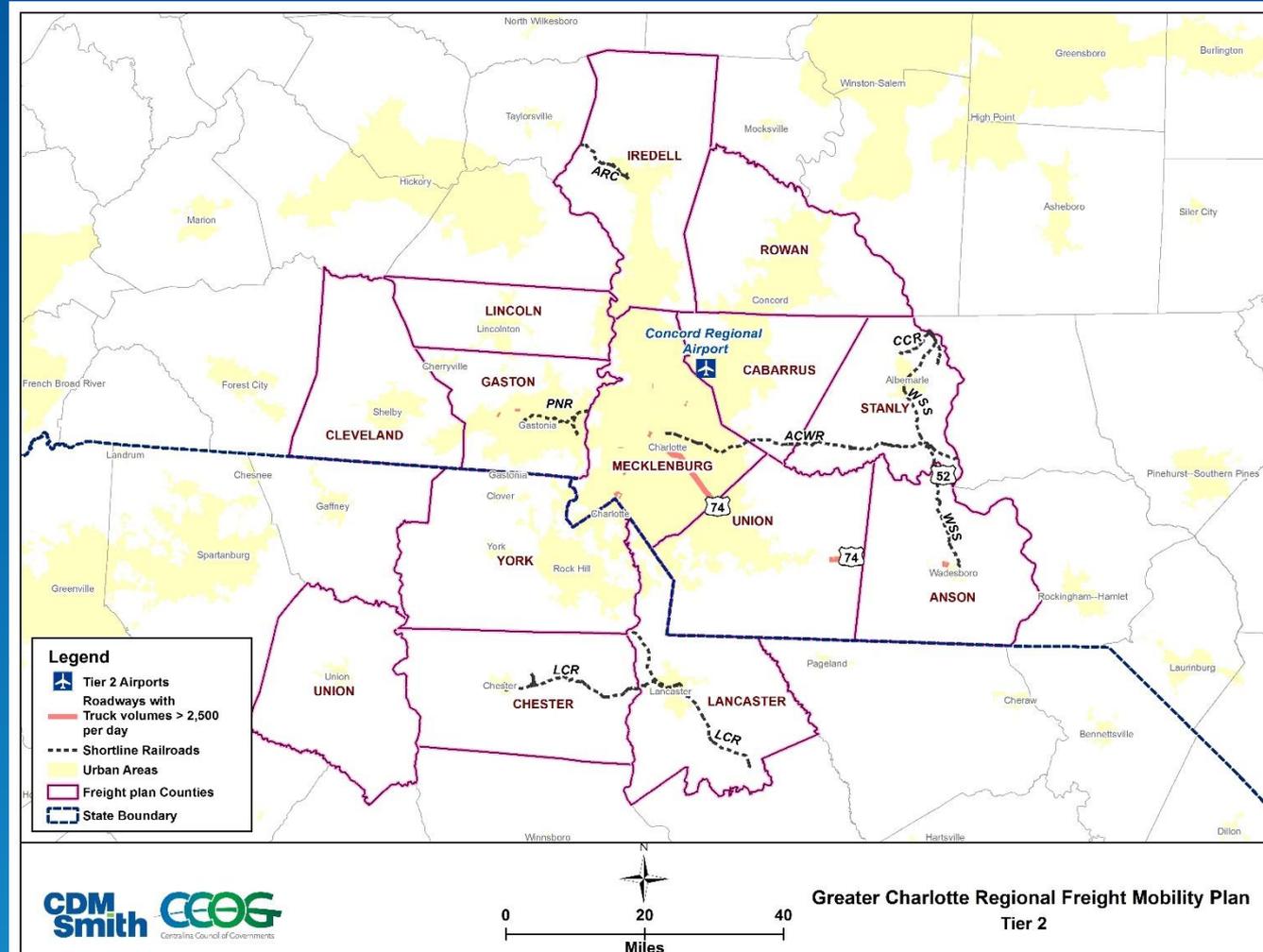
- 202 miles of Railroads
- 1 Airport
- All Non-Tier 1 roadways with: a minimum truck percentage of 10%
- 304 highway miles



Potential Multimodal Freight Network

Tier 2 (Option 3)

