



Regional Freight Plan FTAC Meeting #1

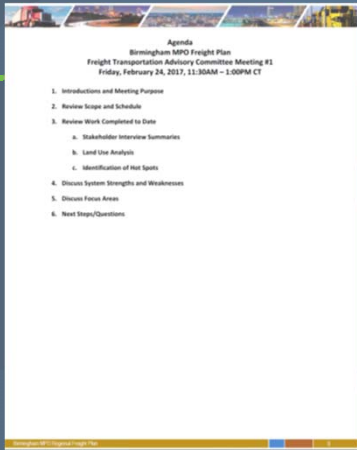
presented to
Regional Planning Commission of
Greater Birmingham

presented by
Cambridge Systematics, Inc.
with
Volkert, Inc.
Creative Directions, Inc.

February 24, 2017

Agenda


- Introductions and Meeting Purpose
- Review Scope and Schedule
- Review Work Completed to Date
 - » Stakeholder Interview Summaries
 - » Land Use Analysis
 - » Identification of Hot Spots
- Next Steps/Questions



Agenda
Birmingham MPO Freight Plan
Freight Transportation Advisory Committee Meeting #1
Friday, February 24, 2017, 11:30AM - 1:00PM CT

1. Introductions and Meeting Purpose
2. Review Scope and Schedule
3. Review Work Completed to Date
 - a. Stakeholder Interview Summaries
 - b. Land Use Analysis
 - c. Identification of Hot Spots
4. Discuss System Strengths and Weaknesses
5. Discuss Focus Areas
6. Next Steps/Questions

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Introductions

- Name
- Title and affiliation
- Role in Region's Freight System

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Why Are We Here Today?

- Initiate Birmingham Regional Freight Plan FTAC
- Review role of FTAC
- Review why freight planning is important
- Review stakeholder interview findings to date
- Engage FTAC in brainstorming sessions

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What Does Participating in the FTAC Mean?

- Attend 3 meetings over next year
- Encourage freight planning best practices
- Provide voice for freight industry
- Help “tell the region’s freight story”
- Provide ongoing input on direction of project
- Review draft findings and draft report



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Why is Freight Planning Important?

- Freight operations have different needs than passenger movements
 - » Linked and complex supply chains
 - » Regional, national and global perspective
 - » Value of time considerations
 - » Shipper/receiver service requirements
 - » Infrastructure ownership
 - » Infrastructure capacity and dimensions
 - » Length of planning horizons



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Why is Freight Planning Important?

- Federal guidance relating to freight transportation to states and MPOs continues to strengthen
 - » Importance of freight at national level began in 1991 with ISTEA; each subsequent bill has strengthened this message
 - » National freight policy designed to drive U.S. global competitiveness
- Fixing America's Surface Transportation Act (FAST Act) passed December 4, 2015 further increased the focus and funding available for freight

National Freight Policy

- Focuses on improving condition and performance of the national freight network to provide foundation for the U.S. to compete in the global economy
- Sets goals related to:
 - Infrastructure improvements
 - Operational improvements
 - Safety, security, and system resiliency improvements
 - Improving state of good repair
 - Increasing use of advanced technology to improve safety and efficiency
 - Incorporating concepts of performance, innovation, competition, and accountability into operation and maintenance of the national freight network
 - Improving economic efficiency
 - Reducing environmental impacts of freight movement

MAP to Freight Transportation

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The screenshot shows the website for the National Freight Advisory Committee. The header includes the U.S. Department of Transportation logo and navigation links for 'Road DOT', 'Our Actions', and 'Areas of Focus'. The main content area is titled 'National Freight Advisory Committee' and includes a mission statement: 'To help the U.S. Department of Transportation provide a safe, economically efficient, and environmentally sustainable freight transportation system, the Department's National Freight Advisory Committee (NFAC) will provide advice and recommendations to the Secretary on matters related to freight transportation in the United States including:'. A list of key activities follows:

- Implementation of the freight transportation requirements of the Moving Ahead for Progress in the 21st Century Act (PL 111-323)
- Establishment of the National Freight Network
- Development of a National Freight Strategic Plan
- Development of strategies to help States implement State Freight Advisory Committees and State Freight Plans
- Development of measures of conditions and performance in freight transportation
- Development of freight transportation investment, data, and planning tools, and
- Regulatory recommendations.

