



BOARD OF DIRECTORS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

PLANNING AND CAPITAL PROGRAMS COMMITTEE

THURSDAY, FEBRUARY 23, 2023

ATLANTA, GEORGIA

MEETING MINUTES

1. CALL TO ORDER AND ROLL CALL

Committee Vice Chair Mullice called the meeting to order at 9:32 A.M.

Board Members

Present:

Al Pond
Freda Hardage
Jim Durrett
Kathryn Powers
Stacy Blakley
Thomas Worthy
William Floyd
Rita Scott
Roderick Mullice

Board Members

Absent:

Roderick Frierson
Russell McMurry
Valencia Williamson
Jennifer Ide
Jacob Tzegaegbe
Jannine Miller

Staff Members Present:

Collie Greenwood
Raj Srinath
Rhonda Allen
Luz Borrero
George Wright
Gena Major
Peter Andrews
Carrie Rocha

Also in Attendance: Leah Ward Sears, Abhay Joshi, Anthony Thomas, Paula Nash, Jacqueline Holland, Phyllis Bryant, Kenya Hammond and Tyrene Huff

2. APPROVAL OF THE MINUTES

Approval of the January 26, 2023 Planning and Capital Programs Committee Minutes

Approval of the January 26, 2023, Planning and Capital Programs Committee Minutes. On a motion by Board Member Worthy, seconded by Board Member Mullice, the motion passed by a vote of 9 to 0 with 9 members present.

3. RESOLUTIONS

Resolution Authorizing the Award of a Contract for the Procurement of Summerhill Bus Rapid Transit (BRT) Construction, IFB B50070

Approval of the Resolution Authorizing the Award of a Contract for the Procurement of Summerhill Bus Rapid Transit (BRT) Construction, IFB B50070 On a motion by Board Member Pond, seconded by Board Member Hardage, the resolution passed by a vote of 9 to 0 with 9 members present.

4. BRIEFING

MARTA Reach Cost and Staffing Assessment

Anthony Thomas, Program Manager, Customer Experience Innovation, presented the above briefing outlining MARTA's learnings around how MARTA might serve transit ridership with on-demand efficiently and cost-effectively.

DBE Performance on Planning Contracts

Paula Nash, Executive Director of Diversity and Inclusion, presented the above briefing providing the committee with comprehensive and transparent information on major Planning contracts and DBE participation.

5. OTHER MATTERS

None

6. ADJOURNMENT

The Committee meeting adjourned at 10:48 A.M.

Respectfully submitted,



Tyrene L. Huff
Assistant Secretary to the Board

YouTube: <https://youtube.com/live/8EVKazpwozI?feature=share>



Resolution Authorizing the Award of a Contract for the Procurement of Summerhill Bus Rapid Transit (BRT) Construction, IFB B50070

February 23, 2023



Summerhill BRT Project Details

- 85% dedicated lanes
- Shared lanes to accommodate turning movements
- 5-mile round trip with 14 transit stations
 - Anticipated 12 to 15-minute ride from Carver Station to Five Points
- BRT service coordinated with MARTA rail hours of operation
 - 10 to 15-minute bus headways
- Five branded, articulated Battery Electric Bus vehicles
- 28 signalized intersections
- 4 pedestrian hybrid beacons
- Drainage enhancements

Status

Solicitation Parameters Established:

- Contract Number: IFB B50070
- Contract Term: 3 Years
- DBE Goal of 15%
- Total Project Budget = \$91M (Includes Construction Value)



Milestone Schedule

Milestone	Current Schedule
Construction Contract Award Date	March 2023
Construction Start Date	May 2023
Construction Substantial Completion Date	March 2025
Revenue Service Date	September 2025

Invitation for Bid (IFB) Process

- The IFB was posted November 30, 2022.
- The bids were opened on February 8, 2023
- MARTA received 1 bid
- The single bid was considered responsive and responsible

Award Recommendation

The award recommendation is for Archer Western Construction in the amount of \$59,950,401 Archer Western Bid Amount
\$ 5,995,040 (10% GM Released Contingency)
\$65,945,441 Total Amount not to Exceed



**Request for the Board to Approve the Resolution Authorizing
the Award of a Contract for the Procurement of Summerhill
Bus Rapid Transit (BRT) Construction, IFB B50070
to Archer Western Construction Contractor**

Thank You





Conley

reach

FORT GILLEM

Lake City



MARTA Reach Cost Assessment

February 23, 2023

**Planning & Capital
Programs Committee**

MARTA Board of Directors

Agenda

1. Service Overview

2. Optimizing Service

- How can we best balance service levels and ridership?

3. Assessing Costs & Staffing Models

- How much does on-demand cost?

