



ATLANTA REGIONAL COMMISSION

# Atlanta Regional Truck Parking Assessment Study



## Georgia Planning Association Fall 2017 Conference

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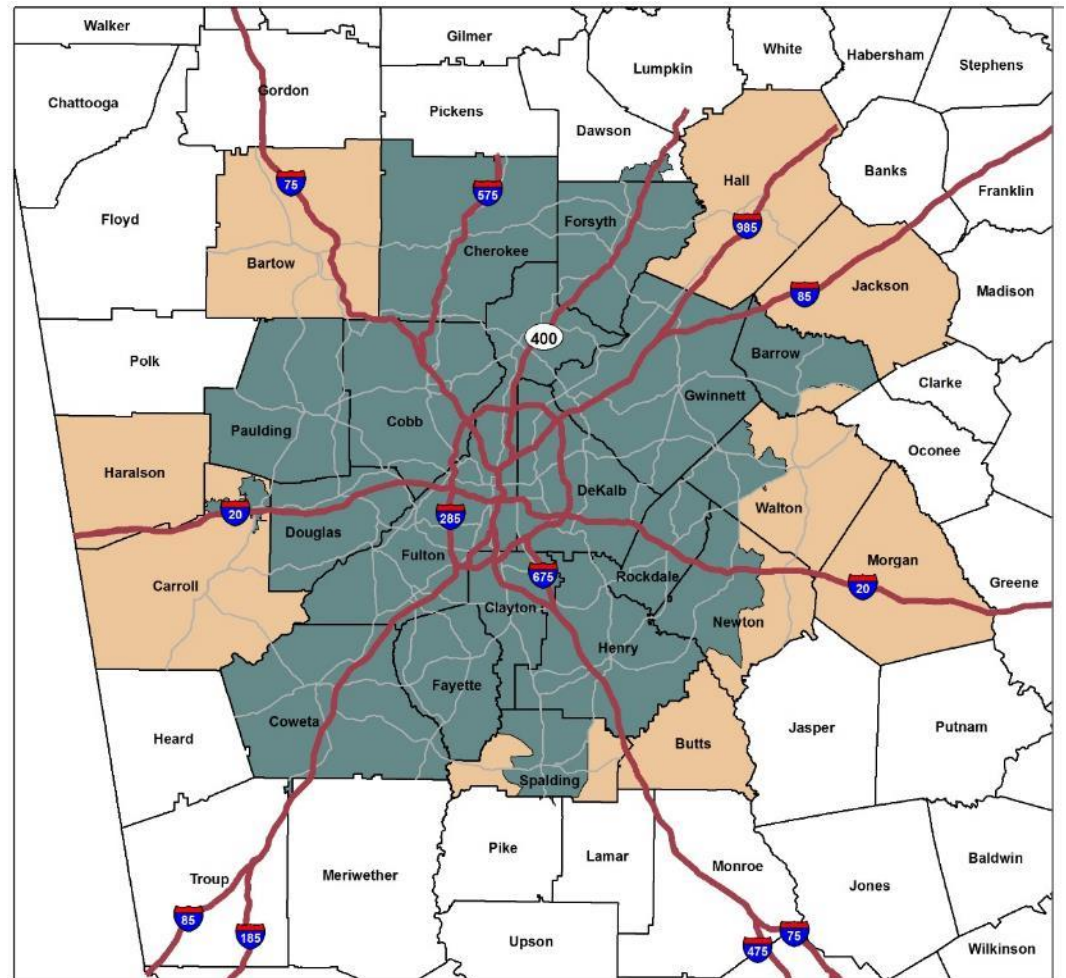
Caroline Evans, AICP, Blue Cypress Consulting

*September 27, 2017*



# Background

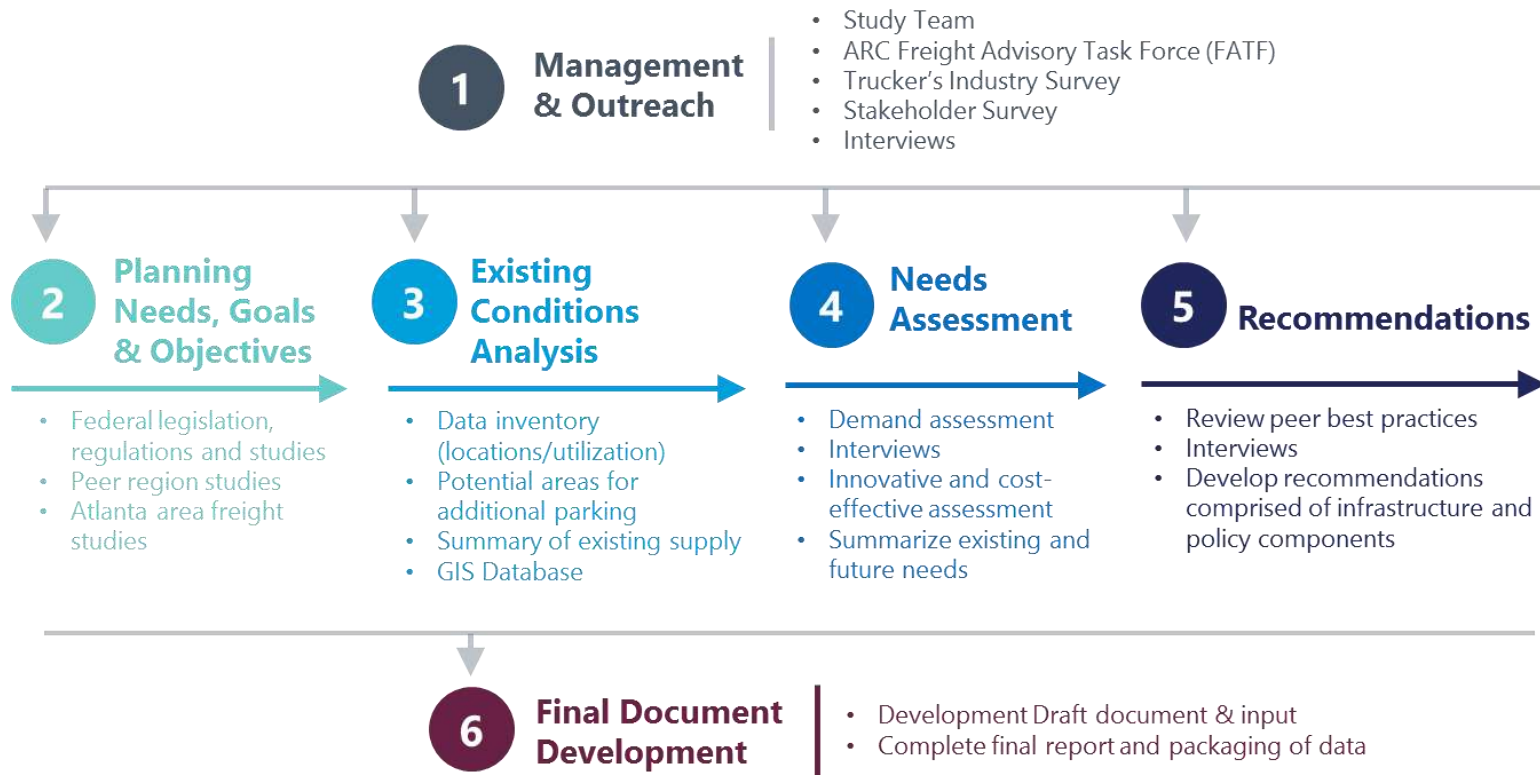
- Existing and Future Truck Parking Needs
- Study Area:
  - ARC MPO
  - Key Adjacent Counties
- Study Completion: Early 2018



# Study Approach



## Atlanta Regional Truck Parking Assessment Study



# Atlanta Regional Freight Mobility Plan Update – June 2016

## Recommended Completion of a Regional Truck Parking Assessment Study

- Purpose:
  - Identify and address truck parking needs in the Atlanta Region
- Objectives:
  - Consider long-haul and short-haul truck parking needs
- Factors:
  - Cities and counties must be considered due to the relevance of local codes and zoning ordinances that [may] regulate where trucks can operate, times of operation, and the design of mixed use facilities.

*ARC, Atlanta Regional Freight Mobility Plan Update (May 2016)*

# Federal Regulations

- Section 1401 of MAP-21  
"Jason's Law" (10/1/2012)
- "National priority on addressing the shortage of long-term parking for commercial motor vehicles on the National Highway System to improve the safety of motorized and non-motorized users and for commercial motor vehicle operators."

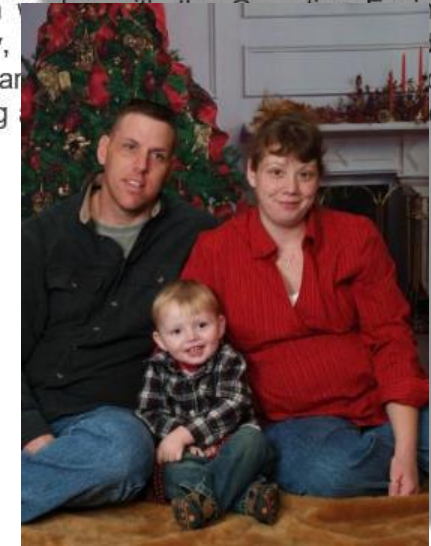
*Albany, NY Times Union (3/10/2009)*

## Jason H. Rivenburg Obituary



Rivenburg, Jason H. FULTONHAM Jason H. Rivenburg, 35, of Tetterbark Rd., died unexpectedly Thursday, March 5, 2009 in Orangeburg, S.C. Jason was born in Cobleskill, N.Y. on October 28, 1973 the son of Dawn (Cater) and Hezekiah Rivenburg Jr.