 On the right side, there is contact information for 'Tasha O'Connell', Director, including a phone number (202) 366-3344 and a fax number (202) 366-3347. Social media icons for Facebook, Twitter, and LinkedIn are also present.

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What Are the Key Elements of an Effective Freight Plan?

- Freight-specific goals and policies
- Consistency/compatibility with State and federal guidance
- Freight system profile & narrative
- Land use/development opportunities
- Stakeholder involvement/engagement
- Identification, prioritization and funding of needs
- Freight performance measures/metrics
- Strategies for growth



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What are the Key Components of Your Freight System?



Generators

- Extraction (quarries, mines, forest)
- Manufacturing and Production facilities
- Assembly plants
- International ports of entry



Distribution Networks

- Interstate highways
- Other freight highways & connectors
- Motor carriers
- Rail lines, yards, and terminals
- Railroads
- Waterways, marine terminals
- Barge operators
- Airports and air carriers
- Pipelines
- Distribution Centers



Receivers

- Major Institutions
- Industrial receivers (manufacturing inputs)
- Retailers
- Direct-to-Consumer

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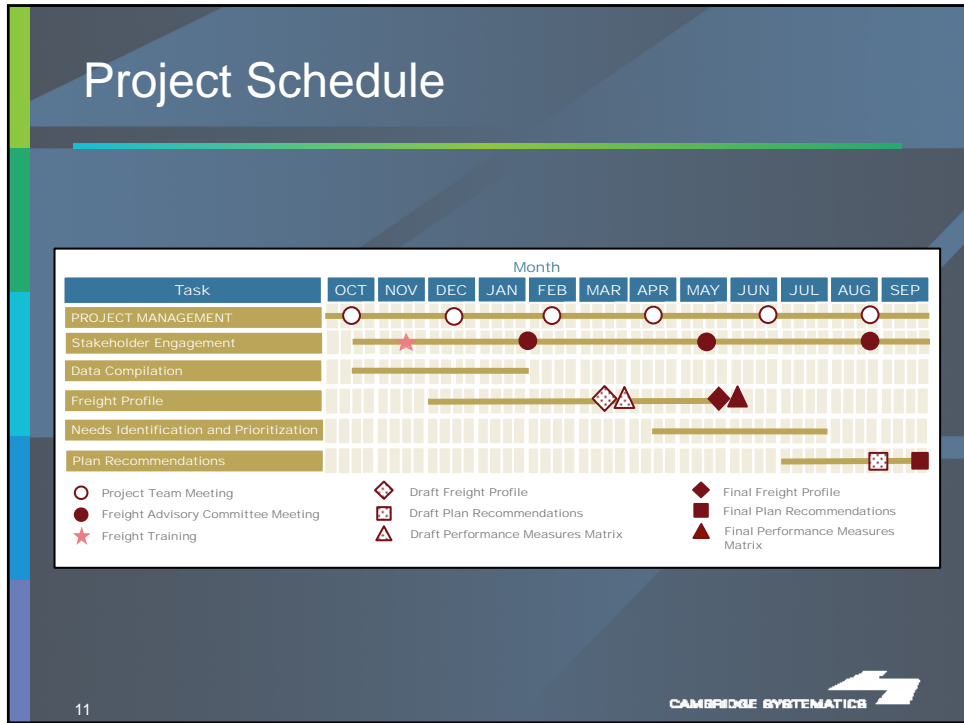
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Scope of Work

