



BUS RAPID TRANSIT

LOCALLY PREFERRED ALTERNATIVE



RTA



BUS RAPID TRANSIT
Locally Preferred Alternative

DRAFT

DEVELOPED FOR
THE NEW ORLEANS REGIONAL TRANSIT AUTHORITY



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INTRODUCTION

INTRODUCTION

Led by their mission to provide safe and dependable mobility services, the New Orleans Regional Transit Authority (NORTA) adopted a Strategic Mobility Plan (SMP) in 2017 to guide public transit improvements over the next 20 years. Among the many mobility options within the SMP, Bus Rapid Transit (BRT) was identified as a key service option for the future. In addition to the SMP, future NORTA rapid transit service has been developed in conjunction with the New Orleans Regional Planning Commission's New Links project. This report presents the methods and evaluation process used to identify and select a locally preferred BRT alternative.

The vision for BRT, established within the SMP, is to create the region's first BRT corridor to enhance the transit network with a faster, more frequent high-capacity premium bus transit service. Four goals were developed to achieve this vision.

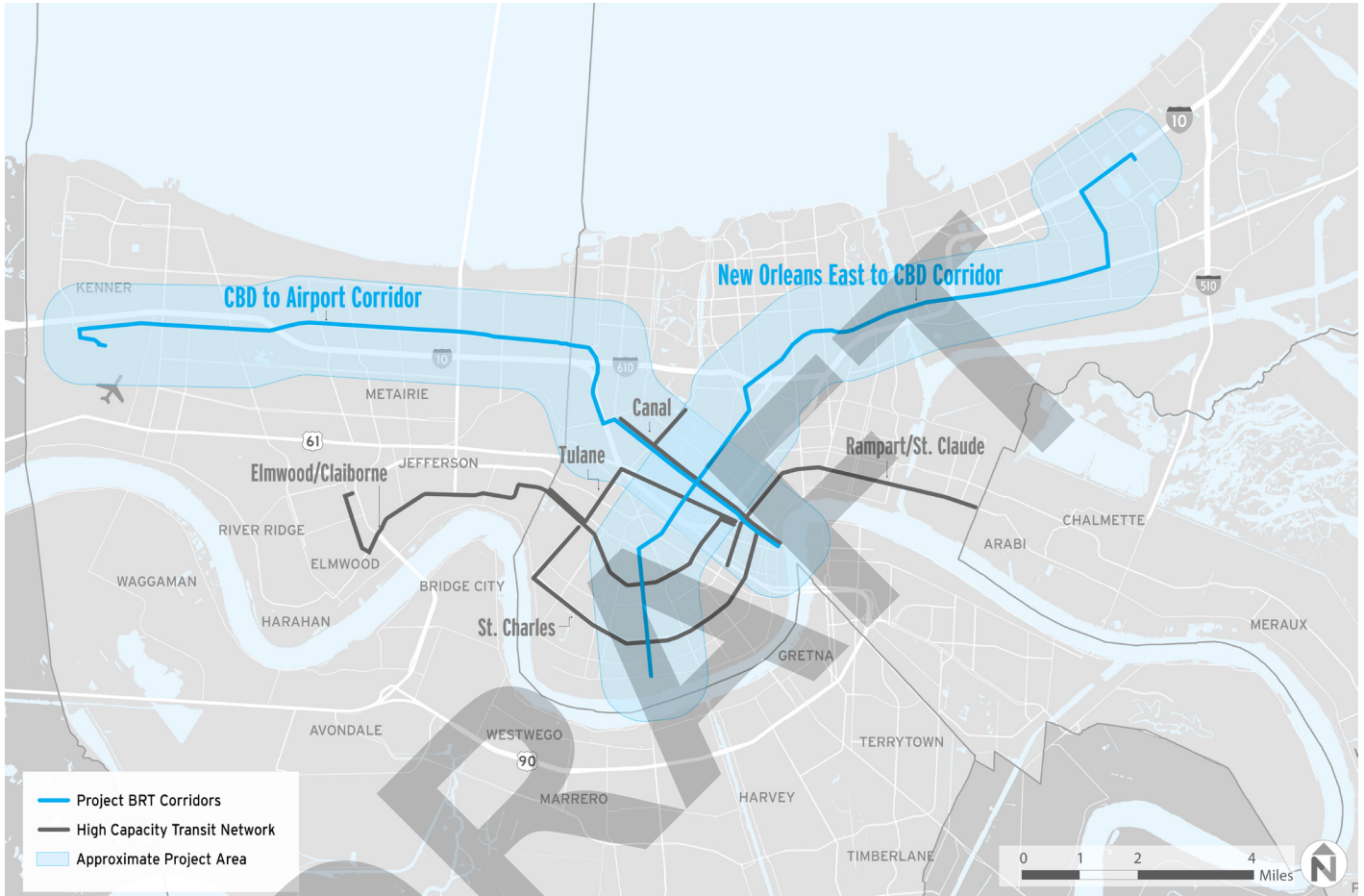
1. Connect to opportunities through fast and efficient service
2. Provide equitable transportation choice to meet the community's needs
3. Promote investment in neighborhoods
4. Support a sustainable and healthy community

BACKGROUND

In 2020 NORTA submitted a Helping Obtain Prosperity for Everyone (HOPE) grant application to the Federal Transit Administration for funding to support the development of design standards and planning for two proposed BRT corridors originating in downtown New Orleans. The application proposed two corridors one connecting New Orleans East to downtown and the other connecting the Airport to Downtown. These potential corridors are shown in the following figure.

Due to funding constraints FTA awarded funding for one corridor. Due to the unique challenges faced by the residents of New Orleans East, NORTA decided to proceed with work on this corridor first and as funding becomes available proceed with planning for the Downtown to the Airport corridor. The BRT corridor extends from New Orleans East across the Danziger Bridge, through the downtown area, and across the Crescent City Connector (CCC) Bridge into the Algiers Neighborhood. Approximately 52,000 people live along the corridor, and around 80,000 jobs are located within a quarter mile of the estimated 15-mile-long BRT route.

New Links is a planning effort led by the New Orleans Regional Planning Commission to re-imagine how public transit connects the parishes of Orleans, Jefferson, and St. Bernard. The goal of New Links is to propose a redesigned bus and streetcar network that makes public transportation work better for riders and the community.



The transportation challenges effecting New Orleans East that were documented in the grant application include the analysis from the New Links project found the majority of riders coming or going to New Orleans East do not have access to a vehicle in their household. Of weekday riders on the 94-Broad to New Orleans East, 53% (2,291) lack access to a vehicle and 28% (1,219) live in one-car households. Other routes providing access and circulation within New Orleans East range from 31-52%. Furthermore, 51% percent of riders on the 94-Broad come from households making less than \$25,000 per year. The New Orleans East area also experiences other unique challenges including Interstate 10, drainage canals and major arterials making it difficult to connect neighborhoods via transit and walking. While many neighborhoods appear to be adjacent on a map, they often require long detours to the next bridge to traverse the gap.

Today, the average New Orleans East resident can only access two percent of the region’s jobs – less than 8,000 – in 30 minutes or less. The RTA’s Strategic Mobility Plan calls for 30-minute transit access to 65% of the regions’ jobs by 2027. The Project’s transit service will provide reliable, high-speed, and direct service to this and other job centers in the region.

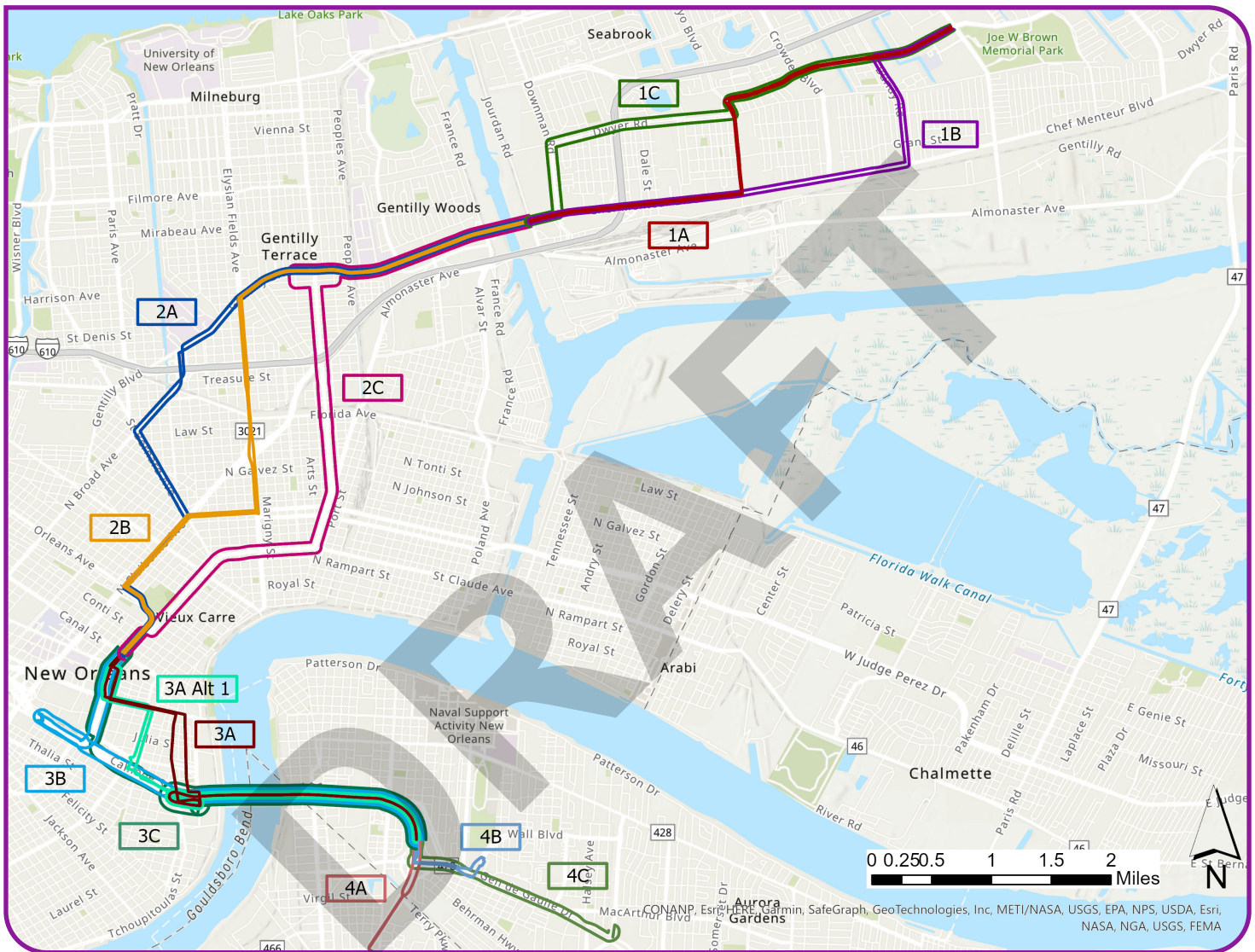
INTRODUCTION

The addition of this new BRT would add to New Orleans' growing transit network, which currently consists of 29 local bus routes and two ferry routes. These routes began operating in late 2022 as part of the New Links project, which re-imaged and re-designed the entire network. NORTA's services served an average of 48,000 weekday riders in 2019.

To support the identification of the LPA 13 possible route alignments across four segments were developed by the project team, as shown in the Alignment Options Map and Table on page seven. The alignment options were identified through extensive conversations with NORTA staff and public engagement efforts that resulted in over 1,000 responses. These same outreach efforts supported the project team in determining a preferred alignment. The preferred alignment is summarized in the Initial Findings section of this report, and described in full detail in the Segment Overview and Locally Preferred Alternative sections.

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ALIGNMENT OPTIONS MAP



ALIGNMENT OPTIONS BY SEGMENT

Segment 1	1A – Wilson Avenue	1B – Bundy Road	1C – Downman Road
Segment 2	2A – St. Bernard/Claiborne	2B – Elysian Fields/Claiborne	2C – Franklin/St. Claude
Segment 3	3A – Tchoupitoulas-Peters/Poydras 3A Alt 1 – St. Charles-Camp/Poydras	3B – Calliope/Loyola	3C – Loyola/HOV
Segment 4	4A – Wilty Terminal	4B – Algiers Park & Ride	4C – Algiers Library

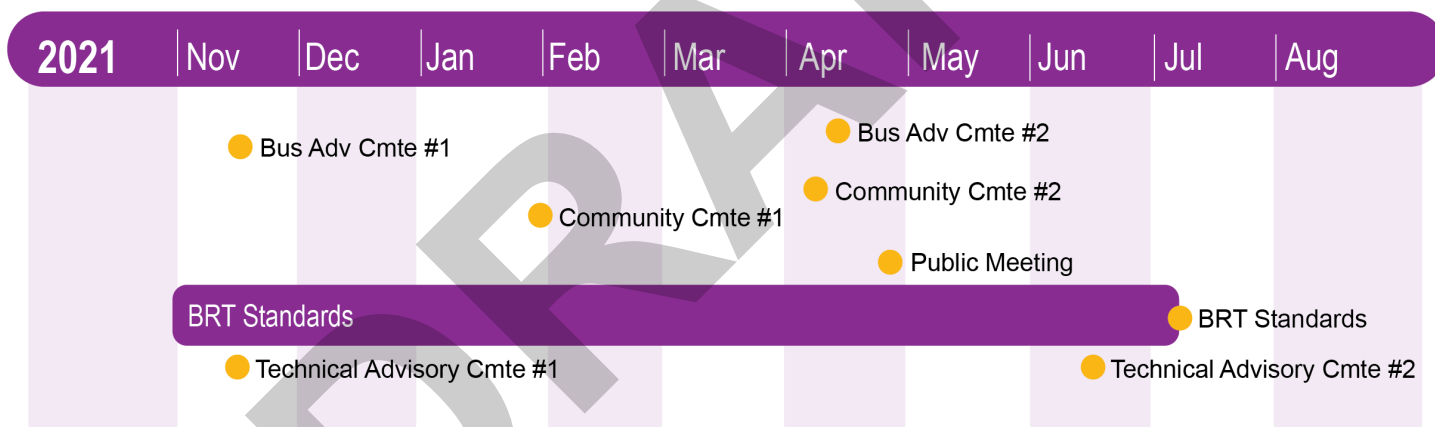


INTRODUCTION

PUBLIC INVOLVEMENT

The public involvement process included input from committee groups and feedback from the general public. The project team created a business advisory committee (BAC), a technical advisory committee (TAC), and a community advisory committee (CAC), which provided a necessary cross-section of technical, private sector, and community expertise for the project. The project team held two BAC meetings, two CAC meetings, two TAC meetings, a technical standards workshop, and three virtual open houses. Project information and event outreach was conducted through both printed and digital formats, giving an opportunity for people to provide feedback in-person and online. This section provides a summary of these meetings. Please refer to Appendix C for more detail.

Public Involvement Timeline



BAC Meetings

The BAC held two events to get input from business members in the community. The first meeting introduced members to the project, how the project came about, and the overall project schedule, presentation shown in Appendix C. The meeting also provided an overview of the engagement strategy that would be used on the project. Utilizing examples from established systems across the country the concept of BRT was introduced. Utilizing Mentimeter as part of the presentation participants were asked for feedback throughout the presentation starting with what was the most important characteristic of BRT for the region. The presentation walked through the different guideway typologies and how those could be implemented. Attendees were then asked what the challenges to implementation would be. The meeting included open dialog that allowed attendees to express their opinions on a range of BRT related topics. The most popular topic was the dedicated lanes for BRT, as attendees wanted to know how RTA would enforce these lanes given “New Orleans’s already poor record of enforcing the HOV lanes and bike lanes.”

The second meeting provided an update on the project status, and shared updates based on feedback provided at the first BAC meeting. The second meeting also focused on gathering feedback on the route alignment options and the transit priority options. Like the first meeting Mentimeter was used to gather attendee opinions on facets of the BRT system that were discussed, presentation shown in Appendix C. To gather feedback the project team utilized similar questions to those that were going to be used on the public survey. The presentation provided the attendees information around the anticipated travel time impacts associated with each guideway type and asked questions about the tradeoffs that would be acceptable, what kind of impacts to auto travel time would be acceptable, and what their preferred guideway treatment would be. Through this discussion attendees indicated support for dedicated lanes as the preferred guideway option, utilizing wide areas of neutral ground to implement them.

CAC Meetings

Two CAC meetings were held that were split between three locations each totaling six meetings. These meetings were held with community members representing Algiers, Gentilly/7th Ward, and New Orleans East. The first set of meetings provided the purpose of the study, background of the planning efforts undertaken by NORTA, and the background of BRT and NORTA's goals for the system as well as a roadmap for future BRT efforts, presentation shown in Appendix C. The presentation for each group was tailored to focus on their respective communities and what they would expect from the project. Utilizing examples from established systems across the country the concept of BRT was introduced. Attendees were asked if they had ever experienced a high-capacity transit system. The project goals were reviewed and feedback was given on what the most important goal for BRT was. The attendees also utilized the examples to identify what tradeoffs they supported for BRT implementation. The feedback from the attendees identified that providing equitable transportation options for the community was most important and utilizing travel lanes was decided on as the preferred tradeoff. The attendees expressed concerns about construction impacts on business and traffic and asked if homeowners would be negatively affected.

The second meeting provided an update on the project status, and shared updates based on feedback provided at the first CAC meetings. The second meeting also focused on gathering feedback on the route alignment options and the transit priority options. Like the first meeting the presentations were tailored to their respective communities, presentation shown in Appendix C. To gather feedback the project team utilized Mentimeter and asked similar questions to those that were going to be used on the public survey. The presentation provided the attendees information around the anticipated travel time impacts associated with each guideway type and asked questions about the tradeoffs that would be acceptable, what kind of impacts to auto travel time would be acceptable, and what their preferred guideway treatment would be. Through this discussion attendees indicated support for dedicated lanes as the preferred guideway option, utilizing wide areas of neutral ground to implement them. For the alignment options the presentation provided statistics about the benefits of each alignment alternative and asked the attendees to rate each option.



INTRODUCTION

TAC Meetings

Two TAC meetings conducted in a workshop format were held with representatives from the City of New Orleans, NORITA, NORPC, Department of Transportation and Development (DOTD), Jefferson Parish, and the Sewerage & Water Board. The initial workshop provided attendees with the project overview, schedule, and engagement strategy. The presentation provided an overview of what BRT is, case studies from around the country, and the FTA definitions of BRT. The main focus of the discussion was to initiate the development of the BRT standards. The presentation walked through the operations, guideways, station design components, technology, vehicles, and branding standards that would be included in the documentation. Throughout the presentation feedback was solicited to determine how the attendees wanted to address each component in the standards. The presentation utilized in this meeting is shown in Appendix C.

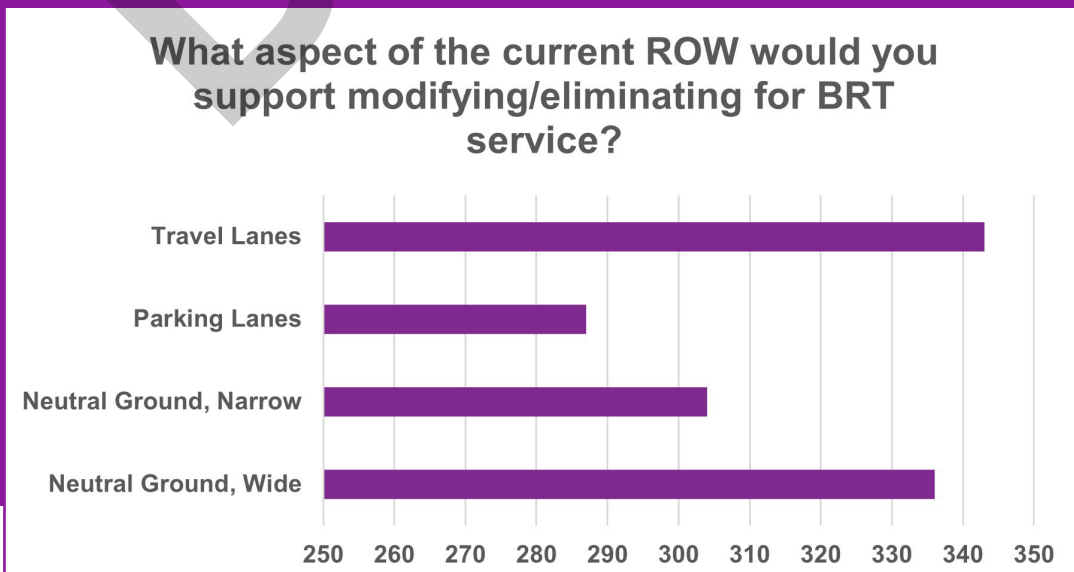
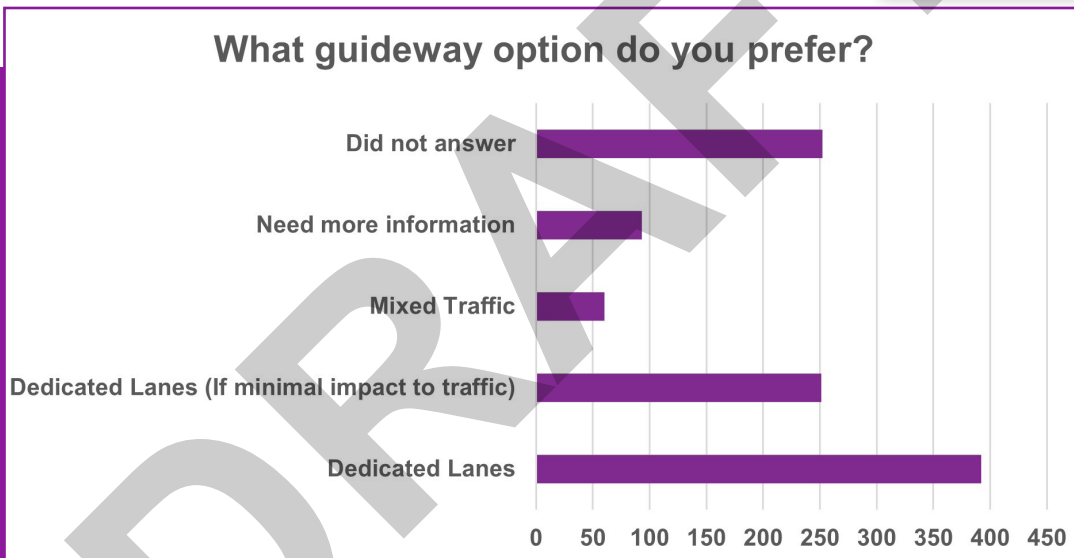
The second TAC meeting focused on provided the attendees with an update on the BRT Standards, and overview of the Tier 1 evaluation process, summary of public feedback, and an overview of the Tier 2 evaluation process. The presentation utilized in this meeting is shown in Appendix C. Throughout the meeting there was a lot of discussion over the dedicated lanes, and how certain segments and options may or may not be able to accommodate them based on roadway width and area characteristics. The attendees also indicated that additional engagement should be undertaken in Algiers around the use of the HOV lanes.

Public Meeting Input

Online surveys and a public meeting provided an opportunity for the project team to ask participants how they felt about the proposed BRT system. This process gathered a total of 1,063 responses from residents across all survey methods, 462 of which were considered “regular riders”, or those that rode public transit at least 1-3 times per week. These respondents were mainly from Uptown, Algiers, or placed themselves in the “Other” category, which included such answers as Kentucky, Alaska, Texas, and many others.



The surveys asked further questions such as how much additional time would be acceptable to add to auto commuting for implementing BRT, what characteristics of BRT are most important, and which routing options were preferred. The feedback revealed support and interest for the implementation of a BRT system, with a focus on fast and reliable service, congestion relief, and improving streets for all users. The public strongly indicated that 10 minutes or less of additional travel time for cars would be acceptable to implement BRT, and that the BRT should utilize a dedicated lane. The public revealed that a BRT system should have these dedicated lanes use or modify travel lanes or utilize available right-of-way (ROW) space.



INTRODUCTION

Stakeholder Engagement Takeaways

General comments/questions received during the public involvement process include, but were not limited to, the following:

- How would bikes and sidewalks be affected?
- What does BRT mean for everyday drivers?
- When will this project be started/finished?
- Why is rail precluded? Why no light/elevated rail? Or monorails?
- Proper shelters should be required at stops in case of rain
- Large trees and neutral ground need to be preserved
- HOV lanes should be used, they seem underutilized
- Worried about auto travel over the CCC bridge if BRT is implemented
- BRT should connect to the Union Terminal/Ferry Terminals
- How is RTA determining the need for this project?
- BRT would be convenient to connect Gentilly with the French Quarter
- How would RTA enforce dedicated lanes?
- Will new bike facilities be a part of this project?
- Would the dedicated lanes be physically separated from traffic?

The BAC, CAC, and TAC identified a preference for ROW usage and key concerns for the new alignment.

ROW and the BRT

BAC

- Prefer to use dedicated lanes for BRT using neutral ground

CAC

- Prefer to use travel lanes or parking lanes for dedicated BRT lanes
- At meeting #2, representatives preferred using the neutral ground for BRT

TAC

- Median running BRT with dedicated lanes, with landscaping and storm water considerations added in
- Tree preservation is a priority

Key Concerns

BAC

- DOTD Cooperation
- Pushback from drivers
- Regional cooperation
- Follow through from RTA
- Cost
- Maintenance of the system

- Accessibility

CAC

- Collaboration with bike share
- Collaboration with New Orleans Complete Streets Coalition
- Access to jobs via BRT
- Sustainability
- Fast and efficient service

TAC

- Frequency of service and number of vehicles
- Equity
- Maintenance of system
- System resiliency
- Integration/collaboration with bike share

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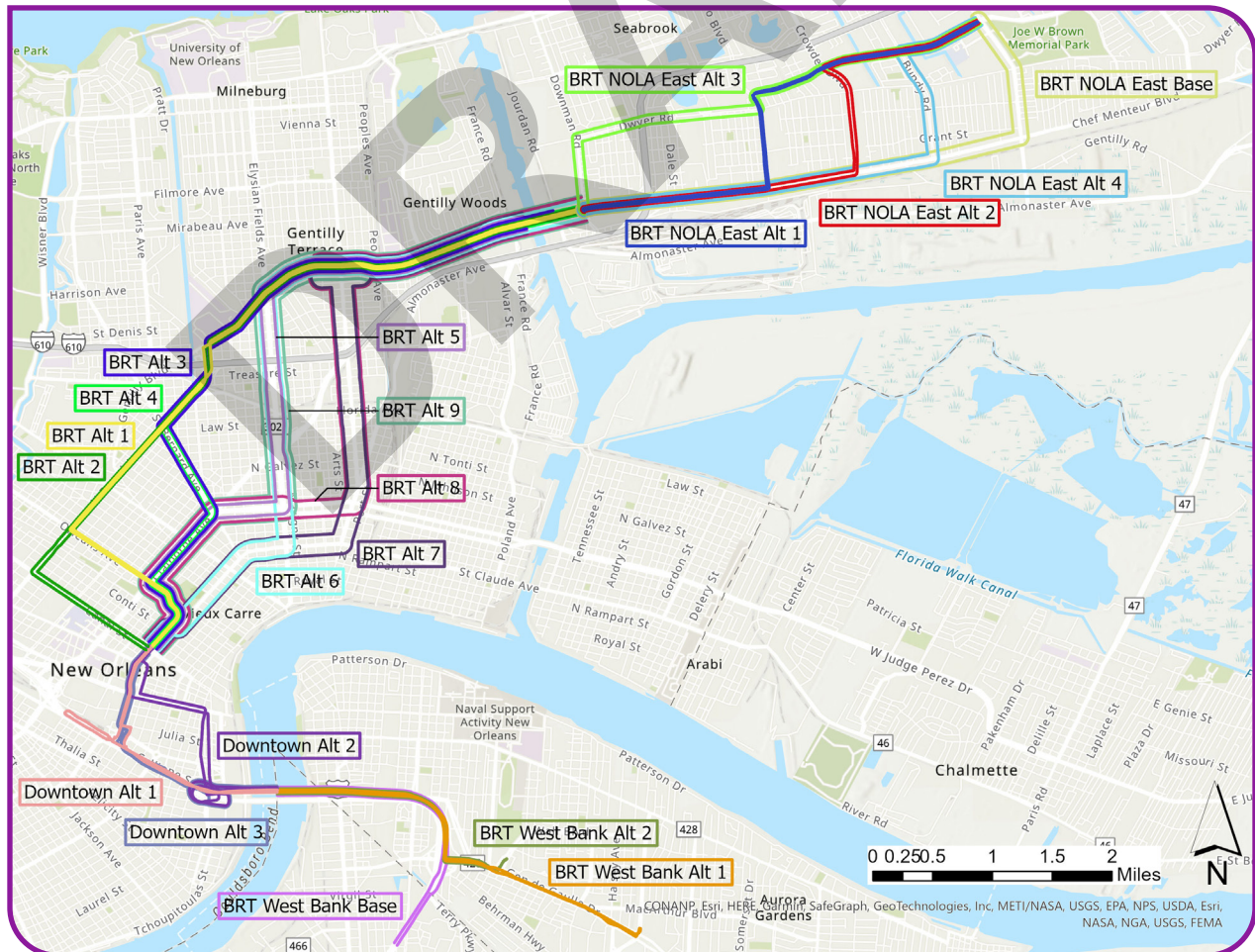
SEGMENT EVALUATION

METHODOLOGY & EVALUATION

The project team, in coordination with NORTA, conducted an evaluation of the proposed BRT system utilizing Excel, ArcGIS, FME, Google Maps, Public Surveying, and a variety of agency specific information to measure options for the network. The BRT alignment was initially divided into four segments. Segment 1: Read Boulevard in New Orleans East to the Danzinger Bridge, Segment 2: The Danzinger Bridge to Canal Street in downtown, Segment 3: Canal Street across the CCC Bridge, and Segment 4: CCC Bridge to Algiers.

The segment analyses included a high-level Tier 1 evaluation and a more detailed Tier 2 evaluation that included a total of 16 criteria across. The Tier 1 evaluation consisted of 11 criteria grouped into four categories: Customer Experience, Sustainability, Land Use Policy, and Implementation and Operations. Tier 1 evaluation resulted in a total of 20 potential alignment options: Five for Segment 1, Nine for Segment 2, and three each for Segments 3 and 4. An overview of the Tier 1 alignments can be found below in the Tier 1 Alignments Map below.

TIER 1 ALIGNMENT OPTIONS MAP



The Tier 1 evaluation established a baseline from which to analyze and compare the various segment options – eventually narrowing down the universe of options to three per segment for the Tier 2 evaluation. The following tables show the scores and rankings for each alignment option in the Tier 1 evaluation. The alignment options highlighted in purple moved into the Tier 2 evaluation.

Segment 1					
	NOLA East Base	NOLA East Alt 1	NOLA East Alt 2	NOLA East Alt 3	NOLA East Alt 4
Total Score	2.10	3.00	2.00	3.10	2.90
Final Ranking	4	2	5	1	3

Segment 2									
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
Total Score	3.63	3.39	3.99	3.41	3.13	4.09	3.91	3.44	3.43
Final Ranking	4	8	2	7	9	1	3	5	6

Segment 3			
	Downtown Alt 1 Loyola	Downtown Alt 2 Tchoupitoulas	Downtown Alt 3 Calliope
Total Score	1.90	2.00	1.70
Final Ranking	2	1	3

Segment 4			
	West Bank Base	West Bank Alt 1	West Bank Alt 2
Total Score	1.80	2.20	1.60
Final Ranking	2	1	3

Tier 2 included an additional six criteria developed to further refine preferred alignment options. Tier 2 criteria include Public Support, Walkability, Existing and Planned Bike Facilities, Local Bus Facilities, Population/Employment within Walksheds, and ROW, and are grouped within the four categories established in Tier 1.

As part of the evaluation process, alignment options were weighted to measure their level of importance to the BRT system, NORTA, and the community. Weighted scores were evaluated, and alignment options were chosen, based on community feedback and goals. A 0 would indicate no importance, and a 3 would indicate a high level of importance.

TIER 1 AND 2 EVALUATION CRITERIA



CUSTOMER EXPERIENCE

The Customer Experience category includes five criteria in relation to riders and integration with the existing public transit system in New Orleans. The five criteria include Footprint, System Connectivity, Transit User Experience, Public Support, and Local Bus Facilities.

- » System Connectivity – Connections to existing transit service (not including the downtown transit center).
- » Transit User Experience – Existing transit riders using stops within a half-mile of the segment option.
- » Public Support – Preferences for the various BRT alignment options and BRT features from NORTA public surveys were incorporated into route option evaluations. The survey included questions on acceptable travel time changes, what features they thought were most important for the proposed BRT network, and other relevant information. Detailed public survey results can be found in the Appendix B.
- » Footprint – Existing conditions of whether the segment option would require full or partial appropriation of the Right of Way (ROW). This criterion, however was later removed due to other more efficient ways of measuring ROW needs.
- » Local Bus Facilities – The bus facilities criteria is the number of shared miles with BRT.



SUSTAINABILITY

The Sustainability category includes three criteria that work together to measure the sustainability of the transit system as a whole. The three criteria include Inbound/Outbound Time, Walkability, and Existing/Planned Bike Facilities.

- » Inbound/Outbound Speed – Measured by the number of minutes to the end of the segment. Utilizing google real time travel time during the peak periods as a base, additional criteria (such as congested speed, dwell time, stop spacing, and acceleration/deceleration time) were added to calculate a more accurate reflection of the time it would take to cross the segment option. This criterion was later changed to represent the potential improvement over mixed traffic transit travel times. A higher percentage means overall improvement in time.
- » Walkability – Walkability ‘Walksheds’ (a half-mile or 10-minute walk from the alignment option) were created to see how much of the area within a half mile area around the alignment options was friendly to pedestrian access.
- » Existing and Planned Bike Facilities – the bike facilities criteria was split into four sections; existing and planned intersects, and existing and planned shared miles. Existing and planned intersects measures the number of planned/existing bike facilities that either intersect or run along the BRT alignment. Existing and planned shared miles measures the number of miles that the BRT alignment shares with the existing and planned bike network.



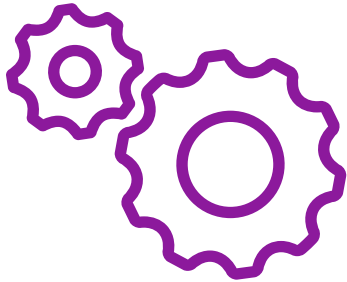
TIER 1 AND 2 EVALUATION CRITERIA

LAND USE POLICY



The Land Use Policy category includes six criteria that measure the relationship between land uses and transit. The six criteria include Planned Developments, Existing Density, Development Patterns, Increasing Service Connections, Connectivity to Trip Generators, and Existing Population/Employment within Walksheds.

- » Planned Development – Measures future population density and future employment density, within a half-mile of the alignment.
- » Existing Density – Measures the existing population and employment density within a half-mile of the alignment.
- » Development Patterns – Measures development trends by showing the number of building permits within a half-mile of the alignment.
- » Increasing Service Connections – Shows connections between planned and existing developments.
- » Connectivity to Trip Generators – Count of connections to key activity centers within a half-mile of the alignment.
- » Existing Population/Employment within Walksheds – Measures the existing population and employment within the walkshed areas.



IMPLEMENTATION AND OPERATIONS

The Implementation and Operations category contains three criteria to measure viability of the project within the larger system. The three criteria include, Potential Capital Cost Implications, ROW Conditions, and Potential Environmental Impacts.

- » Potential Capital Cost Implications – Cost estimates were based on a \$20 million per mile estimate for full dedicated BRT and \$5 million per mile for BRT Lite. These estimates were then converted into a ranking of Standard, High, and Very High costs. It must be stated that these are not exact cost estimates, but simply a high level measure of high, medium, and low costs.
- » ROW Conditions – Measured the supportiveness of existing conditions for the development of a dedicated guideway, Transit Signal Priority (TSP), queue jumps, etc. utilizing ROW width data. This criterion was later removed after a new way of calculating ROW was preferred.
 - » ROW – ROW width calculated based on New Orleans parcel data to measure potential supportiveness of existing conditions for implementation of the BRT system.

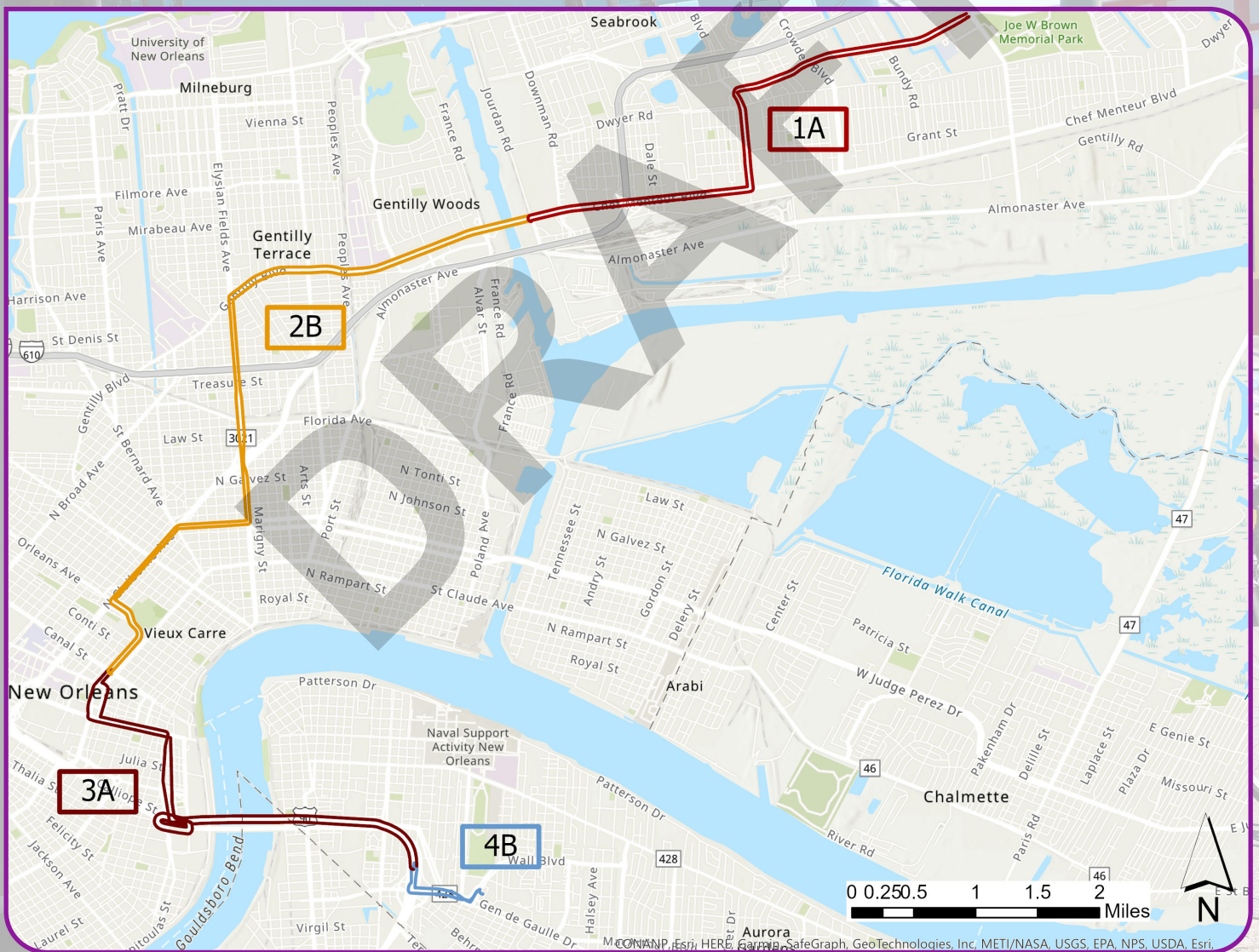
SEGMENT EVALUATION



INITIAL FINDINGS

Segment evaluation identified a preferred alternative route for the new BRT that includes options 1A, 2B, 3A, and 4B. The chosen segments were developed through the two-tier segment evaluation analyses, implementation elements and area characteristics evaluation, and input from NORTA staff. The preferred alternative segment map provides a system-wide view of the four selected segments. A detailed description of the evaluations and information on the alignments can be found in the following sections of this report.

PREFERRED ALTERNATIVE



SEGMENT ONE

Segment 1 extends from Read Boulevard in the East to the Danzinger Bridge in the West on the east side of New Orleans. All alignment options have an endpoint at Read Boulevard near the Joe W. Brown Park, East New Orleans Regional Library, and New Orleans East Hospital.

Destinations along this segment include the New Orleans East Hospital, Joe W. Brown Park, East New Orleans Regional Library, and the Audubon Louisiana Nature Center. Land uses within this segment consist primarily of suburban neighborhoods, with most of the commercial and industrial land uses located along Chef Menteur Highway. The three options provide connections for West Lake Forest, Read Boulevard West, Plum Orchard, Venetian Isles, and Pines Village neighborhoods, as well as various schools, churches, the CSX railyard, Folgers Coffee Plant, and the United States Gypsum Co.

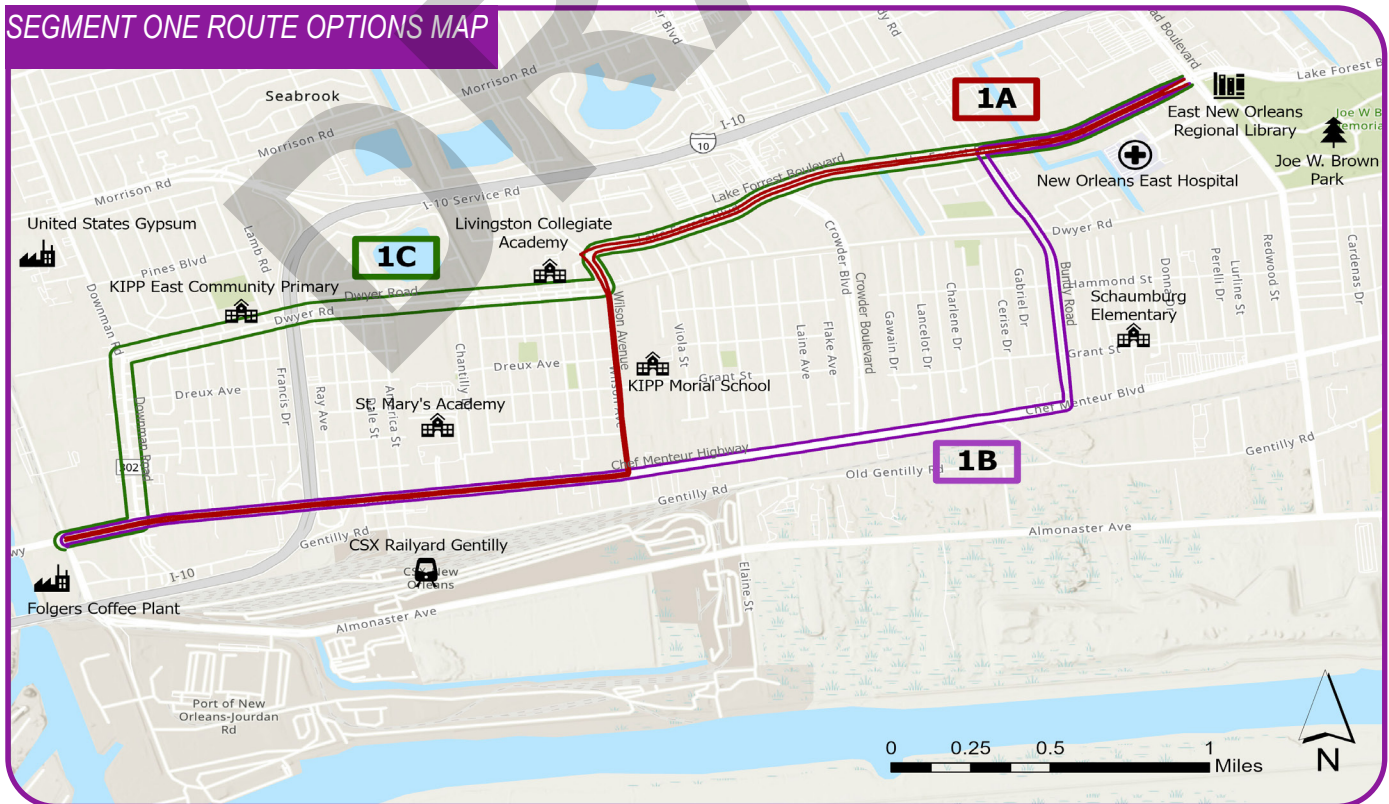
Option 1A - Wilson Avenue
Approximate length: 4.2 miles
Population (1/4 mile): 8,721
Employment (1/4 mile): 1,828

Option 1B - Bundy Road
Approximate length: 4.4 miles
Population (1/4 mile): 11,488
Employment (1/4 mile): 2,439

Option 1C - Downman Road
Approximate length: 4.1 miles
Population (1/4 mile): 8,605
Employment (1/4 mile): 2,188

- » Segment 1's highest scoring alignment is Option 1C Downman Road. Due to local characteristics of this alignment along Dwyer and Downman Roads, namely concerns from Operations that the road width may not be suitable for BRT service, it was decided to go with Option 1A Wilson Avenue instead.

SEGMENT ONE ROUTE OPTIONS MAP



SEGMENT ONE EVALUATION SUMMARY



CUSTOMER EXPERIENCE

Option 1A, tied with the other three sections in system connectivity but scored the lowest in the number of existing riders and shared miles with local service. The public indicated that Option 1C reached many of the important destinations in the area, and that shelters were needed, regardless of which option was chosen.



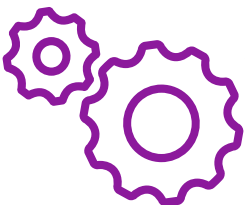
SUSTAINABILITY

Option 1A had a high score in the sustainability criteria in improvement of inbound travel times, walkability scores, and shared miles of existing bike facilities. 1A also had a high score in shared miles of planned bike facilities and tied with the other options in percent improvement of outbound travel time and connections to existing/planned bike facilities. Option 1A, however, ranked lowest in percent improvement of inbound travel time and walkability score. All walkability scores for this segment were around 40%.



LAND USE POLICY

Option 1A, while not the highest ranked in this category, did have high share of building permits along this option, and tied with other options for connections between new and existing developments and connections to key activity centers. 1A ranked the lowest in planned population and existing employment, in addition to population and employment within a walkable distance of the alignment.



IMPLEMENTATION AND OPERATIONS

Option 1C ranked the highest in this category, being associated with the lowest potential capital costs among the options and tied for the supportiveness of ROW. The preferred alternative 1A scored the lowest on supportiveness of ROW. All three options had no environmental impacts associated with them.



SEGMENT ONE EVALUATION

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 1		
							1A	1B	1C
							Wilson Ave	Bundy Road	Downman Road
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/2 mile of route alignments	Population within alignment area	3.0	6,764	11,546	7,646	
			Planned employment within 1/2 mile of route alignments	Employment within alignment area	3.0	3,769	5,604	3,374	
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing Density	Population within 1/2 mile of route alignment	Population near alignment	2.0	8,721	11,488	8,605	
			Employment within 1/4 mile of route alignment	Employment near route alignment	2.0	1,828	2,439	2,188	
		Development Patterns	Development trends	Building permits within 1/4 mile of alignment	2.0	1,708	1,694	1,023	
		Increasing Service Connections	Connection between planned and existing development	Direct connection between new development and existing density	2.0	1	0	1	
	Connectivity to Trip Generators	Connection to key activity centers	Count of connections to key activity centers (RTA to provide essential service layer) within 1/4 mile of route	2.0	5	5	5		
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	1.0	5,804	12,679	10,936	
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	1.0	1,198	2,327	2,007	
	Category Score Summary						1.61	2.44	1.50
Implementation and Operations	Define and select transit projects that are cost-effective	Potential Capital Cost Implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	0.0	2	3	1	
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	17	17	17	
Category Score Summary						1	2	2	

SEGMENT ONE EVALUATION

Alternatives Analysis Evaluation Criteria			Measures		Weight	Segment 1			
						1A	1B	1C	
						Wilson Ave	Bundy Road	Downman Road	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	2.0	5	5	5	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	3.0	1,017	1,022	1,053	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	3.0	1.94	1.74	2.34	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	2.0	3.5	3.6	3.6	
	Category Score Summary						1.25	1.42	2.33
Sustainability			Inbound	# of minutes to end of segment	1.0	6.9%	6.9%	12.9%	
			Outbound	# of minutes to end of segment	1.0	13.8%	13.8%	6.9%	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	3.0	36.75%	37.92%	37.95%	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.		2.0	8.0	6.0	8.0
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	3.8	1.3	3.9
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	17	17	17
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0	6.8	4.9	6.8
Category Score Summary						1.69	1.31	2.23	

SEGMENT TWO

Segment 2 extends from the Danzinger Bridge South along Elysian Fields Avenue to Canal Street.

Destinations along this segment include the New Orleans Baptist Theological Seminary, Dillard University, several schools and libraries, Louis Armstrong Park, the Mahalia Jackson Theatre for the Performing Arts, and Congo Square. Land uses along this segment are predominantly historic urban and suburban residential with spots of commercial in places, particularly along Chef Menteur Highway and Basin Street. The three options provide connections for Gentilly Woods, Desire Area, Gentilly Terrace, St. Roch, St. Claude, Marigny, Bywater, Seventh Ward, Treme Lafitte, French Quarter, Iberville, and the central business district neighborhoods.

Option 2A - St. Bernard

Approximate length: 5.7 miles

Population (1/4 mile): 28,676

Employment (1/4 mile): 18,455

Option 2B - Elysian Fields

Approximate length: 5.8 miles

Population (1/4 mile): 22,608

Employment (1/4 mile): 16,622

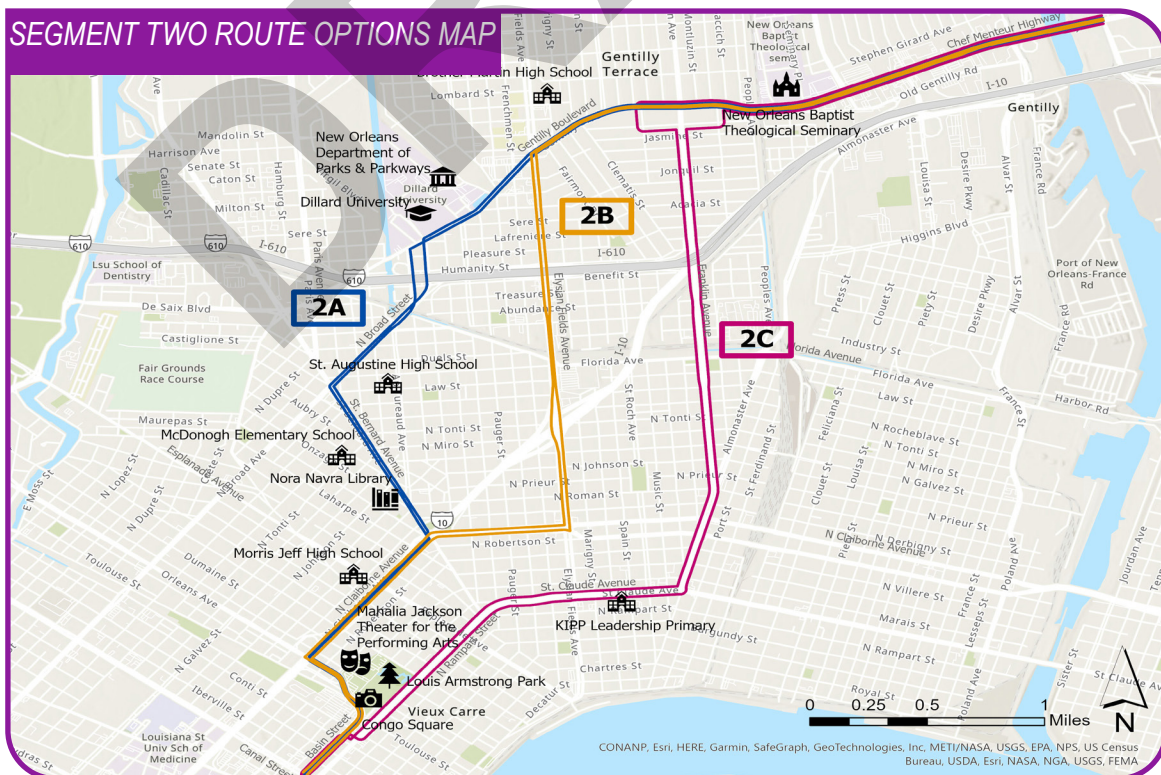
Option 2C - Franklin

Approximate length: 5.5 miles

Population (1/4 mile): 32,857

Employment (1/4 mile): 24,324

- » Segment 2's highest scoring alignment was Option 2A, St. Bernard. The chosen alignment, Option 2B Elysian Fields, scored the lowest but was chosen due to it's wide ROW and already established group of transit riders.



CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, FEMA

SEGMENT TWO EVALUATION SUMMARY



CUSTOMER EXPERIENCE

Option 2A best meets the criteria under this category, with high ranks in existing ridership and public support. Option 2B, the preferred alternative, tied with 2A for system connectivity. 2B did not score highest on any criteria in this category and scored lowest on existing ridership and shared miles with local bus service.

Public survey responses indicated that Option 2A was the best option for them due to its potential to connect with high population areas. The public also noted their interest in the alignment in this area by asking about stop locations and frequency of service. It was specifically noted that preservation of large trees and neutral green space was of high importance.



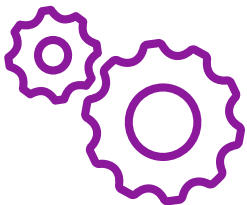
SUSTAINABILITY

Option 2A scored highest in this category, with high ranks in inbound/outbound percent improvement in travel time, connections with planned/existing bike facilities, and shared miles of planned bike facilities. The preferred alternative, 2B, scored highest in walkability score, and lowest in connections with planned/existing bike facilities and shared miles of planned bike facilities. There are several barriers to pedestrian and bike traffic along these alignments, including highways and railroads. All walkability scores for this segment were around 50%.



LAND USE POLICY

Option 2C ranked highest in land use policy, with high scores in existing/future population and employment, nearby building permits, and employment within a walkable distance of the alignment. The preferred alternative, 2B, scored highest for population within walkable distance of the alignment, and number of connections between new and existing developments and connections to key activity centers. 2B scored lowest in future/existing population and employment.



IMPLEMENTATION AND OPERATIONS

The preferred alternative, 2B, scored the highest within this category, with a high level of supportiveness of ROW and no potential environmental impacts. 2B had the highest potential capital costs among the options.



SEGMENT TWO EVALUATION

Alternatives Analysis Evaluation Criteria			Measures		Weight	Segment 2		
						2A	2B	2C
						St Bernard	Elysian Fields	Franklin
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/2 mile of route alignments	Population within alignment area	3.0	28,706	21,869	33,664
			Planned employment within 1/2 mile of route alignments	Employment within alignment area	3.0	21,211	18,106	31,098
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing Density	Population within 1/2 mile of route alignment	Population near alignment	2.0	28,676	22,608	32,857
			Employment within 1/2 mile of route alignment	Employment near route alignment	2.0	18,455	16,622	24,324
		Development Patterns	Development trends	Building permits within 1/4 mile of alignment	2.0	3,537	3,991	4,784
		Increasing Service Connections	Connection between planned and existing development	Direct connection between new development and existing density	2.0	4	4	3
	Connectivity to Trip Generators	Connection to key activity centers	Count of connections to key activity centers (RTA to provide essential service layer) within 1/4 mile of route	2.0	9	9	6	
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	1.0	25,621	37,796	29,453
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	1.0	17,877	21,521	22,239
	Category Score Summary						1.78	1.50
Implementation and Operations	Define and select transit projects that are cost-effective	Potential Capital Cost Implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	0.0	1	3	2
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	11	16	11
Category Score Summary						1	3	1

SEGMENT TWO EVALUATION

Alternatives Analysis Evaluation Criteria			Measures		Weight	Segment 2			
						2A	2B	2C	
						St Bernard	Elysian Fields	Franklin	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	2.0	14	14	12	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	3.0	11,808	11,329	11,512	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	3.0	2.19	2.09	1.78	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	2.0	9.4	9.4	9.9	
	Category Score Summary						2.50	1.58	1.58
Sustainability			Inbound	# of minutes to end of segment	1.0	8.4%	8.2%	8.1%	
			Outbound	# of minutes to end of segment	1.0	8.1%	7.5%	4.2%	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	3.0	46.69%	47.06%	46.93%	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.		2.0	31	25	26
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	9.2	3.9	3.5
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	36	26	30
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0	7.4	7.4	8.9
	Category Score Summary						2.38	1.77	1.85

SEGMENT THREE

Segment 3 extends from Canal Street at Basin Street and across the CCC Bridge.

Destinations along this segment include the Tulane Medical Center, Louisiana State and Tulane Universities, Duncan Plaza, New Orleans City Hall, Caesars Superdome, Smoothie King Center, the Union Terminal, Audubon Butterfly Garden and Aquarium, New Orleans Holocaust Memorial, Ferry Terminal, Lafayette Square, Ogden Museum of Southern Art, US Veterans Memorial, National World War II Museum & Memorial, the New Orleans Convention Center, and the Port of New Orleans. Land uses along this segment are dense, and include commercial, office space, and mixed-use developments. The three options provide connections for the central business district, Central City, Lower Garden District neighborhoods.

- » Segment 3's highest scoring alignment was 3A Alt 1. Option 3A, which scored the second highest of the four available options, was ultimately chosen to avoid potential conflict with the streetcar system.

Option 3A - Tchoupitoulas

Approximate length: 4.4 miles

Population (1/4 mile): 6,868

Employment (1/4 mile): 56,355

Option 3A Alt 1 - St. Charles

Approximate length: 4.4 miles

Population (1/4 mile): 7,237

Employment (1/4 mile): 45,795

Option 3B - Calliope

Approximate length: 4.6 miles

Population (1/4 mile): 13,854

Employment (1/4 mile): 81,319

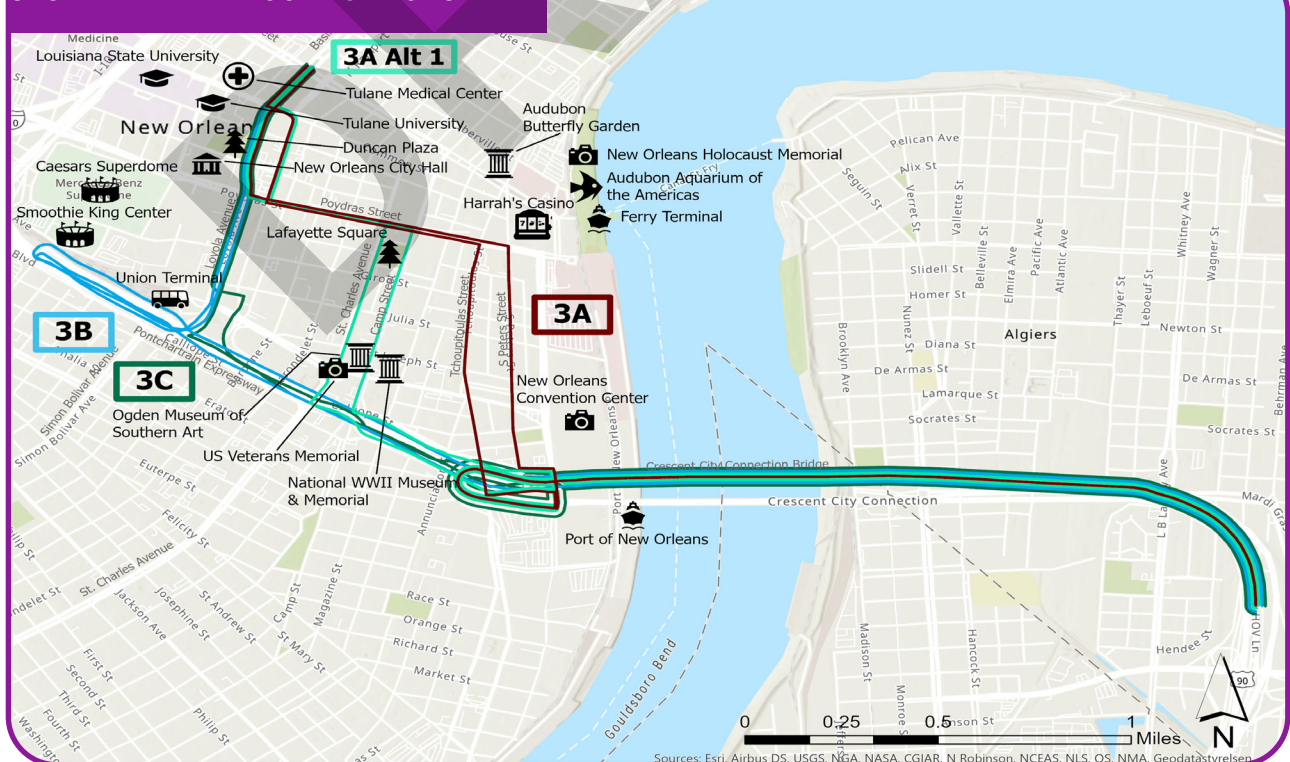
Option 3C - Loyola/HOV

Approximate length: 4.6 miles

Population (1/4 mile): 7,051

Employment (1/4 mile): 38,461

SEGMENT THREE ROUTE OPTIONS MAP



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NIS, OS, NMA, Geodatasrvlens

SEGMENT THREE EVALUATION SUMMARY



CUSTOMER EXPERIENCE

3A Alt 1 best fit the category, with a high ranking in shared miles with local bus facilities and tied with the preferred alternative 3A for public support. 3A scored highest in existing ridership but scored lowest in system connectivity.

Public survey responses indicated that 3A was the best option due to its potential to serve areas with high population and employment densities. Residents also mentioned that BRT could utilize the HOV lanes, and that connections with Union Terminal and the ferries should be considered. There were many concerns about travel times over the CCC bridge should BRT be implemented.



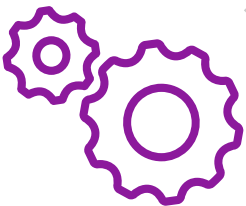
SUSTAINABILITY

Option 3B scored highest in this category, with high scores in percent inbound/outbound travel time improvements. The preferred alternative, 3A, scored highest in shared miles of planned bike facilities and lowest in percent improvement of outbound travel time. Walkability scores ranged from around 40% for options 3B and 3C, and around 65% for Options 3A and 3A Alt 1.



LAND USE POLICY

3B ranked highest in land use policy, scoring well in future/existing population and employment. The preferred alternative, 3A, scored highest in connections between new and existing developments, but scored lowest in existing population near the alignment and connectivity to key activity centers.



IMPLEMENTATION AND OPERATIONS

3B scored highest, with a high rank in all three criteria of this category: potential costs, environmental impacts, and supportiveness of ROW. The preferred alternative 3A had the highest potential capital costs and scored lowest on supportiveness of ROW.



SEGMENT THREE EVALUATION

Alternatives Analysis Evaluation Criteria		Measures			Weight	Segment 3			
						3A	3A Alt 1	3B	3C
						Tchoupitoulas	St Charles	Calliope	Loyola-HOV
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/2 mile of route alignments	2044 Population within alignment area	3.0	9,789	10,185	17,100	9,101
			Planned employment within 1/4 mile of route alignments	2044 Employment within alignment area	3.0	70,254	54,137	83,511	41,886
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing Density	Population within 1/4 mile of route alignment	Population near alignment	2.0	6,868	7,237	13,854	7,051
			Employment within 1/4 mile of route alignment	Employment near route alignment	2.0	56,355	45,795	81,319	38,461
		Development Patterns	Development trends	Building permits within 1/4 mile of alignment	2.0	3,572	3,943	3,103	3,210
		Increasing Service Connections	Connection between planned and existing development	Direct connection between new development and existing density	2.0	21	19	11	11
		Connectivity to Trip Generators	Connection to key activity centers	Count of connections to key activity centers (RTA to provide essential service layer) within 1/4 mile of route	2.0	4	4	5	5
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	1.0	5,970	9,888	2,611	9,978
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	1.0	66,242	79,982	37,198	85,332
	Category Score Summary						2.39	2.61	2.89
Implementation and Operations	Define and select transit projects that are cost-effective	Potential Capital Cost Implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	0.0	4	3	1	2
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	6	6	9	7
Category Score Summary						1	1	4	3



SEGMENT THREE EVALUATION

Alternatives Analysis Evaluation Criteria			Measures		Weight	Segment 3			
						3A	3A Alt 1	3B	3C
						Tchoupitoulas	St Charles	Calliope	Loyola-HOV
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	2.0	7	10	9	14
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	3.0	13,976	13,515	10,921	11,110
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	3.0	2.17	2.17	1.93	1.95
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	2.0	2.8	3.7	2.1	3.3
	Category Score Summary						2.58	3.17	1.17
Sustainability			Inbound	# of minutes to end of segment	1.0	35%	35%	45%	25%
			Outbound	# of minutes to end of segment	1.0	19%	19%	32%	23%
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	3.0	65.95%	68.42%	40.03%	41.94%
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	2.0	16	20	14	20
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.	2.0	1.6	1.2	1.8	1.8
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	16	20	11	17
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.	2.0	2.1	1.5	0.8	0.9
Category Score Summary						2.46	2.85	1.77	2.46

SEGMENT FOUR

Segment 4 extends from the off/on ramp of the Pontchartrain Expressway to one of three end points; Option 4A ends at the Wilty Terminal, 4B ends at the Algiers Park & Ride, and 4C ends at the Algiers Regional Library. The three options provide connections for the Behrman, Gretna, Terrytown, and Tall Timbers-Brechtel neighborhoods.

