

FREIGHT BEYOND THE CITY: ARC FREIGHT CLUSTER PLANS

FHWA TALKING FREIGHT SEMINAR

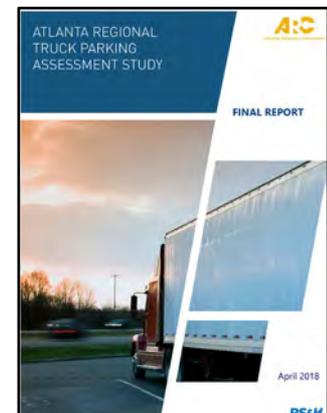
April 15, 2020

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Principal Planner
Atlanta Regional Commission



ATLANTA REGIONAL COMMISSION

Core ARC Freight Planning Work Activities



Freight Advisory Task Force Formed

Atlanta Regional Freight Mobility Plan

Truck Route Master Plan

Atlanta Regional Freight Mobility Plan Update

Truck Parking and Freight Cluster Plans

2003

2005-2008

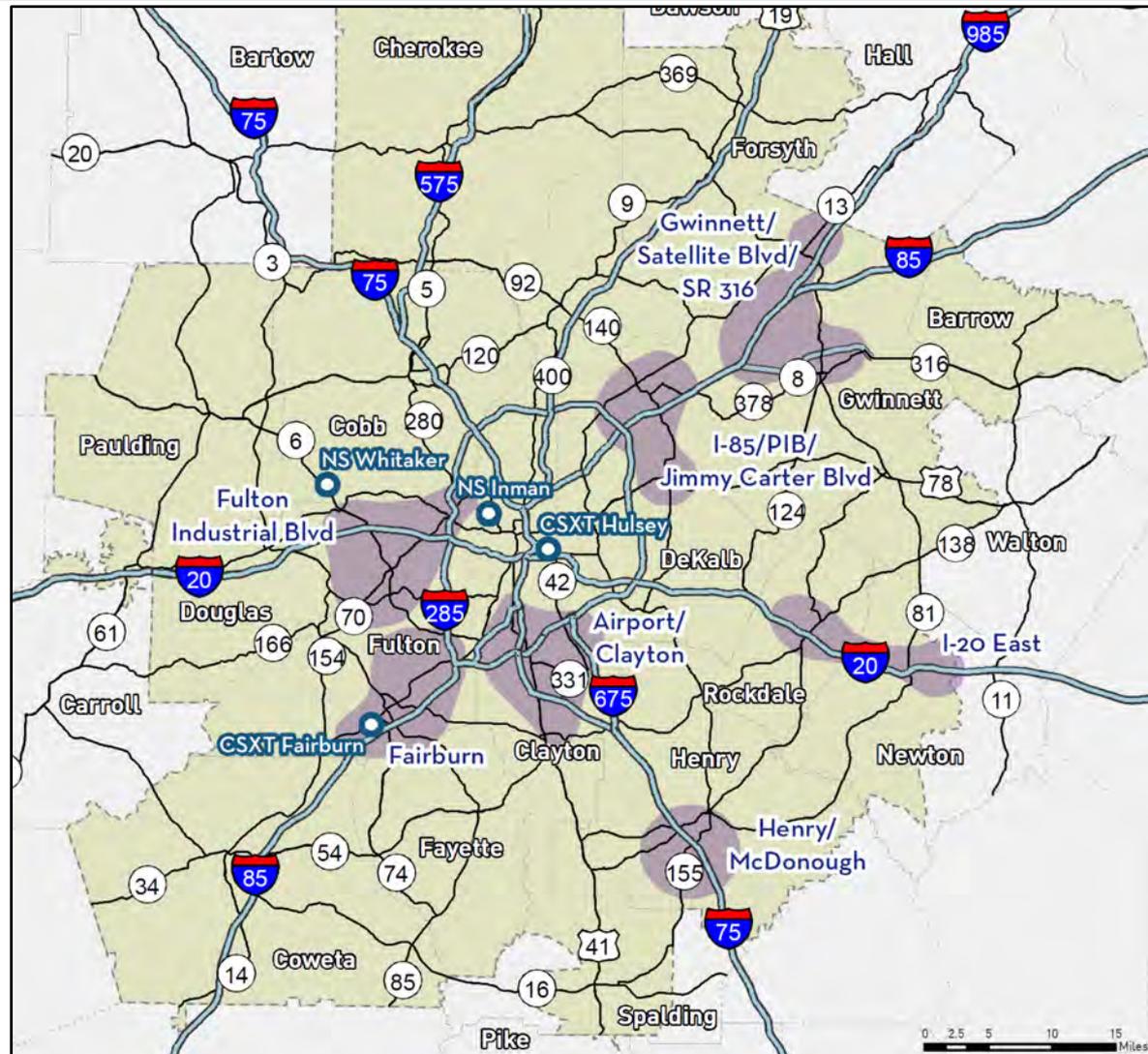
2010

2015-2016

2017-2021



Industrial Development – Freight Clusters



- Industrial development commonly is located near other industrial development
- Infrastructure in these “Freight Clusters” supports economic development

— Regional Freight Network
— Expressways
— MPO Boundary
— Freight Intensive Clusters
○ Intermodal Yard

Land Use and Industrial Growth



BISNOW CITIES EVENTS JOBS EDU ABOUT CONTACT US

News National Industrial

1B SF Of New Industrial Deliveries Not Enough To Satisfy Demand

February 20, 2019 | Dees Stribling, Bisnow National [✉](#)

Want to get a jump-start on upcoming deals? Meet the major players at **one of our upcoming national events!**



Industrial Development

2018, 4th Quarter	Metro Atlanta
Inventory (SF)	617,954,832
Overall Vacancy Rate	5.20%
12-Month Absorption (SF)	18,075,179
Under Construction (SF)	15,574,803

Transwestern Real Estate Outlook, US Market, Industrial, Fourth Quarter 2018

Regional Transportation Plan (RTP)



THE ATLANTA REGION'S PLAN

RTP is a **20+ year long range plan** that is updated every 4 years