- Task 1. Stakeholder Engagement
- Task 2. Data Compilation
- Task 3. Freight Profile
- Task 4. Needs Identification and Prioritization
- Task 5. Plan Recommendations

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- ## Stakeholder Interviews to Date
- RPCGB
 - City of Birmingham Economic Development
 - Birmingham Airport Authority
 - Transportation and Logistical Services (TLS)
 - Watco Alabama Port Services (Port Birmingham operator)
 - Birmingham Terminal Railway
 - Watkins Trucking Company
 - Jefferson County Development Authority
 - Birmingham Business Alliance
 - BNSF Railway
 - Norfolk Southern
 - CSX Industrial Development
 - Christie Strategy Group
 - Church Transportation and Logistics
 - Tennessee Tombigbee Waterway Development Authority
 - Alabama Trucking Association
 - Parker Towing
 - Warrior Tom Bigbee Waterway Association
 - UAB Planning Design and Construction
 - Shelby County
 - Regional Traffic Management Center (TMC)
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System Strengths and Weaknesses *Worksheet*

Component	Strengths	Weaknesses
Roadways		
Trucking company service		
Trucking parking		
Railroad corridors, terminals/yards		
Railroads		
Airports		
Airlines		
Waterways, ports and terminals		
Barge operators		
Industrial parks		
Warehouse/distribution centers		
Land use designations		
Political support for freight		
Others?		

Overview of Stakeholder Input *Waterway Movements*

- Shifts in industry have dramatically reduced demand for water transportation
 - » Power plants converting from coal to natural gas
 - » Wood chip market is gone
 - » Export coal movements now move by rail to Mobile
- Commodities moving by water experience significant fluctuation
 - » Coal is down
 - » Steel is down
- Waterways are in good working order
 - » Annual maintenance dredging
 - » Funding is available given “high use” designation
 - » Scheduled lock and dam replacement projects disrupt service in the short-term, but make system safer and more efficient long-term



Overview of Stakeholder Input *Waterway Movements*

- Growth is dependent on
 - » Roadway connectivity and capacity
 - Weight restrictions, lane width, number of lanes
 - » Availability of utilities
 - Water, electric/high voltage, sewer, natural gas, fiber optic/high speed internet
 - » Fire and rescue
 - » Foreign Trade Zone designation
 - » New/expanded rail access would help attract more distant customers
- Market limited by declining industry and proximity to agriculture

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Overview of Stakeholder Input *Waterway Movements*

- Port Birmingham is only facility in region with direct rail access; all others are served by truck
- Ownership looking to rebuild with new commodity mix
- Niche products include coal, chemicals, lumber
- Maximizing water and rail is priority
- Opportunities for growth and expansion depend on markets and service offerings



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Overview of Stakeholder Input *Waterway Movements*

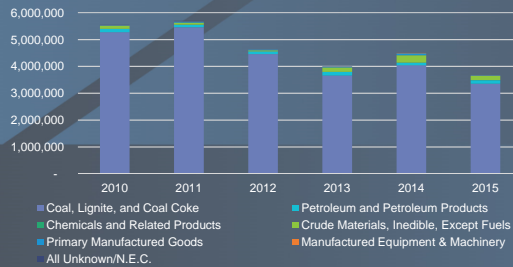
- ➔ Climate controlled warehouse space needed; only have outside lay down space
- ➔ Markets shifting from iron/coal to automotive and medical; this brings new service requirements
- ➔ Have access to 3 Class I railroads
- ➔ Significant marketing is needed to promote services and capacity of Port Birmingham



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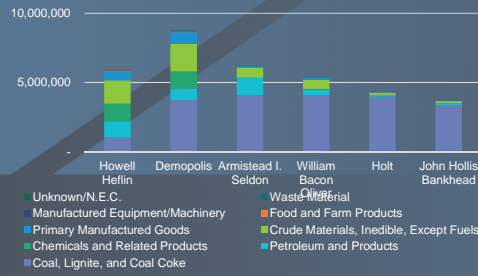
Overview of Stakeholder Input *Waterway Movements*

