

# **GA 400 Transit Initiative Environmental Review** CONNECT 400 METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY January 8, 2014



#### Where We've Been

- GA 400 Starts
  - Alternatives Analysis
- Current study effort started in 2011
- Completed Alternatives Analysis (2013)
  - Assessed a variety of alignments and technologies
  - Extensive community outreach
- Early Scoping Phase 1
- Initiated Early Scoping Phase 1 (Fall 2013)
  - Identified GA 400 as the corridor of focus
  - Advanced HRT, BRT and LRT for further consideration

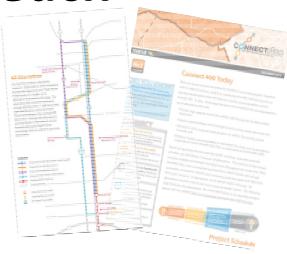
- Early Scoping Phase 2
- Continued Early Scoping Phase 2 (2014)
  - Additional community outreach
  - Eliminated LRT → Advance HRT and BRT
  - Concern of GA 400 east vs. west side alignment options



Community Outreach







#### **Stakeholder Meetings**

- Stakeholders: 30+ Meetings
- TAC: December 13, 2011;
   February 28, 2012, October 25, 2012
- PSC: January 18, 2012; March 22, 2012; November 14, 2012;
   February 26, 2013; May 9, 2013;
   October, 17, 2014; June 12, 2014, September 10, 2014, November 19, 2014

#### **Public Meetings**

- **2011**: December 13- Minority and Non-English Speaking Leadership Meeting
- 2012: January 26; May 22; March 21; August 21-El Banco; August 30- North Fulton Chamber of Commerce Breakfast Forum
  - **2013:** March 21; September 26
- Fall 2013: City Council Briefings
- Summer 2014: Public Meetings and City Council Briefings
- Fall 2014: Public Outreach

#### **Surveys**

- December 12, 2012 to January 17, 2013
  - 136 Respondents
- March 2014 KSU
  Scientific Public Opinion
  Survey
  - 612 Residents
  - 463 Employees



#### What We've Heard

- HRT is the best performing alternative and preferred technology by stakeholders and the public
- Concern over future alignment → East vs. West side of GA 400
- Preference for a "one seat ride"
- Willingness to pay more for HRT service and its benefits
- HRT and BRT ranked highest in New Starts evaluation
- Desire from the community to see MARTA and GDOT coordinate



#### **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)

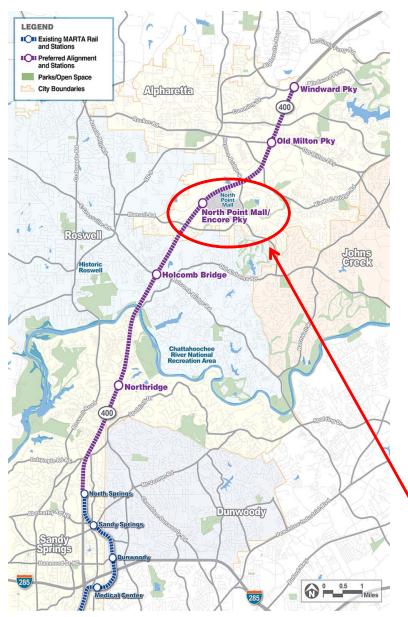


# Background on Analysis for LPA Identification

- Tasked by MARTA management to conduct additional analysis of potential:
  - Environmental Impacts (quantitative)
  - 2. Transportation Impacts (qualitative)
  - 3. Costs (order of magnitude costs based on planning-level assumptions)
- The LPA will define:
  - Technology(s) advanced into the DEIS
  - Refined alignment studied in the DEIS



#### 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 GDOT/MARTA Implementation

Previously studied stations at North Point Mall and Mansell Rd. were combined



#### Analysis Process

Conducted between September and November 2014

Data Right-of-Way Site Selection Collection **Assumptions Impact GIS Base Station** Assessment/ Mapping **Footprints** Costs Refine Crossover **Conclusions** Identification Alignments