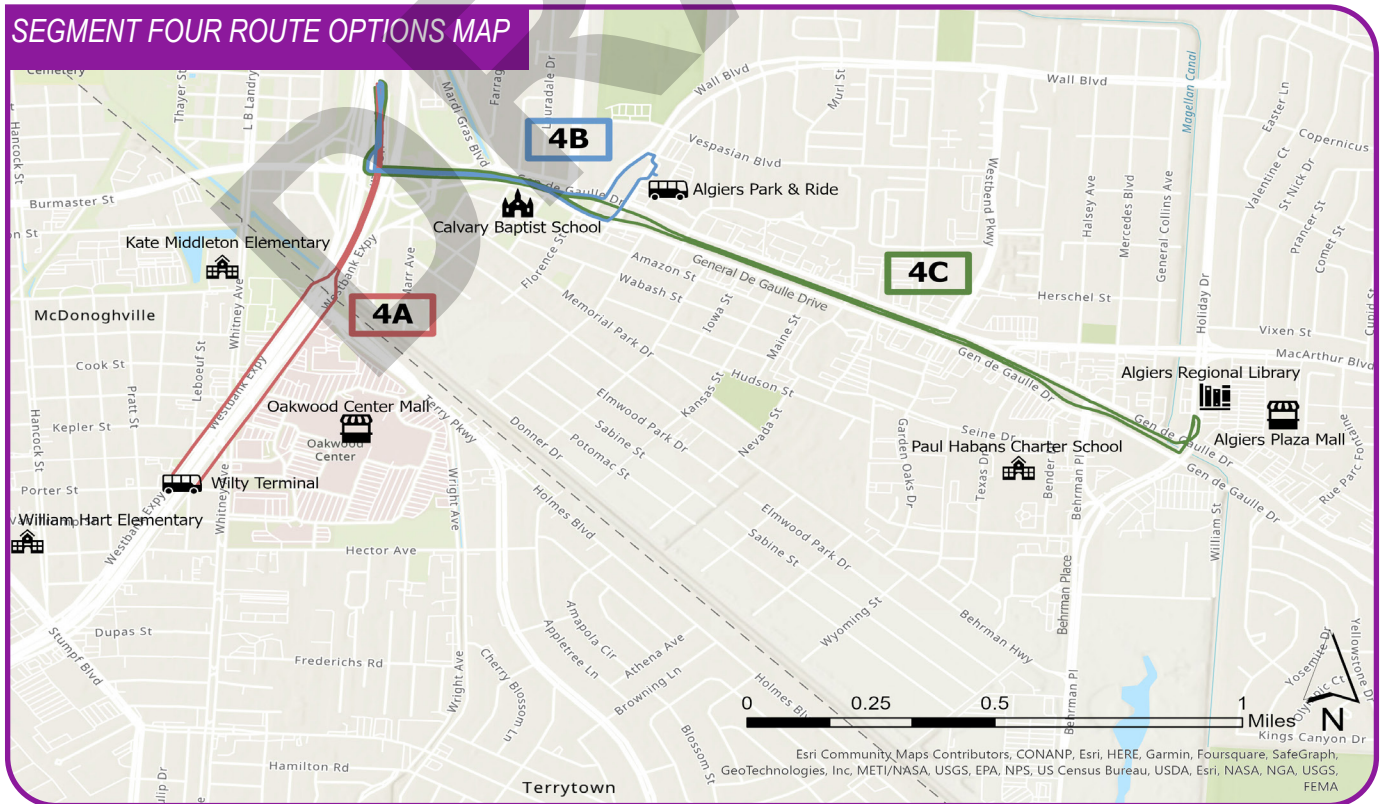
Destinations along these alignment options include several schools, the Oakwood Center Mall, Calvary Baptist School, the Algiers Regional Library, and the Algiers Plaza Mall. Land uses along this segment are generally a mix of historic urban and suburban residential neighborhoods, with most commercial spaces located along General De Gaulle Drive.

Option 4A - HOV - Wilty
 Approximate length: 1 mile
 Population (1/4 mile): 4,057
 Employment (1/4 mile): 4,726

Option 4B - HOV - PNR Lot
 Approximate length: 0.9 miles
 Population (1/4 mile): 4,268
 Employment (1/4 mile): 1,376

Option 4C - HOV - Algiers Library
 Approximate length: 1.9 miles
 Population (1/4 mile): 9,741
 Employment (1/4 mile): 4,188

- » Segment 4's highest scoring alignment was 4C Algiers Library due to how far it travels into Algiers. Option 4B Algiers Park & Ride Lot was decided on instead due to the presence of the already existing Park & Ride facility, which could be used to fuel usage of the BRT system. 4C is not out of the picture, as it was noted to be a possible future expansion for the BRT system.



SEGMENT FOUR EVALUATION SUMMARY



CUSTOMER EXPERIENCE

The preferred alternative, 4B, tied with 4C for system connectivity. Survey responses indicated that Option 4C was the most popular, due to its location deep into Algiers reaching more people and jobs. There was an almost even number of other comments indicating that 4A and 4B were also good choices, since they already serve transit users.



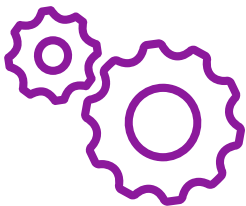
SUSTAINABILITY

Segment 4C again best fit the category, scoring highly in a majority of the criteria, including outbound percent improvement in travel time, walkability score, and the number of shared miles with existing bike facilities. 4B, the preferred alternative, scored moderately in all the categories and tied for the highest ranking in percent improvement in outbound travel time and the number of planned connections to the bike network. 4B scored lowest in the number of connections and shared miles with the existing bike network and the number of shared miles of planned bike facilities.



LAND USE POLICY

Segment 4C ranked highest in land use policy, scoring well in the majority of criteria. The preferred alternative 4B again scored moderately in most criteria but tied with the other options for the number of connections to key activity centers. Due to the extremely short length of Option 4B, it scores relatively lowly in the majority of criteria, such as future population/employment and employment within walkable distance of the alignment.



IMPLEMENTATION AND OPERATIONS

4A scored highest in this category, ranking highest on supportiveness of ROW for BRT and having the lowest potential capital costs. The preferred alternative 4B scored lowest on supportiveness of ROW for BRT, and all three options had no potential environmental impacts.

SEGMENT FOUR EVALUATION

Alternatives Analysis Evaluation Criteria		Measures			Weight	Segment 4			
						4A	4B	4C	
						HOV - Wilty	HOV - Algiers Library	HOV - PNR Lot	
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/2 mile of route alignments	Population within alignment area	3.0	5,164	4,845	10,551	
			Planned employment within 1/2 mile of route alignments	Employment within alignment area	2.0	4,552	2,062	4,160	
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing Density	Population within 1/2 mile of route alignment	Population near alignment	2.0	4,057	4,286	9,741	
			Employment within 1/2 mile of route alignment	Employment near route alignment	2.0	4,726	1,376	4,188	
		Development Patterns	Development trends	Building permits within 1/2 mile of alignment	2.0	67	197	425	
		Increasing Service Connections	Connection between planned and existing development	Direct connection between new development and existing density	0.0	0	1	2	
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	2.0	2,497	3,145	10,281	
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	3.0	3,817	1,406	4,321	
	Category Score Summary						1.78	1.39	2.50
	Implementation and Operations	Define and select transit projects that are cost-effective	Potential Capital Cost Implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	0.0	1	2	3
Providing High-Quality Service		ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	18	13	14	
Category Score Summary						3	1	2	



SEGMENT FOUR EVALUATION

Alternatives Analysis Evaluation Criteria			Measures		Weight	Segment 4			
						4A	4B	4C	
						HOV - Wilty	HOV - Algiers Library	HOV - PNR Lot	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	2.0	6	7	7	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	3.0	761	224	501	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	2.0	1.93	2.16	2	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	2.0	3.6	3.6	5.7	
	Category Score Summary						1.50	1.83	2.00
Sustainability			Inbound	# of minutes to end of segment	1.0	0.0%	28.1%	15.0%	
			Outbound	# of minutes to end of segment	1.0	0.0%	0.0%	0.0%	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	2.0	26.17%	28.58%	40.50%	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.		2.0	0	4	6
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	0.0	0.2	0.2
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	1	4	10
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0	0.0	0.2	2.6
Category Score Summary						1.00	2.00	2.62	

LOCALLY PREFERRED ALTERNATIVE

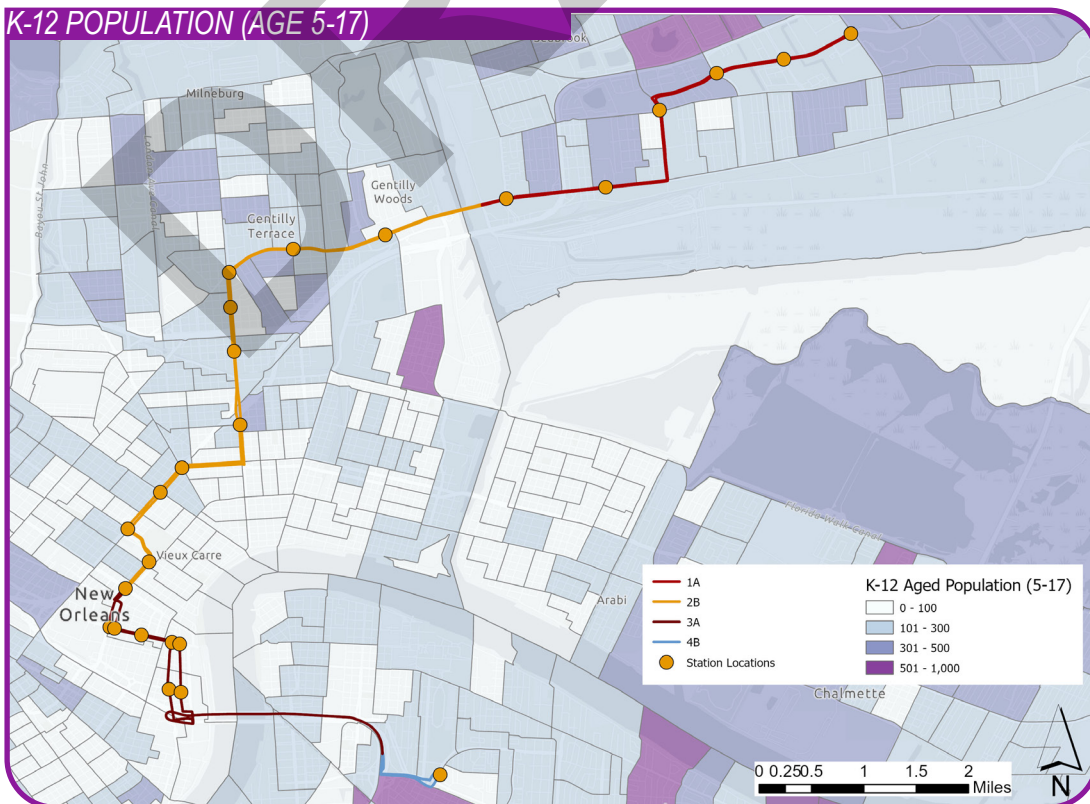
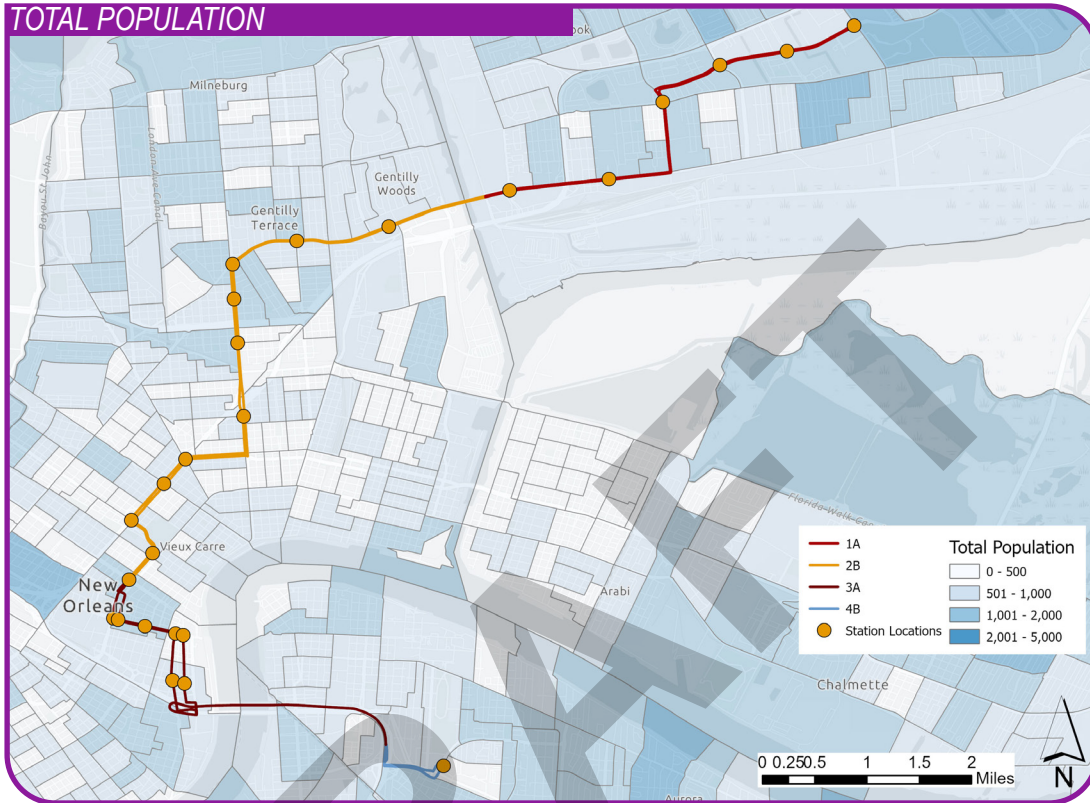
LOCALLY PREFERRED ALTERNATIVE (LPA)

The previously identified segments represent the preferred alternative as determined through the engagement process and technical evaluation. The preferred alternative has been identified as the LPA for the BRT corridor connecting New Orleans East with downtown and on to Algiers, totaling approximately 15 miles in length. The LPA contains the follow key statistics:

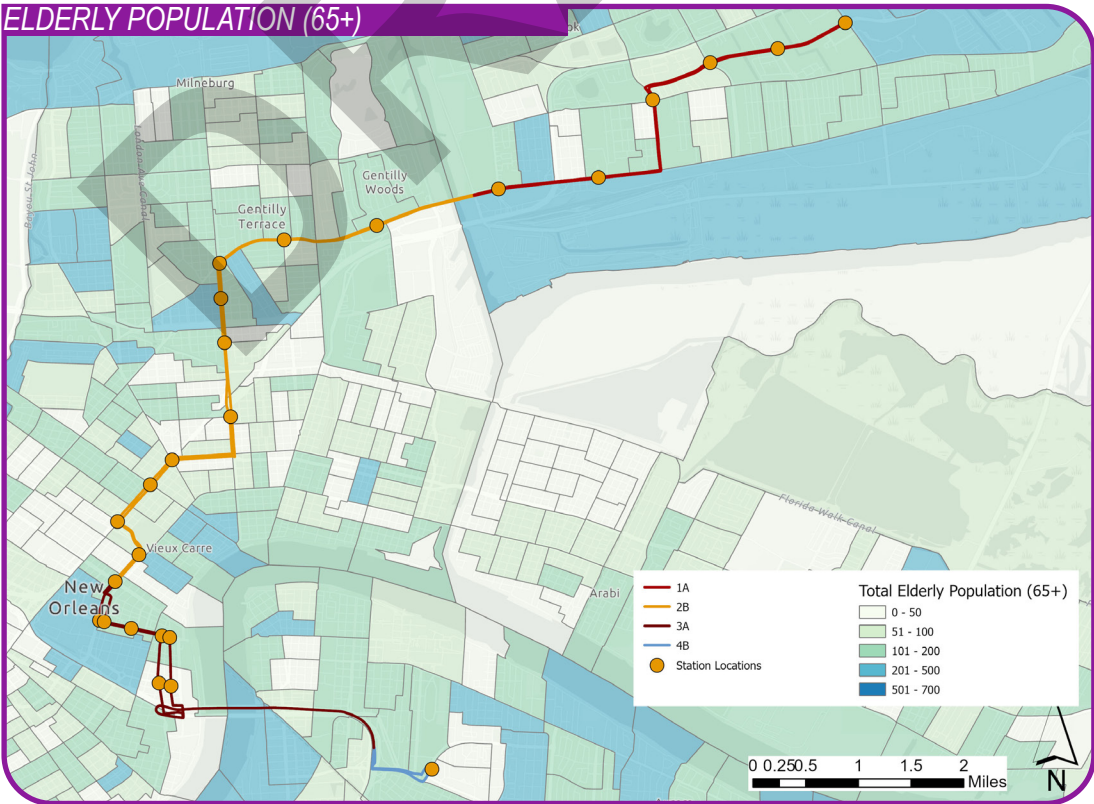
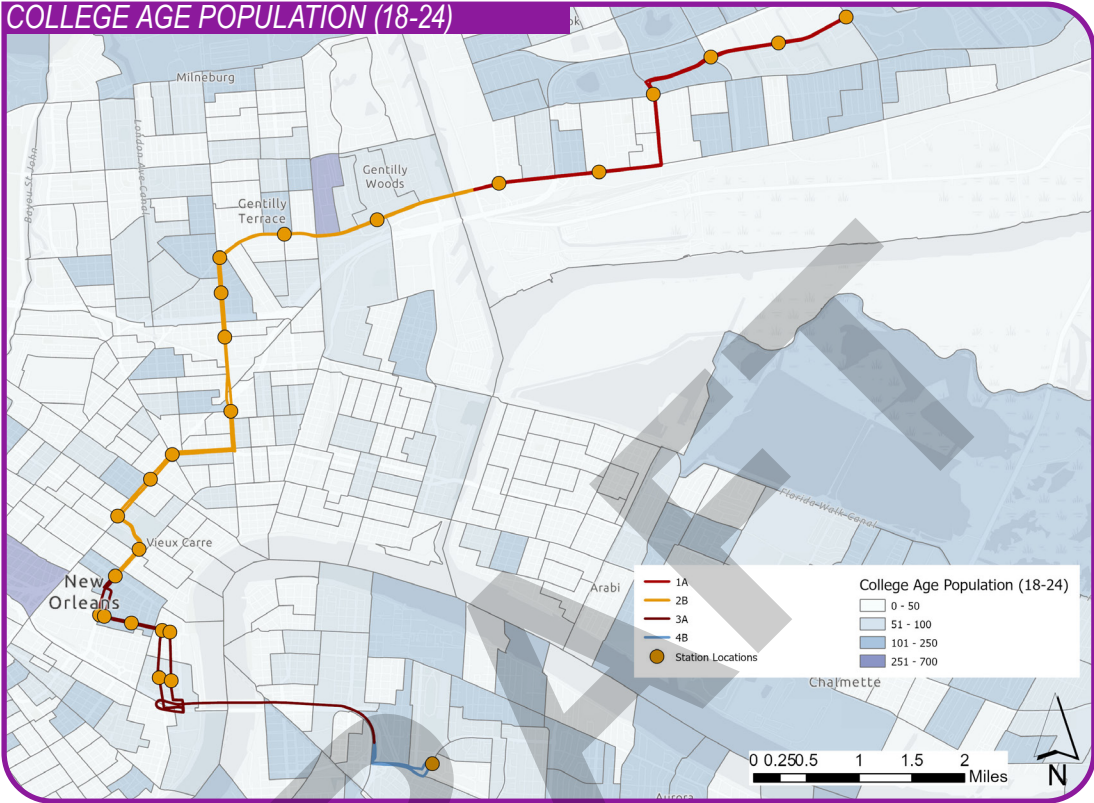
- Population within walkable distance (1/2 mile): 30,663
- Employment within walkable distance (1/2 mile): 68,258
- Existing Ridership on local service: 18,113
- Average walkability score: 45%
- Connections to key activity centers (1/2 mile): 18

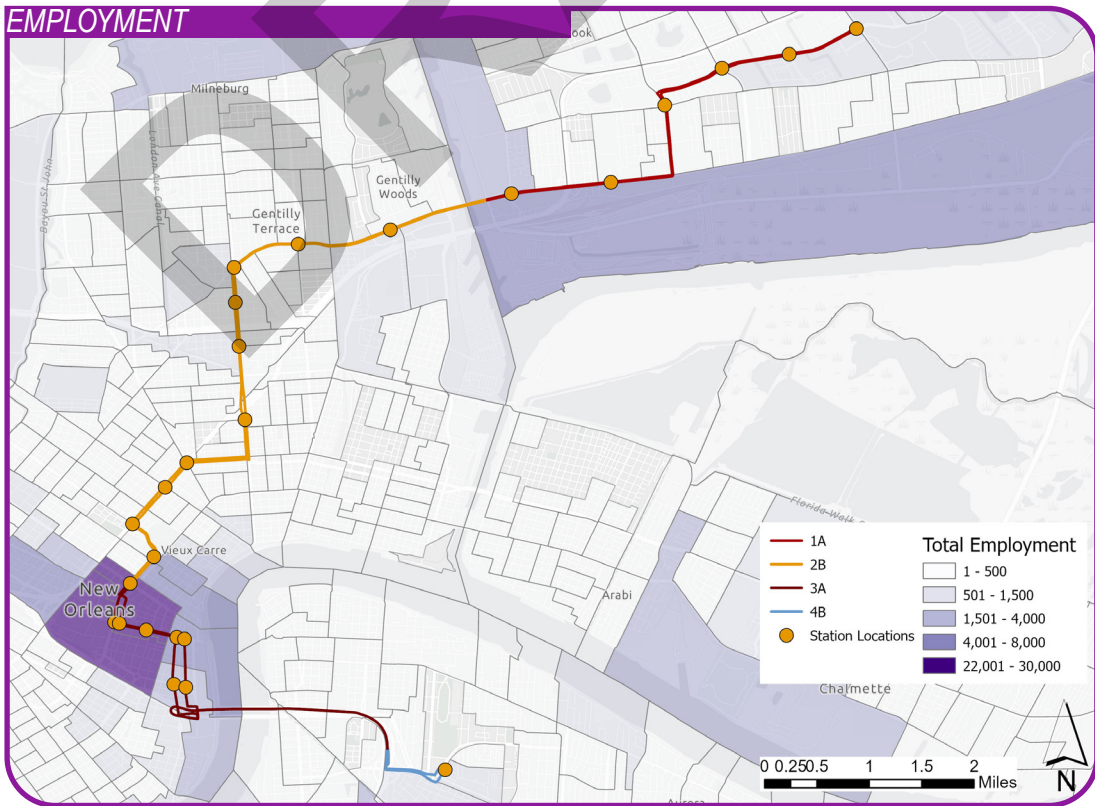
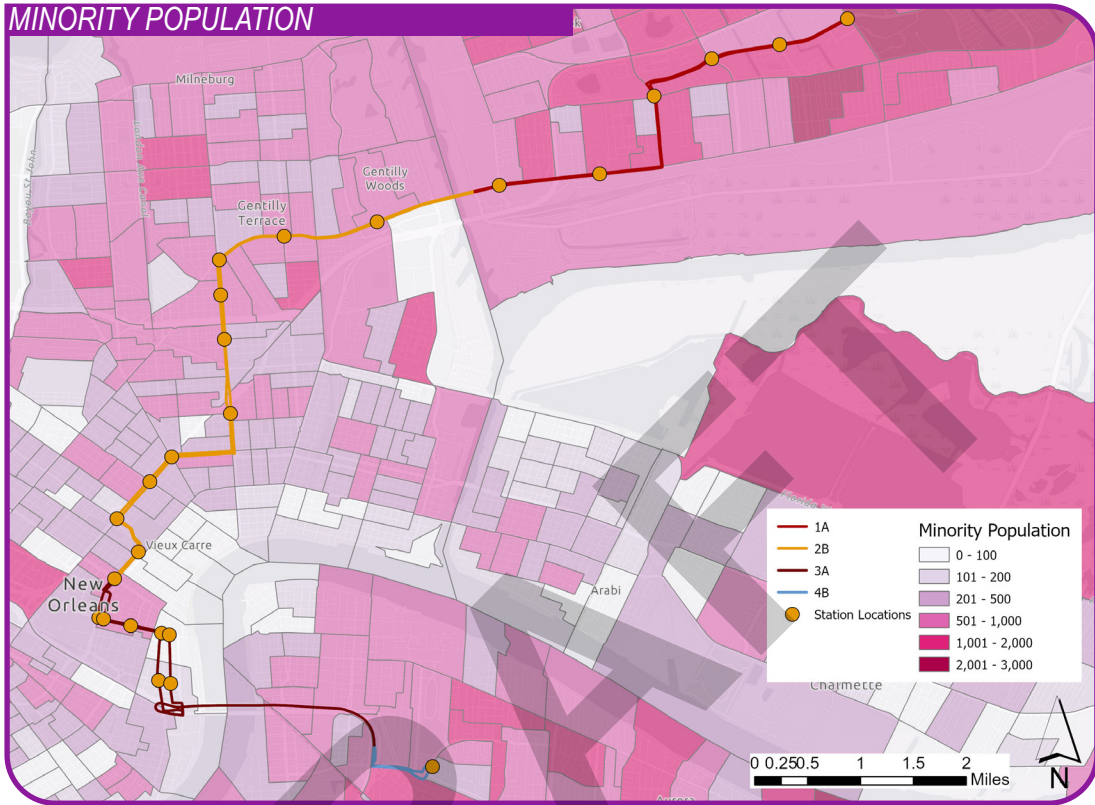
More detailed demographics pertaining to the LPA that are within a half mile of the corridor can be found in the table below and in the graphics on the following pages.

LPA Demographics (1/2 Mile)	
Total Population	70,653
K-12 Population (5-17)	12,087
College Age Population (18-24)	4,558
Elderly Population (65+)	8,617
Percent Minority	79.8%
Total Employment	91,111
Average Median Household Income	\$36,074
Zero Car Households	7,862
Population below the Poverty Level	20,973

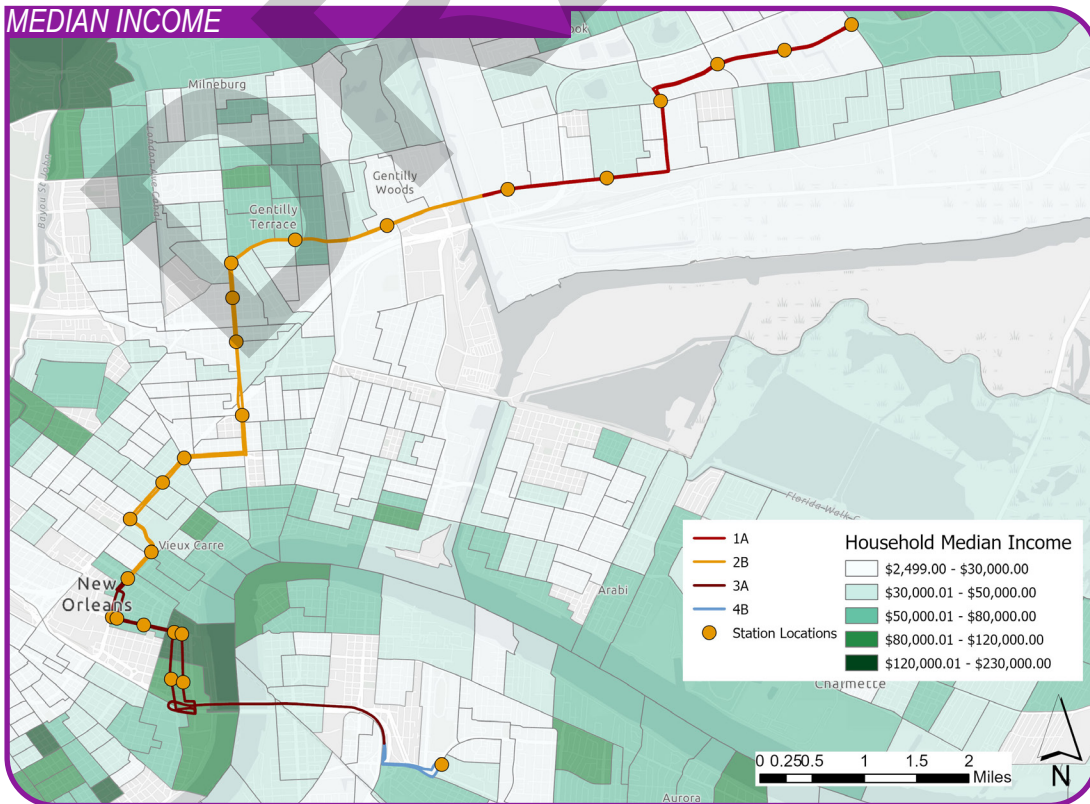
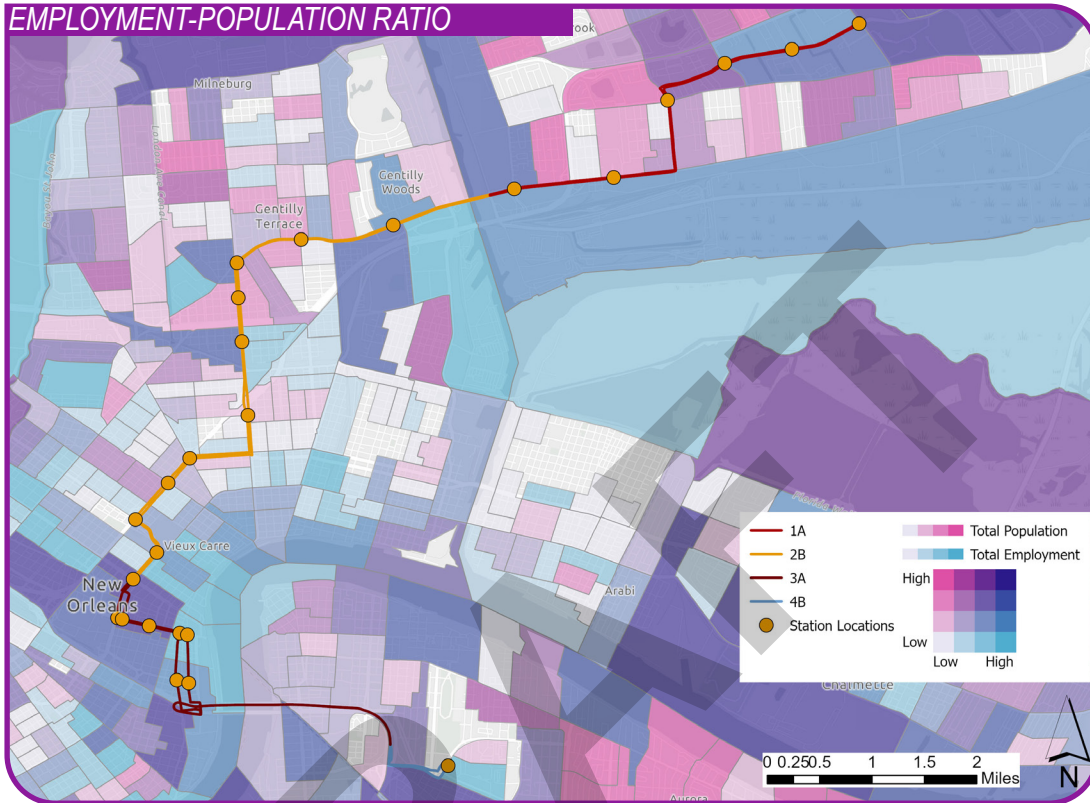


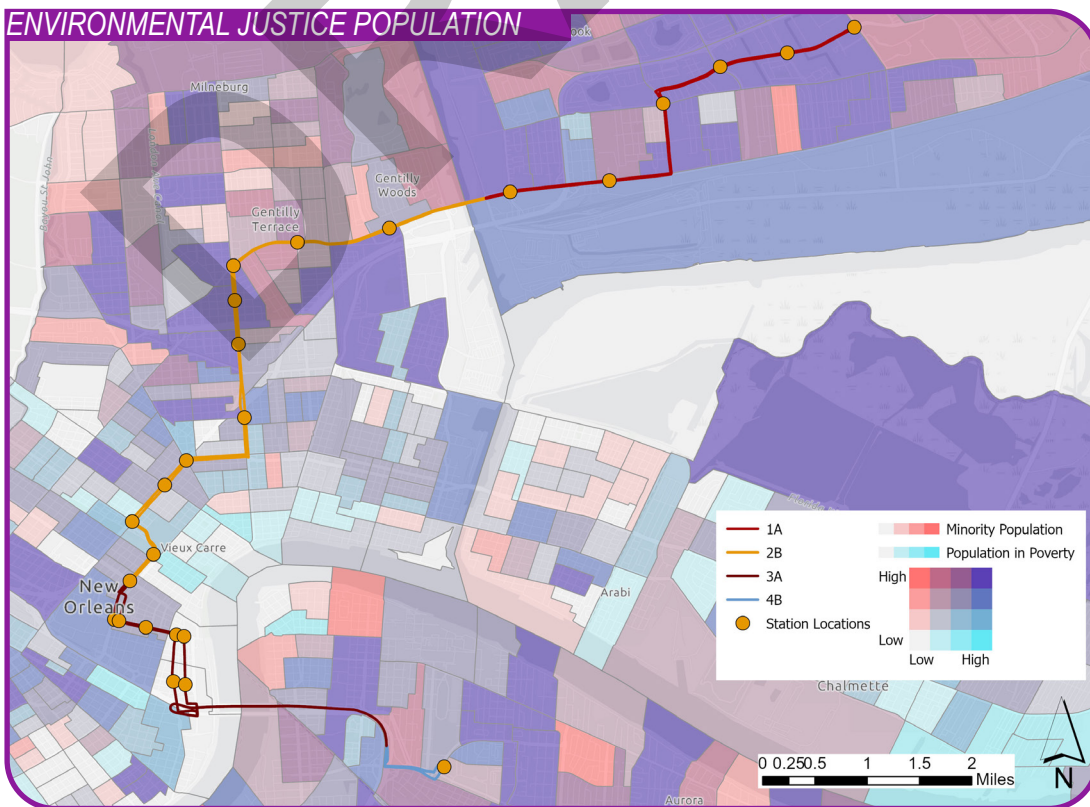
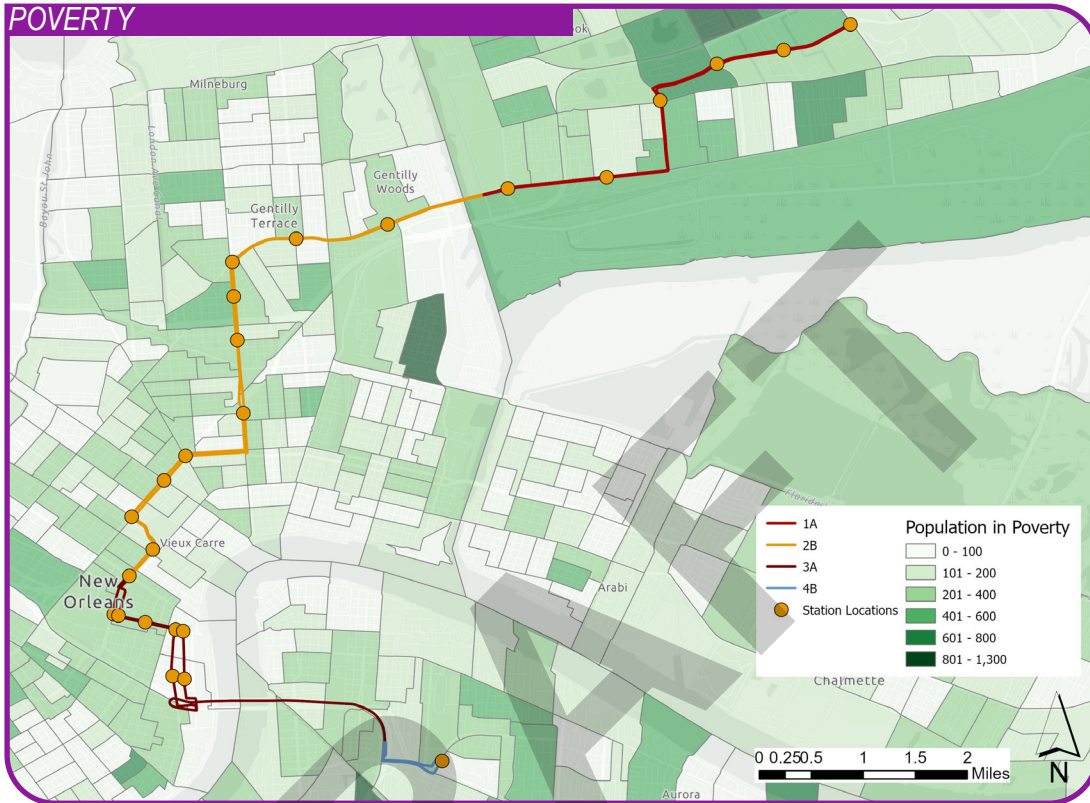
LOCALLY PREFERRED ALTERNATIVE



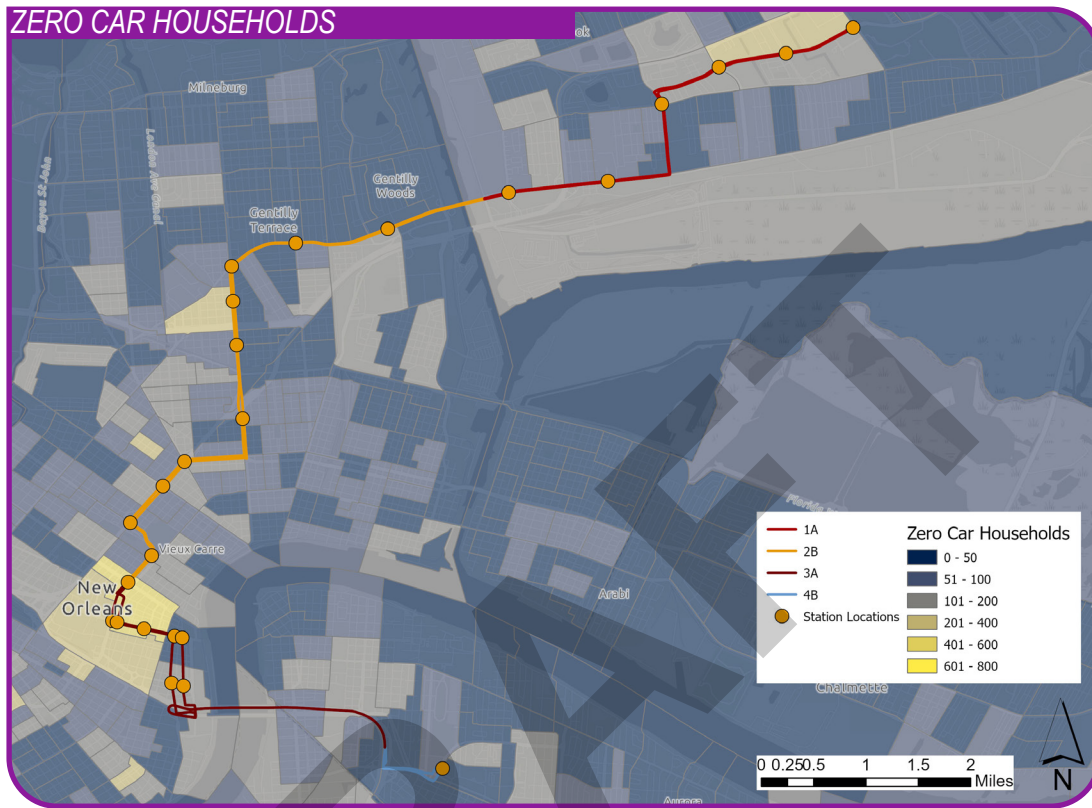


LOCALLY PREFERRED ALTERNATIVE





LOCALLY PREFERRED ALTERNATIVE



DR

STATION PLACEMENT

As part of the Locally Preferred Alternative (LPA), preliminary station locations were identified along the alignment according to the half-mile spacing standard identified in the *Bus Rapid Transit Design Guidelines* (with exceptions made for specific areas, such as universities or key activity centers). The preliminary stations for the alignment are identified in the following sections for each segment.

DRAFT



LOCALLY PREFERRED ALTERNATIVE

SEGMENT 1

Segment 1 consists of six station locations spaced approximately a half mile apart. The terminus at Lake Forrest Boulevard and Read Boulevard will serve as the eastern terminus. This location will also serve as the future location of the New Orleans East Transit Center.

1. Lake Forrest Boulevard @ Read Boulevard
2. Lake Forrest Boulevard @ Bundy Road
3. Lake Forrest Boulevard @ Crowder Boulevard
4. Wilson Avenue @ Dwyer Road
5. Chef Menteur Highway @ Sisters of the Holy Motherhouse
6. Chef Menteur Highway @ Downman Road

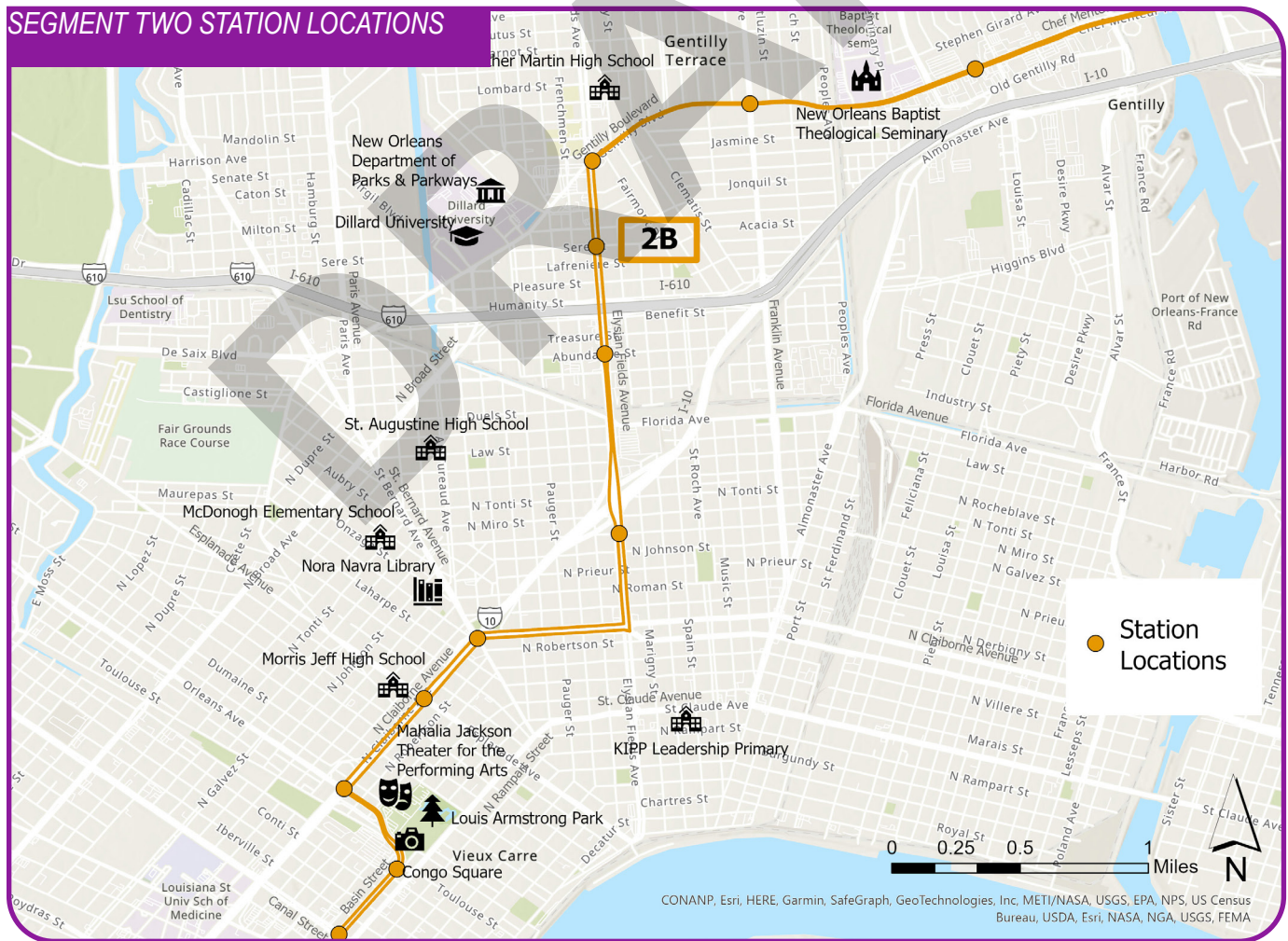
SEGMENT ONE STATION LOCATIONS



SEGMENT 2

Segment 2 consists of 10 station locations. In order to provide proper connectivity the station locations at Elysian Fields Avenue @ Sere Street and North Claiborne Avenue @ Esplanade Avenue are included. The station at Chef Menteur Highway and the Walmart will be revisited as plans for the future Gentilly Woods Transit Center are advanced.

- | | |
|---|--|
| 1. Chef Menteur Highway @ Walmart | 6. Elysian Fields Avenue @ N Galvez Street |
| 2. Gentilly Boulevard @ Franklin Avenue | 7. North Claiborne Avenue @ St. Bernard Avenue |
| 3. Gentilly Boulevard @ Elysian Fields Avenue | 8. North Claiborne Avenue @ Esplanade Avenue |
| 4. Elysian Fields Avenue @ Sere Street | 9. North Claiborne Avenue @ Orleans Avenue |
| 5. Elysian Fields Avenue @ Abundance Street | 10. Basin Street @ Toulouse Street |

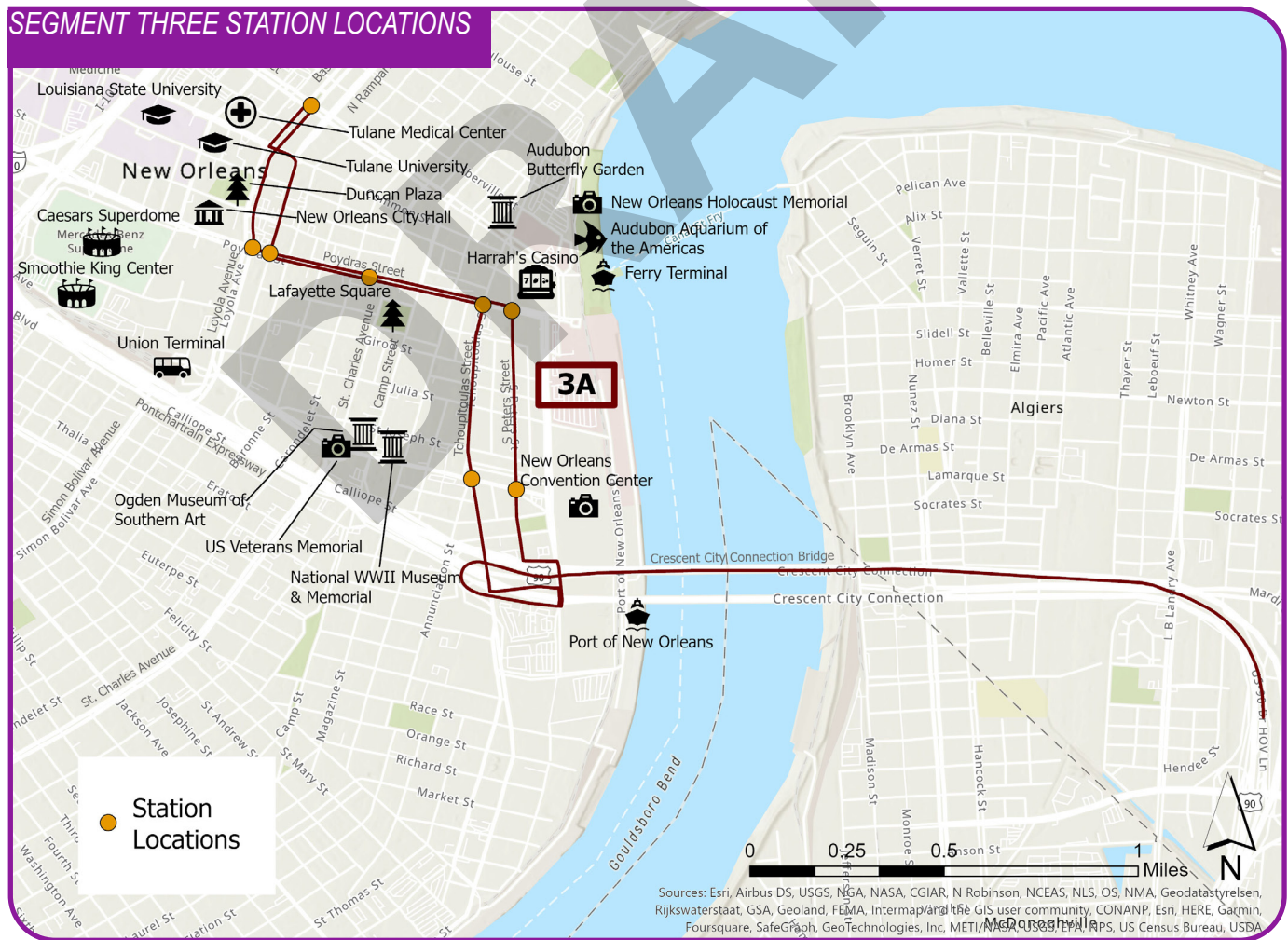


LOCALLY PREFERRED ALTERNATIVE

SEGMENT 3

Segment 3 consists of 5 station locations. The route will serve the future transit center at Basin and Canal before continue through downtown providing connections to major employment centers. Within Segment 3 there is the future potential for an extension into the River District which is currently advancing redevelopment plans.

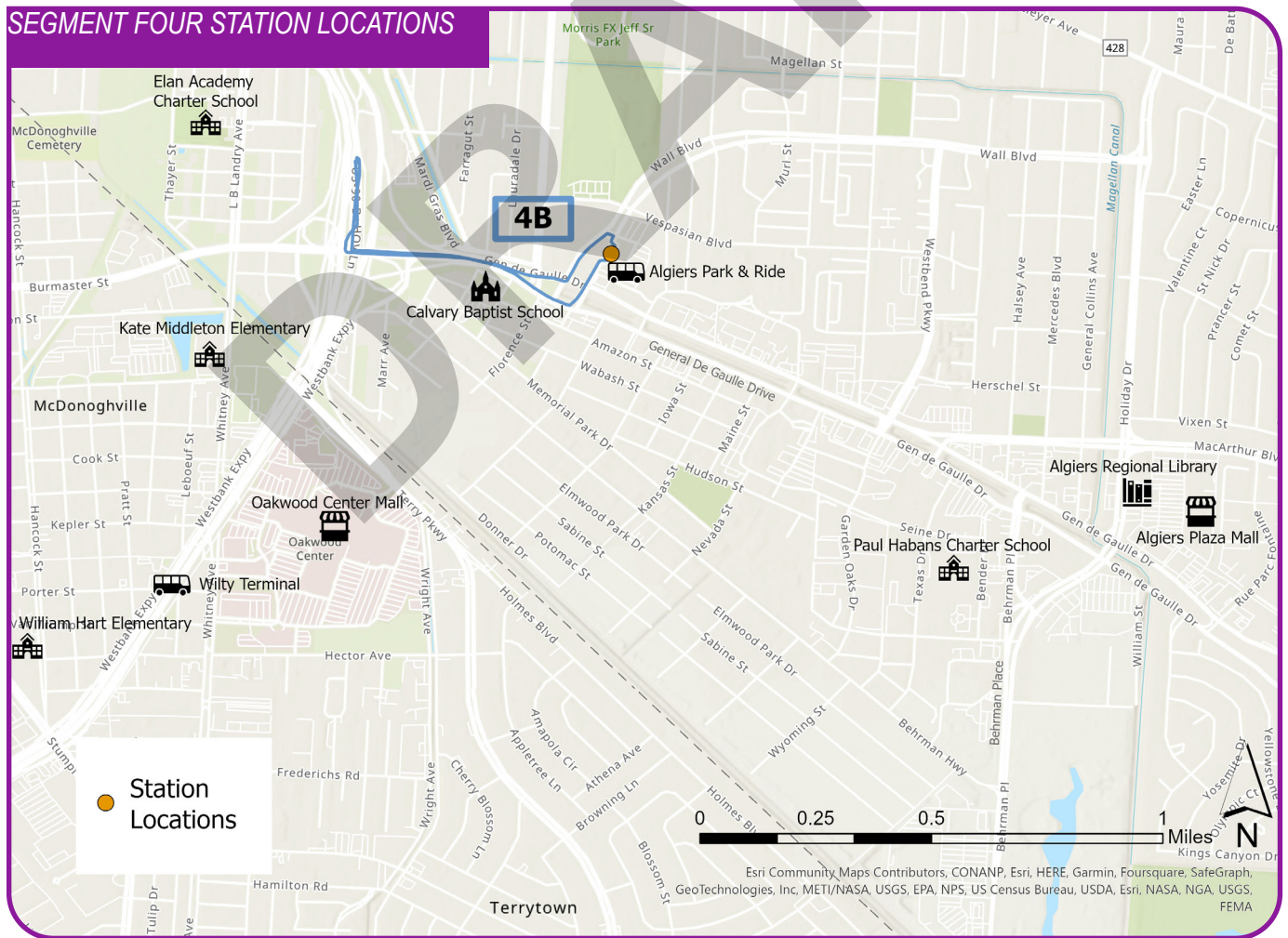
1. Basin Street @ Canal Street
2. Loyola Avenue/S Rampart Street @ Poydras Avenue
3. Poydras Street @ St. Charles
4. Tchoupitoulas Street/S Peters Street @ Poydras Street
5. Tchoupitoulas Street/S Peters Street @ Andrew Higgins Boulevard



SEGMENT 4

The BRT route will terminate at the Algiers Park and Ride. Future extension will be considered that would extend the route further into Algiers to locations such as the Algiers Library. As the project advances local route modifications will be considered to insure connectivity to Wilty Terminal and other areas within the West Bank.

1. Wall Boulevard @ Algiers Park & Ride



CONCLUSION

CONCLUSION

Safe and efficient operations is paramount for successful BRT service. All options evaluated, within all segments, provide both opportunities and challenges that NORTA will need to weigh. Options that rose to the top of the evaluation process provide a starting point for final alignment consideration. Key elements of any project such as cost and public support can change over time but utilizing a standardized method of analyzing these options will help decision makers determine next steps in design and construction. For more information on the analysis please refer to Appendix A. With the LPA identified this phase of study will continue to complete project definition. The final Project Definition report will include this report as a chapter and include details around ridership forecasts, traffic analysis, conceptual engineering, preliminary environmental screening, and funding plan. The Project Definition report will guide the project into Project Development which will include NEPA and preliminary design.

DRAFT

RTA



BUS RAPID TRANSIT
Locally Preferred Alternative

DRAFT

DEVELOPED FOR
THE NEW ORLEANS REGIONAL TRANSIT AUTHORITY



Appendices

APPENDIX A - CRITERIA EVALUATION

APPENDIX B - PUBLIC SURVEY SUMMARY

APPENDIX C - STAKEHOLDER ENGAGEMENT MEETINGS

APPENDIX D - DATA SOURCES

DRAFT

APPENDIX A - CRITERIA EVALUATION

Segment 1 Criteria Evaluation

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 1		
							Chef/Downman - Wilson - Lake Forest - Lake Forest/Read (Option1A)	Chef/Downman - Bundy - Lake Forest - Lake Forest/Read (Option 1B)	Chef/Downman - Dwyer - Lake Forest - Lake Forest/Read (Option 1C)
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	5	5	5
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	1,017	1,022	1,053
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	1.94	1.76	2.34
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	3.5	3.6	3.6
Connections		Number of connections or intersects between the BRT alignment and local bus routes.		2.0		5.0	5.0	5.0	
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	6.9%	6.9%	12.9%
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	13.8%	13.8%	6.9%
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	36.75%	37.92%	37.95%
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	8.0	6.0	8.0
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	3.8	1.3	3.9
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	17	17	17
Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0		6.8	4.9	6.8	
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	6,764	11,546	7,646
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	3,769	5,604	3,374
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	8,721	11,488	8,605
			Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	1,828	2,439	2,188
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	1,708	1,694	1,023
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	1	0	1
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	5,804	12,679	10,936
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	1,198	2,327	2,007
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments. Converted to ranking format.	0.0	2	3	1
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	0	0	0
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	10	11	11

Segment 1 Alignment Options Rankings

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 1		
							Chef/Downman - Wilson - Lake Forest - Lake Forest/Read (Option1A)	Chef/Downman - Bundy - Lake Forest - Lake Forest/Read (Option 1B)	Chef/Downman - Dwyer - Lake Forest - Lake Forest/Read (Option 1C)
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	1	1	1
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	1	2	3
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	2	1	3
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Number of connections or intersects between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	1	2
Connections		2.0		1			1	1	
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	1	1	3
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	2	2	1
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	1	2	3
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	2	1	2
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	2	1	3
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	1	1	1
Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0		3	1	2	
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	1	3	2
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	2	3	1
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	2	3	1
			Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	1	3	2
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	3	2	1
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	2	1	2
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	1	3	2
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	1	3	2
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	2	1	3
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	1	1	1
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	1	2	2

Score:	1.42	1.71	1.83
Rank:	3	2	1

Option 1C wins!

Segment 2 Criteria Evaluation

Alternatives Analysis Evaluation Criteria		Measures				Weight	Segment 2		
							Basin - Claiborne - St Bernard (Option 2A)	Basin - Claiborne - Eleysian Fields (Option 2B)	Rampart - Franklin (Option 2C)
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	14	14	12
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	11,808	11,329	11,512
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	2.19	2.09	1.78
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	9.4	9.4	9.9
		Connections		Number of connections or intersects between the BRT alignment and local bus routes.		2.0	26	26	23
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	8.4%	8.2%	8.1%
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	8.1%	7.5%	4.2%
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	46.69%	47.06%	46.93%
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	31	25	26
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	9.2	3.9	3.5
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	36	26	30
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0	7.4	7.4	8.9
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	28,706	21,869	33,664
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	21,211	18,106	31,098
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	28,676	22,608	32,857
			Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	18,455	16,622	24,324
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	3,537	3,991	4,784
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	4	4	3
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	25,621	37,796	29,453
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	17,877	21,521	22,239
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	1	3	2
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	0	0	27
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	11	16	11

Segment 2 Alignment Options Rankings

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 2			
							Basin - Claiborne - St Bernard (Option 2A)	Basin - Claiborne - Eleysian Fields (Option 2B)	Rampart - Franklin (Option 2C)	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	2	2	1	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	3	1	2	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	3	2	1	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	2	1	3	
				Connections		Number of connections or intersects between the BRT alignment and local bus routes.	2.0	2	2	1
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	3	2	1	
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	3	2	1	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	1	3	2	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	3	1	2	
				Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.	2.0	3	2	1
				Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.	2.0	3	1	2
				Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.	2.0	2	1	3
	Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	2	1	3
Planned employment within 1/4 mile of route alignments				Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	2	1	3	
Encourage compact and connected development by increasing service to and from activity and employment centers		Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	2	1	3	
				Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	2	1	3
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	1	2	3	
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	2	2	1	
Supports Local Populations		Connectivity to trip generators	Connection to key activity centers	Count of connections to key activity centers (RTA to provide essential service layer) within 1/4 mile of route	Essential service points	2.0	2	2	1	
				Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	1	3
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	1	2	3	
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	3	1	2	
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	2	2	1	
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	1	3	1	

Score:	2.02	1.60	1.91
Rank:	1	3	2

Option 2C wins!

Segment 3 Criteria Evaluation

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 3			
							Tchoupitoulas-Peters-Poydras (Option 3A)	St. Charles-Camp-Poydras (Option 3A Alt 1)	Calliope-Loyola (Option 3B)	Loyola-HOV (Option 3C)
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	7	10	9	14
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	13,976	13,515	10,921	11,110
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	2.17	2.17	1.93	1.95
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	2.8	3.7	2.1	3.3
Connections		Number of connections or intersects between the BRT alignment and local bus routes.		2.0		26	27	22	27	
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	35%	35%	45%	25%
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	19%	19%	32%	23%
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	65.95%	68.42%	40.03%	41.94%
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	16	20	14	20
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	1.6	1.2	1.8	1.8
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	16	20	11	17
Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0		2.1	1.5	0.8	0.9	
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	9,789	10,185	17,100	9,101
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	70,254	54,137	83,511	41,886
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	6,868	7,237	13,854	7,051
				Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	56,355	45,795	81,319
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	3,572	3,943	3,103	3,210
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	21	19	11	11
	Supports Local Populations	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	5,970	9,888	2,611	9,978
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	66,242	79,982	37,198	85,332
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	4	3	1	2
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	38	45	30	31
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	6	6	9	7

Segment 3 Alignment Options Rankings

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 3				
							Tchoupitoulas-Peters-Poydras (Option 3A)	St. Charles-Camp-Poydras (Option 3A Alt 1)	Calliope-Loyola (Option 3B)	Loyola-HOV (Option 3C)	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	1	3	2	4	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	4	3	1	2	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	3	3	1	2	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Connections	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	2	4	1	3
		Number of connections or intersects between the BRT alignment and local bus routes.			2.0		2	3	1	3	
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	2	2	4	1	
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	1	1	4	3	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	3	4	1	2	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Planned Intersects	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	2	3	1	3
		Existing Shared Miles			Number of shared miles between the BRT alignment and existing bike facilities.		2.0	2	1	3	3
		Planned Intersects			Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	2	4	1	3
		Planned Shared Miles			Number of shared miles between the BRT alignment and planned bike facilities.		2.0	4	3	1	2
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	2	3	4	1	
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	3.0	3	2	4	1	
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	1	3	4	2
				Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	3	2	4	1
		Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	3	4	1	2	
		Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	4	3	1	1	
	Supports Local Populations	Existing Density within Walksheds	Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	1.0	2	3	1	4
				Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	1.0	2	3	1	4
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	1	2	4	3	
	Choose transit projects that have support from the public.	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	2	1	4	3	
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	1	1	4	3	

Score:	2.30	2.64	2.06	2.17
Rank:	2	1	4	3

Option 3A Alt 1 wins!