John Hollis



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Overview of Stakeholder Input *Waterway Movements*



Overview of Stakeholder Input *Trucking Industry*

- Shippers have moved away from internal traffic departments; use brokers or 3PLs
- New, reliable fleet is critical
- OS/OW regulations vary by state; significant fines if not in compliance
- Roadway network is severely congested in AM and PM peaks; off peak is OK
- Margins for van loads have been pushed down; higher profits available for niche services like flat beds
- Communication with drivers varies from text messages, to phone calls, to on-board computers



Overview of Stakeholder Input *Trucking Industry*

- Change to hours of service regulations are exacerbating the driver shortage
- Electronic log books will decrease capacity and driver availability
- Rates will likely increase; some one day transits will become two days; some drivers will quit
- Services are available to brokers to monitor driver and carrier insurance and safety performance
- Today's drivers want to be home weekends and holidays; recruiting and keeping drivers is difficult



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Overview of Stakeholder Input *Trucking Industry*

- Majority of accidents involving a truck are caused by car drivers
- Police should enforce car driver behavior
- Driver age limits complicate recruiting
- Driver training is important and should be affordable
- 20/59/65 reconstruction will improve safety; loads shift with weaves; not sure if best alternative was picked
- 20/59 by airport has horrible curves and weaves in both directions
- 459 in Trussville experiences significant back ups



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Overview of Stakeholder Input

Trucking Industry

- 65 southbound does not have enough capacity; widening should extend south to Shelby Airport
- Steep grade on 65 up to Alford Road prevents trucks from getting up to speed
- Short ramps on 65 northbound restrict trucks
- 150 provides access to Dollar General warehouse on Lakeshore; steep grade after exiting highway limits speed
- Northern beltline as planned will have limited impact
- 280 is severely congested
- Traffic weaves should be removed when possible



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Overview of Stakeholder Input

Rail Industry

- Railroads provide connections and access to regional and more distant seaports
- Service in area includes intermodal, carload, unit train
- Facilities include classification yards, intermodal ramps, transload terminals, and direct carload service via sidings
- Eastern and Western railroads interchange with each other and local short lines
- Limited opportunities for new rail served customers; but there is capacity available at sites currently served
- Sites with sidings typically have contracts requiring minimum service; penalties are assessed if not used



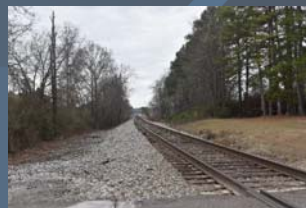
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Overview of Stakeholder Input

Rail Industry

- Limestone is key outbound flow by rail; high quality limestone shipped to non-routine sites based on construction activity
- Primary focus is intermodal although the region has lots of transload customers for bulk products (e.g., plastic pellets, hazmat chemicals)
- Railroads are always looking for direct siding dependent customers
- Urban development adjacent to rail corridors and yards creates conflicts
- It is critical that rail served sites be protected for rail dependent industries



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Overview of Stakeholder Input

Rail Industry

- As the region continues to grow, planners need to keep freight in mind; must balance an industrial landscape with quality of life for our communities
- Quality of life considerations can limit available workforce
- Grade crossing projects are always a priority
- Bike and pedestrian projects should avoid heavy rail corridors
- Municipal zoning is an issue; industrial areas are being redeveloped into residential lofts
- Rail traffic is anticipated to grow in the future in Birmingham area
- Grade crossing closures benefit rail operations but are hard to accomplish



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Overview of Stakeholder Input *Air Industry*