Jason was a 1991 graduate of Schoharie Central School. He was a construction worker for the Albany, N.Y. Local 106 in Albany, N.Y. He worked for tractor trailers for many years and his own vehicle cleaning business.



# Hours-of-Service (HOS)

## Federal Regulations

- **Effective since 07/01/13: Federal Motor Carrier Safety Administration (FMCSA) Requirements for Commercial Motor Vehicle Drivers:**
  - **Daily Driving Limit / 11-hour Driving Limit:** may drive a maximum of 11 hours after 10 consecutive hours off duty
  - **14-Hour Driving Window / 14-Hour Limit:** may not drive beyond the 14<sup>th</sup> consecutive hours after coming on duty, following 10 consecutive hours off-duty. Off-duty time does not extend the 14-hour period.
  - **Rest Breaks / 30-Minute Break:** may drive only if eight (8) hours or less have passed since end of driver's last off-duty or sleeper berth period of at least 30 minutes [49 CFR 397.5 mandatory "in attendance" time may be included in break if no other duties performed]
  - **60/70-Hour On-Duty Limit:** may not drive after 60/70 hours on-duty in 7/8 consecutive days. A driver may restart a 7/8 consecutive day period after taking 34 or more consecutive hours off duty.
  - **Sleeper Berth Provision / Team Driving:** drivers using this provision must take at least 8 consecutive hours in the sleeper berth, plus a separate two (2) consecutive hours in the sleeper berth, off duty, or any combination of the two (2).

# Electronic Logging Devices (ELDs)

## Federal Regulations

- **ELD R**

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**Bottom-Line:**

**Demand for truck parking  
will likely increase after  
December 2017 when ELDs  
are MANDATED**

9

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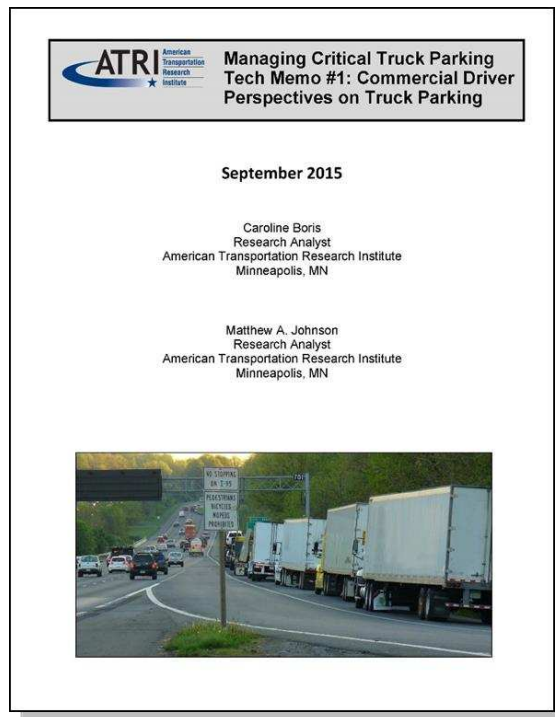
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AOBRD – Automatic Onboard Recording Device (Less than 20% of existing trucks have AOBRDs per 3/2016 survey by TruckStop.com)

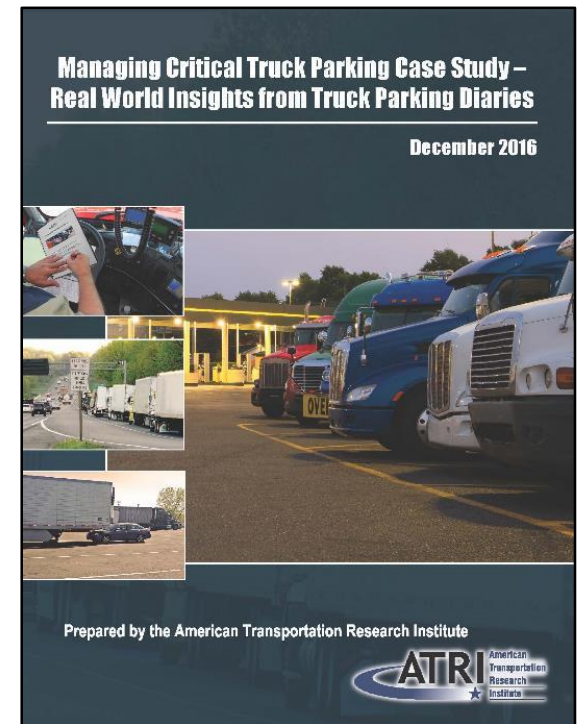
# ATRI Surveys

- Driver Surveys: over 1,400 collected
- Impacts of lost capacity



# ATRI Diaries

- 148 completed covering 14 days of activity (Jun – Sep 2016)
- 2,035 days of truck parking activity
- 4,763 unique stops
- When, where, how long to find a spot, etc.





# ATRI Diaries:

## Real Reason for Parking Location

Importance of Factor	Percent of Responses
Proximity to Route / Destination	96.5%
Restroom / Showers	79.8%
Expected Parking Availability	75.5%
Width of Parking Space / Ease of Access	31.9%
Restaurant	30.5%
Security	20.3%
Company Policy / Loyalty Program	18.1%
Internet	6.9%
Laundry	4.0%
Maintenance / Service Center	3.7%
Weather Conditions	3.6%

# Anecdotal Data - ATRI Diaries

## Exceptions to Private Truck Stops?

*"I am reluctant to eat by myself in a sit down restaurant. The women I know would rather think ahead, go grocery shopping and prepare a healthy, quiet meal in the truck while watching our favorite program on DVD. We would also rather use our own porta-potty instead of public facilities, especially at night. So since we have everything we need in our micro homes, all we need is a legal parking space. Rest areas also have more RV dumps and are much quieter at night."*

*- Female Truckload Driver from Missouri*

## Lost Time and Revenue?

*"I've been kicked out of truck stops due to overcrowding. I've been kicked out of rest areas wondering if I will have a safe haven for my 10-hour break. It is the most stressful aspect of the job."*

Flatbed Driver from Alabama



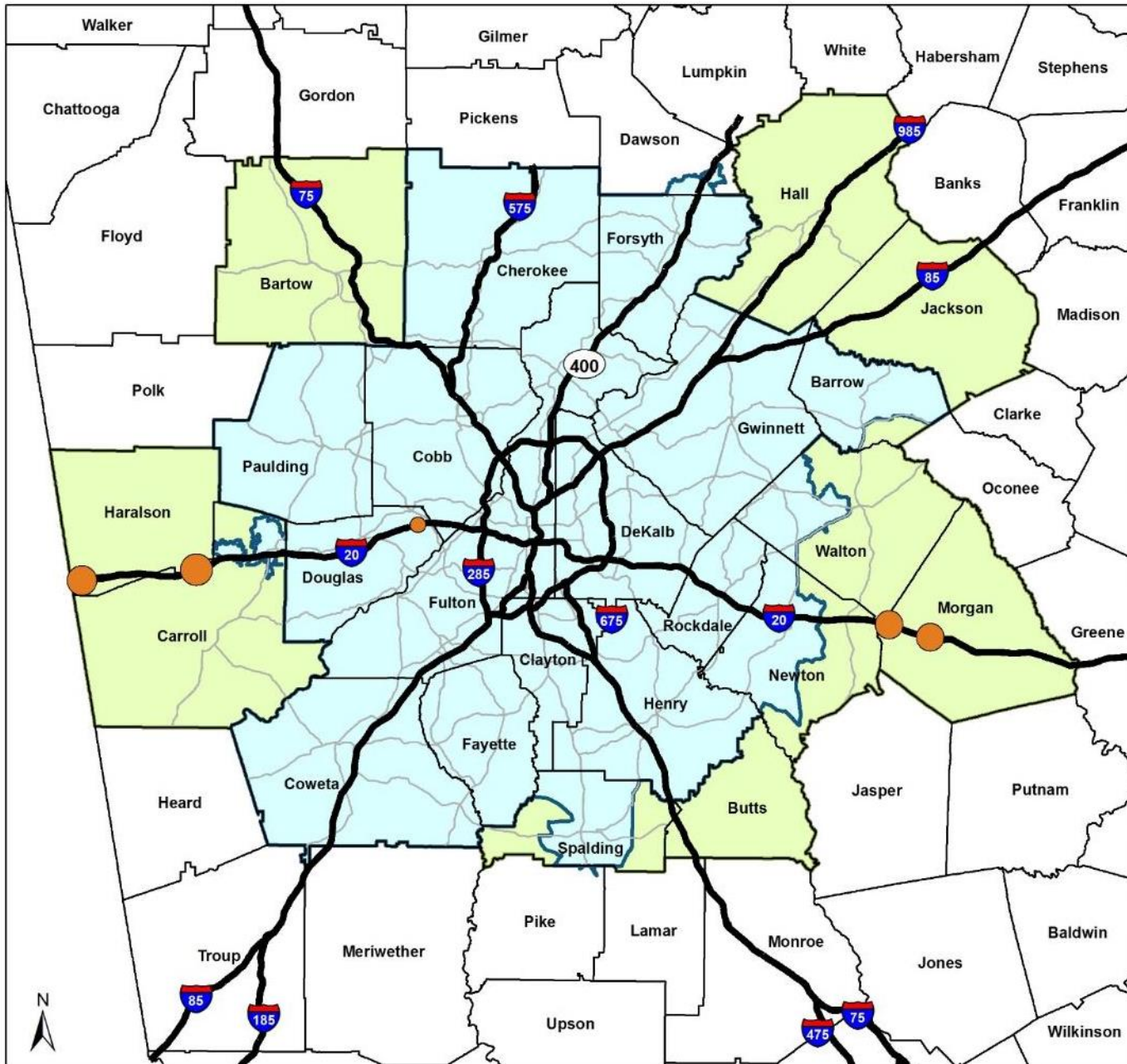
# Driver Perspectives - Parking Issues

- Seeking parking is primarily motivated by **Hours-of-Service** compliance
- Common issues:
  - Parking only available in **unsafe locations**
  - Parking only available on **road shoulders/ramps**
- Finding available parking is **difficult at public rest areas and private truck stops**
- Finding parking is most difficult during the **evening (7PM – midnight)**, followed by **early morning (midnight – 5 AM)**



