

# Appalachian Regional Freight Mobility Plan

Steering Committee Meeting #3

August 13, 2020



# AGENDA

ACOG REGIONAL FREIGHT MOBILITY PLAN



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Land Use & Gap Analysis

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Truck Parking Analysis

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Findings & Opportunities

# Introduction to Speakers

ACOG REGIONAL FREIGHT MOBILITY PLAN



**Wade Luther**

*Columbia, SC*

# Task Purpose



# Task Purpose

ACOG REGIONAL FREIGHT MOBILITY PLAN



*Define land use, facility, infrastructure, and regulatory conditions, and conduct a gap and conflict analysis.*

# Land Use & Gap Analysis







Mapping analysis completed using:

- County Current Zoning Classifications
- County Future Land Use Map Classifications
- Department of Commerce Industrial Parks inventory
- SCDOT Statewide Model TAZ level population and employment projections
- Transearch Freight Finder database

# Definitions

ACOG REGIONAL FREIGHT MOBILITY PLAN



- **Freight related land use** – zoning or future land use designation for heavy industrial or light industrial classifications.
- **Industrial Parks** – existing industrial park development and greenfield sites identified as future industrial parks.
- **Freight Generators** – commercial locations generating freight tonnage shipments within the region.
- **Existing Freight Corridor** – roadway corridor where current planning regulation (zoning) and existing freight related land use and generators exist.
- **Future Freight Corridor** – roadway corridor where future land use planning regulation (FULU map) for freight related land use and existing generators exist.



# Definitions Cont.

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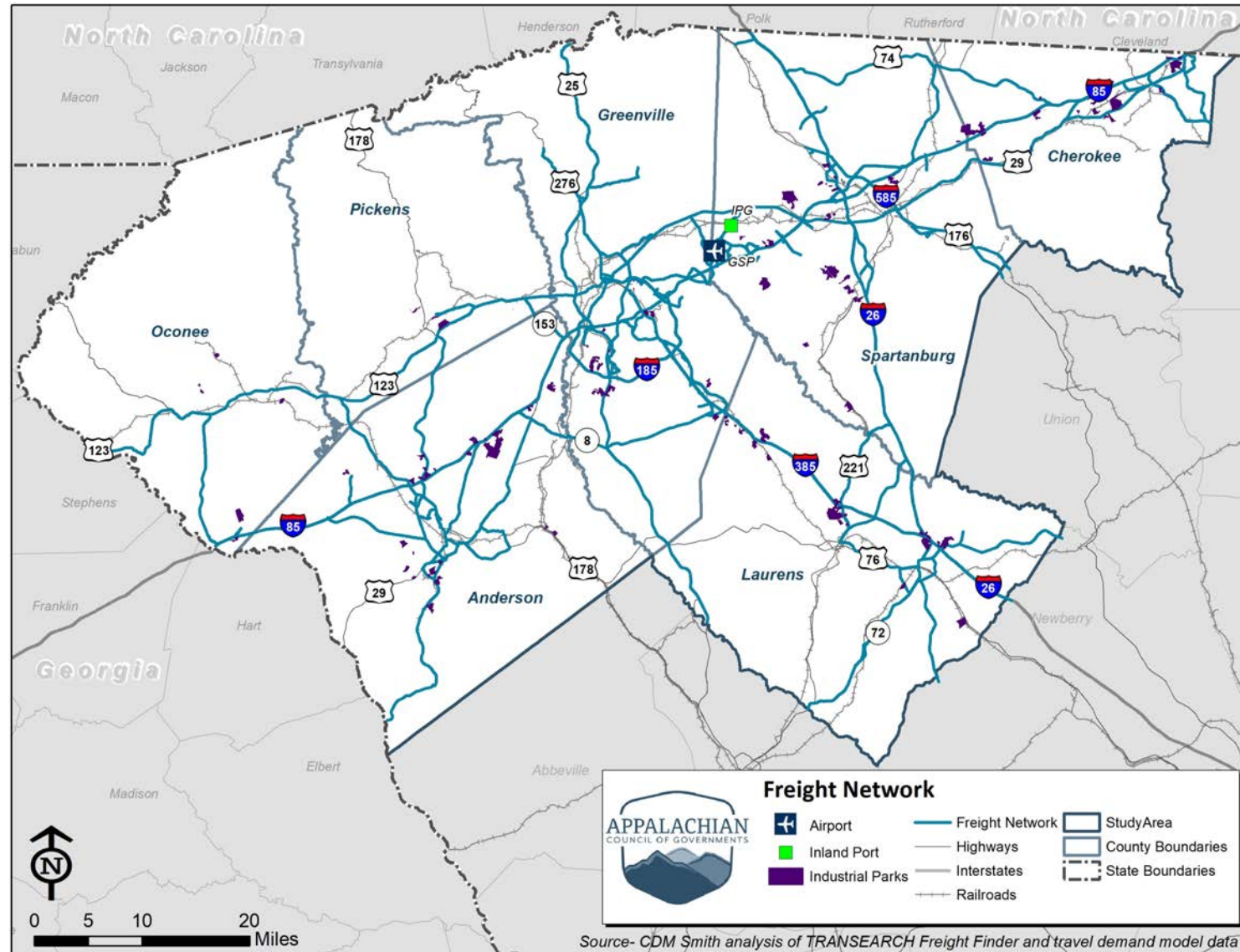
- **Employment Growth** – the difference in employment growth from 2015 to 2045 in the Wholesale/Distribution, Manufacturing, and Mining sectors by NAICS code.
- **Development Clusters** – where job growth is forecast within planned growth areas.
- **Employment Growth Gap** – where job growth is forecast outside of planned growth areas.
- **Planning Gap** – locations of existing freight land use where planning regulation does not appear to support growth.

# Study Area

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- ## Locational analysis
- Intermodal Facilities
  - Industrial Parks