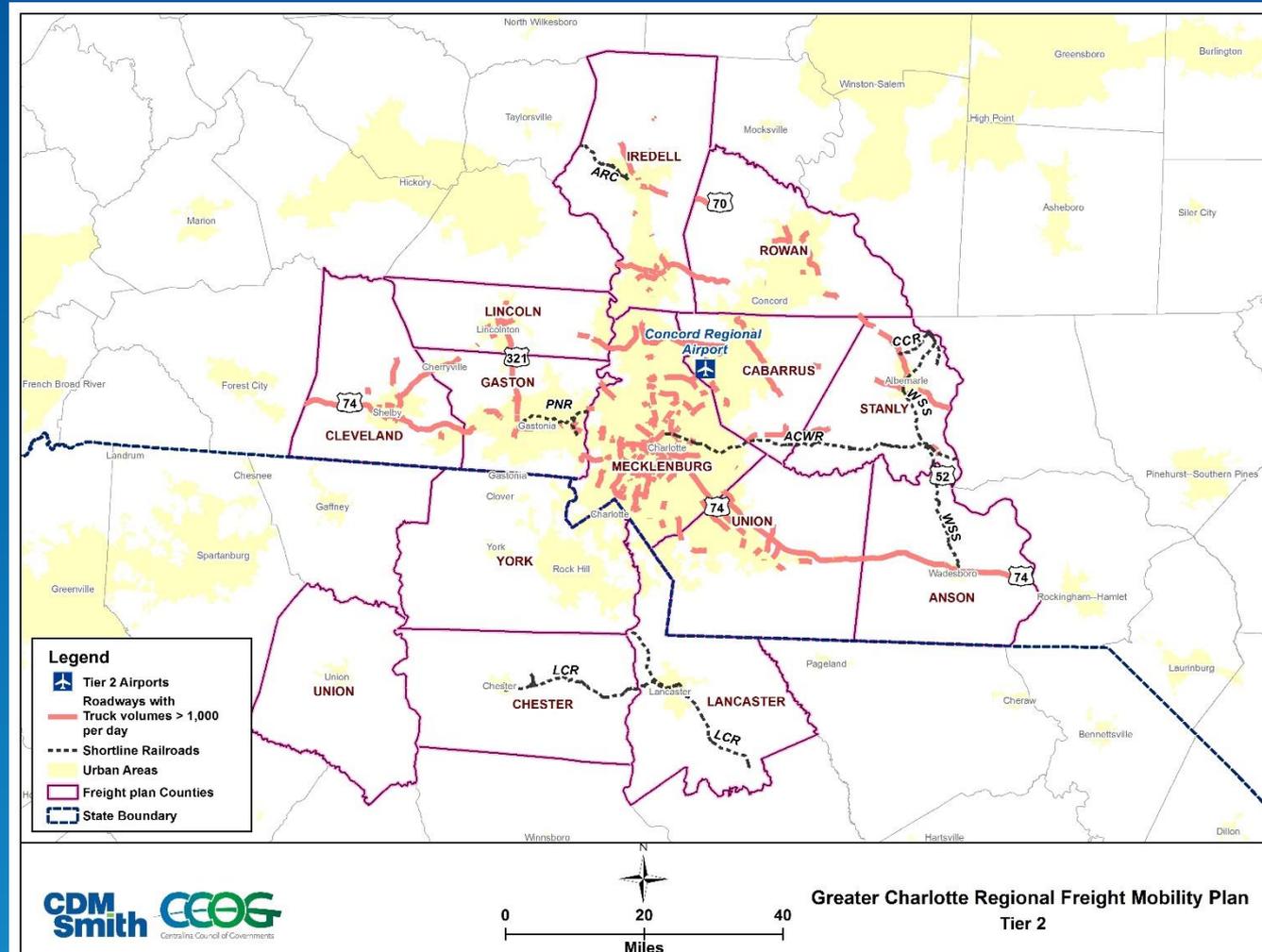
- 202 miles of Railroads
- 1 Airport
- All Non-Tier 1 roadways with a minimum truck volume of 2,500/day
- 33 highway miles



Potential Multimodal Freight Network

Tier 2 (Option 4)

- 202 miles of Railroads
- 1 Airport
- All Non-Tier 1 roadways with a minimum truck volume of 1,000/day
- 570 highway miles