# Driver Perspectives: Technology and Truck Parking

- Smartphones are the most commonly used technology for accessing the internet
- Preferred mechanism for receiving parking availability information:
  - 1) Smartphone applications
  - 2) Dynamic roadside signs
- Drivers prefer to receive parking availability information 20 miles ahead of a parking location

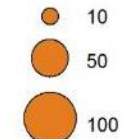


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**Public  
Truck Parking  
Facilities  
(Tier 1) by  
Number of Spaces**

Number of Spaces



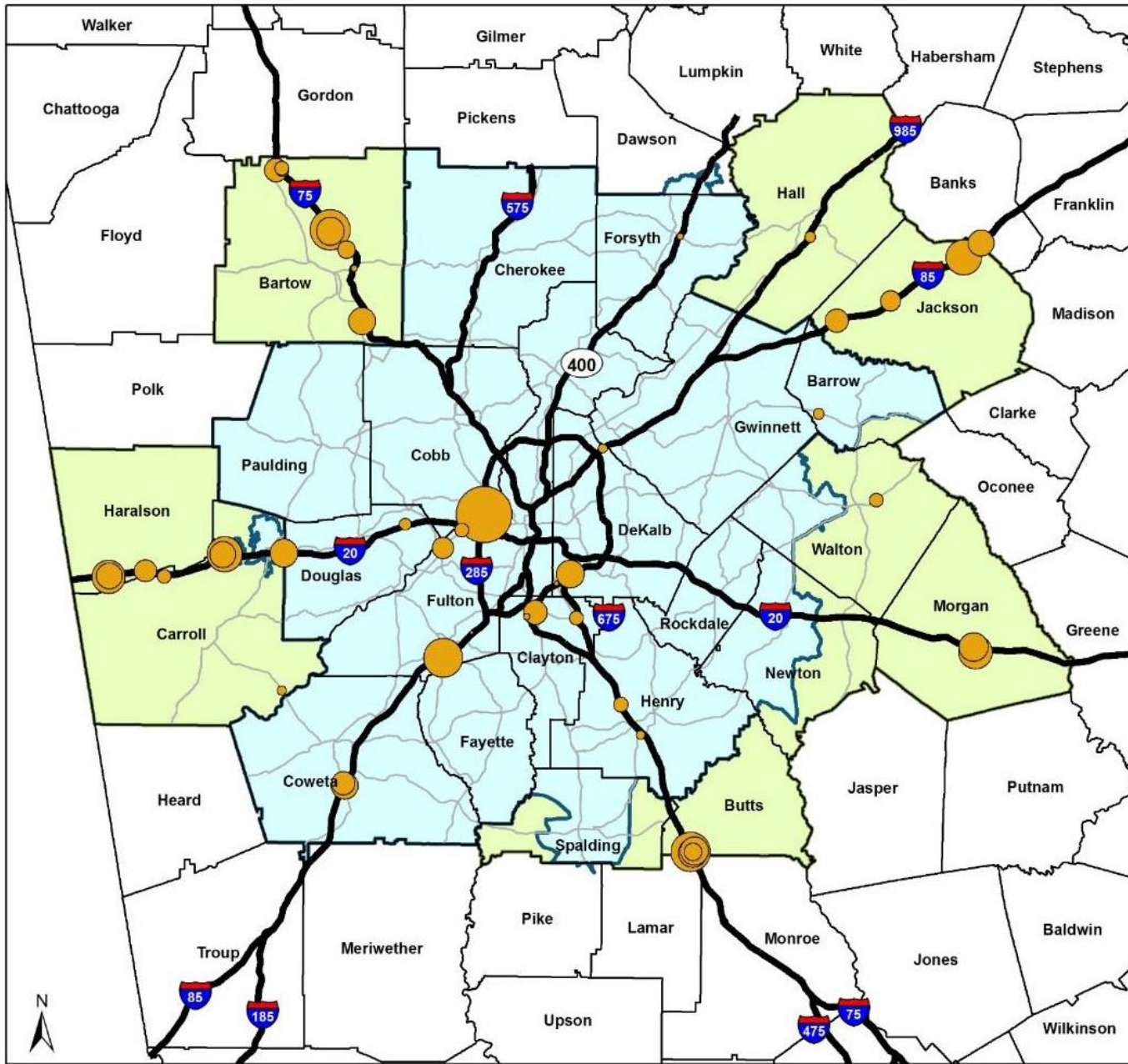
- Expressways
- Regional Truck Routes
- MPO Boundary
- Key Adjacent Counties



Date: May 2017

Sources: ARC, GDOT, EPD,  
Jason's Law, Company Websites





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## Primary Privately-Owned Truck Parking Facilities (Tier 2a) by Number of Spaces

Number of Spaces

- 1
- 10
- 100

- Expressways
- Regional Truck Routes
- MPO Boundary
- Key Adjacent Counties

0 5 10 20 Miles

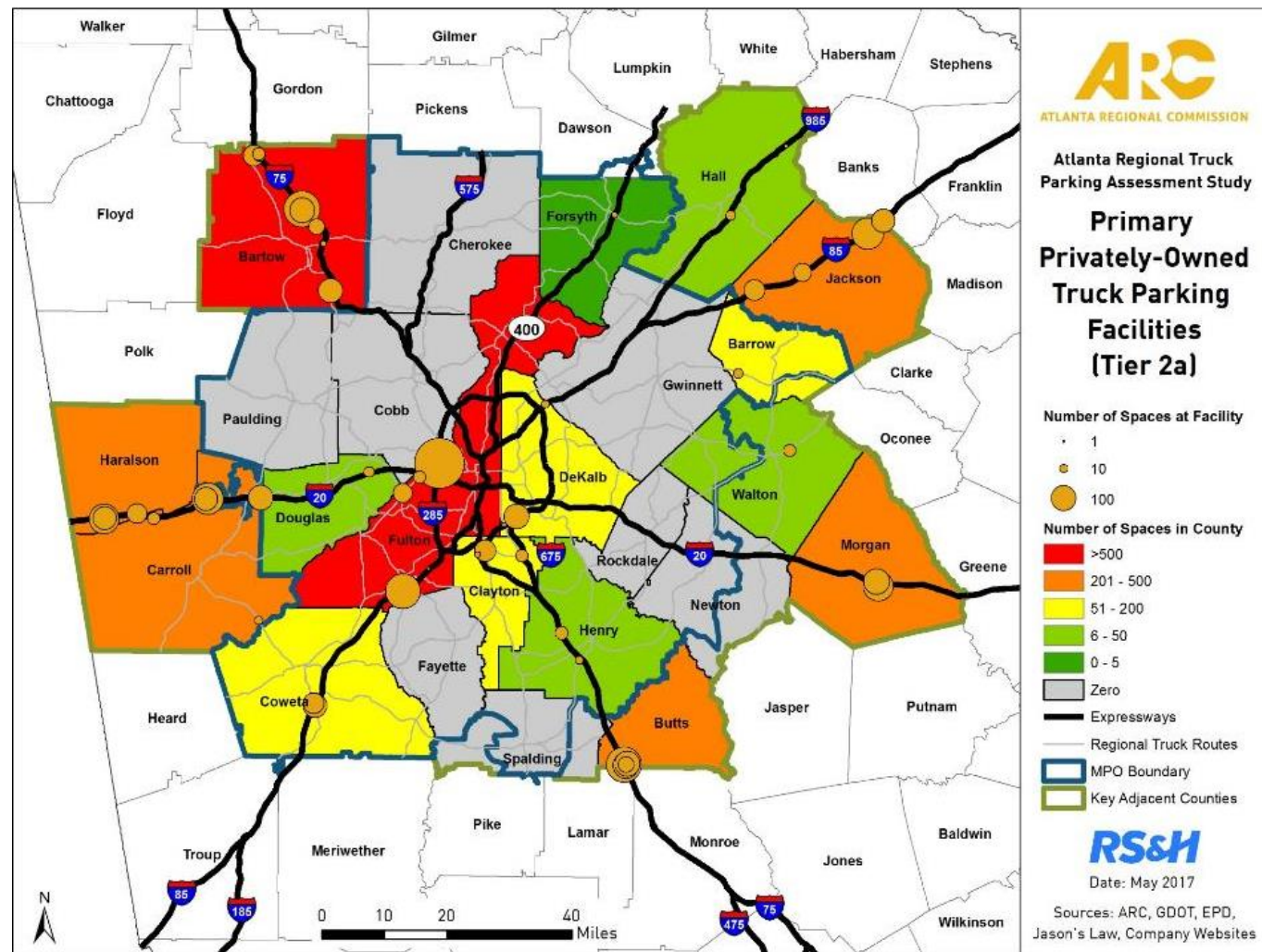


Date: May 2017

Sources: ARC, GDOT, EPD, Jason's Law, Company Websites

# Private Spaces by County

County	Spaces
Fulton	698
Bartow	575
Butts	450
Carroll	360
Haralson	332
Jackson	309
Morgan	259
Coweta	165
DeKalb	114
Clayton	105
Barrow	85
Henry	40
Walton	25
Douglas	20
Hall	19
Forsyth	5
<b>Total</b>	<b>3,561</b>





