

# Regional Freight Plan FTAC Meeting #3

#### presented to

Regional Planning Commission of Greater Birmingham

September 29, 2017

presented by

Cambridge Systematics, Inc.

*with* Volkert, Inc. Creative Directions, Inc.

### Agenda



- Discuss project identification process
- Discuss list of freight improvement projects
- Discuss project prioritization process
- Review and discuss project priorities
- Discuss other recommendations
- Review outline for final report
- Schedule and next steps



#### AGENDA

Birmingham MPO Freight Plan Freight Transportation Advisory Committee Meeting #3 Friday, September 29, 2017, 11:30AM – 1:00PM CT

- 1. Introductions
- 2. Discuss project identification process
- 3. Discuss list of freight improvement projects
- 4. Discuss project prioritization process
- 5. Review and discuss project priorities
- 6. Discuss other recommendations
- 7. Review outline for final report
- 8. Schedule and next steps



### **Finalizing Needs List**

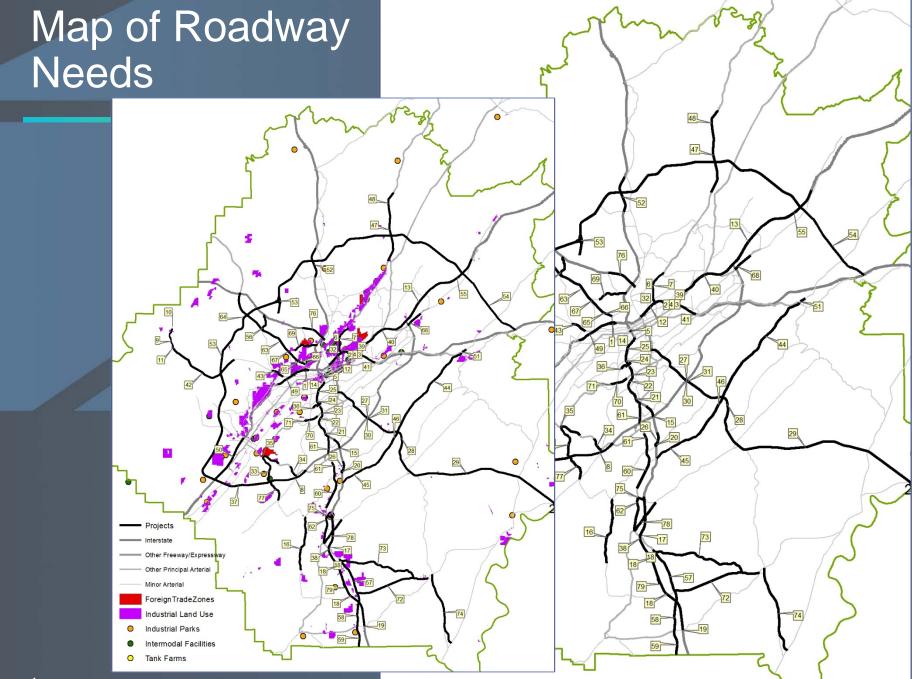
### Roadways

- » Developed list of projects based on site reviews and stakeholder input
- » Reviewed RTP projects
- » Eliminated projects underway or complete
- » Eliminated projects in predominantly residential communities
- » Compared stakeholder list to existing project list and identified projects that address identified needs
- Developed project description and cost estimate for new projects









### **Finalizing Needs List**

### Railroads

 Requests sent to railroads requesting documentation of needs; no needs were submitted