#### **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



# Refinements in Evaluation Since the Alternatives Analysis

Alternatives Analysis (OLD)	Current Analysis (NEW)
Generalized station location	Station footprint located for purposes of impact analysis
Standard station cost	Station footprints, type, and parking structures included
Standard structures cost	Major/minor structure assumptions based on length and typical section
Total land acquisition cost	Land acquisition cost based on land value at footprint location and typical section width
5% Cost Contingency	30% Cost Contingency (30% is based on professional experience for planning level assumptions).
\$2012 Costs	Year of Expenditure Costs (2028 assumed)
GDOT Managed Lane Information <b>NOT</b> Included	GDOT Managed Lane Information WAS included



#### Evaluation Results – HRT Summary

- Low Range assumes GDOT's managed lane project is NOT constructed
- High Range assumes GDOT's managed lane project IS constructed

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

<sup>\*</sup>Higher score indicates greater relative impacts.



# Evaluation Results – BRT Summary

Criteria	East Or	ly 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	Medium	Low
Aggregate Score	4	5	3	4	2	2	2

<sup>\*</sup>Higher score means indicates greater relative impacts.

<sup>\*\*</sup>Assumes joint project implementation. ML = Managed Lanes



### 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)



## Evaluation's 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.
- East-West-East Alternatives have the lowest level of impacts.
- 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).
- Availability of GA 400 ROW from GDOT is uncertain based on existing and future managed lane plans for the corridor.



#### Recommended LPA

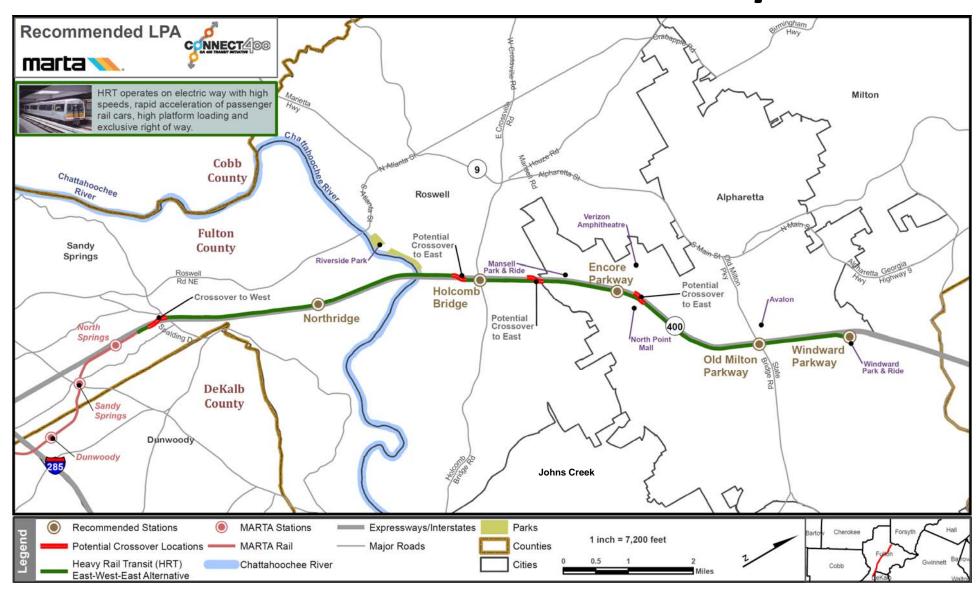
- MARTA Staff Recommended LPA
  - East-West-East HRT
    - \$2.1 to 2.2 Billion
    - Least impacts
    - Community preferred
- Other Alternatives for Study in DEIS
  - East-West-East BRT
    - \$880 Million to \$1.0 Billion
    - Minimal impacts
    - Preferred alignment alternative
  - BRT in GDOT Managed Lanes
    - Approximately \$520 Million
    - High impacts → Managed Lane footprint
    - Potential coordination with GDOT
  - No Build







### Recommended LPA Map





### Rationale for Selecting the LPA

- Strongest Support from planning partners and general public
- One seat ride → High ridership
- Natural extension of existing red line
- Supports land use, economic development, and future investment goals adopted by local communities and planning partners.
- Performs well against preliminary FTA New Starts criteria
- Minimizes environmental and community impacts.





#### Next Steps

- Finalize LPA recommendation for MARTA Board (Today/January 2015)
- Recommended LPA to the MARTA Board (February 2015)
- Initiate Draft EIS (March 2015)



#### Questions?

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