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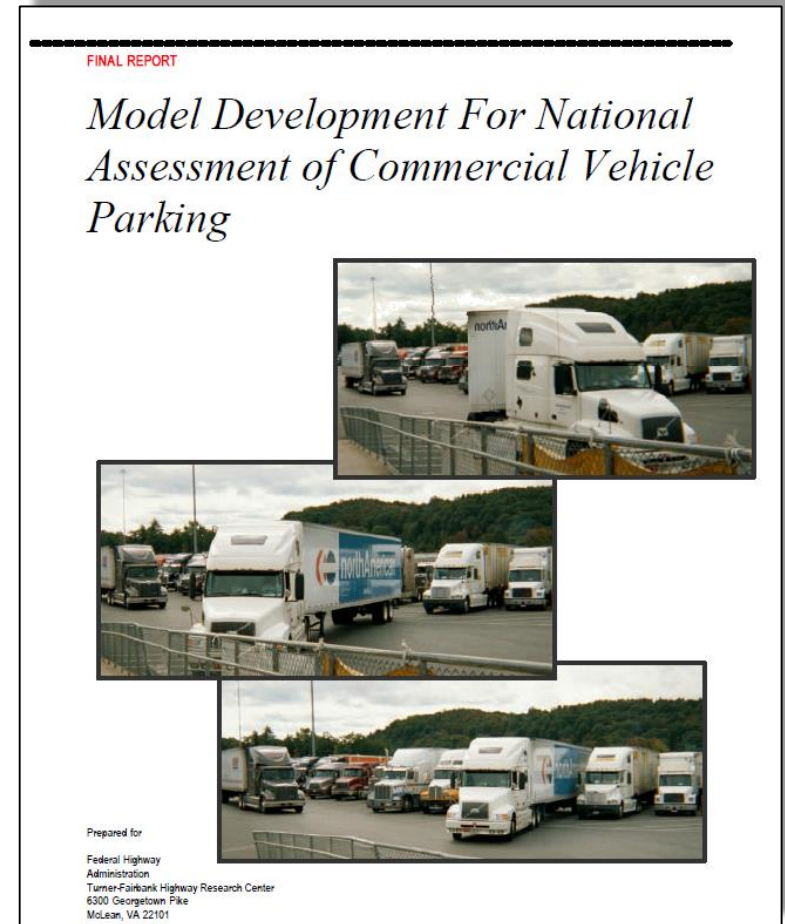
## Needs Assessment

- Demand
- Utilization
- Flows










# FHWA Truck Parking Demand Model

- Estimates corridor-level truck parking demand
- Input
  - Volumes
  - Corridor segment length
  - Speed
- Parameters
  - Truck driver service hour limits
  - Long haul parameters

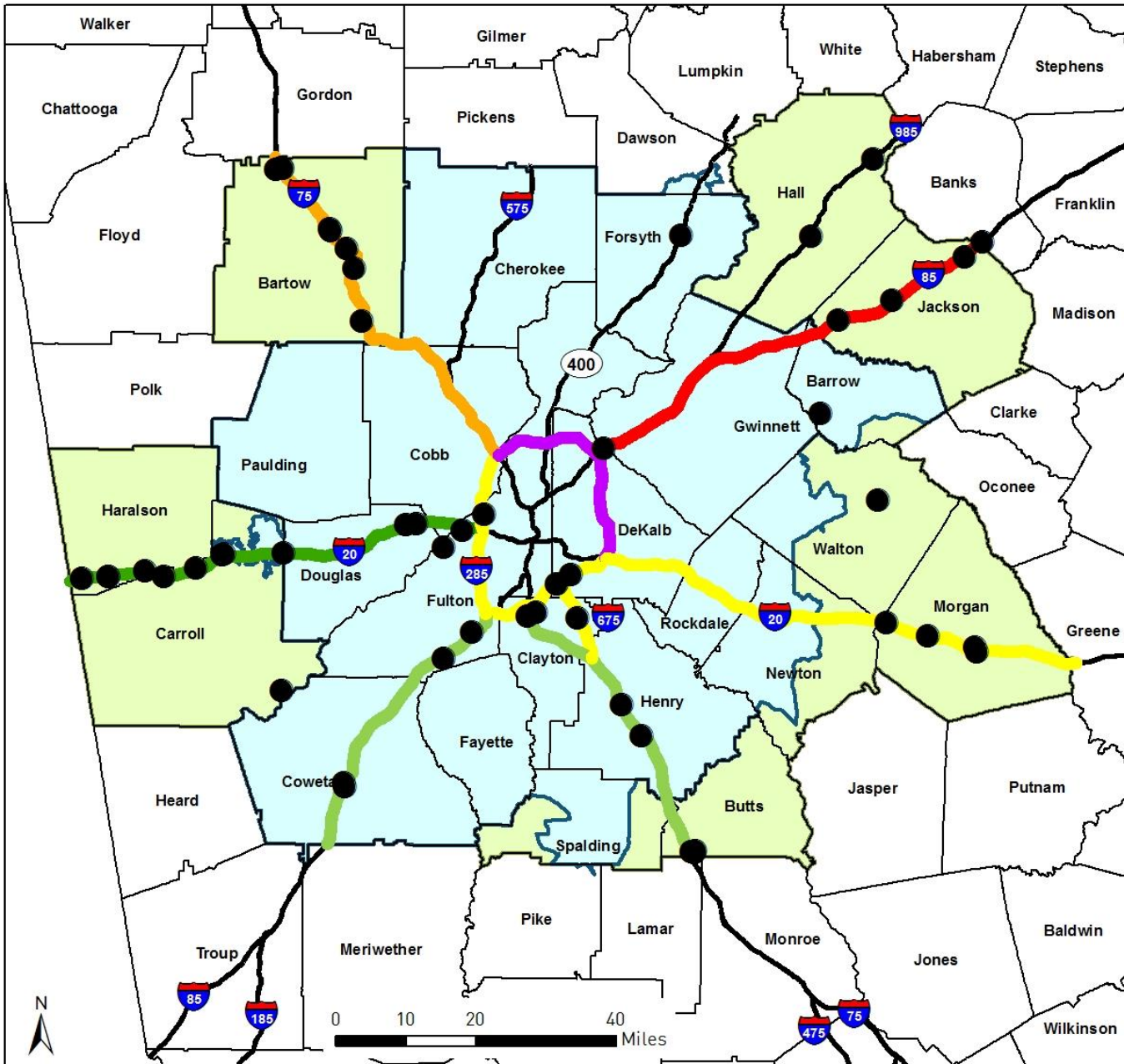


# FHWA Truck Parking Demand Model

Result: Between 2012 and 2045 truck parking demand is estimated to increase by approximately **76%**.

Legend - Corridor Level Results	
	Up to 400 space Surplus
	Up to 100 space Surplus
	
	Up to 100 space Deficit
	Up to 150 space Deficit
	Up to 300 space Deficit
	Up to 450 space Deficit

Parking Surplus or Deficit		
Corridor	2012	2045
I-20 West	(368)	37
I-85 South	(96)	110
I-75 South	(87)	223
I-285 West	21	349
I-675	50	106
I-20 East	88	413
I-285 South	97	307
I-75 North	147	695
I-85 North	303	830
I-285 NE	456	802



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# Base Year Truck Parking Demand

2012 Parking

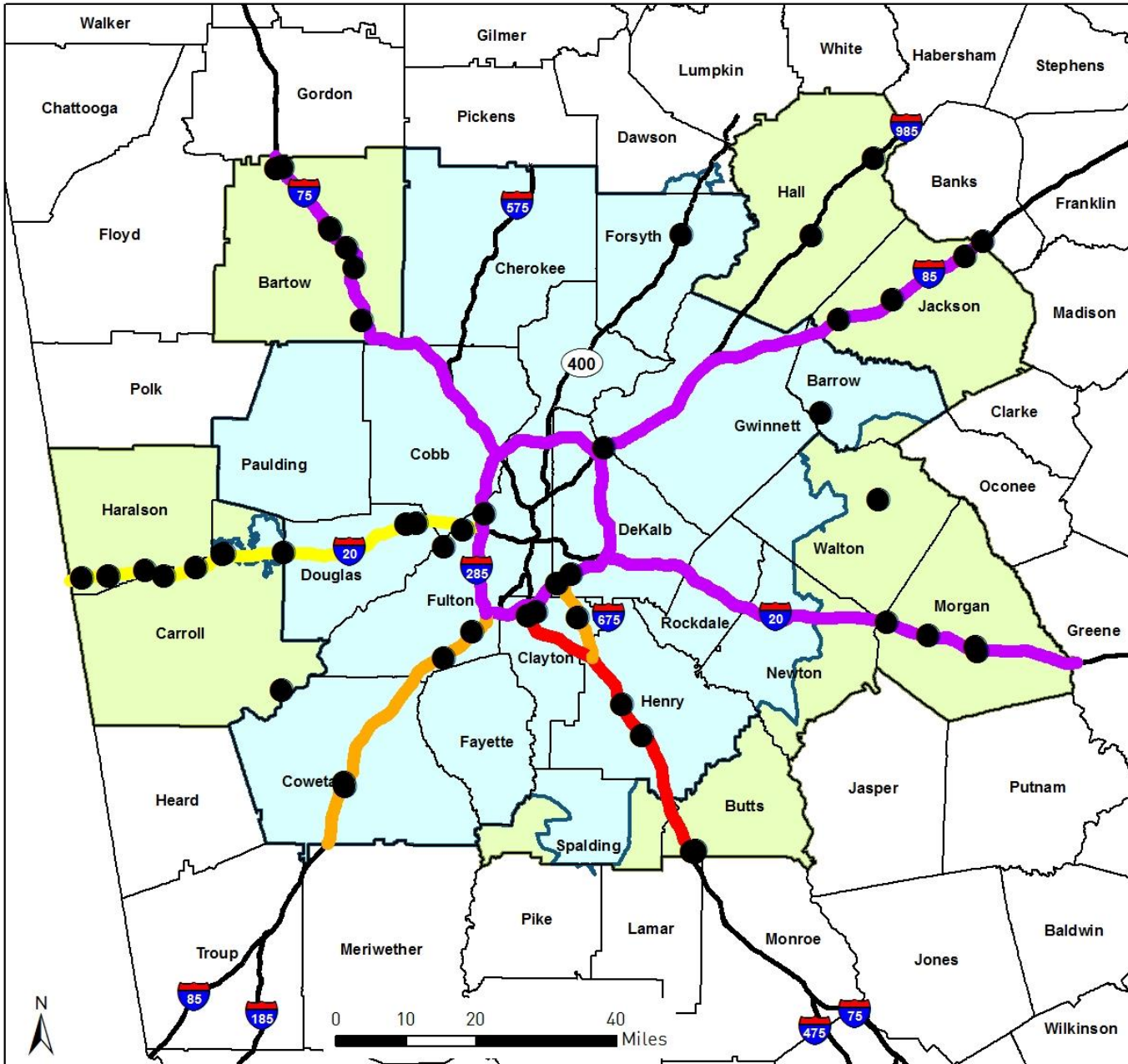
- █ Up to 400 space Surplus
- █ Up to 100 space Surplus
- █ Up to 100 space Deficit
- █ Up to 150 space Deficit
- █ Up to 300 space Deficit
- █ Up to 450 space Deficit
- Current Truck Parking
- Expressways
- MPO Boundary
- Key Adjacent Counties