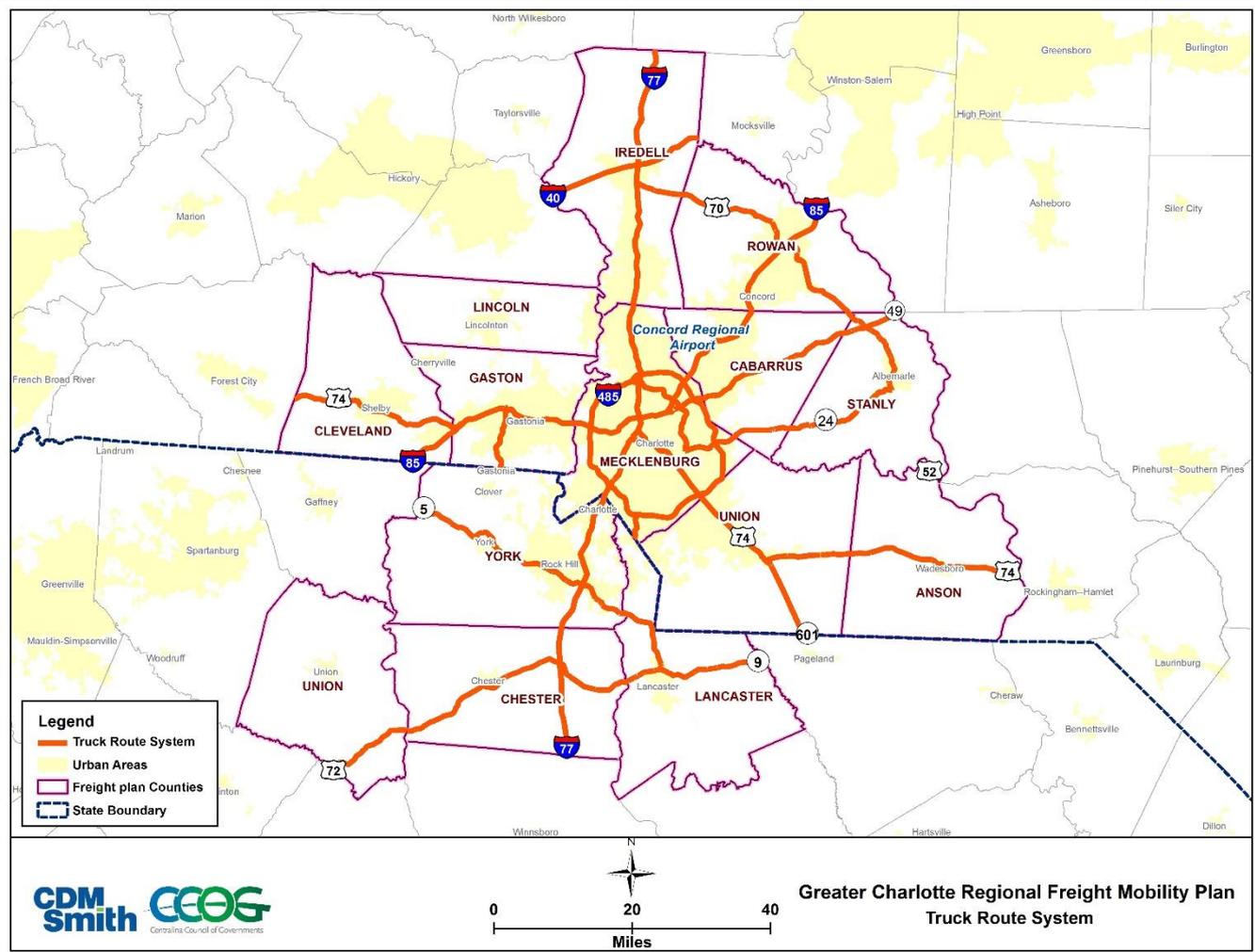
Potential Multimodal Freight Network

Alternative Definition

- Highways
 - Designated truck routes (NCDOT and SCDOT)
 - Those on the National Multimodal Freight System (NMFS) and/or all Interstates
 - Critical Urban Freight Corridors (CUFC)
 - Critical Rural Freight Corridors (CRFC)
- Railroads
 - All active freight railroads
- Aviation
 - Commercial Service Airports

Potential Multimodal Freight Network

NCDOT and SCDOT Truck Route System





Preliminary Land Use Analysis

Land Use Analysis Process

- Source: CommunityVIZ
- Identification of Existing Freight Lands
- Identification of Vacant Undeveloped Lands
- Identification of Undeveloped Freight Lands
- Identification of Potential Freight Development Lands
- Look at large freight clusters of existing and potential freight lands
- Look at these freight clusters along the freight network

Land Use Analysis Definitions

Existing Freight Lands (total 247,295 acres)

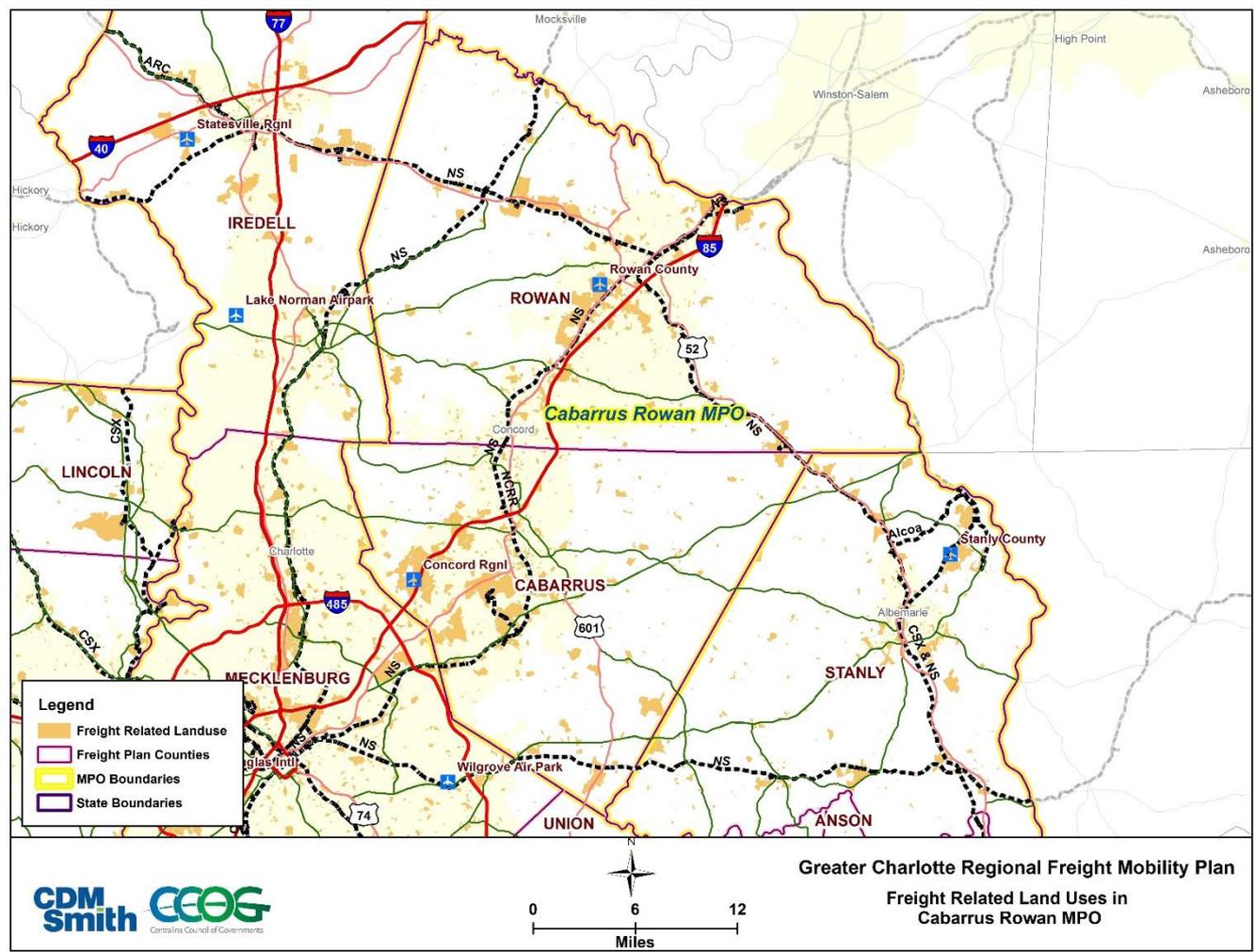
Community Type	Primary Land Uses
Working Farms	Cultivated Farmland
	Timber Harvest
	Livestock
	Woodlands
	Single-family Detached Home
Heavy Industrial Center	Factory
	Heavy Assembly Plant
	Construction Contractor
	Regional Warehouse
	Regional Distribution and Trucking
Light Industrial Center	Landfill
	Light Manufacturing and Assembly
	Processing Facilities
	Laboratory
	Warehouse
Regional Employment Center	Distribution
	Professional Office
	Corporate Campus
	Research and Development
Airport	Government Buildings
	Airport Activities (e.g., Commercial Terminal, Control Tower, Freight Facilities, etc.)
	Flight School
	Warehouse
	Aviation-related Maintenance and Repair
	Shipping