- 12k foot runway; category 2 airport; 2nd runway 7100 feet
- Fedex and UPS operate daily service
- Unleased cargo apron available for growth
- Runway and taxiway are too close together; impedes operations in bad weather
- Village Creek runs through airport; has environmental issues; limits opportunities for critical airport improvements
- East cargo area would require new roadway access
- Airport has significant land available to develop; access to vacant land is limited



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Overview of Stakeholder Input *Air Industry*

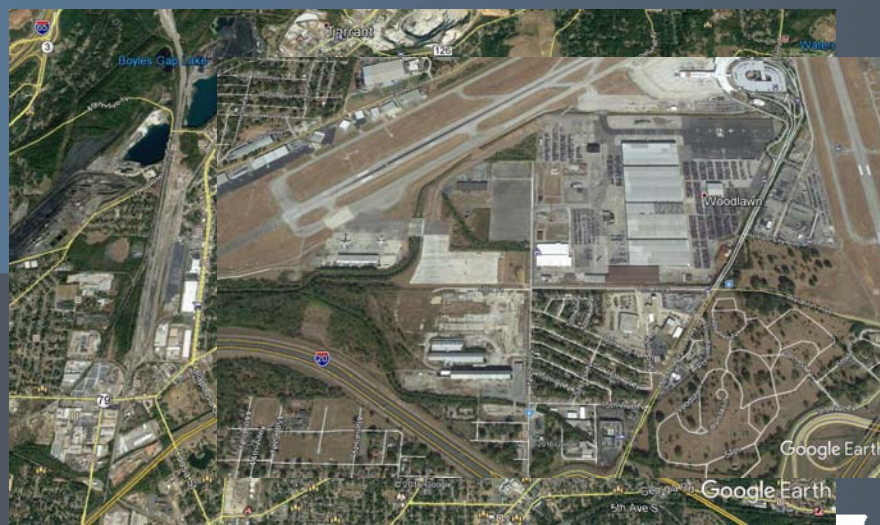
- Cargo marketing is limited; limited to integrators today
- Airlines have consolidated; larger planes
- Success will be driven by business and population growth; disposable income is critical



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Airport Layout and Opportunities



Overview of Stakeholder Input *Economic Development, Counties, Cities*

- Network of industrial parks throughout region
- Development authorities (county, city, etc.) locate and develop land, recruit businesses, and maintain common elements
- Majority of industrial parts are full; always looking for more land
- Redevelopment of brownfield sites is expensive with liability issues
- Municipalities have access to funding grants
- Preferred locations are near interstates, have rail service, access to utilities
- Size and operation varies



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Overview of Stakeholder Input

Economic Development, Counties, Cities

- Companies range from light manufacturing, to warehouse and distribution facilities
- Many suppliers to auto manufacturing plants outside the region locate in these parks
- Northern beltline will improve regional mobility
- Airport has limited space and handles limited cargo; redevelopment opportunities exist (unused hangars at airport offer 1.2 million square feet)
- Economic development tool kits are useful
- Regional leaders are pro-business and fiscally responsible
- State is good, not great, but good; competition drives everything

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Overview of Stakeholder Input

Economic Development, Counties, Cities

- Region needs to provide variety of industrial parks (premium as well cheaper options)
- Improved marketing is critical to ensure the region consistently gets short listed when competing for new projects
- Birmingham should continue to work to improve its image as a place companies and workers want to locate and live
- Region has identified target businesses (automotive, aerospace, chemicals, finance, life sciences, manufacturing)
- Warehouse and distribution will always be a priority
- Time to market and access to market is critical and the region has a strong transportation system

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Overview of Stakeholder Input

Economic Development, Counties, Cities

- Many national trucking firms have operations in region
- Technology is a major focus (Tech Birmingham, Innovation Depot)
- Airport has potential to grow cargo; this would be beneficial but there are challenges
- Airport hosts FTZ 98 there are several subzones; FTZ status is not extensively used
- Expansion of FTZ to cover Port Birmingham will be helpful
- Roadway access to port drops from 4 to 2 lanes
- Grow Alabama Initiative identifies transportation