Date: July 2017

Sources: Study Team, FAF, ARC, GDOT, EPD, Jason's Law, Company Websites





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# Future Truck Parking Demand

## 2045 Parking

- Up to 100 space Deficit
- Up to 150 space Deficit
- Up to 300 space Deficit
- Up to 900 space Deficit
- Current Truck Parking
- Expressways
- MPO Boundary
- Key Adjacent Counties

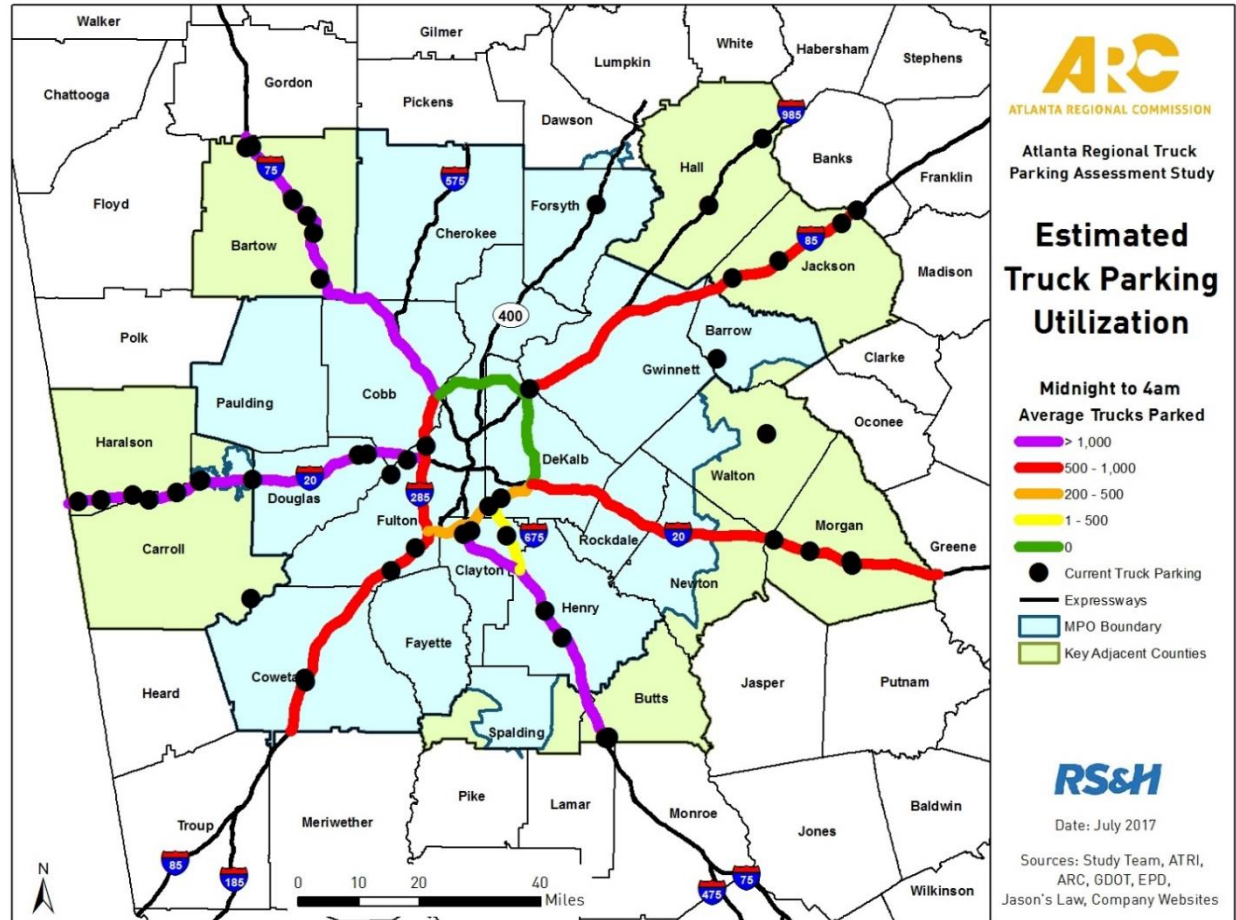


Date: July 2017

Sources: Study Team, FAF, ARC, GDOT, EPD, Jason's Law, Company Websites

# Estimated Corridor Truck Parking Utilization

Corridor	Estimated Utilization
I-20 W	2,290
I-75 S	1,710
I-75 N	1,800
I-285 W	990
I-85 S	860
I-20 E	880
I-85 N	850
I-285 S	420
I-675	170
I-985	50
Total	10,020

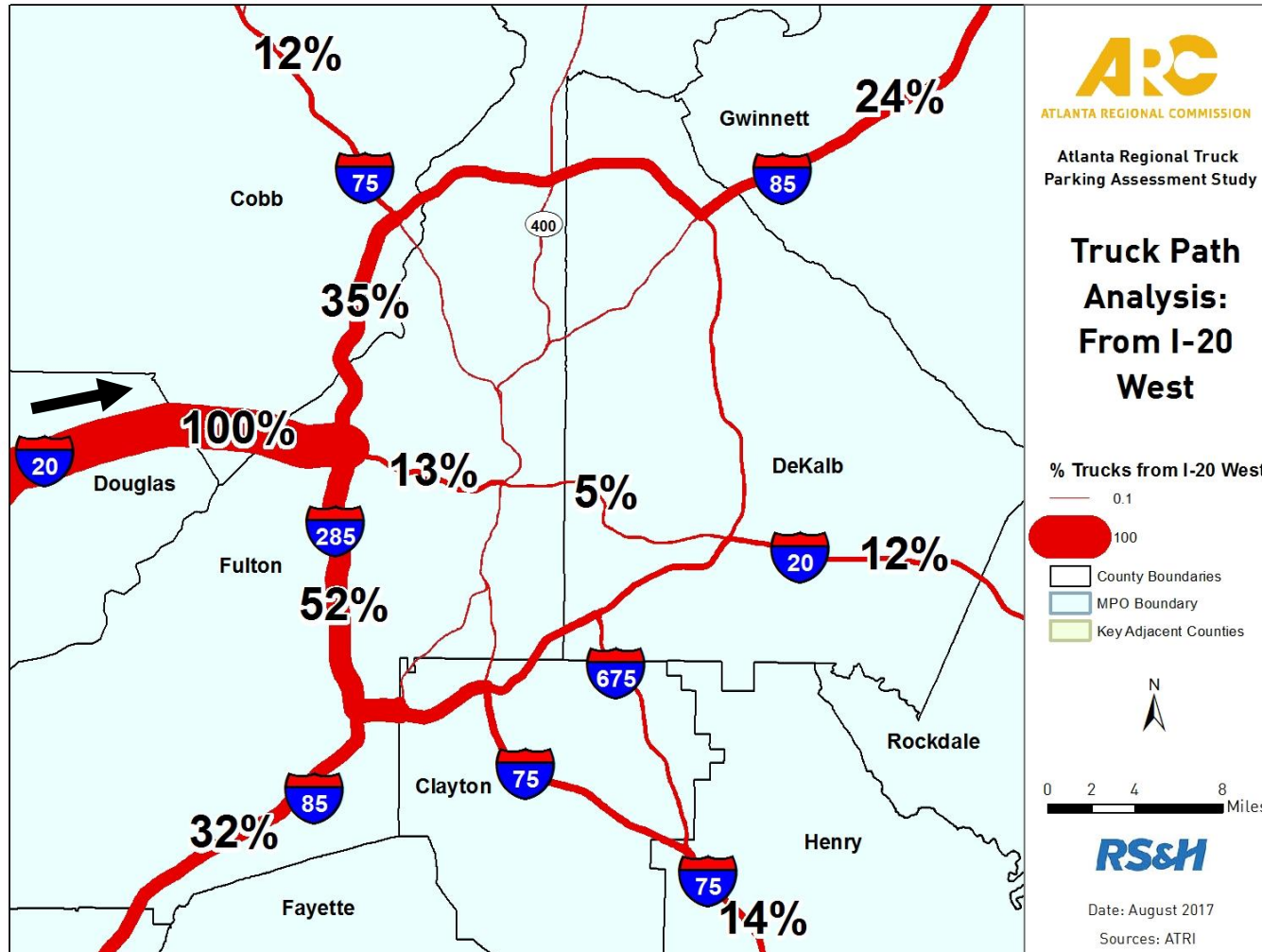
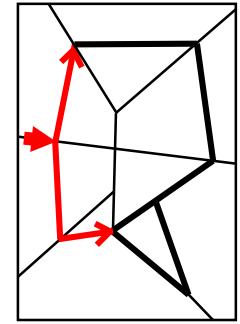