4. Putting it all together

- Recommendations for on-demand transit at MARTA
- Hand-off to NextGen Bus Project



MARTA Reach vehicle



Reach Background

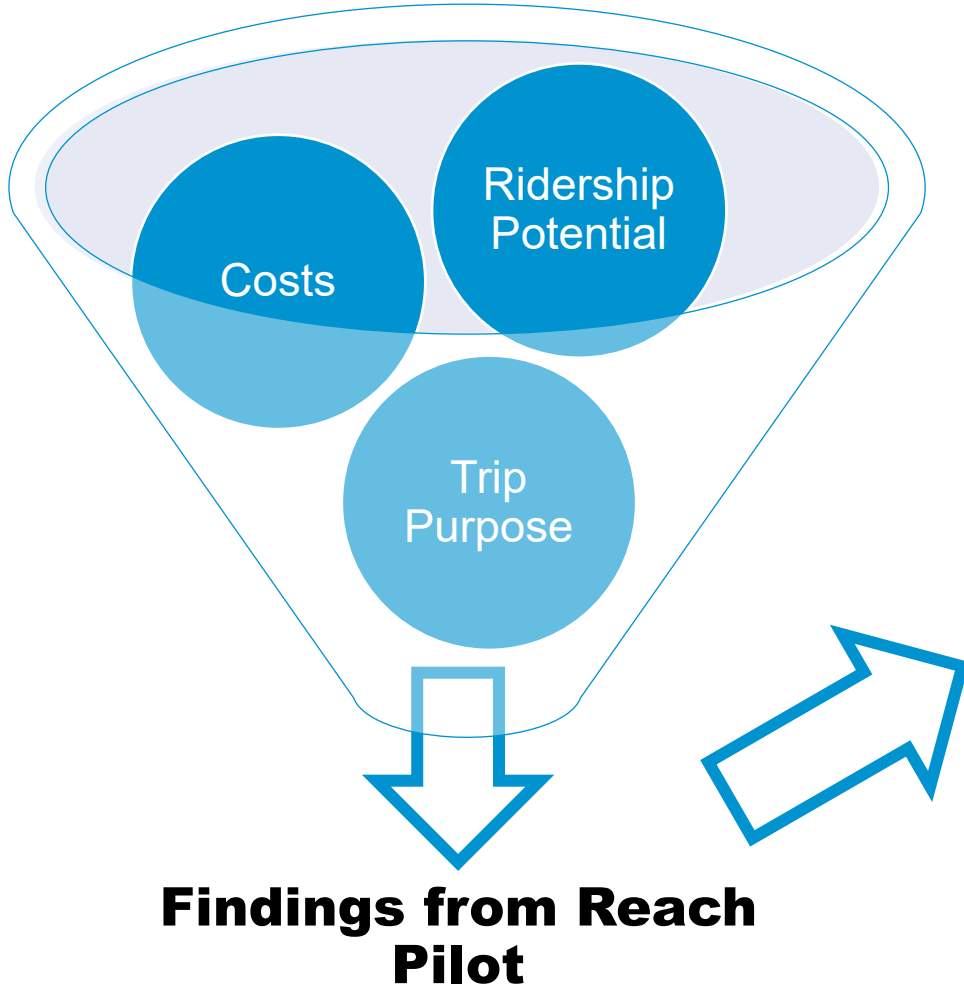
Overview of the Reach service



Pilot Overview

- Shuttles connected “virtual stops” to nearby fixed-route hubs
 - All trips were required to start and end within the zone (unlike Uber/Lyft)
 - If the origin & final destination was within the zone, we would complete the trip directly
 - If the final destination was outside of the zone, we would connect to fixed route service to get to final destination
- Pilot operated **6:00 AM to 7:00 PM, Monday - Friday**
- Standard \$2.50 fare with transfers included, passes accepted
- Pilot service limited to four specific zones. Only trips within these zones were allowed

Contextualizing the Pilot



The findings of the **Reach** pilot are intended to be an input into the **Bus Network Redesign**.

Agencies with Microtransit

Local

- Ride Gwinnett (Future)
- Livable Buckhead (the Buc)
- Valdosta (On-Demand)
- Hall County (We Go)

National

- LA Metro
- King County Metro
- Utah Transit Authority (UTA)
- Metro St. Louis
- Dallas Area Rapid Transit (DART)
- CapMetro
- METRO (Houston, TX)
- **+MANY more**

Optimizing Service

How could we have delivered more efficient service, given the ridership we observed?

Optimization Methodology

1. We partnered with **3 private sector mobility on-demand technology providers** for this service optimization exercise.
2. We also worked with Georgia Tech to create a **baseline for the service optimization**.
3. We provided all 3 providers with ridership data (origins and destinations) from **August 31, 2022** (highest ridership day of the pilot).
4. Based on this data, each provider used their simulation engines to determine **1) vehicle requirements, 2) expected service impacts** (i.e., wait times, travel times, ride-sharing).

What's possible, with on-demand?