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Overview of Stakeholder Input

Economic Development, Counties, Cities

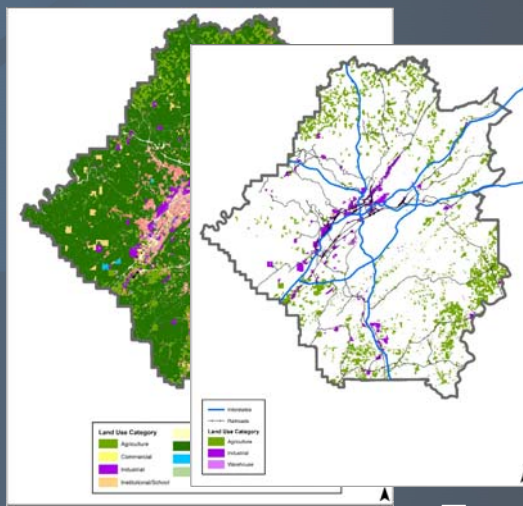
- Significant congestion on 65 southbound and on 280
- Topography of region limits land availability for new warehouse and distribution center developments
- Last mile connections to sites is critical part of development
- Region should capitalize on transportation assets
- Workforce training programs exist

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Initial Land Use Analysis

- ➔ Significant portion of region consists of open space
- ➔ Residential and commercial uses are centered in the urban core
- ➔ Warehouse and distribution uses are focused along key roadway and rail corridors

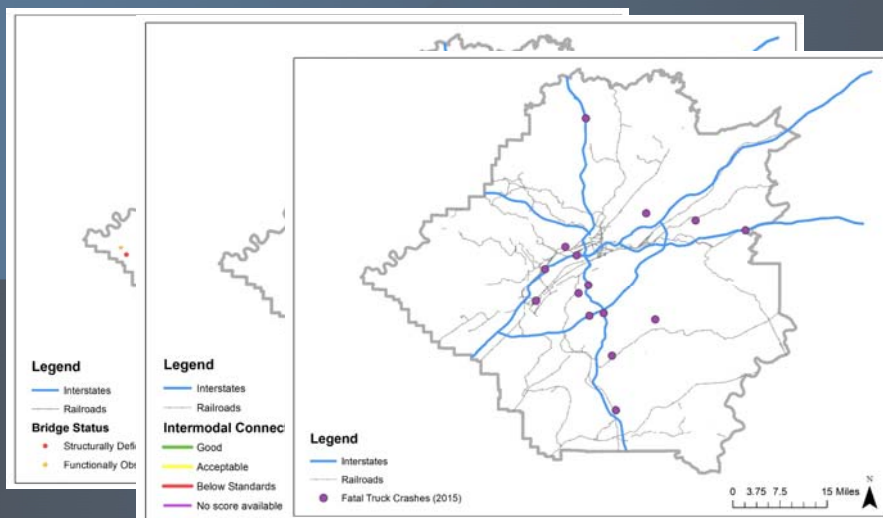


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Other Considerations

Bridge Locations, Intermodal Connectors, Fatal Accidents

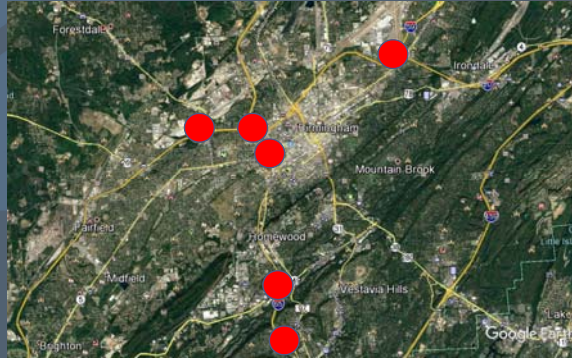


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Traffic Management Center *Key Hotspots Monitored*