# Example Specific Truck Parking Utilization

I-75 N at Cass White Rd near Cartersville in Bartow County  
TA and Pilot Truck Stops



# Truck Flows I-20 from the West





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# Atlanta Regional Truck Parking Assessment Study



## Outreach Activities Overview



# Outreach Activities



- **Meetings**

- Freight Advisory Task Force (FATF)
- ARC Committees

- **Surveys**

- Truck Drivers
- Stakeholders

- Local Jurisdictions & CIDs
- Law Enforcement Officials
- Truck Stop Owners/Operators
- Shippers/Receivers & Private Fleets



- **Stakeholder Interviews**

# Meetings

- **ARC Freight Advisory Task Force**
  - 4 presentations
  - March, May, August, November
- **ARC Transportation Coordinating Committee**
  - 3 presentations
  - May, August, TBD/November
- **ARC Land Use Coordinating Committee**
  - 3 presentations
  - May, August, TBD/November

# Truck Driver Survey Results

- 277 Respondents
- Average Length of Haul

Length of Haul	Response
Local (less than 100 miles)	0.0%
Regional (100-499 miles per trip)	22.3%
Inter-Regional (500-999 miles per trip)	49.3%
Long-Haul (1,000+ miles per trip)	28.4%

- How often do you need to temporarily park in the Atlanta Region for staging before a scheduled pick-up and/or drop-off time?
  - **84% of respondents**

# Truck Driver Survey Results

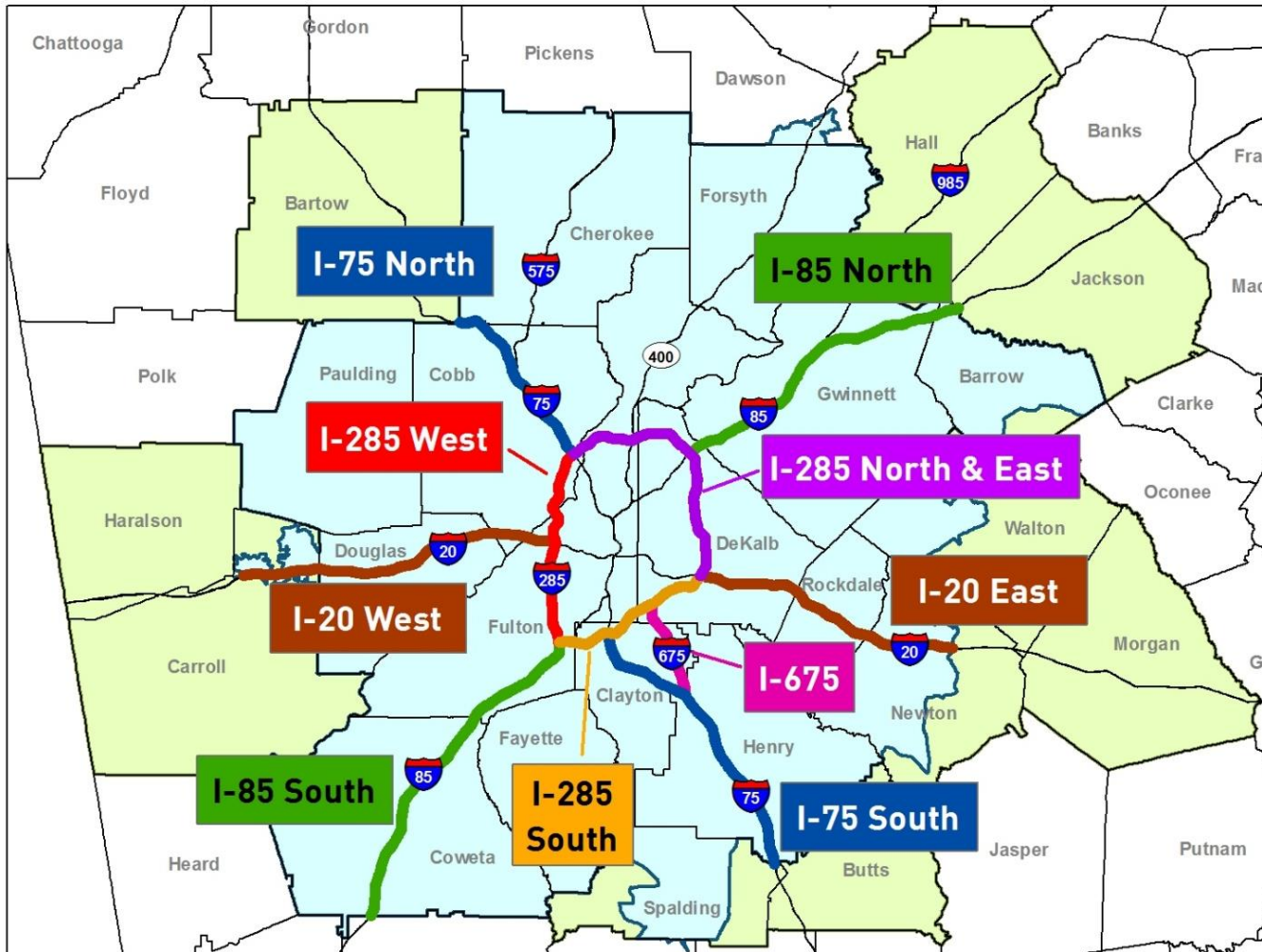
- How long does it usually take you to find truck parking in the Atlanta region?

Length of time	Response
Less than 15 minutes	1.3%
15 – 30 minutes	6.5%
30 minutes – 1 hour	41.3%
More than 1 hour	51.0%

- When parking in the Atlanta region, where is it more difficult to find available truck parking?

Location	Response
Public rest stops	80.8%
Private truck stops	88.5%
Shipper / Receiver	71.8%

# Truck Driver Survey Results - Corridor Designations



# Truck Driver Survey Results - Corridor Designations

## Percentage of Respondents Who Consider Truck Parking to be Limited/Rarely Available or Not Available

Corridor	Truck Drivers	Stakeholders
I-285 North and East (I-75 north to I-20 east)	91%	62%
I-285 West (I-85 south to I-75 north)	90%	62%
I-285 South (I-20 east to I-85 south)	89%	64%
I-85 North	79%	29%
I-20 East	76%	36%
I-85 South	74%	29%
I-75 South	73%	50%
I-20 West	73%	36%
I-75 North	69%	46%
I-675	68%	69%

# Stakeholder Survey



## ■ **Distribution**

- ARC Transportation Coordinating Committee (TCC)
- ARC Land Use Coordinating Committee (LUCC)
- ARC Transportation & Air Quality Committee (TAQC)
- ARC Freight Advisory Task Force (FATF)
- Interviewees and their networks
- Georgia Tech Supply Chain & Logistics Institute

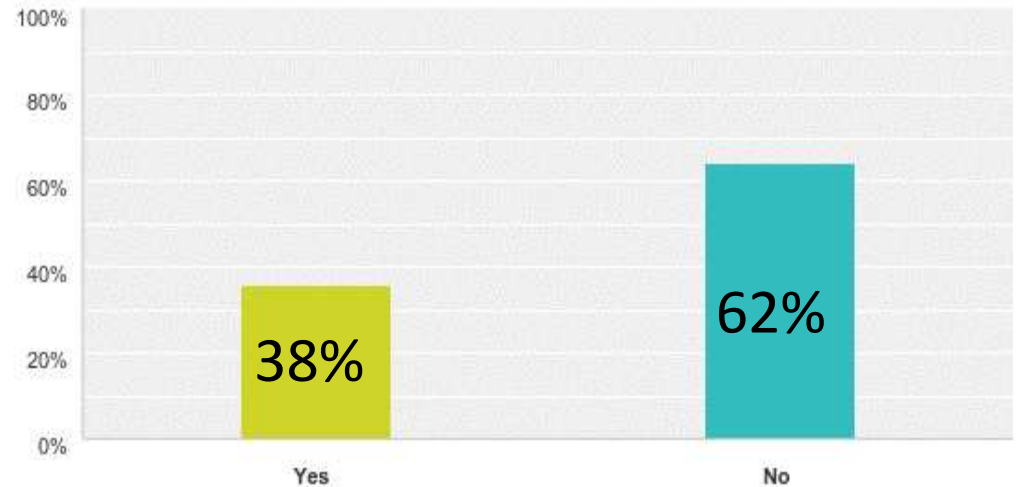
## ■ **97 Responses**

- Local Jurisdictions / CIDs - 45 responses
- Trucking Companies / Shippers - 27 responses
- Law Enforcement - 19 responses
- Truck Stop Owner / Operators - 6 responses

*Survey open from 5/15/2017 to 7/17/2017*

# Stakeholder Survey Results

- Does your jurisdiction have any programs, policies, or strategies in place to address truck parking?