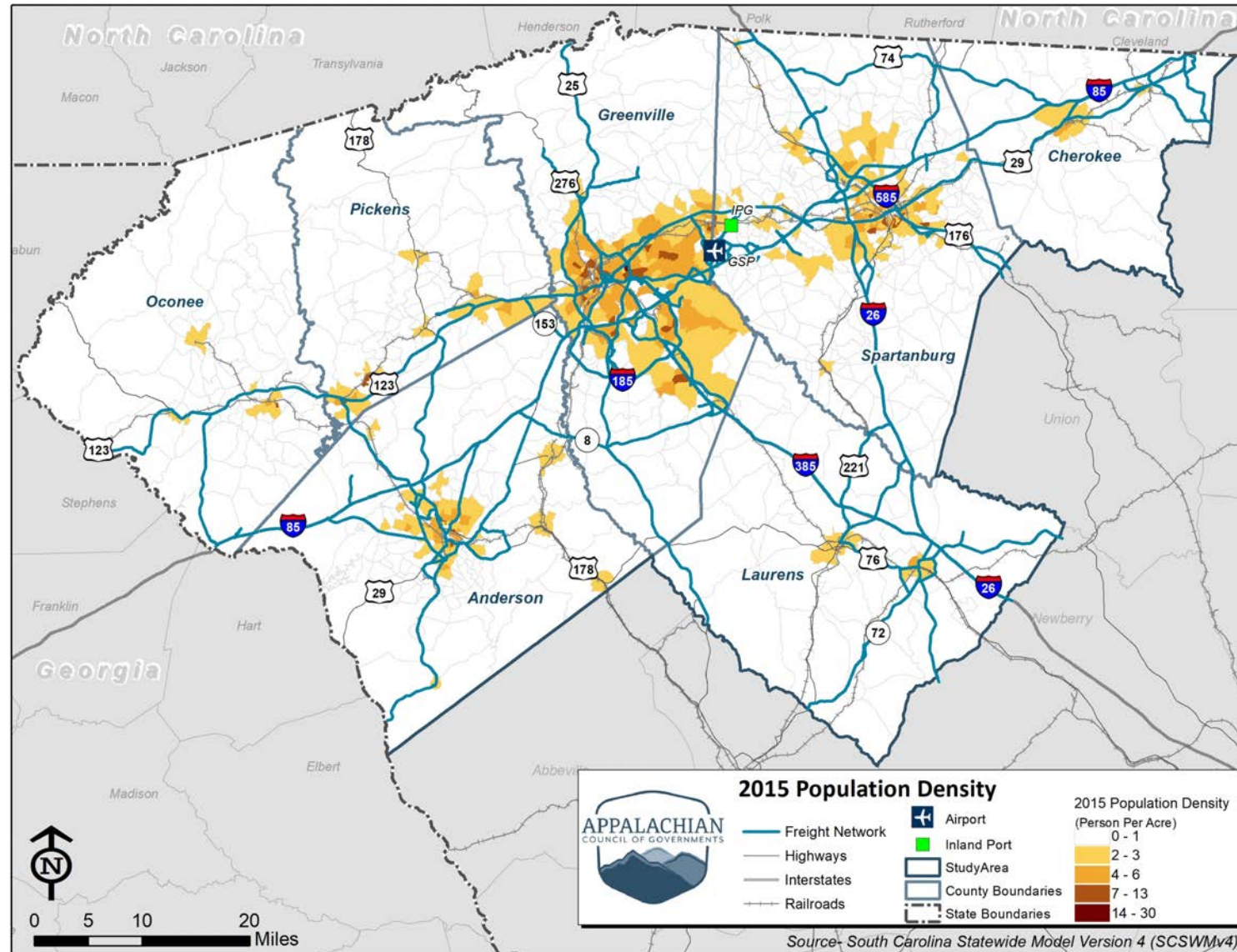


# Existing Population Density

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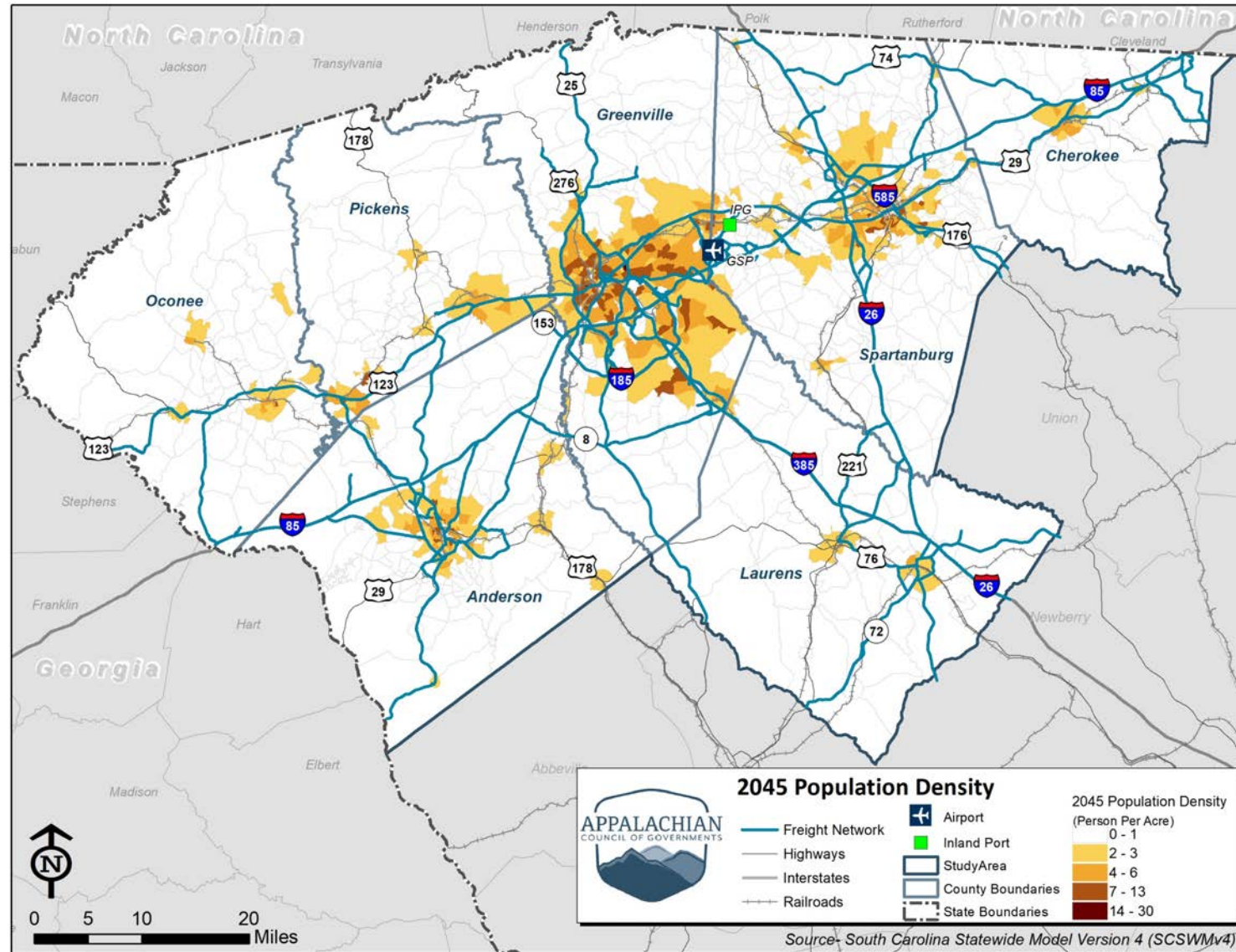
Population density indicates areas where industrial development is not likely to occur





# Future Population Density

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Industrial development is likely concentrated on the fringe of densely populated areas

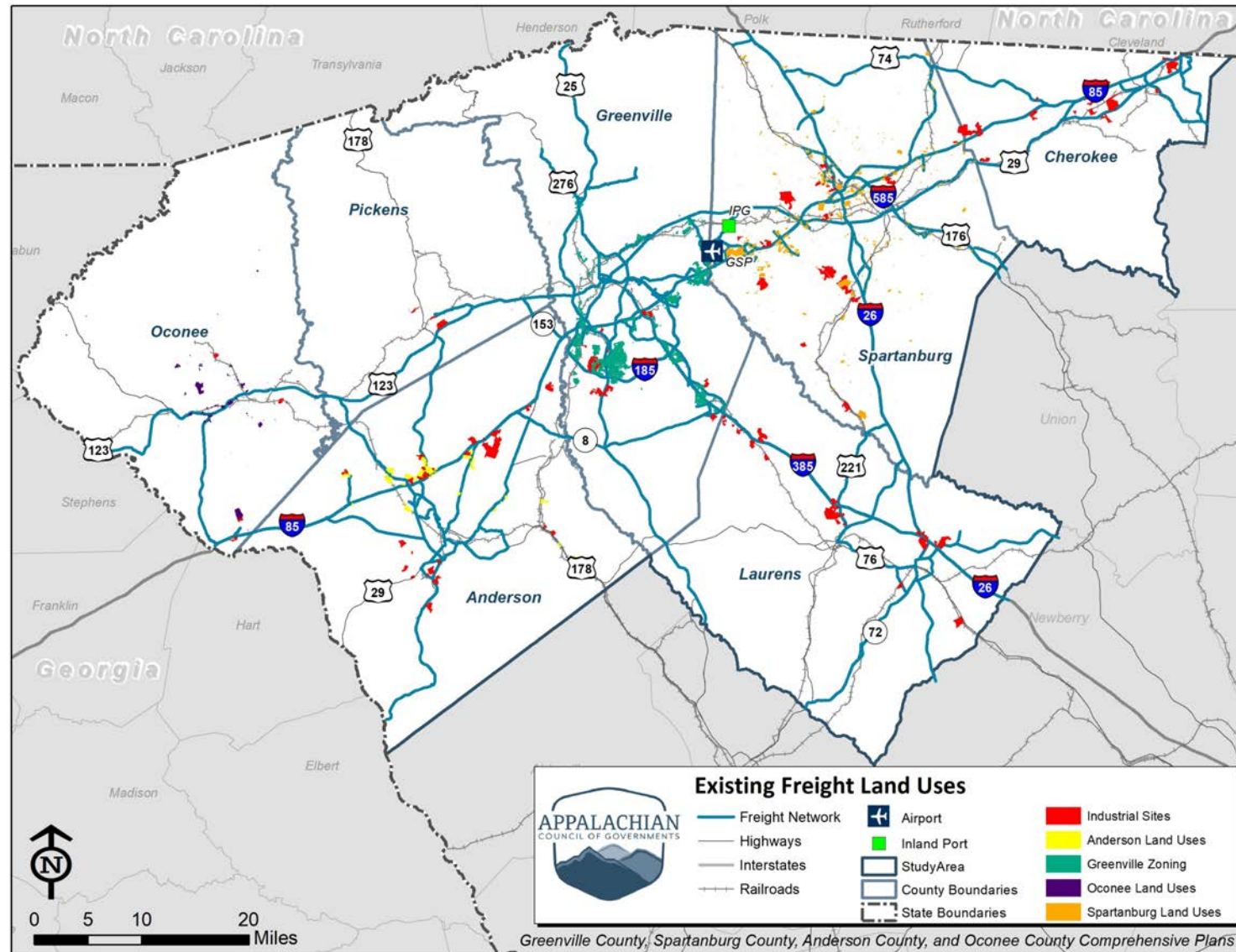
# Existing Land Use

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## Analyzes

- Existing Industrial Parks
- Heavy & Light Industrial Zoning Classifications



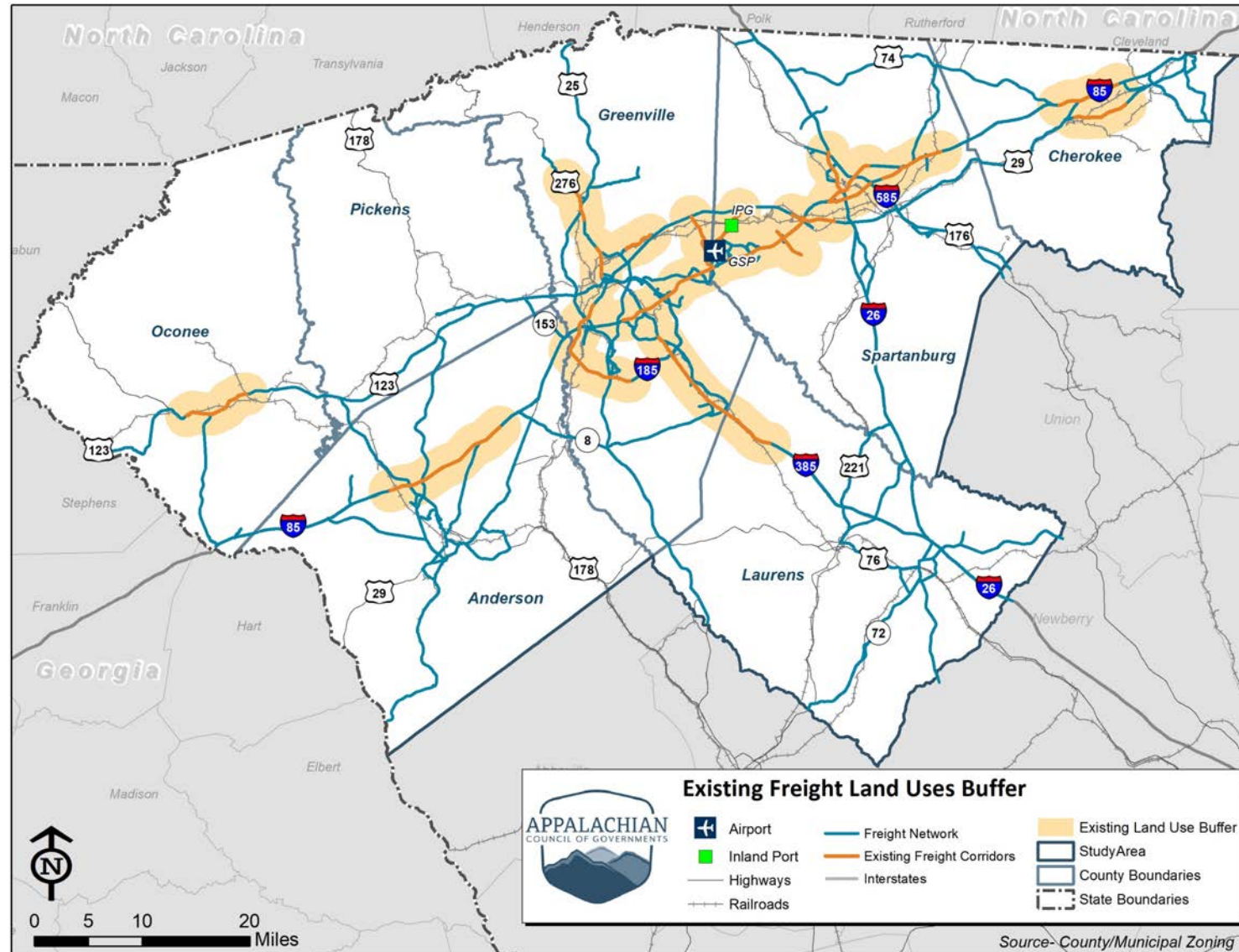


# Existing Land Use Buffer

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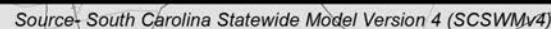


Created 2-mile buffer of existing freight related land use classifications and parks





## A stylized illustration of a blue truck with a white cab and a large blue cargo box. The truck is shown from a side profile, facing right. It has multiple wheels and a simple, clean design.