- I-65 at the 20/59 Ramp
- I-65 at 3rd Ave N
- I-65 before Alford
- I-65 at Lakeshore
- 20/59 at Arkadelphia
- 20/59 at Airport Highway

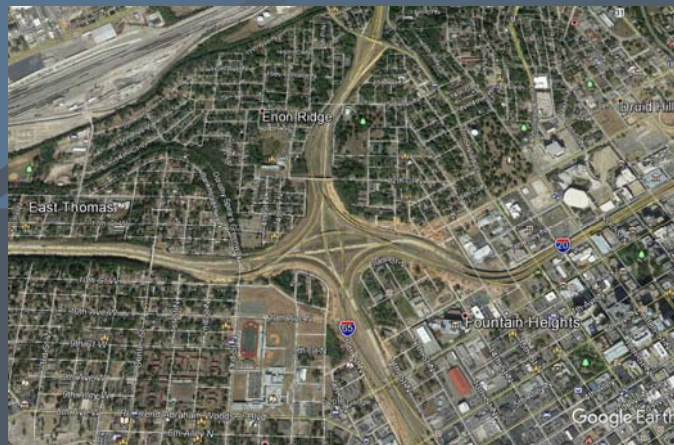


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Traffic Management Center *Key Hotspots Monitored*

- I-65 at the 20/59 Ramp

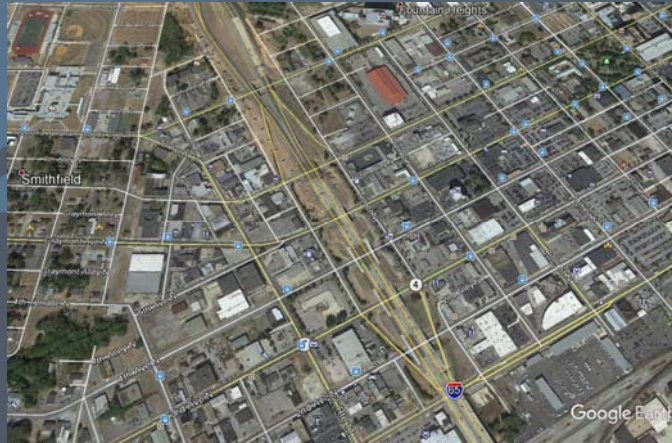


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Traffic Management Center *Key Hotspots Monitored*

➔ I-65 at 3rd Ave N

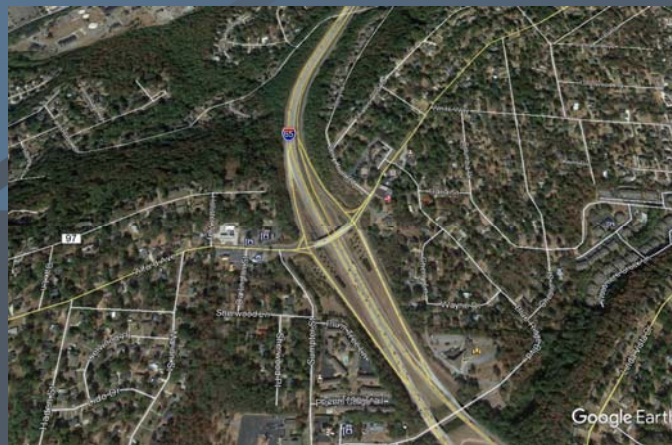


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Traffic Management Center *Key Hotspots Monitored*