Segment 4 Criteria Evaluation

Alternatives Analysis Evaluation Criteria			Measures			Weight	Segment 4				
							HOV - Wilty (Option 4A)	HOV - Algiers Library Option 4B	HOV - PNR Lot Option 4C		
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	6	7	7		
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	761	224	501		
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	2.0	1.93	2.16	2		
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.		3.6	3.6	5.7		
							Connections	Number of connections or intersects between the BRT alignment and local bus routes.	7	7	7
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	0.0%	28.1%	15.0%		
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	0.0%	0.0%	0.0%		
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	2.0	26.17%	28.58%	40.50%		
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.		0	4	6		
							Existing Shared Miles	Number of shared miles between the BRT alignment and existing bike facilities.	0.0	0.2	0.2
							Planned Intersects	Number of planned bike routes that connect or intersect with the BRT alignment.	1	4	10
							Planned Shared Miles	Number of shared miles between the BRT alignment and planned bike facilities.	0.0	0.2	2.6
Land Use Policy	Support compact and mixed-use development	Planned Development	Planned population within 1/4 mile of route alignments	Population within alignment area	Utilize NORPC future (2044) demographic data	3.0	5,164	4,845	10,551		
			Planned employment within 1/4 mile of route alignments	Employment within alignment area	Utilize NORPC future (2044) demographic data	2.0	4,552	2,062	4,160		
	Encourage compact and connected development by increasing service to and from activity and employment centers	Existing density	Population within 1/4 mile of route alignment	Population near alignment	Population near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	4,057	4,286	9,741	
				Employment within 1/4 mile of route alignment	Employment near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	4,726	1,376	4,188	
				Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	67	197	425
				Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		0.0	0	1	2
	Supports Local Populations	Connectivity to trip generators	Connection to key activity centers	Count of connections to key activity centers (RTA to provide essential service layer) within 1/4 mile of route	Essential service points		2.0	0	0	0	
				Existing Density within Walksheds	Population within 1/2 mile walkshed area	Population within walkshed area.	Utilize FME data analysis results.	2.0	2,497	3,145	10,281
			Employment within 1/2 mile walkshed area	Employment within walkshed area.	Utilize FME data analysis results.	3.0	3,817	1,406	4,321		
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	1	2	3		
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	3.0	0	0	0		
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	18	13	14		

Segment 4 Alignment Options Rankings

Alternatives Analysis Evaluation Criteria		Measures				Weight	Segment 4			
							HOV - Wilty (Option 4A)	HOV - PNR Lot (Option 4B)	HOV - Algiers Library (Option 4C)	
Customer Experience	Provide reliable, frequent service	System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links. Excludes downtown transit center.	Count of existing routes with stops that intersect the route alignment. Excludes downtown.	2.0	1	2	2	
	Accessibility to customer base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within 1/2 mile of the route alignment.	Sum of existing ridership based on pre covid 2019 data.	3.0	3	1	2	
	Choose options that support public opinion.	Public Support	Public support and opinions on BRT alignment options	Public average opinion ranking of which option was preferred	Based on survey data from BRT public survey.	3.0	1	3	2	
	Local Bus Facilities	Shared Miles	Supportiveness of BRT alignment for access to / integration with local bus routes.	Number of shared miles between the BRT alignment and local bus routes.	Utilize City of New Orleans local bus route GIS data.	2.0	1	2	3	
		Connections		Number of connections or intersects between the BRT alignment and local bus routes.		2.0	1	1	1	
Sustainability			Inbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	1	3	2	
			Outbound	# of minutes to end of segment	Percentage increase with dedicated lanes	1.0	1	1	1	
	Define walkability of alignment options	Walkability	Supportiveness of BRT alignment for pedestrian access.	% of area within 1/2 mile of BRT alignment that is walkable.	GIS walkshed analysis results based on proposed BRT alignment.	3.0	1	2	3	
	Existing and Planned Bike Facilities	Existing Intersects	Supportiveness of BRT alignment for bicyclist access.	Number of existing bike routes that connect or intersect with the BRT alignment.	Utilize City of New Orleans bike map data.	2.0	1	2	3	
		Existing Shared Miles		Number of shared miles between the BRT alignment and existing bike facilities.		2.0	1	2	2	
		Planned Intersects		Number of planned bike routes that connect or intersect with the BRT alignment.		2.0	1	2	3	
		Planned Shared Miles		Number of shared miles between the BRT alignment and planned bike facilities.		2.0	1	2	3	
	Land Use Policy	Support compact and mixed-use development	Planned Development	Planned densities within 1/4 mile of route alignments	Population density within alignment area	Utilize NORPC future (2044) demographic data	3.0	2	1	3
Planned densities within 1/4 mile of route alignments				Employment density within alignment area	Utilize NORPC future (2044) demographic data	3.0	3	1	2	
Encourage compact and connected development by increasing service to and from activity and employment centers		Existing density	Residential density within 1/4 mile of route alignment	Population per square mile near alignment	Utilize 2015 - 2019 American Community Survey (ACS) 5-year estimates	2.0	1	2	3	
			Employment density within 1/4 mile of route alignment	Employment per square mile near route alignment	Utilize 2019 Census LEHD origin-destination employment statistics	2.0	3	1	2	
			Development patterns	Development trends	Building permits within 1/4 mile of alignment	City of New Orleans building permit data	2.0	1	2	3
			Increasing service connections	Connection between planned and existing development	Direct connection between new development and existing density		2.0	1	2	3
Supports Local Populations		Existing Density within Walksheds	Residential density within 1/2 mile walkshed area	Population per square mile within walkshed area.	Utilize FME data analysis results.	1.0	1	2	3	
			Employment density within 1/2 mile walkshed area	Employment per square mile within walkshed area.	Utilize FME data analysis results.	1.0	2	1	3	
Implementation and Operations	Define and select transit projects that are cost-effective	Potential capital cost implications	New or complex infrastructure needs	Cost estimates - Standard, high, or very high cost implications (related to typical roadway work)	Assume \$20 million a mile for portion of a route that ROW is sufficient, and \$5 million a mile for BRT lite treatments.	0.0	3	2	1	
	Choose transit projects that have support from the public and	Potential environmental impacts	Prevalence of environmental constraints	# of potential environmental constraints	Property acquisition, visual impacts, section 4(f) resource impacts, construction impacts, and social justice impacts	0.0	1	1	1	
	Providing High-Quality Service	ROW	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW width	Utilize New Orleans parcel data to approximate ROW. 4 lanes or more were determined to be adequate for dedicated guideways.	2.0	3	1	2	

Score:	1.47	1.60	2.28
Rank:	3	2	1

Option 4C wins!

APPENDIX B - Public Survey Summary

DRAFT



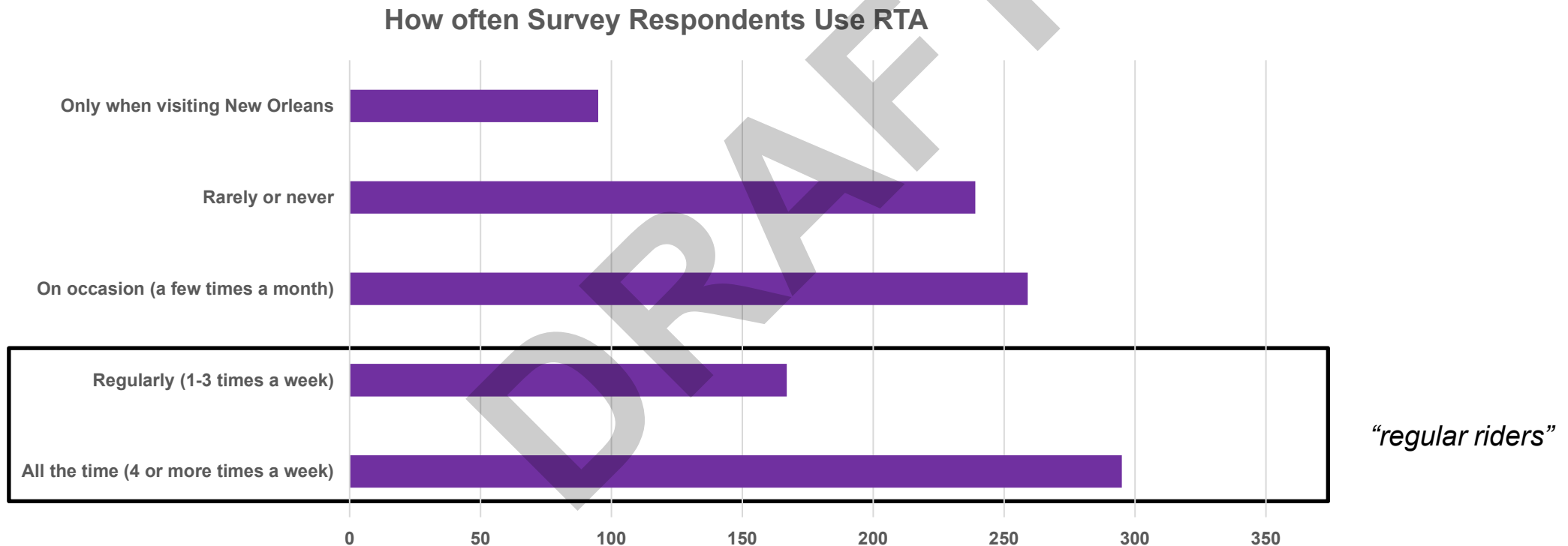
New Orleans Regional Transit Authority

Bus Rapid Transit Survey RESULTS

July 2022

BRT Survey: Respondents

Collected a total of 1,063 responses from residents including online polls, meetings, and workshops, with 462 responses from "regular riders" (~2+ times per week).

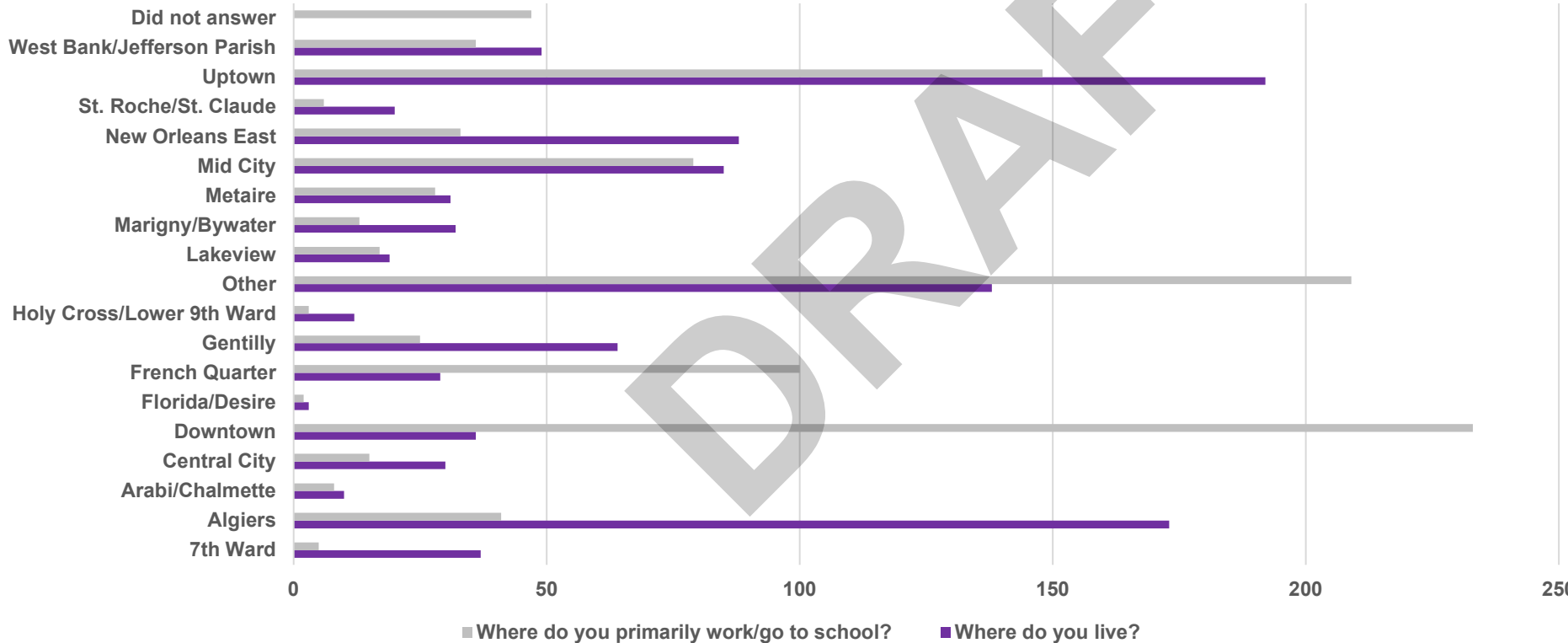




BRT Survey: Place of Residence/Employment

Majority of respondents are from Uptown, Algiers, or used the “Other” category.
Majority of respondents work/go to school in either Downtown or Uptown, or answered in the “Other” Category.

Where do you live/work?



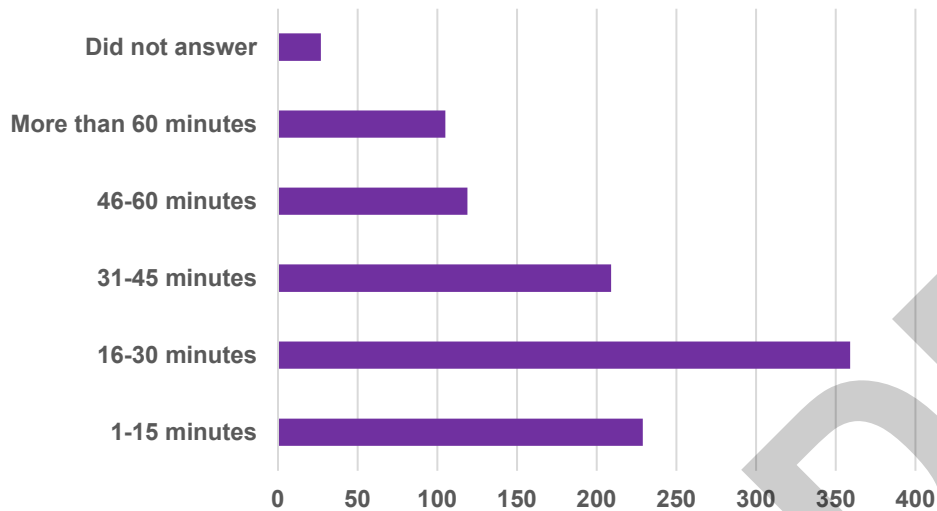
“Other” Category answers include (but are not limited to):

- Kentucky
- Ireland
- Anchorage, Alaska
- Houston, Texas
- Washington D.C.
- Birmingham, Alabama
- Baton Rouge
- Lower Garden District
- Seattle, Washington
- Baltimore, Maryland
- Chicago, Illinois
- Etc.

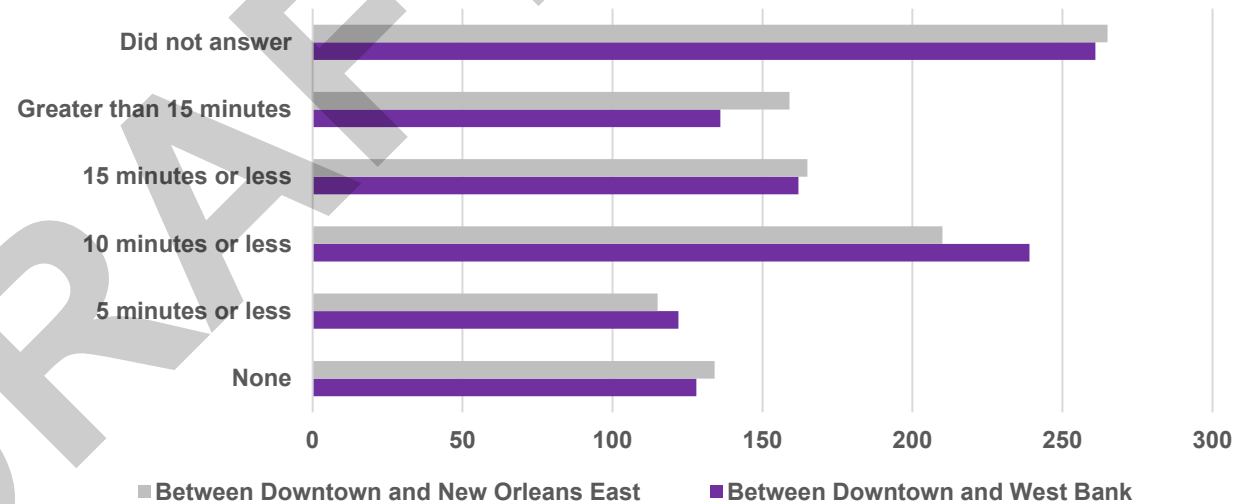
BRT Survey: Ride Time

The typical commute for most riders lasts between 16 and 30 minutes. Most riders feel that 10 minutes or less of additional travel time is acceptable.

How long does your commute typically take?



How much additional travel time is acceptable to implement BRT?





BRT Survey: Benefits

The most wanted benefit from BRT was fast and reliable service. Following this was congestion relief and improving streets for all users.

BRT Benefits

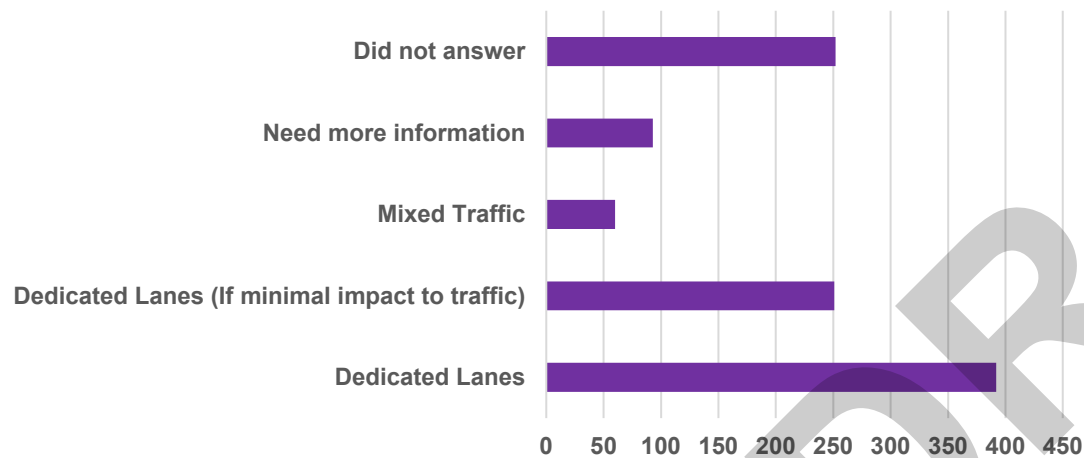
Ranking	Fast and Reliable Service	Congestion Relief	Corridor Revitalization	Attracting Investment	Improving Streets for Users	Improving Streets for Utilities
1	553	80	36	24	124	61
2	126	248	67	83	238	99
3	61	185	151	125	193	138
4	50	135	209	185	104	166
5	26	103	224	208	135	131
6	59	94	141	205	59	269
Did not answer	173	203	220	218	195	184



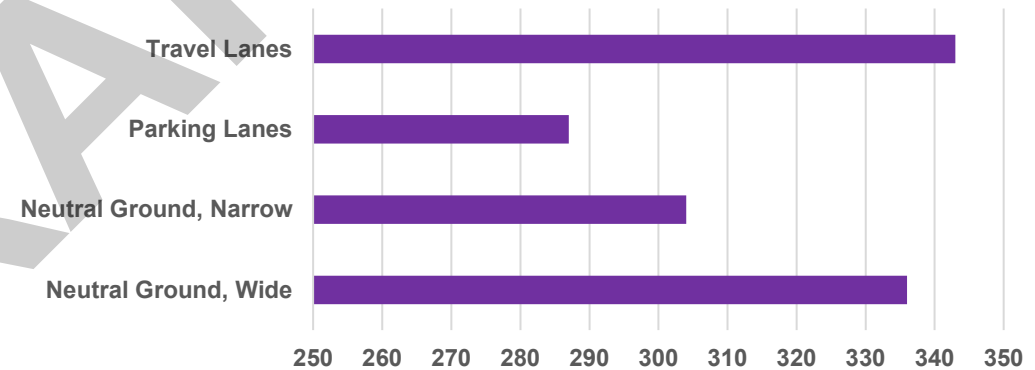
BRT Survey: Guideway Preference

Most respondents supported removing travel lanes to support BRT implementation.

What guideway option do you prefer?



What aspect of the current ROW would you support modifying/eliminating for BRT service?



Common comments:

Much concern over New Orleans driver attitudes towards dedicated lanes, i.e., using them or parking in them anyways.

Lots of respondents want bike facilities as part of this project.

If dedicated lanes are to be used, then the city **MUST** enforce them.

Many respondents want dedicated lanes but want something to physically separate it from normal traffic.

Many respondents mention wanting center-running BRT.

Respondents want neutral green space to be preserved, along with large trees along roads.

Many people confused about what the guideway options mean, what the categories of ROW mean, and what ROW is.

Respondents are adamant about not touching the neutral green space and trees.



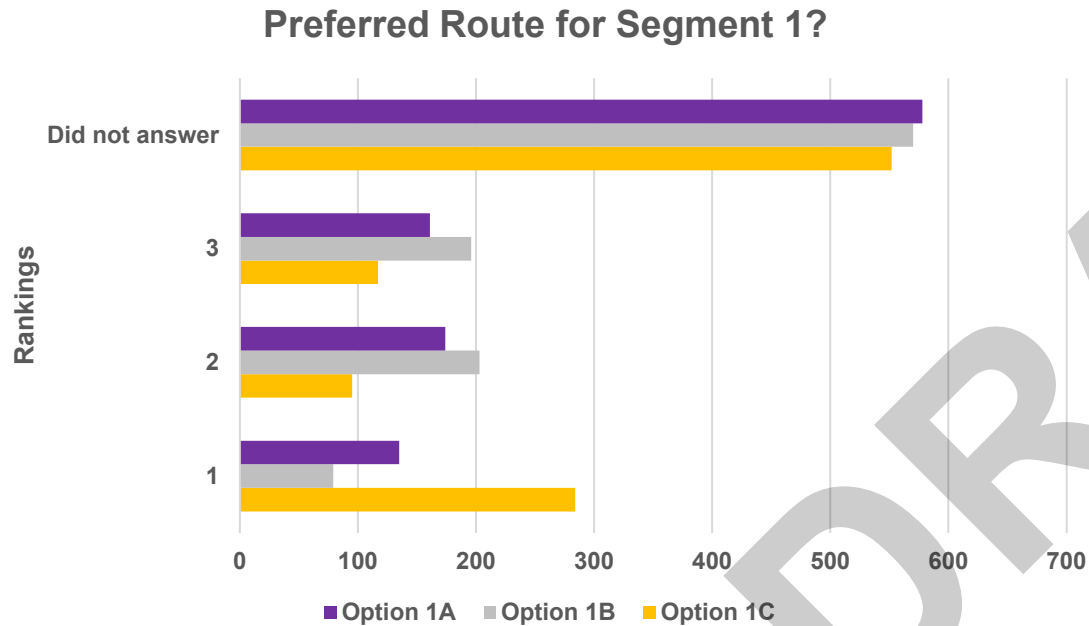
BRT Survey: Transit Priority Comments

Comments and Questions included, but are not limited to:

- How would bikes and sidewalks be affected?
- Need to adopt a transit hierarchy like other cities.
- BRT lanes should permit electric vehicles and carpools.
- Why is rail precluded? Why no light rail, or elevated rail?
- What does BRT mean for everyday drivers?
- Would like to see more space on vehicles for luggage, Wi-Fi on vehicles, and onboard advertising too.
- Where can I talk to RTA if I have further commentary?
- How soon will this project be started?
- We should reduce impervious pavement, great opportunity to increase water infiltration.
- What would the BRT schedule look like?
- Are monorails too expensive?
- How is RTA determining the need for this?
- Remember to have bike lanes in the priorities!
- Etc.

BRT Survey: Segment 1

Option 1C was the clear choice of preference by the public.



- Common comments on Segment 1 include:
- I do not spend time in this area, therefore not familiar.
 - I do not travel in East New Orleans and do not have a strong preference.
 - All options seem good, why not all three?
 - Proper rain shelters are required due to the rain.
 - 1C reaches all the popular destinations in East New Orleans.

Preferred Choice by Residence

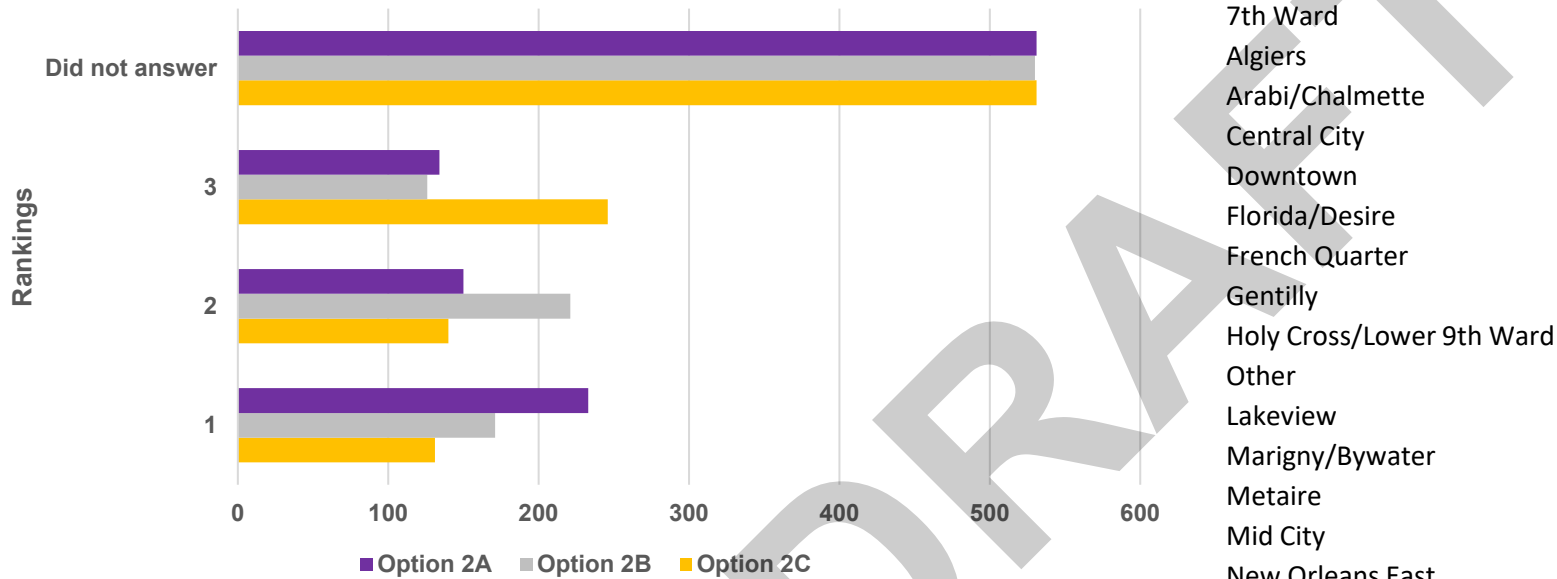
	Option 1A	Option 1B	Option 1C
7th Ward	4	1	15
Algiers	19	4	32
Arabi/Chalmette	1	0	2
Central City	9	2	12
Downtown	9	3	9
Florida/Desire	0	0	1
French Quarter	4	3	3
Gentilly	7	4	25
Holy Cross/Lower 9th Ward	1	3	6
Other	14	9	41
Lakeview	2	2	6
Marigny/Bywater	2	2	9
Metairie	5	2	8
Mid City	8	4	23
New Orleans East	11	23	24
St. Roche/St. Claude	4	1	4
Uptown	31	13	48
West Bank/Jefferson Parish	4	4	16
Did not answer	578	570	552

*Preferred choice = residents who chose the option as their number one choice.

BRT Survey: Segment 2

Option 2A was the clear choice of preference by the public.

Preferred Route for Segment 2?



Preferred Choice by Residence

	Option 2A	Option 2B	Option 2C
7th Ward	10	7	4
Algiers	38	15	15
Arabi/Chalmette	1	2	1
Central City	8	9	6
Downtown	10	3	9
Florida/Desire	1	0	0
French Quarter	1	3	7
Gentilly	13	17	10
Holy Cross/Lower 9th Ward	3	3	3
Other	27	24	13
Lakeview	5	4	3
Marigny/Bywater	7	7	8
Metairie	6	4	4
Mid City	23	13	5
New Orleans East	22	18	11
St. Roche/St. Claude	4	1	4
Uptown	40	35	21
West Bank/Jefferson Parish	14	6	7
Did not answer	531	530	531

Common comments on Segment 2 include:

BRT would be convenient in Gentilly/French Quarter.

Trees and neutral ground preservation should be prioritized.

2A hits the greatest number of people, so it is the best option.

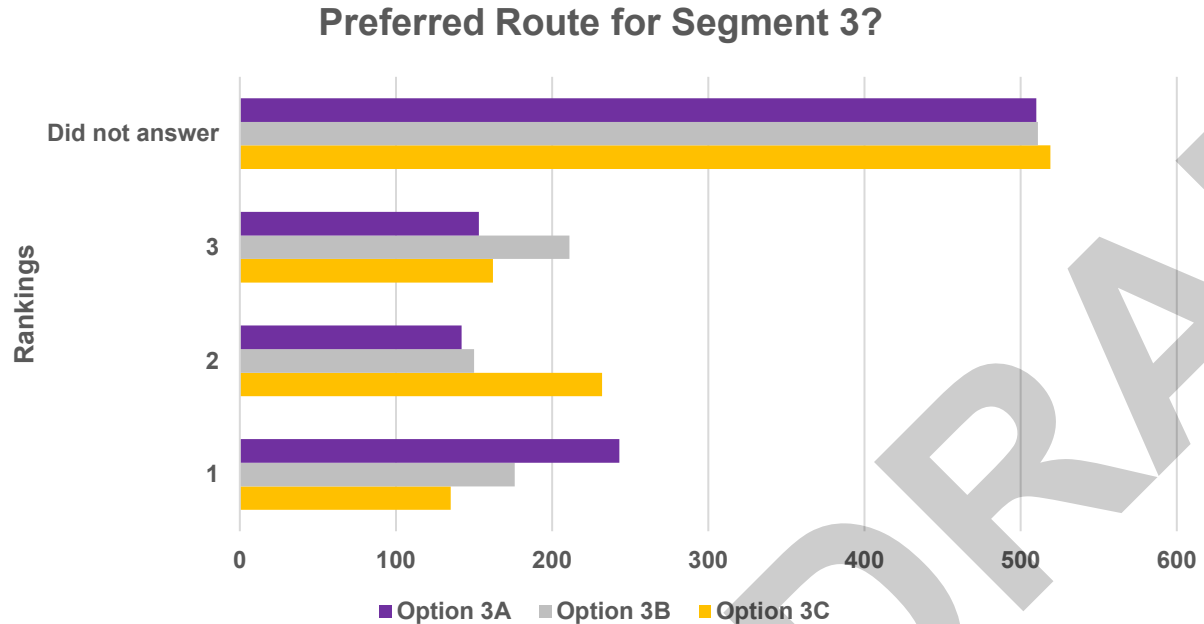
Many respondents said they were not impacted by segment 2 and could not offer a strong opinion on it.

Many want to know where stops are located and how often service would run.

*Preferred choice = residents who chose the option as their number one choice.

BRT Survey: Segment 3

Option 3A was the clear choice of preference by the public.



Preferred Choice by Residence

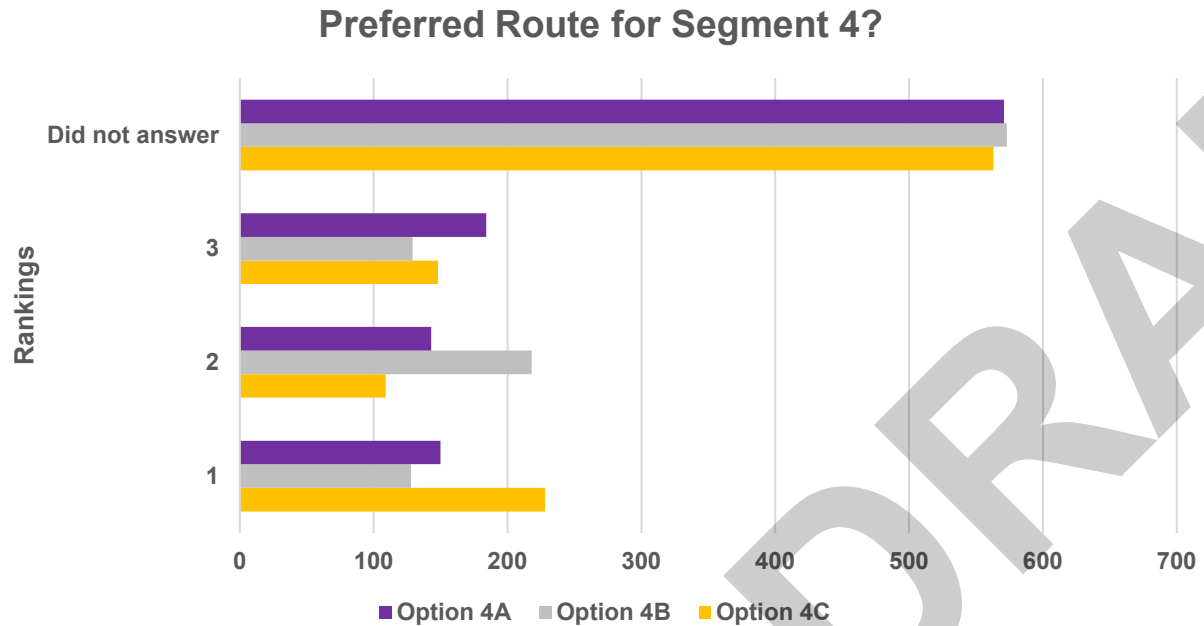
	Option 3A	Option 3B	Option 3C
7th Ward	10	7	4
Algiers	34	34	17
Arabi/Chalmette	0	2	1
Central City	10	6	7
Downtown	14	5	4
Florida/Desire	1	0	0
French Quarter	5	3	4
Gentilly	18	10	6
Holy Cross/Lower 9th Ward	4	4	1
Other	31	17	19
Lakeview	7	2	5
Marigny/Bywater	9	5	4
Metairie	5	4	4
Mid City	20	11	14
New Orleans East	24	14	10
St. Roche/St. Claude	2	2	4
Uptown	37	36	27
West Bank/Jefferson Parish	12	14	3
Did not answer	510	511	519

Common comments on Segment 3 include:
 HOV should be used, seems currently underutilized.
 Important to serve the Union Terminal.
 3A is the best option due the larger population and higher employment.
 Access to and from the ferry would be great.
 Many respondents worried about auto travel over the CCC bridge if BRT is implemented.

*Preferred choice = residents who chose the option as their number one choice.

BRT Survey: Segment 4

Option 4C was the clear choice of preference by the public.



Common comments on Segment 4 include:
 Algiers library most central location, 4C is best option.
 4C is best because it goes the farthest into Algiers.
 Why not have a BRT line go to the library and the PNR?
 Worried about parking at Algiers Library.
 Funds to revitalize the Algiers PNR were promised but not delivered.
 Wilty Terminal already accesses other bus routes so it should end there for better integration.

Preferred Choice by Residence

	Option 4A	Option 4B	Option 4C
7th Ward	6	8	6
Algiers	26	33	50
Arabi/Chalmette	1	2	0
Central City	12	4	6
Downtown	8	2	8
Florida/Desire	0	0	1
French Quarter	3	2	4
Gentilly	9	6	18
Holy Cross/Lower 9th Ward	1	4	2
Other	13	10	32
Lakeview	5	4	2
Marigny/Bywater	2	1	11
Metairie	1	3	5
Mid City	9	10	12
New Orleans East	15	12	15
St. Roche/St. Claude	1	1	5
Uptown	19	22	44
West Bank/Jefferson Parish	19	4	7
Did not answer	571	573	563

*Preferred choice = residents who chose the option as their number one choice.



BRT Survey: Did not Answer

Below are tables showing those respondents that did not mark their preference for segment options.

Residents who Did Not Answer

	Option 1A	Option 1B	Option 1C	Option 2A	Option 2B	Option 2C	Option 3A	Option 3B	Option 3C	Option 4A	Option 4B	Option 4C
	Wilson Ave	Bundy Rd	Downman Rd	St Bernard / Claiborne	Elysian Fields / Claiborne	Franklin / St Claude	Tchoupitoulas- Peters / Poydras	Calliope / Loyola	Loyola / HOV	Wilty Terminal	Algiers PNR	Algiers Library
7th Ward	18	18	17	15	16	16	17	16	16	17	17	18
Algiers	122	119	117	107	111	111	92	91	94	73	76	71
Arabi/Chalmette	7	7	7	6	6	6	7	7	7	7	7	7
Central City	9	9	5	9	8	10	9	7	9	9	9	10
Downtown	15	15	15	14	14	14	13	14	15	18	18	18
Florida/Desire	2	2	2	2	2	2	2	2	2	2	2	2
French Quarter	19	19	19	20	20	17	18	17	17	20	20	20
Gentilly	29	30	29	26	26	26	30	30	32	33	33	32
Holy Cross/Lower 9th Ward	4	3	3	4	3	3	2	3	3	5	5	5
Other	77	78	74	76	76	74	72	71	73	85	86	83
Lakeview	9	9	9	7	7	7	5	5	5	8	8	8
Marigny/Bywater	20	19	19	10	11	9	17	17	15	21	20	19
Metairie	18	18	16	17	17	17	19	19	18	22	23	23
Mid City	52	50	51	45	44	44	41	40	42	53	54	54
New Orleans East	37	33	32	39	38	41	39	41	41	47	47	47
St. Roche/St. Claude	11	11	11	11	11	11	12	12	12	15	14	13
Uptown	103	105	101	100	98	100	95	96	95	115	111	111
West Bank/Jefferson Parish	26	25	25	23	22	23	20	23	23	21	23	22

APPENDIX C - Stakeholder Engagement Meetings

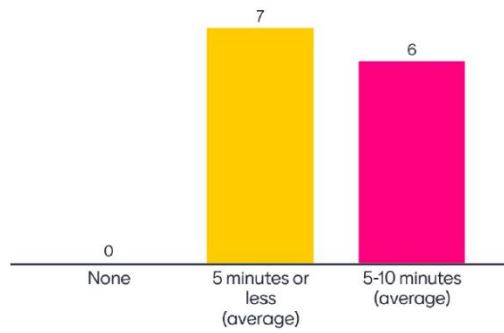
BAC Meetings

Meeting #1

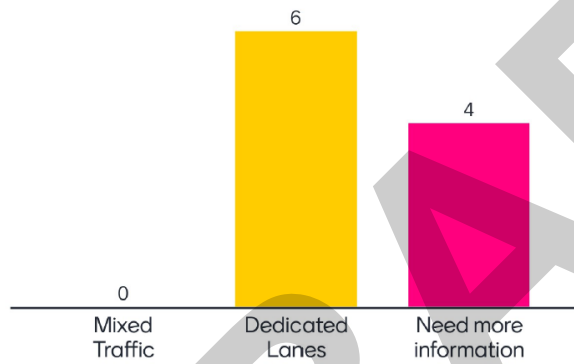
- What will RTA's BRT speed be?
- What will the BRT do for automobile speed?
- Need to show where unemployment lies regarding the BRT alignment
- Need to look for business partnerships to grow areas along the BRT alignment. Integration of ads and retail space could help with initial funding
- What would enforcement of dedicated transit lanes look like? We don't do a great job of managing enforcement of our already existing HOV lanes and bike facilities
- Concerned that anything short of 100% dedicated center-running lanes will hinder adoption due to enforcement issues
- How can we integrate/enhance bike facilities? Are there dedicated lanes that also allow bikes?
- How would Danzinger Bridge need to be modified to accommodate dedicated BRT lanes?
- Stations seem like a good place to incorporate public art
- Wi-Fi on buses and at stations is a must, along with station-based and app-based fares. It is also essential to show real-time arrival/status in the app
- If West Bank portion extends to Gretna, integrated fare technology will be essential
- Current largest use of the HOV lanes are carpooling parents that lack school bus service taking their kids to school. If we make them transit dedicated, how will we help those parents?
- How many buses are in the RTA fleet? Pre- and Post-Katrina? The next generation of buses that RTA uses needs to be clean and environmentally friendly
- Great opportunity as an alternative to light rail. However, we should not immediately discard the thought. Best to start small, then invest in future expansion
- Algiers currently lacks sidewalks – it would be great to invest in them alongside this project
- Who will benefit the most from BRT? Businesses? Workers?
- Not been a good job of connecting higher education to transit
 - Tulane has a shuttle system – work with them?
- Next generation of residents is not as reliant on cars, and they will want to see increased transit
- Transit is an equity issue, and it needs to work to resolve accessibility issues
 - Need to build a system that serves the community
- Project will not be successful without strengthening the current system
- NOLA East is not walkable
- RTA needs to discuss how it has failed to meet the needs of current riders
- Would like to be updated on studies and data throughout the planning process
- Major concerns about lack of sidewalks and access to important facilities

Meeting #2

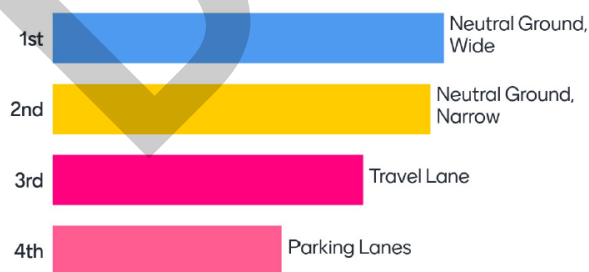
How much impact to driving times is acceptable for equal or better transit commute?



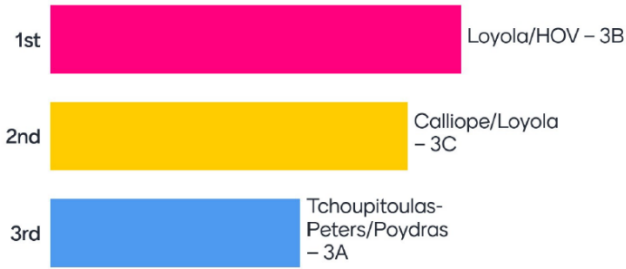
What guideway option do you prefer for BRT?



What trade-offs do you currently support for fast and reliable transit?

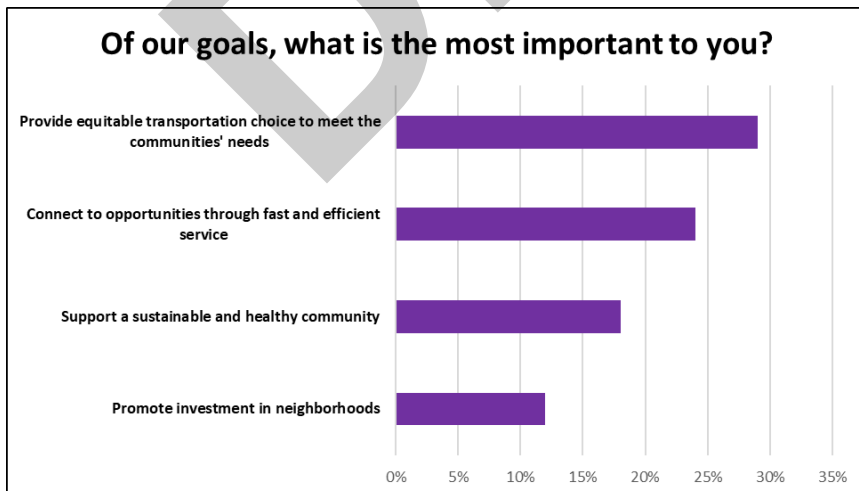
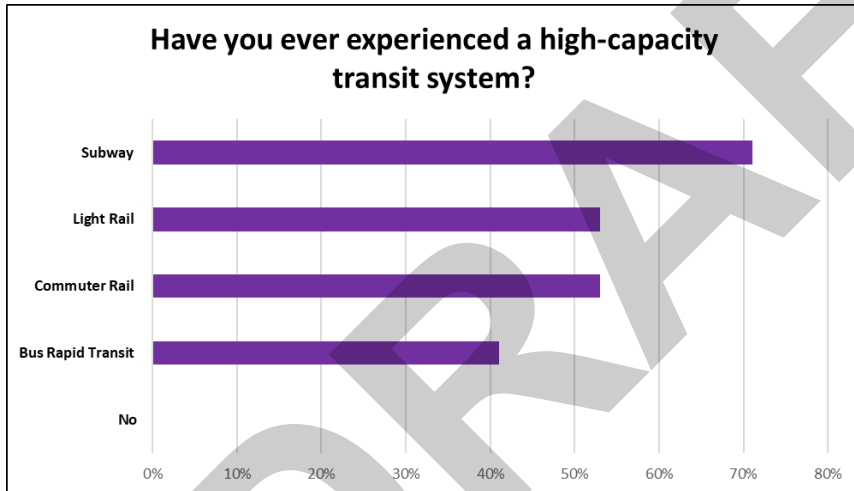


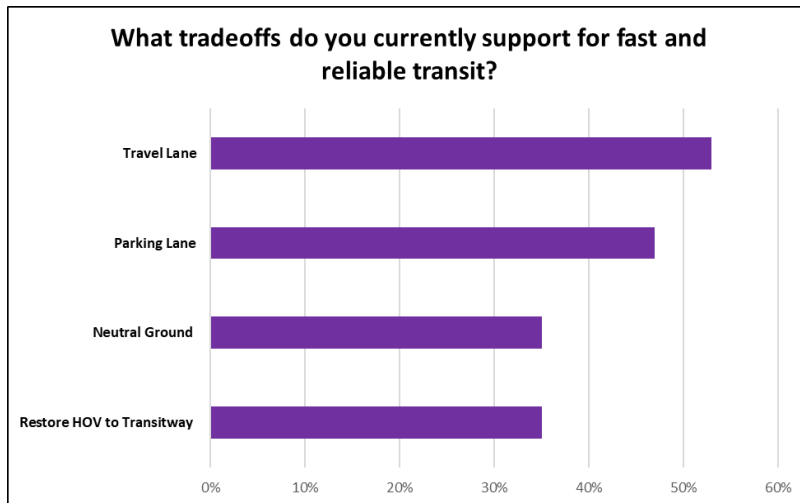
What is your preferred route?



CAC Meetings

Meeting #1





- How many miles long is the corridor?
- How long would construction take for the BRT corridor, and how would construction impact surrounding businesses?
- Would there be job opportunities for local residents during the construction phase?
- Lake Forrest and Read is a far distance from the apartment complexes and dense housing areas. Will that be a part of the design considerations as we move forward?
- There is a lot of roadwork that would have to be done to accommodate BRT, is that cost built into RTA's budget? Or is that something that the City will have to contribute to?
- When creating the transit hubs with BRT and NewLinks, is the RTA considering the traffic and density that these efforts will bring to the neighborhoods?
- You mentioned tradeoffs, are the lands of business owners and homeowners a possible tradeoff?
- Is there connectivity with Jefferson and St. Bernard Parishes in this new system?
- Why are we so confident that we can install new bus shelters at bus stops with BRT when we seem to have trouble installing shelters at existing stops?

Meeting #2

General

- Please limit the use of acronyms
- Project team needs to be clear on how RTA picked the routes and options
- Will there be other BRT's in the future? I would like Lakeview, Uptown, and Chalmette
- What does 'critical communities' mean?
- Heavy buses cause problems for residential streets
- Who will maintain the cleanliness of the bus and the hub? Bus shelters now are filthy and not maintained by anyone
- The ride line should be easy to remember for everyone
- So BRT is the express line, and everything else will feed into hubs on the express line?
- Does RTA have the land they need for people to meet at these hubs?
- What is the estimated time of completion?
- Language used by the RTA needs to be more clear
- Need to be clearer on where people are voting for
- Need more pictures
- A route to the airport was not addressed

- What is the frequency of service?

On Segment 1 Options

- Potential for economic development along Segment 1
- Could we do an economic study along the BRT corridor?
- What does corridor investment look like?
- It would be nice to know where current lines are on the BRT map
- Is the BRT line always going to run on the same roads, coming or going?
- Why were those streets in Segment 1 selected?
- Express bus passes Morrison, goes onto Chef Menteur – will it be an express bus?
- What are the pros and cons of each option in Segment 1?
- What are ‘essential services’?
- What is the point of displaying these schools if the hub is going to be further away?
- How long will it take to get from New Orleans [East] to downtown?
- I understand you’ll expand later, but one con for me is that none of these go to the lake. There are a lot of apartment complexes and schools in that area.
- Whenever I-10 is blocked, Danzinger Bridge is the last place you want to go
- Consider going to the lake and then West to C Simon
- I think y’all are thinking about what is the quickest, when you should be thinking about what is less crowded
- I love progress, I want to move forward, but I think we should slow down and take things a bit at a time and see if it actually happens
- Can we see an example of the BRT line on Chef Highway?
- I know why I chose Downman, but I think that not knowing where essential services are could steer my decision
- Chef Menteur is the first main street, I think, that’s important for the branding of NOE. People make decisions based on what they see
- What would the BRT bring in terms of economic development?

On Segment 2 Options

- Would think that people going to areas along Segment 2 from Algiers would be going to Dillard and UNO, and would use Elysian Fields
- Would it be possible to go from Elysian Fields to St. Claude? There is a lot of employment there.
- What is the anticipated schedule? During work hours? Would it cater to those in the service industry that work late hours?
- What would the speed be?
- How many stops will there be?
- I’d be weary of Morris Jeff High school, it’s in the process of consolidating and the building is old
- Is there a bike network being developed on Franklin and St. Bernard?
- Is there a reason for Elysian Fields to cut over to Claiborne? It would make more sense to go to St. Claude where the streetcar is
- Any thoughts on Louisa Street?
- Does Segment 2 go past Dillard?
- We don’t want to cut down any of the old growth trees. Those of us who are old enough remember how beautiful it used to be in the 7th Ward. Now it’s all just concrete
- I’m confused, you have a bus that passes, you have a trolley that passes, so what are you going to do on Elysian Fields and Claiborne?

On Segment 3 Options

- I'd love to see an option that incorporates the ferry to bring in people from all over Algiers. An additional Algiers circulator could bring people to the ferry

On Segment 4 Options

- Will it take additional time to transfer between BRT and local bus service?
- Would there be an option for deviation from BRT to regular bus?
- For Option 4C, would there be a way where it could go to the Willy Terminal every once in a while?
- Is Option 4B actually using the Park and Ride as a Park and Ride?
- Will the vehicles have some sort of signal priority?
- Need to consider additional circulator buses to connect locals to the BRT
- Are there any considerations for special events and festivals?
- Ferry service is not given a chance to help people the way it should, and don't understand why it is not properly integrated into these systems. The ferry is always dismissed as "We'll get around to it" but nothing happens. Where I live, we use the ferry all the time.
- It is unclear to me whether or not General De Gaulle could handle a dedicated lane
- Seems with NewLinks all routes are going to the Willy Terminal, makes it difficult to pick an option without a bias
- People coming from Belle Chase tunnel could add to traffic
- Do you have data on how people currently use transit in Algiers?
- West Bank has lots of employment centers, big opportunity to increase ridership
- If Jefferson Parish is not cooperating, you're wasting your time with the Willy Terminal
- Depends on connections

On Travel Time

- If we did center running where they are next to each other, is there room for bike facility coordination?
- I would like to include bike lanes in the plans
- Make sure to show people the graphics – the differences between running types can be subtle
- Good idea to include visuals of a potential station
- Can you depict what a station would look like during daytime and nighttime?
- Big choke point for BRT will be getting over the canal. Only way I see this working is to reenact the Almonaster Bridge and make it HOV only.

On Dedicated Lanes/Guideways

- Doesn't matter what time of day, the HOV is always congested
- Schools contribute considerably to the congestion of the HOV lanes
- Terrified of the increase in congestion that could happen on either side. There would be a significant increase in congestion while people figure out that it's faster to take the BRT
- Should have had us rank these options instead of making us choose only one option
- What about drivers? Drivers will go up to 90 minutes just so that transit can achieve 45 minutes
- If I knew some of the people that own cars are taking transit, then I would too
- Different cities have different transit needs. New Orleans is a compact city, parking is expensive. It's cheaper to ride public transit
- We know that this is to bring economic development, but that means we should anticipate more traffic. Step 1 should be giving us a different way across the canal so there is no sacrifice to auto travel. Step 2

should be to find the least invasive way to incorporate dedicated lanes on existing roads, not take away lanes they already have

- It's like when they took a lane away from us on Gentilly and didn't tell us. It caused more traffic
- We fear putting rapid transit into existing roadways
- Have you guys looked at data from rideshare companies and looked at what the cost of ridesharing is?

On Transit Priority

- Will there be a focus group focused on youth?
- Meetings with the tourism industry would be helpful
- How many bikes can the buses hold?
- Are you in contact with the City on this?
- We always give input, but is RTA listening?
- Going on test rides on a bus is a good idea
- I suggest we look at Almonaster Bridge

TAC Meetings

Meeting #1 - Workshop

General Comments

- How many BRT buses will be on the route at any given time if the expectation is for wait times at stations to be at most 10 minutes?
- Sensitivity of system to rain and moisture?
- There are phasing in opportunities where LADOTD and/or City are planning corridor improvements now
- Match corridor or fixed solutions to address to know safety issues
- Focus messaging on time savings – More meaningful to riders and general public
- Why not reduce stops on 2 routes and see how much that helps? Why do you need BRT to accomplish stop relocation?

Operations

- Not certain I understand the value of adding BRT line if "Express" lines operate at similar travel times from NOE to CBD. Is the intended user someone who needs to get from NOE to WB?
- Is the level of ridership projected to be high enough to invest in BRT rather than improve the current "Express" lines?
- Is the priority BRT lines able to integrate with current NewLinks plan?
- OTP vs Residents served vs Route time?
- Modify on time performance thresholds (RTA) to target some customer-based metric much like CTAs – "Blank % of customers"
- Headway management makes sense for frequent service but does not necessarily address keeping relatively consistent speeds throughout the day. (All vehicles speed up or slow down together so headways are consistent, but travel may be slowed)
- Buses same as rest of system or separate vehicles? Reduce stops to every .65 miles minimum

Guideway

- Left-turn conflicts should be evaluated thoroughly
- Fixed vs corridor?
- Median vs curb alignment?

- 50% dedicated guideway is the FTA threshold
- BAT lanes in FTA's eyes are fixed
- It would be useful to break into groups and problem solve
- Median running lane designation in sections of route with respect to landscaping and stormwater considerations
- Look at permeable pavement (concrete tracks with grass in-between?). Seems expensive but could contribute to stormwater goals and also discourage use of lanes by cars, etc.
- Conflicts with parkways mission and charter; need for public trees and greenspace; underground utilities
- Would RTA purchase left side doors? Is concrete default treatment? Fixed guideway seems unfeasible along this alignment

Stations

- Equitable level of service should be expected in CBD area stations as terminus points (and all other stations in between)
- ¼ mile to ½ mile spacing is ideal
- What drives stop locations
- Real time arrival info needed
- Kiosks with digital maps needed
- Station buildouts and improvements based on actual ADA needs (ie ramps and service access)
- Integrate bikeshare, infrastructure at stations as well as expanding bikeshare boundaries to use BRT as spine
- Median stations need to accommodate local buses
- Same conflict issues as guideways using neutral grounds
- Next bus arrival information?
- Drainage, narrow sidewalks

Technology

- JET using GPS for dedicated signaling on VETS
 - DOTD approved – using tech that DOTD approves already will minimize review duration from state-level reviews
- Rain/humidity as a factor/real life factor – How to have all amenities in the existing conditions without burdening O&M
- GPS and traffic signal priority needed
- Automated vehicle location needed
- Automated enforcement needed
- Connected vehicle applications – Buses talk to each other (Autonomy)
- Would be useful for us to know what technologies are being used currently
- Wi-Fi at stations as necessary to support new fare collection strategy or to simply make it easier to use the app to purchase tickets for those waiting for the bus in shoddy cell service areas
- Real-time arrival! Also showing which stop you're on on-board as SCs have now?

Vehicles

- For the level for service intended, ensuring that whatever vehicles are used can be easily maintained for continuous operation
- Left-or-right opening doors?
- Can any bus be used on a BRT, or are there other issues (besides door location) to consider?
- Minimal branding/wrapping! Lets stop covering the windows of vehicles

- Left side doors on buses mean a new fleet – doesn't this mean even more work for RTA?
- Please no electric vehicles

Meeting #2

BRT Standards Update

- Considerations have to be given for who is operating and maintaining the [Veterans Corridor Signal Prioritization] system
- Does the 1:1 tree replacement ratio take into consideration the ages of both trees being removed and replaced?

Tier 1 Evaluation Process

- What were you looking at when considering ROW availability?
- Should already have an idea of each corridor and the maximum level of service you would be able to provide – what type of facilities are possible?
- Seems like we should have an idea of what is possible when going to the public

Segment 1

- Is the objective to avoid the I-10 interstate entirely?
- So BRT is not an express route?
- Fixed guideway – there are a lot of one-way roads in the guideway options. A lot of small streets. Dwyer is a 2-lane road. There's not much traffic congestion on these streets
- If a fixed guideway does not provide a significant improvement, will it be needed? For example, if there isn't much existing congestion in a segment?
- Right now, you have a proposed facility at Lake Forrest and Read where it terminates. If you were to get Federal money for this, you would look into improving this right?

Segment 2

- What kind of investment into a certain corridor are you anticipating and how will that affect the choice of alignment?
- Consider the current state of roadway, drainage, bridge structures – may influence the cost of projects and corridor selection
- The level of intervention needs to be thought out. I don't think you have that level of slowdown on these corridors. Have any kinds of assessments been done to see where the biggest chokepoints are?
- Should not immediately think of a dedicated lane as the default solution for each segment of the corridor
 - [In response to RTA's answer] I think we can all agree that a dedicated lane wouldn't garner as much community support as we are talking about
- Is there a technical reason for the St. Bernard alignment? If you took it down to Rampart you could connect the entire back of the French Quarter
 - [In response to RTA's answer] It's good, but it could be improved. Not connecting to Rampart and the French Quarter is missing a huge rider area and employment area

Segment 3

- Magazine is probably the fastest way to get to the bridge. Magazine and Peters – Peters would be easiest way to get to the HOV
- Investigate converting Loyola to avoid using Rampart as part of 3A
- Do you see any of the land uses playing a role in more direct service?

Segment 4

- It does seem like a shame to miss the Wilty Terminal. That opens up more of the West Bank and Jefferson Parish. It's a factor that I don't think would show up in the criteria. But from a land use perspective, General De Gaulle is a good option. I think it would get the most support from economic development
- At the end of 4C there is no area for a layover, so you may be looking at a loop or something off street. Would need to figure that part out.

HOV

- Is the proposal to make the HOV lane transit only?
- I'm glad you're doing an analysis. May need to do some legislative code that needs be rewritten. If there is a chance of doing something, a thorough analysis will be required
- Have you had any discussions with Jefferson Parish admin or Gretna about the HOV? Would be a good idea to get this on their radar as soon as possible

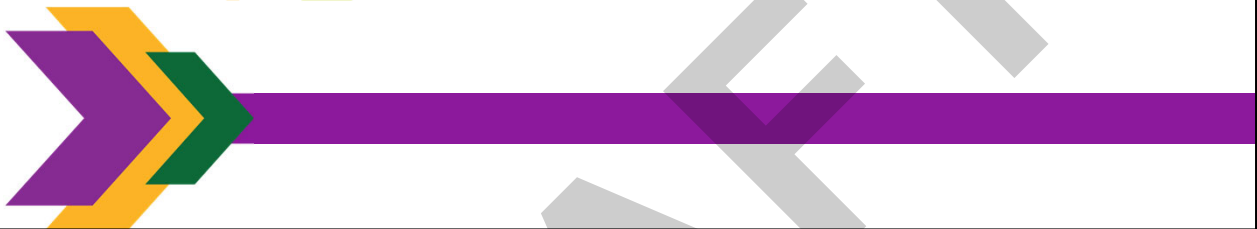
Tier 2 Evaluation Process

- Potential additional criteria - Equity

DRAFT

BRT Feasibility Study Business Advisory Committee

November 12, 2021
Xavier University Convocation Annex



DRAFT

AGENDA

Introductions

RTA Overview

Project Overview

Why Bus Rapid Transit

Bus Rapid Transit Overview

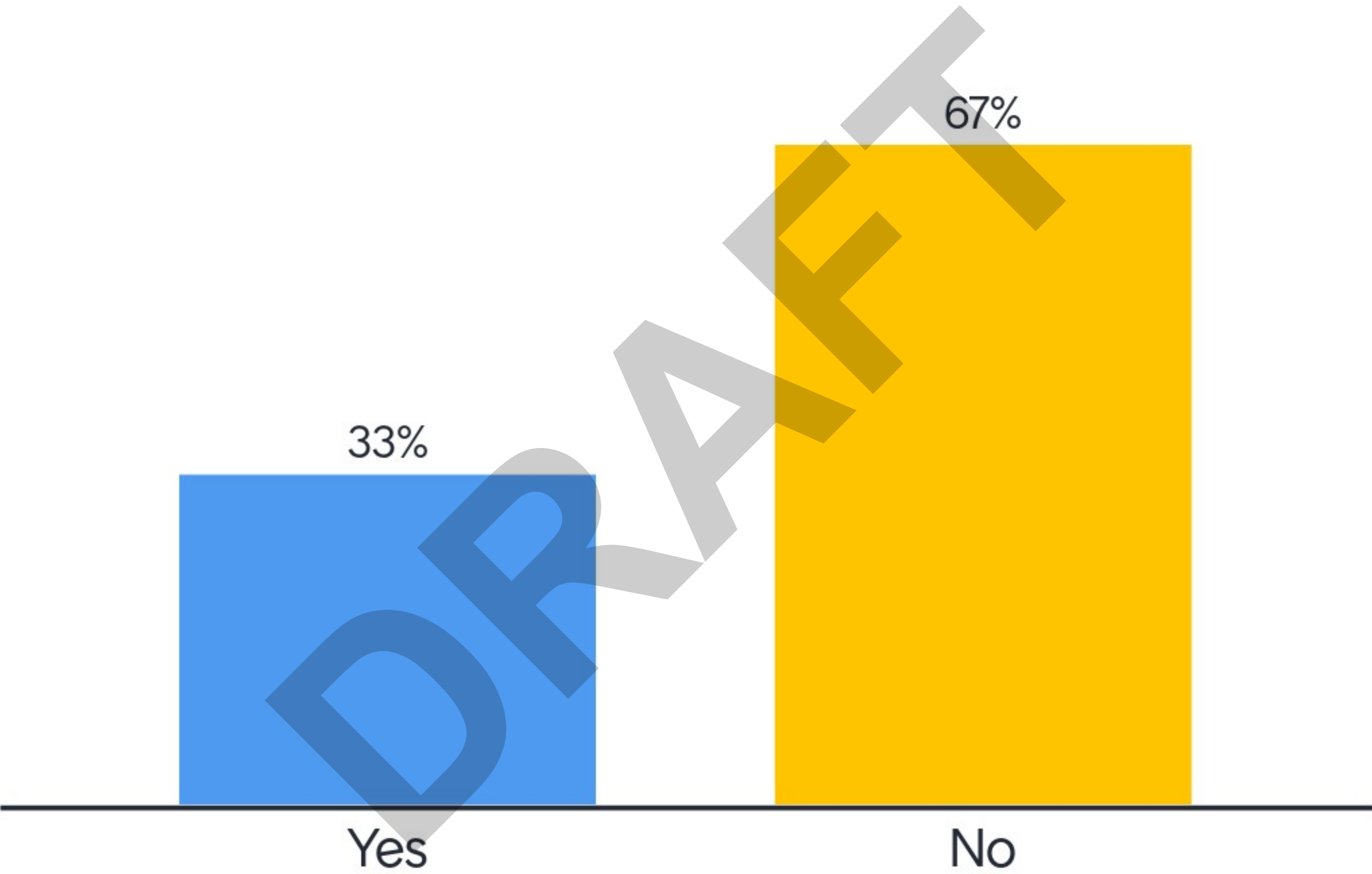
Summary & Next Steps

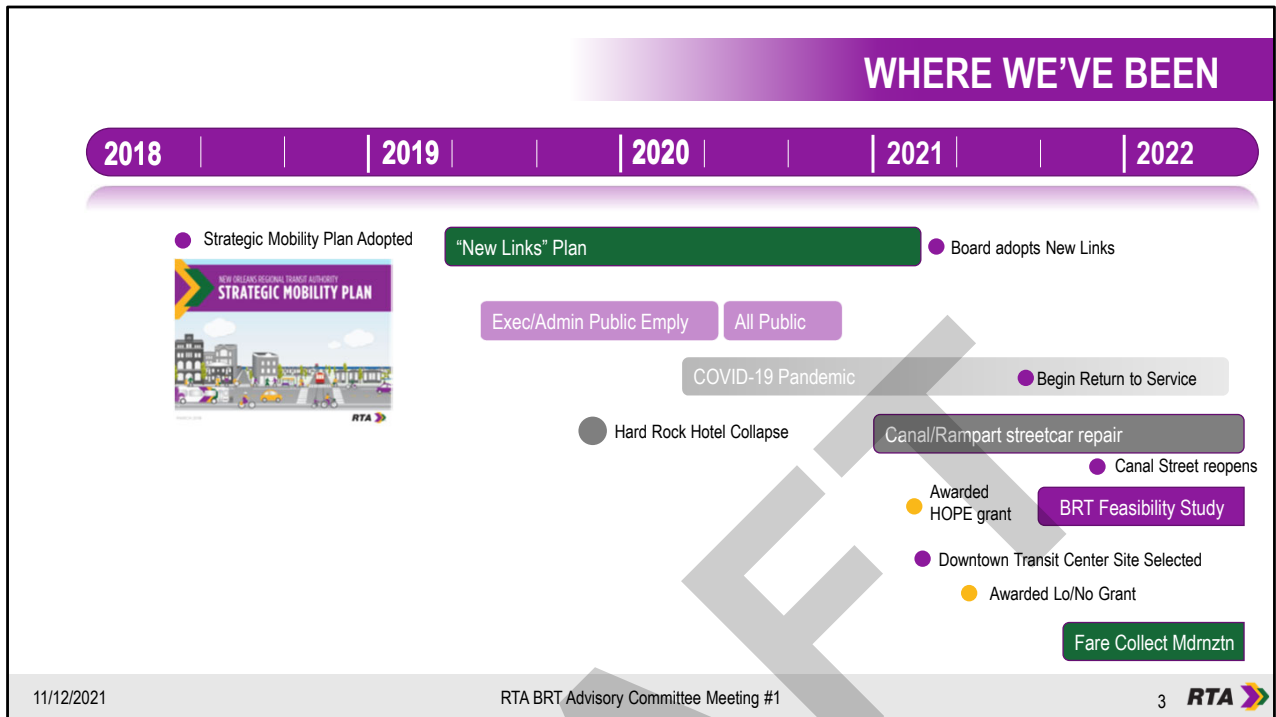
We will be using interactive polling,
please go to www.Menti.com and
type in the following code:

855305

DRAFT

Have you ever ridden on a Bus Rapid Transit route?