# Existing Freight Corridors

- Align with regional freight network determination
- Freight land use coordination currently exists in these areas

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# Existing Freight Corridors

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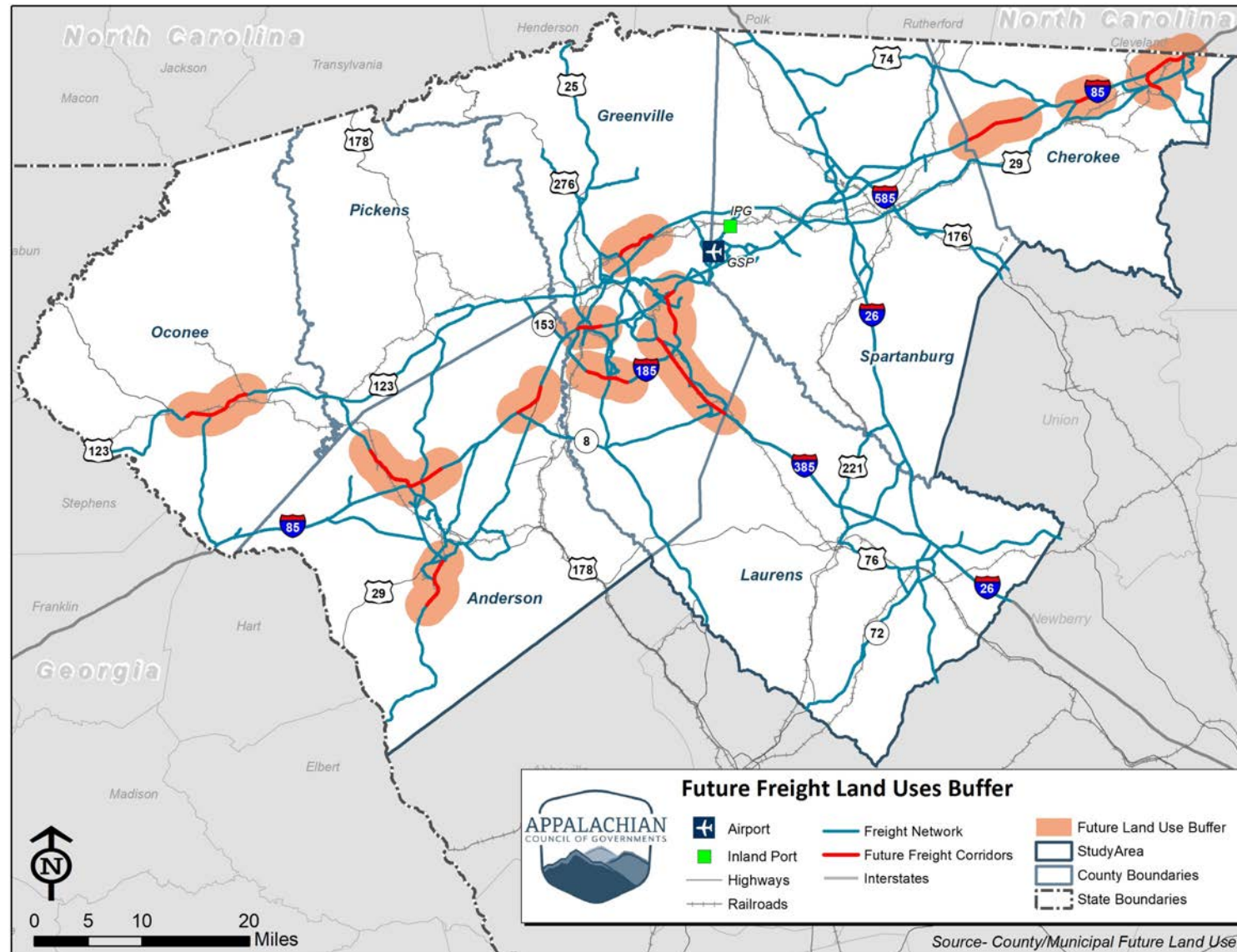
Number	Description
1	I-85 & US 29 from Gaffney to Blacksburg
2	I-85 from Anderson/Greenville County Line to Spartanburg/Cherokee County Line
3	I-26 & US 176 near Willow Wood
4	US 29 & S Buncombe Rd near Greer
4a	SC 80 GSP to Inland Port Greer
5	US 29 & Rutherford Rd near Wade Hampton
6	US 276 & US 29 from I-185/I-85 Interchange to North of Travelers Rest
7	I-385 from Mauldin to Gray Court
8	I-185 from Golden Grove to SC 146 (Exit 4)
9	I-85 from South I-85/US 76 Interchange to White Plains
10	US 123 from Westminster to Seneca

# Future Land Use Buffer

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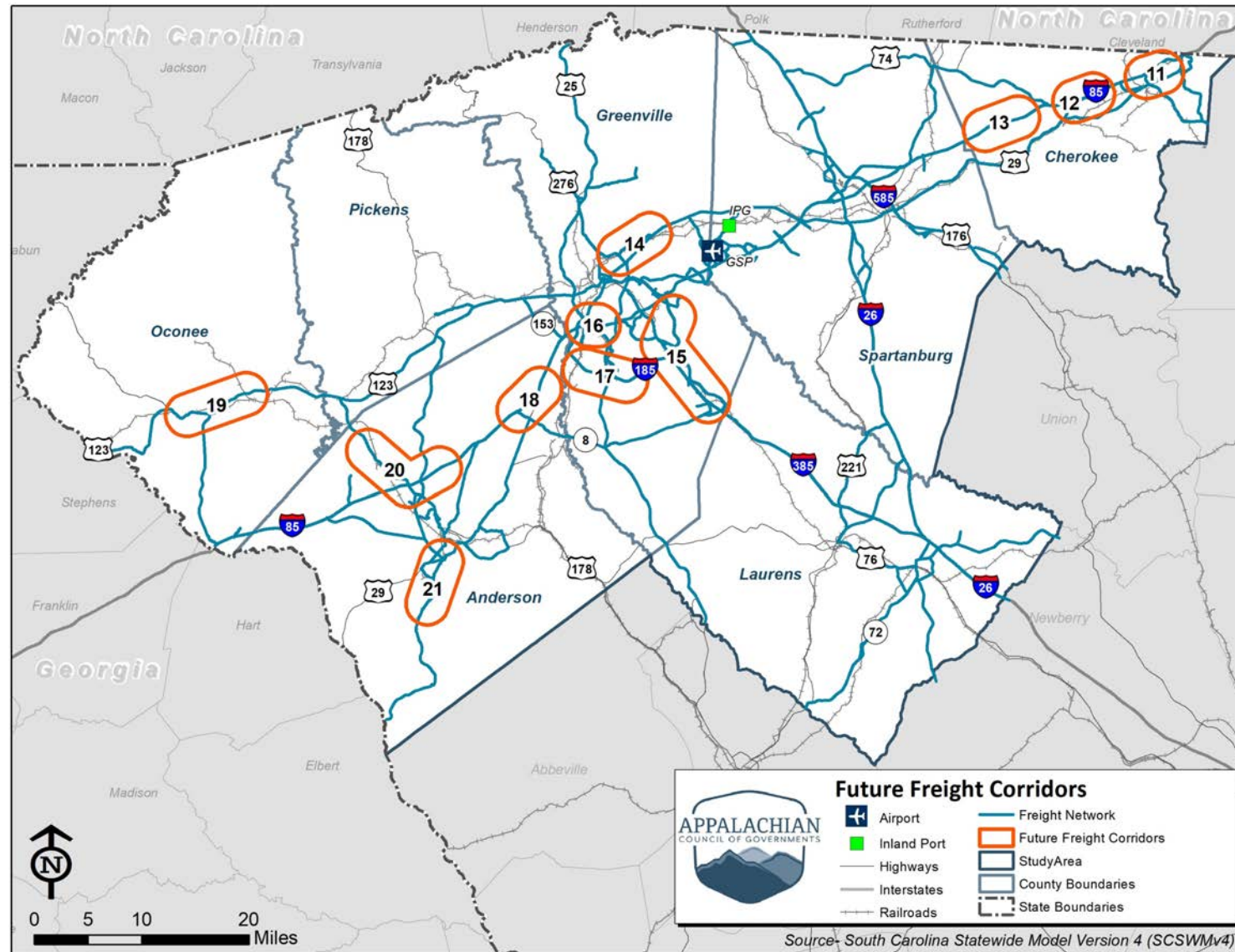
- Desktop survey of Future Land Use maps of the region
- Created 2-mile buffer





# Future Freight Corridors

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## Future Freight Corridors

- Align with regional freight network determination
- Freight land use coordination currently exists in these areas

# Future Freight Corridors

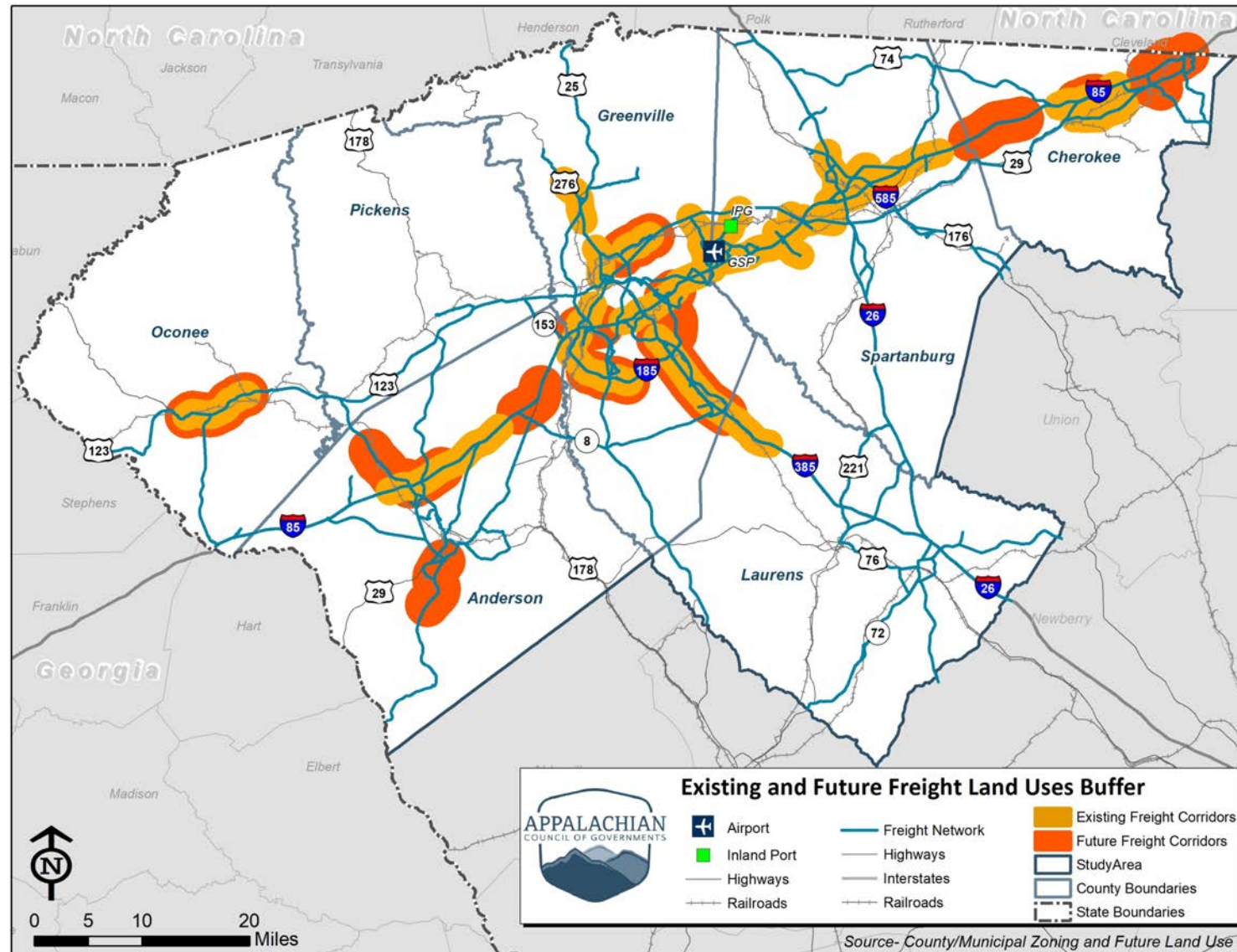
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Number	Description
11	I-85 & US 29 from Blacksburg to Cherokee County Line/NC
12	I-85 near Gaffney
13	I-85 from Spartanburg/Cherokee County Line to South of SC 11 (Exit 92)
14	US 29 & Rutherford Rd near Wade Hampton
15	I-385 from I-85/I-385 Interchange to Fountain Inn
16	I-85 from I-185/I-85 Interchange to I-85/SC 291 Interchange (Exit 46B)
17	I-185 from Golden Grove to SC 146 (Exit 4)
18	I-85 from North of SC 86 (Exit 35) to White Plains
19	US 123 from Westminster to Seneca
20	US 76 from Pendleton to I-85/US 76 Interchange and I-85 from I-85/US 76 Interchange to South of SC 81 (Exit 27)
21	SC 81 near Anderson