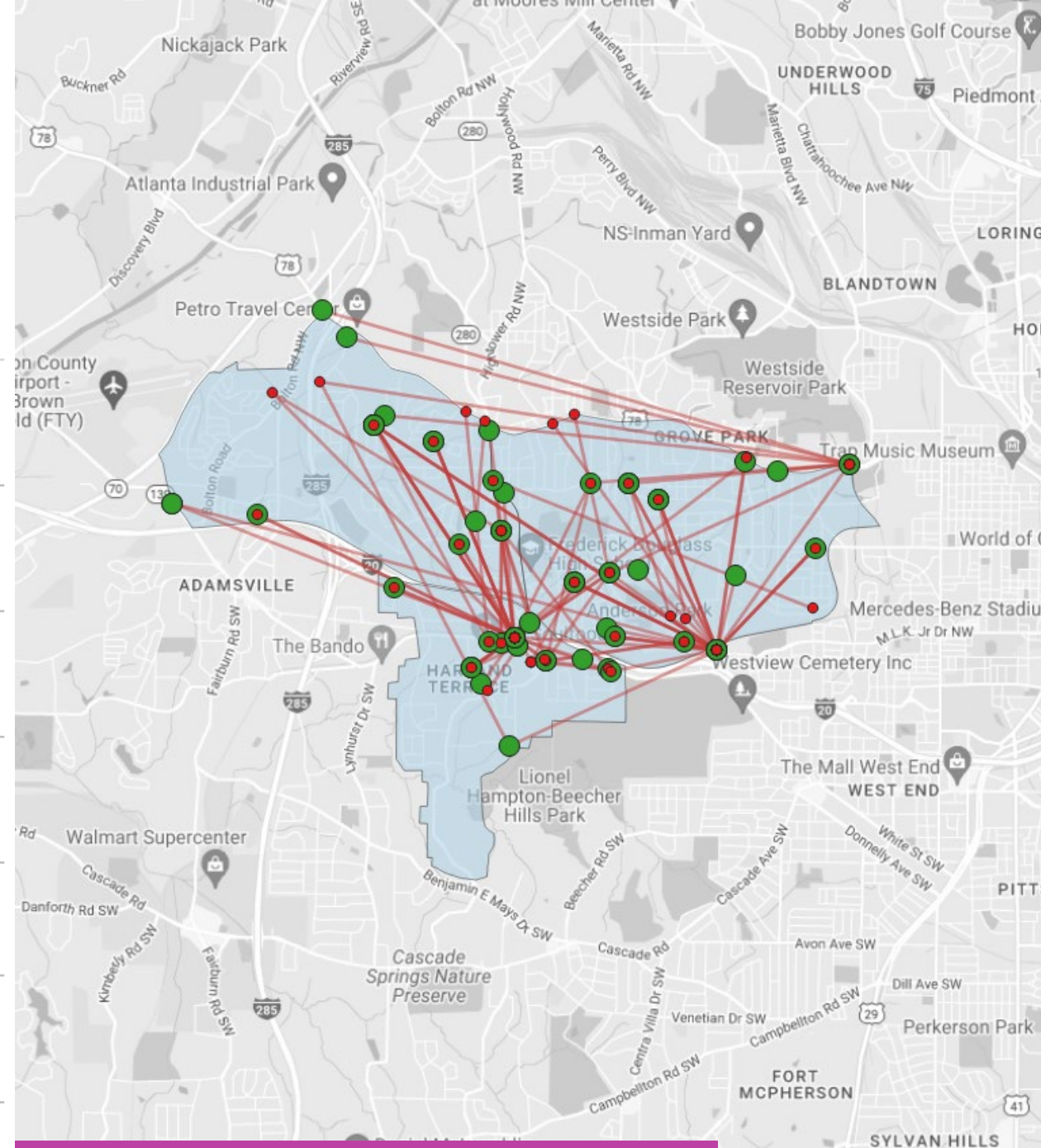
- The goal of this exercise was to explore what **might be possible**, given different models of on-demand transit available in the market.
- **Vendor 1:** Pre-booking, trip-snapping (encourages the sharing of trips by limiting drop-off time periods)
- **Vendor 2:** Flexible operations models
- **Vendor 3:** Has a focus on minimizing the number of dedicated vehicles and brokering trips to TNCs.

Vendor 1 Findings

Vendor 1 estimates being able to cover ridership seen in Reach pilot (in all zones) with 5 vehicles (compared to 16 in pilot service). Below are simulation results for West Atlanta zone.

Rides Served	100%	Consider additional vehicles above 100 riders/day
Sharing Rate	60%	Effective ride pooling
Passengers per vehicle hour	5	Efficient ride grouping
On-Demand Wait Time	10 – 15 mins	Quick and timely rides
Average On-Board Duration	8 mins	Comparable to direct
On-Time Performance	95%	Consistently Reliable. Expect higher OTP with prebooking enabled.

February 2023



Sample Demand Profile Used in West Atlanta Simulation

Vendor 2 Findings

Vendor 2 estimates being able to cover ridership seen in Reach pilot (in all zones) with 6-8 vehicles (compared to 16 in pilot service). Below are simulation results for W. Atlanta zone.

Rides Served	100%	Consider additional vehicles above 100 riders/day
Sharing Rate	15-20%	Moderate ride pooling
Passengers per vehicle hour	3	Moderate group riding
On-Demand Wait Time	7-9 mins	Quick and timely rides
Average On-Board Duration	6-8 mins	Comparable to direct
On-Time Performance	95%	Consistently Reliable.

February 2023



Sample Demand Profile Used in West Atlanta Simulation

Vendor 3 Findings

Vendor 3 estimates being able to cover ridership seen in Reach pilot (in all zones) with 2-3 vehicles (compared to 16 in pilot service). Below are simulation results for all Reach ridership.