Comments:

- Need to explain that changes made with NewLinks and how this ties in.

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WHERE WE'RE GOING

2022

2023

2024

2025

Implement New Links

BRT Feasibility Study

BRT Final Design

BRT Construction

Fare Collection Modernization

Interim Downtown Hub

DTC Design

DTC Construction

Transfer Hubs Design

Transfer Hub Construction

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PROJECT SCHEDULE

2021 | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | 2022

Bus. Adv Cmte #1 (Nov)
Community Cmte #1 (Dec)
Bus. Adv Cmte #2 (Jan)
Community Cmte #2 (Feb)
Public Meeting (Mar)
Bus. Adv Cmte #3 (May)
Community Cmte #3 (Jun)

BRT Standards

Wkshp #1 (Sep)
Wkshp #2 (Oct)
Draft BRT Standards (Nov)

BRT Corridor Plan

Route Evaluation (Nov)

Project Definition (Nov)

Plan Development (Jan)

Funding Analysis/Assessment (May)

15% Plans, Estimate, Final Report (Jul)

Funding Memo (Aug)

11/12/2021

RTA BRT Advisory Committee Meeting #1

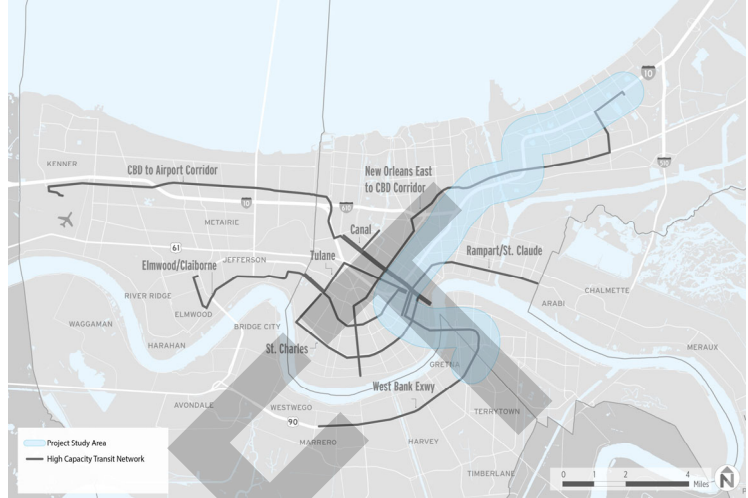
5 RTA

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BRT CORRIDOR PLAN

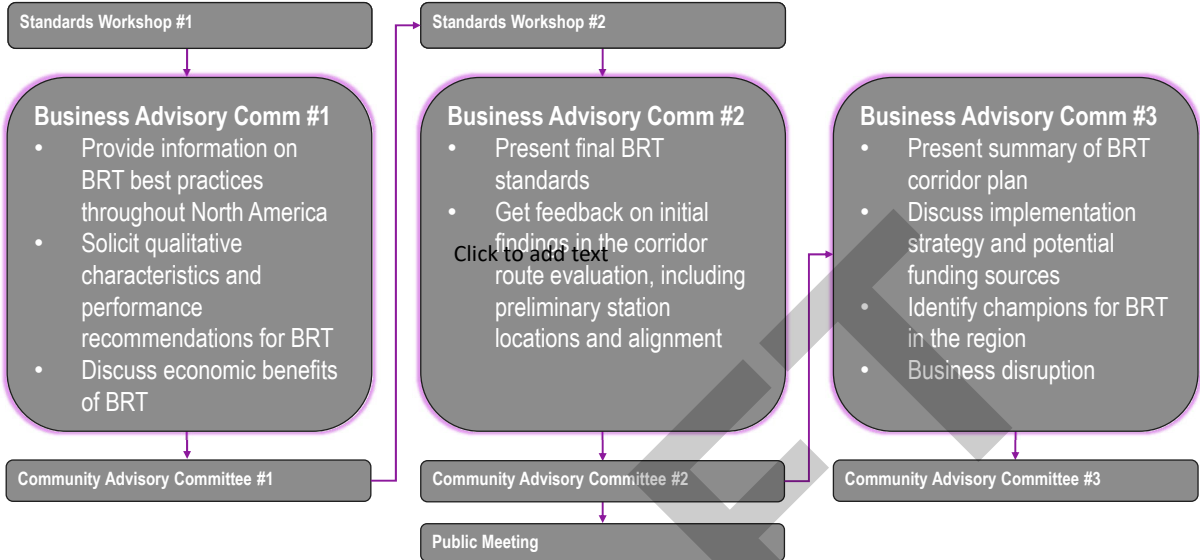
Evaluate the BRT corridor connecting New Orleans East to CBD and on to the West Bank. This task will include:

- Previous study review
- Project definition and 15% design plans including alignment, termini, station locations, guideway, and technology improvements.
- Ridership forecasts
- Preliminary traffic analysis
- Operating plan development
- Environmental screening



DRAFT

ENGAGEMENT STRATEGY



DRAFT

WHAT IS BRT?

THINK RAIL, USE BUSES

Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast and efficient service that may include:

- Dedicated lanes
- Traffic signal priority
- Off-board fare collection
- Elevated platforms
- Enhanced stations
- Unique Vehicles



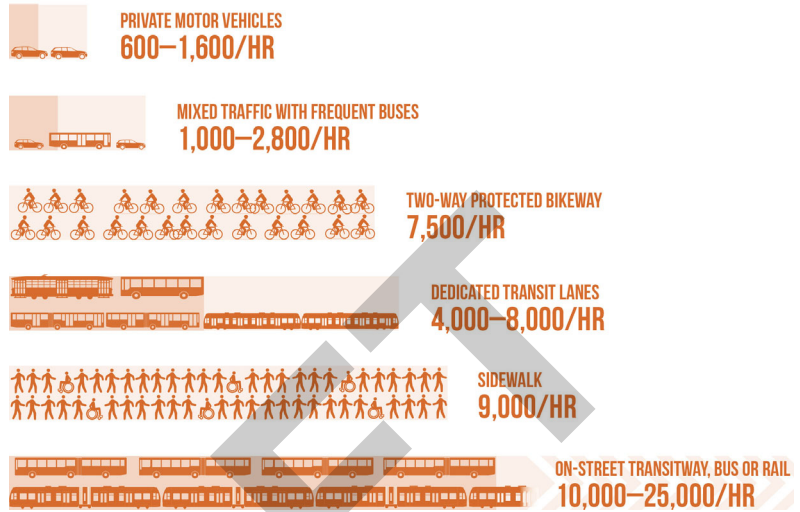
DEFINING BRT

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MOVING PEOPLE

- Make the most of the ROW
- Balance multiple modes
- Think differently about our streets - person throughput as a primary measure of effectiveness
- Transit is the most spatially efficient mode

WHY BRT?



Source: NACTO Transit Street Design Guide

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LRT vs BRT



Agency

- Metro Transit

Location

- Minneapolis, Minnesota

Revenue Operations

- 2024

Corridor Length

- 14.5 Miles, 36 Stations

Capital Cost

- \$2.03 Billion



Agency

- Albuquerque Transit Department

Location

- Albuquerque, New Mexico

Revenue Operations

- 2017

Corridor Length

- 8.8 Miles, 18 Stations

Capital Cost

- \$134M

WHY BRT?

BRT can provide similar benefits and more cost effective than LRT.

Light Rail Transit

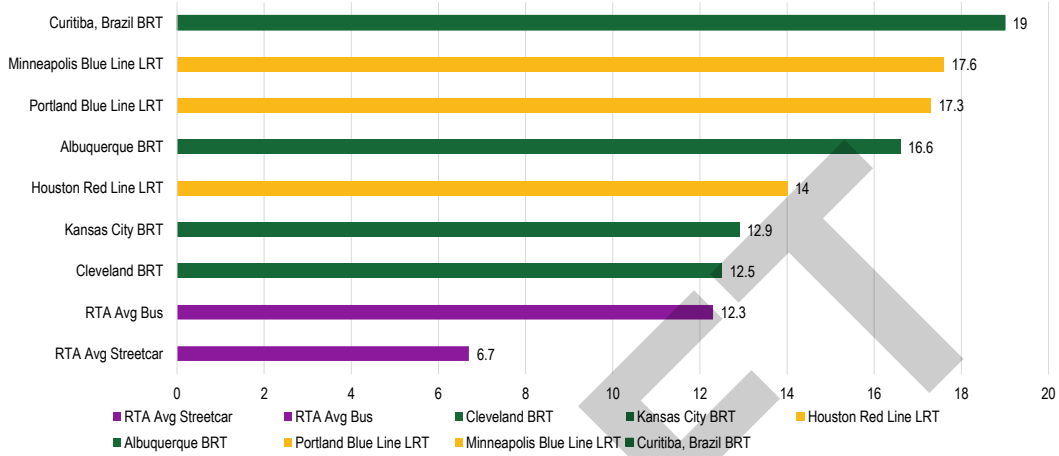
\$75-150M per mile

Bus Rapid Transit

\$5-20M per mile

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Transit Speed



Comments:

- What is the difference between the example speeds and RTA?
 - What will RTA's BRT speed be?
- What will BRT do for automobile speed?

ACCESS TO OPPORTUNITY

WHY BRT?

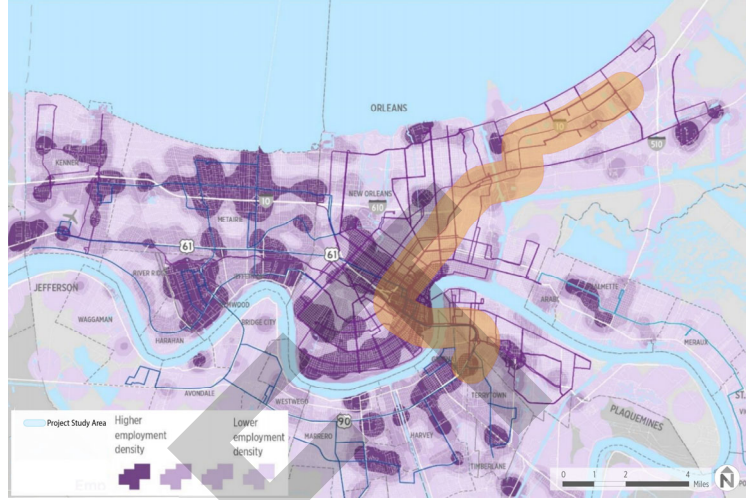
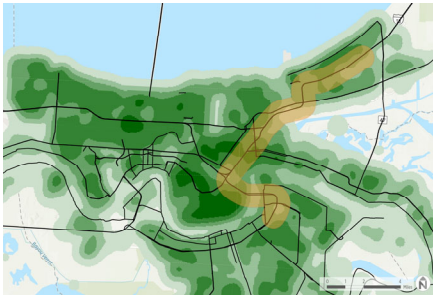
Jobs accessible by
30-minute transit ride

11%

Jobs accessible by
30-minute car ride

89%

Source: Ride New Orleans



11/12/2021

RTA BRT Advisory Committee Meeting #1

12 **RTA**

Comments:

- Show similar maps to demonstrate where the concentrations of unemployment are.

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TRANSIT-ORIENTED DEVELOPMENT

WHY BRT?

- E-TOD (Equitable Transit-Oriented Development) – share the benefits of BRT for all
 - Affordability
 - Small-business support
 - Dense, safe, walkable corridors
- Station Area Planning
- Supportive Zoning and Policies



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WHAT IS BRT?

DEFINING BRT

ART/BRT "LITE"

Enhanced Stations, Upgraded Technology,
Increased Frequency

PREMIUM BRT

Dedicated or Grade-Separated Runningway, Level Boarding, Off-Board Fare
Collection, Upgraded Vehicle and station Technology, System Branding



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Prospect Avenue MAX



DEFINING BRT

Agency

- Kansas City Area Transportation Authority

Location

- Kansas City, Missouri

Revenue Operations

- 2019

Corridor Length

- 10 Miles, 26 Stations

Capital Cost

- \$56M

BRT Characteristics

- Mixed Traffic with Bus Lane Segments
- Level Boarding
- Station WiFi
- Smart Interactive Kiosks
- BRT-Style CNG Vehicles

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HealthLine



DEFINING BRT

Agency

- Greater Cleveland Regional Transit Authority

Location

- Cleveland, Ohio

Revenue Operations

- 2015

Corridor Length

- 6.8 Miles, 36 Stations

Capital Cost

- \$197.2

BRT Benefits

- \$9.5 Billion in economic development
- 23 million square feet in total development
- 13,000 new jobs

11/12/2021

RTA BRT Advisory Committee Meeting #1

16 

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Albuquerque Rapid Transit

DEFINING BRT



Agency

- Albuquerque Transit Department

Location

- Albuquerque, New Mexico

Revenue Operations

- 2017

Corridor Length

- 8.8 Miles, 18 Stations

Capital Cost

- \$134M

BRT Benefits

- \$2.9 Billion in economic development
- \$418 Million in increased assessed property value
- 9,592 new jobs

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RTA BRT Advisory Committee Meeting #1

17 **RTA** 

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Curitiba, Brazil

DEFINING BRT



Agency

- Rede Integrada de Transporte (Integrated Transportation Network)

Location

- Curitiba, Brazil

Revenue Operations

- 1974

System Length

- 50.6 Miles, 21 Transit Centers

BRT Characteristics

- Dedicated Bus Lanes
- Level Boarding
- All-door Boarding
- Bi-Articulated Vehicles
- Custom Station Architecture

11/12/2021

RTA BRT Advisory Committee Meeting #1

18 RTA

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What are the most important characteristics of Bus Rapid Transit for the region?



BRT CONSIDERATIONS



Operations & Service Goals



BRT Guideway Alternatives



Station Design Components



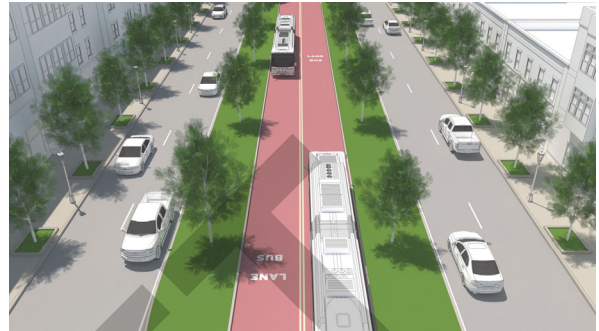
Technology



Vehicle Standards



Branding



Comment: "Look to business partnerships to invest in growing the areas surrounding the BRT lines. Appropriate ads and retail space incorporated in the system would provide the needed initial and long-term funding source."

Comment: "What would enforcement of dedicated transit lanes look like? I'm thinking of the frequent use of the HOV lane by single drivers/constant parking in bike lanes that we don't do a great job of managing



OPERATIONS

- On-Time Performance/Reliability
- Headway
- Span of Service
- Stop/Station Spacing
- Open vs. Closed System

Setting a framework for the levels of service and operations will guide development of service standard definitions for BRT service.



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GUIDEWAY

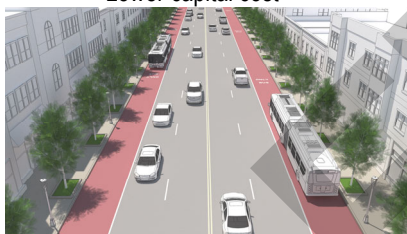
Mixed Traffic

- Lowest capital cost
- Slowest travel time



Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost



Median-running BRT

- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



11/12/2021

RTA BRT Advisory Committee Meeting #1

22 **RTA**

Comment: "Given the history of challenges in policing the semi-dedicated lanes (ex: bike lanes), concerned that anything short of 100% dedicated lanes in the center of a roadway will hinder significant adoption."

Comment: "How can we integrate/enhance bike infrastructure? Are there models that allow dedicated bus lanes to be safely shared by bikes?"



NEW ORLEANS OPPORTUNITIES

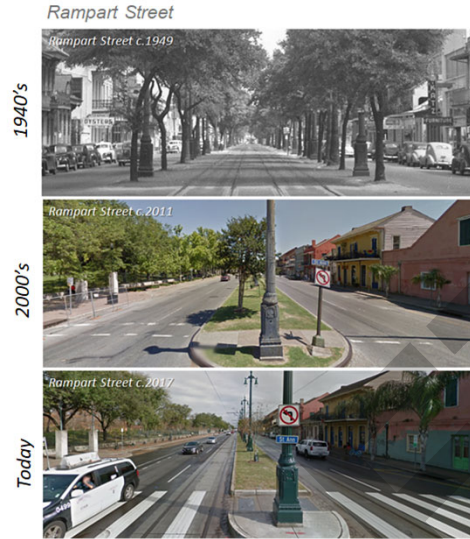
GUIDEWAY

Neutral Ground

- Opportunity for dedicated guideway use
- Historic precedent

Stormwater Management

- Opportunity for green solutions integrated with the guideway



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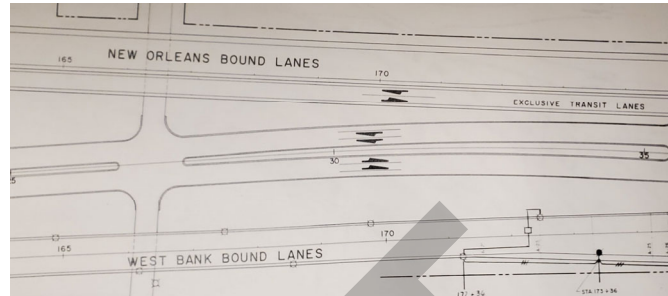


NEW ORLEANS OPPORTUNITIES

GUIDEWAY

US 90 Bridge HOV Conversion

- Current configuration is not effective
- Restore HOV lane to original configuration
- 2-way with transit use
- Key to BRT success and connection to Algiers



11/12/2021

RTA BRT Advisory Committee Meeting #1

24 **RTA**

Comments:

- US 90 Bridge
 - How would it work around Danziger?
 - Biggest users are people taking kids to school
 - What would enforcement look like?



STATIONS

BRT Station Considerations

- Station Location
- Station Length/Width
- Platform Height
- Shelter Style/Design
- Typical Station Amenities



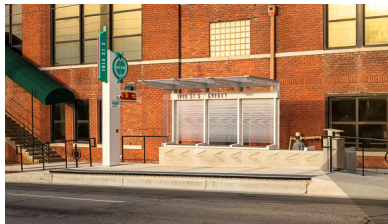
Level Boarding



ABQ Rapid Transit



SBX Bus Rapid Transit



Tulsa Peoria Ave AERO



Grand Rapids – The Rapid

11/12/2021

RTA BRT Advisory Committee Meeting #1

25 **RTA**

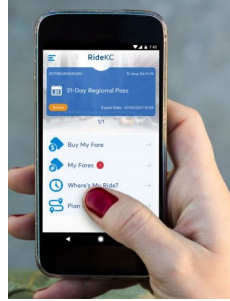
Comment: "Let's include trash cans! This seems like a good place to incorporate public art."

DRAFT

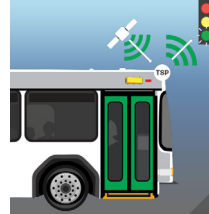


TECHNOLOGY

On-Board vs Off-Board Payment



Transit Signal Priority



WiFi On-board/Stations



Stations Technology



Comment: "WIFIF on the stations and on the buses are a must, along with the rapid boarding through station-based and app-based fares. In the app it is essential to have real-time status and arrival times."

Comment: "If the West Bank portion extends into Gretna, integrated fare technology will be crucial."

DRAFT



VEHICLES

Typical Length

- 40' – 60'

Capacity

- 60-90 (seated + standing)

Types:

- Standard low-floor BRT bus
- Articulated bus

Propulsion:

- Diesel
- Diesel Hybrid
- Compressed Natural Gas (CNG)
- Electric



11/12/2021

RTA BRT Advisory Committee Meeting #1

27 RTA

Comment: “The biggest users of the HOV lane are carpooling parents who no longer have school bus service in our current school system. How ca we get kids to school easily?”

- How many buses are in the fleet?
 - Half of the pre-katrina fleet.
 - How many are from post Katrina.
 - Next generation needs to be clean and environmentally friendly.



BRANDING



11/12/2021

RTA BRT Advisory Committee Meeting #1

28 

DRAFT

What are your biggest concerns to implementing BRT in New Orleans?

dotd cooperation
pushback from drivers
regional cooperation
follow through
cost
maintenance
having it work for riders
neighborhood service
access

NEXT STEPS

Meeting Follow-up

- Summary materials will be sent to all invitees
 - Presentation
 - Notes Summary

Next Steps

- Community Stakeholder Meeting - feedback
- BRT Standards Development
- BRT Corridor Route Evaluation
- Business Advisory Committee - feedback

How can we engage others to increase the effectiveness and success of this project?

DRAFT

REVIEW & QUESTIONS



Comment: “This is a great opportunity as an alternative to the dream of light rail. While this is dramatic savings compared to light rail, we should not short out on the thought. It will be better to start small, invest in the complete solution and prove the benefits.

Comment: “Algiers is lacking sidewalks – it’d be great to invest in that connecting infrastructure to the BRT.”

Comment: “Who will benefit the most from BRT? Businesses, workers, or the unemployed?”

- There has not been a good effort in connecting the high education institutions with transit.
- Don’t forget the next generation of people is not as reliant on cars and they want to see increased transit.
- RTA wants to be at the table to meet the needs of higher ed.
 - Tulane has a shuttle system
- Transit is an equity issue
 - Transit needs to work to resolve access issues
 - Build a system that serves the community.
- The project isn’t successful without strengthening the existing system
 - NOLA east is not walkable
- Need to discuss how the community has failed to meet the needs of the current riders

- Would like to see the data throughout the study
- Concerns
 - Lack of sidewalks
 - Important to facilitate access

DRAFT



BUS RAPID TRANSIT FEASIBILITY STUDY

Business Advisory Committee

Monday, April 11, 2022
9:00 – 11:30 am



DRAFT

Welcome and Introductions

Recap:

- Where RTA is Going
- Investing in Existing Service
- Why Bus Rapid Transit (BRT)?
- BRT Goals

BRT Corridor Development

- Route & Transit Priority Options
- Public Engagement Approach



RTA (Regional Transit Authority)

- Lona Hankins, Deputy CEO for Planning & Infrastructure
- Dwight Norton, Sr. Director of Strategic & Long-Term Planning

Project Consultant Team Representatives

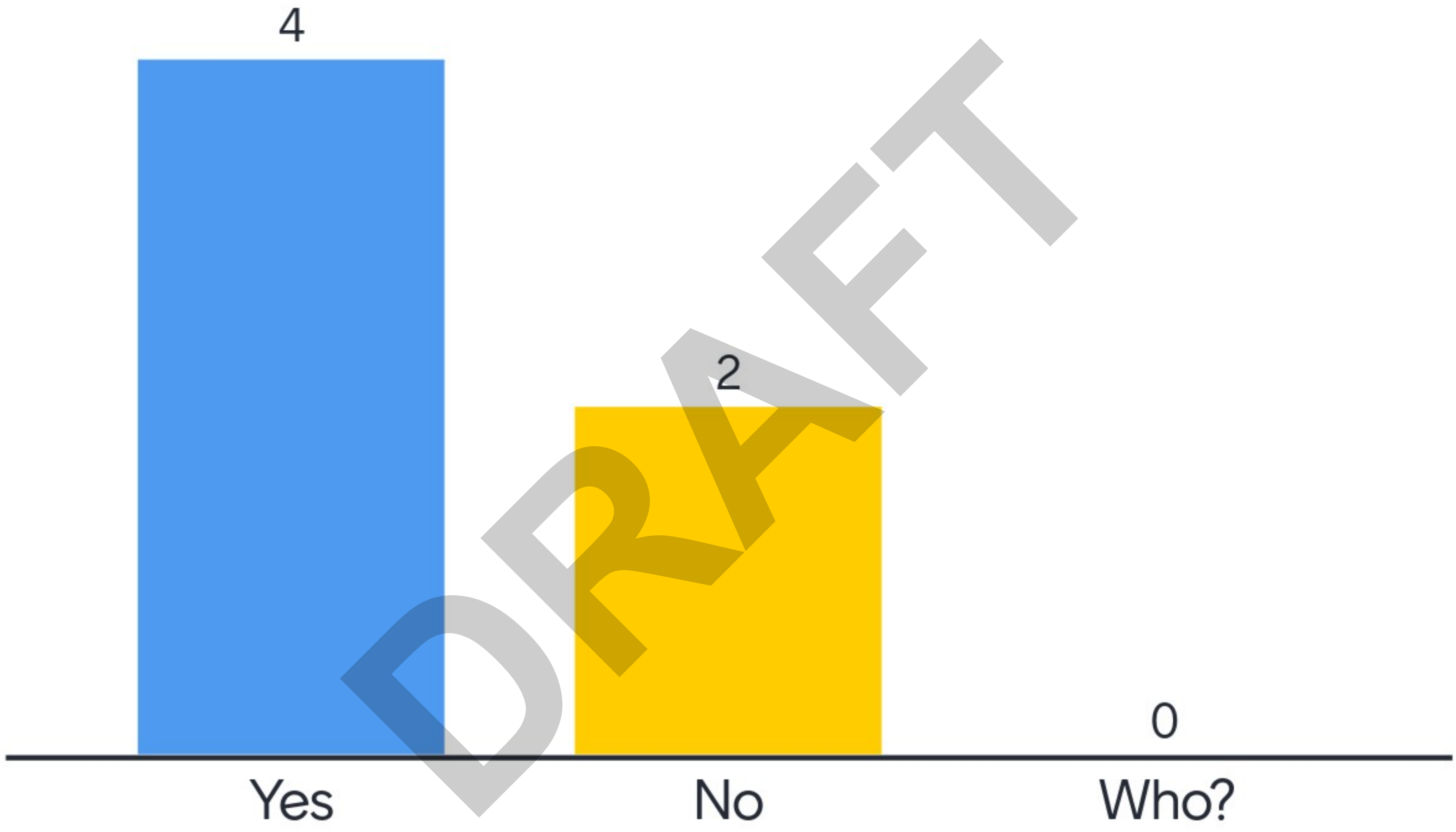
- **Iam Tucker – ILSI – Prime Consultant**
- **Geneva Coleman & Karimah Stewart – Hawthorne Agency – Public Engagement**
- **Devin Foil – HNTB – Planning Consultant**

CAPTURING YOUR INPUT

Use your phone to answer the poll

- Open an internet browser on your phone
 - Type in www.menti.com
- Type in the code **"2775 8720"** into the code field

Will the Pelicans make it to the playoffs?



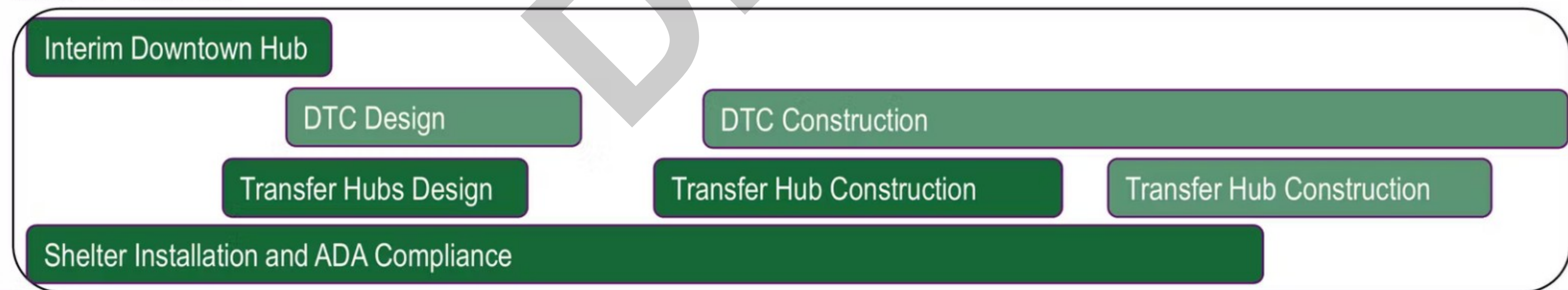
WHERE WE'RE GOING



Bus Rapid Transit (BRT):



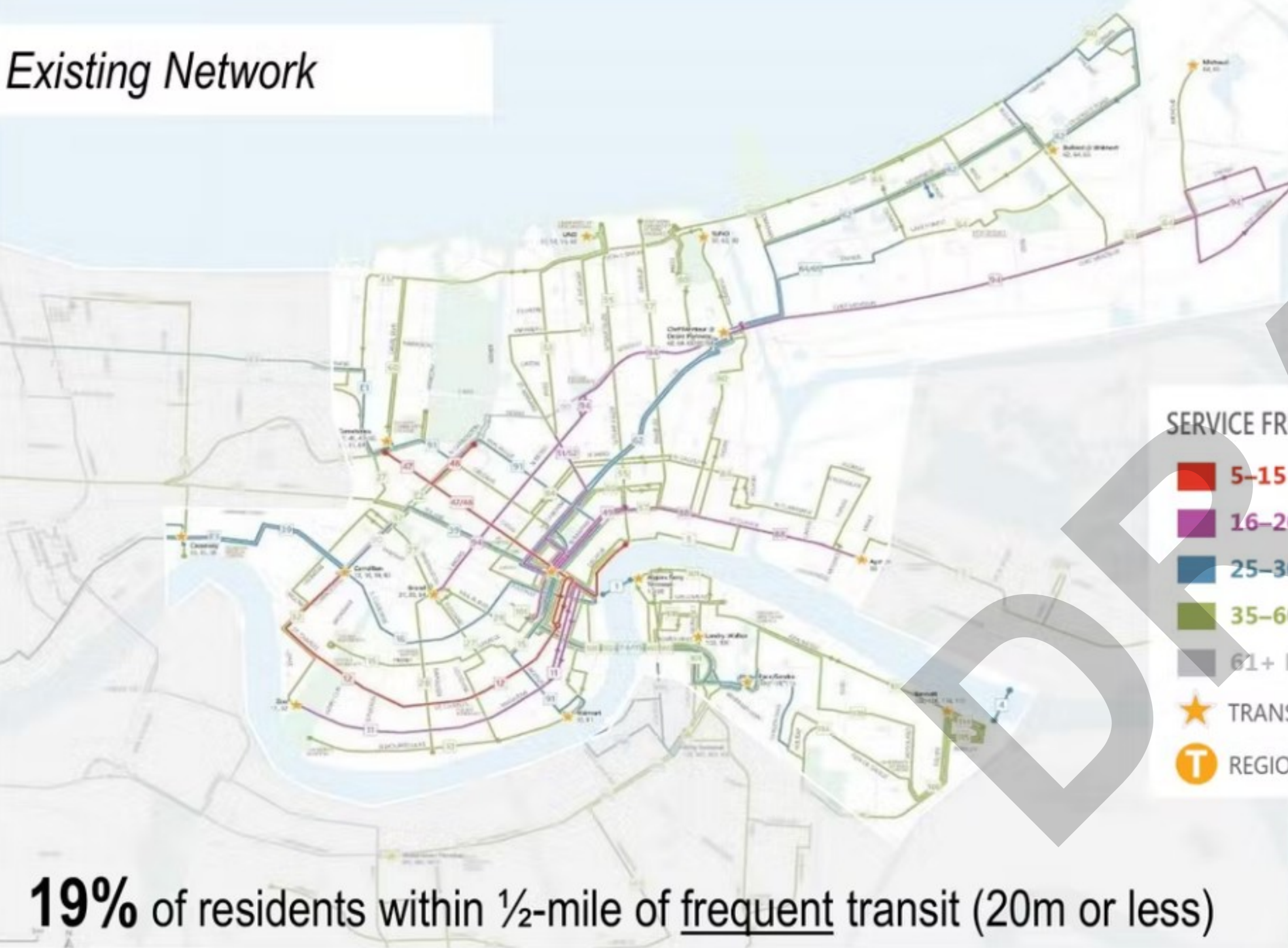
Modern Facilities:



INVESTING IN BASIC SERVICE

New Links Implementation

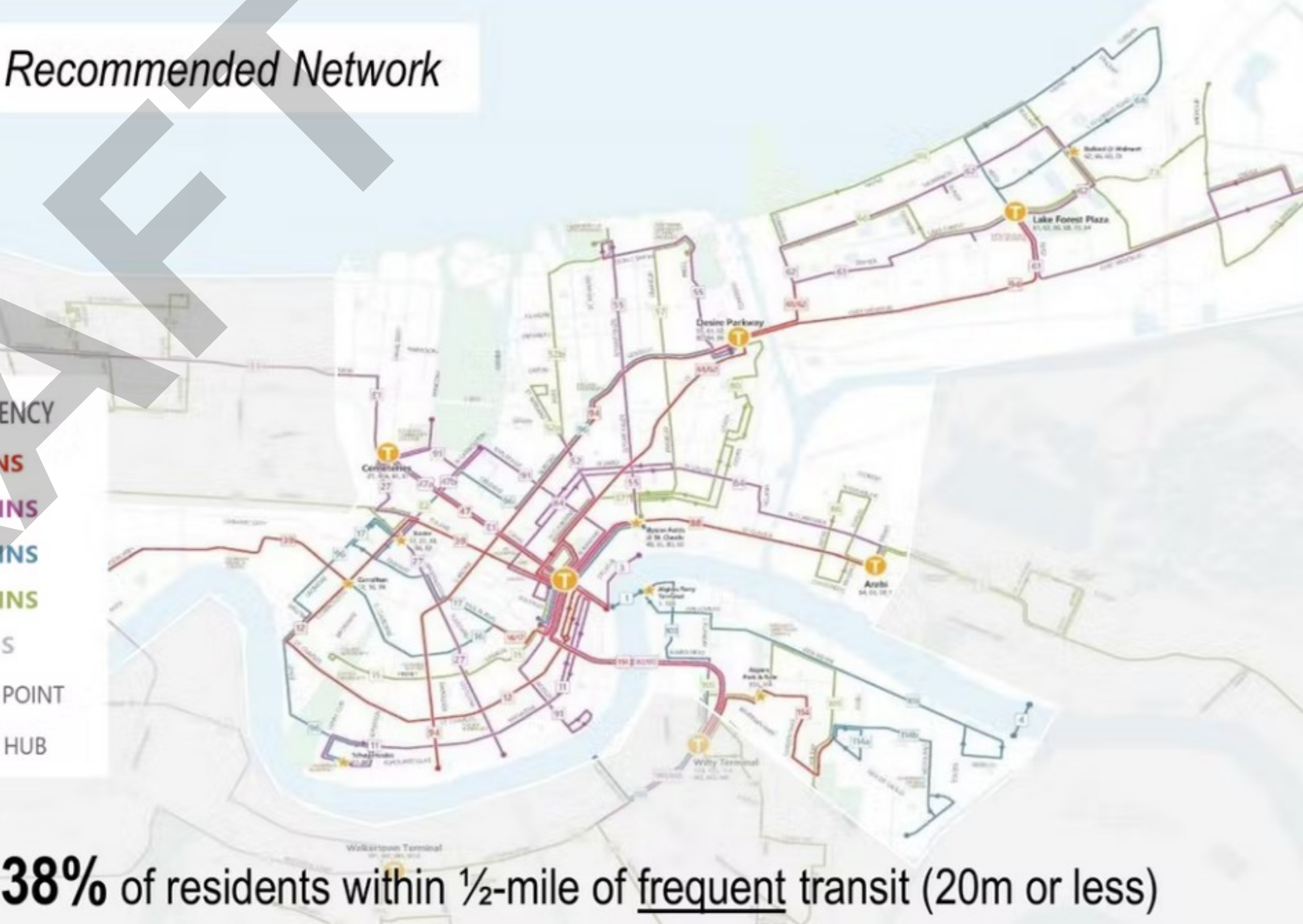
Existing Network



19% of residents within 1/2-mile of frequent transit (20m or less)

35% of zero-car households within 1/2-mile of frequent transit

Recommended Network



38% of residents within 1/2-mile of frequent transit (20m or less)

64% of zero-car households within 1/2-mile of frequent transit

- SERVICE FREQUENCY
- 5-15 MINS
 - 16-20 MINS
 - 25-30 MINS
 - 35-60 MINS
 - 61+ MINS
 - ★ TRANSFER POINT
 - T REGIONAL HUB

WHY NEW TRANSIT TYPES

Connect to Opportunities

Connect outer residential areas,

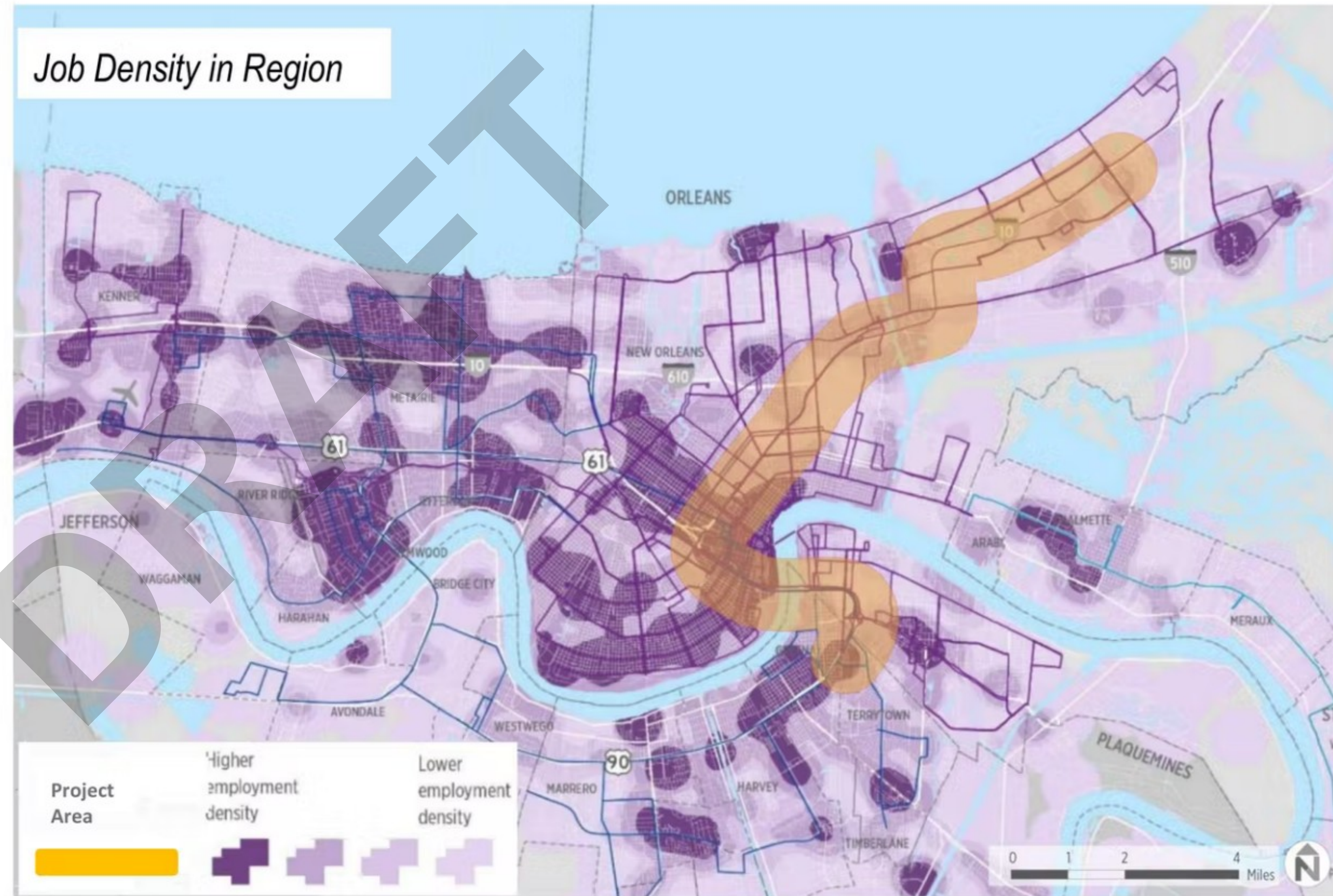
- New Orleans East
- Algiers

to high employment areas,

- Downtown
- Mid-city
- Uptown

for much cheaper than driving

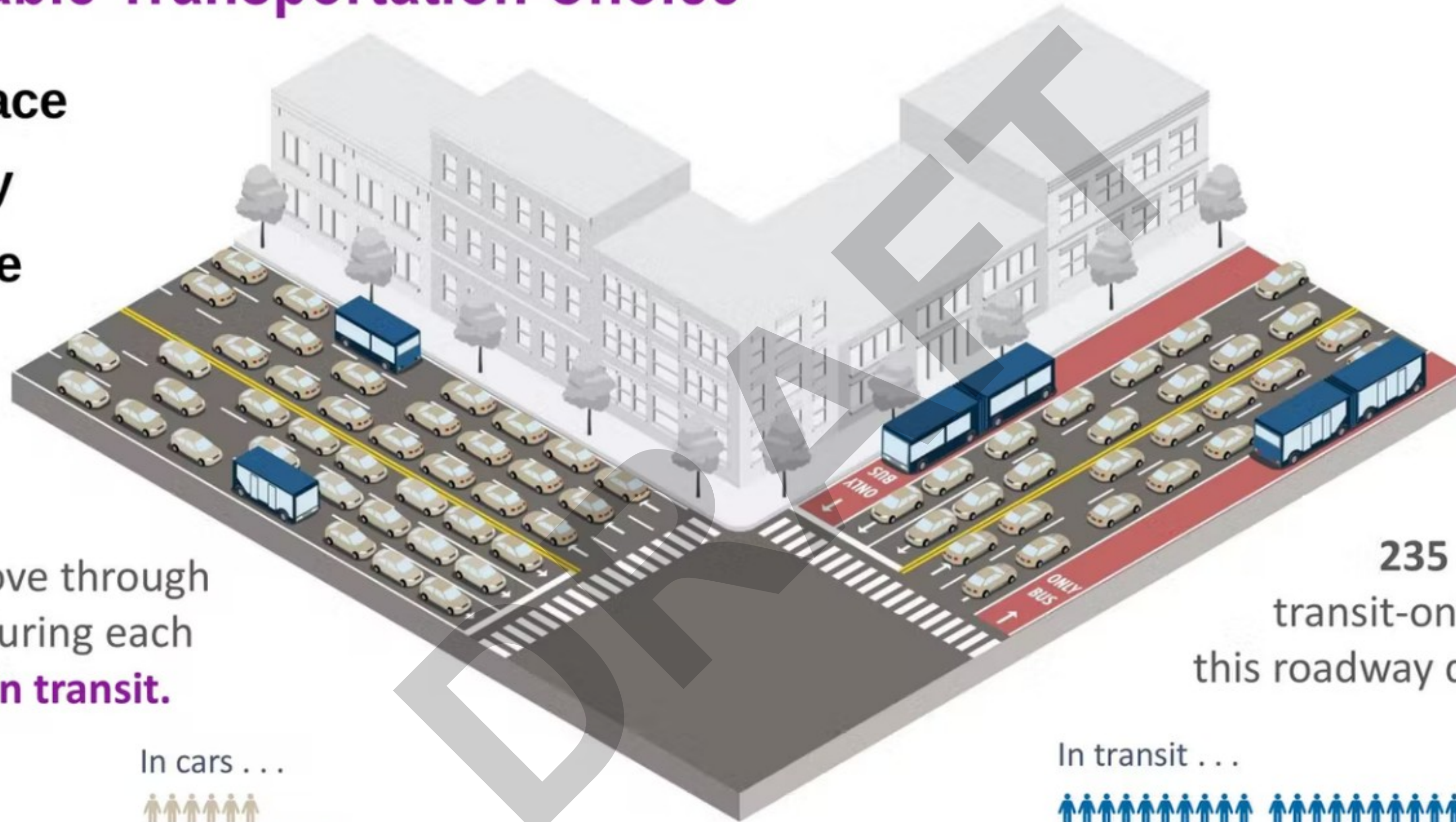
but similar travel times



WHY NEW TRANSIT TYPES

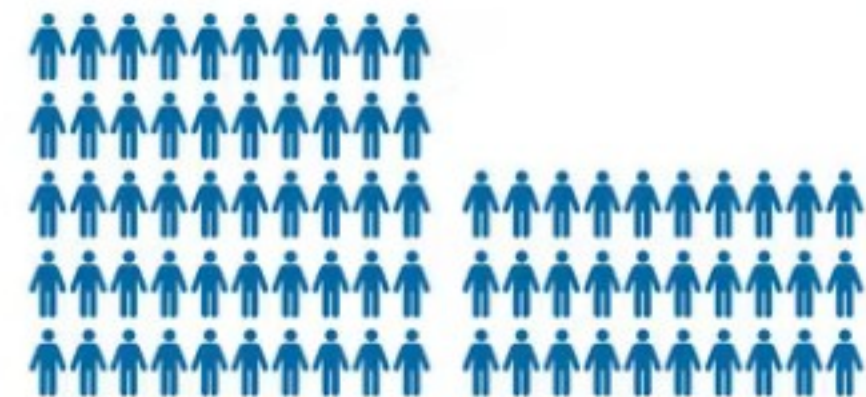
Provide Equitable Transportation Choice

Use limited space more efficiently for more people



126 people move through this roadway during each light cycle. **80 in transit.**

In transit . . .



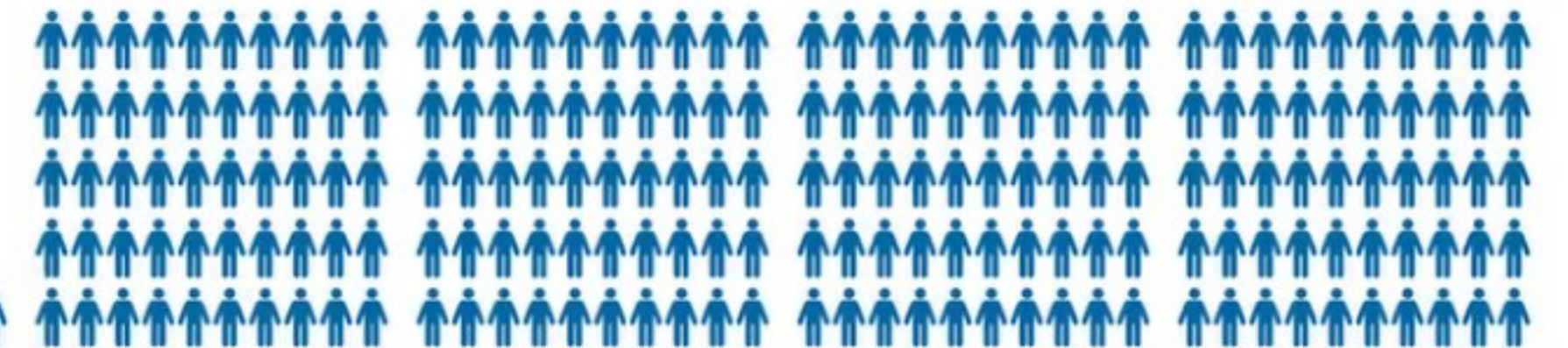
In cars . . .



235 people on a road with transit-only lanes move through this roadway during each light cycle.

204 in transit.

In transit . . .



In cars . . .



Light Rail (LRT) vs Bus Rapid Transit (BRT)



Agency: Metro Transit
Location: Minneapolis, MN
Opened: 2024
Corridor Length: 14.5 Miles
36 Stations
Capital Cost: \$2.03 Billion



Agency: Albuquerque Transit Dept
Location: Albuquerque, NM
Opened : 2017
Corridor Length: 8.8 Miles
18 Stations
Capital Cost: \$134 Million

BRT can provide similar benefits and more cost effective than LRT.

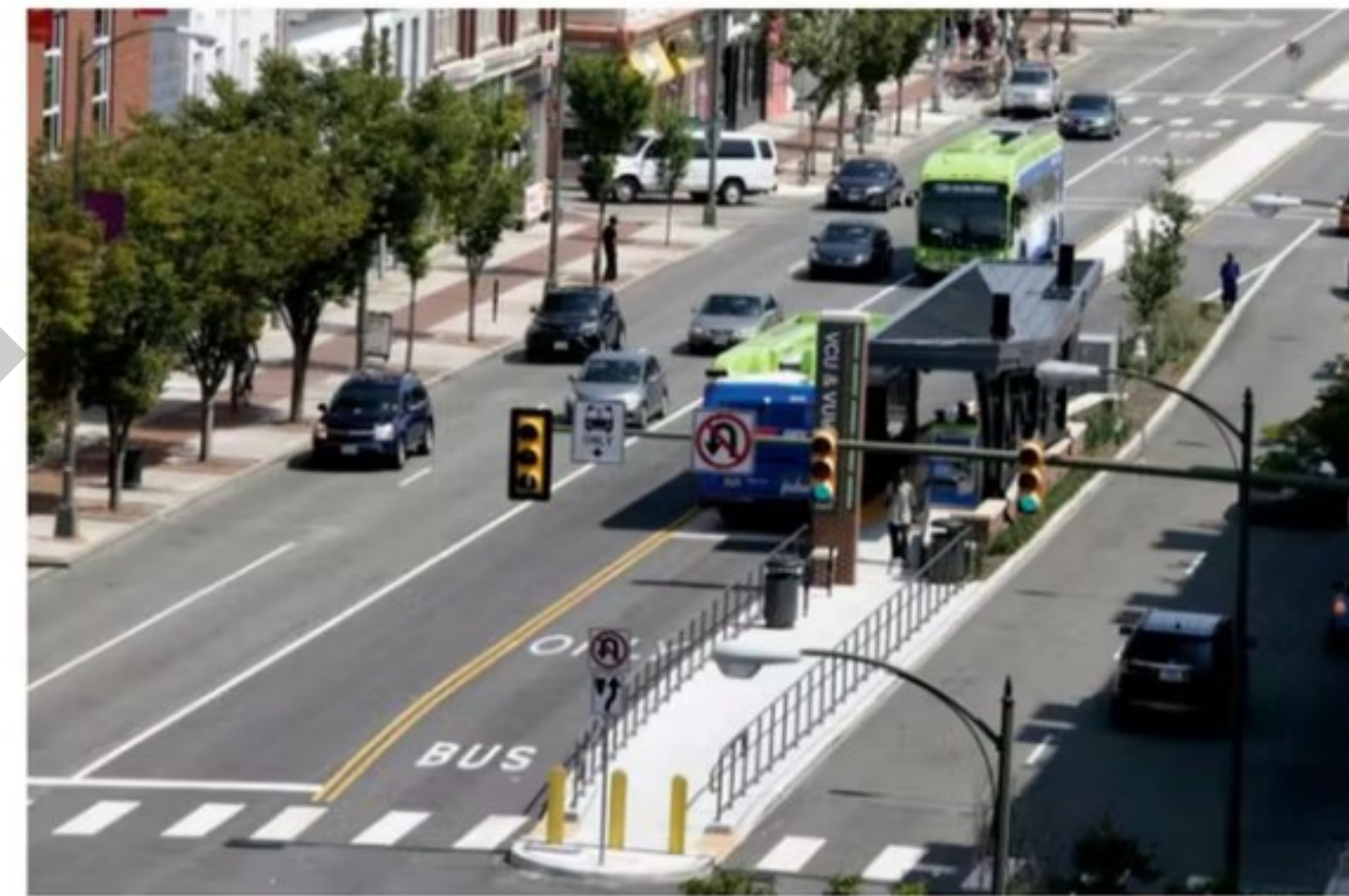
Light Rail Transit

\$75-150M per mile

Bus Rapid Transit

\$5-20M per mile

Examples of Bus Rapid Transit (BRT)



BUS RAPID TRANSIT GOALS



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet communities needs.



Promote investment in neighborhoods.



Support a sustainable and healthy community.



DEFINING TRANSIT PRIORITY

Travel Time: New Orleans East (Lake Forest/Read) to Downtown (Canal & Basin)

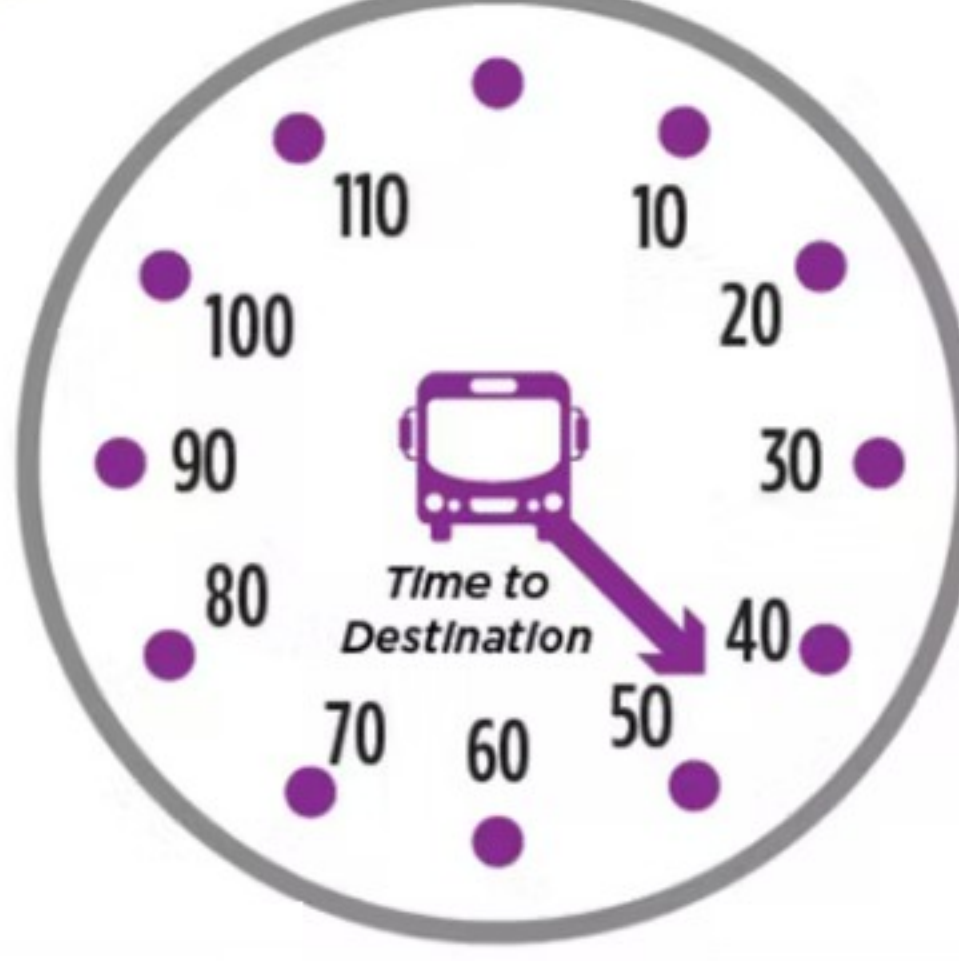
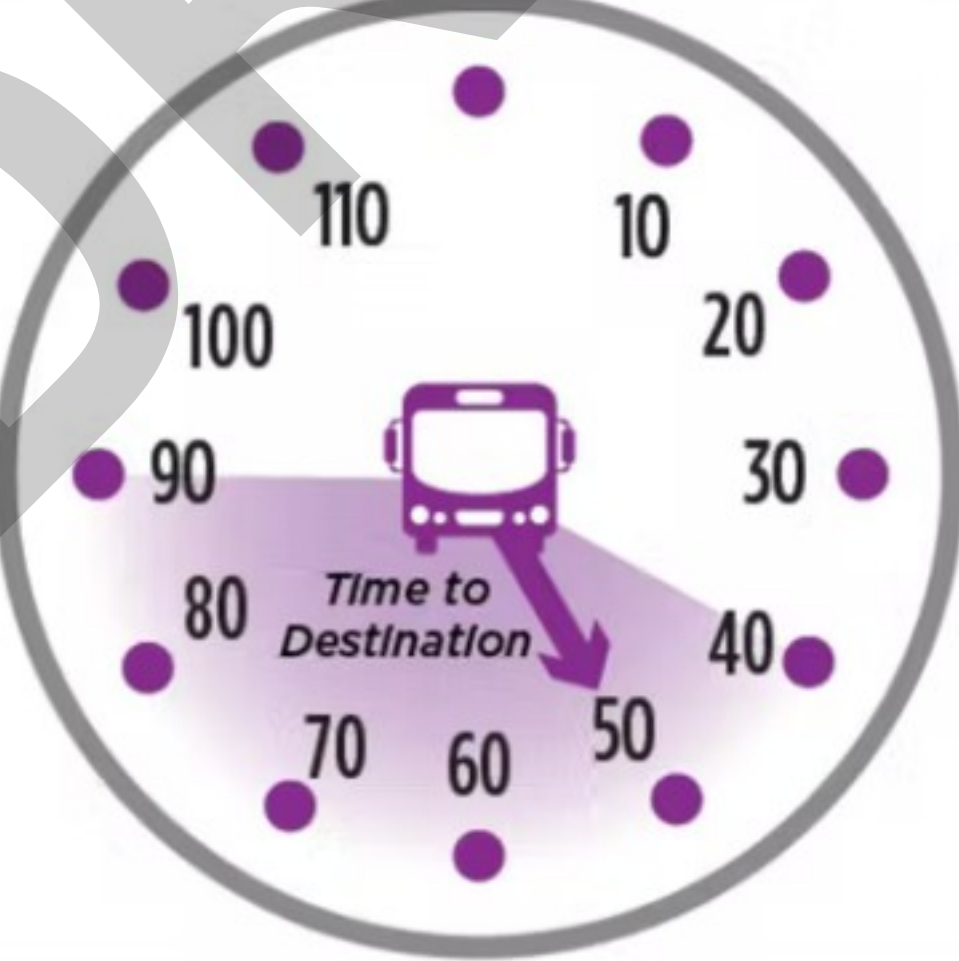
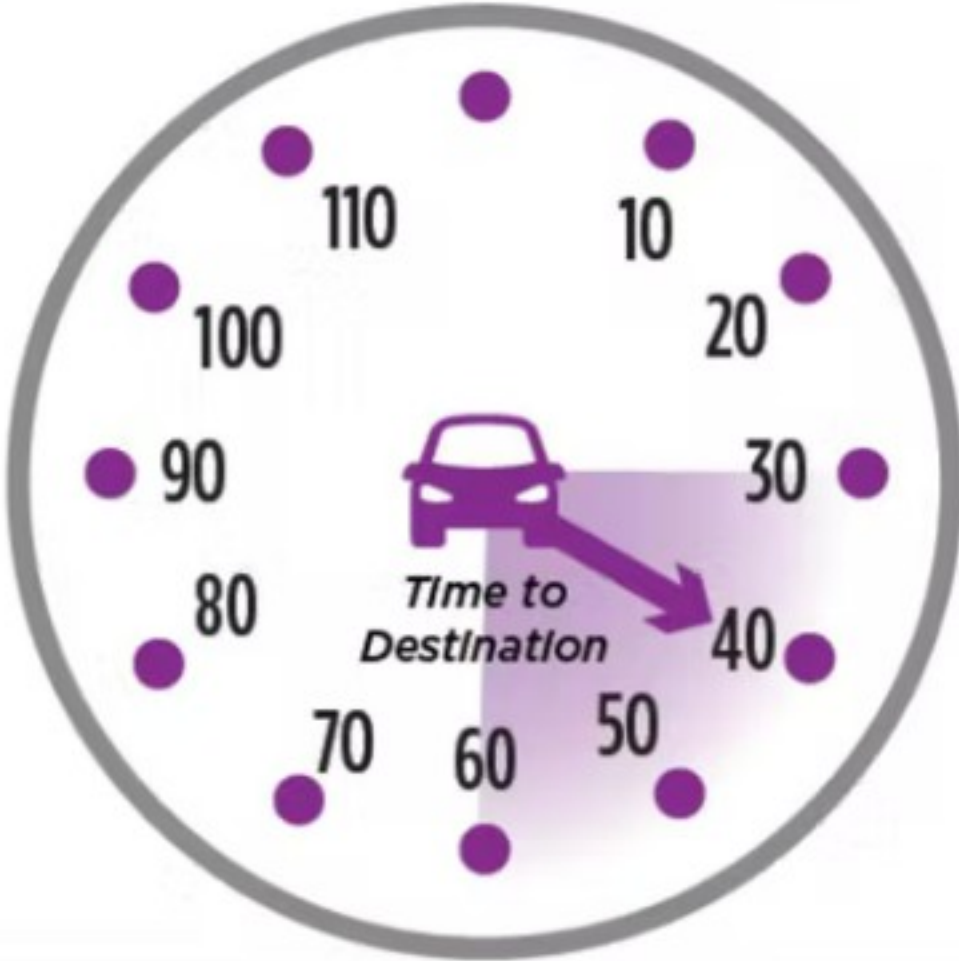
Driving Alone



BRT Mixed Traffic



BRT Dedicated Lanes



DEFINING TRANSIT PRIORITY

Travel Time: Downtown (Canal & Basin) to West Bank (Wilty Terminal)

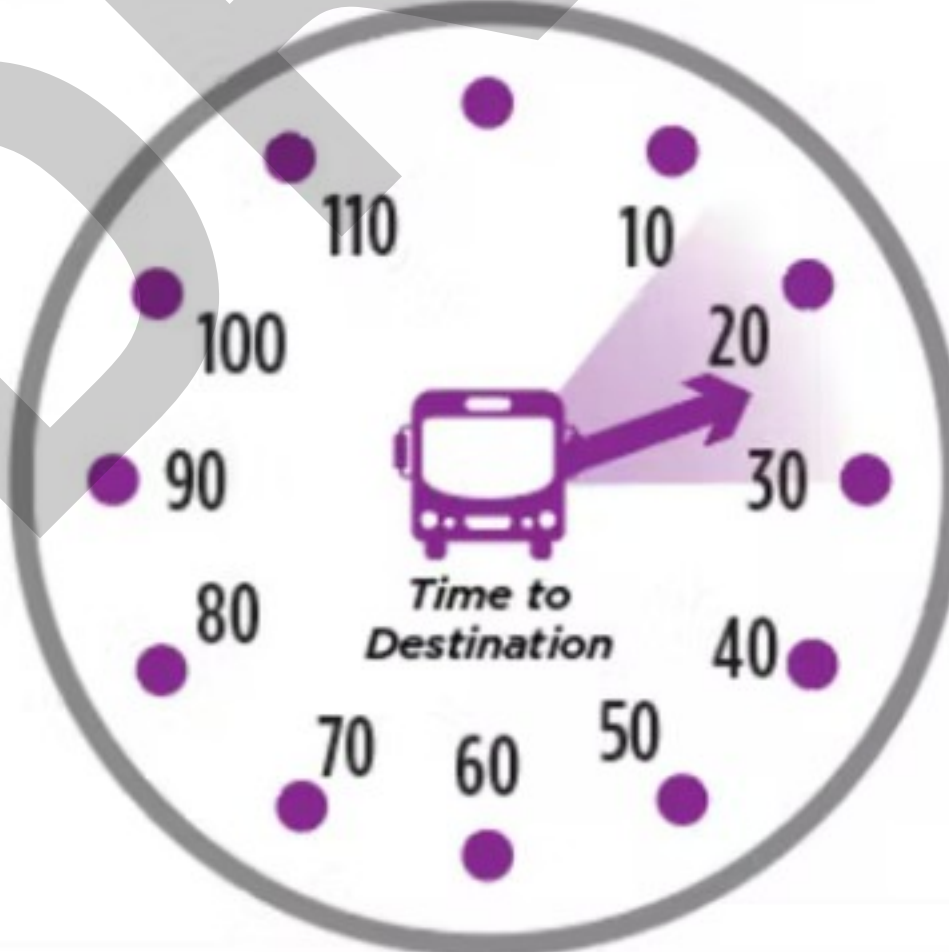
Driving Alone:



BRT Mixed Traffic



BRT Dedicated Lanes



Variations of Dedicated Lanes

Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost



Center-running BRT

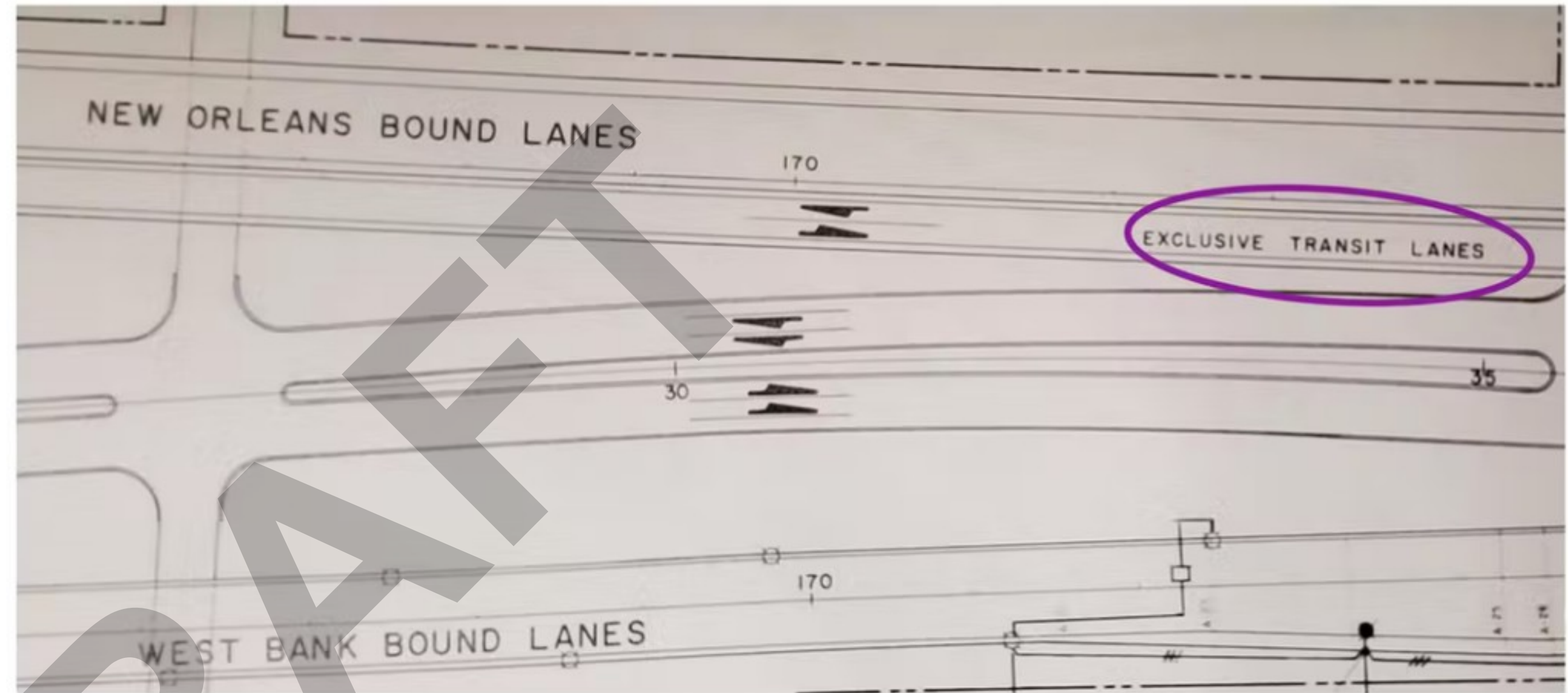
- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



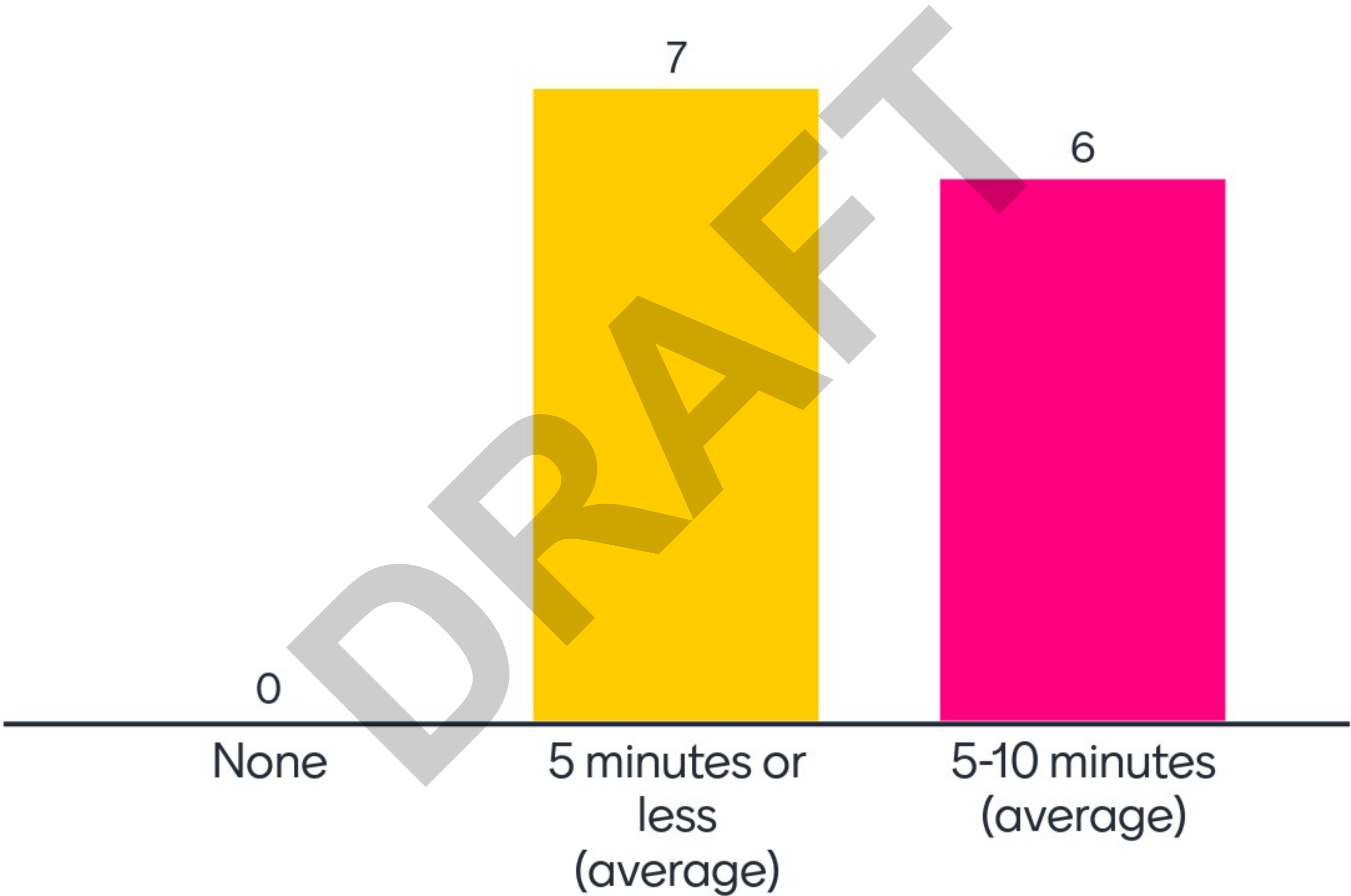
History of Dedicated Lanes

US 90 Bridge HOV

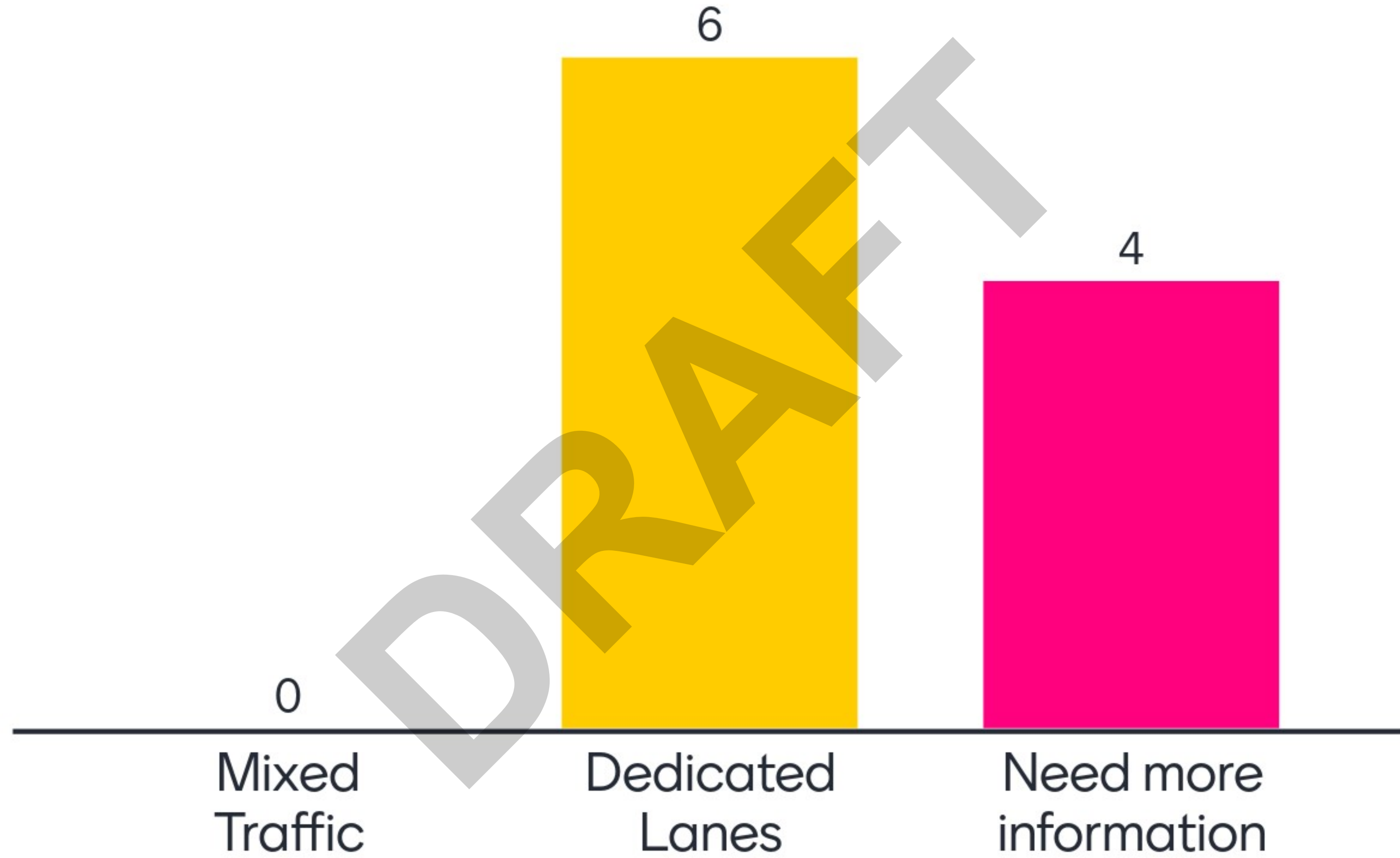
- Current configuration no meets today's travel patterns
- Original function was 2-way with transit use
- Restoring HOV lane to original configuration is grant compliant
- Key to BRT success and connection to West Bank



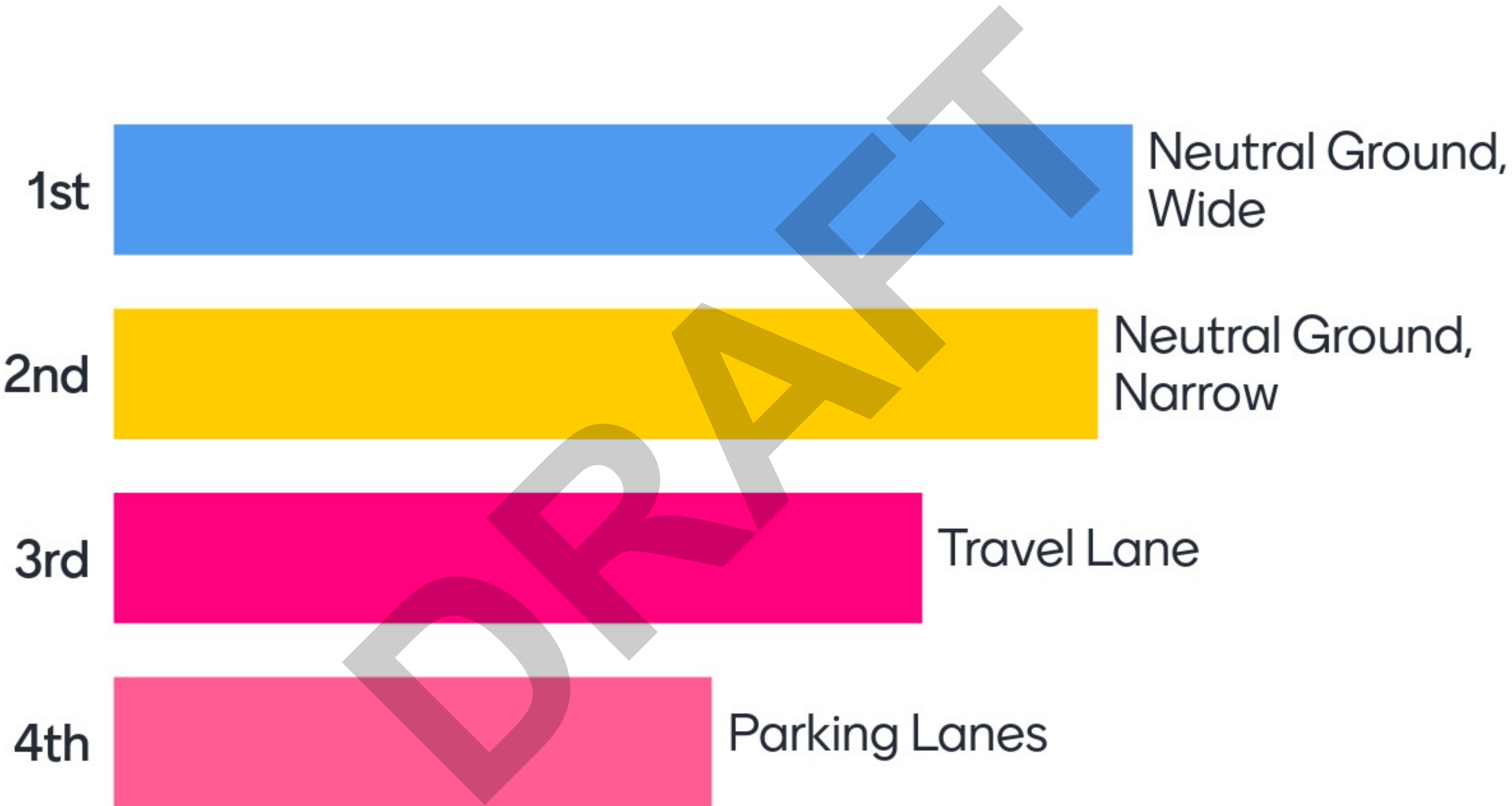
How much impact to driving times is acceptable for equal or better transit commute?



What guideway option do you prefer for BRT?



What trade-offs do you currently support for fast and reliable transit?



YOUR INPUT

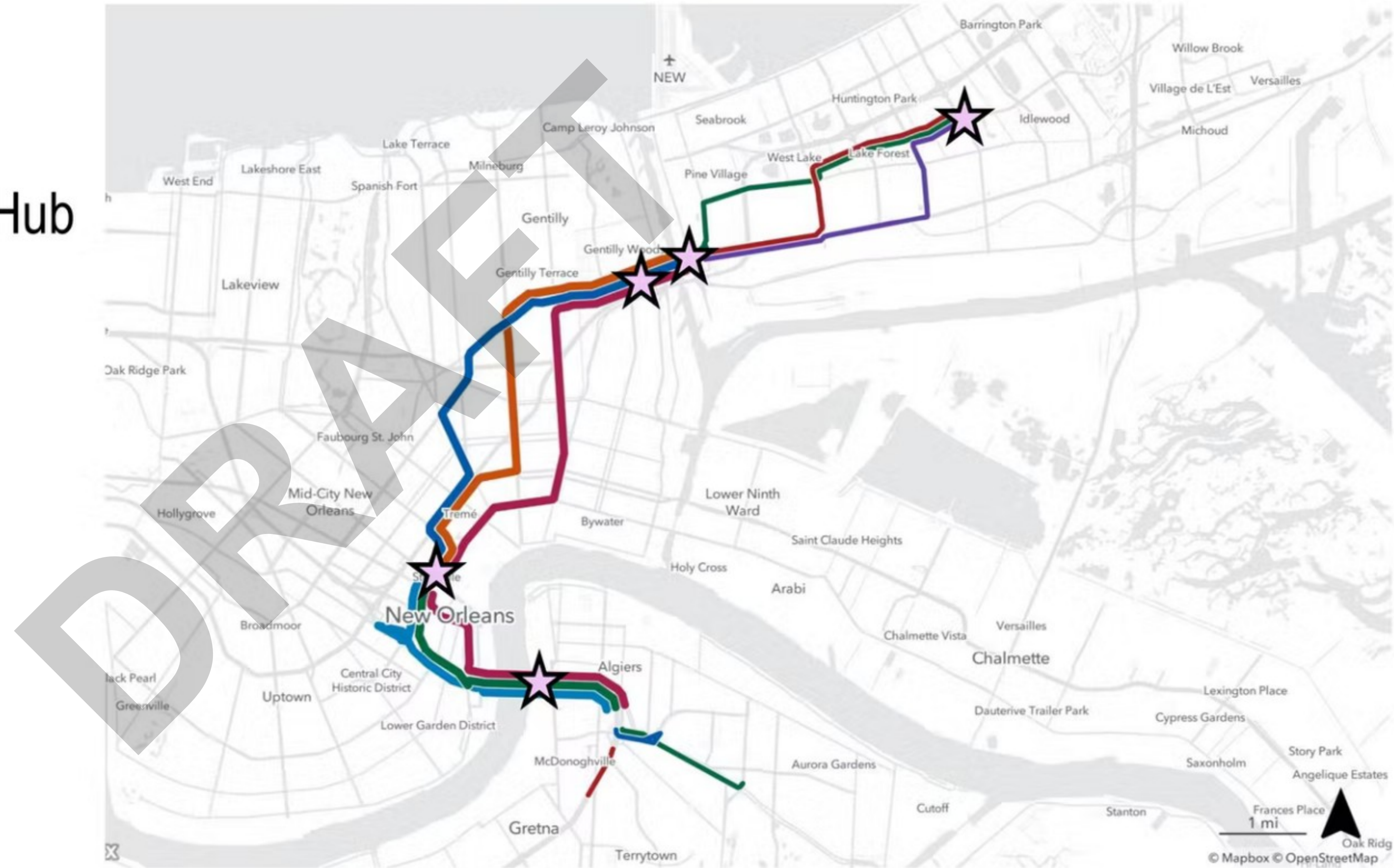
What questions and comments do you have with defining transit priority?

DRAFT

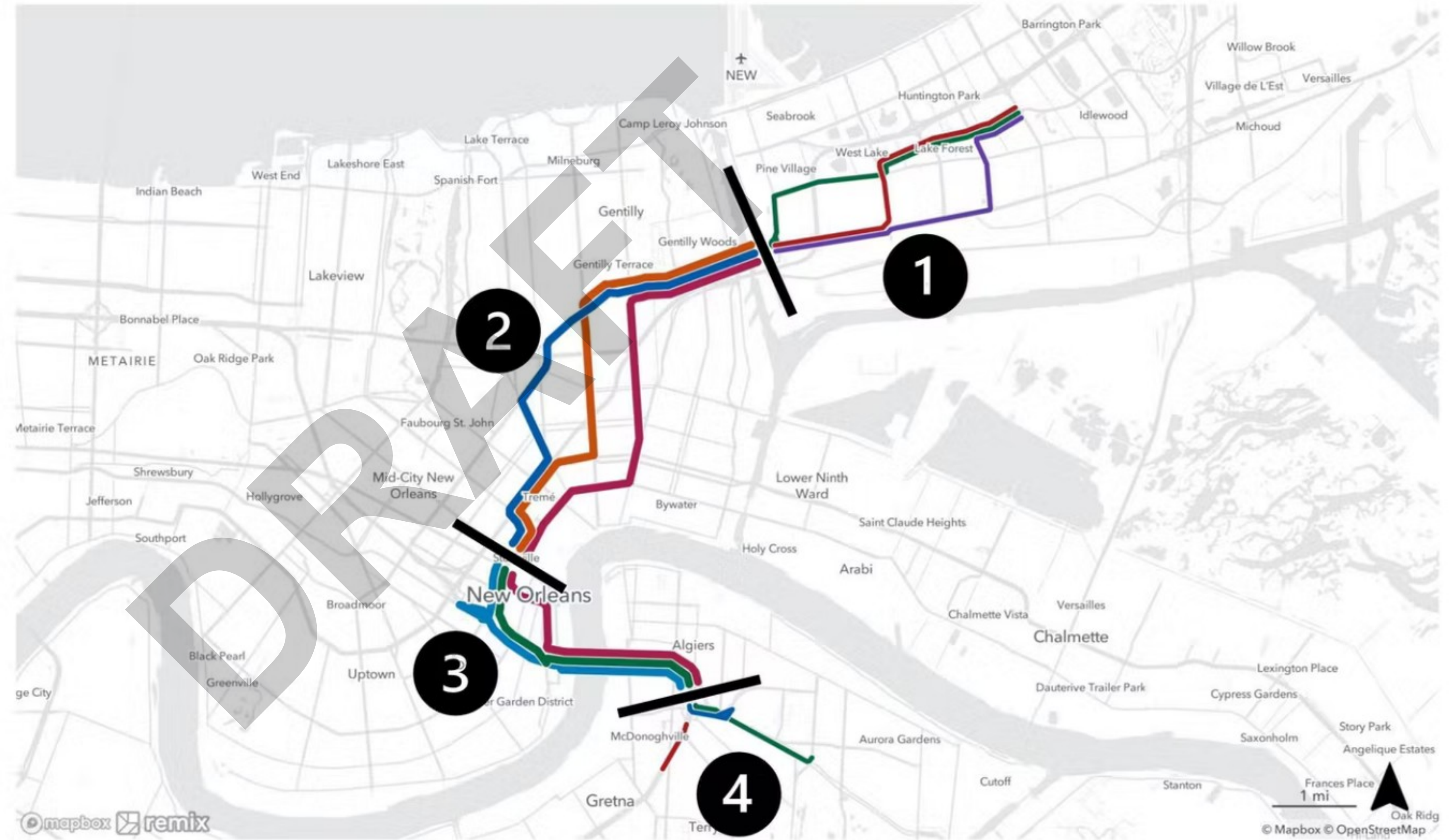
Potential Routes

KEY NODES

- ★ New Orleans East Transfer Hub
- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Wilty Terminal (Gretna)
- Algiers Park-n-Ride

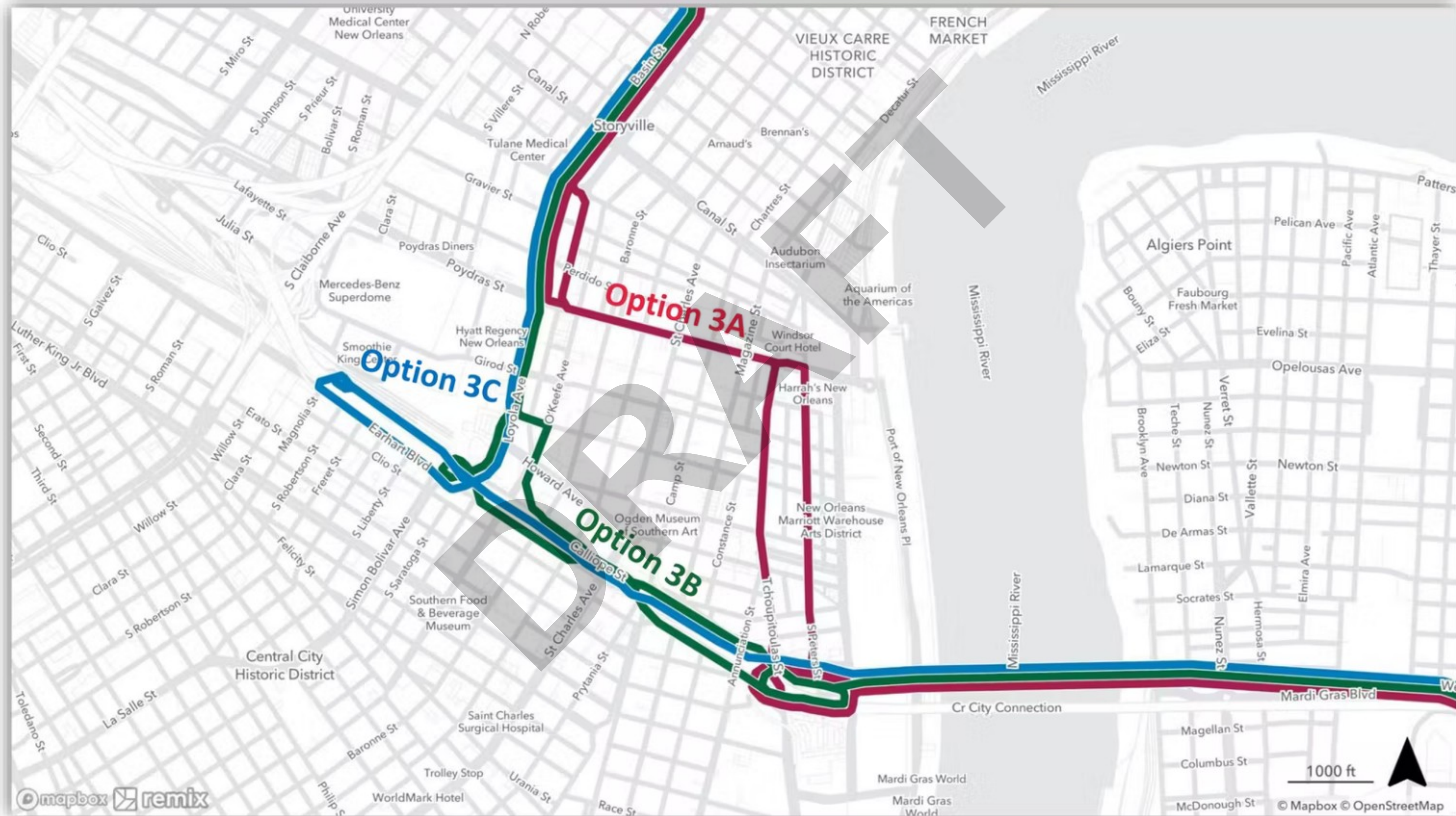


Potential Routes



Potential Routes – Segment 3

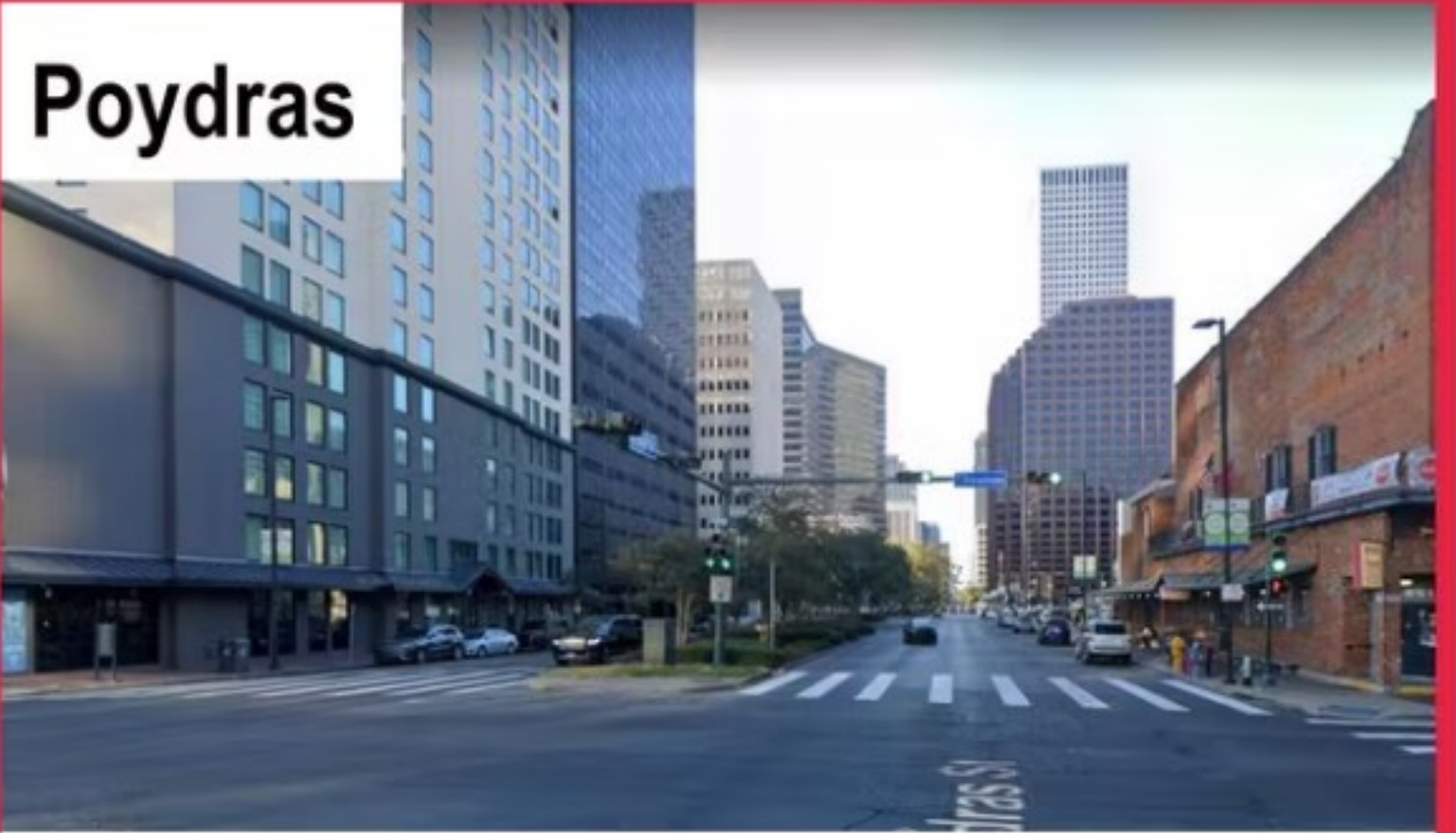
DEFINING THE ROUTE



Potential Routes – Segment 3

DEFINING THE ROUTE

Option 3A:



Option 3B:



Option 3C:



Option 3A:

Key Destinations:

- Tulane Medical Center
- CBD
- Convention Center

Key Statistics:

- 54,162 Total Employment
- 3,890 Total Population
- 13,939 Existing Riders
- 4 Essential Service Connections

Option 3B:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal
- Transfer to Uptown

Key Statistics:

- 32,154 Total Employment
- 2,365 Total Population
- 10,528 Existing Riders
- 2 Essential Service Connections

Option 3C:

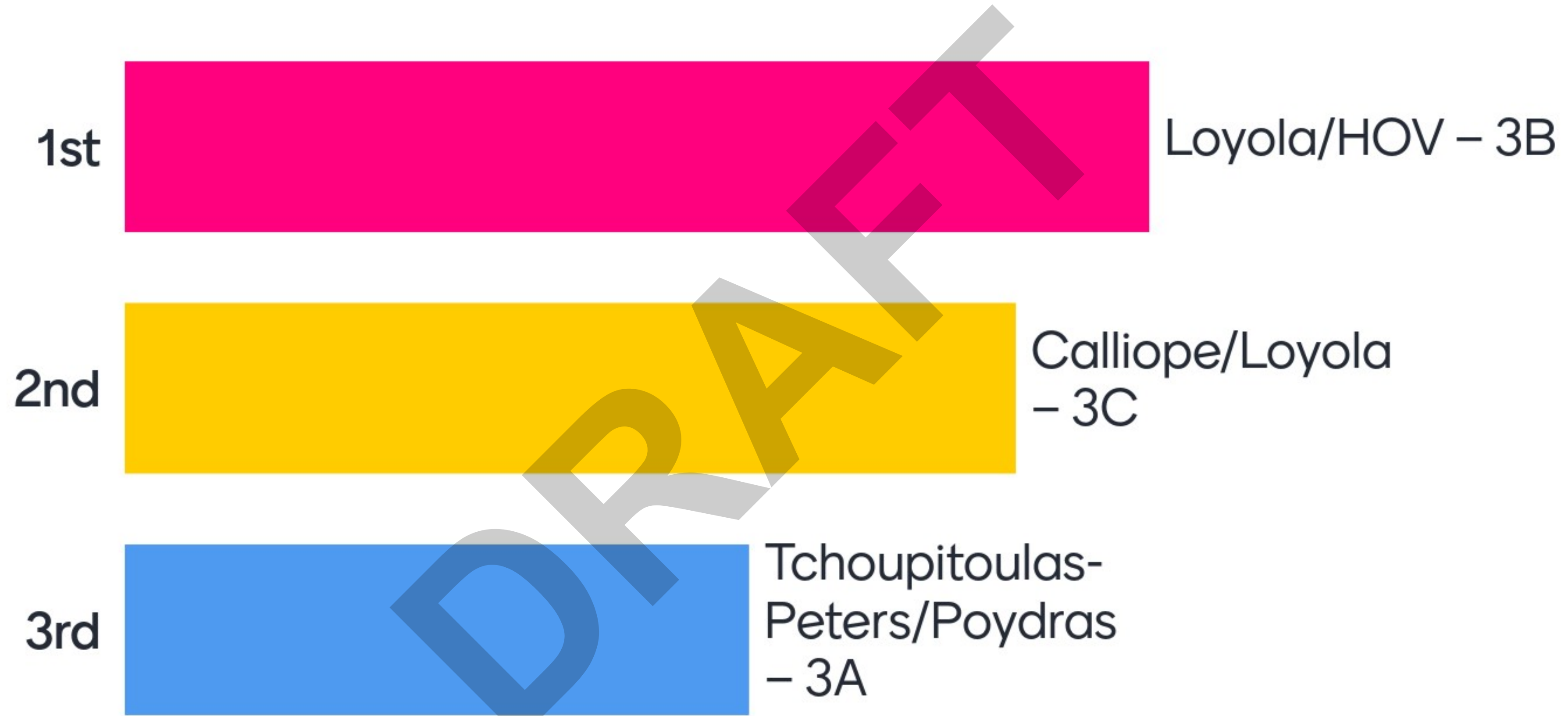
Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal

Key Statistics:

- 36,294 Total Employment
- 4,150 Total Population
- 11,094 Existing Riders
- 2 Essential Service Connections

What is your preferred route?

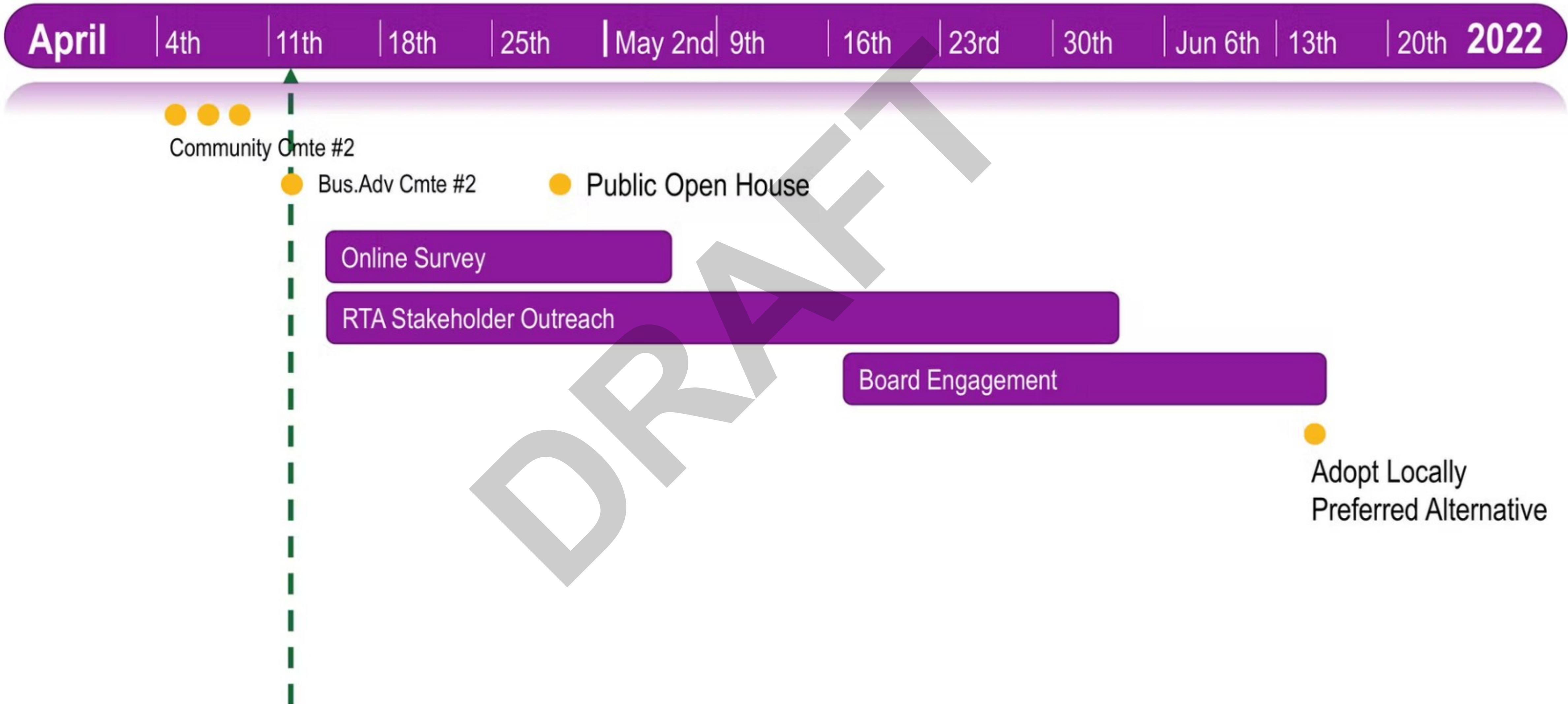


YOUR INPUT

What questions and comments do you have with the route options?

DRAFT

ENGAGEMENT SCHEDULE



Our Effort

- Promote Public Engagement Opportunities
 - Social Media Campaign
 - Email Campaign
 - Boards in Public Facilities
 - Local Media Outreach
 - Neighborhood Associations Meeting
- Present at Stakeholder Meetings

Online Survey

mid-April – early May

Open Houses

late-April: EB & WB

How You Can Help:

- Promote Public Engagement Opportunities
 - Social Media Support
 - Promote via Email
 - Boards in Building/Campus
- Host Stakeholder Presentation(s)

Online Survey

mid-April – early May

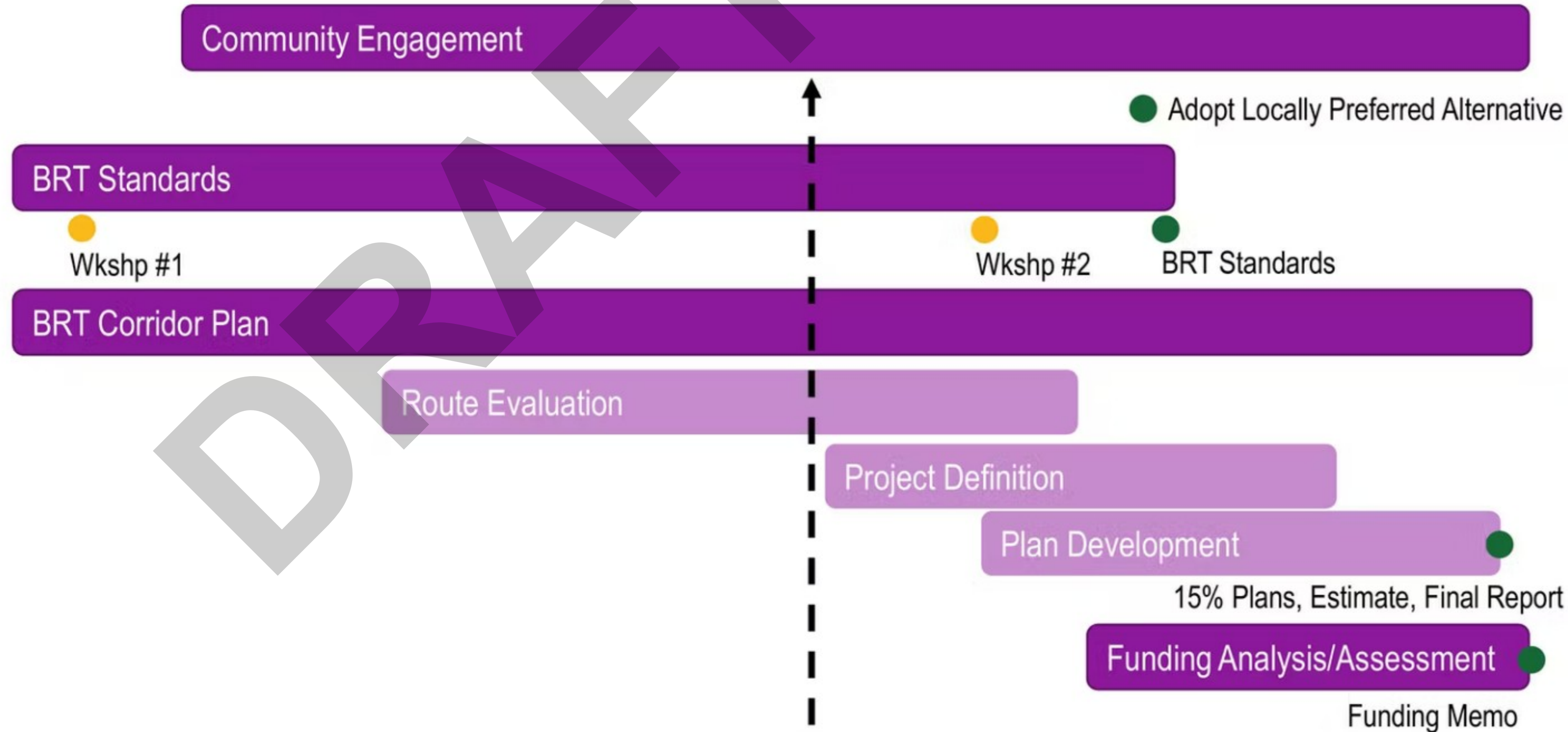
Open Houses

late-April: EB & WB

We need your help to gather input!

PROJECT SCHEDULE

2021 | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | 2022



SEND US YOUR COMMENTS:

Dwight Norton

dnorton@rtaforward.org

Tiffany Bradley

tbradley@rtaforward.org



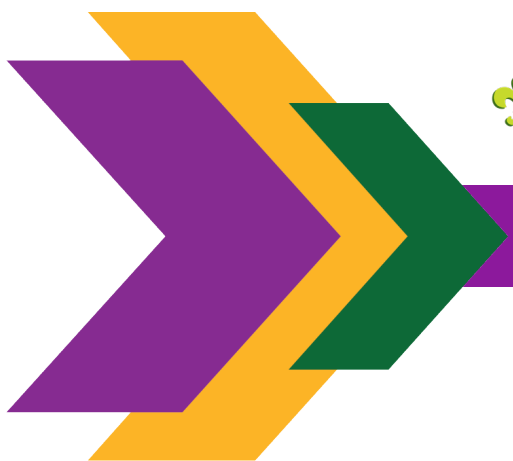


BRT Feasibility Study Community Advisory Committee - Gently

Tuesday, January 26, 2022

Zoom

5:30 – 7:00 pm



Welcome and Introductions

RTA Overview: Where We've Been and Where We're Going

Investing in Existing Service

Bus Rapid Transit (BRT)

- **What is BRT?**
- **Why BRT?**
- **BRT Study Goals**
- **Defining the Project**
- **Public Engagement**

DRAFT

RTA

- **Alex Wiggins, CEO**
- **Lona Hankins, Deputy CEO for Planning & Infrastructure**
- **Dwight Norton, Sr. Director of Strategic & Long-Term Planning**

Project Consultant Team Representatives

- **Iam Tucker – ILSI – Prime Consultant**
- **Geneva Coleman & Karimah Stewart – Hawthorne Agency – Public Engagement**
- **Bobby Hosack – HNTB – Planning Consultant**

WHERE WE'VE BEEN

2018

2019

2020

2021

2022

● Strategic Mobility Plan Adopted



“New Links” Plan

● Board adopts New Links

Exec/Admin Public Empl

All Public

COVID-19 Pandemic

● Begin Return to Service

● Hard Rock Hotel Collapse

Canal/Rampart streetcar repair

● Canal Street reopens

BRT Feasibility Study

● Downtown Transit Center Site Selected

Fare Collect Mdrnztn

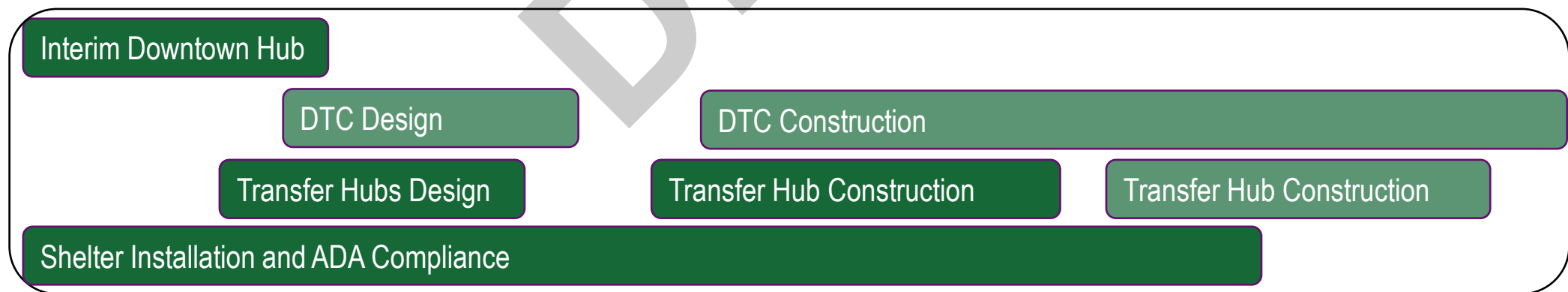
WHERE WE'RE GOING



Bus Rapid Transit (BRT):



Modern Facilities:





MARCH 2018



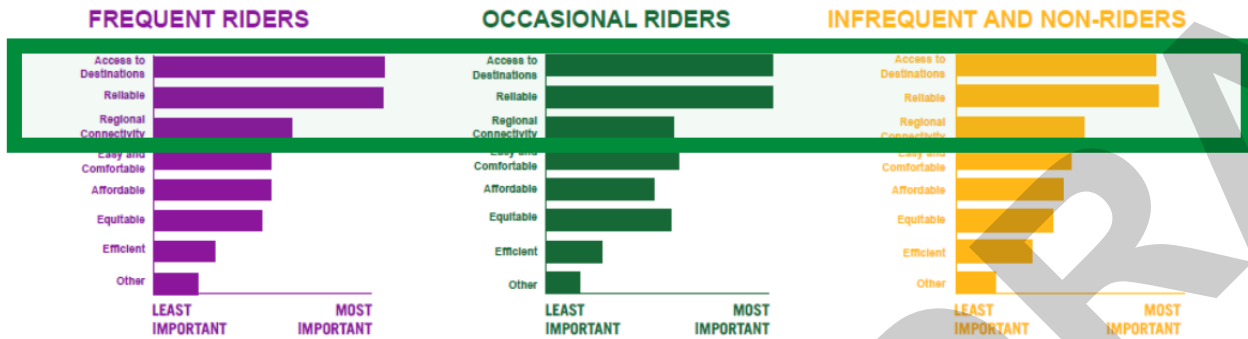
ROADMAP FOR FUTURE



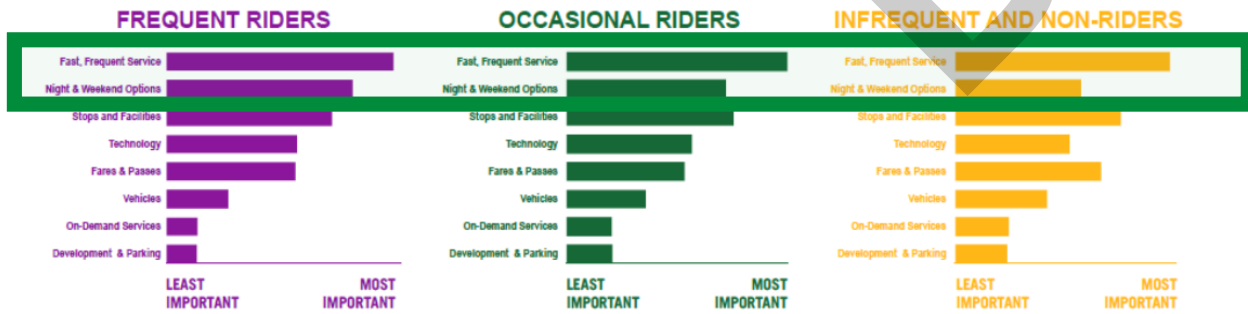


MARCH 2018 **RTA**

What four (4) values are most important for the future of public transportation and mobility in the region?



What four (4) types of strategies are most important to improve public transportation?



ROADMAP FOR FUTURE

COMMUNITY FEEDBACK:

Values

1. Access to Destinations
2. Reliable
3. Regional Connectivity

Strategies

1. Fast, Frequent Service
2. Night/Weekend Options

NEW ORLEANS REGIONAL TRANSIT AUTHORITY
STRATEGIC MOBILITY PLAN

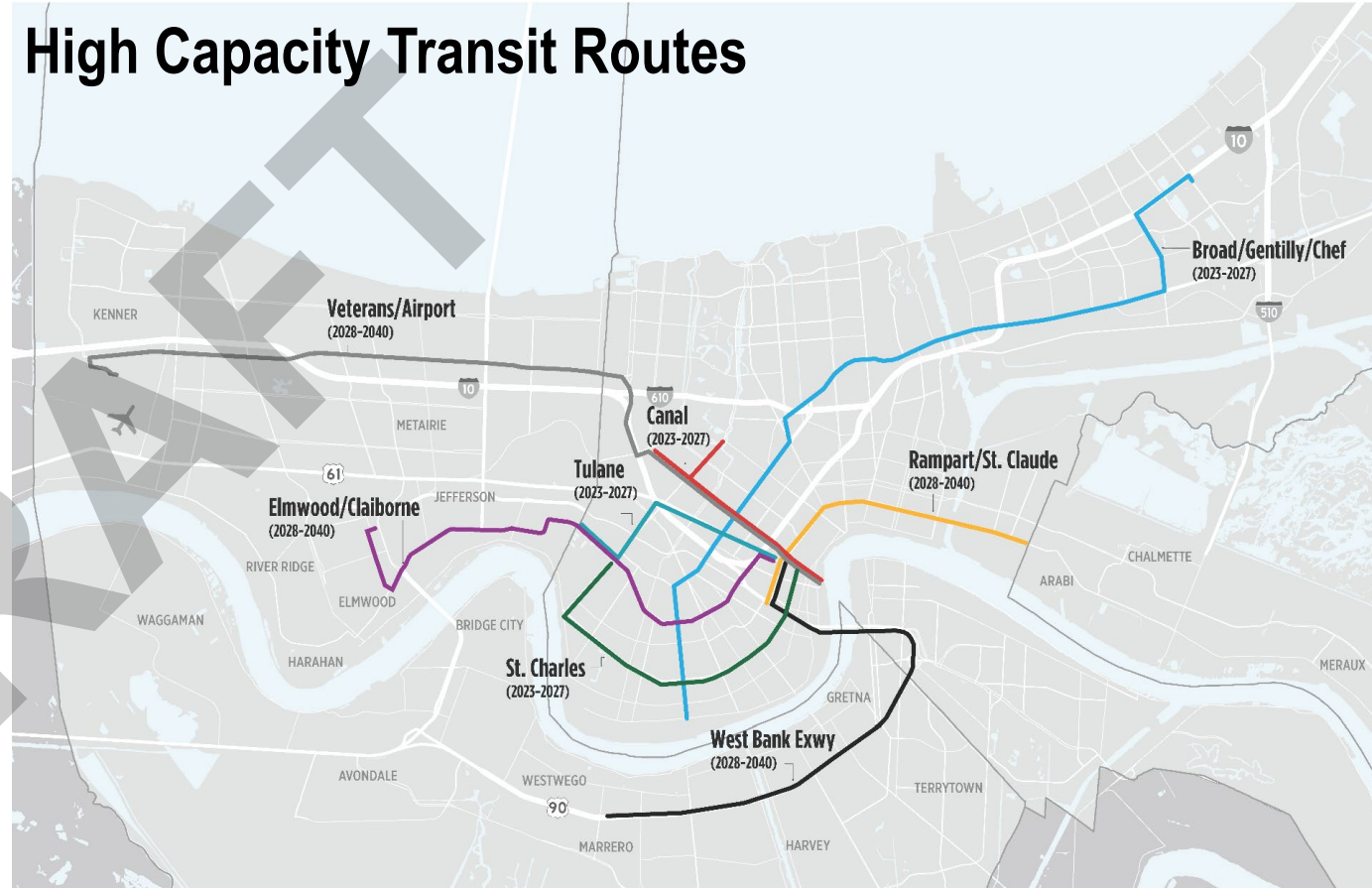


MARCH 2018



ROADMAP FOR FUTURE

High Capacity Transit Routes



Available Modes
(BRT, Streetcar, and LRT)



Every 10 min. (peak)
Every 15 min. (off-peak)



20-24 hrs per day



Stops every
1/4 to 1/2 mile



Pay before
boarding



Extensive use of dedicated
roadway space and/or
coordinated
traffic signals

YOUR INPUT

Have you ever experienced a high-capacity transit system?

1. No

2. Bus Rapid Transit



3. Subway



4. Light Rail



5. Commuter Rail



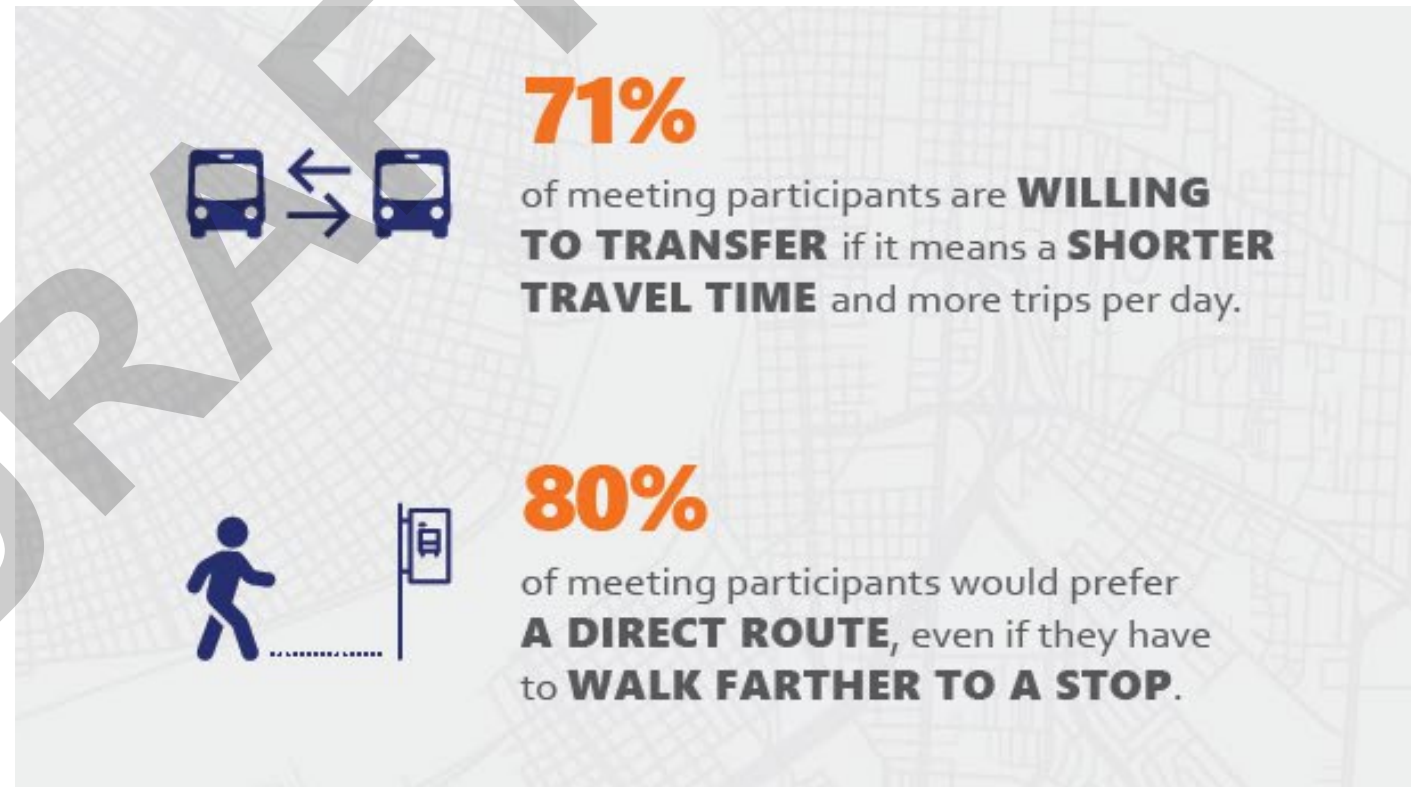
New Links

REIMAGINE OUR
TRANSIT NETWORK

Redesign of bus and streetcar service for RTA and JP Transit

INVESTING IN EXISTING SERVICE

Key Takeaways from Initial Public Outreach:



Outdated Bus Network Challenges

- Approximately half of 2004 service
- Wide coverage but low frequency
- Has not kept up with changing patterns in housing and jobs

11% of Jobs accessible by 30-minute transit ride

89% of Jobs accessible by 30-minute car ride

INVESTING IN EXISTING SERVICE

Existing Network



Redesign Bus Network

INVESTING IN EXISTING SERVICE

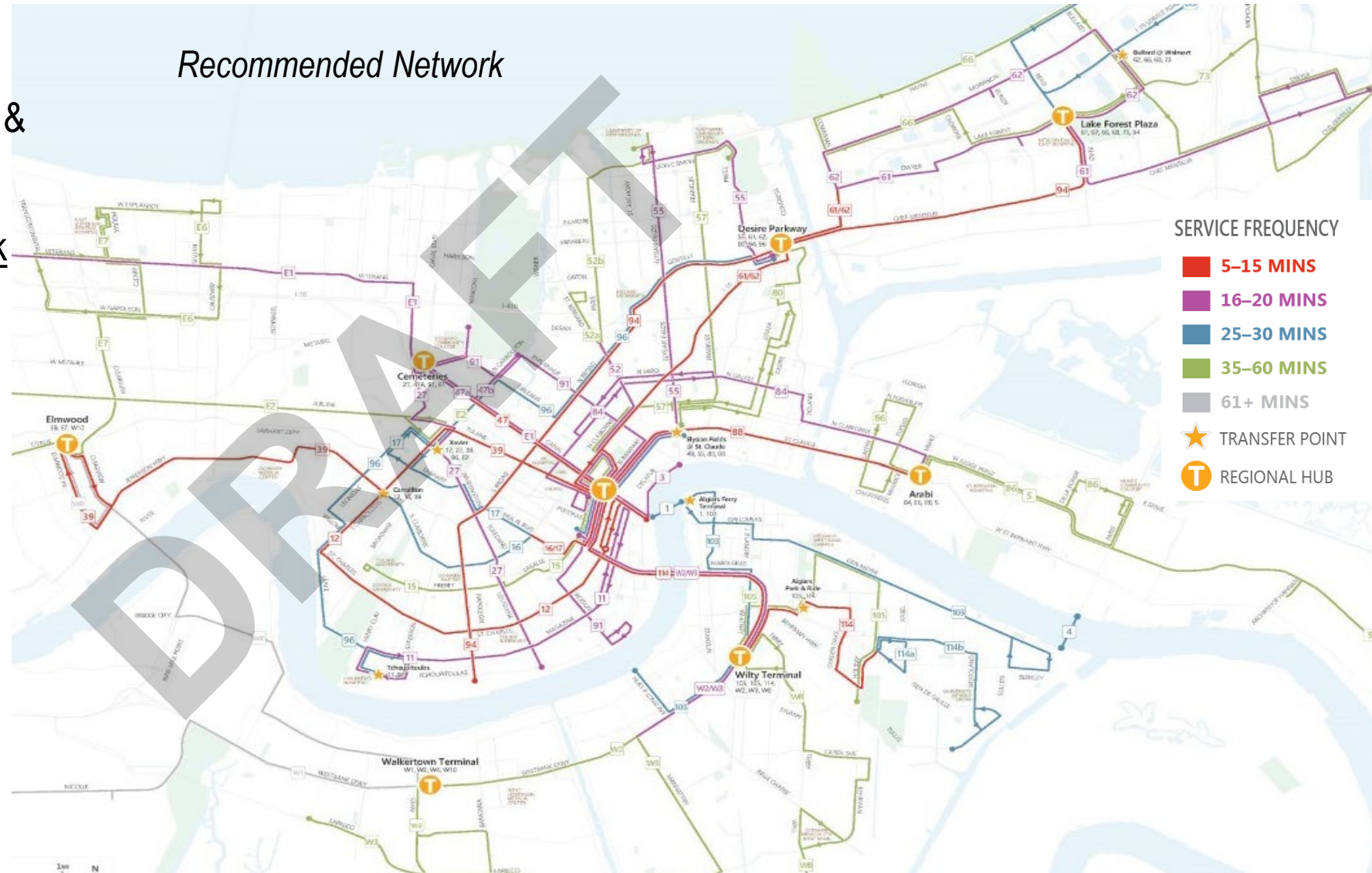
RPC-led Network Redesign

- Regional plan: Orleans, Jefferson & St Bernard Parishes
- People willing to trade further walk and transfer for faster travel time

38% of residents within 1/2-mile of frequent transit (20m or less)

64% of zero-car households within 1/2-mile of frequent transit

Recommended Network



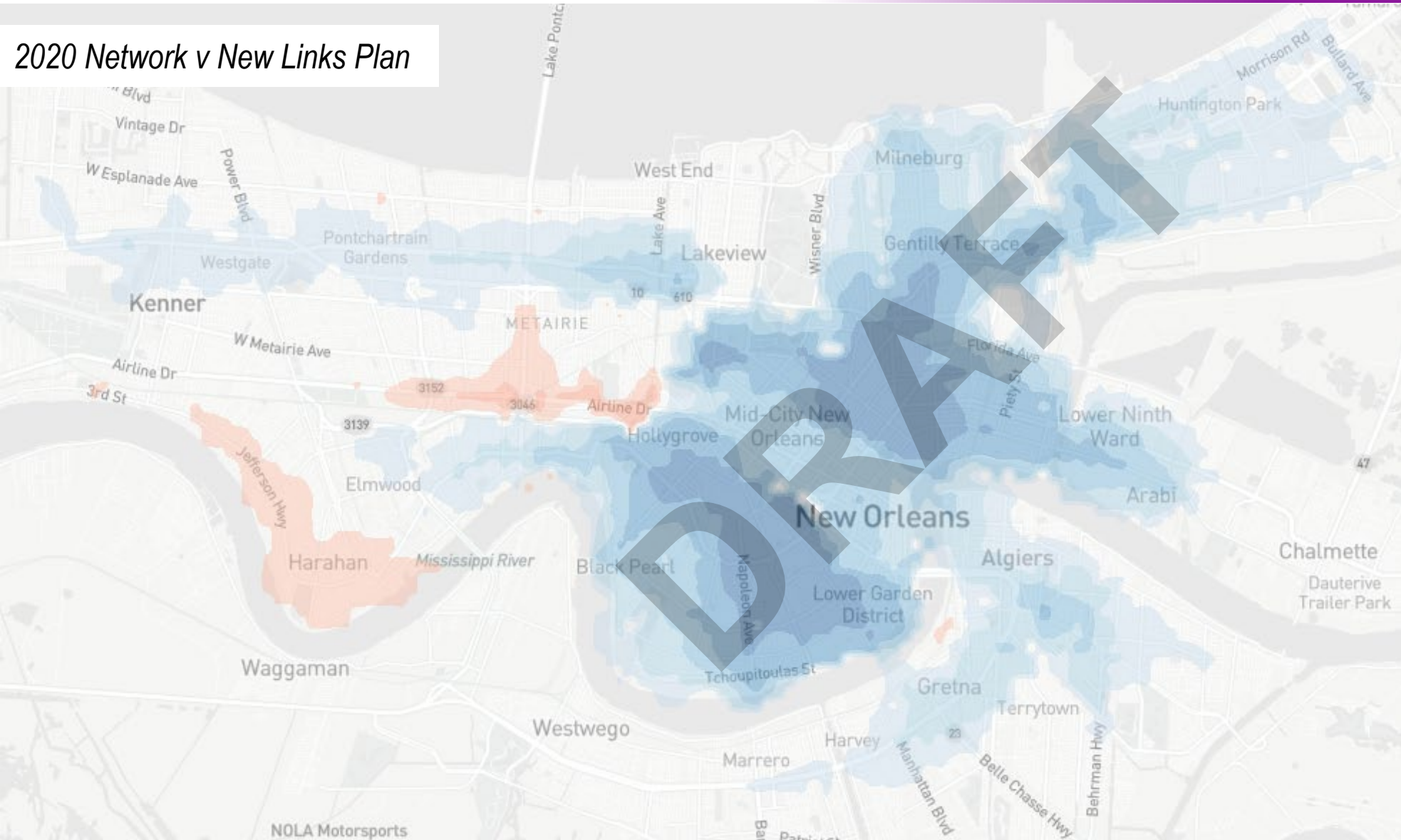
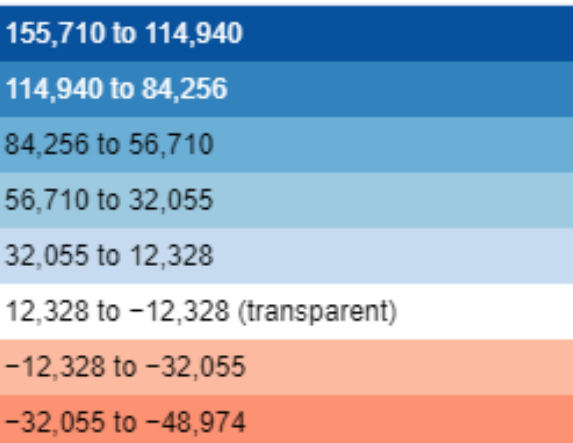
Measuring Impact

INVESTING IN EXISTING SERVICE

Regional Jobs Access Change

(Weekday Midday)
 Max Walking Time – 15 min.
 Max Total Time – 45 min.