# Existing and Future Freight Buffers

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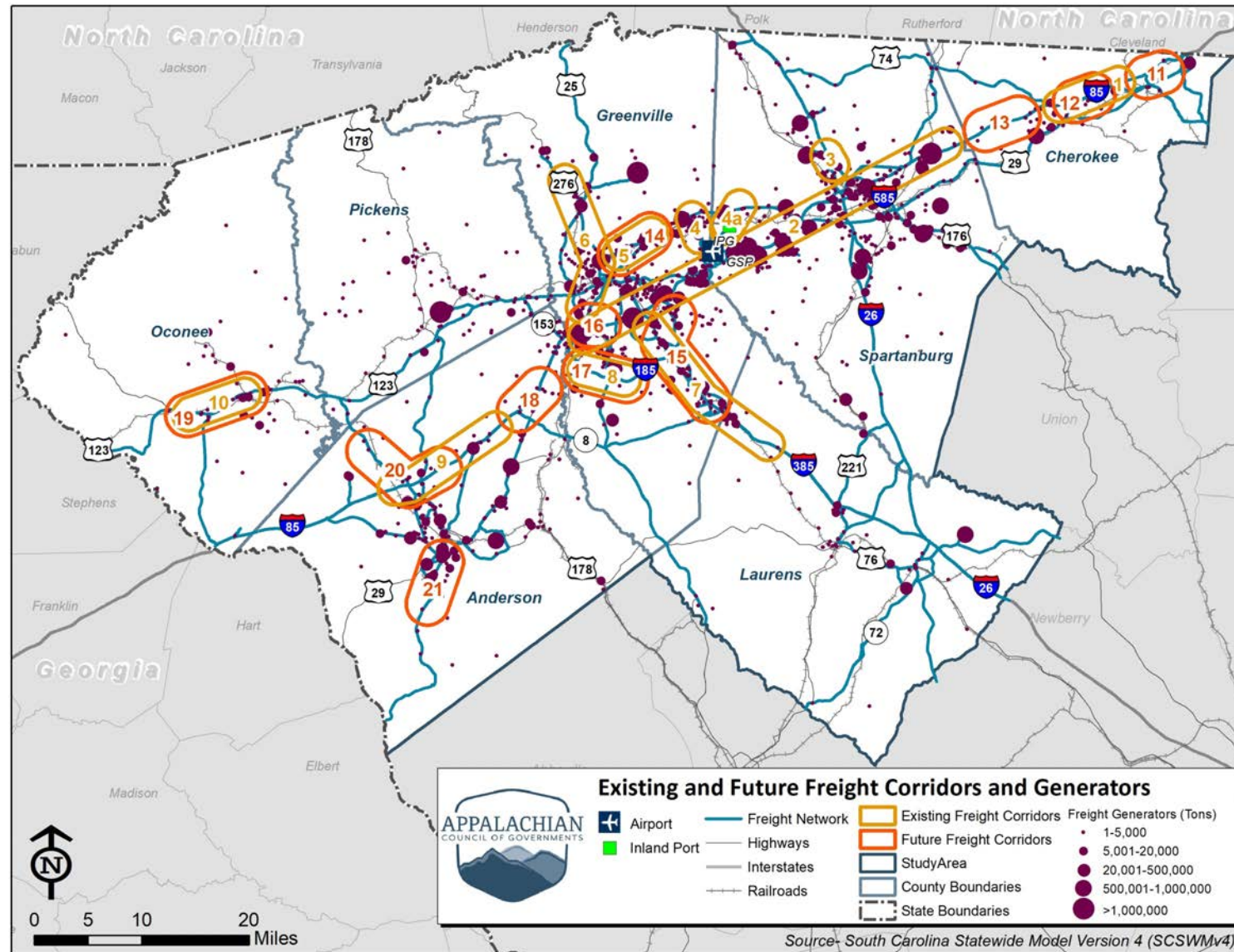


Validates that Current and Long-Range Planning coordination takes place within the freight network determination



# Existing/Future Freight Corridors & Generators

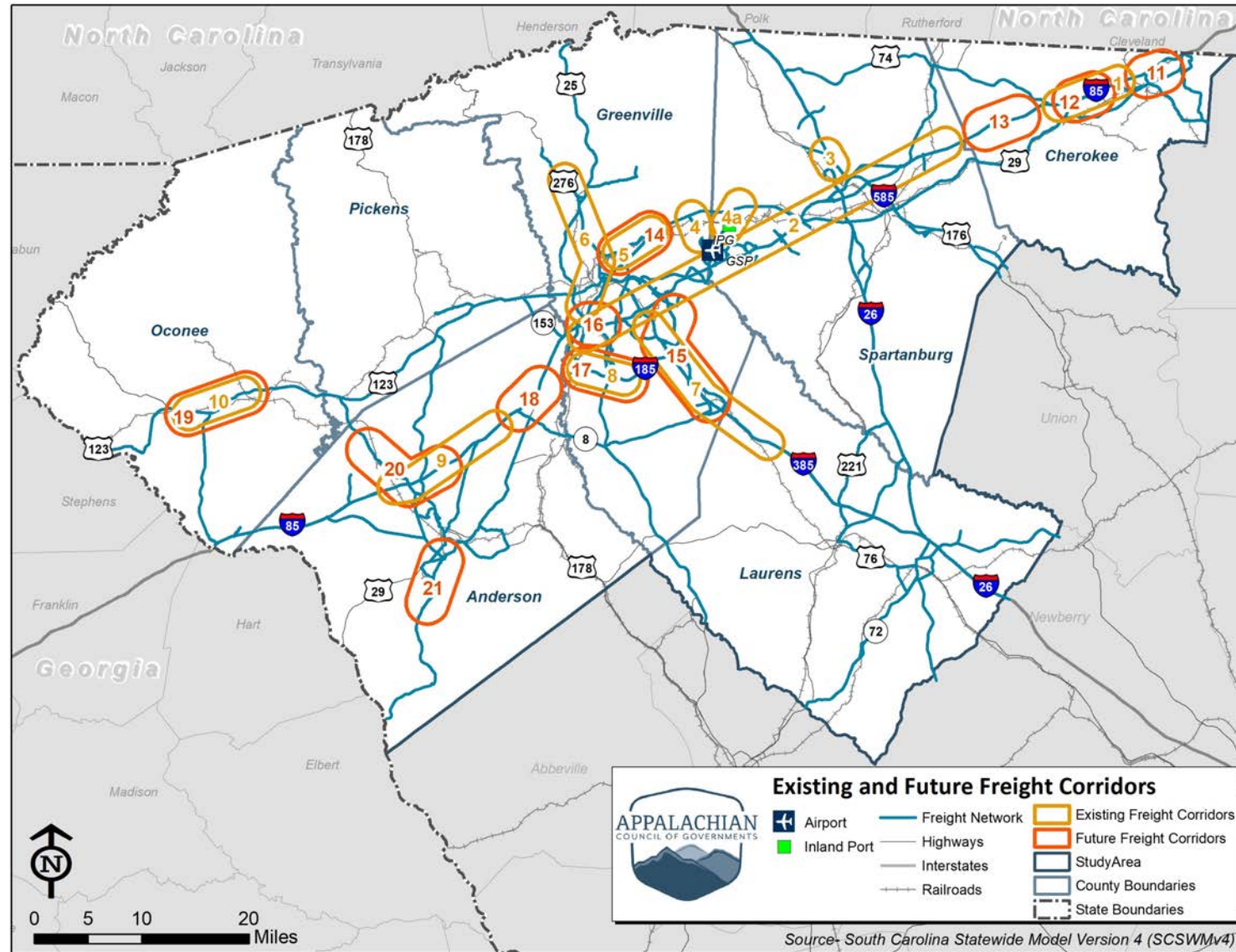
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Validates that freight network determination meets land use planning efforts and major freight generator locations

# Existing and Future Freight Corridors

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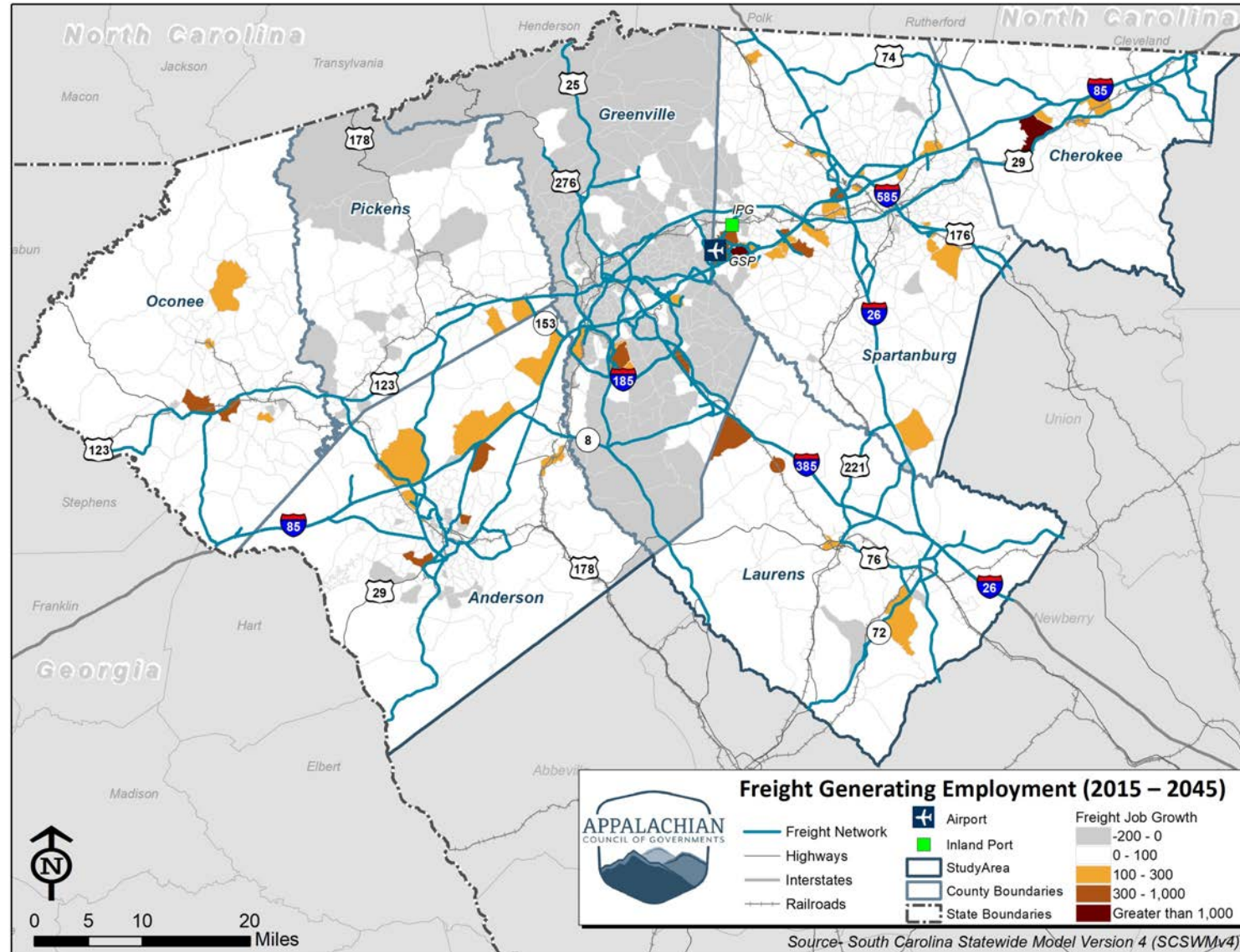