World Class Infrastructure

Ensuring a comprehensive transportation network

Healthy Livable Communities

Developing walkable, vibrant communities

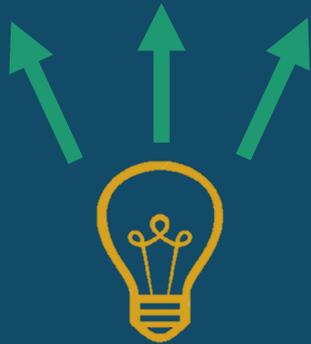
Competitive Economy

Building the region as a global hub of innovation and prosperity

Comprehensive Transportation Plan (CTP) Program



Regional Transportation Plan



CTP

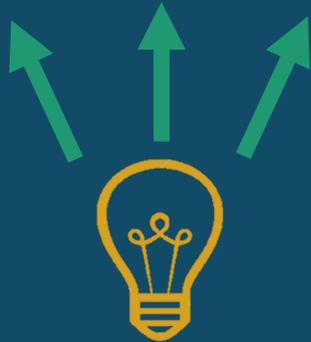
Program Goals

- Assist local governments with local transportation plans
- **Help local jurisdictions identify local priorities and community vision**
- Establish relationships between local transportation expectations with regional expectations
- Help support Comprehensive Plans

Cluster Plan Process



Regional
Transportation Plan



Freight Cluster
Plan

Plan Elements

- Existing Conditions/Needs Assessment
- Traffic Study
- Extensive Outreach Efforts
- Recommendations
 - Prioritized project list
 - On-Deck projects with more detailed analysis
 - What projects will be implemented next?

Transportation Planning



- **Roadways/Connectivity**
 - New roadways
 - Roadway extensions
 - Identification of freight routes
 - Trucks in residential areas
 - Route conflicts/issues
 - Access management
 - Asphalt/Striping Condition
- **Crash Data Review**
 - Crash hotspots
 - Freight specific needs
- **Signage and lighting**
 - Truck drivers may not be local
- **Bridges**
 - Weight restricted bridges
 - Sufficiency ratings analysis
 - Low bridge conflicts
- **Rail**
 - Freight activity
 - RR Crossings: Vehicle operations/design analysis
- **Truck Parking**
 - Unauthorized parking locations
 - Staging near industrial
 - How to improve?

