

Project Steering Committee November 19, 2014



# **Today's Agenda**

- Project Status
- ARC Economic Analysis Results
- Analysis Activities to Inform the Locally Preferred Alternative (LPA)
- Discussion Items
  - Alignments
  - Technology
- Next Steps
- Q&A



# **Project Status**



- Re-initiated efforts in Spring of 2014 to:
  - Conduct a second phase of Early Scoping
  - Initiate the preliminary New Starts evaluation
  - Recommend / adopt a LPA
  - Begin environmental documentation (DEIS) (Begins in Winter 2015)



# **ARC Economic Study Findings \***

GA 400 Corridor	Fulton	DeKalb	Rest of MPO	Rest of RDC	MPO
2040 Total Employment (Thousands of jobs)	9.283	1.72	6.22	4.528	16.365
2040 Gross Regional Product (Billions of fixed (2005) dollars)	\$0.511	\$0.161	\$0.624	\$0.479	\$1.221
2040 Population (Thousands)	4.305	2.92	16.01	10.892	22.124

\* Documentation will be finalized by December 2014.



#### **Background on Analysis for LPA Identification**

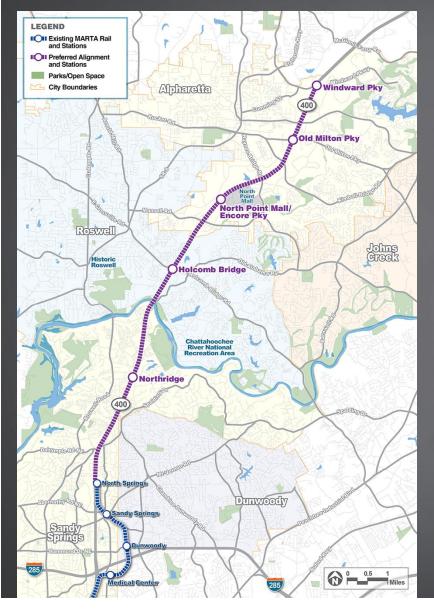
**Goal:** to inform the identification of an LPA through additional analysis of potential:

- 1. Environmental Impacts (quantitative)
- 2. Transportation Impacts (qualitative)
- 3. Costs (order of magnitude costs based on planninglevel assumptions)

The LPA will define a technology for advancement into the DEIS and refine alignment assumptions for further study.



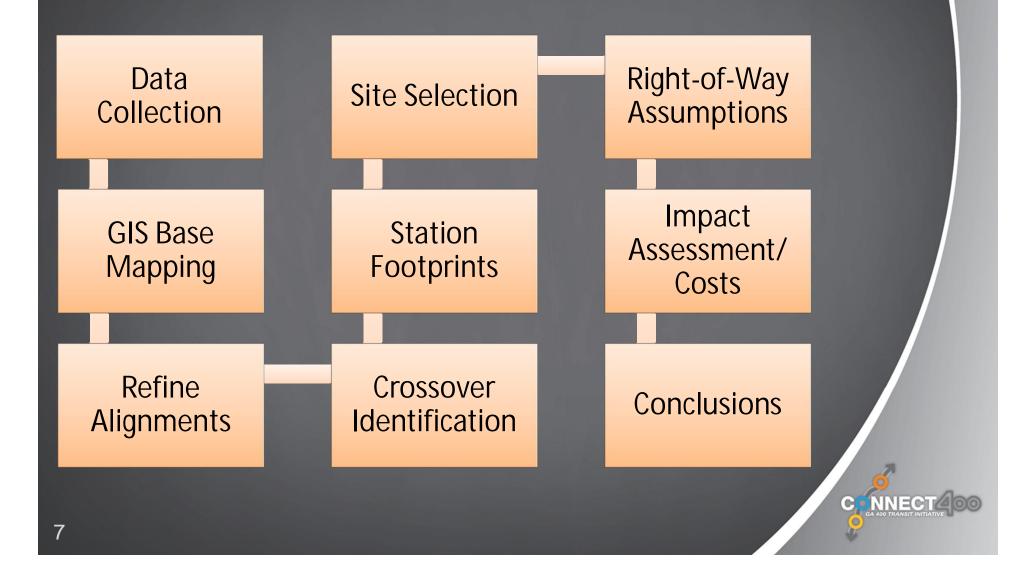
#### **Alternatives Considered**



- East Only HRT
- East Only BRT
- West Only HRT
- West Only BRT
- East-West-East HRT
- East-West-East BRT
- BRT in Managed Lanes\*
  - \*- assumes joint implementation