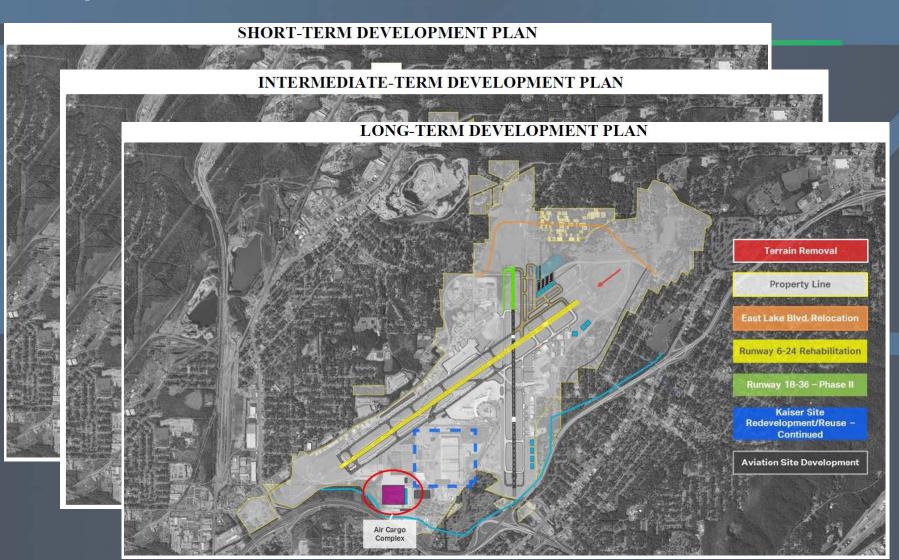
### Airport

- » Met with Birmingham-Shuttlesworth International Airport to review project list provided in current master plan
- Freight or freight friendly projects were identified, discussed, documented and included





## Airport Needs





### **Finalizing Needs List**

#### Ports/Waterways

- » Met with Port Birmingham and Watco to discuss needs
- » Freight projects (terminal, waterway, rail and roadway connections) were identified, discussed, documented and included
- » Many identified needs consisted of market and feasibility studies, or as of yet undefined land purchases and development opportunities; these have been included in study recommendations





## Port Needs



This rendering is an artistic representation of the proposed building. Variations in scope of work, color, building materials, grading, etc.. may impact actual constructed appearance.



WATCO - Port Birmingham Birmingham, AL September 2017

## Performance Areas & Weights

Performance areas apply to projects from all modes of transportation

#### Equal weights used for all areas

Goals	Objectives	Performance Measures	Weight
	Improve access to critical freight assets	Does Project improve last-mile access to designated freight facility/asset?	10
economic development through strategic freight	Improve (intermodal)	Does Project improve network connection?	10
	connections on freight network	Will project enhance capacity ?	10
	Enhance freight related	Does project improve/create access to	
	employment and development	industrial centers (e.g., distribution center;	
	opportunities	<b>C 1</b> 7	10
Identify opportunity to	Freight as a good neighbor		
	<u> </u>	users?	10
for benefit of all	, , , , , , , , , , , , , , , , , , , ,	Does project improve safety?	10
		Does project address a network segment	
	Reduce delay on freight network	identified by stakeholders as a freight	
		bottleneck?	10
Improve reliability and	Reduce costs for shippers,	Will project reduce delay or improve reliability	
reduce congestion of freight network	operators, and consumers	on a network segment?	10
	IE nnance travel time reliability	Will project improve the efficiency of	
		existing/planned freight operations?	10
	Improve condition of the freight	Will project improve the condition of existing	
		freight assets (rolling stock/vehicles, rail,	
		roadway (pavement/bridge)?	10
	Advance regional economic development through strategic freight investments Identify opportunity to everage freight investment for benefit of all Improve reliability and reduce congestion of freight network	Advance regional economic development through strategic freight nvestmentsImprove access to critical freight assetsImprove (intermodal) connections on freight networkEnhance freight related employment and development opportunitiesIdentify opportunity to everage freight investmentFreight as a good neighborImprove safety for allImprove reliability and reduce congestion of treight networkReduce delay on freight networkReduce costs for shippers, operators, and consumersEnhance travel time reliability	Advance regional economic development through strategic freight nvestmentsImprove access to critical freight assetsDoes Project improve last-mile access to designated freight facility/asset?Improve (intermodal) connections on freight networkDoes Project improve network connection?Improve (intermodal) 