Land Use Analysis Definitions

- **Vacant Undeveloped Lands**—Includes ALL Vacant land for the study area which have the potential to be re-zoned to freight related use if necessary.
- **Undeveloped Freight Lands**—Existing Freight Lands which do not have a permanent structure on the parcel. These parcels are already zoned for freight related uses and would not require any zoning changes to accommodate freight uses.
- **Potential Freight Development Lands**—Includes vacant land located adjacent to the freight roadway and rail network which is vacant land zoned for either freight related uses or other non-freight related uses.

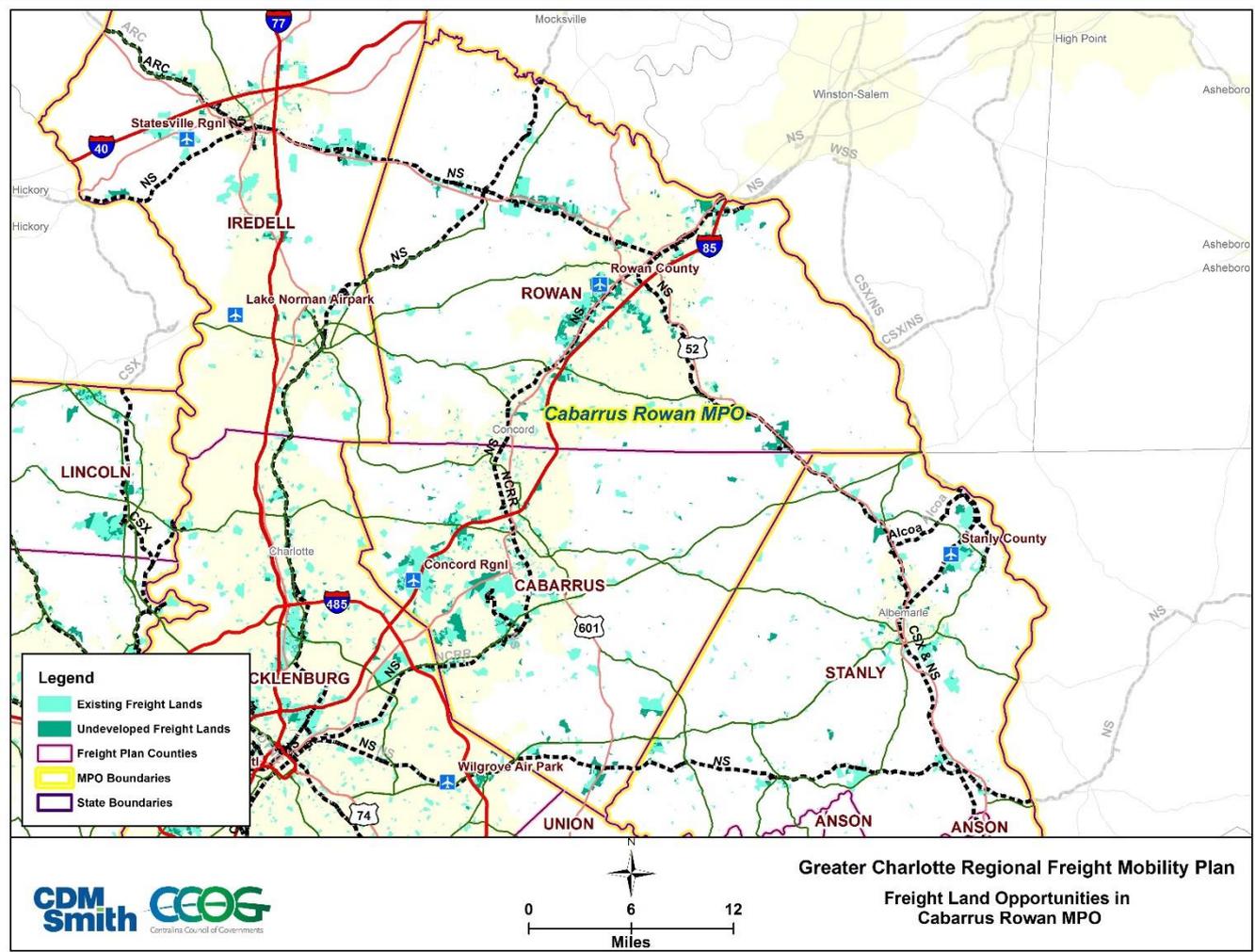
Land Use Analysis Results

Freight Land Uses Example

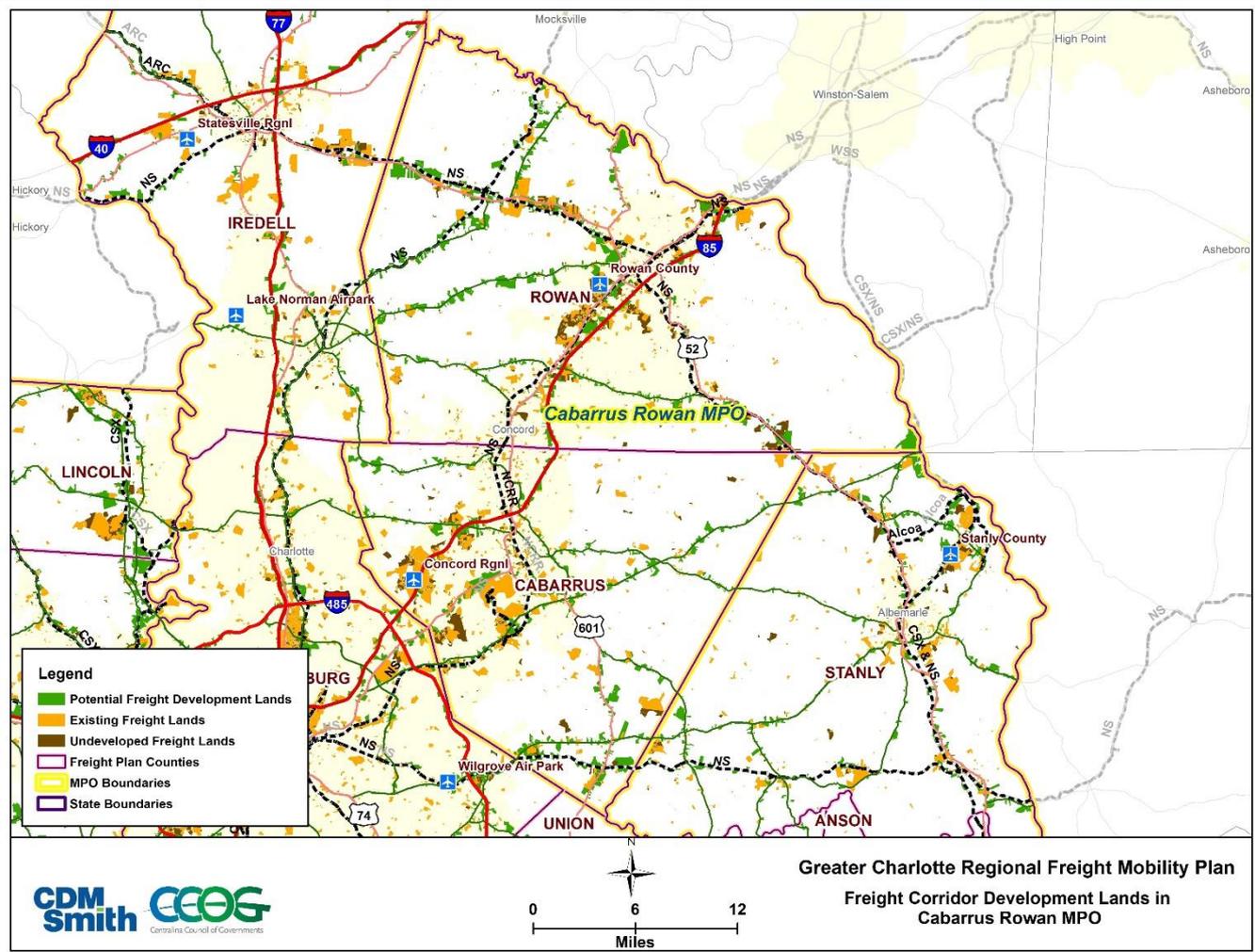


Land Use Analysis Results

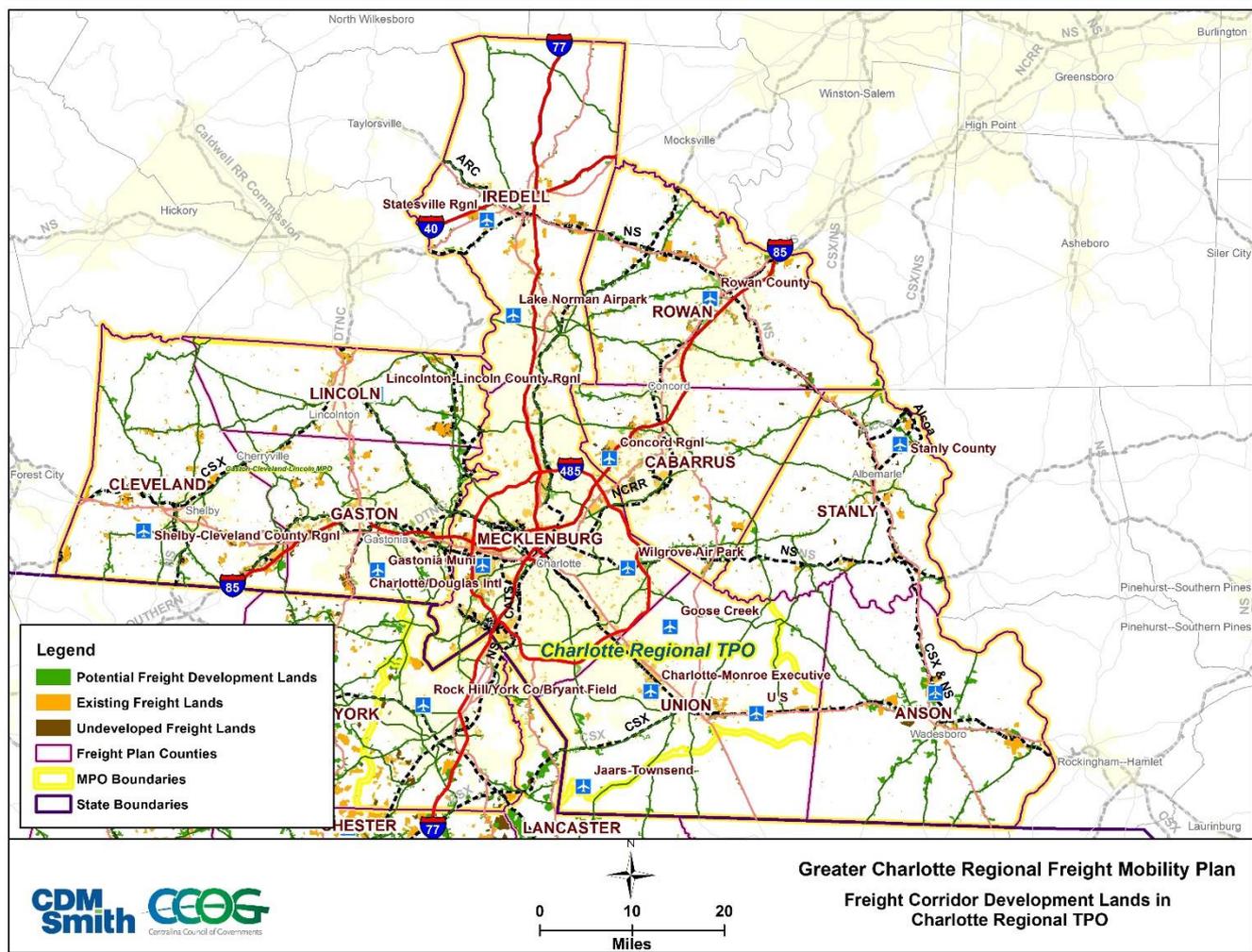
Freight Land Uses and Undeveloped Freight Land Uses Example