Rides Served	79%	<i>Consider additional vehicles to increase served trips</i>
Sharing Rate	66%	<i>Effective ride pooling</i>
Passenger per vehicle hour	4.8	<i>Efficient ride grouping</i>
On-Demand Wait Time	19 – 22 mins	<i>Additional vehicles may decrease wait time to within advertised waiting period</i>
Average On-Board Duration	10 mins	<i>Comparable to direct</i>
On-Time Performance	85%	<i>OTP could be improve with an additional vehicle allocated</i>



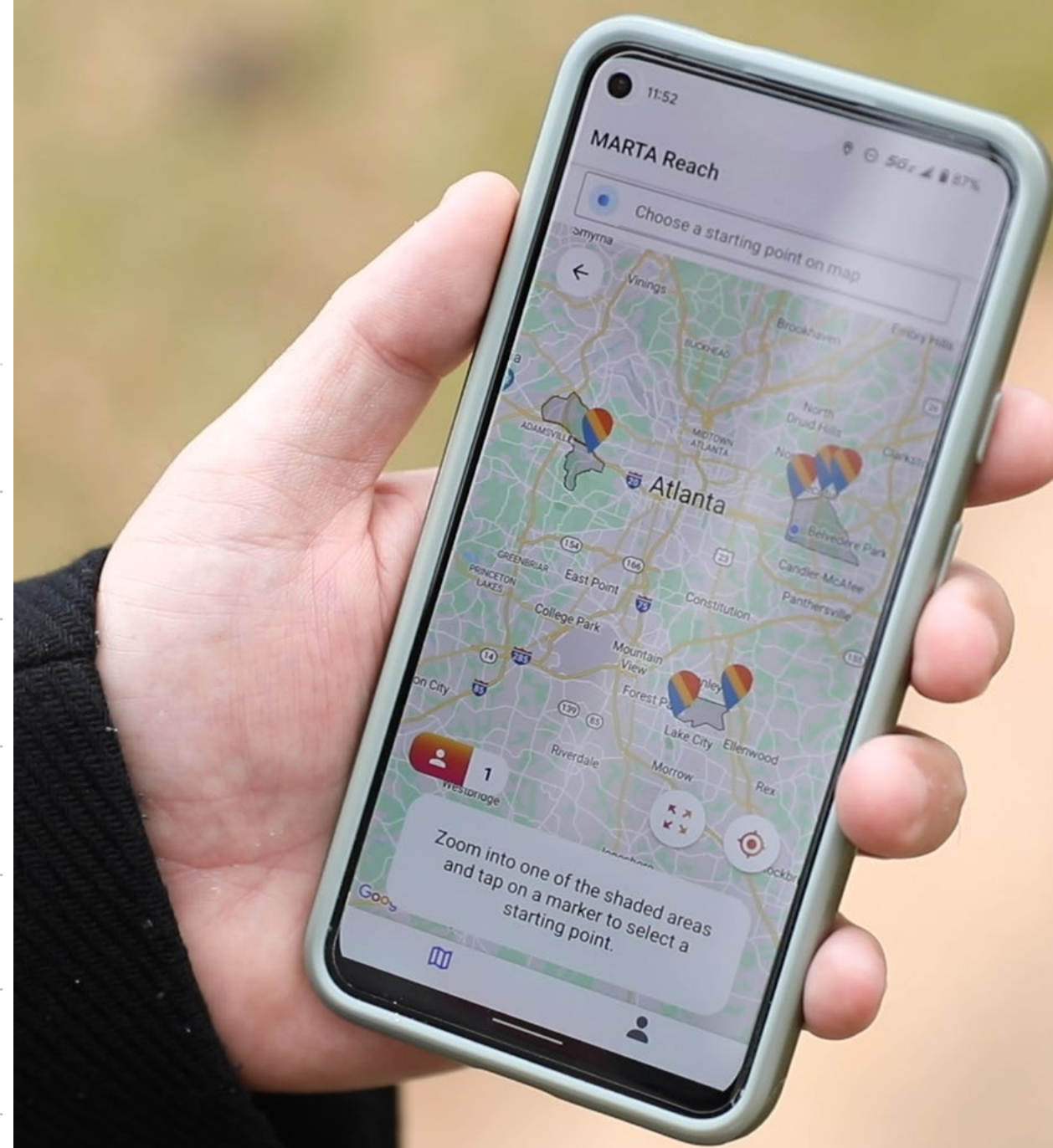
Sample Demand Profile Used in West Atlanta Simulation

Georgia Tech Baseline

MARTA worked with Georgia Tech to establish a baseline for how to optimize the Reach service. The Georgia Tech team estimates that the Reach service can be served with 4-5 vehicles in total.

Rides Served	100%	<i>Consider additional vehicles to increase served trips</i>
Sharing Rate	45%	<i>Effective ride pooling</i>
Passenger per vehicle hour	3-4	<i>Efficient ride grouping</i>
On-Demand Wait Time	15 mins	<i>Additional vehicles may decrease wait time to within advertised waiting period</i>
Average On-Board Duration	5 mins	<i>Comparable to direct</i>
On-Time Performance	85%	<i>OTP could be improve with an additional vehicle allocated</i>

February 2023



Sample Demand Profile Used in West Atlanta Simulation

Optimization Take-a-ways

1. The pilot service over allocated resources given observed ridership levels.
2. The advertised wait-times (15-20 minutes) are achievable with **far fewer resources** (and therefore lower costs).
3. Potential to **expand service** offering (e.g., days & hours of service) while maintaining **similar costs** to pilot service.
- 4. Service is scalable** – increases in ridership and number of zones can be met with increases in vehicles.
5. Impact of changes to fixed route bus service were not tested during the Reach pilot.
6. There is opportunity to further optimize the service by allowing pre-booking and commingling ADA and non-ADA trips.