- Unique Identifiers for Needs Assessment:
- Network performance analysis
  - Land use conflict analysis, and
  - Project identification



# Forecast Future Freight Employment

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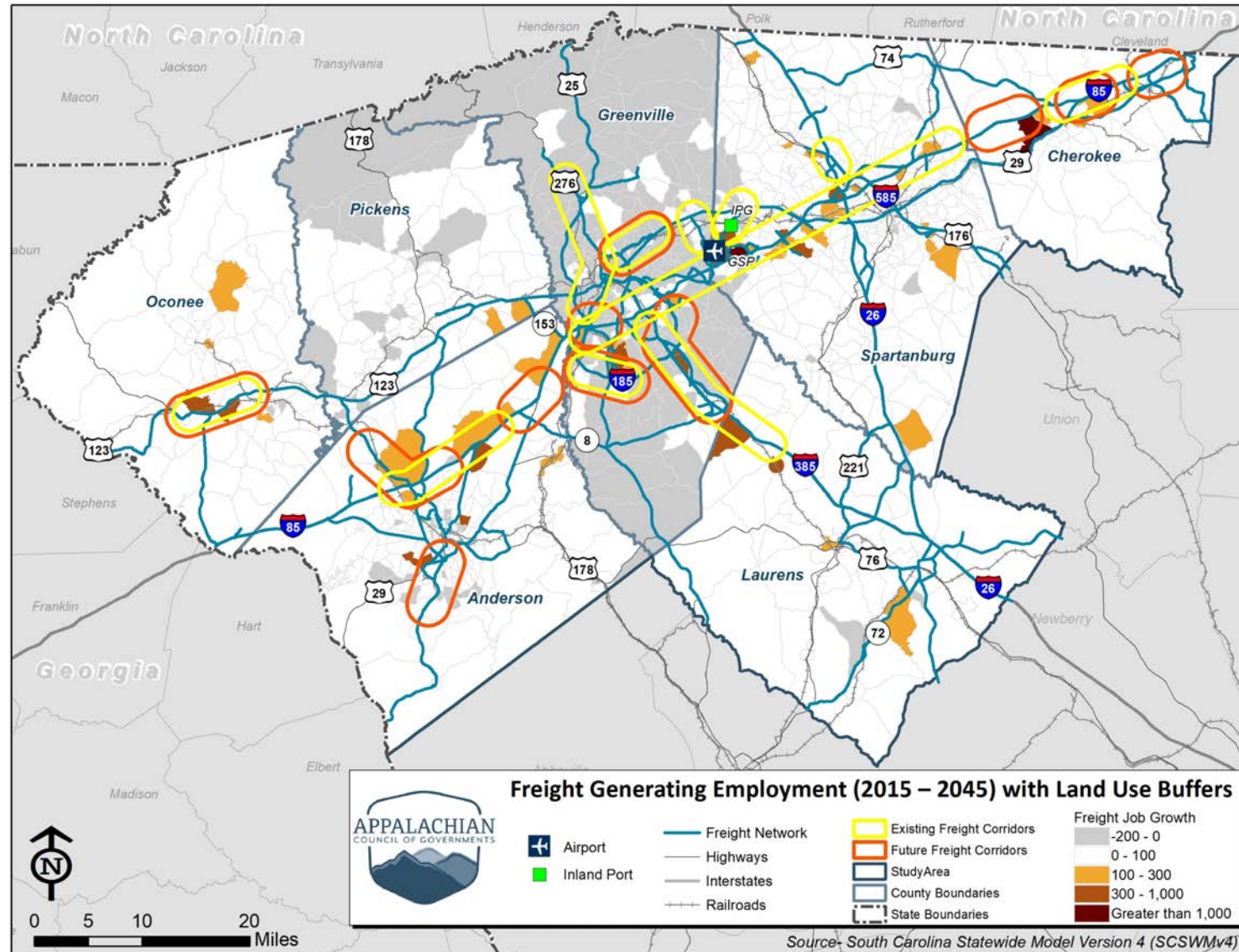


Use TAZ level employment data to forecast future job growth to 2045

- Manufacturing
- Wholesale Distribution & Warehousing
- Mining

# Corridors and Freight Employment Growth

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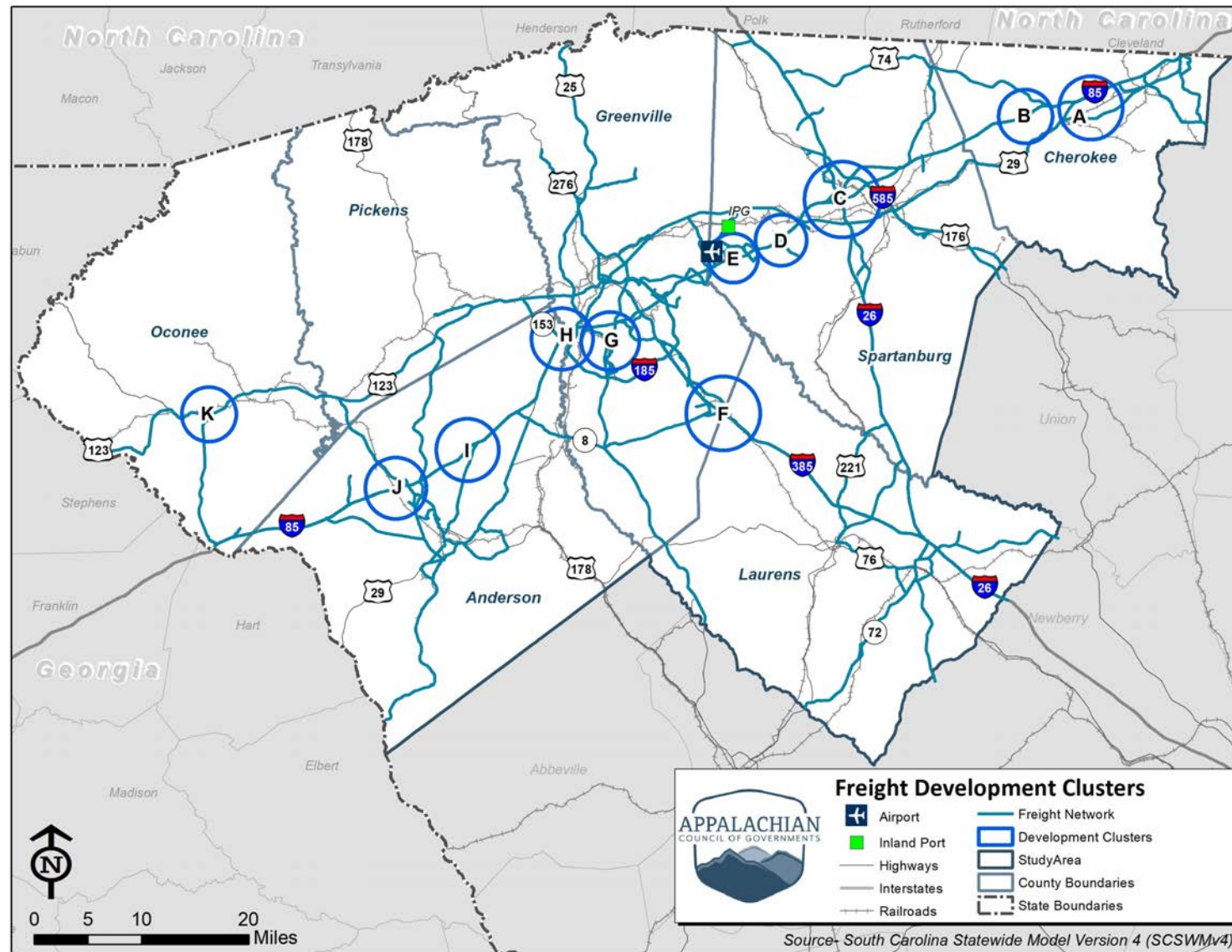


- Job growth > 100 was threshold for significant growth in combined sectors
- Gray areas indicate job losses between 0 and -200



# On-Network Development Growth Clusters

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Intensive growth is forecast along the existing network within existing freight land use planning constraints

# On-Network Employment Growth Clusters

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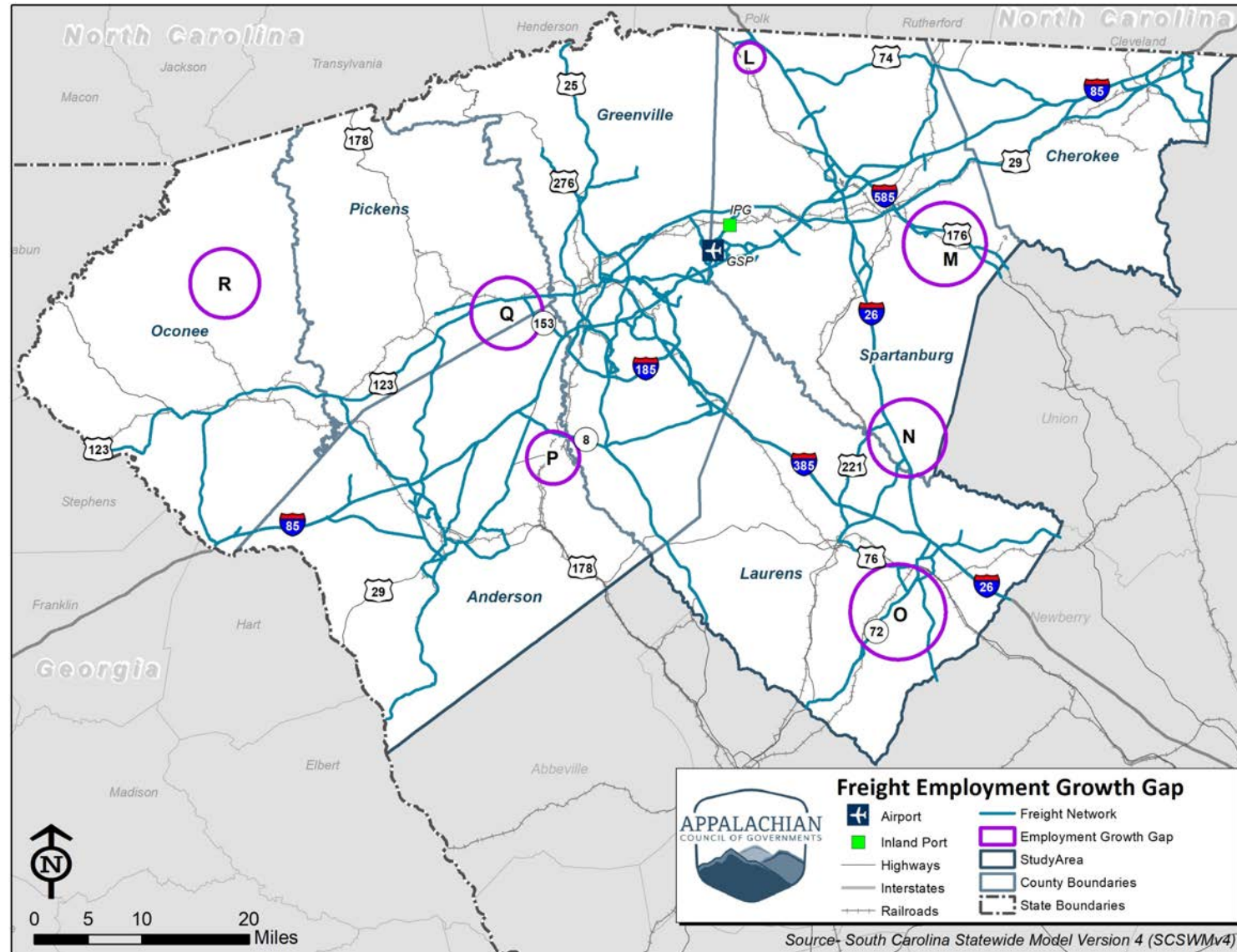