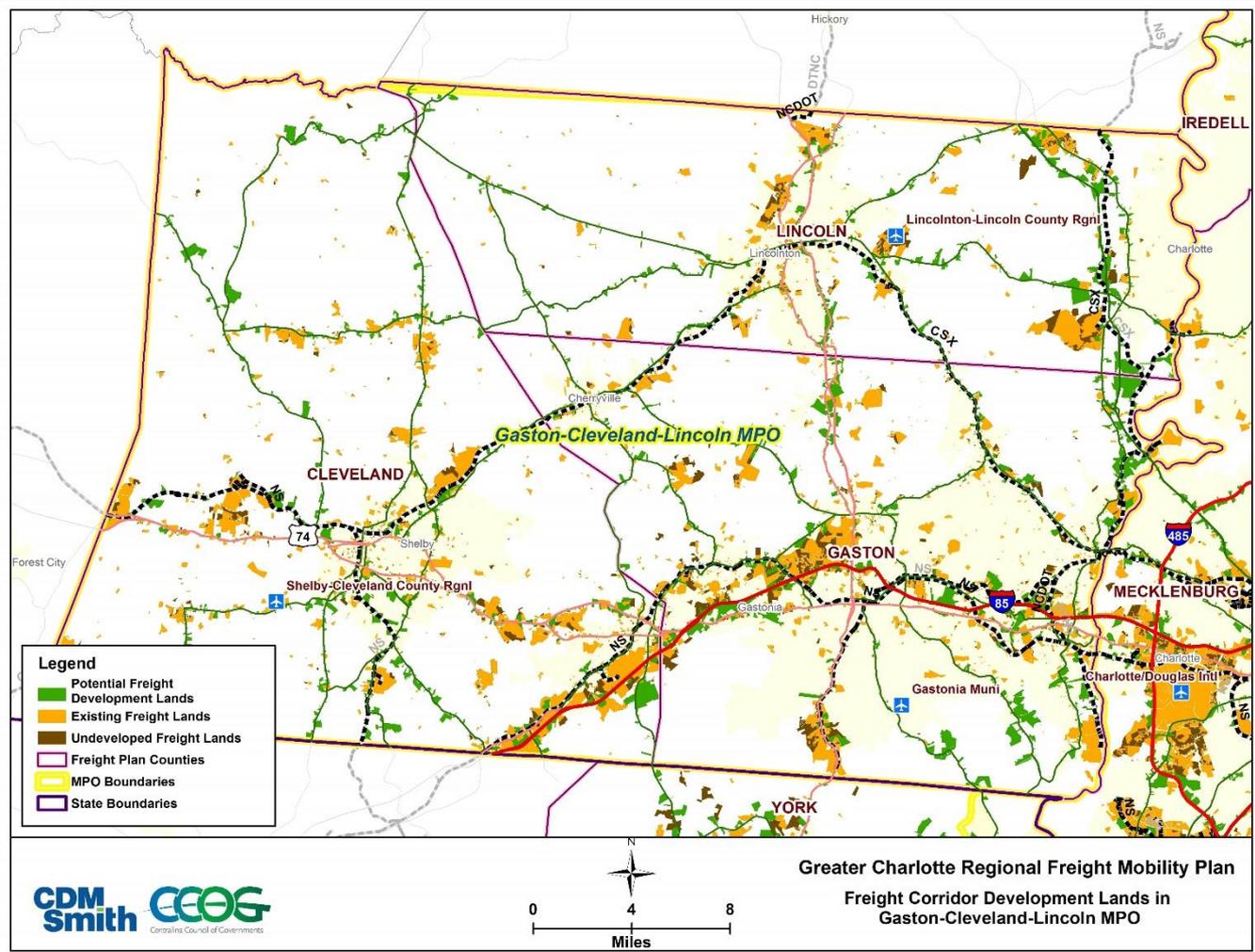
Land Use Analysis Results



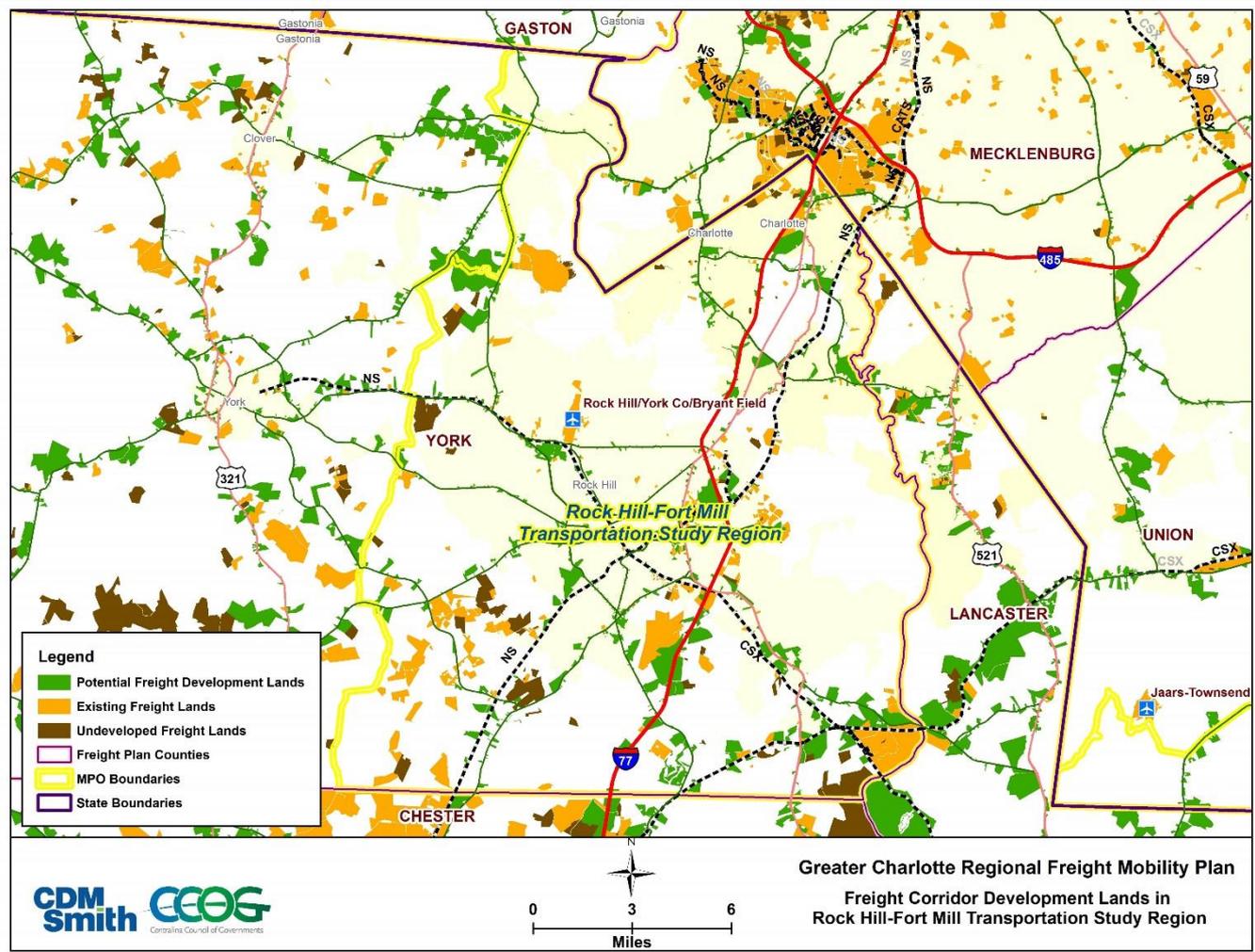
Land Use Analysis Results



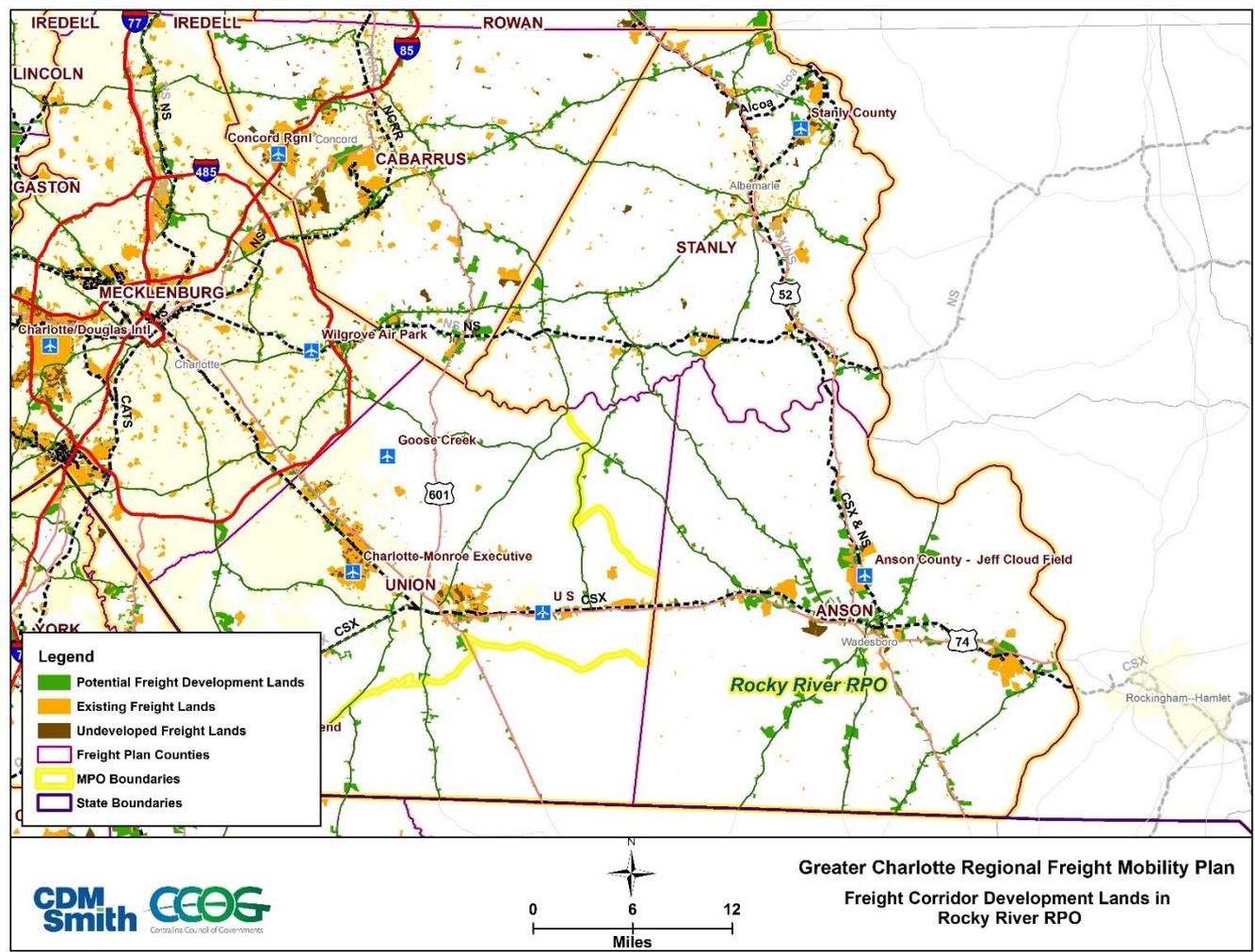