Costs & Staffing Models

Exploring the cost impacts of on-demand transit

Reminder: Staffing Assessment

- To understand the potential future of on-demand service at MARTA, we evaluated two potential future scenarios.

Scenario A
***Fully Contractor
Supported Model***

Vendor provides vehicles
and is responsible all
operations and
maintenance.

Scenario B
***Fully MARTA
Supported Model***

MARTA provides vehicles
and is responsible for all
operations and
maintenance.

Costs Analysis Assumptions

- Given that decisions regarding the future of on-demand service are dependent on the outcomes of the NextGen Bus Project, several assumptions were incorporated into this cost analysis:
 - Ridership levels were assumed to be the same as the final day of the pilot (August 31, 2022)
 - Service hours were assumed to be the same as the pilot service (Monday – Friday, 6:00am – 7:00pm)
 - One estimate was collected assuming broader service hours (Monday – Sunday, 4:00am – 1:00am)
- The costs on the next page are for the service ran during the pilot. Any future on-demand service at MARTA would have different costs depending on the number of zones and vehicles.

Costs (Year 1)

Vendor	Scenario A ¹ <i>Contractor Supported Model</i>		Scenario B ¹ <i>MARTA Supported Model</i>	
	Software	Turnkey	Software	MARTA O&M
Vendor 1	Included	\$1.41M	\$94,000	\$1M (Operations) \$1M (vehicles/maintenance)
	Total: \$1.4M		Total: \$2.1M	
Vendor 2	Included	\$1.1M – \$1.9M	\$78,000	\$1M (Operations) \$1M (vehicles/maintenance)
	Total: ~1.5M		Total: \$2.1M	
Vendor 3	---	---	\$77,000	\$1M (Operations) \$1M (vehicles/maintenance)
	Total: N/A		Total: \$2.1M	

The costs are for the service ran during the pilot. Any future on-demand service at MARTA would have different costs depending on the number of zones and vehicles.

Sample Costs (Year 2 & 3)

Vendor	Scenario A ¹ <i>Contractor Supported Model</i>		Scenario B ¹ <i>MARTA Supported Model</i>	
	Software	Turnkey	Software	MARTA O&M
Vendor 1	<i>Included</i>	\$1.45M (Y2)	\$64k (Y2)	\$1M <i>(Operations)</i>
		\$1.50M (Y3)	\$67k (Y3)	\$300k <i>(Maintenance)</i>
		<i>Total: \$1.45M (Y2), \$1.50M (Y3)</i>	<i>Total: \$1.36M (Y2), \$1.37M (Y3)</i>	
Vendor 2				
Vendor 3	--	--	\$67k (Y2)	\$1M <i>(Operations)</i>
	<i>Total: N/A</i>		\$300k <i>(maintenance)</i>	
			<i>Total: \$1.36M (Y2)</i>	

Putting it all together

Developing a vision for the
future of on-demand
transit at MARTA



On-demand can work at MARTA

First/Last
Mile

Community
Circulation

- However, **on-demand is not a one-size fits all.**
- To work as a first/last mile solution on-demand must be a part of the broader public transportation network:
 - The service must connect to other transit services that are **highly frequent and reliable.**
- On-demand can also work for local trips given the community demographics and needs:
 - For this the service should connect to **key community points of interest** (e.g., schools, hospitals, grocery stores, major employers, or other key POIs)
 - The service should also connect to “trip drivers” or key centers of trip generations, like **housing centers** (esp. those with high % of car-free households) or **areas with high job density**

Recommendations for the NextGen Bus Project

- 1. Evaluate the potential use-cases for on-demand:**
 - Deliver service in the places where there is limited service available today
 - Address underperforming fixed bus route routes with on-demand transit
 - Provide a solution to the first-mile/last-mile problem
 - Create community circulators to connect potential riders to POIs
- 2. In each location determine which use-case we're addressing**
 - Do the zone demographics, land-use, overlapping fixed route transit, and other factors support the use-case?
- 3. Ensure that on-demand is a good fit operationally**
 - Do the expected passengers per vehicle hour work with on-demand (i.e., 4-8 p/vh)?