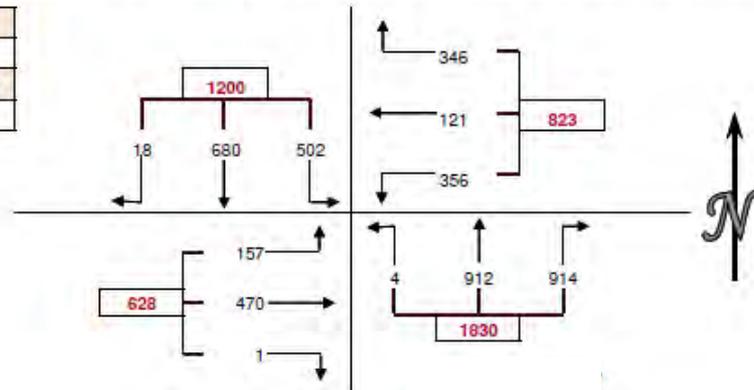
Traffic Analysis



- AM and PM Peak Hour Analysis
- Off-Peak analysis if needed
- Future year analyses
- Field Review
- Geometric Design Review
- Detailed Recommendations
- Capacity, Operations, and ITS Projects

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	5	167	95	71	21	94	246	172	0	1	79	21	972
415-430	14	142	115	78	21	72	242	202	0	1	84	24	995
430-445	8	129	120	84	26	83	237	207	0	0	107	27	1028
445-500	4	131	122	84	30	88	235	218	0	0	115	40	1067
500-515	4	156	121	87	31	75	216	221	3	0	110	45	1069
515-530	8	209	145	84	46	95	239	234	0	1	120	38	1219
530-545	2	184	114	91	14	98	224	239	1	0	125	34	1126
545-600	9	118	112	71	16	58	246	192	1	1	110	43	977
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	31	569	452	317	98	337	960	799	0	2	385	112	4062
415-515	30	558	478	333	108	318	930	848	3	1	416	136	4159
430-530	24	625	508	339	133	341	927	880	3	1	452	150	4383
445-545	18	680	502	346	121	356	914	912	4	1	470	157	4481
500-600	23	667	492	333	107	326	925	886	5	2	465	160	4391

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.92



Localized Needs



Identify problems in the field, and their solutions . . .



Access to Jobs



Alternative Modes

- Transit Access
 - Route location/frequency
 - Roadway design for buses
- Bike/ped infrastructure
- Context sensitive design
 - Bicyclist/pedestrian safety
 - Maintain truck operations



TDM: Georgia Commute Options

- Carpool/Vanpool Ridematching
- Guaranteed Ride Home
- Employer assistance/Commuter incentives