Letter	Description	Employment Growth
A	East Gaffney (Victory Trail Rd)	303
B	Gaffney (Hyatt St)	1311
C	I-85/I-26 Interchange	1119
D	I-85 (Exit 63, SC 290)	1589
E	BMW Plant (Exit 58, Brockman McClimon Rd)	7500
F	I-385 (Exit 22, N Old Laurens Rd)	372
G	Donaldson Center Airport (Exit 7A)	691
H	I-85/I-185 Interchange	284
I	I-85 (Exit 27, SC 81)	615
J	I-85/US 76 Interchange	605
K	Westminster (SC 11)	1112



# Off-Network Development Growth Clusters (GAP)

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Growth is also forecast in areas outside of existing planning efforts

# Off-Network Development Growth Clusters (GAP)

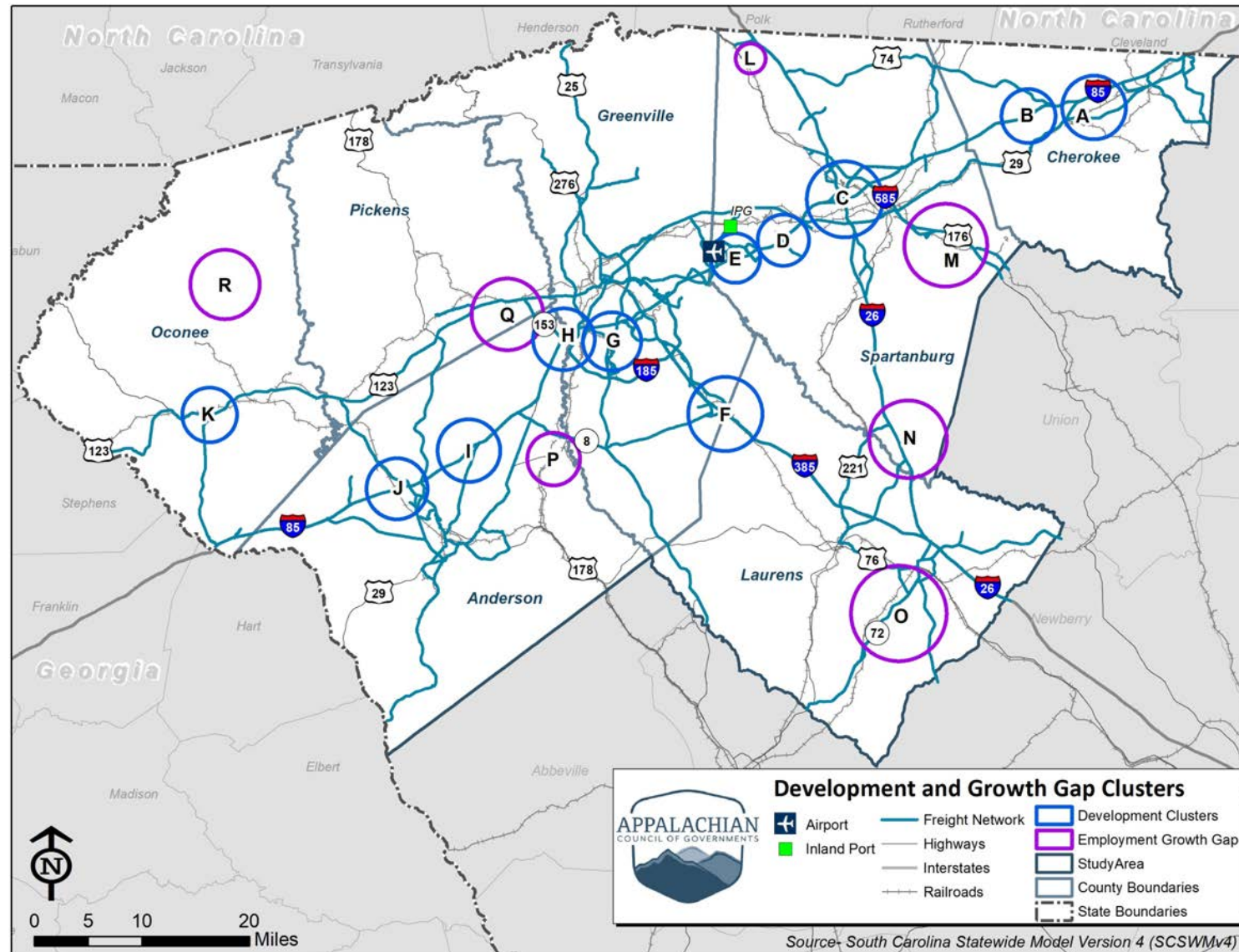
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Letter	Description	Employment Growth
L	US 176 near Landrum	110
M	SC 295 near Rosewood	563
N	SC 92 (I-26 Exit 41)	108
O	SC 72 near Clinton	106
P	SC 20 near Williamston	266
Q	US 123 near Easley	458
R	SC 11 near Tamassee	119

# Employment Growth Clusters (On & Off Network)

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Validates the freight network as growth is occurring along the network

- With exception of Gap Cluster "R" (Oconee County)



# Employment Growth Clusters Facts

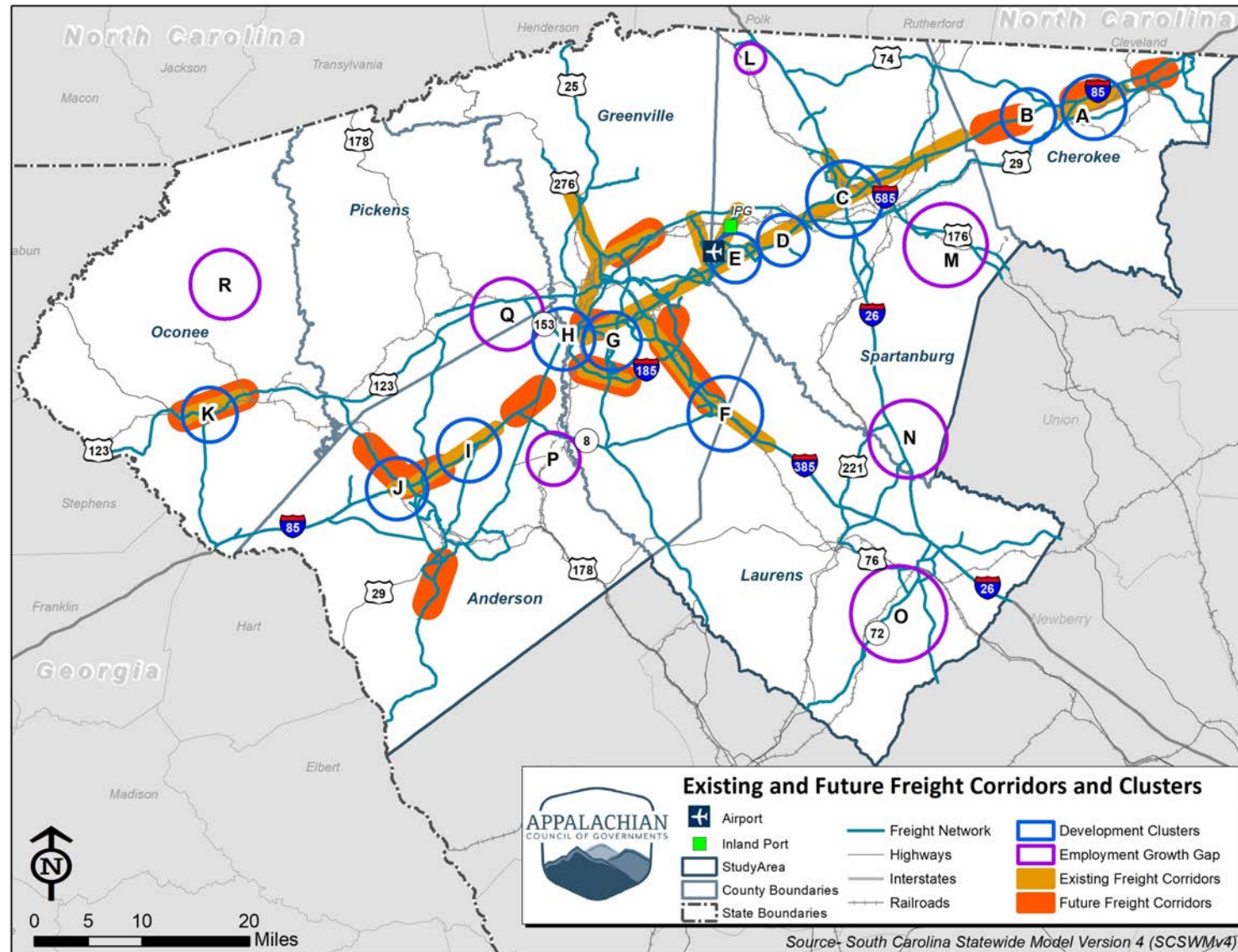
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- 8/11 development clusters have rail access
  - 2 CSX
  - 6 NS
- 5/7 gap clusters have rail going through them
  - 2 CSX
  - 3 NS
- 10/11 Development clusters located on interstate system
- 1/7 Gap clusters located on interstate system

# Freight Corridors & Employment Growth Clusters

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GAP clusters outside of existing current and long-range planning efforts