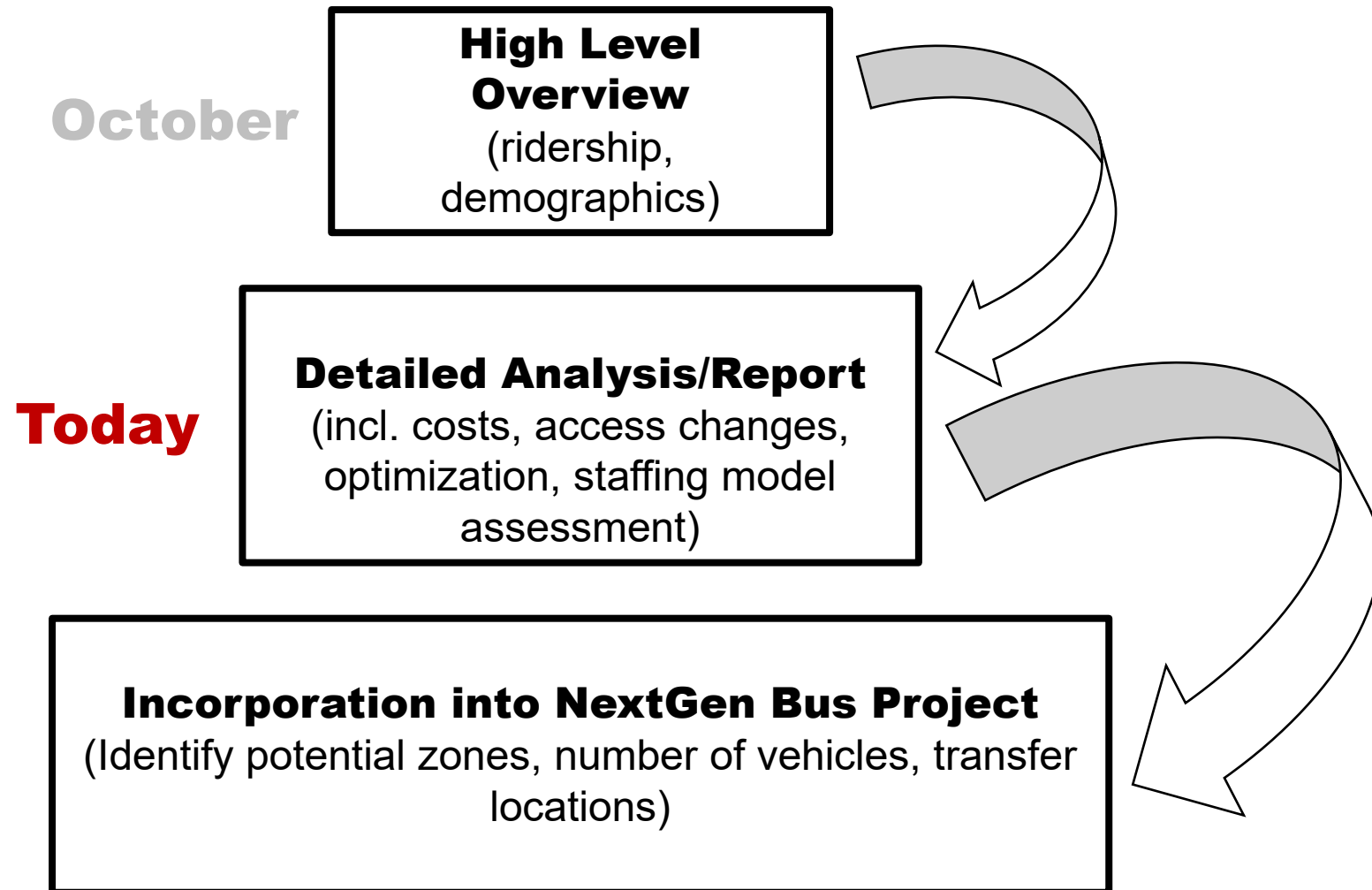
Recommendations for the NextGen Bus Project (cont.)

- 4. Plan cost assumptions based on a MARTA-operated model**
 - Incorporate cost assumptions of MARTA operated model into NextGen Bus Project
 - Develop an RFP for on-demand software services
 - Begin developing an operational plan for new mode of MARTA Bus Operations

Recommendations for MARTA Operations

- **Start commingling ADA and non-ADA trips on on-demand service**
 - There is potential to improve paratransit operations by commingling ADA and non-ADA trips (allowing paratransit patrons to access same day booking)

Reach Next Steps



marta 

Conley

reach

FORT GILLEM

Lake City



 Georgia
Tech.

February 2023

Thank you!

More information at
www.itsmarta.com/reach.aspx

Email us at
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Anthony Thomas
Program Manager, Customer
Experience Innovation
athomas5@itsmarta.com



DBE Presentation on Planning Contracts

February 23, 2023

Paula Nash

Executive Director, Diversity & Inclusion

Purpose

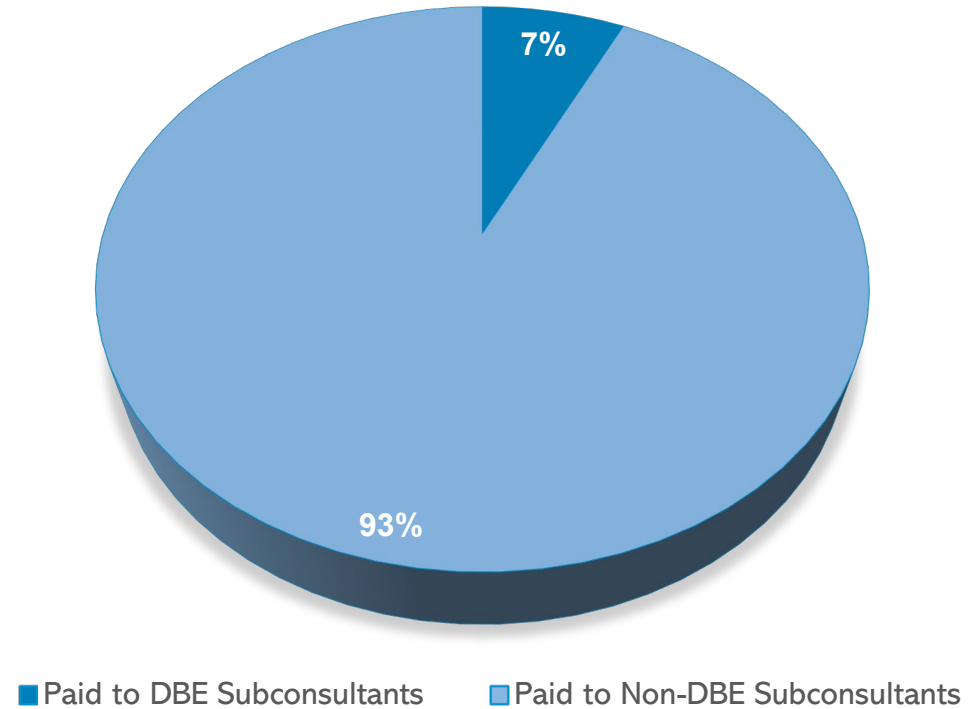
- Provide MARTA Board with comprehensive and transparent information on major Planning contracts and DBE participation.