- What are the programs, policies, and/or strategies?
  - Zoning 64%
  - Signage and Enforcement 21%
  - Private property 14%

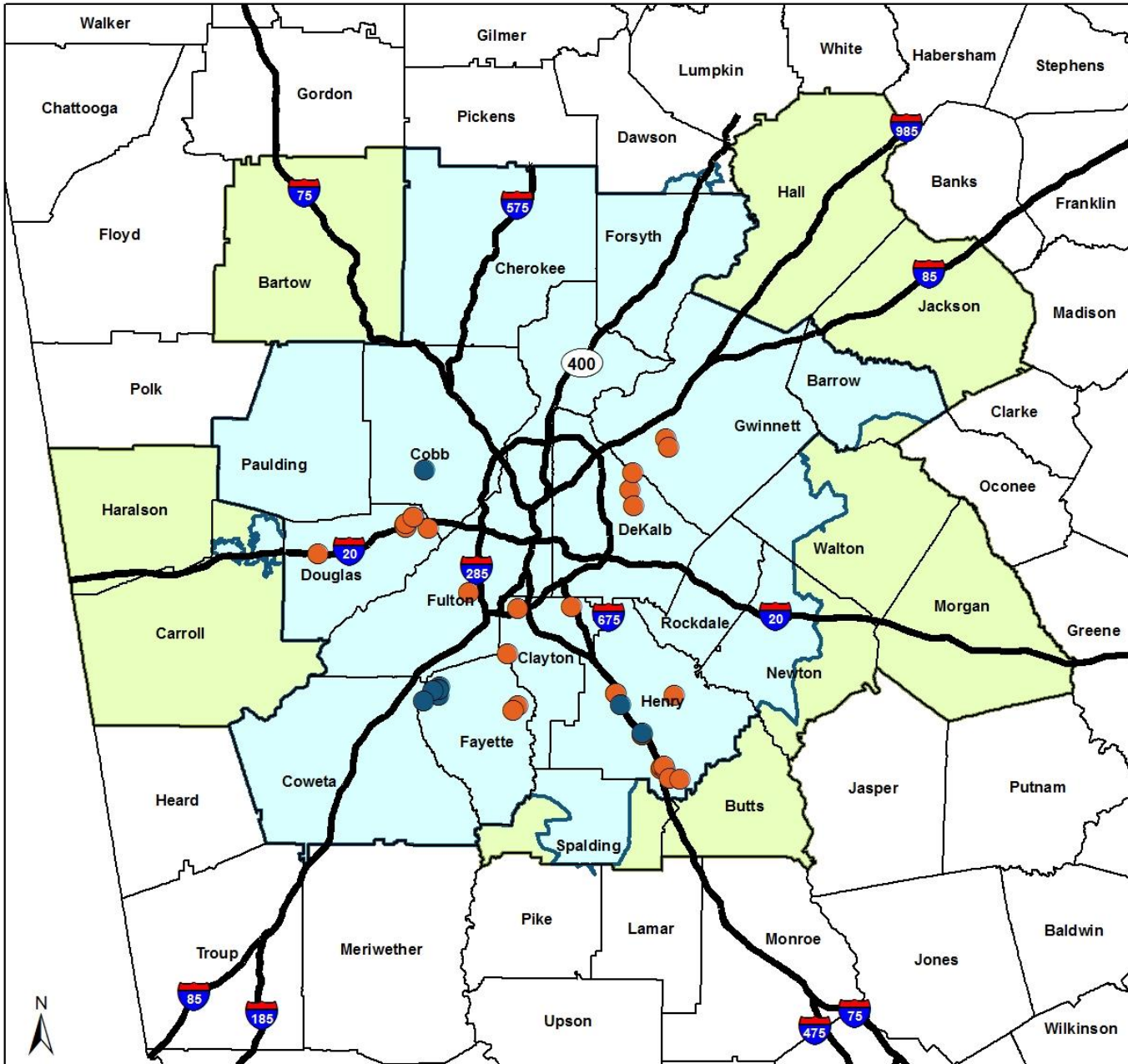


# Stakeholder Wikimapping<sup>©</sup>

## Unauthorized Parking

- **13 separate respondents** provided **39 different** responses (locations)
  - Local Jurisdictions / CIDs      31 responses
  - Law Enforcement                      8 responses
- Unauthorized truck parking locations
  - Where?
  - How Often?



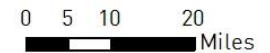


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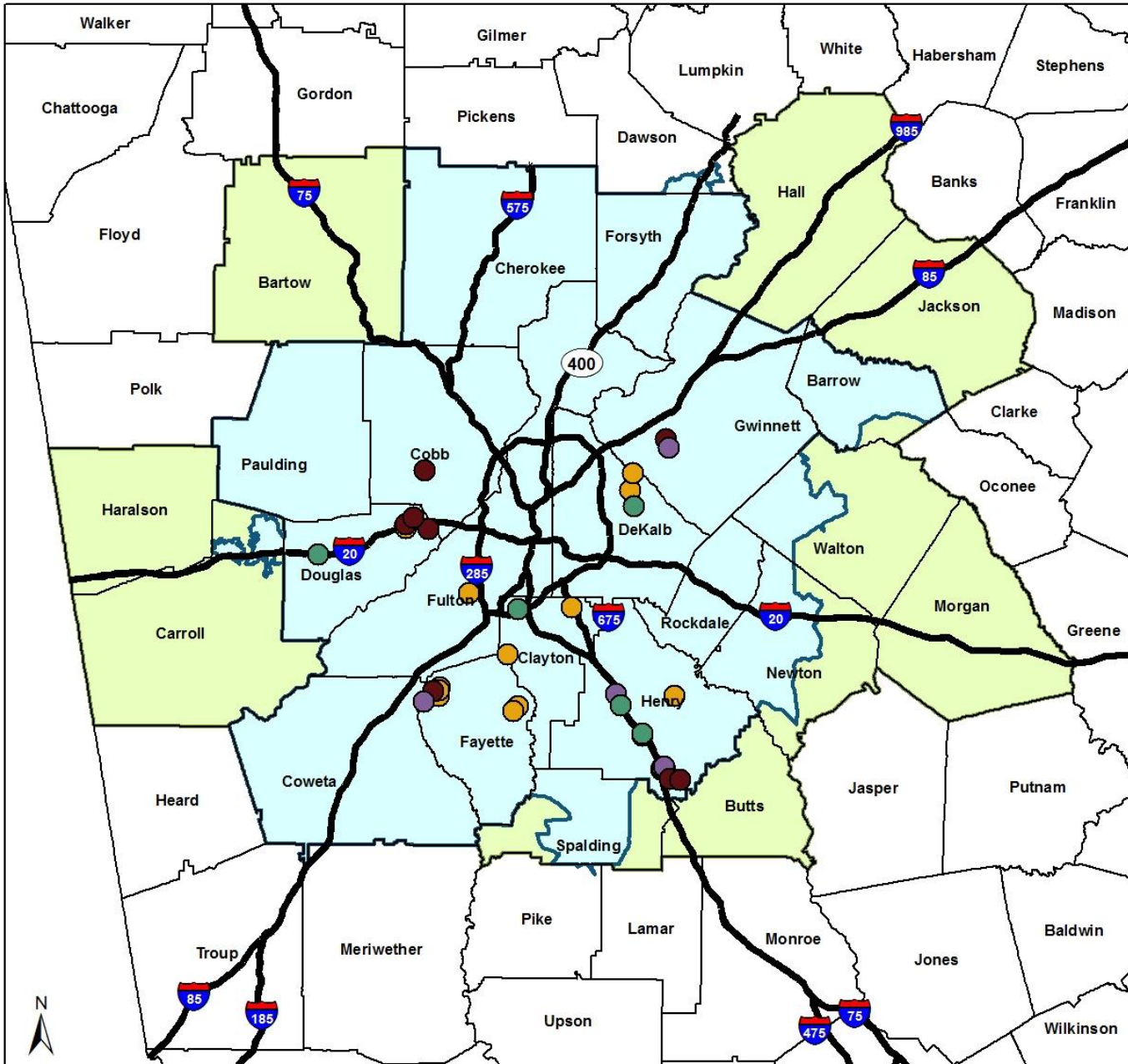
# Unauthorized Parking Locations by Input Source

- Law Enforcement
- Local Jurisdictions
- Expressways
- MPO Boundary
- Key Adjacent Counties



Date: July 2017

Sources: ARC, GDOT  
Stakeholder Surveys

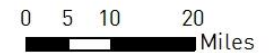


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# Unauthorized Parking Locations by Type