TOTAL Points



## **Project Prioritization Calculator**

### Excel-based tool designed to rank projects



Regional Planning Commision of Greater Birmingham *Project Calculator for Freight Plan* 

#### About this tool

This tool provides a structured approach to prioritize freight transportation projects in the Greater Birmingham region. The tool was developed specifically for the region and projects are prioritized based on criteria determined to be important by the regional planning commission. Projects are scored on a scale from 0 to 100 and are ranked in descending order, from the highest numerical score to the lowest. The highest the score, the more the project responds to the user-defined weighting factors.

#### How to Use the Project Calculator

- Step #1. The tool already has default values for the criteria weights. If necessary, update the relative weights for each of the Performance Measure Categories in the "Weights" tab.
- Step #2. Enter the projects to be evaluated in the "Projects" tab. The "mode" column is case sensitive. Use 0 for NO and 1 for YES.
- Step #3. Press the "Sort" button in the Projects tab. The buttom will automatically sort the projects by mode in separate tabs.
- Step #4. Press the "Rank" button on each of the mode tabs to automatically rank projects in descending order, from the highest numerical score to the lowest.

Note: Make sure to run steps #3 and #4 everytime you update information in the "Projects" tab.



### Roadway Ranking Based on Performance and Cost-Effectiveness



Cost-Effectiveness (Score/\$)