List of Major Planning Contracts

- GPC – AECOM
- GPC – WSP
- GPC – HNTB
- Regional Bus Stop Signage – Walton Enterprises
- Bus Stop Amenities - Autaco

P39820 Planning Support & Technical Services

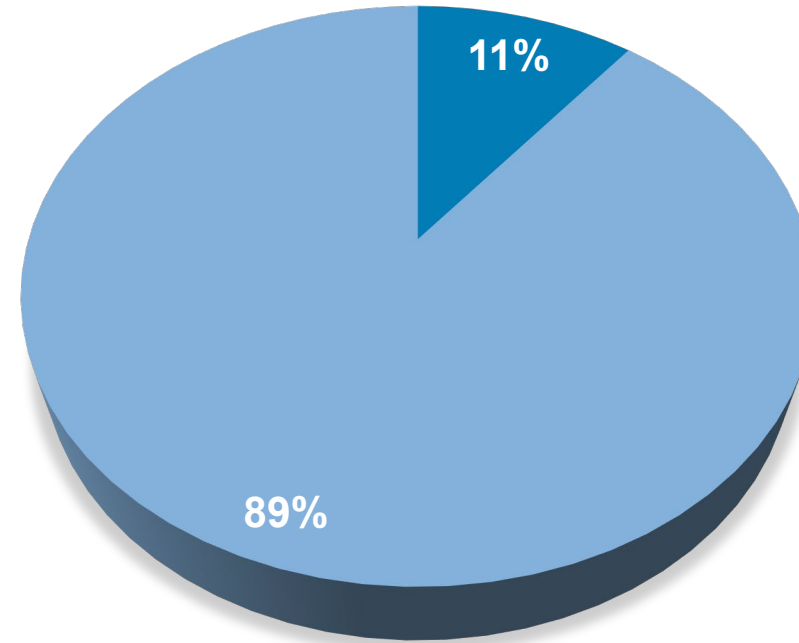
Prime Consultant: AECOM



Paid to Contract*	\$	10,945,864
Paid to DBE Subconsultants*	\$	790,011
DBE Participation Goal Amount	\$	2,736,466
MARTA DBE Goal		25%
AECOM DBE Participation Achieved To Date		7%
Contract Duration		5 years
Contract Effective Date		January 2018
*Payments as reported through 12/2/2022		

P39820 Planning Support & Technical Services

Prime Consultant: WSP



■ Paid to DBE Subconsultants ■ Paid to Non-DBE Subconsultants

Paid to Contract*	\$	9,318,106
Paid to DBE Subconsultants*	\$	1,000,869
DBE Participation Goal Amount	\$	2,329,527

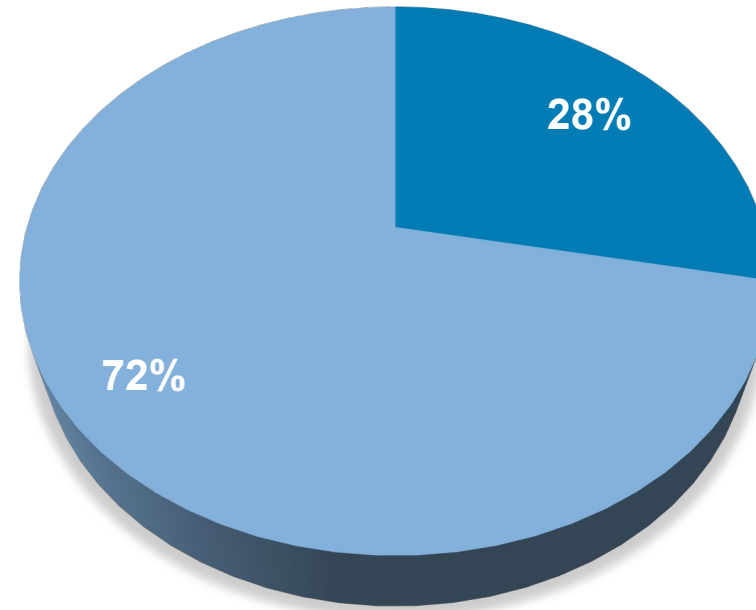
MARTA DBE Goal	25%
WSP DBE Participation Achieved To Date	11%

Contract Duration	5 years
Contract Effective Date	January 2018

*Payments as reported through 12/2/2022.