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# **Analysis Process**



# **Station Assumptions – Footprint**

Topography	<ul> <li>Land Profile</li> </ul>	
Station Area	<ul> <li>Required land area</li> </ul>	
→ Quadrant	<ul> <li>Preferred locations, development, value</li> </ul>	
→ Туре	<ul> <li>At-Grade, Aerial, Cut and Cover</li> </ul>	
Size	<ul> <li>Typical sections and acreage (from GA 400 Alternatives Analysis)</li> </ul>	



# **Station Assumptions - Parking**

Parking Estimates	<ul> <li>Required land area / proximity to station</li> </ul>	
Ridership	<ul> <li>Alternatives Analysis travel forecasts</li> </ul>	
→ # of Space	Capacity / utilization at existing stations	
→ Size	<ul> <li>Space size assumptions (GA 400 AA)</li> </ul>	



# **Station Assumptions - Site Selection**

Site Selection	<ul> <li>Parcel identification at desired station locations</li> </ul>
	<ul> <li>Station + parking, bus bays, access, pedestrian and vehicular circulation</li> </ul>
Parcel Selection	<ul><li>Minimum running width</li><li>Size and value</li></ul>



# **Refinements Since Alternatives Analysis**

Current Analysis
Station footprint located for purposes of impact analysis
Station footprints, type, and parking structures included
Major/minor structure assumptions based on length and typical section
Land acquisition cost based on land value at footprint location and typical section width
30% Cost Contingency (30% is based on professional experience for planning level assumptions).

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### **Evaluation Criteria**

#### Transportation Impacts

- Accessibility / network impacts
- Population / employment access
- Proximity to attractors
- Consistency with existing plans / Early Scoping feedback
- Environmental Impacts
  - Displacements
  - Wetlands
  - Parklands
  - Community facilities
  - Environmental Justice
- Capital Costs



# **Evaluation Results – HRT Summary**

Criteria	East Only HRT		West O	nly HRT	East-West-East HRT	
	Low Range	High Range	Low Range	High Range	Low Range	High Range
Transportation Impacts	High	High	Medium	Medium	Low	Low
Environmental Impacts	Medium	High	Medium	High	Low	High
Capital Costs	High	High	High	High	High	High
Aggregate Score	5	6	4	5	2	4

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\*Higher score means indicates greater relative impacts.

# **Evaluation Results – BRT Summary**

Criteria	East Or	nly BRT	BRT West Only BRT		East-West-East BRT		BRT in
	Low Range	High Range	Low Range	High Range	Low Range	High Range	ML**
Transportation Impacts	High	High	Medium	Medium	Low	Low	Low
Environmental Impacts	Medium	High	Medium	High	Medium	Medium	High
Capital Costs	Medium	Medium	Medium	Medium	Medium	High	Low
Aggregate Score	4	5	3	4	2	3	2

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\*Higher score means indicates greater relative impacts.

\*\*Assumes joint project implementation.

# **Capital Cost Estimates**

Alternative	Est. Capital Cost * Low Range	Est. Capital Cost * High Range	
East Only HRT	\$2.167 B	\$2.326 B	
East Only BRT	\$807 M	\$858 M	
West Only HRT	\$2.191 B	\$2.262 B	
West Only BRT	\$817 M	\$889 M	
East-West-East HRT	\$2.157 B	\$2.243 B	
East-West-East BRT	\$882 M	\$1.019 B	
BRT in Managed Lanes**	\$522 M		

\*-Year of Expenditure dollars (2028)\*\*-Includes stations and structures (no guideway)



# **Key Findings**

- Crossovers add about a 1%-2% increase to total project cost.
- HRT alignments are approximately 2.5 times the cost of their corresponding BRT alignment. Impacts are similar.
- BRT Managed Lane alternative has lower cost but high impact due to anticipated right of way requirements (based on GA 400 Managed Lanes Feasibility Study).
- No GA 400 ROW is anticipated as available for use in the HRT and BRT fixed guideway alternatives based on future Managed Lanes plan.

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#### **Discussion – LPA Recommendation**

- Technology
   BRT or HRT?
- Refined Alignment Assumptions
   Crossover south of Spalding?
- Managed Lanes Considerations
  - GDOT project is long range
  - Could be considered as a comparative alternative in the DEIS







# **Next Steps**

- Finalize LPA recommendation for MARTA Board (December 2014/January 2015)
- Recommend LPA to the MARTA Board (February 2015)
- Initiate Draft EIS (March 2015)



# **Questions?**

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