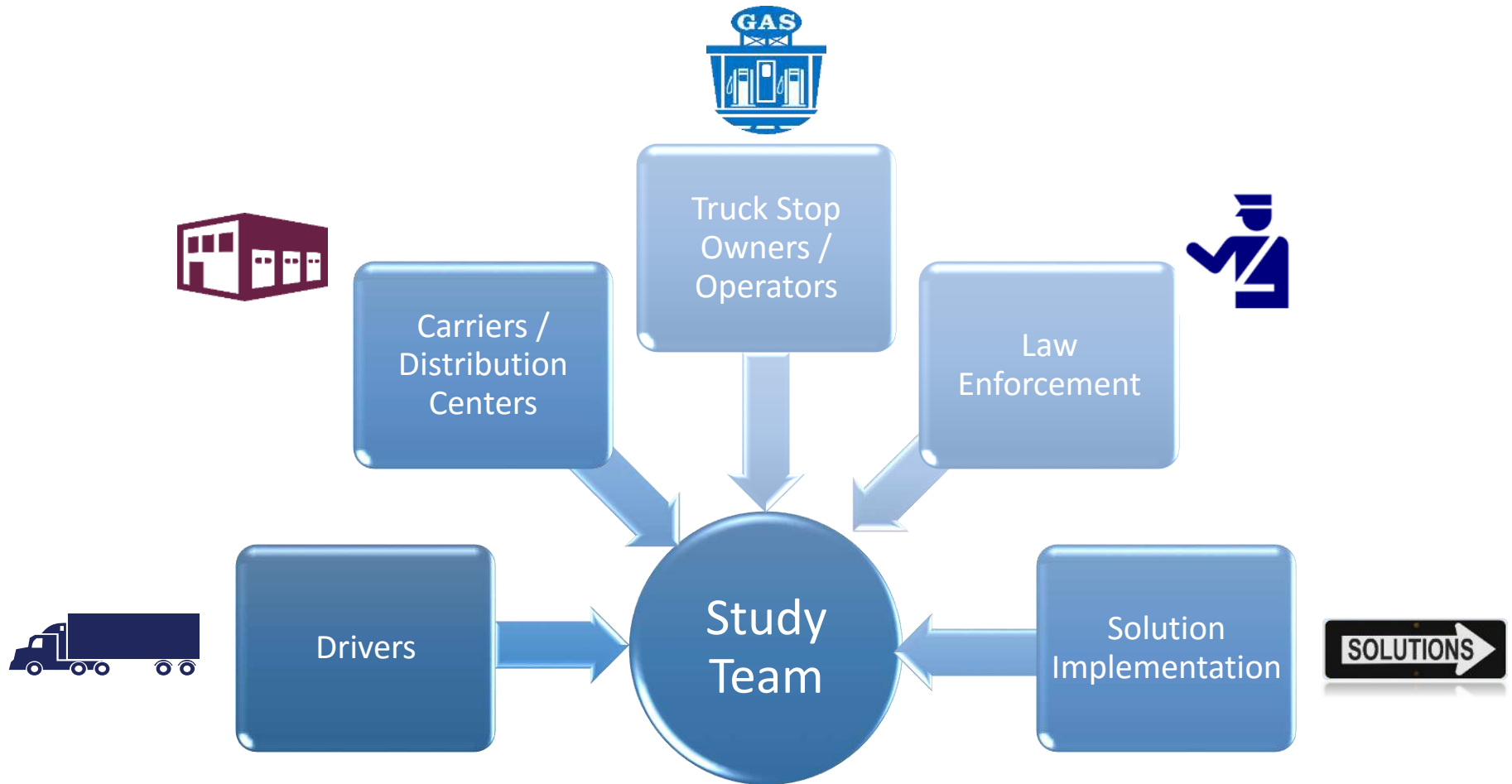
- Highway on/off ramp
- Other
- Side of road
- Vacant lot/building
- Expressways
- MPO Boundary
- Key Adjacent Counties



Date: July 2017





Sources: ARC, GDOT  
Stakeholder Surveys

# Stakeholder Interviews Overview







# Stakeholder Interviews

## Common Issues

Issues				
	Drivers	Carriers / Distribution Centers	Truck Stop Owners / Operators	Law Enforcement
Finding Safe and Authorized Parking is a Challenge	X	X	X	
Zoning, Land Use, and Noise Ordinances are an impediment to finding and siting truck parking	X	X	X	
Truck parking demand is greater than supply of parking spaces, which creates issues with traffic and staging for delivery	X	X	X	X
Lack of parking results in less driving time and impacts to bottom-line as substantial time is spent searching for safe, authorized parking.	X	X		

# Stakeholder Interviews

## Common Findings

Issues				
	Drivers	Carriers / Distribution Centers	Truck Stop Owners / Operators	Law Enforcement
Most truckers just need a clean restroom, and well-lit, safe, parking area - most carry their own food and supplies.	X	X	X	
Finding parking is mostly handled by drivers through GPS, apps, and local knowledge	X	X	X	
The most common truck parking violations are those parking on interstate ramps and in emergency lanes				X
Industrial areas bring increased truck traffic; many communities want the increased tax revenue, but don't realize the side effects	X	X	X	
Electronic Logging Device (ELD) requirements will increase truck parking challenges	X	X	X	X

# Recommendations from Interviews

## Zoning, Land Use & Noise Issues



Local, state, and Federal governments need to work together to find a solution to the problem

Allow real-time, accurate signage about available parking

**Drivers**



Educate law enforcement about noise levels for Aux Power Units (APUs)

Educate communities about the need for truck parking near industrial areas

**Carriers / Distribution Centers**



Large corporate chains may employ staff who help navigate zoning, land use, and noise issues / permitting during development of new locations

**Truck Stop Owners / Operators**



Sees most of the problems in the Atlanta suburban ring counties (Henry, Gwinnett, Douglas) not as much in the urban counties of Fulton and DeKalb

**Law Enforcement**

# Recommendations from Interviews

## Solutions Implementation

- Multi-level agency collaboration
- Public-private collaboration
- Educational component
- Importance of technology

**FHWA**

- Rapid technology advances challenge investment level
- Sharing culture / WAZE effect
- Innovative solutions using existing assets
- Data availability: public vs. private
- Small investments by many versus large investments by few

**Mid-America Freight Coalition / FDOT / CISCO**





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## Summary of Needs and Recommendations

# Summary of Needs

- Lack of parking supply throughout region
- ELDs, industrial growth will increase demand
- Zoning constrains expansion of parking supply
- Proposed solutions vary based upon perspective
- Solutions must:
  - Include coordination
  - Maximize use of technology
  - Be adaptable / flexible
  - Leverage existing assets



# Potential Recommendations

## Coordination

- Education
- Needs and Concerns
- Solutions
- Who?
  - Truck drivers
  - Freight industry
  - Government agencies
  - Development industry



# Potential Recommendations

## Example: Distributor Parking Program



- Drivers Must:
  - Wear safety vests at all times
  - Carry a flashlight at night
  - Follow safety rules
  - De-couple tractor from trailer
  - May not move tractor
  - Preferential treatment for no-idle cabs

# Potential Recommendations

# Maximize Use of Technology

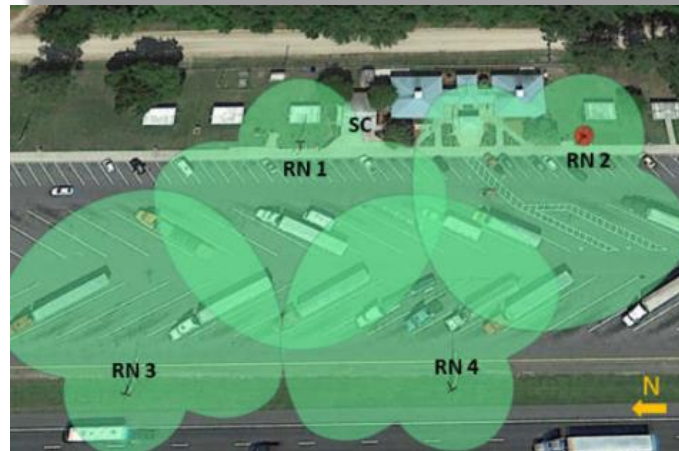


## Parking sensors headed to truck stops; to be tested in Orlando

Jul 26, 2017, 2:41pm EDT  
Subscriber-Only Article Preview | For full site access: [Subscribe Now](#)

The Florida Department of Transportation has issued a request for proposals for a firm to design and test the technology.

**Veronica Brezina**  
Staff Writer  
*Orlando Business Journal*



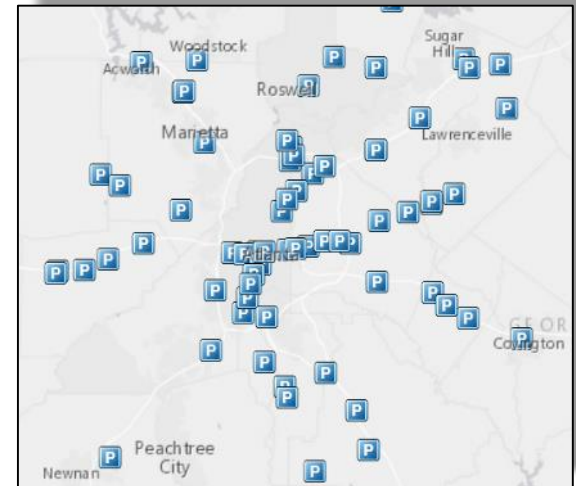
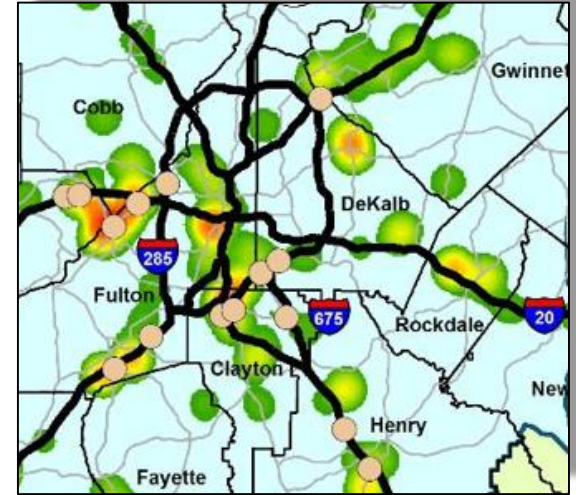
# Potential Recommendations Adaptable / Flexible Solutions



## QT Store Truck Parking Jonesboro Road at Foster Place, Henry County

# Potential Recommendations Leverage Existing Assets

- Vacant Industrial Space
- Brownfield Sites
- Industrial Parks
- Existing or closed rest areas
- Park-and-ride lots (PM only)





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## Questions?