## **Prioritized Needs**

See handouts
» Roadways
» Airport
» Port



# Draft Priorities – Roadway

No ID	ew Map	Project Name:	Project Description	Project Type	Timeframe	Jurisdiction/Project Sponsor	Rank
	11	SR-269 Install Bridge	Bridge Installation SR-269 rail crossing south of Port of Birmingham	Operations & Capacity	Medium	Consultant	Rank 1
	66	US-78 Widen - 4	Widen 4 to 6 lanes From Finley Blvd to Pratt Hwy (2nd St) (Includes RR bridge replacement)	Additional Roadway Lanes	Short	ALDOT	Rank 1
	2	20/59 and Airport Highway Interchange	Operational improvements to interchange intersections with Messer Airport Highway	Operations	Short	Consultant	Rank 1
	67	US-78 Bridge	Bridge Replacement and Approaches on US-78 (SR-5) over Dugan Avenue, Bin 1392 (4 to 6 lanes)	Bridges and Approaches	Long	ALDOT	Rank 1
	32	AL-79 Widen	SR-79 (Tallapoosa St.) From 400' South of I-59/I-20 to East Lake Blvd. Widen and Drainage Correction 4 to 6 Lanes. Intermodal Project)	Additional Roadway Lanes	Long	ALDOT	Rank 1
	36	Oxmoor Rd Intersection Improvements	Oxmoor Blvd-Green Springs to Barber Court. Intersection Improvements At Barber Ct. and Oxmoor Rd.	Intersection Improvements	Short	Homewood	Rank 1
	43	SR-269 Widen - 2	Widen 4 to 6 lanes	Additional Roadway Lanes	Long	ALDOT	Rank 1
	24	I-65 Steep Grades - 4	I-65 Auxiliary Lanes Birmingham - From Oxmoor Road NB to Greensprings Avenue/Greensprings Road SB to Oxmoor Road, Bridge replacement at Valley Ave	Additional Roadway Lanes and Bridge Replacement	Short	ALDOT	Rank 1
	68	US-11 Widen	Widen 4 to 6 Lanes from I-459 to Tutwiler Drive	Additional Roadway Lanes	Long	ALDOT	Rank 1
	14	I-65 Widen - 3	I-65 Auxiliary Lanes Homewood - From Lakeshore Parkway NB to Oxmoor Road/Oxmoor Road SB to Lakeshore Parkway Bridge replacement at Valley Ave	Additional Roadway Lanes	Long	ALDOT	Rank 2
	5	I-65 and 3rd Ave N Interchange	Operational improvements to interchange intersections with 3rd Ave N (possible ramp widening)	Operations & Capacity	Short	Consultant	Rank 2
	35	AL-150 Add Lanes	SR-150 from Morgan Rd at Bessemer to MP 4.3 W of Parkwood Rd. Phase I	Additional Roadway Lanes	Short	ALDOT	Rank 2
	1	20/59 and Arkadelphia Rd Interchange	Pavement resurfacing interchange ramps	Maintenance	Short	Consultant	Rank 2
	7	AL-79 Corridor Resurfacing	Pavement resurfacing AL-79 from E Lake Blvd to Springdale Rd	Maintenance	Medium	Consultant	Rank 2
	8	I-459 Resurfacing	Pavement resurfacing I-459 between Exist 6-10	Maintenance	Medium	Consultant	Rank 2
	14	I-65 Widen - 2	I-65 Auxiliary Lanes Birmingham - From Oxmoor Road NB to Greensprings Avenue/Greensprings Road SB to Oxmoor Road	Additional Roadway Lanes	Long	ALDOT	Rank 2
	31	US-280 Add Lanes - 5	SR-38(US 280) Auxiliary Lanes from I-459 to Cahaba River Road	Access Management/ Additional Roadway Lanes	Short	ALDOT	Rank 2
	48	SR-79 Bridge	Replace Bridge, Bin 006360, SR-79 over Gurley Creek (Suff=59.0, Status=Fo) and Additional Bridge For 4 Lane Grade & Drain	Bridge Replacement	Long	ALDOT	Rank 2
	51	US-411 Widen	Widen US-411 from 2 to 4 lanes	Additional Roadway Lanes	Long	ALDOT	Rank 2
	61	US-31 Widen - 5	Widen 4 to 6 lanes from Riverchase Parkway to I-65	Additional Roadway Lanes	Long	ALDOT	Rank 2
	71	Lakeshore Parkway Widen - 2	Widen from 4 to 6 lanes from Oxmoor Rd. to Industrial Drive	Additional Roadway Lanes	Long	Jefferson County	Rank 2
	75	CR-52, Shelby County, Widen	Widen from 3 to 4 lanes from I-65 to US 31	Additional Roadway Lanes	Long	ALDOT	Rank 2
	78	CR-11 (Shelby County) Widen	Widen 2 to 3 lanes from US-31 to East Weatherly Entrance (Henderson Rd.)	Widening and Resurfacing (Roadway)	Short	Jefferson County	Rank 2
	79	CR-87 (Shelby County) Widen	Widen 2 to 4 lanes from CR-12 North .55 miles	Additional Roadway Lanes	Long	Shelby County	Rank 2
	69	CR-94, Jefferson County	Add Left Turn Lanes from Cherry Ave (CR-105) to I-65	Turn Lanes	Long	Birmingham	Rank 2

# Draft Priorities – Airport

P	roject ID	Project Name:	Project Description	Project Type	Timeframe	Rank
	99Environmental Assessment: Taxiway A / Village Creek102Taxiway H—Phase I, Design (RW 6 to ANG Apron)		Relocation of Taxiway A is critical project to allow efficient, unobstructed operation of the main runway; this relocation to the south requires relocation/mitigation of Village Creek	Environmental assessment to identify strategies and preferred alternative for relocation of Taxiway A to the south (EA Study)	Short	High
			Taxiway H is parallel facility to Taxiway A on the north side of the airport; it must be relocated to the south prior to Taxiway A being relocated	Design	Short	High
	107	Taxiway A Realignment	Relocation of Taxiway A is critical project to allow efficient, unobstructed operation of the main runway; this relocation to the south requires relocation/mitigation of Village Creek	Construction	Intermediate	High
	113 Relocate Utility Mains Crossing Runway 6-243		Relocation of utilities; required before Taxiway A can be relocated	Utility/construction	Short	High
	117Taxiway H – Phase I, Construction (RW 6 to ANG Apron)120Village Creek Relocation		Taxiway H is parallel facility to Taxiway A on the north side of the airport; it must be relocated to the south prior to Taxiway A being relocated		Short	High
			Relocation of Taxiway A is critical project to allow efficient, unobstructed operation of the main runway; this relocation to the south requires relocation/mitigation of Village Creek	Construction	Intermediate	High
97 Air Cargo Avenue Realignment		Air Cargo Avenue Realignment	Segment of facility falls in "object free area" and must be relocated to the south by 50 feet	Construction	Long	High