Access to
 New Links update
 Jobs total within 45 minutes, 50th percentile
 minus
 Baseline 2020
 Jobs total within 45 minutes, 50th percentile



2020 Network v New Links Plan

Modern Facilities

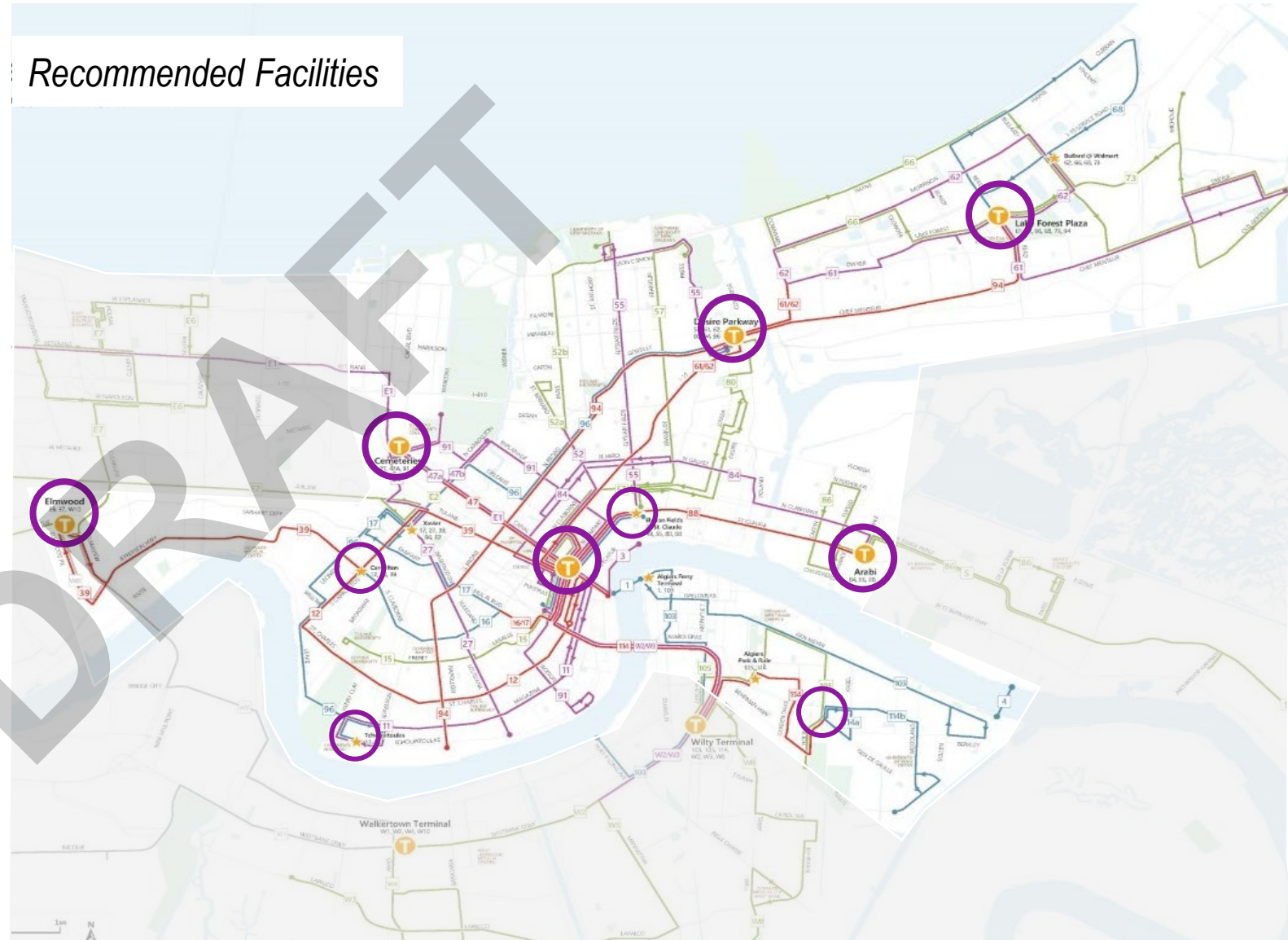
INVESTING IN EXISTING SERVICE

Locations identified for:

- Downtown Transfer Center
- Regional Hubs*
- Major Transfer Points*

**RAISE FY22 will fund design for all and construction of 2-3*

Recommended Facilities



Current Awards

- 2020 HOPE \$550,000 Bus Rapid Transit Feasibility Study
- 2021 LO / NO \$5,150,000 Electric Buses and Charging Equipment
- 2021 RAISE \$18,500,000 Fare Modernization, Neighborhood Transfer Points, and Regional Transfer Hubs

Opportunities

- + \$479 Million Transit Formula Funds



U.S. Department of Transportation

Bipartisan Infrastructure Bill: In the first year, this represents about 34% increase in new funds that RTA may be able to receive.

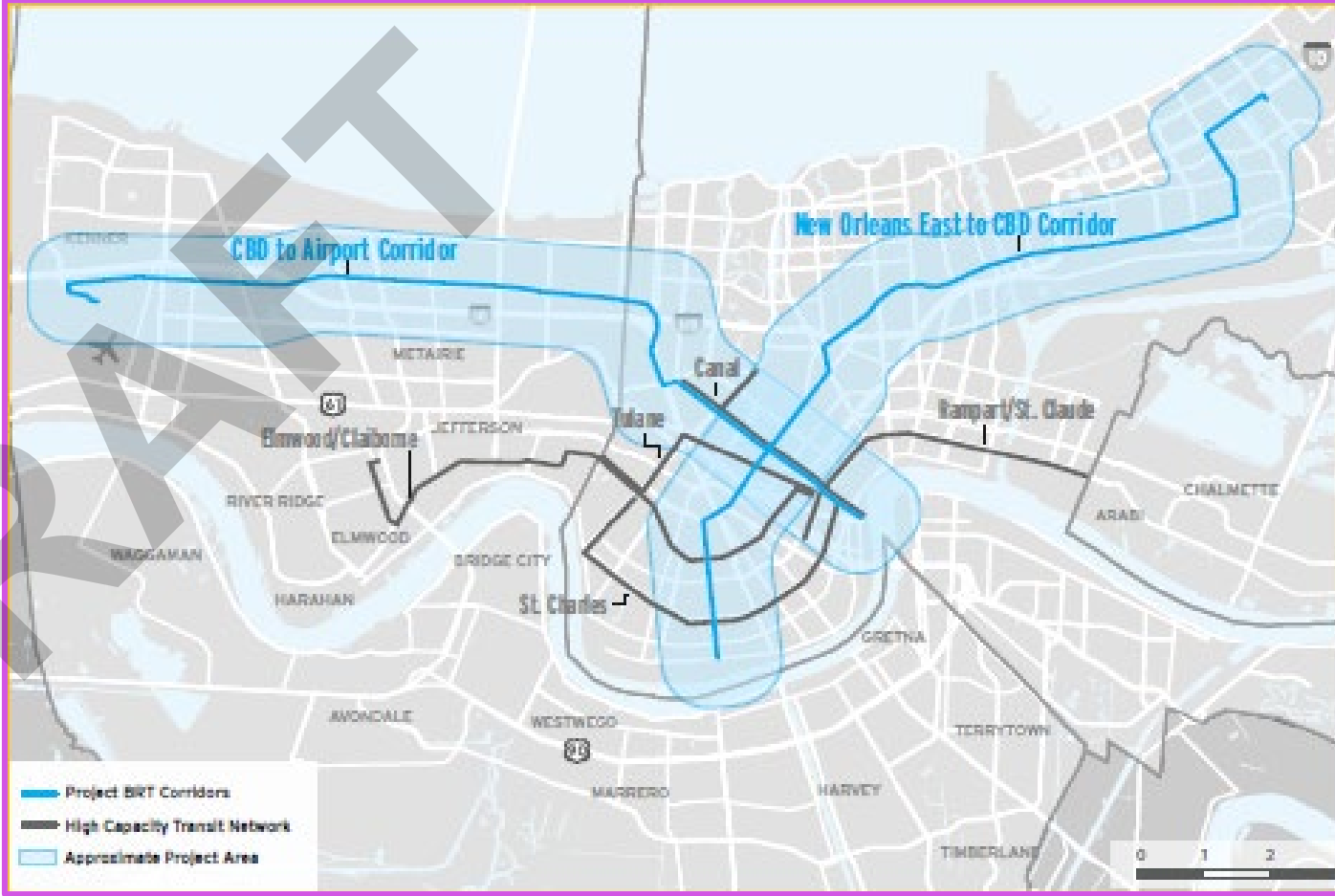
BRT FEASIBILITY STUDY

2020 HOPE GRANT

- Requested \$850,000 to study two corridors
 - New Orleans East to CBD
 - CBD to Airport
- Received \$550,000 for first corridor
 - Authorized to evaluate West Bank extension

Grant Commitments

- Define project features and BRT standards
- Preliminary design (15%) plans and cost estimates for BRT Corridor #1

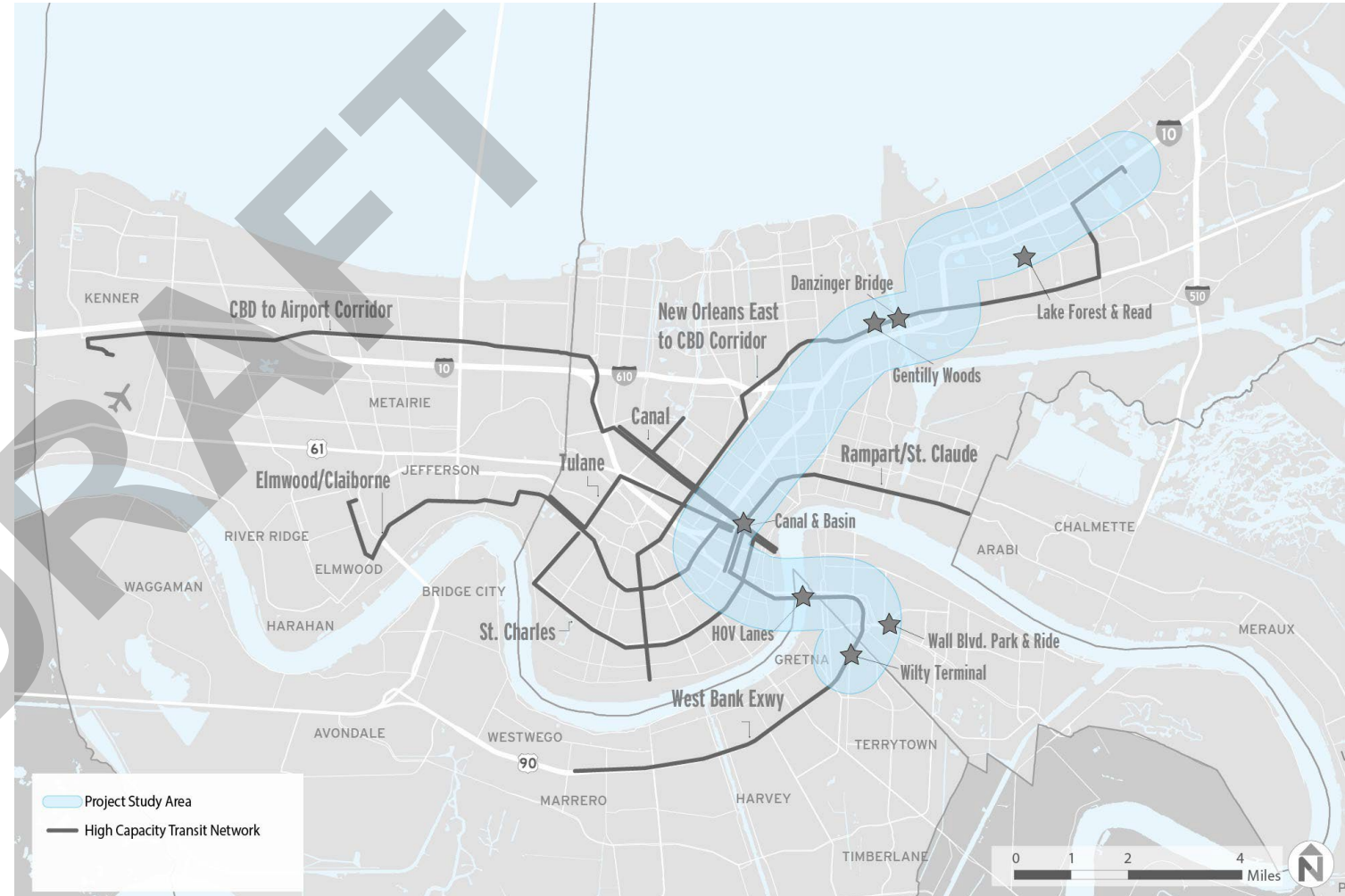


First BRT Corridor

BRT STUDY CORRIDOR

KEY NODES

- ★ New Orleans East Transfer Hub
- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Wilty Terminal (Gretna)
- Algiers Park-n-Ride



YOUR INPUT

Do you agree it is important to prioritize improvements to transit access to jobs and other opportunities from New Orleans East and Algiers?

DRAFT

Think Rail, Use Buses

Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast and efficient service that may include:

- Dedicated lanes
- Traffic signal priority
- Off-board fare collection*
- Elevated platforms
- Enhanced stations*
- Unique vehicles*

**aligns with other grants, projects, and programs*



WHAT IS BRT?

ART/BRT “LITE”

Enhanced Stations, Upgraded Technology,
Increased Frequency

PREMIUM BRT

Dedicated or Grade-Separated Runningway, Level Boarding, Off-Board Fare
Collection, Upgraded Vehicle and station Technology, System Branding

Tulsa Aero
Omaha ORBT
Kansas City MAX
Cincinnati Metro Plus
San Antonio Primo

Grand Rapids Silverline
El Paso BRIO

San Bernardino SBX
Eugene EmX
Richmond Pulse

Cleveland HealthLine
Ctfastrak
LA Metro Orange Line
Albuquerque ART

Kansas City MAX

WHAT IS BRT?



Agency

- Kansas City Area Transportation Authority

Location

- Kansas City, Missouri

Revenue Operations

- 2019

Corridor Length

- 10 Miles, 26 Stations

Capital Cost

- \$56M

BRT Characteristics

- Mixed Traffic with Bus Lane Segments
- Level Boarding
- Station WiFi
- Smart Interactive Kiosks
- BRT-Style CNG Vehicles

Albuquerque Rapid Transit

WHAT IS BRT?



Agency

- Albuquerque Transit Department

Location

- Albuquerque, New Mexico

Revenue Operations

- 2017

Corridor Length

- 8.8 Miles, 18 Stations

Capital Cost

- \$134M

BRT Benefits

- \$2.9 Billion in economic development
- \$418 Million in increased assessed property value
- 9,592 new jobs

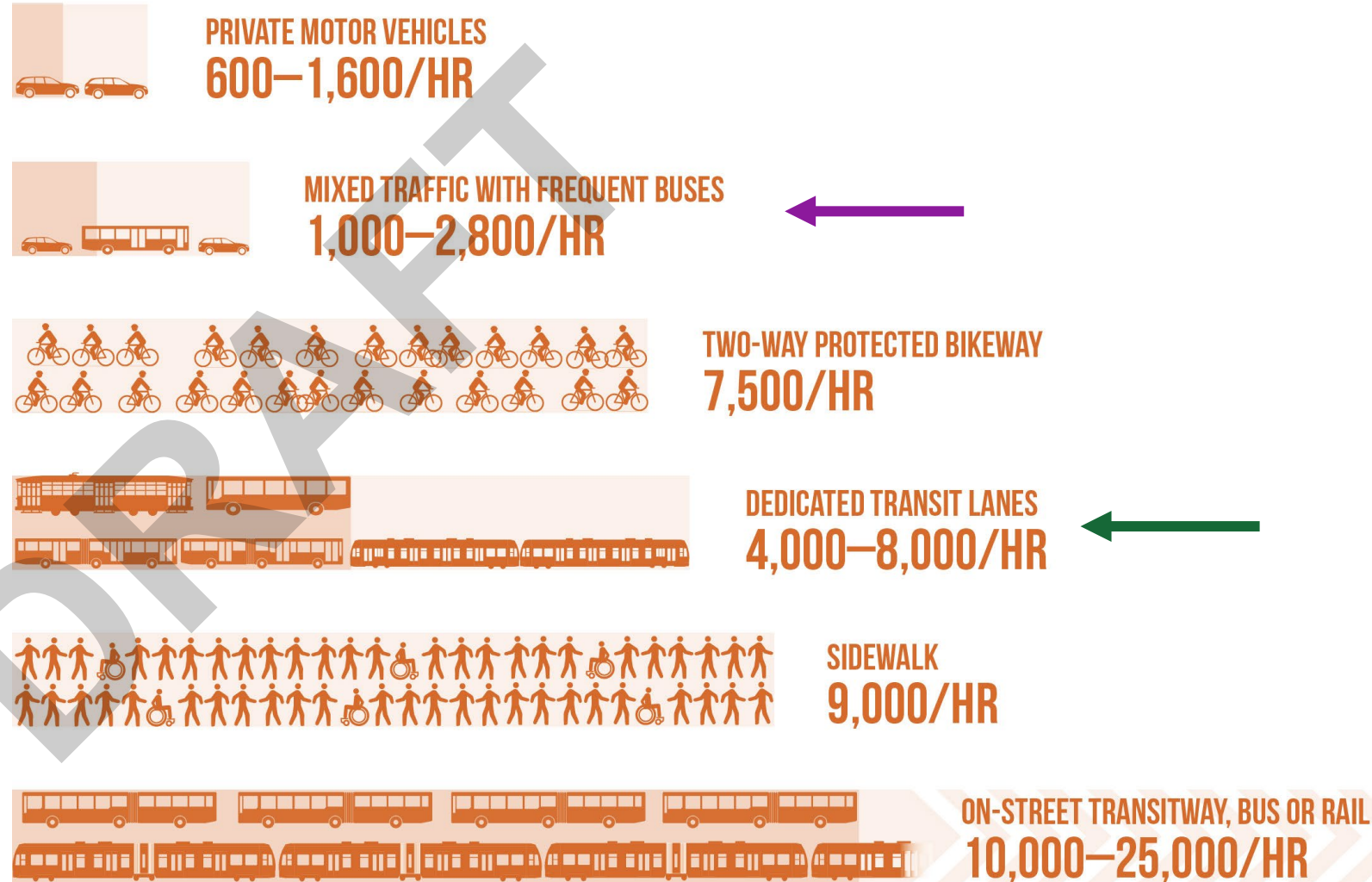
Transit Speed (miles per hour)



MOVING MORE PEOPLE

WHY BRT?

- People First: Primary measure of effectiveness
- Efficiency: Space on street is limited
- Equitable: Balance access across modes

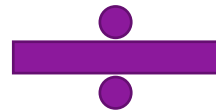
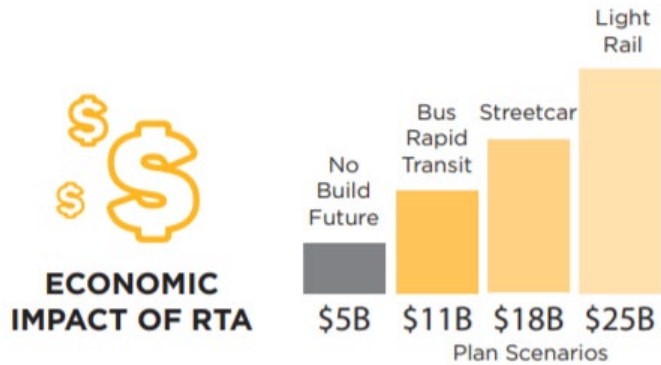


Source: NACTO Transit Street Design Guide

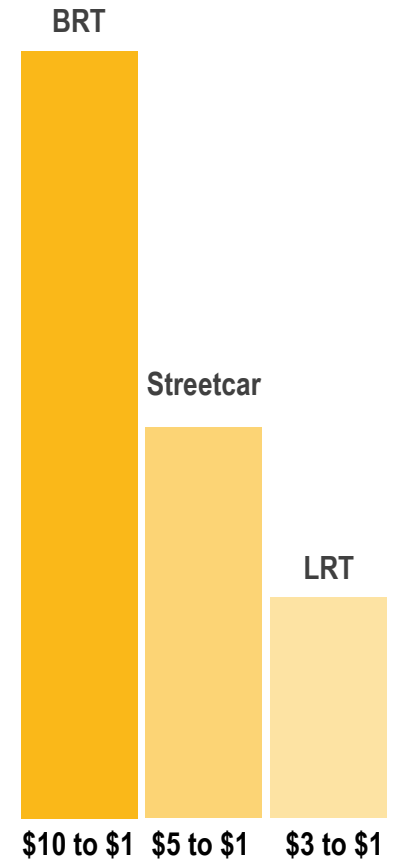
BETTER INVESTMENT

WHY BRT?

BENEFITS*



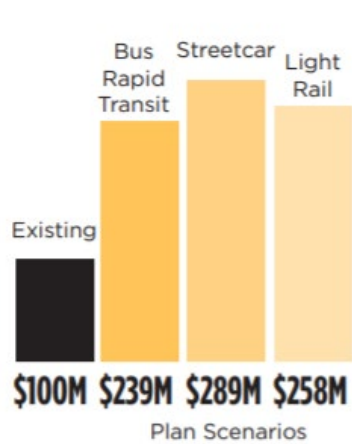
BENEFIT TO COST RATIO



COSTS*



OPERATING BUDGET (ANNUAL)



CAPITAL COSTS



*Strategic Mobility Plan / detailed cost estimates for specific projects not included



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet the communities needs.



Promote investment in neighborhoods

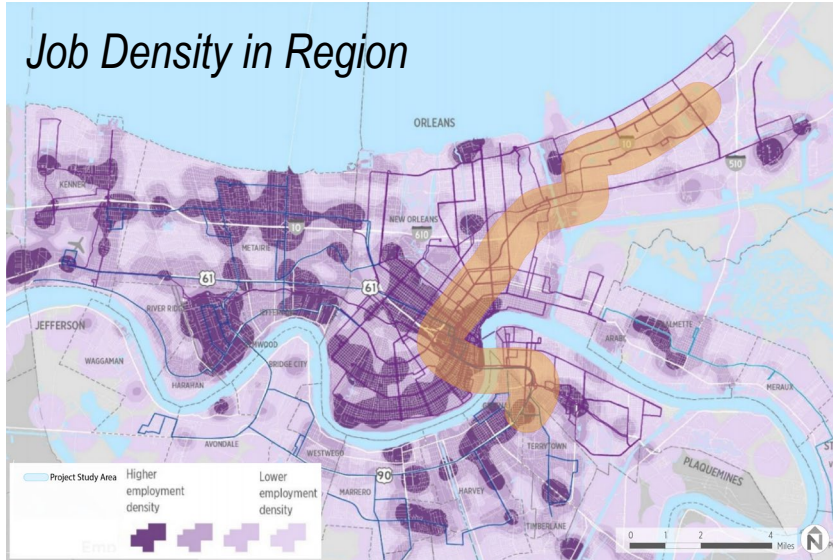


Support a sustainable and healthy community.

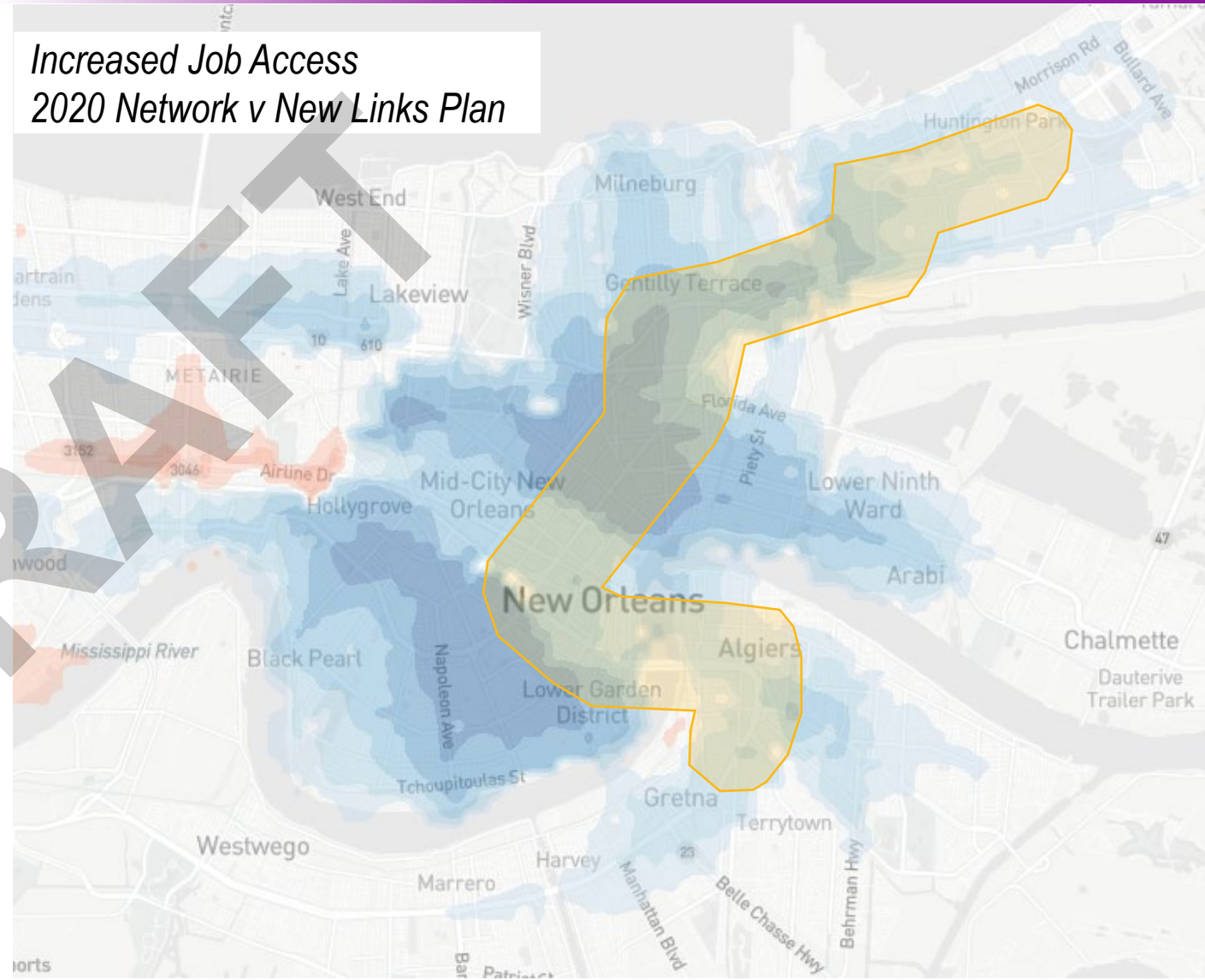
Connect to Opportunities

BRT GOALS

Job Density in Region

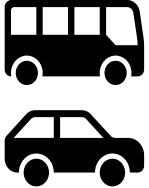


Increased Job Access
2020 Network v New Links Plan

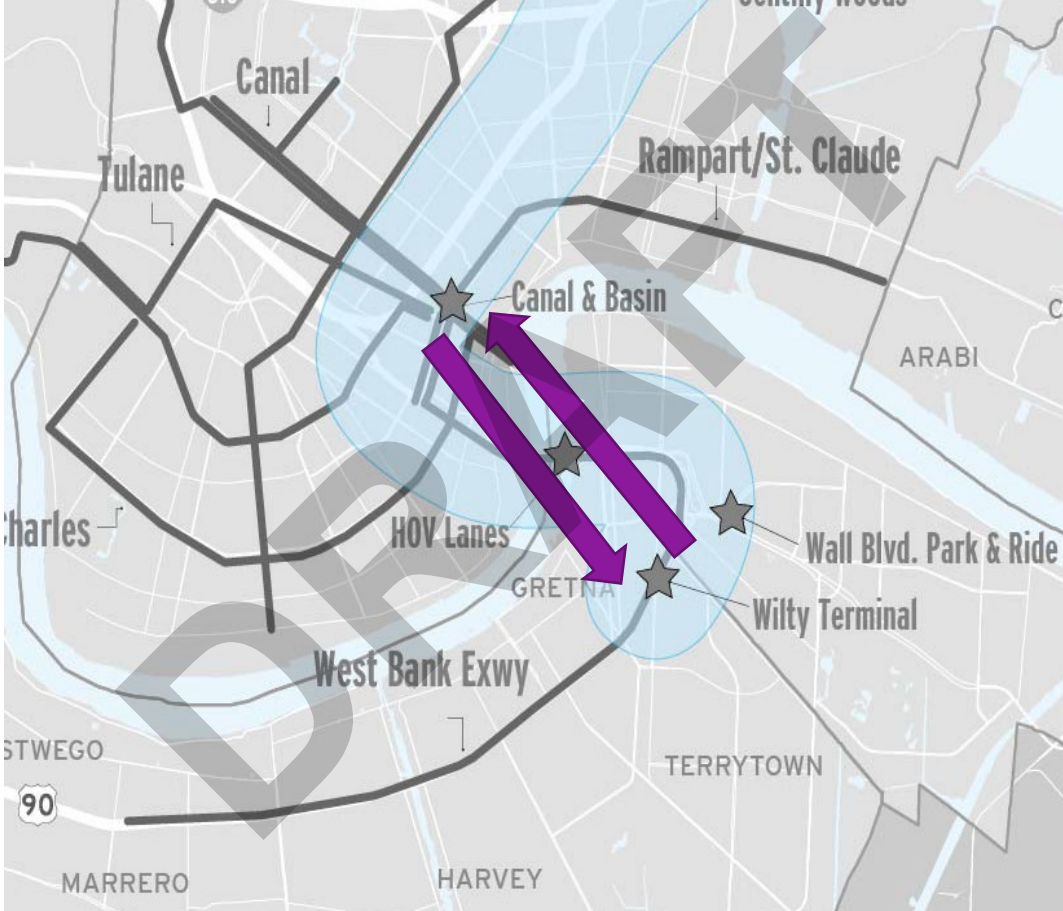


Estimated Existing Travel Times: Algiers - CBD

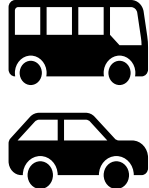
AM (8-9a)



In	Out
36m	28m
11m	11m



PM (4-5p)



In	Out
35m	26m
28m	14m

Sources:
 • Auto: Google Real Time Travel Times
 • Transit: RTA Transit Schedules

Invest in Neighborhoods

- Align with City of New Orleans “Transit Oriented Communities” Planning
- Support residential and small business development

Support Sustainable/Healthy Community

- Climate Action goals target reduction of emission from transportation (44% of total)
- Support car optional choices
- Enable more walking neighborhoods

TRANSIT ORIENTED COMMUNITIES

Transit Oriented Communities optimize the link between **transit infrastructure** and the **surrounding neighborhoods**



Source: CNO Office of Transportation Transit Oriented Communities 2021

YOUR INPUT

Of our goals what is the most important to you?



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet the communities needs.



Promote investment in neighborhoods



Support a sustainable and healthy community.

DEFINING THE PROJECT



Operations & Service Goals



BRT Guideway Alternatives



Station Design Components



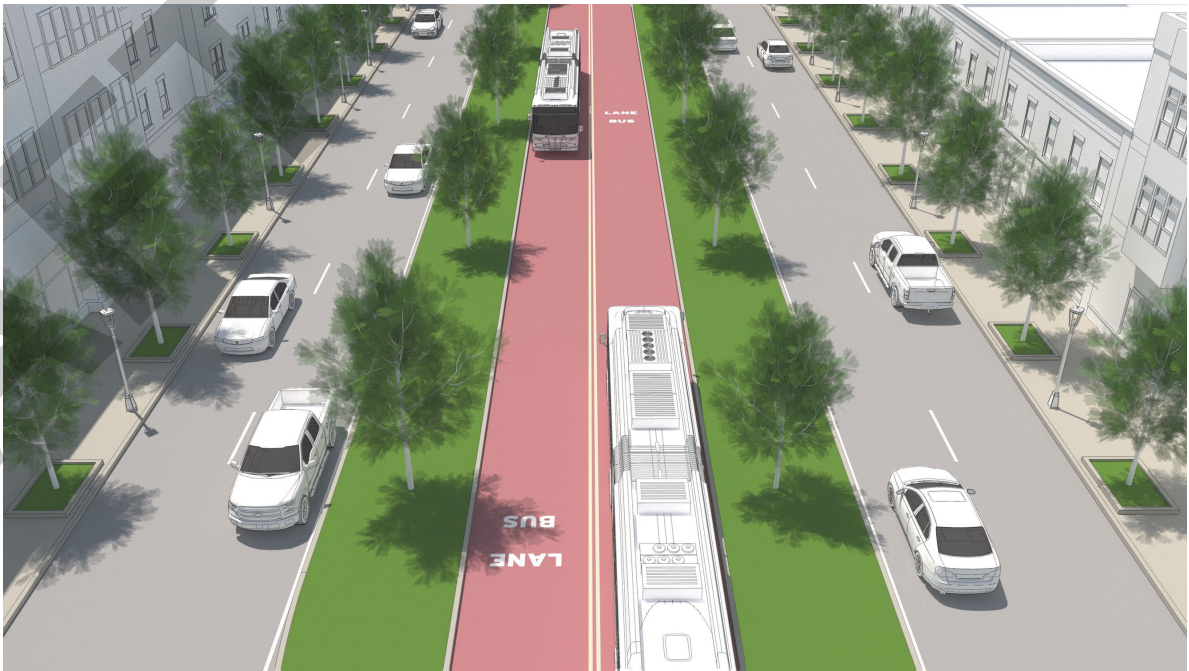
Technology



Vehicle Standards



Branding



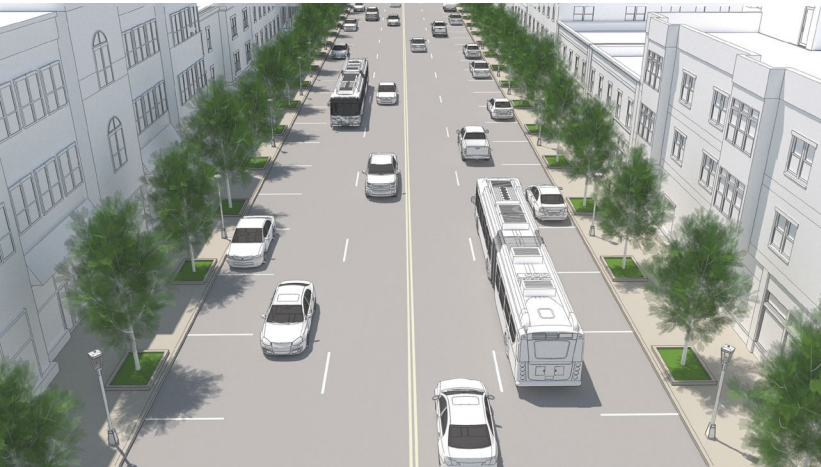
DRAFT



DEFINING THE PROJECT

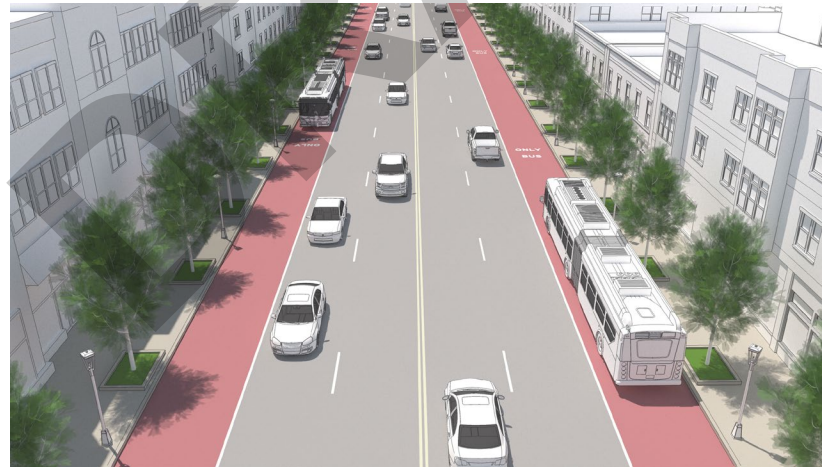
Mixed Traffic

- Lowest capital cost
- Slowest travel time



Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost



Center-running BRT

- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs





NEW ORLEANS OPPORTUNITIES

GUIDEWAY

Neutral Ground

- Opportunity for dedicated guideway use
- Historic precedent

Stormwater Management

- Opportunity for green solutions integrated with the guideway



Rampart Street

1940's



2000's



Today

Tulane Avenue



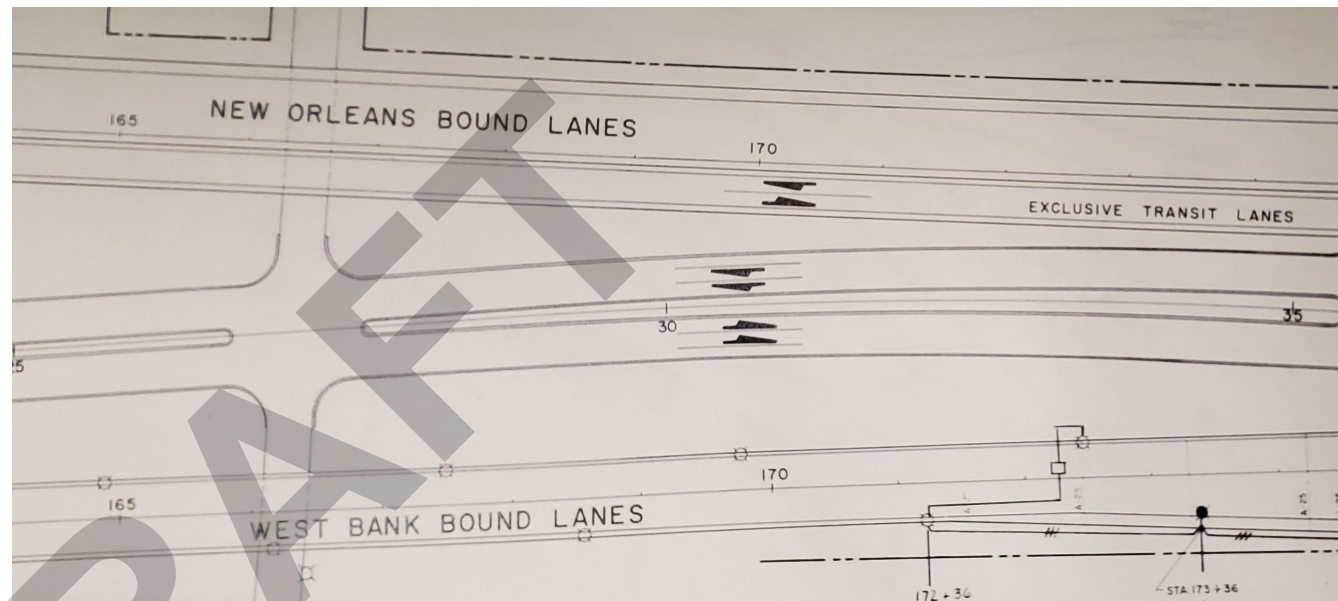


NEW ORLEANS OPPORTUNITIES

GUIDEWAY

US 90 Bridge HOV Conversion

- Current configuration is not effective
- Restore HOV lane to original configuration
- 2-way with transit use
- Key to BRT success and connection to Algiers



YOUR INPUT

What trade offs do you currently support for fast and reliable transit?

- Neutral Ground
- Parking Lanes
- Travel Lane
- Restore HOV to Transitway

DRAFT



DEFINING THE PROJECT

BRT Station Considerations

- Station Location
- Station Length/Width
- Platform Height
- Shelter Style/Design
- Typical Station Amenities



Level Boarding



ABQ Rapid Transit



SBX Bus Rapid Transit



Tulsa Peoria Ave AERO

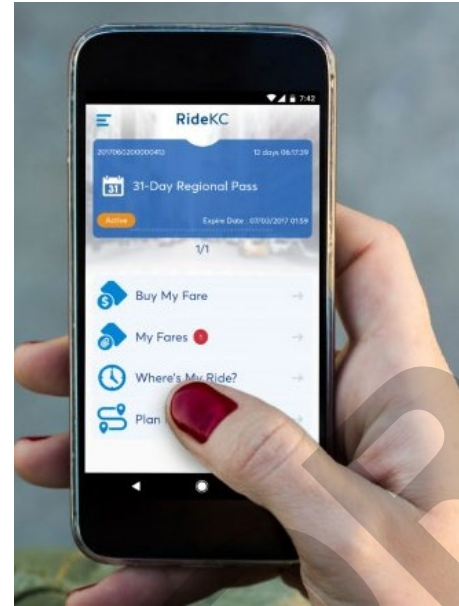


Grand Rapids – The Rapid

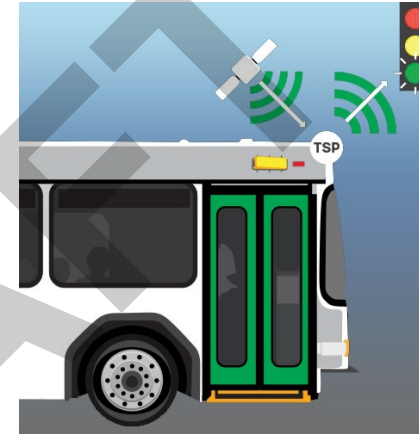


DEFINING THE PROJECT

On-Board vs Off-Board Payment



Transit Signal Priority



WiFi On-board/Stations



Stations Technology



YOUR INPUT

What are the biggest concerns about the BRT project that your communities will have?

Who else should be included in this discussion?

DRAFT

YOUR INPUT

What do you think the public reaction will be to the BRT proposal?

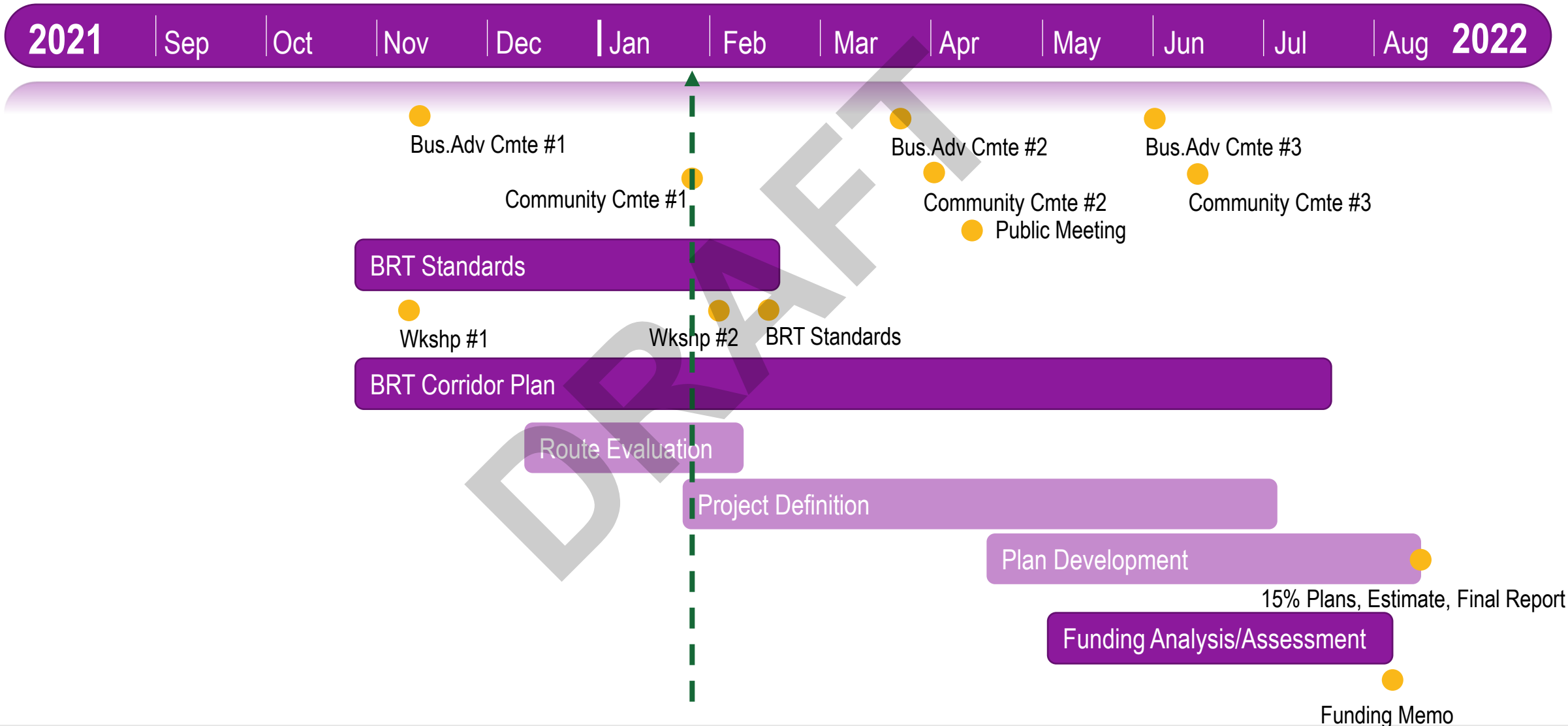
DRAFT

YOUR INPUT

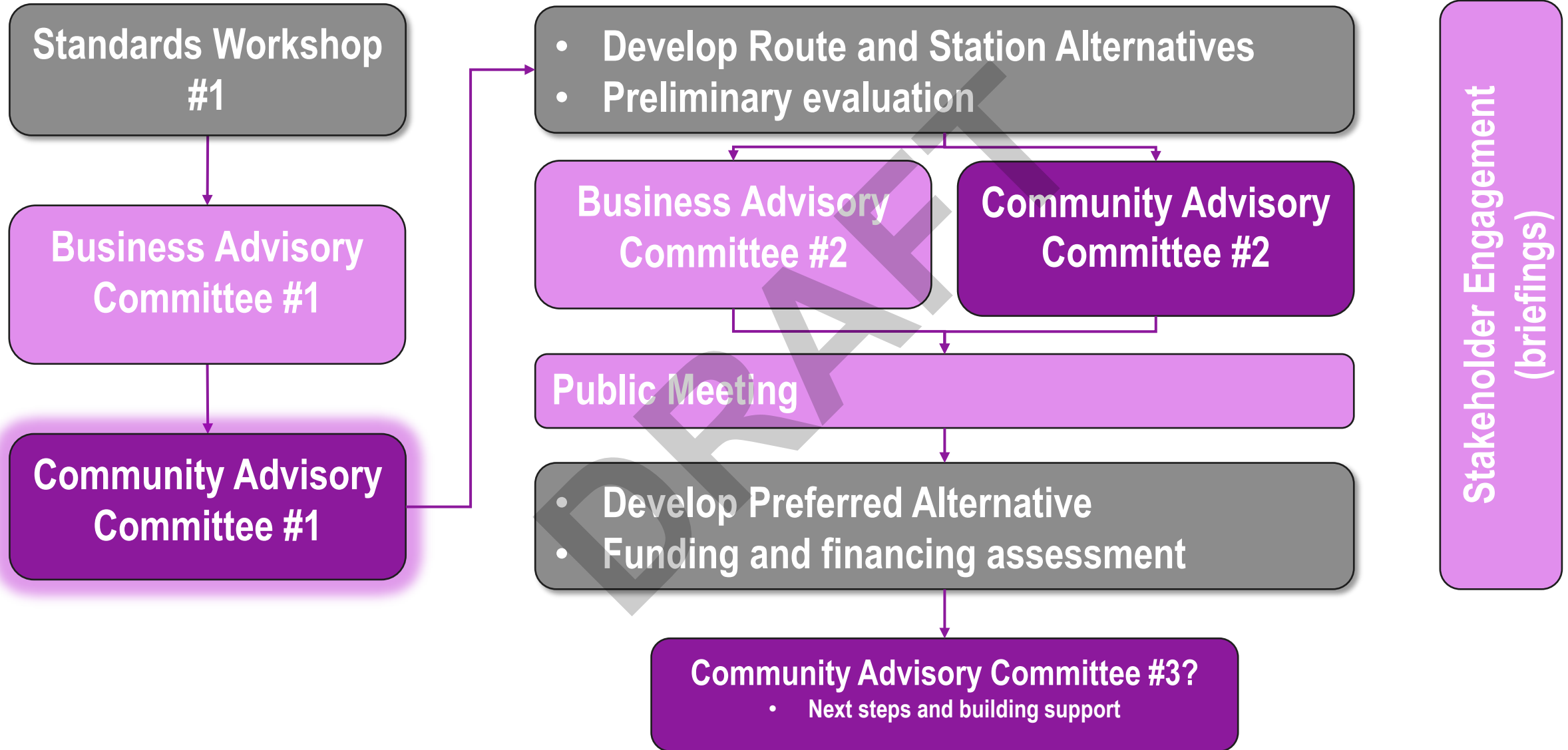
What features, issues, concerns would you like more information on?

DRAFT

PROJECT SCHEDULE



PUBLIC ENGAGEMENT



YOUR INPUT

Do you have suggestions on our approach to engaging the community?

Preferred format / time for next conveneing?

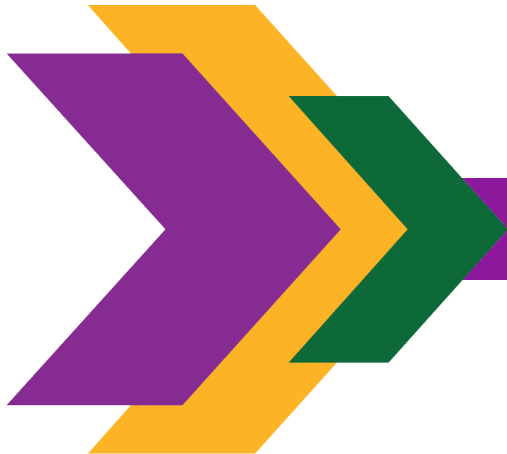
DRAFT

SEND US YOUR COMMENTS:

BRT Feasibility Study

***Dwight Norton, Sr. Director of Strategic
Planning***

dnorton@rtaforward.org





RTA

BUS RAPID TRANSIT FEASIBILITY STUDY

Community Advisory Committee:

Algiers

Tuesday, April 5, 2022
5:30 – 7:00 pm

DRAFT



Welcome and Introductions

Recap:

- Where RTA is Going
- Investing in Existing Service
- Why Bus Rapid Transit (BRT)?
- BRT Goals

BRT Corridor Development

- Route & Transit Priority Options
- Public Engagement Approach



RTA

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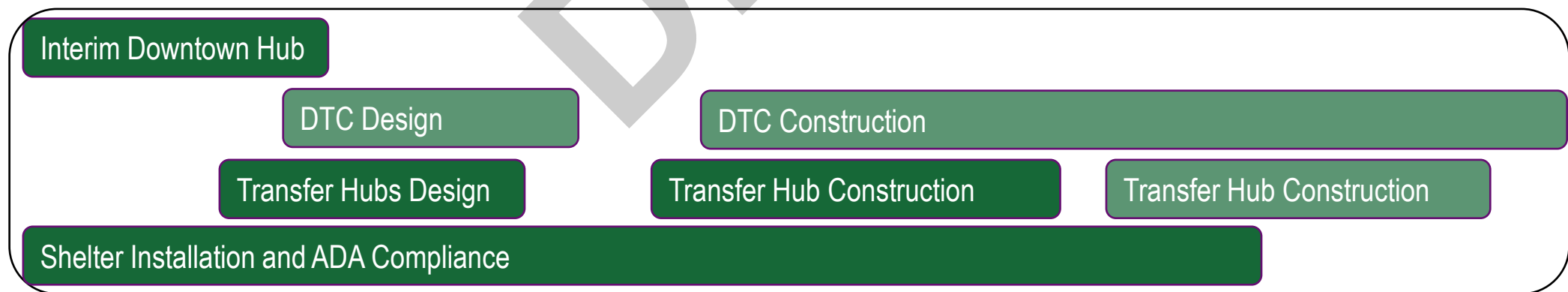
WHERE WE'RE GOING



Bus Rapid Transit (BRT):



Modern Facilities:



BRT GOALS



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet communities needs.



Promote investment in neighborhoods.



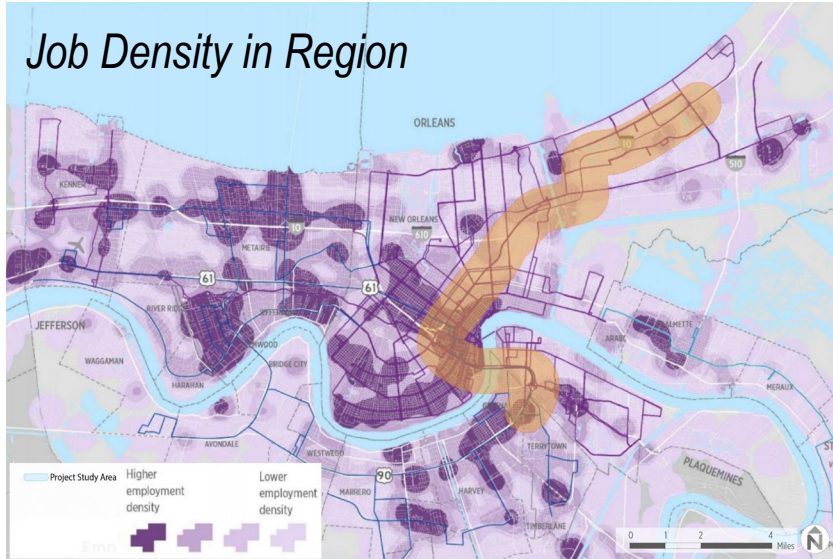
Support a sustainable and healthy community.



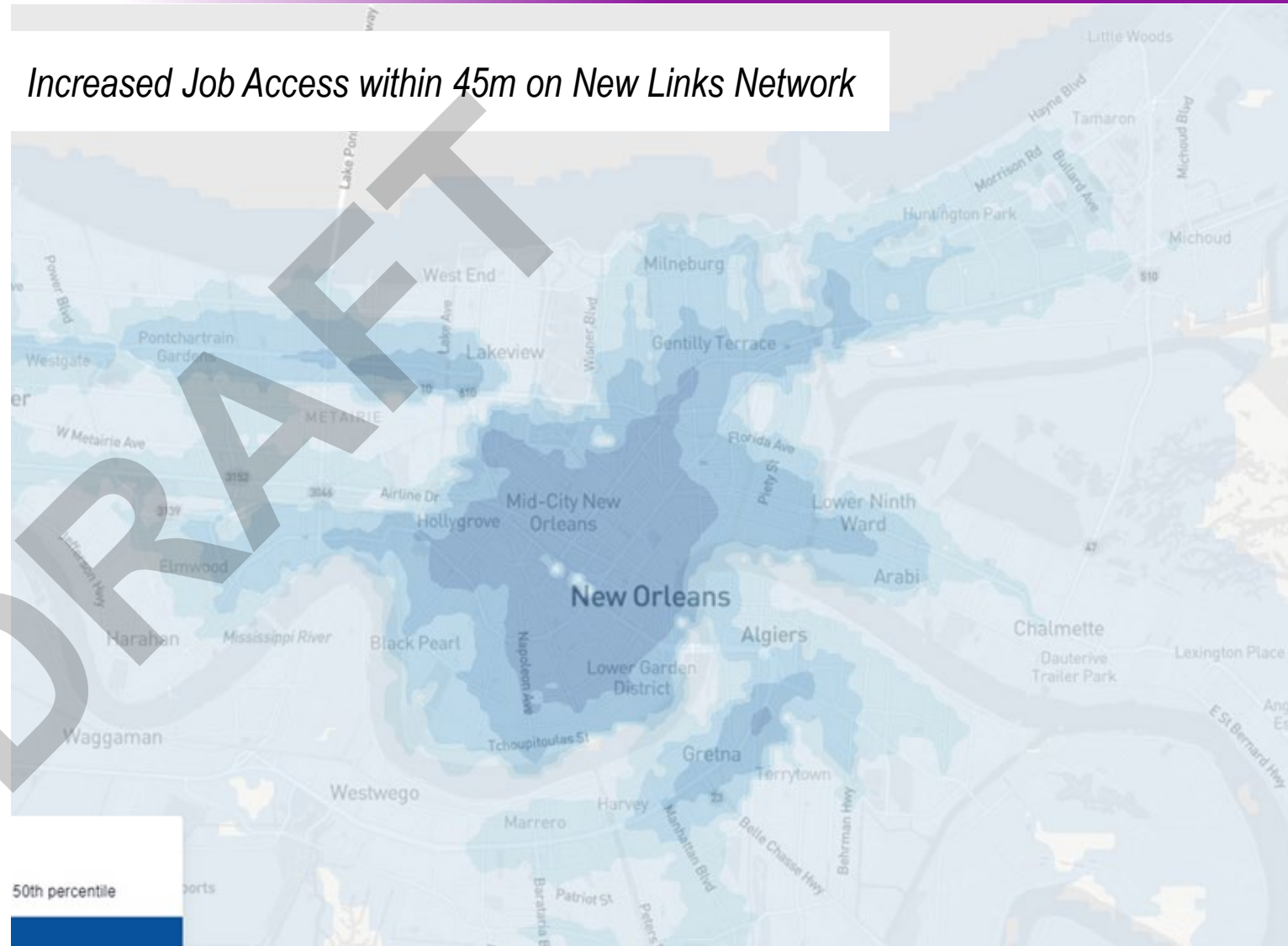
Connect to Opportunities

BRT GOALS

Job Density in Region



Increased Job Access within 45m on New Links Network



Light Rail (LRT) vs Bus Rapid Transit (BRT)



Agency: Metro Transit

Location: Minneapolis, MN

Opened: 2024

Corridor Length: 14.5 Miles
36 Stations

Capital Cost: \$2.03 Billion



Agency: Albuquerque Transit Dept

Location: Albuquerque, NM

Opened : 2017

Corridor Length: 8.8 Miles
18 Stations

Capital Cost: \$134 Million

BRT can provide similar benefits and more cost effective than LRT.

Light Rail Transit

\$75-150M per mile

Bus Rapid Transit

\$5-20M per mile



YOUR INPUT

Use your phone to answer the poll

- Open an internet browser on your phone
 - Type in www.menti.com
- Type in the code “**6169 0928**” into the code field



YOUR INPUT

Will the Pelicans make it to the playoffs?