Land Use/Growth

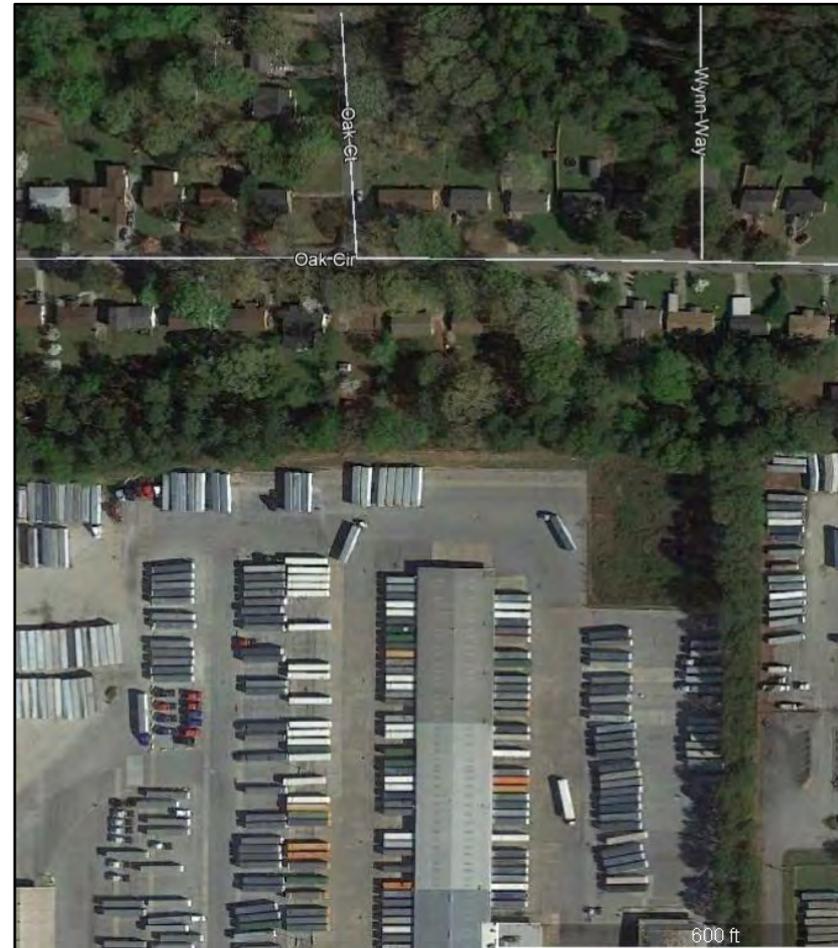


Land Use

- Growth Potential for Traffic Analysis
- Existing Land Use/Zoning review
 - Residential Conflicts
 - Does Industrial/Commercial zoning allow residential uses?
 - Is Residential allowed adjacent to land zoned for Industrial?

Market Analysis

- Major Employers
- Functionally Obsolete Buildings
- Optional – Full Market Study



Incompatible Land Uses

Outreach Options



- Freight Advisory Task Force
- Stakeholder Advisory Committee
- Stakeholder Interviews
- Truck Driver Surveys
- Local Jurisdiction Meetings
- Technical Advisory Committee
- Online Surveys/Mapping tools
- Public Meetings
- Open House meetings at Industrial Facilities



Industry Changes



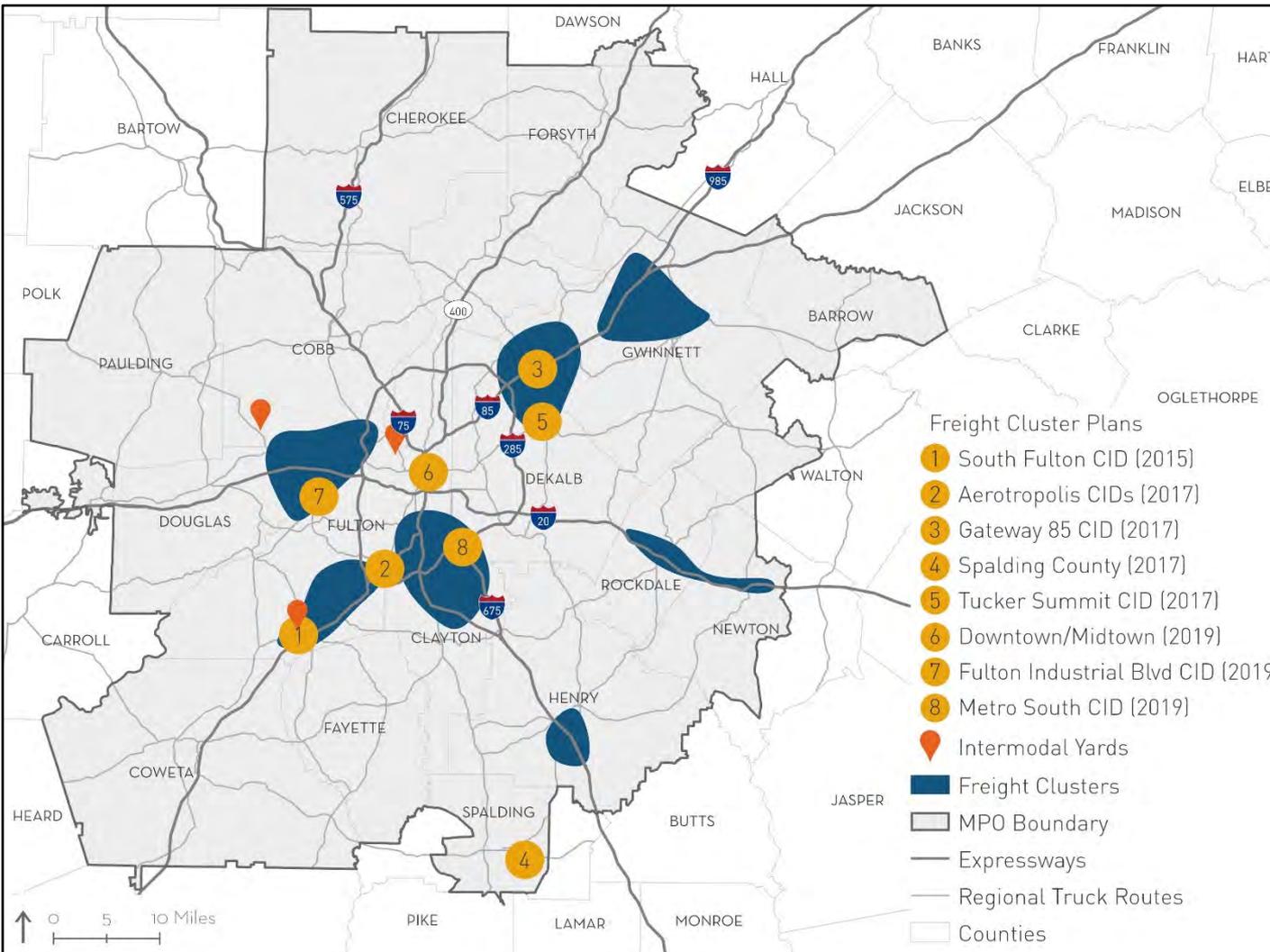
How will the logistics and transportation industries change?