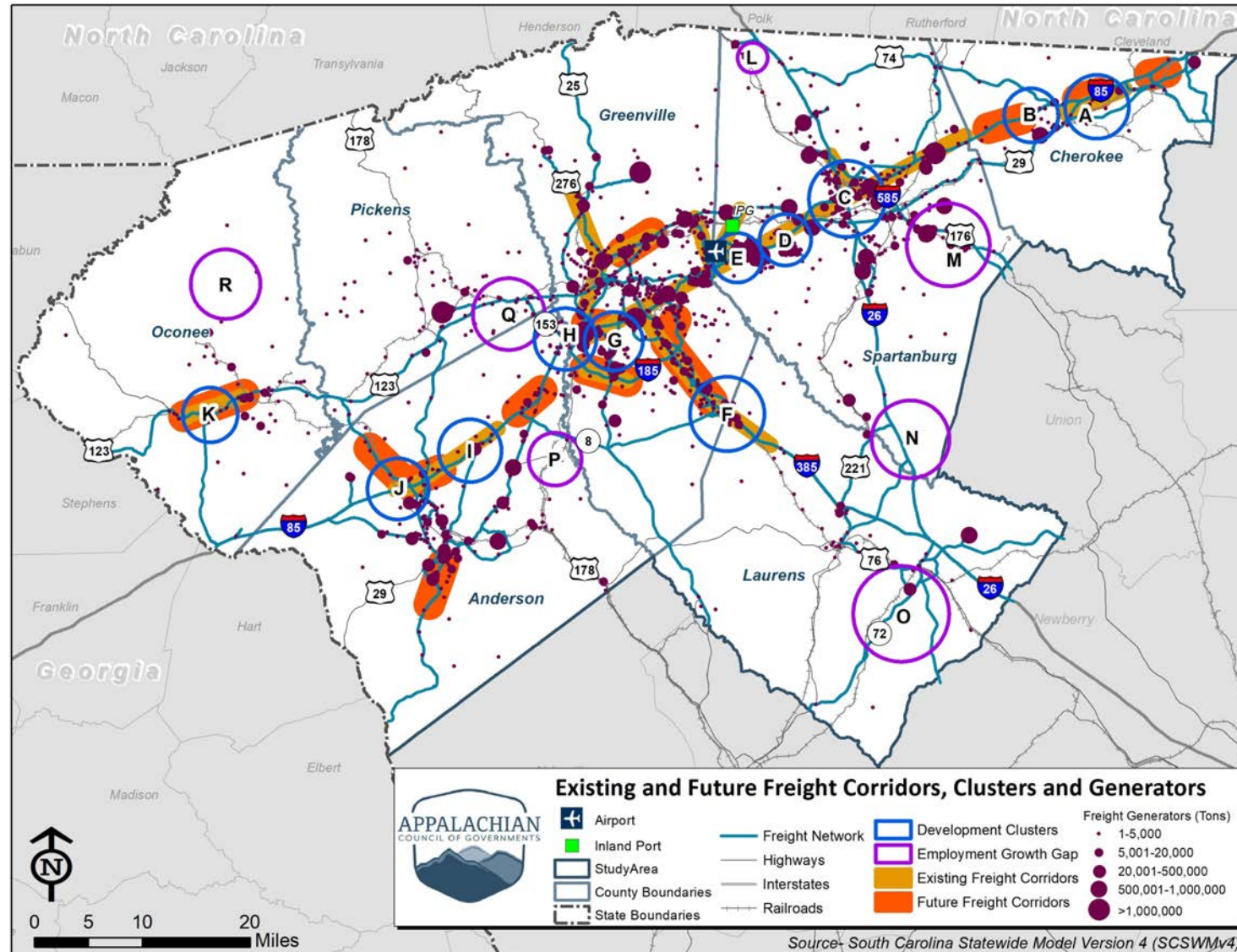
# Corridors, Employment Growth Clusters, & Freight Generators

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## Transearch Freight Generator database validates

- Existing and future land use planning efforts,
- On-network growth, and
- Employment growth gaps



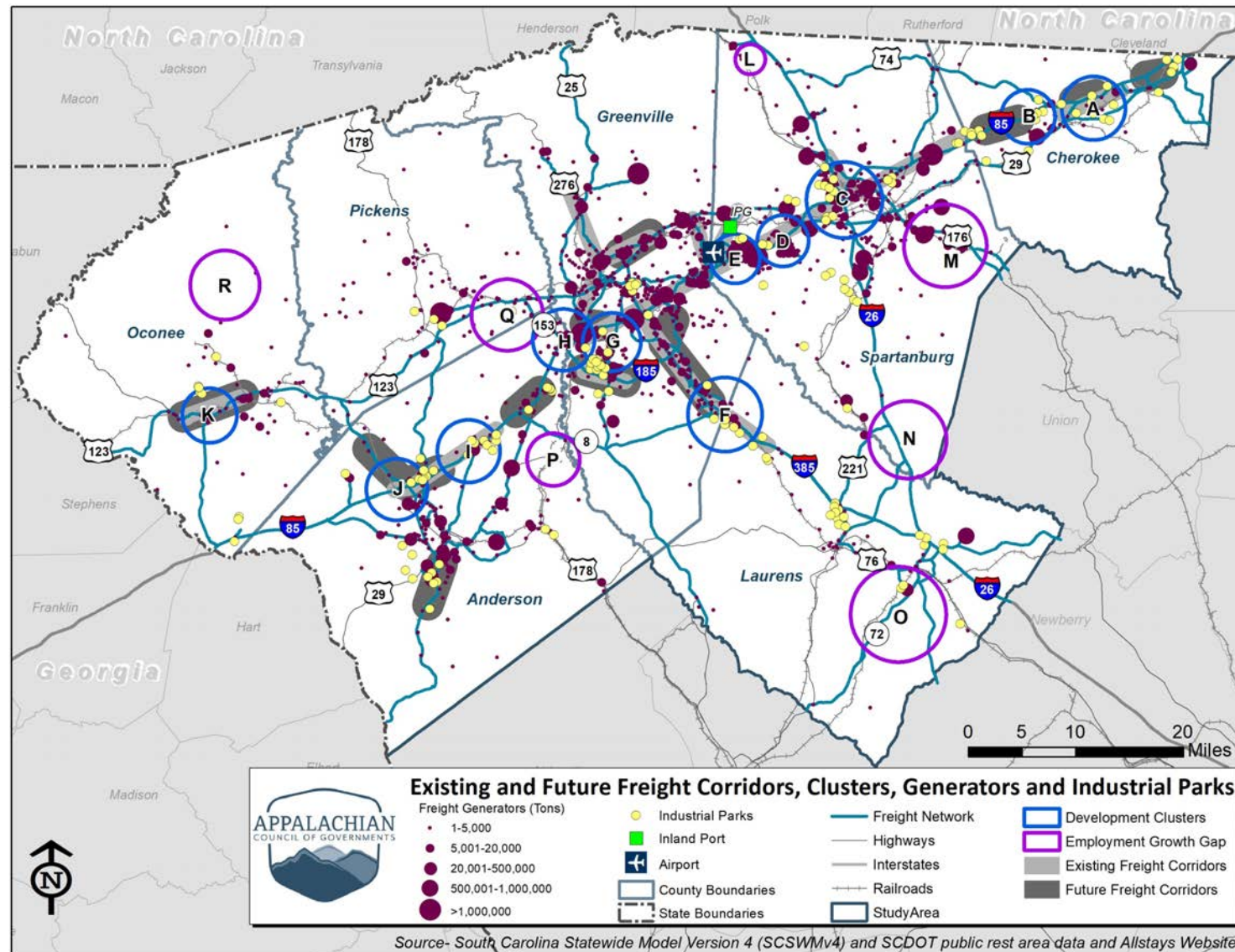


# Planning Gap Identification

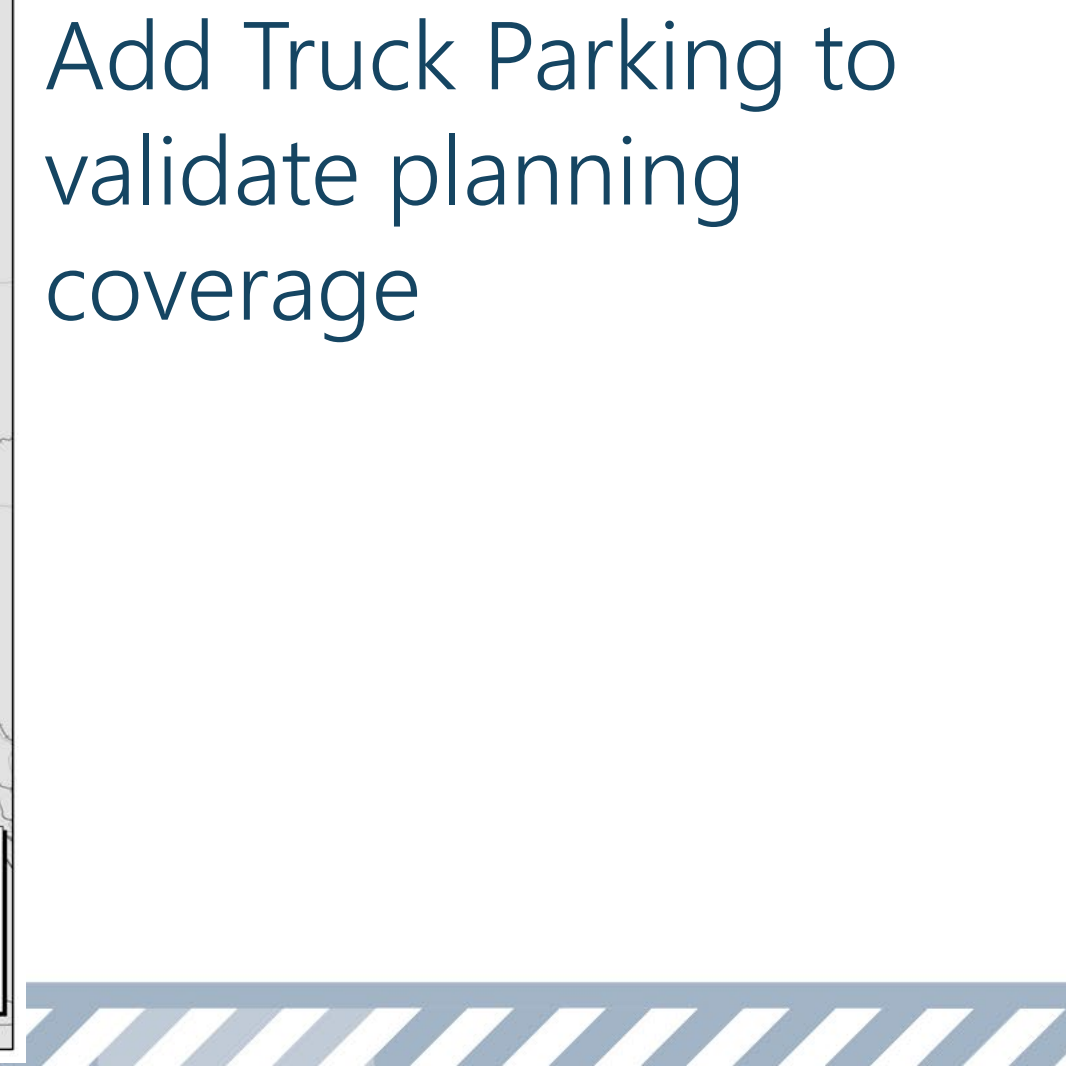
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Add Industrial Parks  
to validate planning  
coverage



## A stylized illustration of a blue truck with a white cab and a large blue cargo box. The truck is shown from a side profile, facing right. It has multiple wheels and a simple, clean design.