1. No

2. Yes

3. Who?

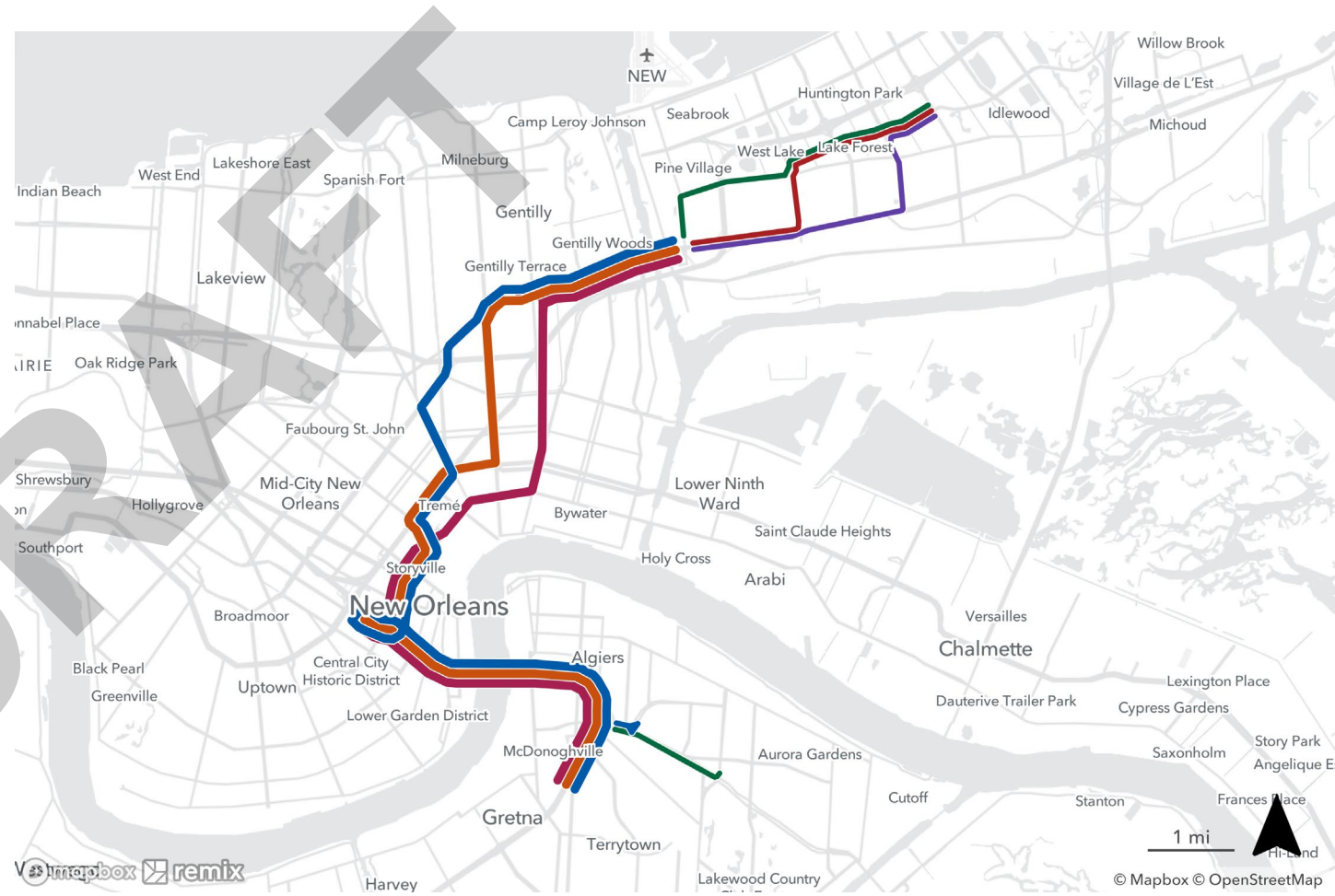
DRAFT

Potential Routes

DEFINING THE ROUTE

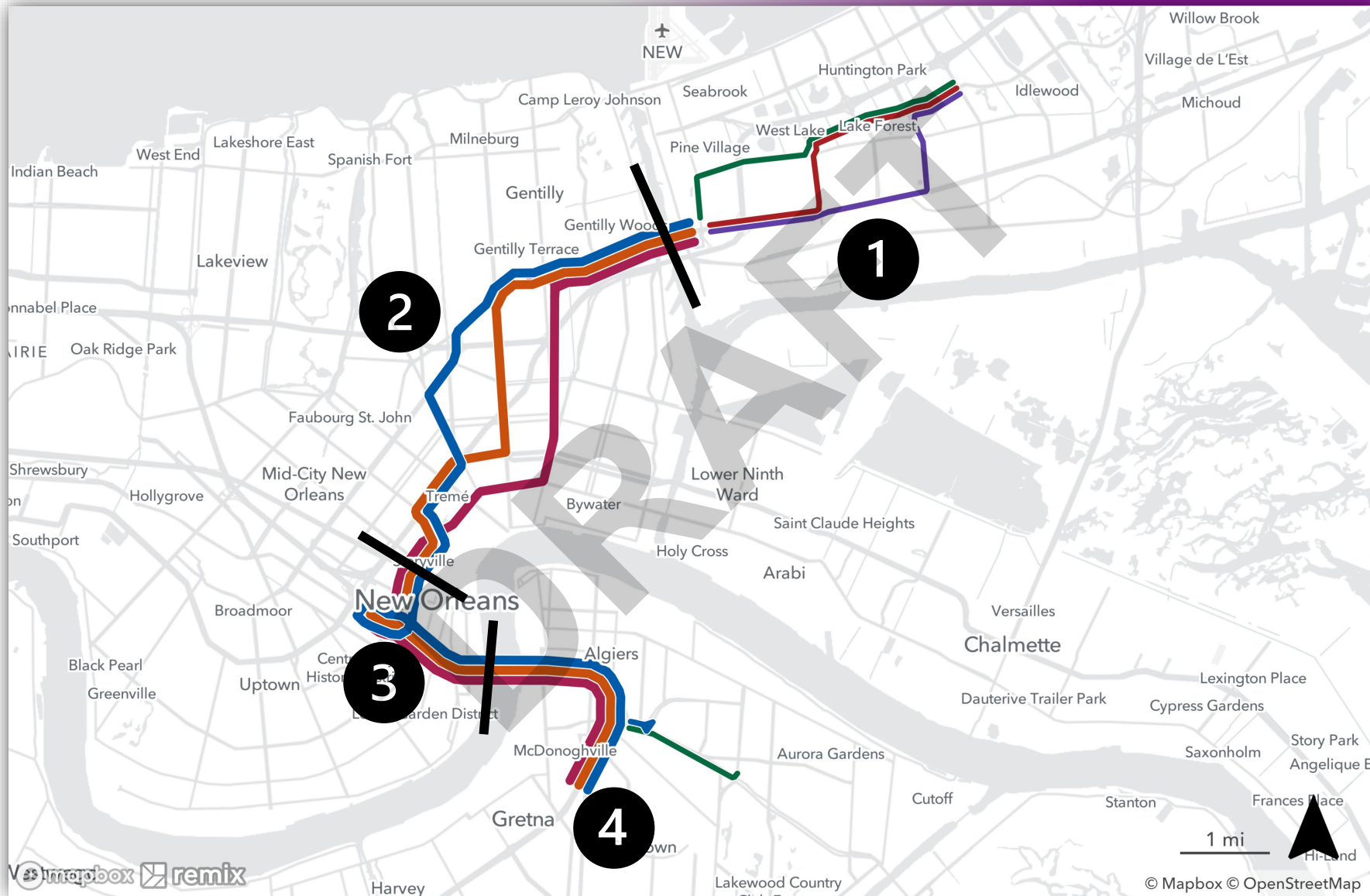
KEY NODES

- ★ New Orleans East Transfer Hub
- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Wilty Terminal (Gretna)
- Algiers Park-n-Ride



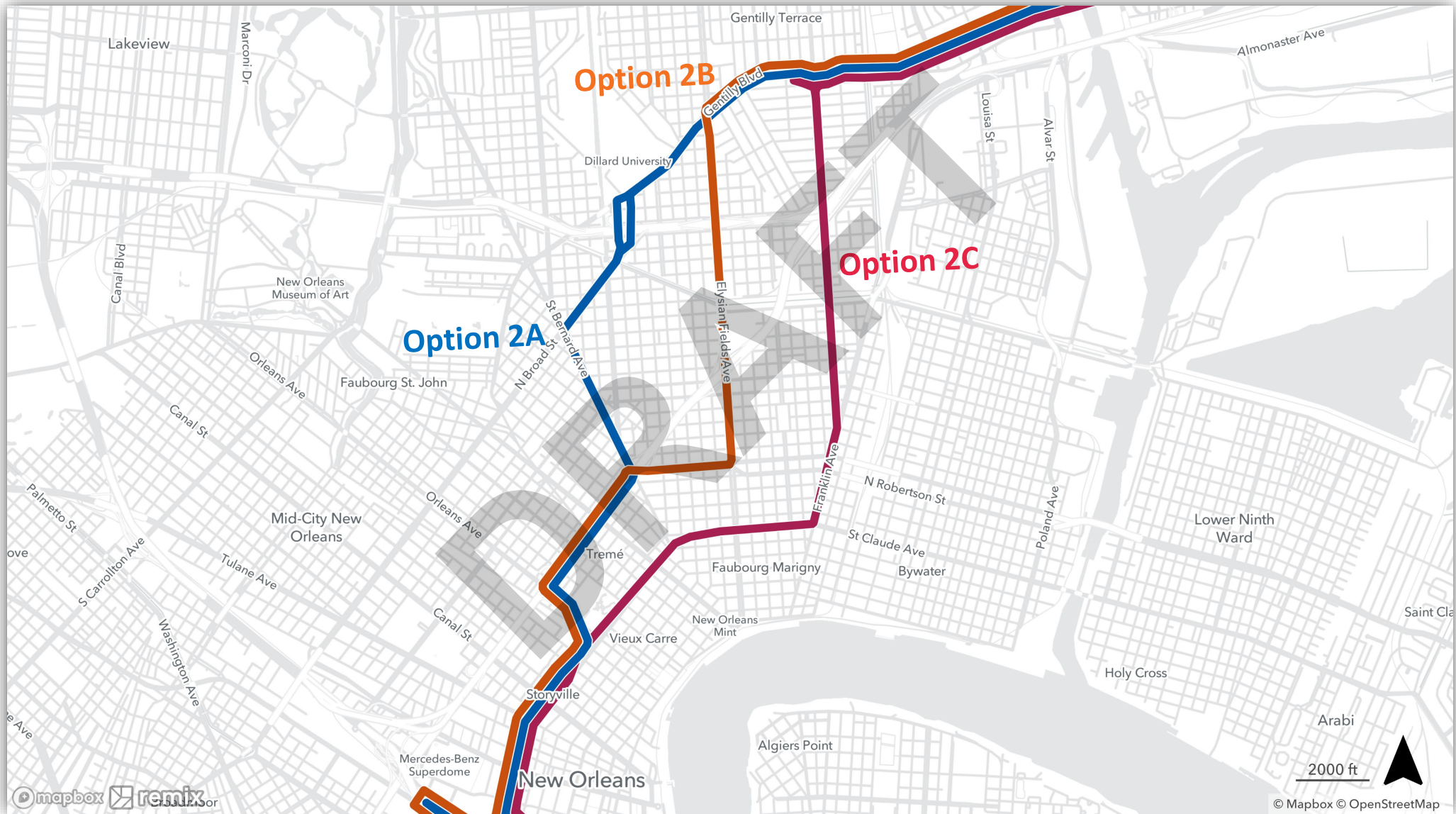
Potential Routes

DEFINING THE ROUTE



Potential Routes – Segment 2

DEFINING THE ROUTE



Potential Routes – Segment 2

DEFINING THE ROUTE

Option 2A:

St Bernard



Claiborne

Option 2B:

Elysian Fields



Claiborne

Option 2C:

Franklin



St. Claude / N. Rampart

Option 2A:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Nova Nora Library

Key Statistics:

- 16,261 Total Employment
- 37,154 Total Population
- 18 Essential Service Connections

Option 2B:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Crescent Care

Key Statistics:

- 15,754 Total Employment
- 17,065 Total Population
- 19 Essential Service Connections

Option 2C:

Key Destinations:

- French Quarter/Marigny

Key Statistics:

- 19,946 Total Employment
- 21,005 Total Population
- 20 Essential Service Connections



YOUR INPUT

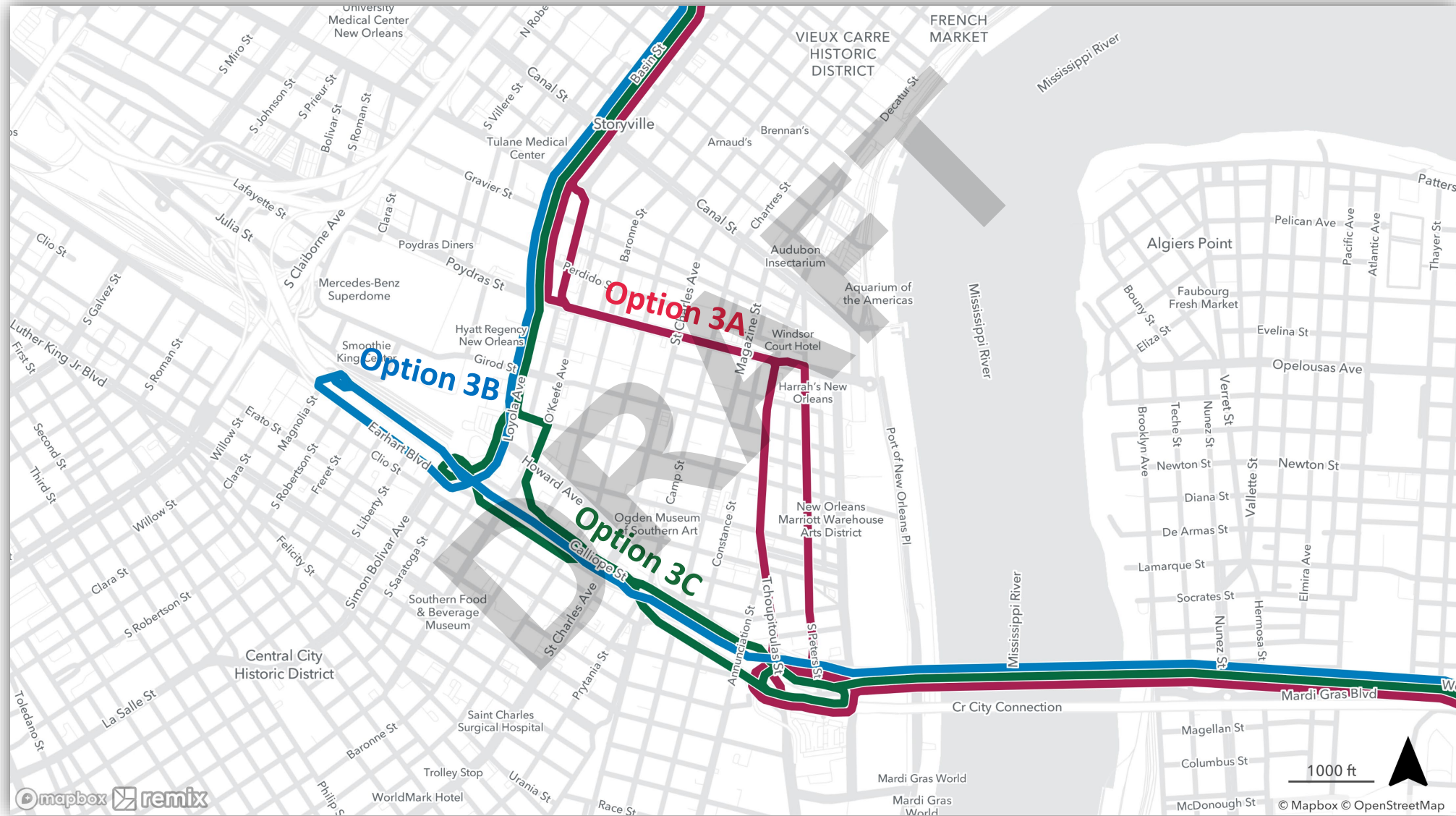
What is your preferred route?

- A. St Bernard / Claiborne – 2A
- B. Elysian Fields / Claiborne – 2B
- C. Franklin / St Claude – 2C

DRAFT

Potential Routes – Segment 3

DEFINING THE ROUTE

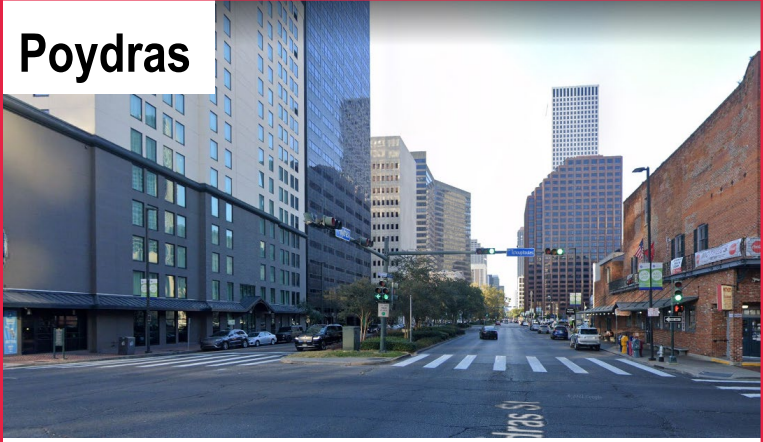


Potential Routes – Segment 3

DEFINING THE ROUTE

Option 3A:

Poydras

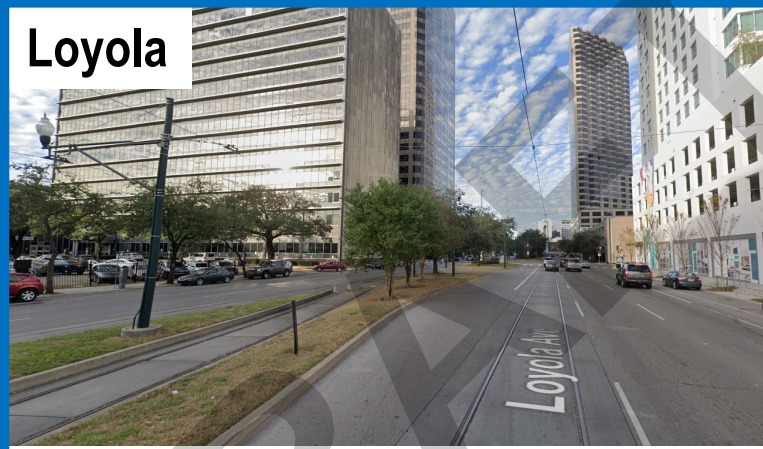


Tchoupitoulas-Peters



Option 3B:

Loyola



Calliope



Option 3C:

Loyola



HOV



Option 3A:

Key Destinations:

- Tulane Medical Center
- CBD
- Convention Center

Key Statistics:

- 54,162 Total Employment
- 3,890 Total Population
- 4 Essential Service Connections

Option 3B:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal
- Transfer to Uptown

Key Statistics:

- 32,154 Total Employment
- 2,365 Total Population
- 2 Essential Service Connections

Option 3C:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal

Key Statistics:

- 36,294 Total Employment
- 4,150 Total Population
- 2 Essential Service Connections



YOUR INPUT

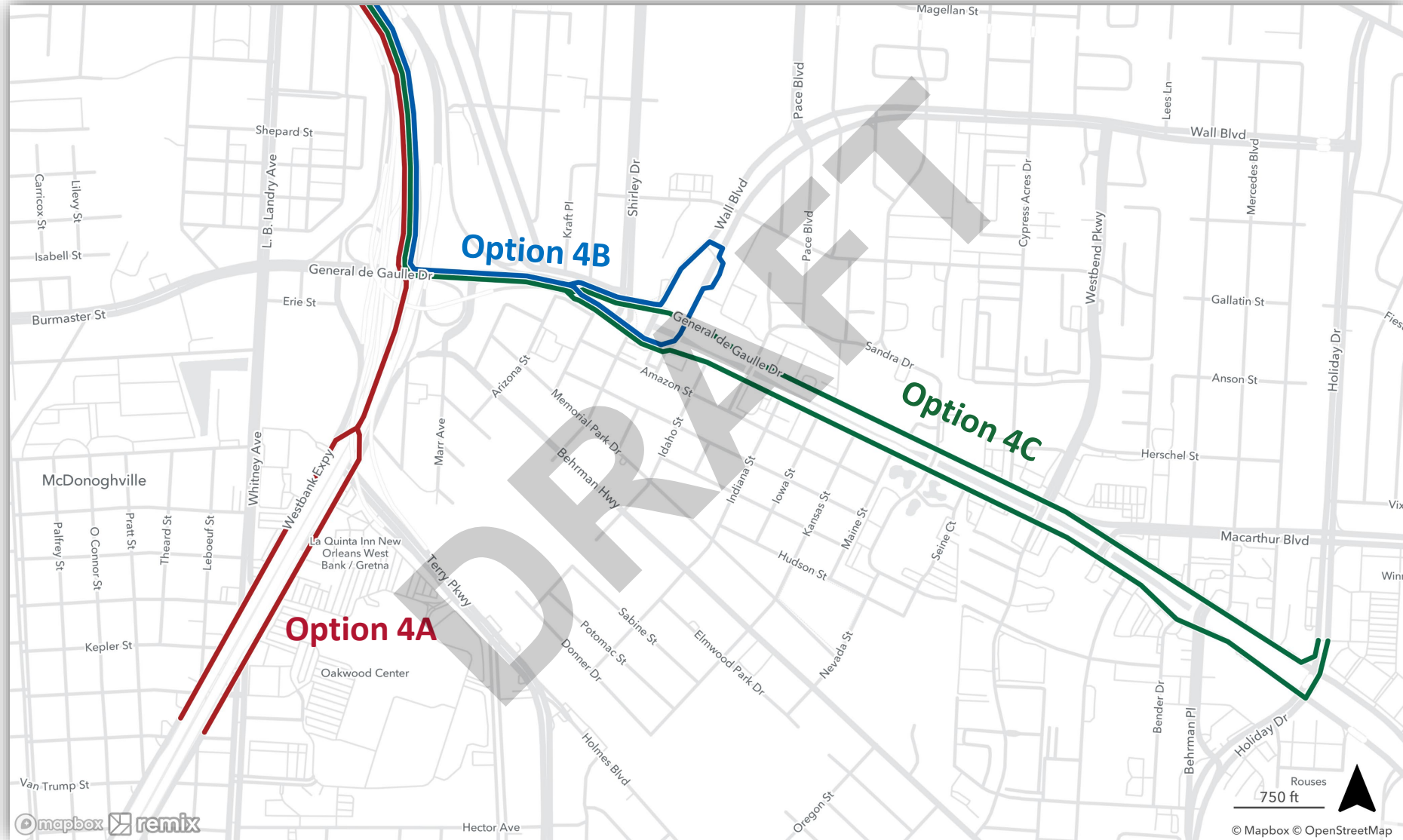
What is your preferred route?

- A. Tchoupitoulas-Peters/Poydras – 3A
- B. Calliope/Loyola – 3C
- C. Loyola/HOV – 3B

DRAFT

Potential Routes – Segment 4

DEFINING THE ROUTE



Potential Routes – Segment 3

DEFINING THE ROUTE

Option 4A: Willy Terminal



Option 4B: Algiers Park and Ride



Option 4C: Algiers Library



Option 4A:

Key Destinations:

- Wilty Terminal

Key Statistics:

- 1,445 Total Employment
- 2,230 Total Population
- 0 Essential Service Connections

Option 4B:

Key Destinations:

- Algiers Park and Ride

Key Statistics:

- 1,306 Total Employment
- 3,464 Total Population
- 3 Essential Service Connections

Option 4C:

Key Destinations:

- Algiers Library

Key Statistics:

- 4,153 Total Employment
- 9,336 Total Population
- 1 Essential Service Connections



YOUR INPUT

What is your preferred route?

- A. Wilty Terminal – 4A
- B. Algiers Park and Ride – 4B
- C. Algiers Library – 4C

DRAFT

YOUR INPUT

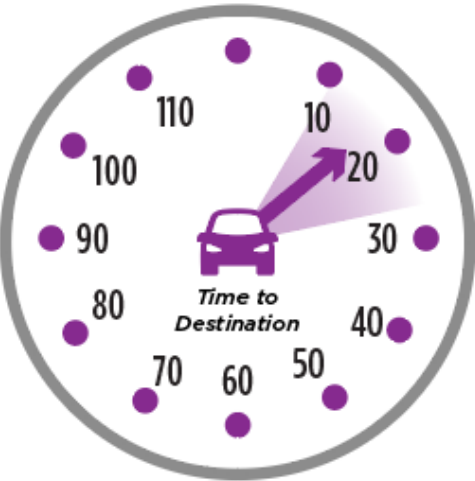
What questions and comments do you have with the route options?

DRAFT

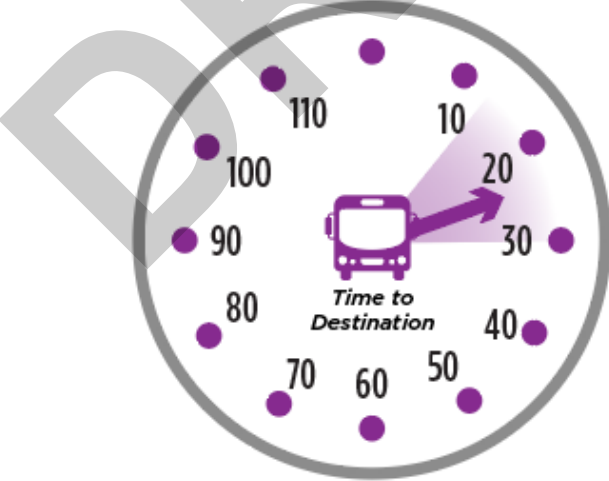
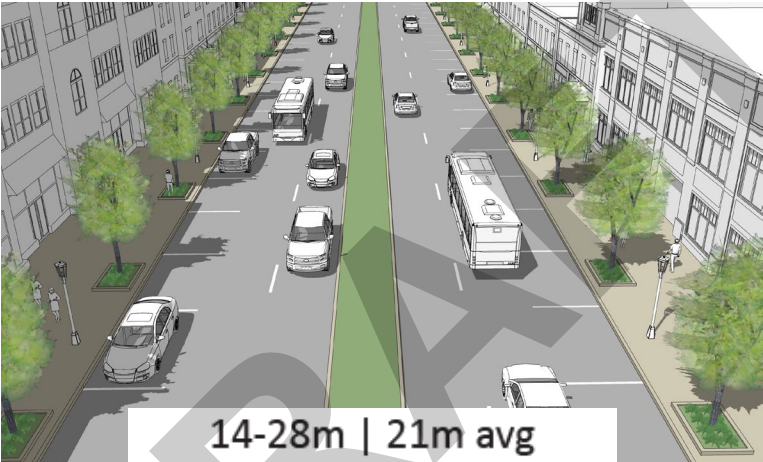
DEFINING TRANSIT PRIORITY

Travel Time: Downtown (Canal & Basin) to Wilty Terminal

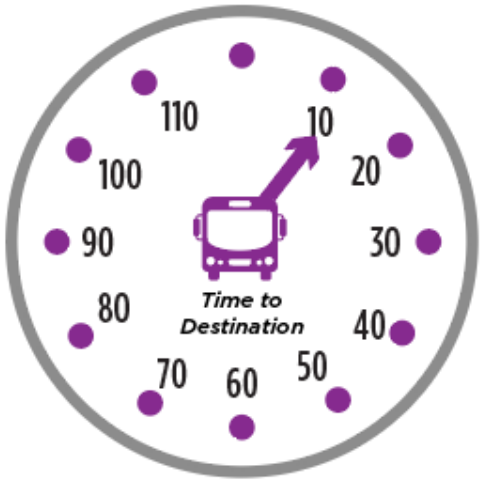
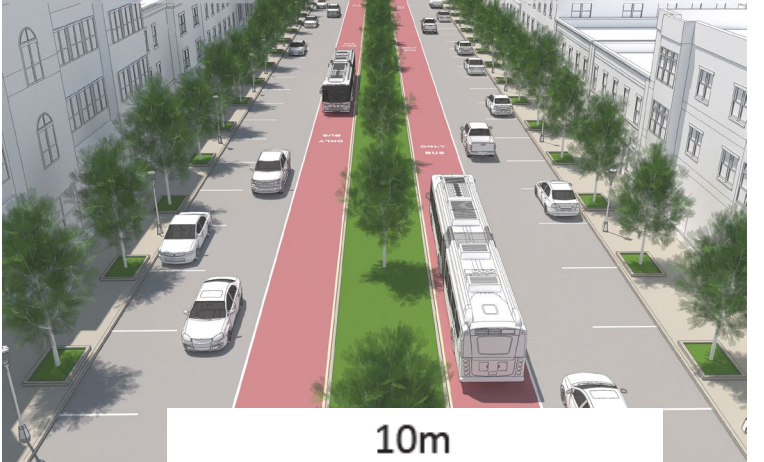
Driving Alone:



BRT Mixed Traffic



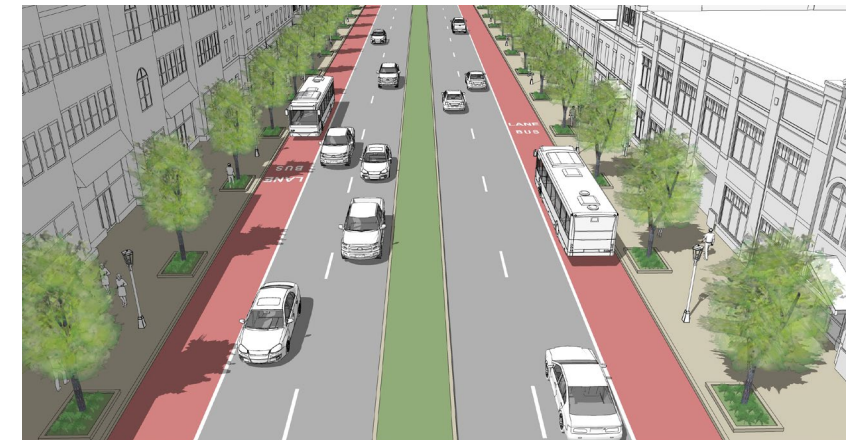
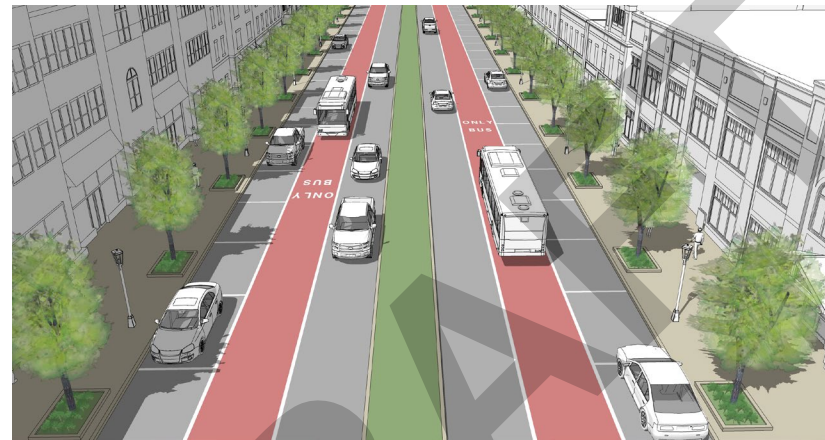
BRT Dedicated Lanes



Variations of Dedicated Lanes

Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost



Center-running BRT

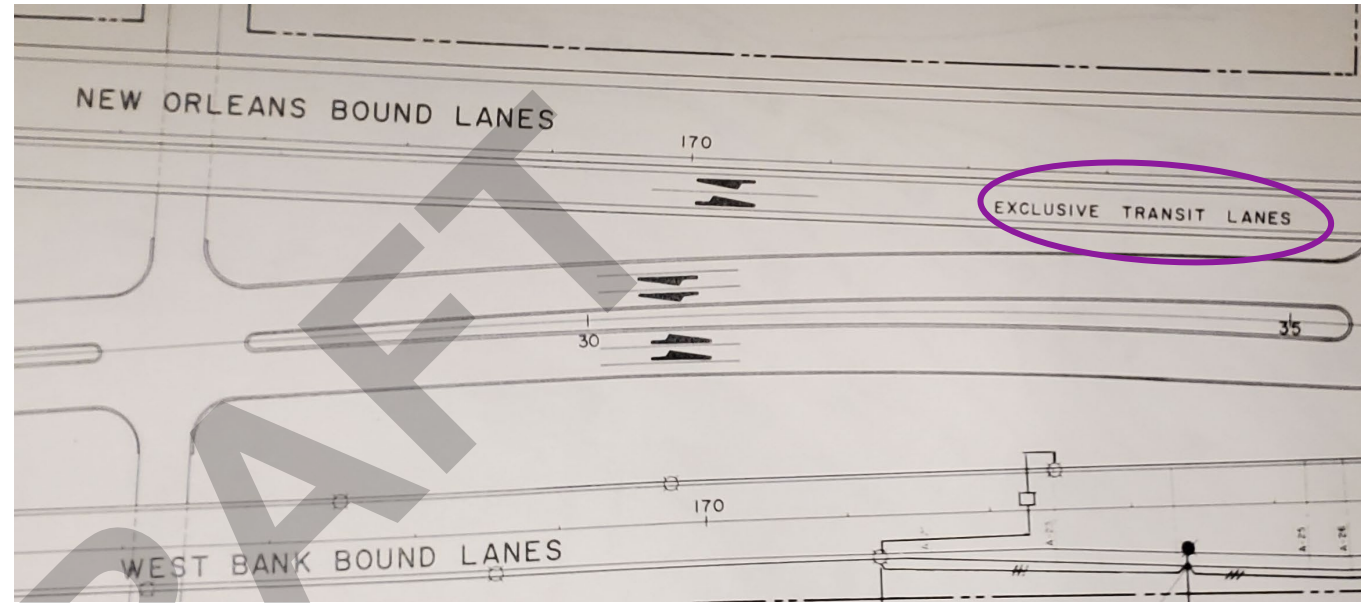
- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



History of Dedicated Lanes

US 90 Bridge HOV

- Current configuration no meets today's travel patterns
- Original function was 2-way with transit use
- Restoring HOV lane to original configuration is grant compliant
- Key to BRT success and connection to West Bank



YOUR INPUT

What guideway option do you prefer for BRT?

- A. Mixed Traffic
- B. Dedicated Lanes
- C. Need more information

DRAFT

YOUR INPUT

What trade-offs do you currently support for fast and reliable transit?

- A. Neutral Ground, Wide
- B. Neutral Ground, Narrow
- C. Parking Lanes
- D. Travel Lane

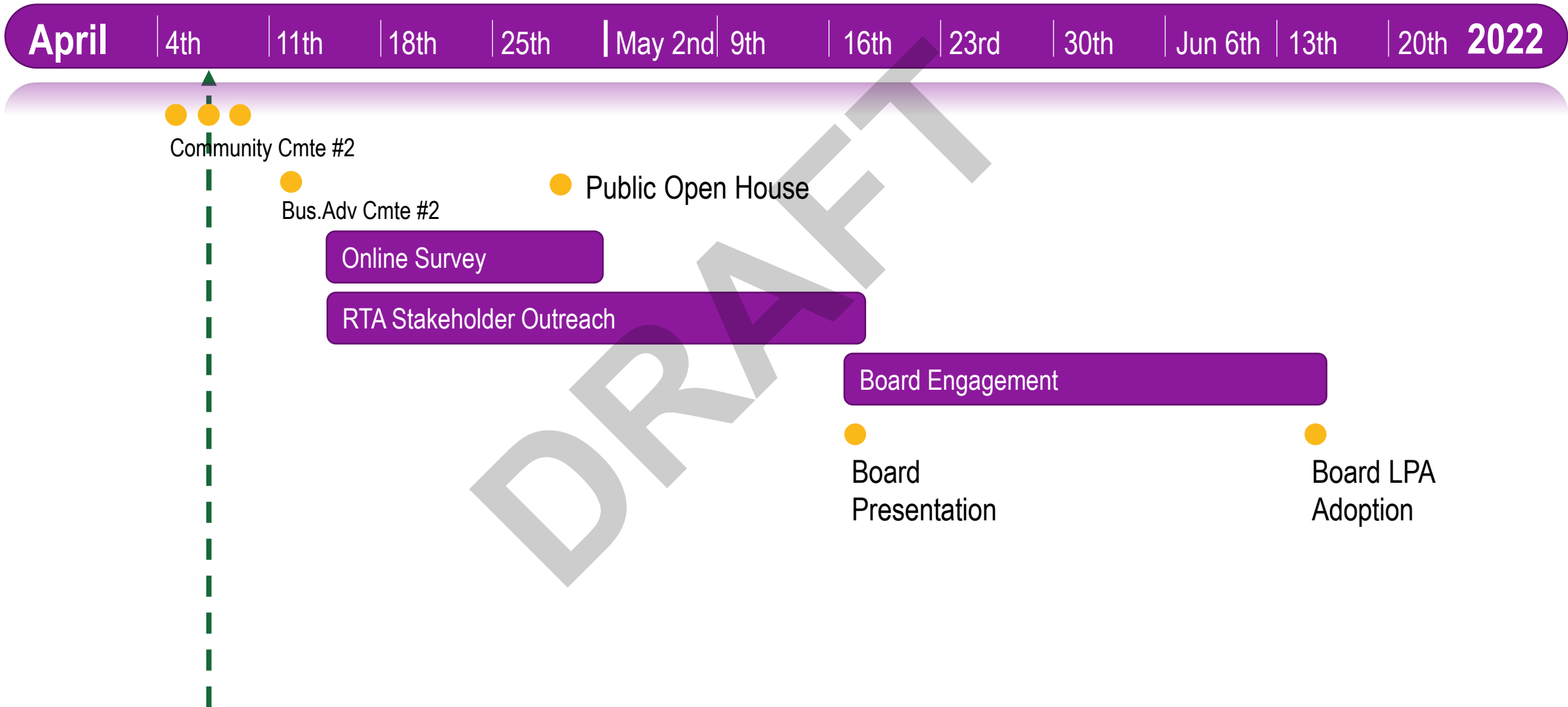
DRAFT

YOUR INPUT

What questions and comments do you have with defining transit priority?

DRAFT

ENGAGEMENT SCHEDULE



Your Input

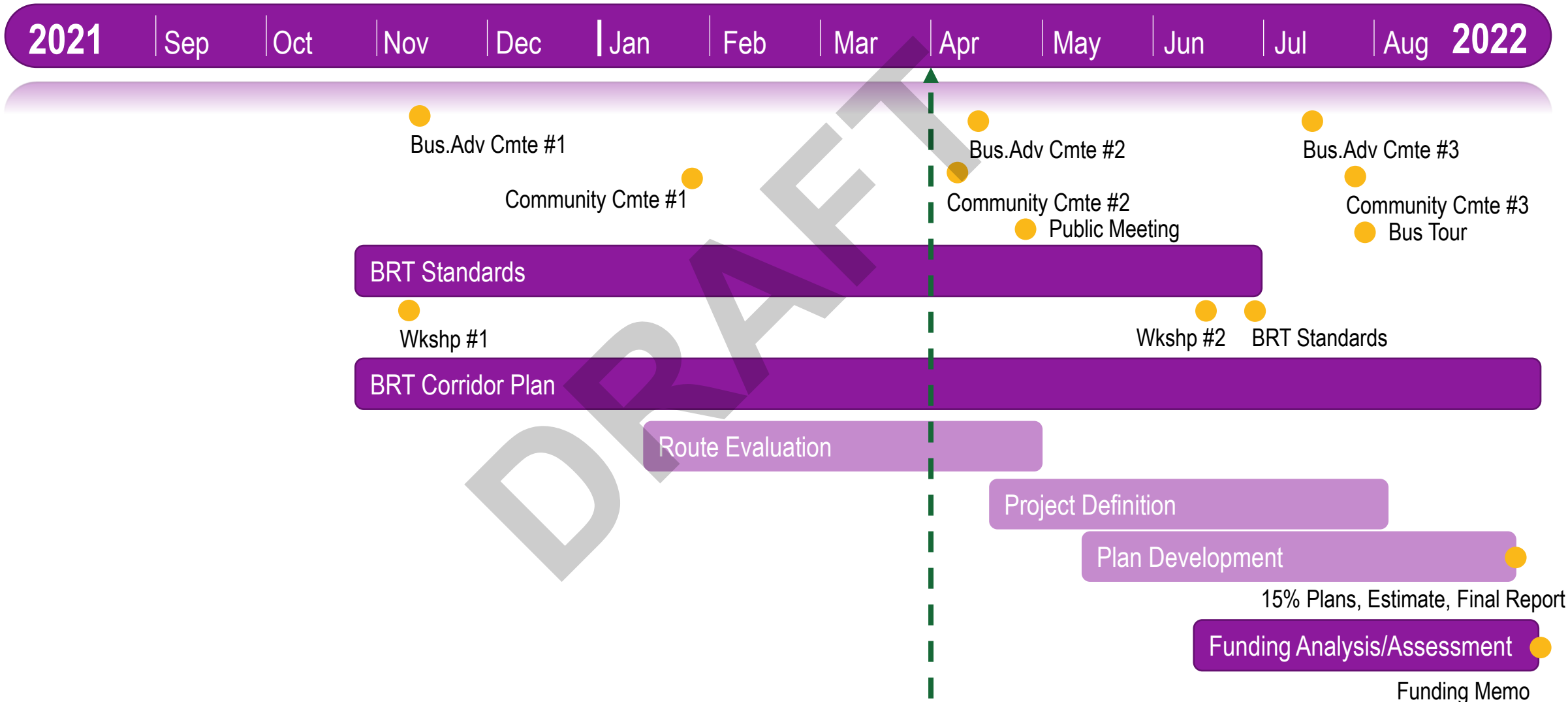
- Social Media Campaign including Advertisements
- Boards in Public Facilities
- Email Campaign
- Media Campaign
- Neighborhood Associations Meeting
- BRT Ride Along

**Public Online Survey
(mid-April – April 30)**

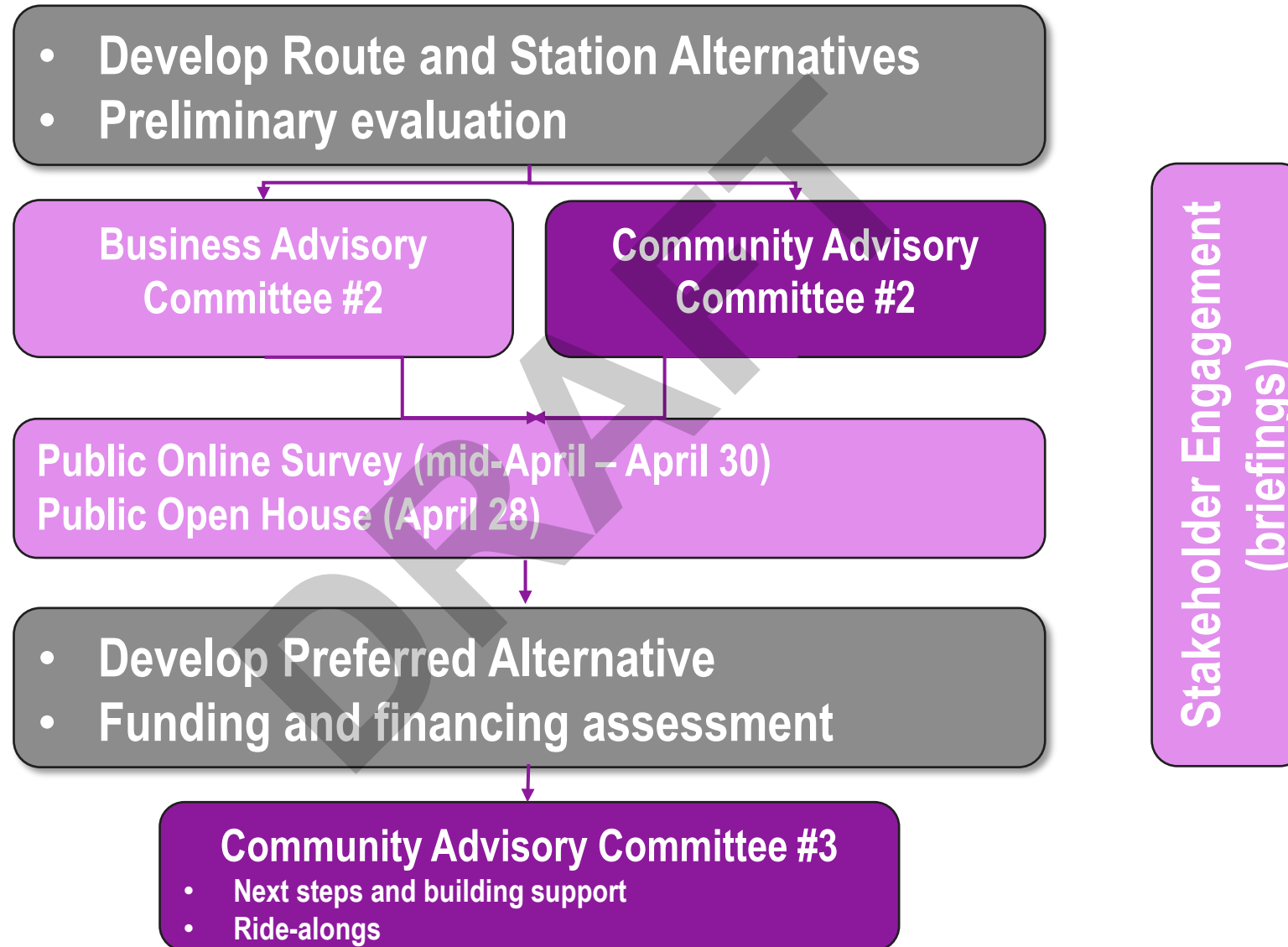
**Public Open House
(April 28)**

How can you help us promote public feedback?

PROJECT SCHEDULE



PUBLIC ENGAGEMENT



SEND US YOUR COMMENTS:

BRT@rtaforward.org

DRAFT





BUS RAPID TRANSIT FEASIBILITY STUDY

Community Advisory Committee:

New Orleans East

Wednesday, April 6, 2022

5:30 – 7:00 pm

DRAFT



Welcome and Introductions

Recap:

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- Why Bus Rapid Transit (BRT)?
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- Public Engagement Approach



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YOUR INPUT

Use your phone to answer the poll

- Open an internet browser on your phone
 - Type in www.menti.com
- Type in the code “7256 5474” into the code field

YOUR INPUT

Will the Pelicans make it to the playoffs?

1. No

2. Yes

3. Who?

DRAFT

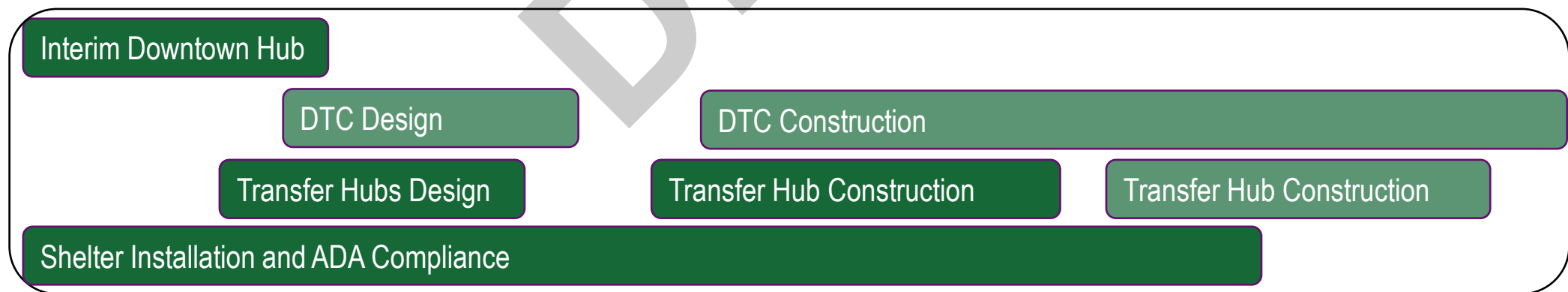
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Modern Facilities:



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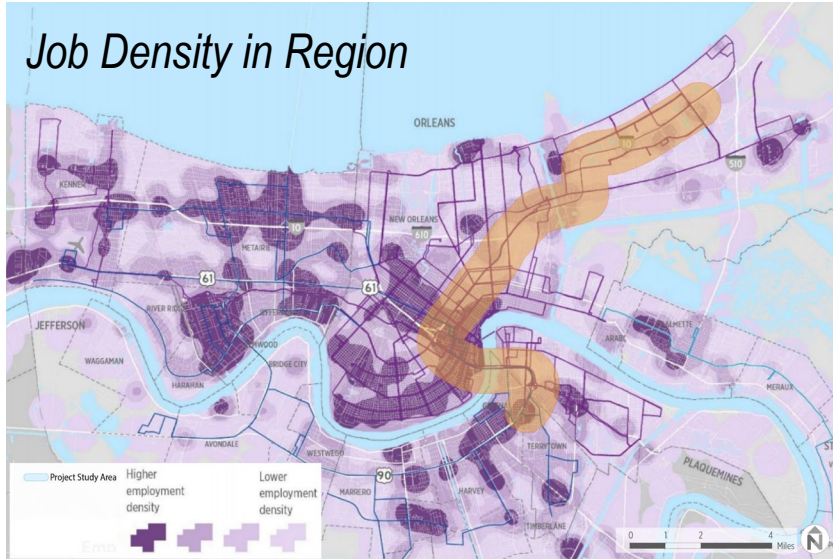
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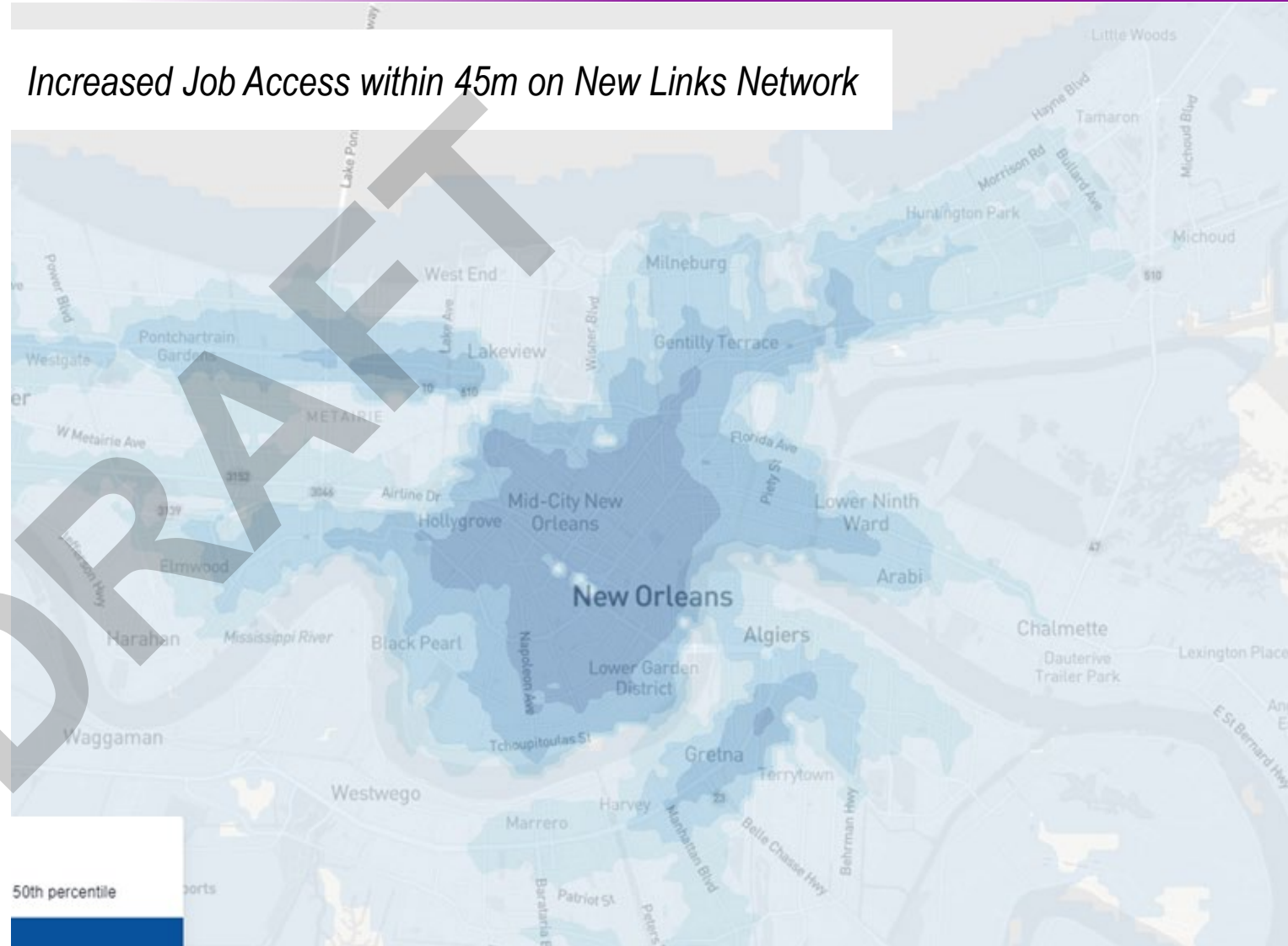
Connect to Opportunities

BRT GOALS

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Increased Job Access within 45m on New Links Network



Light Rail (LRT) vs Bus Rapid Transit (BRT)



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Location: Minneapolis, MN

Opened: 2024

Corridor Length: 14.5 Miles
36 Stations

Capital Cost: \$2.03 Billion



Agency: Albuquerque Transit Dept

Location: Albuquerque, NM

Opened : 2017

Corridor Length: 8.8 Miles
18 Stations

Capital Cost: \$134 Million

BRT can provide similar benefits and more cost effective than LRT.

Light Rail Transit

\$75-150M per mile

Bus Rapid Transit

\$5-20M per mile

Examples of Bus Rapid Transit (BRT)

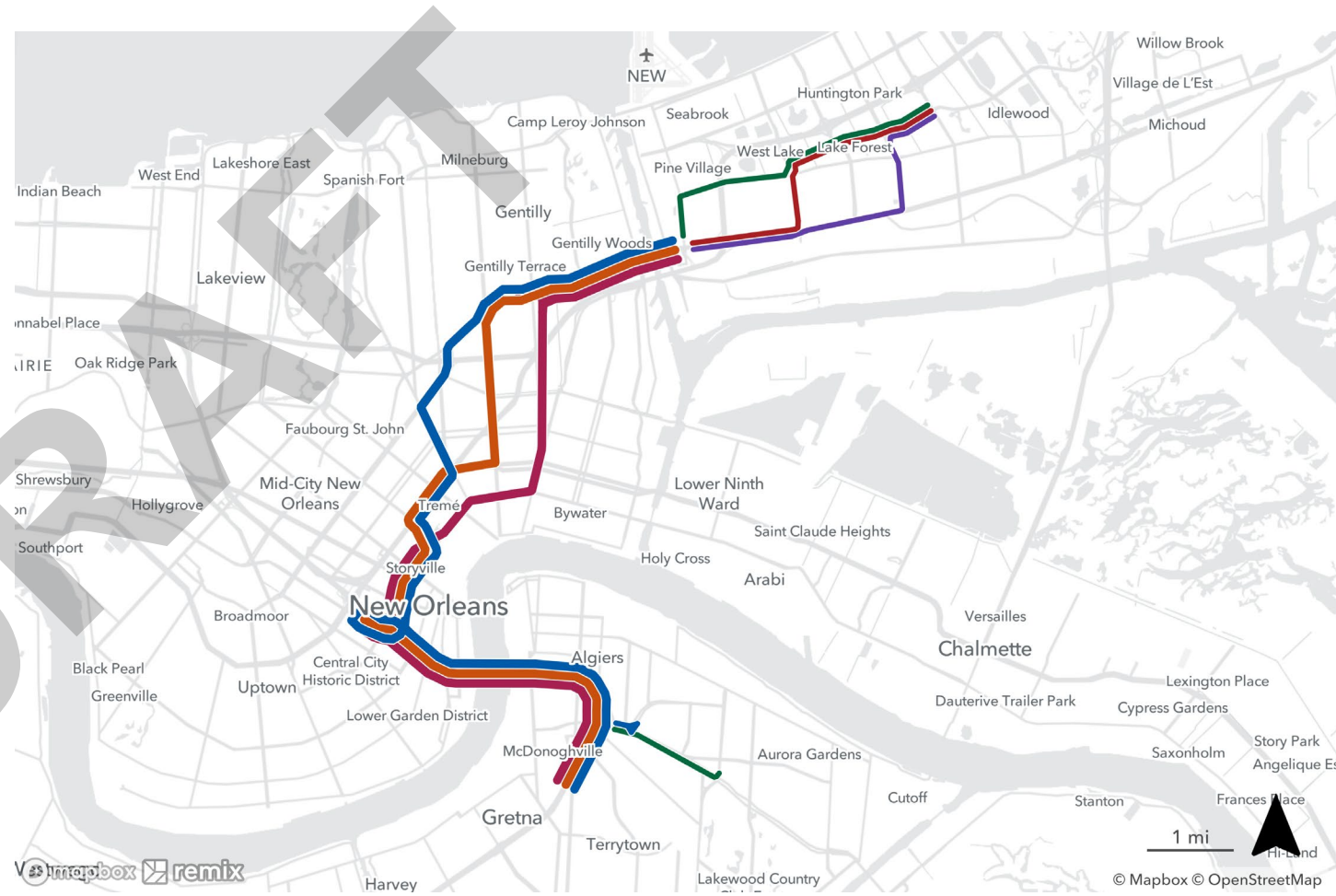


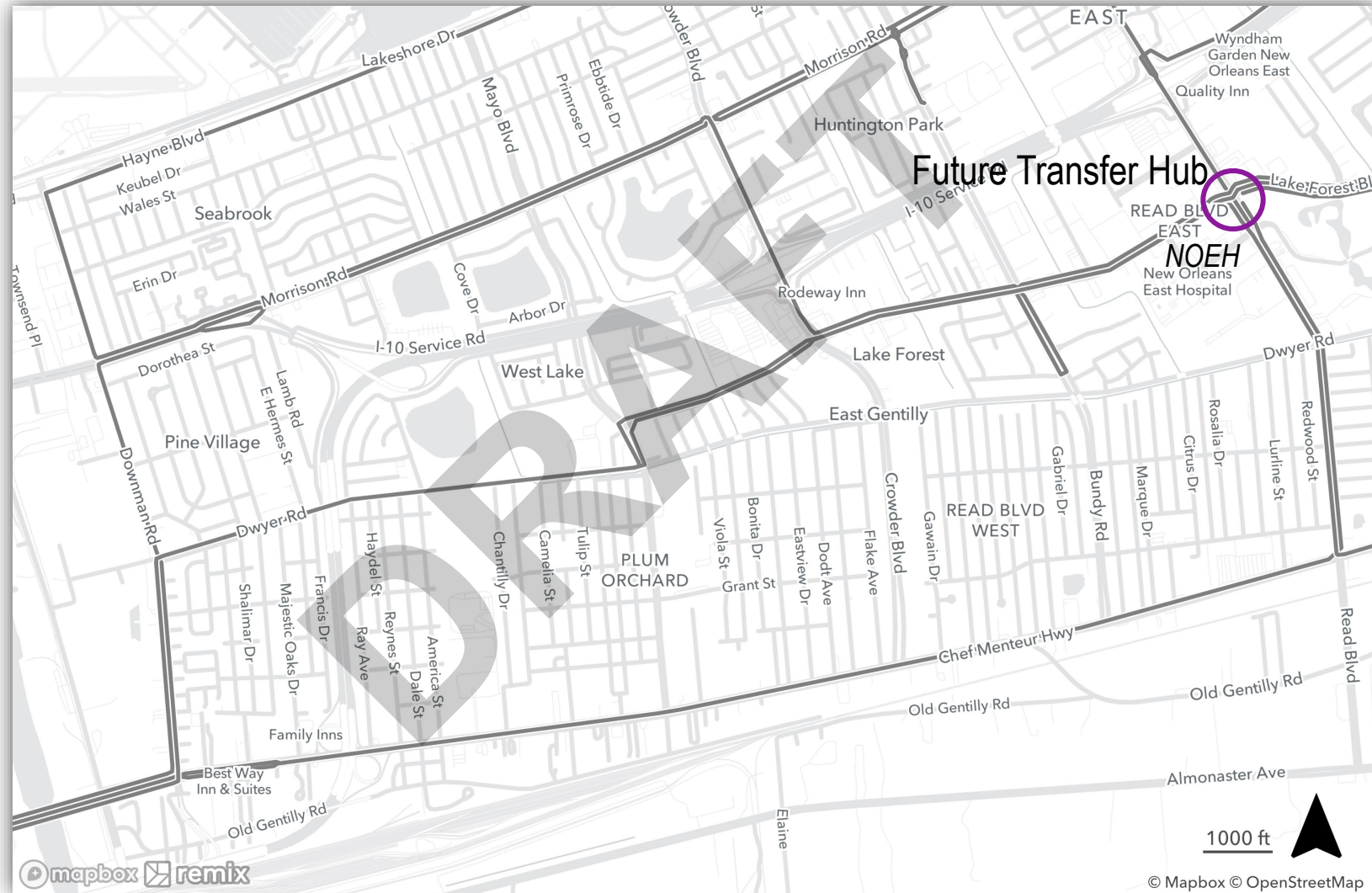
Potential Routes

DEFINING THE ROUTE

KEY NODES

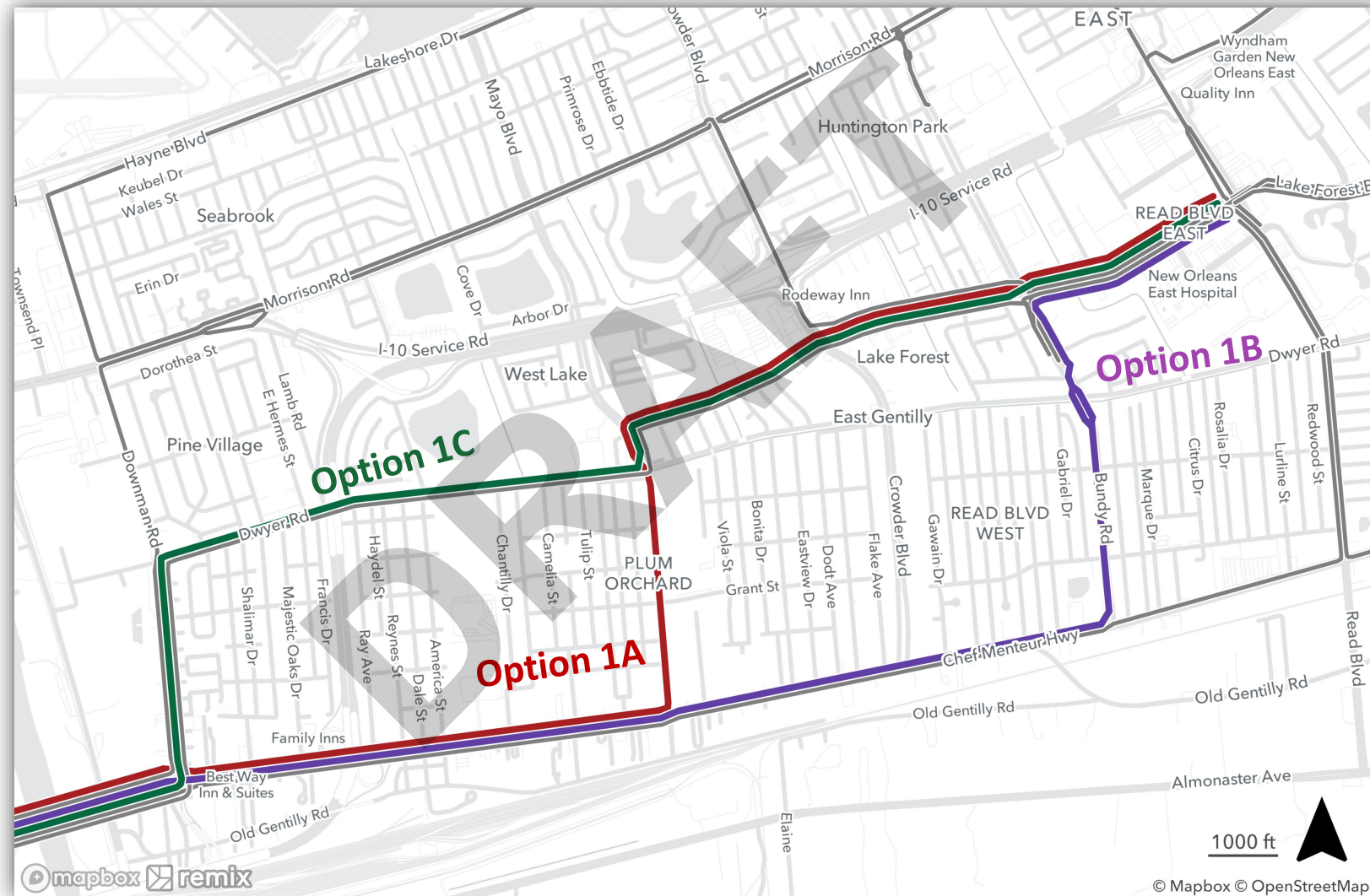
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- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Wilty Terminal (Gretna)
- Algiers Park-n-Ride





Potential BRT Routes – Segment 1

DEFINING THE ROUTE



Potential Routes – Segment 1

DEFINING THE ROUTE

Option 1A:



Option 1B:



Option 1C:



Potential Routes – Segment 1

DEFINING THE ROUTE

Option 1A:

Key Destinations:

- New Orleans East Hospital
- Livingston Collegiate Academy
- KIPP Morial School

Key Statistics:

- 1,351 Total Employment
- 6,165 Total Population
- 1,017 Existing Riders
- 7 Essential Service Connections

Option 1B:

Key Destinations:

- New Orleans East Hospital

Key Statistics:

- 1,360 Total Employment
- 8,051 Total Population
- 1,022 Existing Riders
- 9 Essential Service Connections

Option 1C:

Key Destinations:

- New Orleans East Hospital
- Livingston Collegiate Academy
- KIPP East Community Primary

Key Statistics:

- 3,263 Total Employment
- 12,213 Total Population
- 1,053 Existing Riders
- 4 Essential Service Connections

YOUR INPUT

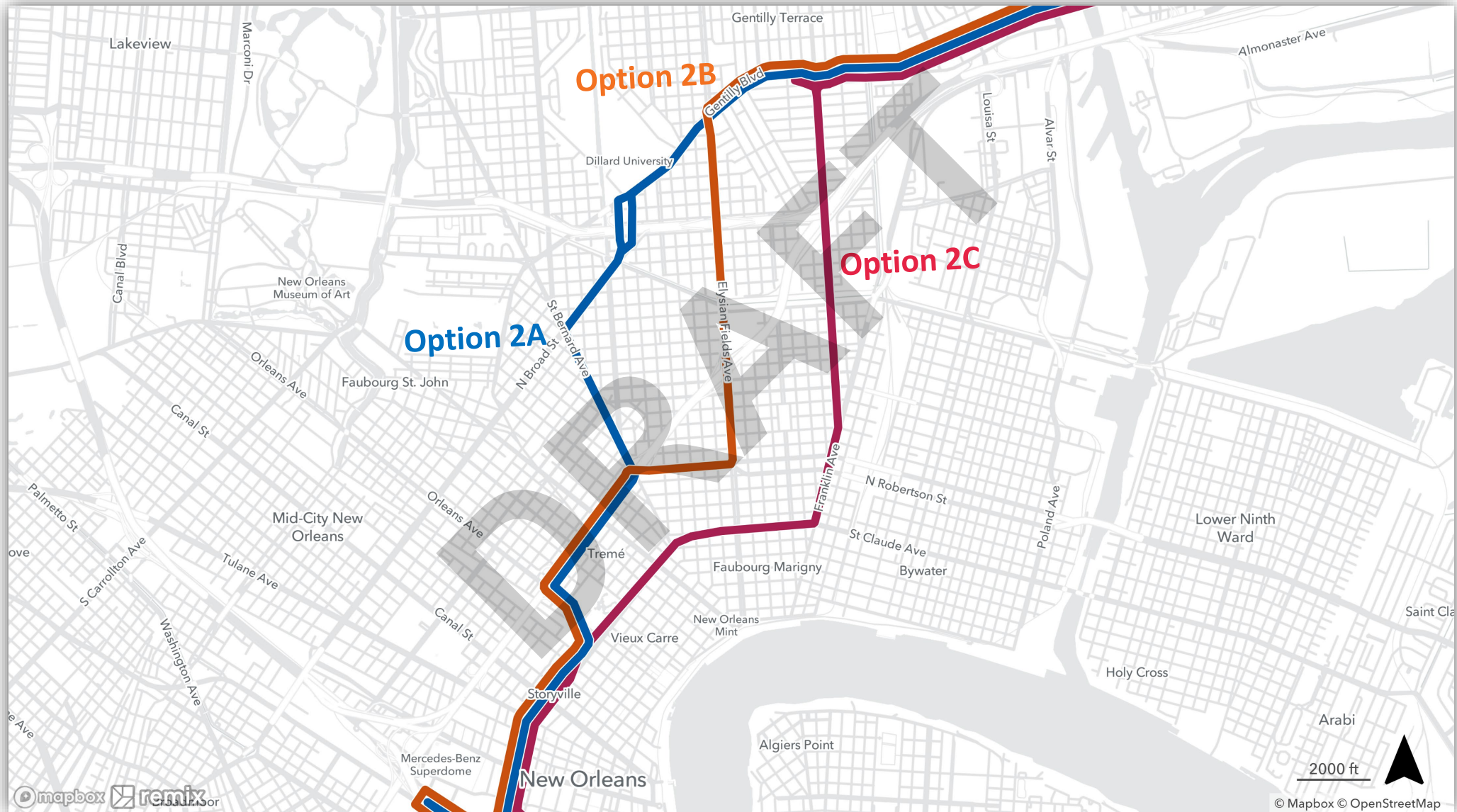
What is your preferred route for Segment 1?