- Growing Home Delivery: E-commerce Fulfillment Centers
- New Intelligent Transportation Systems (ITS) Technology
- Connected Vehicles and Autonomous Vehicles (CAV)
- Alternative fuels: CNG, LNG, and electric trucks



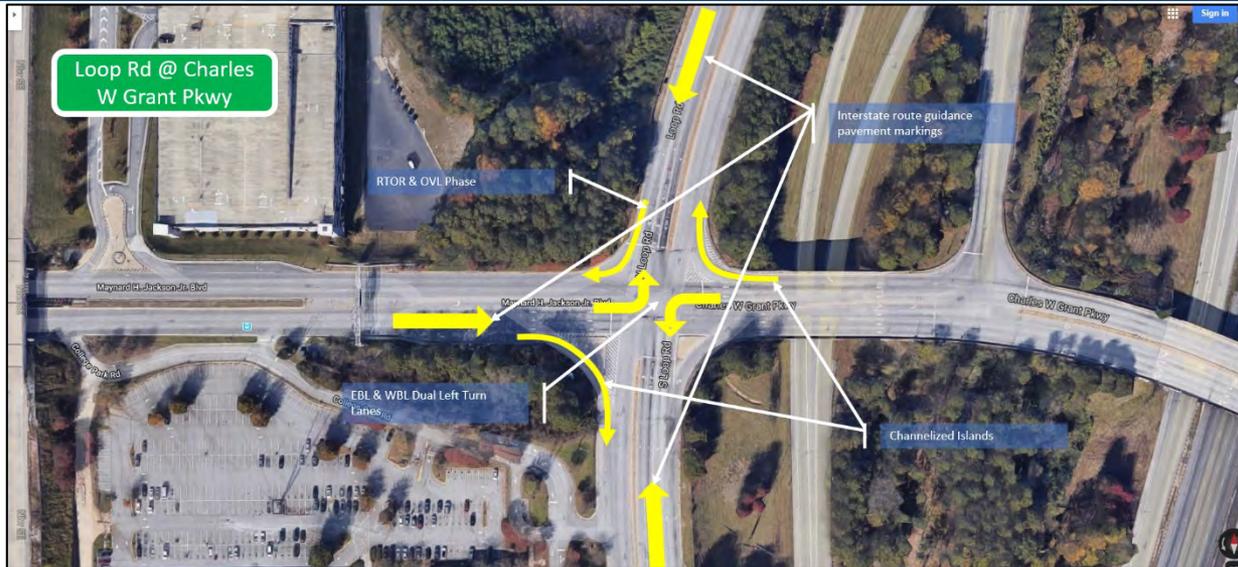
The New York Times, Nov. 13, 2017: Starsky Robotics, testing in Florida