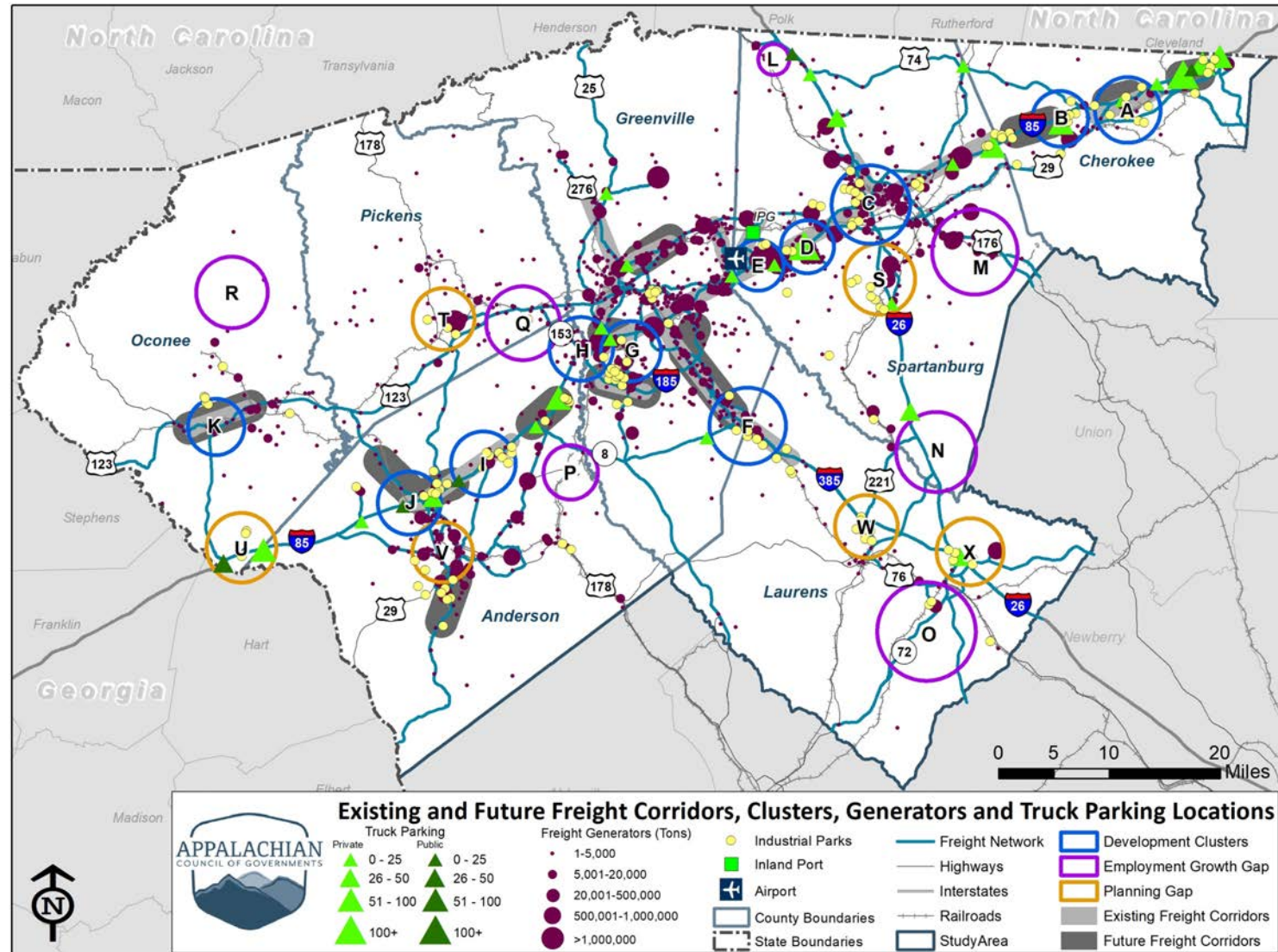


# Add Truck Parking to validate planning coverage



# Planning Gap Identification

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Source- South Carolina Statewide Model Version 4 (SCSWMV4) and SCDOT public rest area data and Allstays Website

Orange circles indicate gaps in planning regulation for industrial freight related land use clusters



Letter	Description
S	I-26 South of Spartanburg
T	Pickens County near US 123
U	Oconee County at State Line
V	SC 28 West of Anderson
W	Wal-Mart Distribution Center (Laurens County)
X	SC 72 Southwest of Clinton

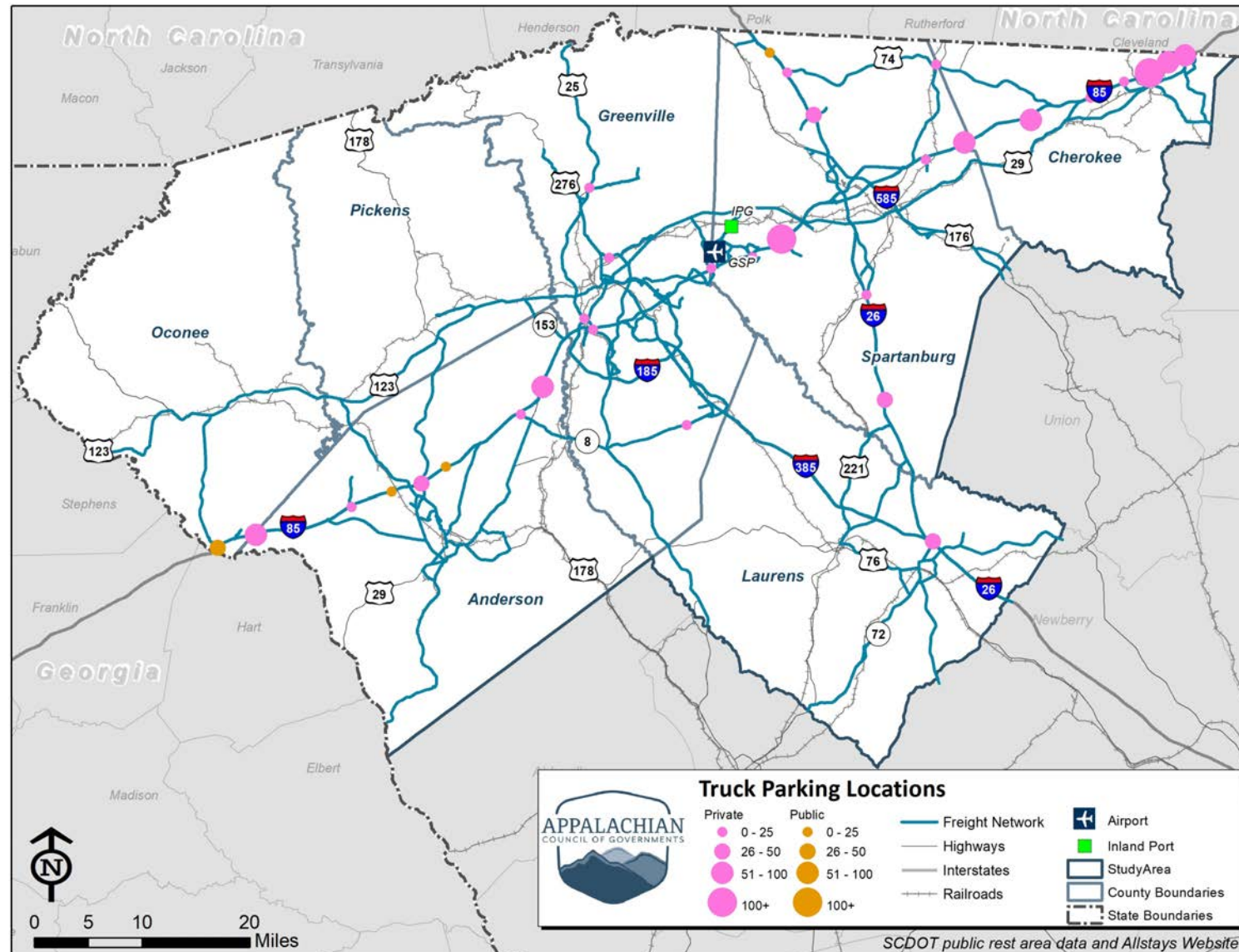


# Truck Parking Analysis



# Truck Parking Locations

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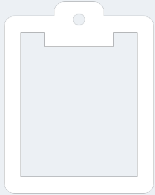


- Most supply along I-85
- I-85 truck parking study identified 21 exits where trucks were parking illegally



# Truck Parking Survey

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## Questions

1. What is the Facility Name?
2. Can you please confirm your physical address is \_\_\_\_\_?
3. What are the hours of operation?
4. How many truck parking spaces are currently at your facility?
5. What is the typical cost of renting a space?
6. What types of trailers can your facility accommodate?
7. What types of amenities does your facility have?
8. What was the estimated occupancy rate Pre-COVID? Currently?
9. What hour ranges typically see the highest occupancy? Is there a typical length of stay?
10. Do you have plans to add additional spaces or amenities in the future?

# Truck Parking Survey Responses

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Q #	1301 Fairview Rd, Simpsonville, SC 29680	1840 Hwy 101 S, Greer, SC 29651	1011 North Mountain St, Blacksburg, SC 29702	5415 Hwy 187, Anderson, SC 29625	4535 Liberty Hwy, Anderson, SC 29621	2497 S. Hwy 14, Greer, SC 29651	175 Truck Stop Rd, Cowpens, SC 29330
1.	Spinx	QuikTrip	Flying J	Marathon	QuikTrip	Spinx	Westar Citgo
2.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	24/7, no overnight parking	24/7	24/7	6 A.M. - 12 A.M.	24/7	24/7	24/7
4.	16 spaces	26 spaces	20 spaces	20 spaces	20 spaces	7 spaces	150 spaces
5.	No rentals	No rentals	\$15/night	\$10/night; \$200/month	No rentals	No rentals	No rentals
6.	All	All	All	All	All	All	All
7.	Public bathroom	Public bathroom	Laundry, truck wash, scale, showers, bathrooms	None	Public bathroom	Public bathroom	Laundry, scale, showers, bathrooms
8.	Unaware	Unaware	Unaware	Unaware	Unaware	Unaware	Unaware
9.	Morning until 1 P.M.	Morning	Varies day to day	7 A.M. - 11 A.M.	Spaces full by 6 P.M. for the night	8 A.M. - 2 P.M. 2 hours	Night shift
10.	No	No	No	No	No	No	No

# Land Use Findings





# Land Use Key Findings

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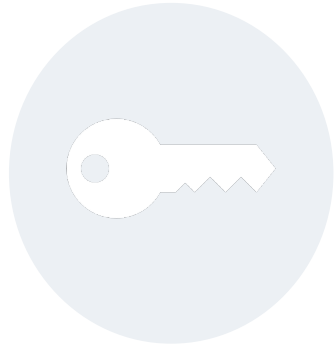


Local, regional and state transportation and land use planning decisions are interdependent

- Regional and local coordination with SCDOT at the Planning, District and Regional Production Group levels;
- Land development regulations and permit approvals should consider incorporating traffic impact studies; and
- Continue to plan for future freight related development along existing freight corridors.

# Land Use Key Findings

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## Focus on rail corridors to promote truck to rail mode shift

- Continue to foster growth of the Inland Port Greer Terminal and strategies to mitigate its impacts to small communities;
- Take advantage of underutilized/underserved rail corridors; and
- Vacant and infill industrial sites with accessibility to rail should be a focus of the regional economic development marketing strategy

# Land Use Key Findings

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## Coordination between local governments, ACOG, Upstate Alliance, and Department of Commerce

- Compare local goals and objectives with state and regional economic development strategy;
- Zoning and Future Land Use determinations should continue to align with local and regional planning and economic development goals; and
- Local land use decision making should account for regional impacts to the transportation network.



# Land Use Opportunities

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- Sub-Area & Neighborhood Freight Plan Program
  - Develop strategies and design standards to reduce conflicts between freight, auto, transit, and bike/ped for small towns and neighborhoods
- At-Grade Rail Crossing Program
  - Prioritize and program at-grade crossing project improvements
- Regional Truck Parking Plan
  - Identify and prioritize sites for future truck parking facilities

# Land Use Opportunities

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- Regional Freight Development Study
  - Determine freight related planned acreage and future industry cluster recruitment and marketing strategies
- Regional Supply Chain Resiliency Strategy
  - Develop a strategy to create immunity to local and global impacts to the network supply chain

# Questions and Answers

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*Please type your questions in the questions box and our project team will answer them*

*If we do not get to all the questions, we'll prepare written responses and post them to the website with the meeting recording*