➔ I-65 before Alford

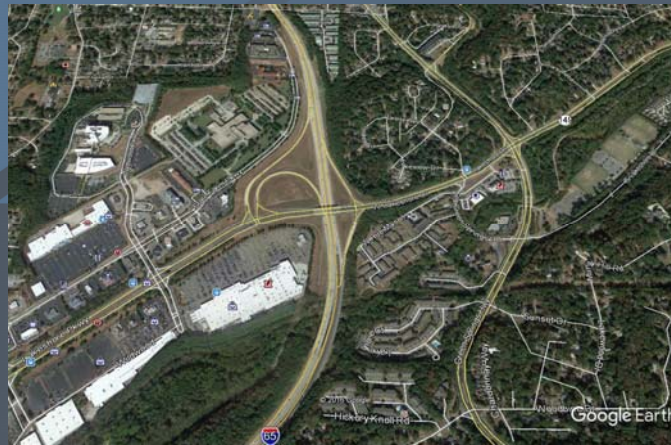


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Traffic Management Center *Key Hotspots Monitored*

➤ I-65 at Lakeshore

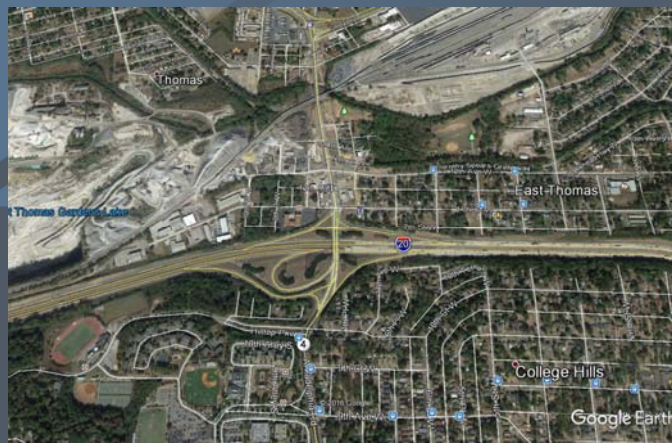


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Traffic Management Center *Key Hotspots Monitored*

➤ 20/59 at Arkadelphia

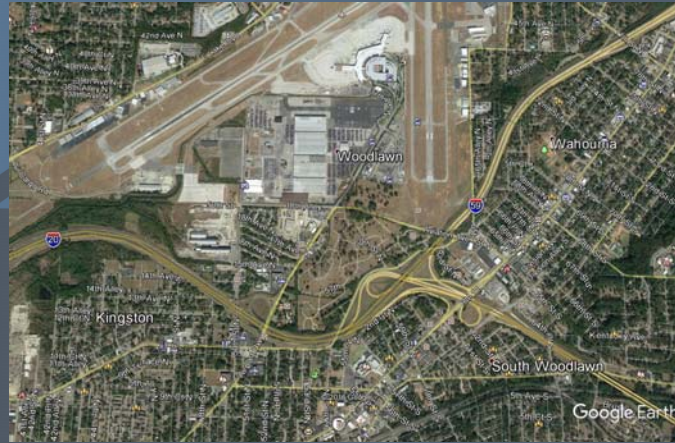


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Traffic Management Center *Key Hotspots Monitored*

➔ 20/59 at Airport Highway



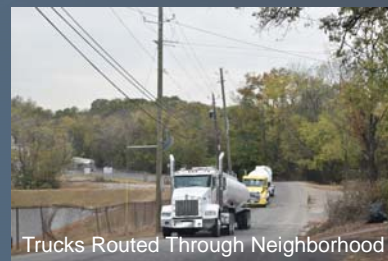
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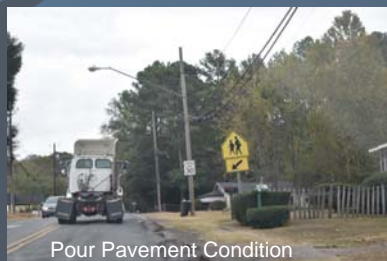
Examples of Deficiencies



Pour Pavement Condition



Trucks Routed Through Neighborhood



Pour Pavement Condition



Congestion Adjacent to Interchange

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Next Steps/Questions

- Complete remaining data collection
- Analyze economic database
- Prepare freight system profile
- Begin to identify needs list

QUESTIONS?