Freight Cluster Plans Underway in 2019



- Four plans began in 2019
- More plans kicking off in 2020
- South Fulton CID Multi-Modal Plan:
 - Completed in 2018

Freight Cluster Plans Aerotropolis Atlanta CIDs



EXAMPLE PROJECT TYPES: OVERALL

- **Route guidance**
 - Pavement markings and signage
- **Curb repair**
 - Widen tight turning radii
 - Rebuild deficient and cracked curbs
- **Lighting**
 - Improve visibility, wayfinding and signage
- **Pedestrian facilities to support workforce**
 - Sidewalk along bus routes in proximity to major employers
 - Better connections to bus stops



EXAMPLE PROJECT TYPES: OTHER

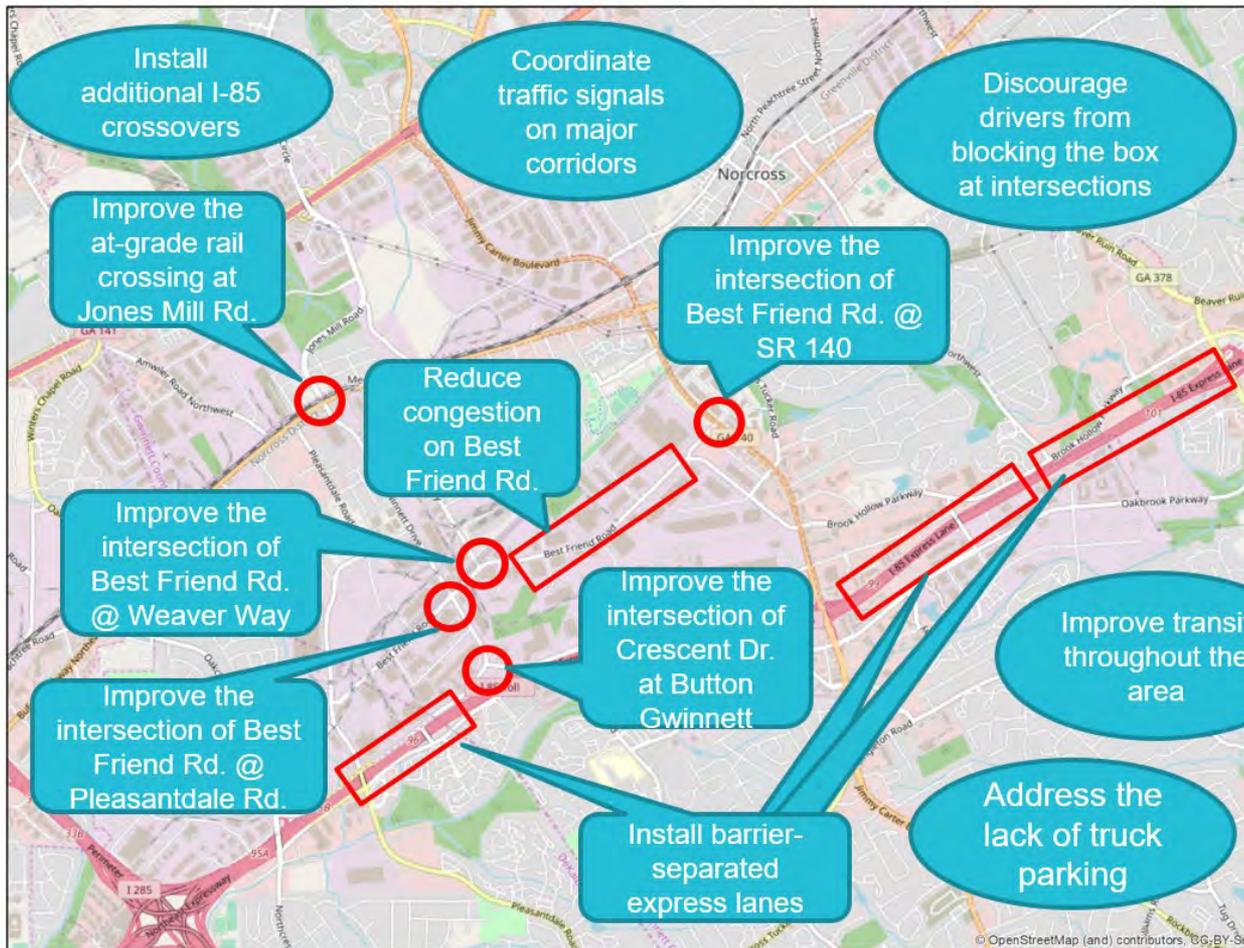
- **Increase capacity, elevate facility type**
- **Improve freight access to airport**
- **New roadway connections**
 - Between key truck corridors with anticipated increase in volume, like Camp Creek Pkwy and South Fulton Pkwy
- **Shared-use/shared parking agreements**
 - Explore use of park-and-ride lots or vacant warehouse lots
- **Sidewalk along bus routes in warehouse / employment centers**
- **ITS technologies near RR crossings**
- **Curbside management and delivery zones**