P39820 Planning Support & Technical Services

Prime Consultant: HNTB



■ Paid to DBE Subconsultants ■ Paid to Non-DBE Subconsultants

Paid to Contract*	\$	37,013,702
Paid to DBE Subconsultants*	\$	10,405,746
DBE Participation Goal Amount	\$	11,104,110

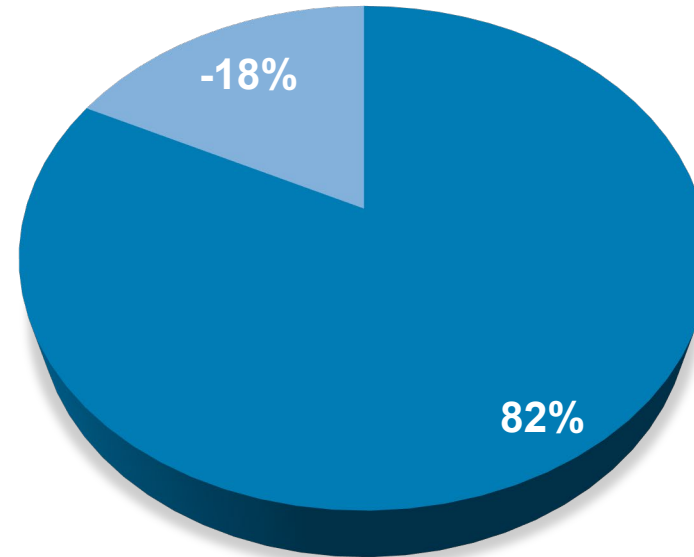
MARTA DBE Goal	25%
HNTB DBE Participation Achieved To Date	28%

Contract Duration	5 years
Contract Effective Date	January 2018

*Payments as reported through 12/2/2022

P40714 Regional Bus Stop Signage

Prime Consultant: Walton Enterprises



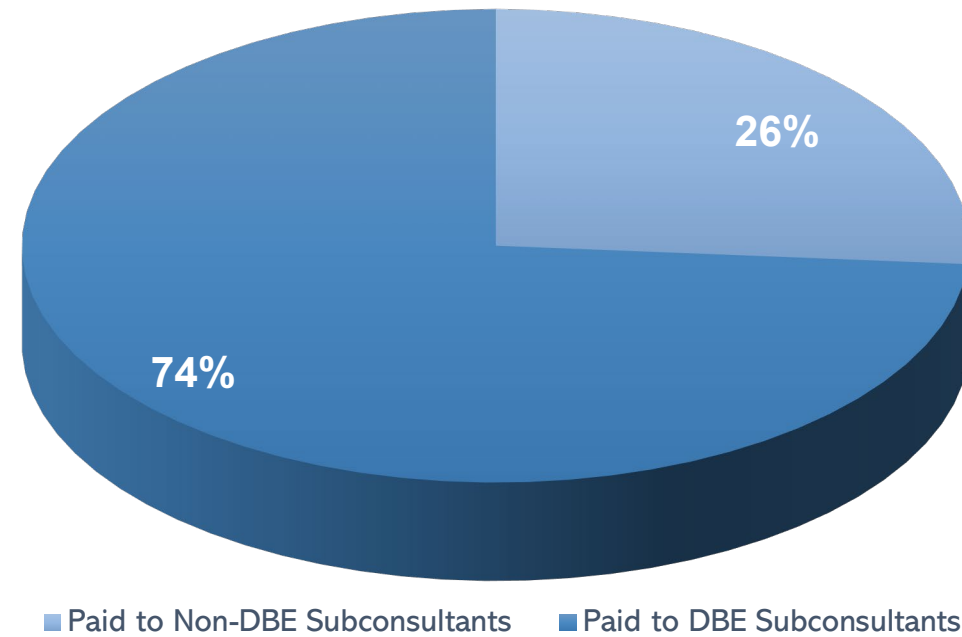
■ Paid to DBE Subconsultants ■ Paid to Non-DBE Subconsultants

Paid to Contract*	\$	54,179
Paid to DBE Subconsultants*	\$	68,857
DBE Participation Goal Amount	\$	10,836
MARTA DBE Goal		20%
WE DBE Participation Achieved To Date		127%
Contract Duration		5 years
Contract Effective Date		September 2019

*Payments as reported through 2/9/2023

P43079 Bus Stop Amenities

Prime Consultant: AUTACO (DBE Firm)



Paid to Contract*	\$	5,583,149
Paid to Non-DBE Subconsultants*	\$	1,464,902
DBE Participation Goal Amount	\$	3,070,732
MARTA DBE Goal		30%
AUTACO DBE Participation Achieved To Date		74%
Contract Duration		5 years
Contract Effective Date		June 2019

*Payments as reported through 2/9/2023.

Deficiency Actions

- Require primes to provide reasons why goal is not being met
- Require a corrective action plan

Reinforcement Actions

- Language changes in bid documents that emphasize the importance of DBE participation
- Inclusion Matters series
- Semi-annual reporting to MARTA Board



Thank You