## Draft Priorities – Port

Project ID	Project Name:	Project Description	Project Type	Timeframe	Jurisdiction/Project Sponsor
123	Rail Siding Expansion	One mile new rail track to allow bi- directional movements to/from the port	Construction	Medium	Port Birmingham
122	Container On Barge Service	Port of Mobile to Port Birmingham container on barge service. Improvements to include dock improvements, laydown areas, and new container moving equipment at Port Birmingham (reach stacker)	Construction and Equip	Short to Medium	Port Birmingham
125	Truck Related Technology Investments at Port	Technology to support efficiency of truck operations (gate access, parking, staging, dispatch, etc.)	Technology and operati	Short to Medium	Port Birmingham
121	Port Birmingham Warehouse	Multi-phased project consisting of new warehouse buildings on Port Birmingham; intent is to provide climate controlled space to market new customers	Construction	Short to Medium	Port Birmingham
124	Terminal Related Dredging Improvements	Maintenance dredging adjacent to port terminals; extension of terminals could require more extensive dredging (deepening)	Maintenance	Short / Ongoing	Port Birmingham



### **Other Recommendations**

- Establish protocols for ongoing FTAC, including membership, role, meeting frequency
- Develop at grade crossing inventory with ranking related to needed improvements
- Designate key truck routes/network for Birmingham region
- Identify lands suitable for industrial park development
- Conduct market feasibility study to support Port Birmingham development



### Other Recommendations

- Evaluate opportunities for brownfield redevelopment for industrial use
- Conduct truck parking study to identify unmet parking demand
- Develop marketing brochure to promote Birmingham's industrial and freight capacity
- Investigate workforce development opportunities to promote freight and logistics training in local schools



### Outline for Final Report

### See handout



#### Birmingham Regional Freight Plan – Final Report Outline Executive Summary

- 1.0 Introduction and Background
- 2.0 Freight System
  - 2.1 Freight System Overview
  - 2.2 Highway Freight System
  - 2.3 Railway System
  - 2.4 Aviation System
  - 2.5 Waterway System
- 3.0 Commodity Flow Patterns
  - 3.1 Overview of Commodity Flows in the Birmingham Region
  - 3.2 Significant Commodity Movements
  - 3.3 Significant Trading Partners
  - 3.4 Commodity Flow Forecasts
- 4.0 The Freight Industry and Economic Impacts
  - 4.1 Major Industrial Areas in Birmingham
  - 4.2 Future Development Opportunities
  - 4.3 Key Trends Impacting the Birmingham Region
  - 4.4 Economic Impacts of the Freight Industry
- 5.0 Freight System Needs and Priorities and Performance Measures
  - 5.1 Key Issues Identified by Stakeholders
  - 5.2 Needs by Mode
  - 5.3 Freight Priorities
  - 5.4 Freight Performance Measures
- 6.0 Conclusions and Recommendations
  - 6.1 Findings and Conclusions
  - 6.2 Recommendations

### Next Steps and Schedule

- Finalize project needs and priorities in October
- Draft Final Report in November
- Final Report in January
- FTAC Meeting #4 in February
- Final presentations to MPO committees, as requested in February