Freight Cluster Plans Gateway 85 CID



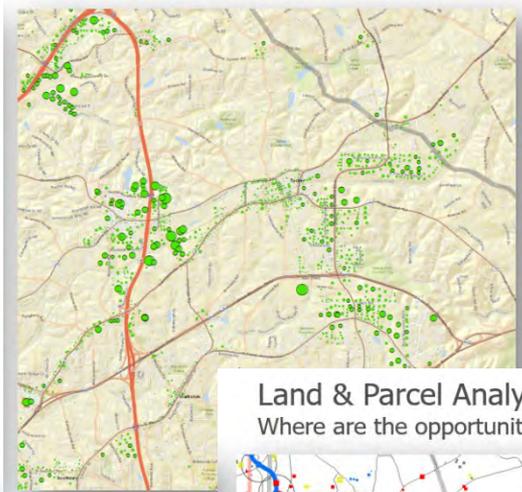
Additional Thoughts from Stakeholders



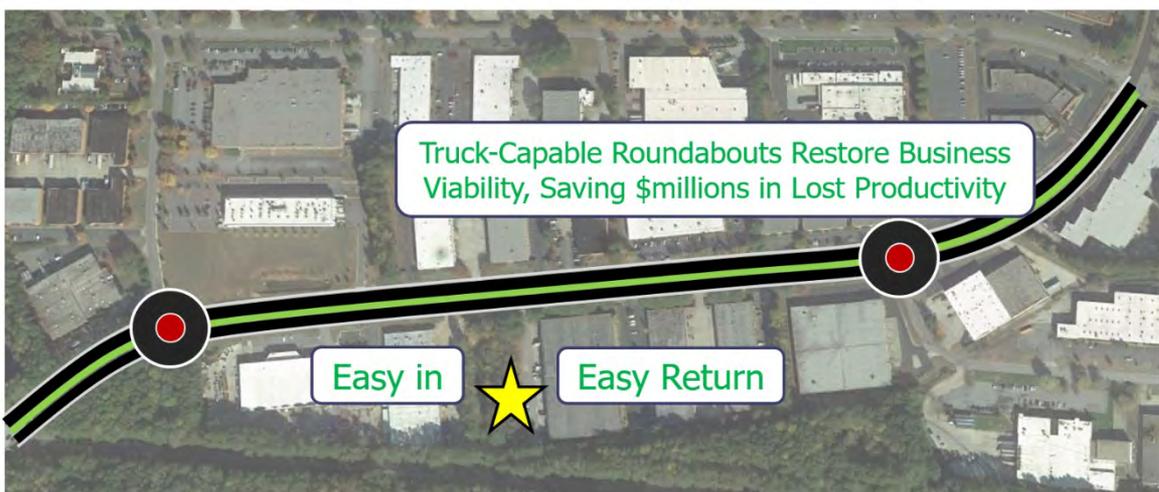
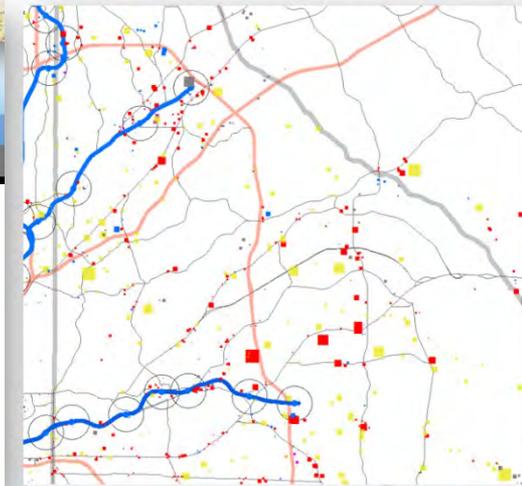
Freight Cluster Plans Tucker Summit CID