Land Use Analysis Results



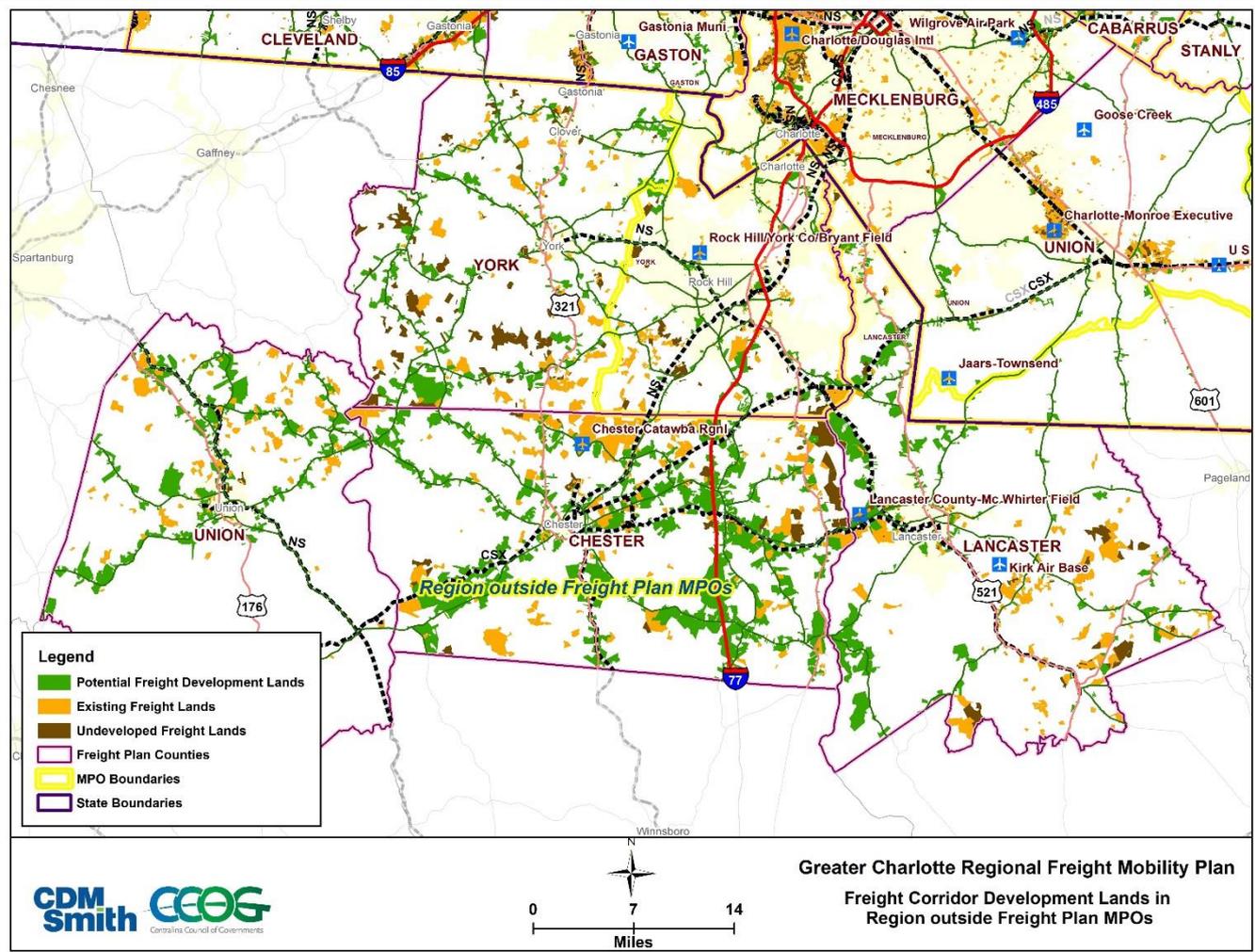
Land Use Analysis Results



Land Use Analysis Results



Land Use Analysis Results



Greater Charlotte Regional Freight Mobility Plan

Coordinating Committee Meeting #4



Questions and Open Discussion

January 28, 2016
9:00am—11:00am