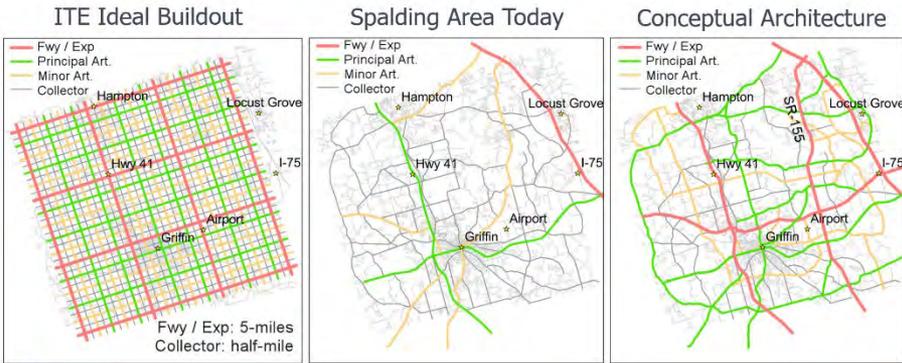
Employment Density
Where are the jobs?



Land & Parcel Analysis
Where are the opportunities?



Freight Cluster Plans Spalding County



metro analytics

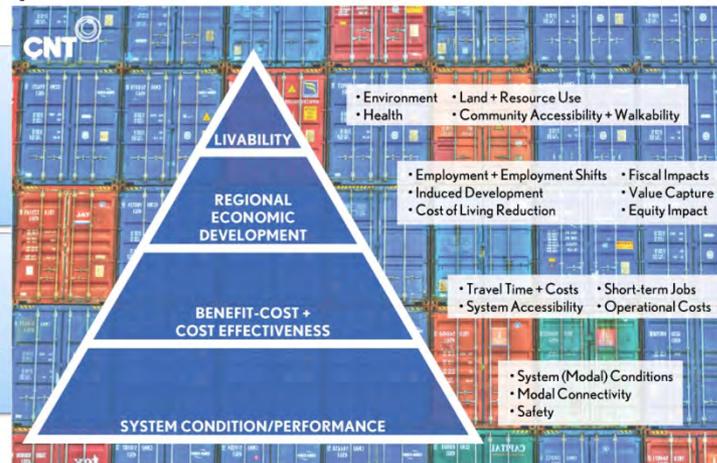


metro analytics

Cargo Oriented Development

Integrate freight system efficiency with manufacturing and logistics business development

Identify strategies to benefit local economies, the environment, and public safety



metro analytics

Lessons Learned



- Freight knowledge gap
 - Project sponsors and consultants may lack freight planning expertise
 - How to better integrate freight into planning, engineering, and policy?
- Benefits of the plans
 - Identifying issues with traffic operations, parcel level access, turning radii at intersections, steep drop-offs along roads, signage, access to jobs, etc.
 - Study areas can become better suited for development/redevelopment
- Outreach
 - Challenging to get input from the private sector
 - Existing relationships are key; Law enforcement can be helpful
 - Outreach example: One consultant had truck drivers conduct intercept surveys with other truck drivers, but most questions were high level
- Data challenges
 - Is there a way to know what commodities are moving locally?
 - Some vendors provide specialized data, but there is additional financial cost – i.e. Streetlight Data can provide Origin/Destination data

QUESTIONS?

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