- A. Wilson Avenue – 1A
- B. Bundy Road – 1B
- C. Downman Road – 1C

DRAFT

Potential Routes – Segment 2

DEFINING THE ROUTE



Potential Routes – Segment 2

DEFINING THE ROUTE

Option 2A:

St Bernard



Claiborne

Option 2B:

Elysian Fields



Claiborne

Option 2C:

Franklin



St. Claude / N. Rampart

Potential Routes – Segment 2

DEFINING THE ROUTE

Option 2A:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Nova Nora Library

Key Statistics:

- 16,261 Total Employment
- 37,154 Total Population
- 11,499 Existing Riders
- 18 Essential Service Connections

Option 2B:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Crescent Care

Key Statistics:

- 15,754 Total Employment
- 17,065 Total Population
- 11,184 Existing Riders
- 19 Essential Service Connections

Option 2C:

Key Destinations:

- French Quarter/Marigny

Key Statistics:

- 19,946 Total Employment
- 21,005 Total Population
- 11,366 Existing Riders
- 20 Essential Service Connections

YOUR INPUT

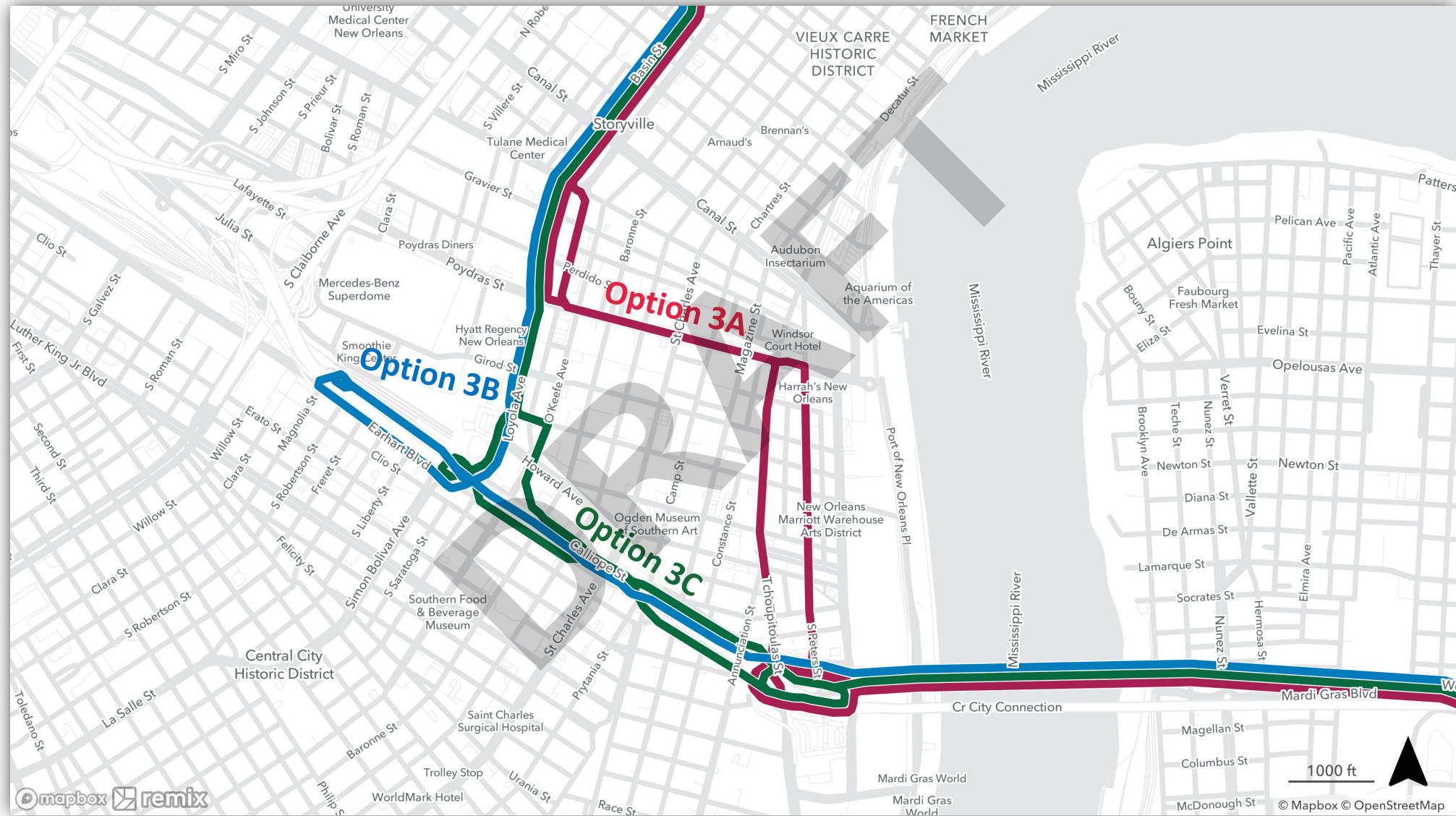
What is your preferred route?

- A. St Bernard / Claiborne – 2A
- B. Elysian Fields / Claiborne – 2B
- C. Franklin / St Claude – 2C

DRAFT

Potential Routes – Segment 3

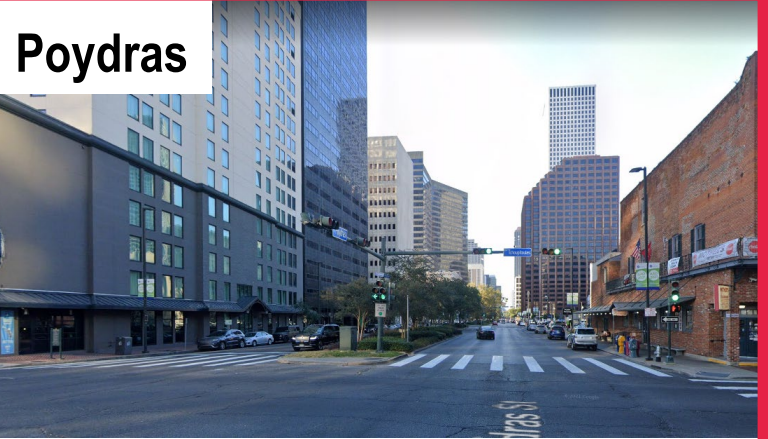
DEFINING THE ROUTE



Potential Routes – Segment 3

DEFINING THE ROUTE

Option 3A:



Option 3B:



Option 3C:



Option 3A:

Key Destinations:

- Tulane Medical Center
- CBD
- Convention Center

Key Statistics:

- 54,162 Total Employment
- 3,890 Total Population
- 13,939 Existing Riders
- 4 Essential Service Connections

Option 3B:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal
- Transfer to Uptown

Key Statistics:

- 32,154 Total Employment
- 2,365 Total Population
- 10,528 Existing Riders
- 2 Essential Service Connections

Option 3C:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal

Key Statistics:

- 36,294 Total Employment
- 4,150 Total Population
- 11,094 Existing Riders
- 2 Essential Service Connections

YOUR INPUT

What is your preferred route?

- A. Tchoupitoulas-Peters/Poydras – 3A
- B. Calliope/Loyola – 3C
- C. Loyola/HOV – 3B

DRAFT

YOUR INPUT

What questions and comments do you have with the route options?

DRAFT

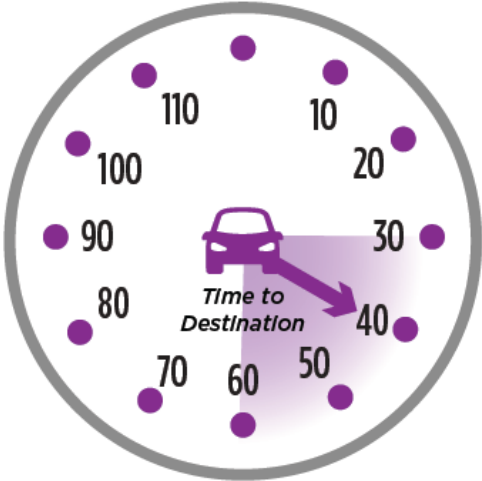
DEFINING TRANSIT PRIORITY

Travel Time: New Orleans East to Downtown

Driving Alone



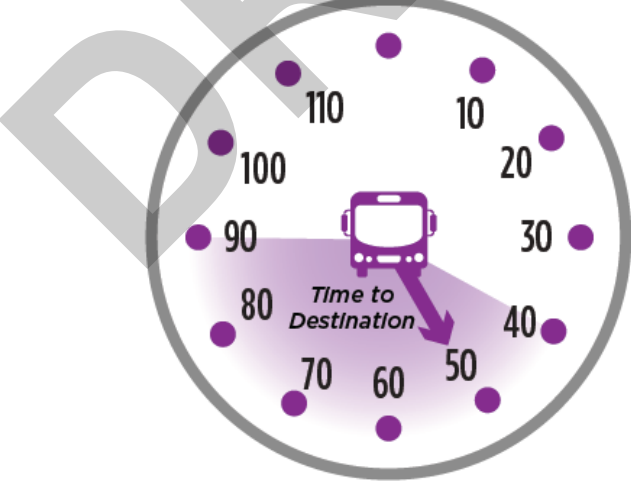
30-60m | 40m avg



BRT Mixed Traffic



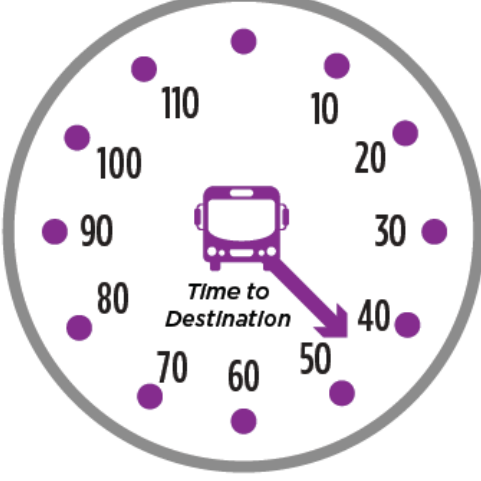
40-90m | 50m avg



BRT Dedicated Lanes



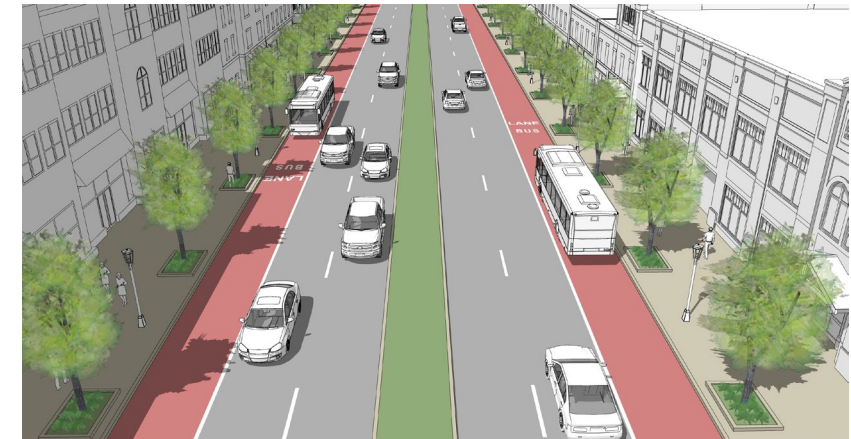
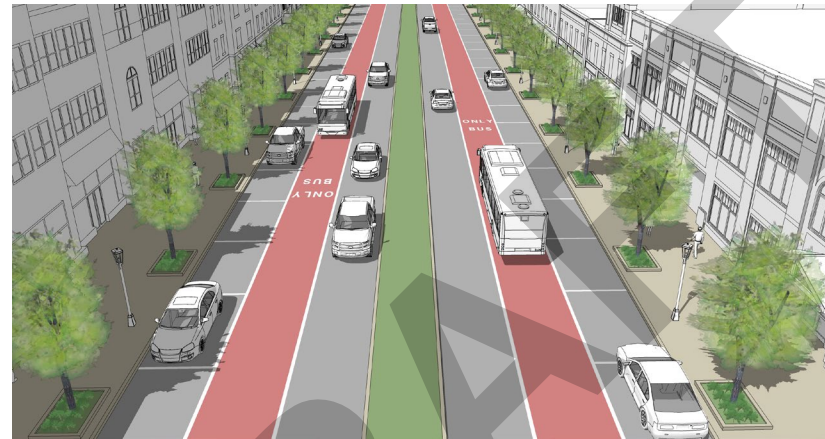
45m



Variations of Dedicated Lanes

Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost

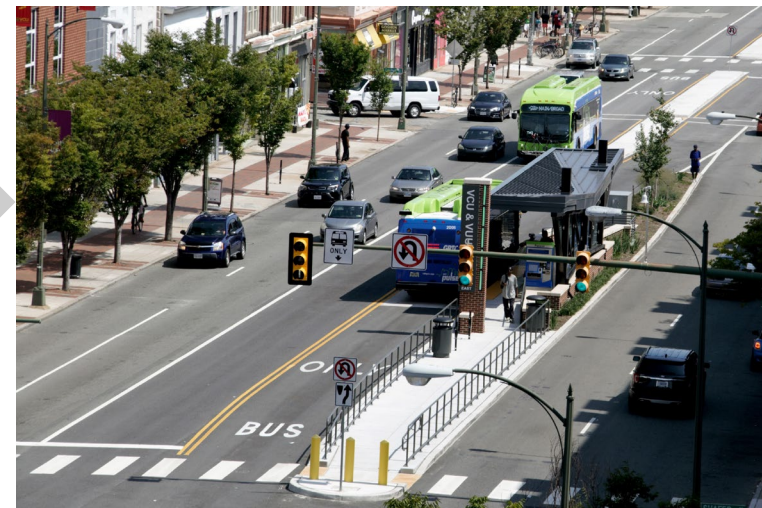


Center-running BRT

- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



Variations of Dedicated Lanes



YOUR INPUT

What guideway option do you prefer for BRT?

- A. Mixed Traffic
- B. Dedicated Lanes
- C. Need more information

DRAFT

YOUR INPUT

What trade-offs do you currently support for fast and reliable transit?

- A. Neutral Ground, Wide
- B. Neutral Ground, Narrow
- C. Parking Lanes
- D. Travel Lane

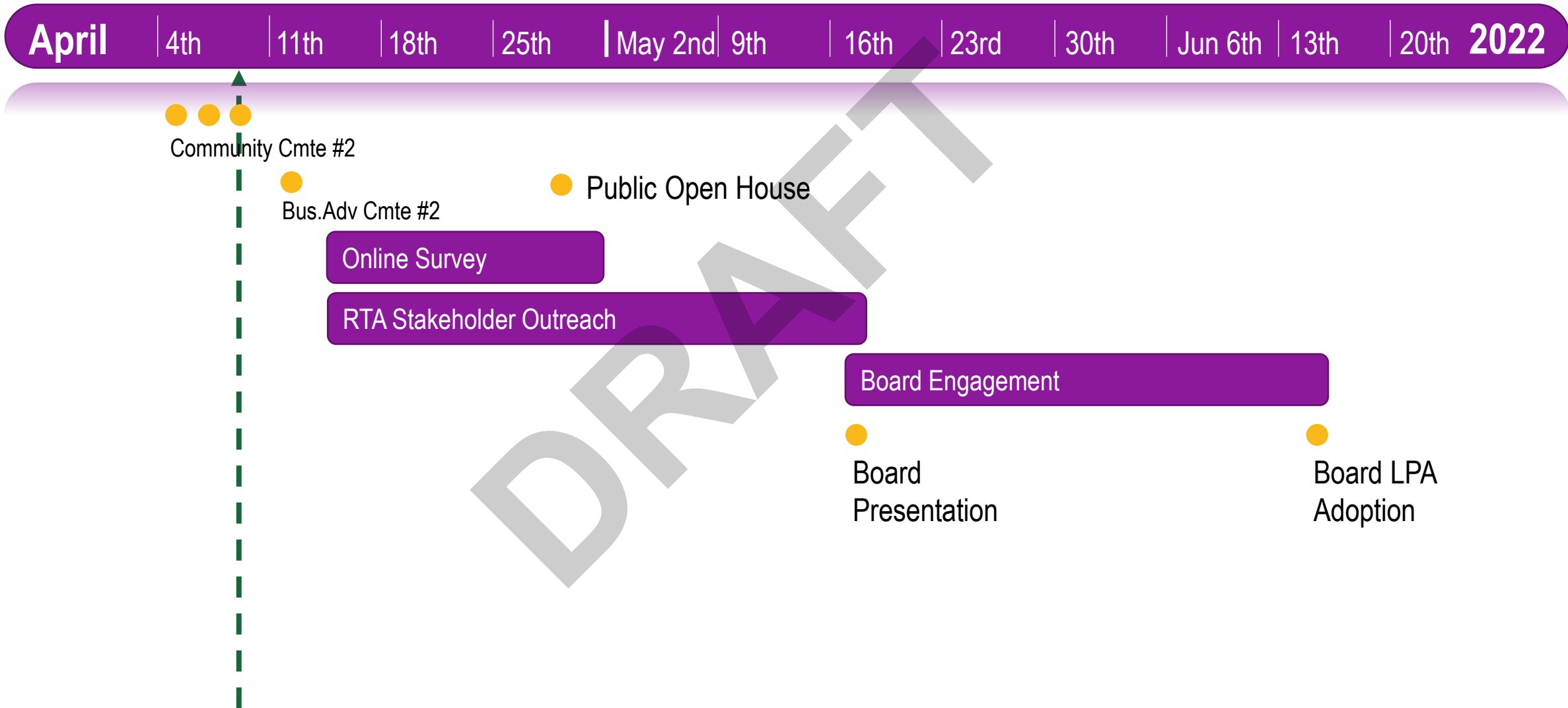
DRAFT

YOUR INPUT

What questions and comments do you have with defining transit priority?

DRAFT

ENGAGEMENT SCHEDULE



Your Input

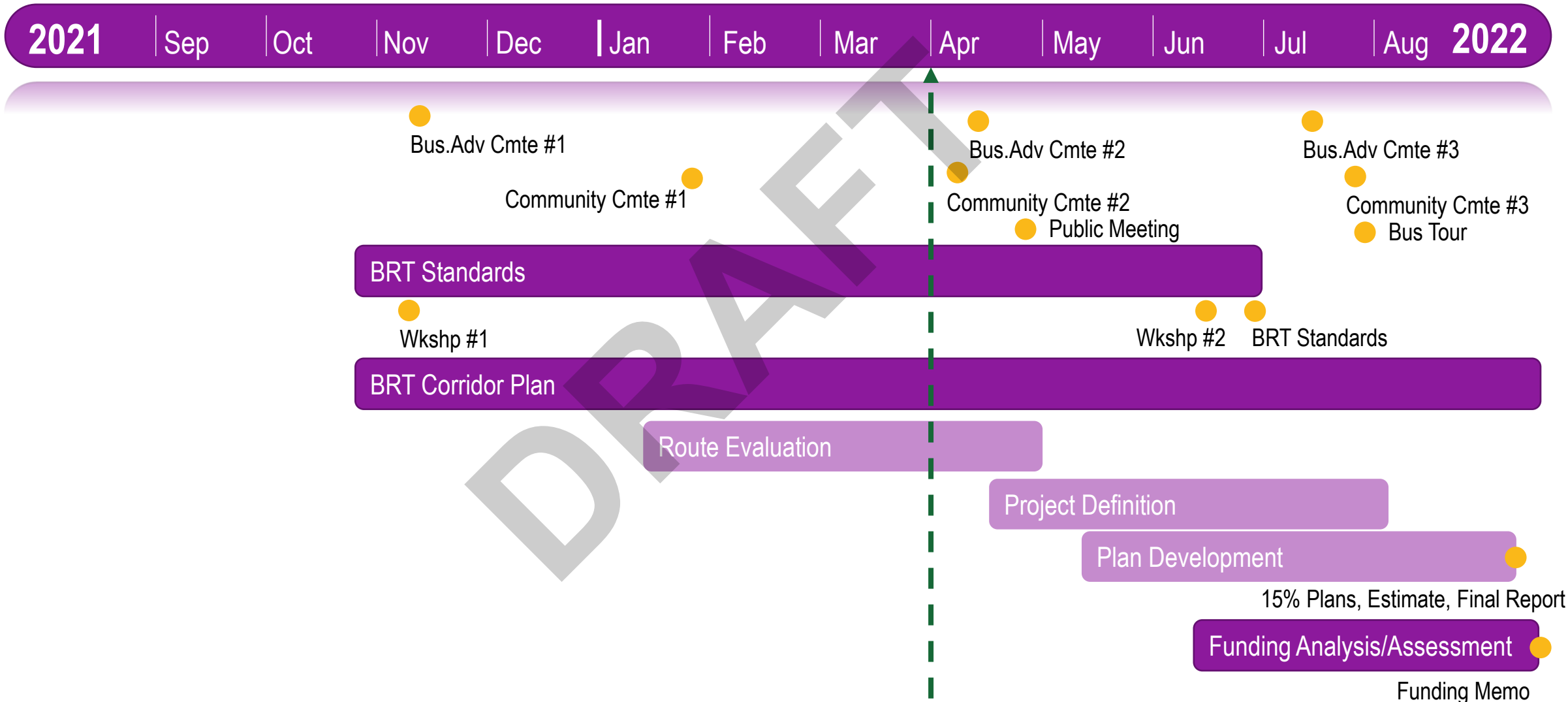
- Social Media Campaign including Advertisements
- Boards in Public Facilities
- Email Campaign
- Media Campaign
- Neighborhood Associations Meeting
- BRT Ride Along

**Public Online Survey
(mid-April – April 30)**

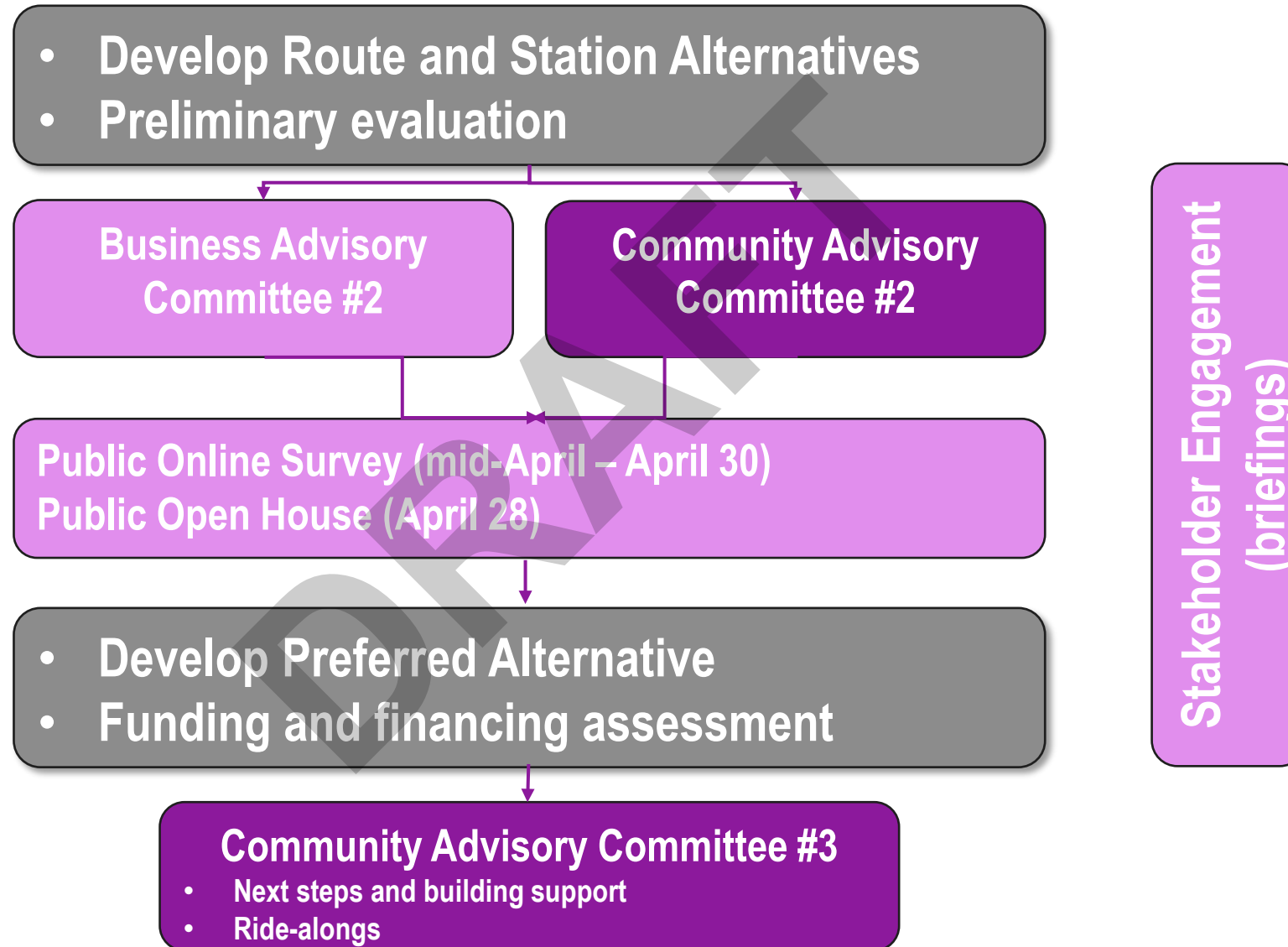
**Public Open House
(April 28)**

How can you help us promote public feedback?

PROJECT SCHEDULE



PUBLIC ENGAGEMENT



SEND US YOUR COMMENTS:

BRT@rtaforward.org

DRAFT





BUS RAPID TRANSIT FEASIBILITY STUDY

Community Advisory Committee:

Treme/7th Ward/Gentilly

Monday, April 4, 2022
5:30 – 7:00 pm



Welcome and Introductions

Recap:

- Where RTA is Going
- Investing in Existing Service
- Why Bus Rapid Transit (BRT)?
- BRT Goals

BRT Corridor Development

- Route & Transit Priority Options
- Public Engagement Approach



RTA

- **Lona Hankins, Deputy CEO for Planning & Infrastructure**
- **Dwight Norton, Sr. Director of Strategic & Long-Term Planning**

Project Consultant Team Representatives

- **Iam Tucker – ILSI – Prime Consultant**
- **Geneva Coleman & Karimah Stewart – Hawthorne Agency – Public Engagement**
- **Devin Foil – HNTB – Planning Consultant**

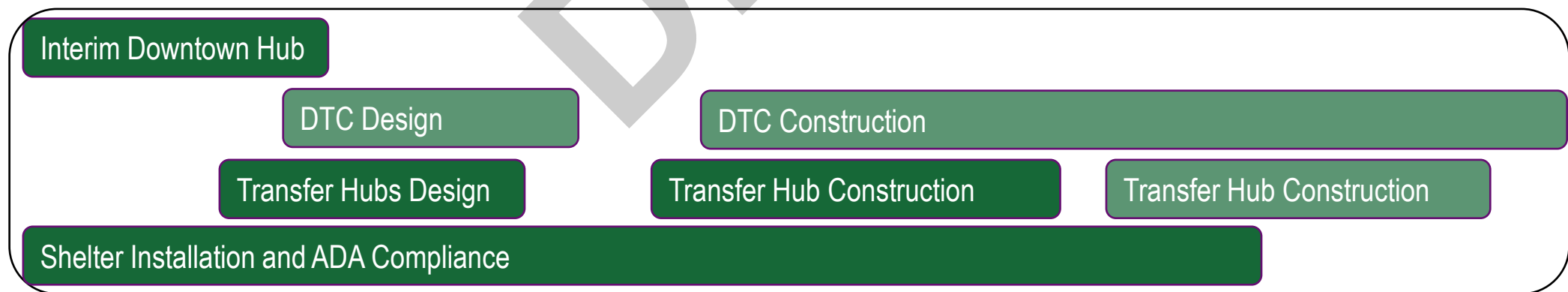
WHERE WE'RE GOING



Bus Rapid Transit (BRT):



Modern Facilities:



BRT GOALS



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet communities needs.



Promote investment in neighborhoods.



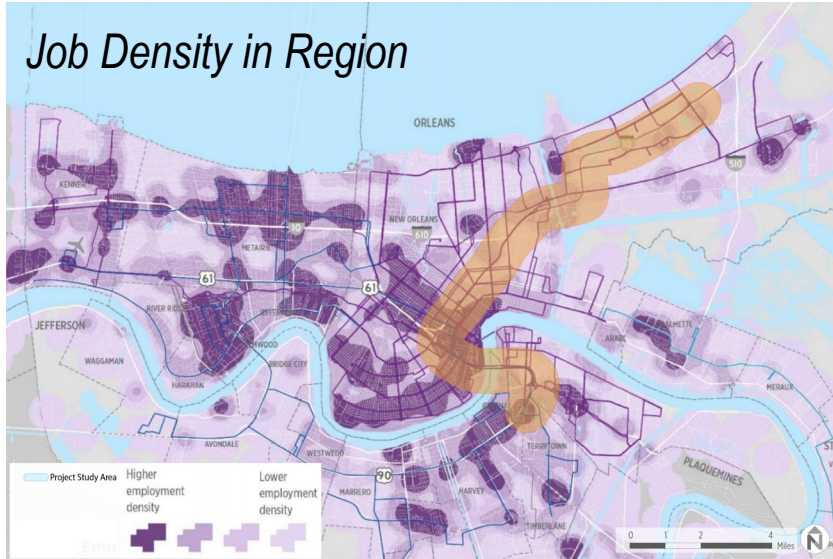
Support a sustainable and healthy community.



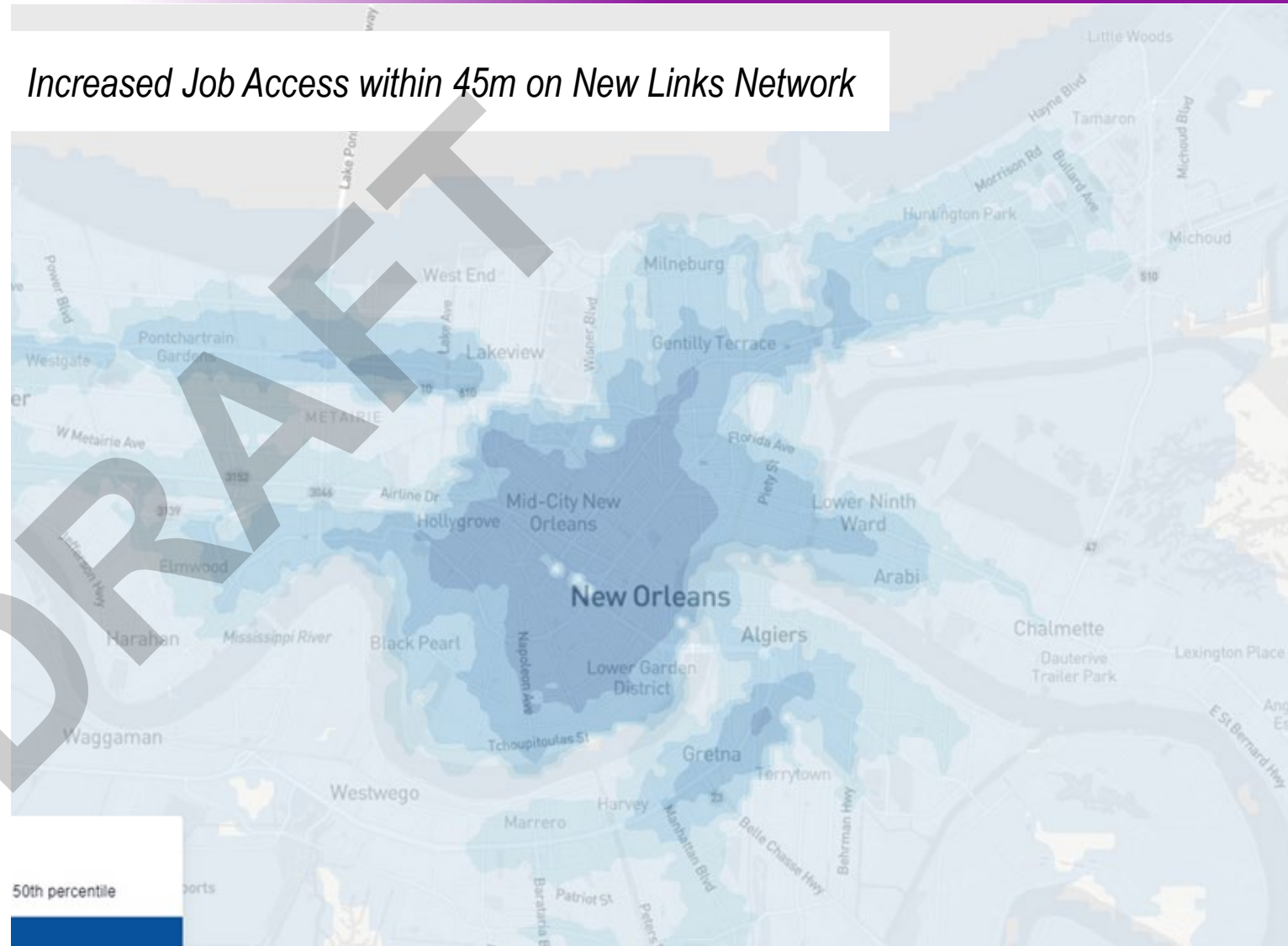
Connect to Opportunities

BRT GOALS

Job Density in Region



Increased Job Access within 45m on New Links Network



Light Rail (LRT) vs Bus Rapid Transit (BRT)



Agency: Metro Transit
Location: Minneapolis, MN
Opened: 2024
Corridor Length: 14.5 Miles
36 Stations
Capital Cost: \$2.03 Billion



Agency: Albuquerque Transit Dept
Location: Albuquerque, NM
Opened : 2017
Corridor Length: 8.8 Miles
18 Stations
Capital Cost: \$134 Million

BRT can provide similar benefits and more cost effective than LRT.

Light Rail Transit

\$75-150M per mile

Bus Rapid Transit

\$5-20M per mile

YOUR INPUT

Will the Pelicans make it to the playoffs?

1. No

2. Yes

3. Who?

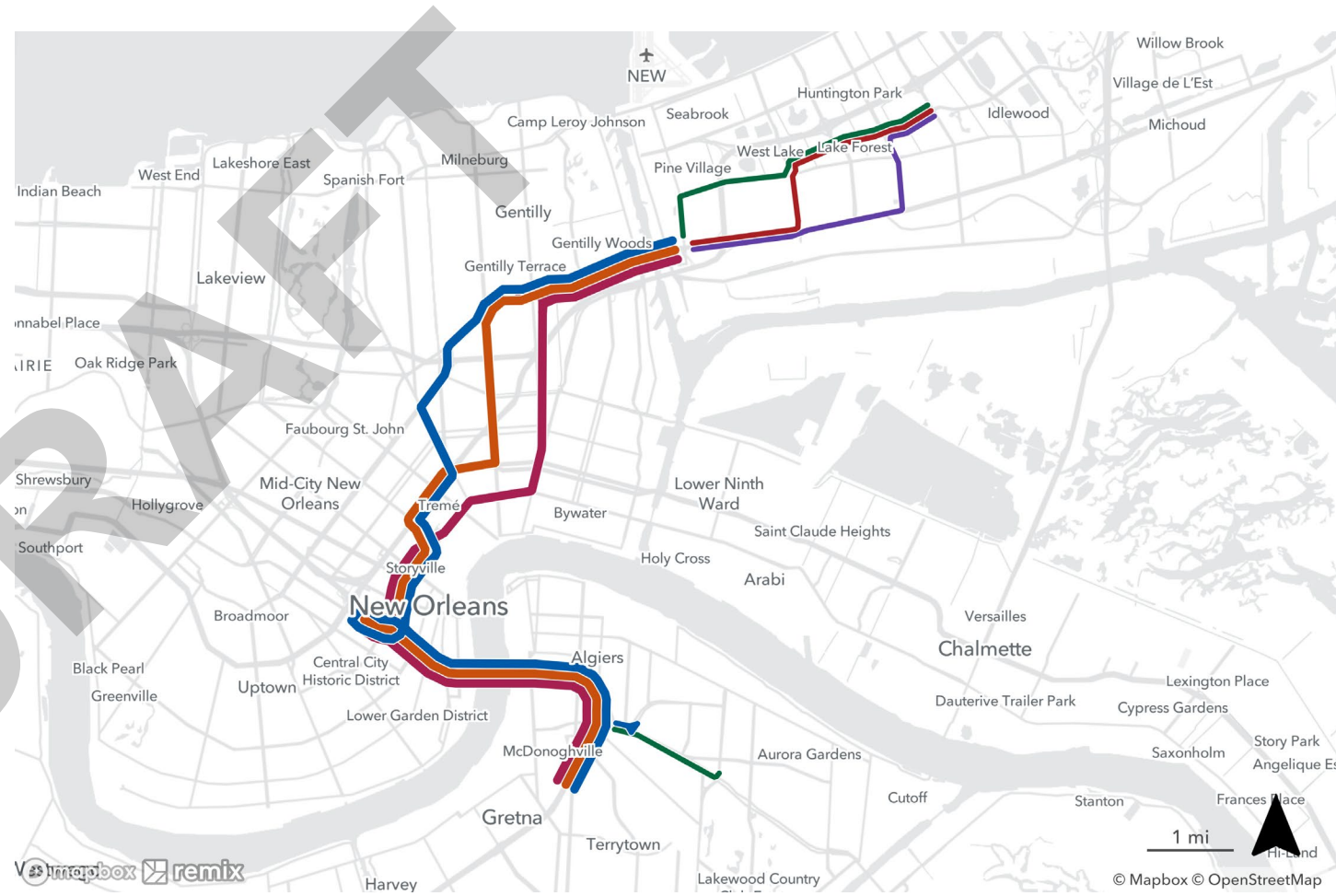
DRAFT

Potential Routes

DEFINING THE ROUTE

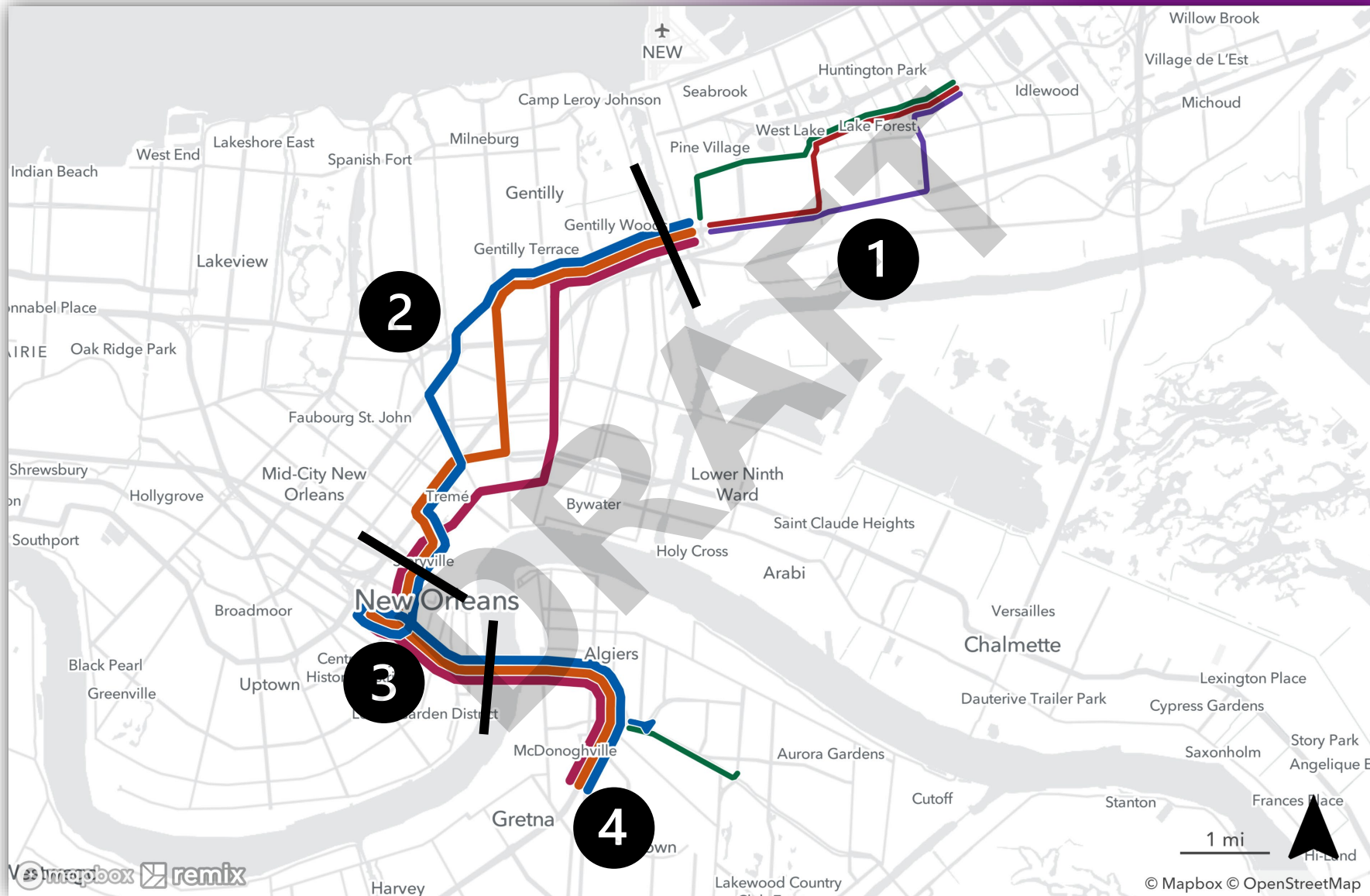
KEY NODES

- ★ New Orleans East Transfer Hub
- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Wilty Terminal (Gretna)
- Algiers Park-n-Ride



Potential Routes

DEFINING THE ROUTE



Potential Routes – Segment 1

DEFINING THE ROUTE

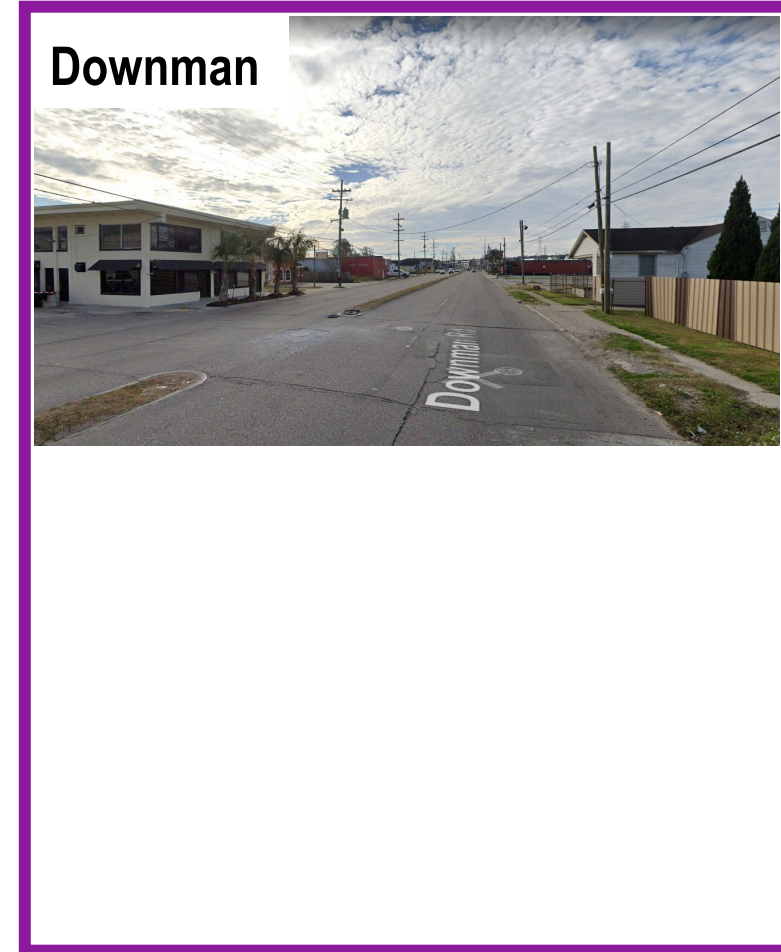
Option 1A:



Option 1B:



Option 1C:



Option 1A:

Key Destinations:

- New Orleans East Hospital
- KIPP Morial School
- Livingston Collegiate Academy

Key Statistics:

- 687 Employment per SqMi
- 3,114 Population per SqMi
- 7 Essential Service Connections

Option 1B:

Key Destinations:

- New Orleans East Hospital
- Schaumburg Elementary

Key Statistics:

- 602 Employment per SqMi
- 3,296 Population per SqMi
- 9 Essential Service Connections

Option 1C:

Key Destinations:

- New Orleans East Hospital
- Livingston Collegiate Academy
- KIPP East Community Primary

Key Statistics:

- 938 Employment per SqMi
- 3,379 Population per SqMi
- 4 Essential Service Connections

YOUR INPUT

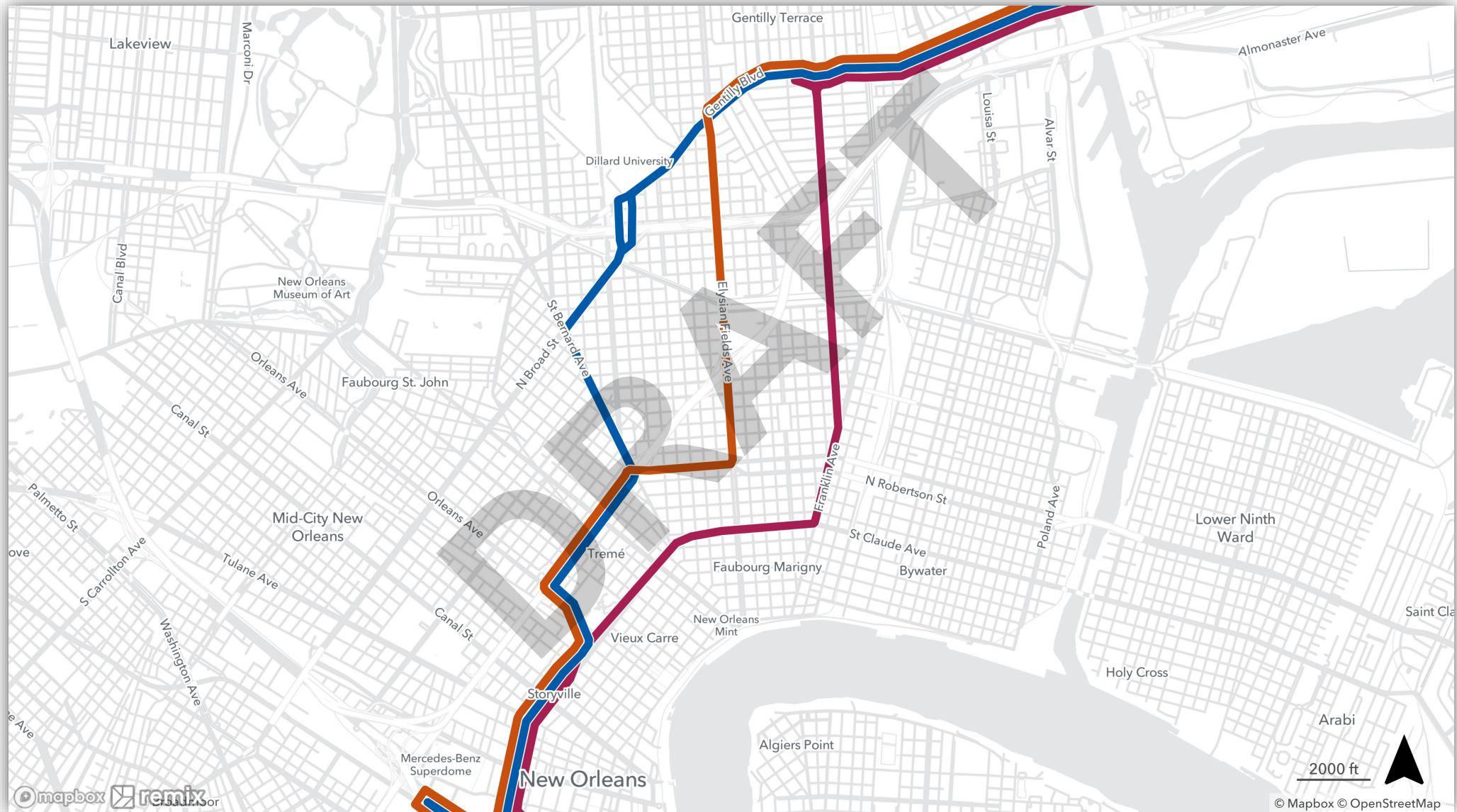
What is your preferred route for Segment 1?

- A. Wilson Avenue – 1A
- B. Bundy Road – 1B
- C. Downman Road – 1C

DRAFT

Potential Routes – Segment 2

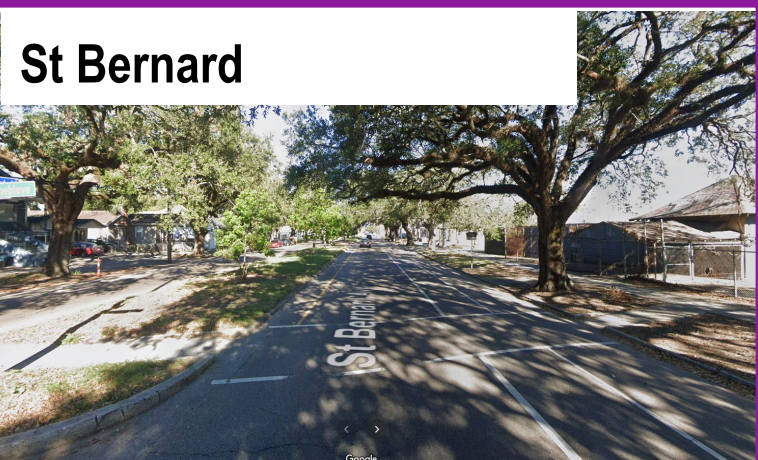
DEFINING THE ROUTE



Potential Routes – Segment 2

DEFINING THE ROUTE

Option 2A:

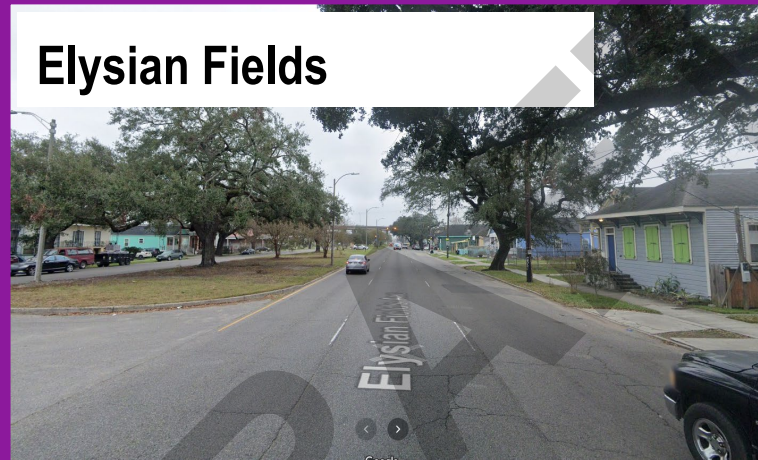


St Bernard



Claiborne

Option 2B:



Elysian Fields



Claiborne

Option 2C:



Franklin



St. Claude / N. Rampart

Option 2A:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Nova Nora Library

Key Statistics:

- 7,334 Employment per SqMi
- 4,484 Population per SqMi
- 18 Essential Service Connections

Option 2B:

Key Destinations:

- Dillard University
- Morris Jeff Community School
- Crescent Care

Key Statistics:

- 7,236 Employment per SqMi
- 4,450 Population per SqMi
- 19 Essential Service Connections

Option 2C:

Key Destinations:

- French Quarter/Marigny

Key Statistics:

- 6,787 Employment per SqMi
- 4,705 Population per SqMi
- 20 Essential Service Connections

YOUR INPUT

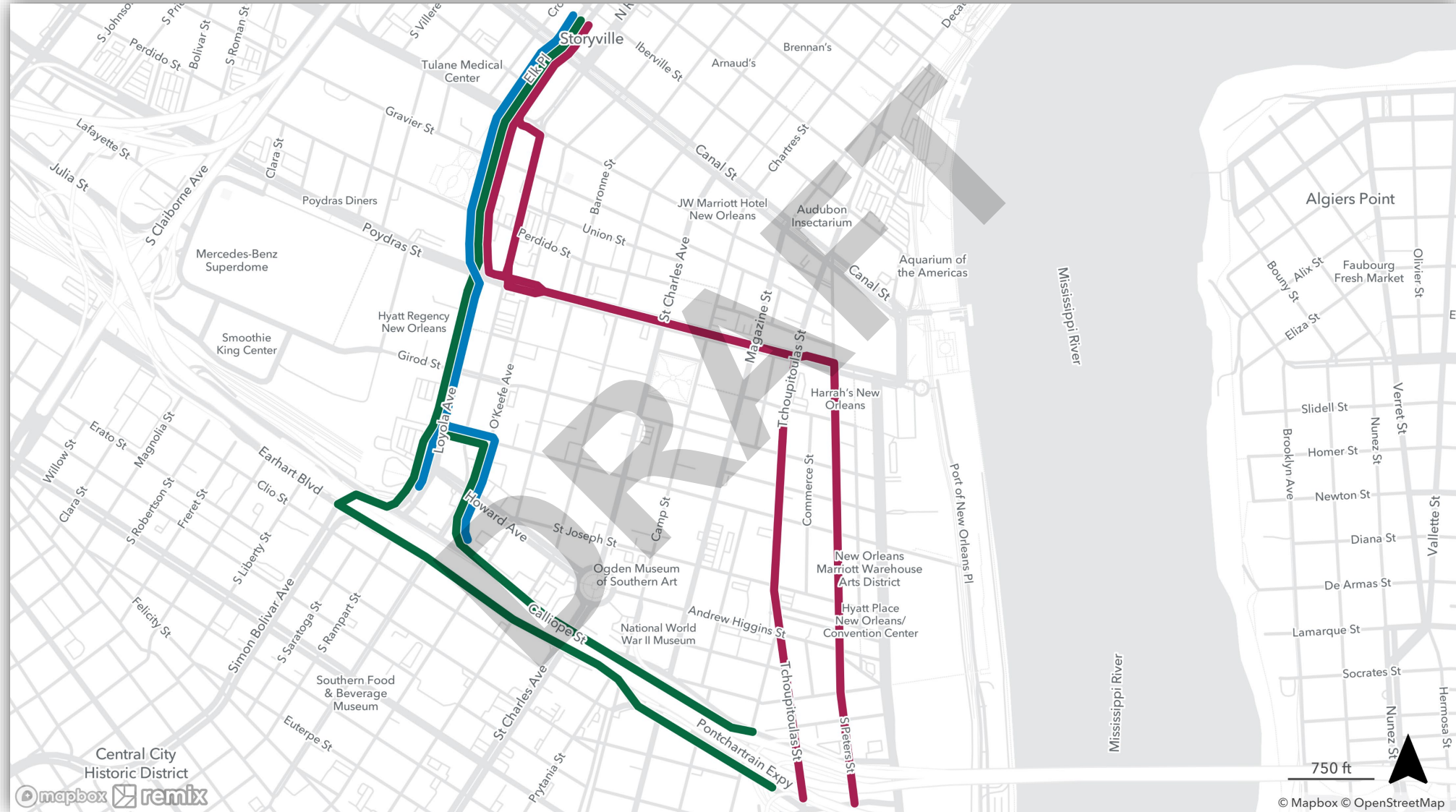
What is your preferred route?

- A. St Bernard / Claiborne – 2A
- B. Elysian Fields / Claiborne – 2B
- C. Franklin / St Claude – 2C

DRAFT

Potential Routes – Segment 3

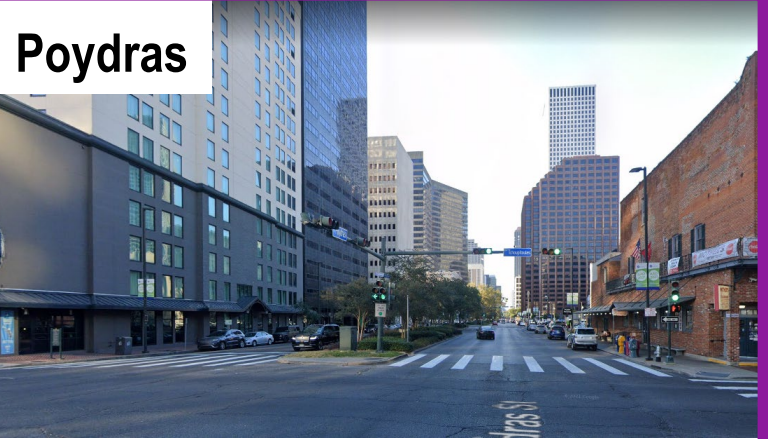
DEFINING THE ROUTE



Potential Routes – Segment 3

DEFINING THE ROUTE

Option 3A:



Option 3B:



Option 3C:



Option 3A:

Key Destinations:

- Tulane Medical Center
- CBD
- Convention Center

Key Statistics:

- 40,244 Employment per SqMi
- 2,891 Population per SqMi
- 4 Essential Service Connections

Option 3B:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal
- Transfer to Uptown

Key Statistics:

- 38,125 Employment per SqMi
- 4,353 Population per SqMi
- 2 Essential Service Connections

Option 3C:

Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal

Key Statistics:

- 53,248 Employment per SqMi
- 3,917 Population per SqMi
- 2 Essential Service Connections

YOUR INPUT

What is your preferred route?

- A. Tchoupitoulas-Peters/Poydras – 3A
- B. Calliope/Loyola – 3C
- C. Loyola/HOV – 3B

DRAFT

YOUR INPUT

What questions and comments do you have with the route options?

DRAFT

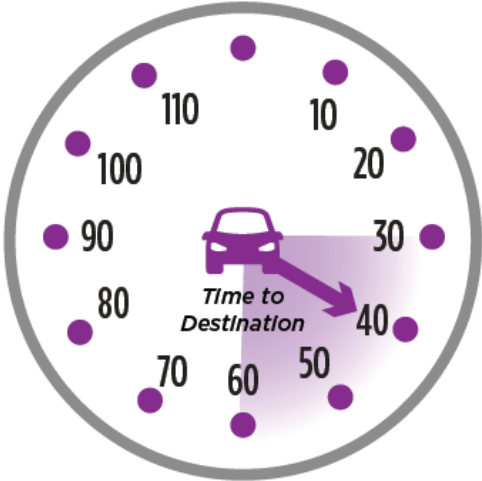
DEFINING TRANSIT PRIORITY

Travel Time: New Orleans East to Downtown

Driving Alone



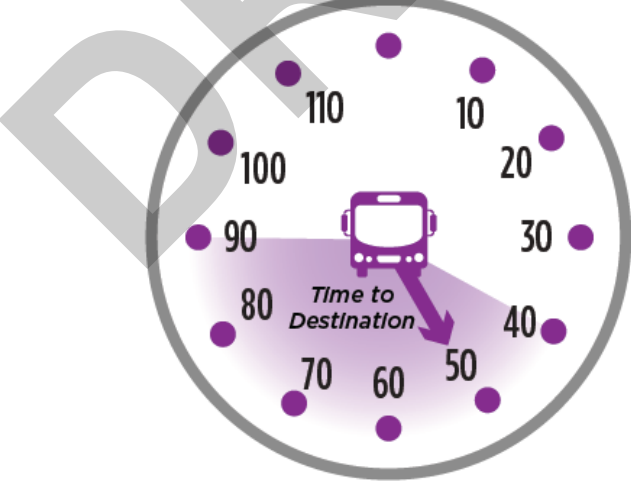
30-60m | 40m avg



BRT Mixed Traffic



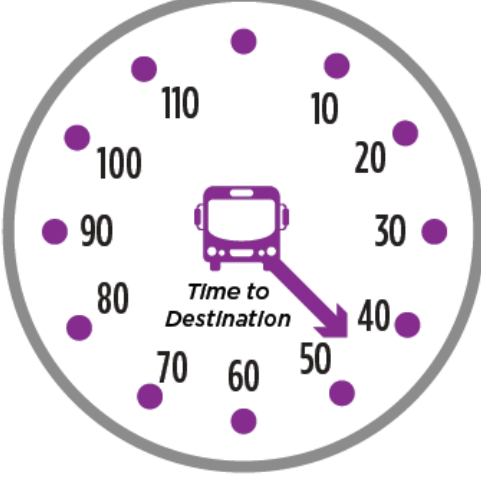
40-90m | 50m avg



BRT Dedicated Lanes



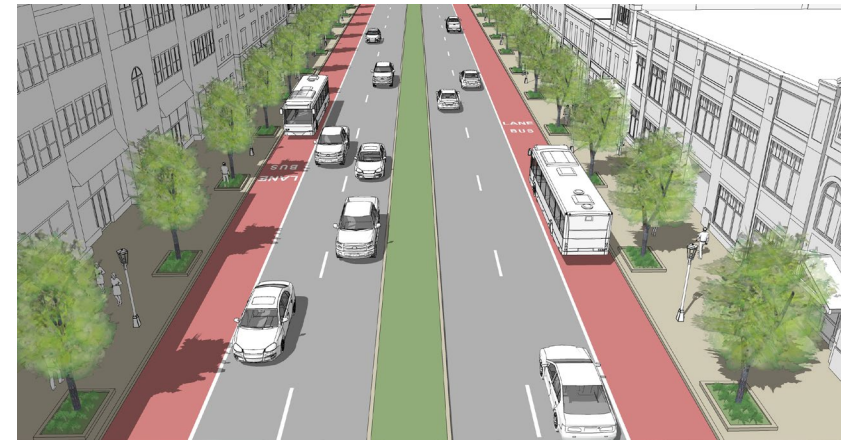
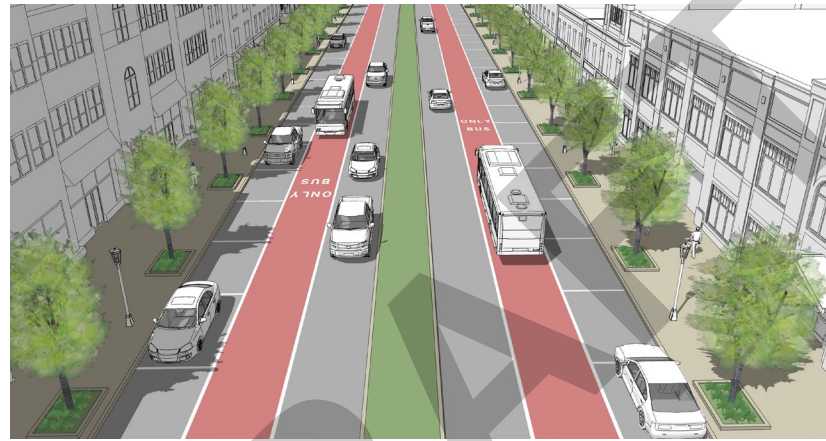
45m



Variations of Dedicated Lanes

Curb-running BRT

- BAT Lane (Business Access and Transit)
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost



Center-running BRT

- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



YOUR INPUT

What guideway option do you prefer for BRT?

- A. Mixed Traffic
- B. Dedicated Lanes
- C. Need more information

DRAFT

YOUR INPUT

What trade-offs do you currently support for fast and reliable transit?

- A. Neutral Ground, Wide
- B. Neutral Ground, Narrow
- C. Parking Lanes
- D. Travel Lane

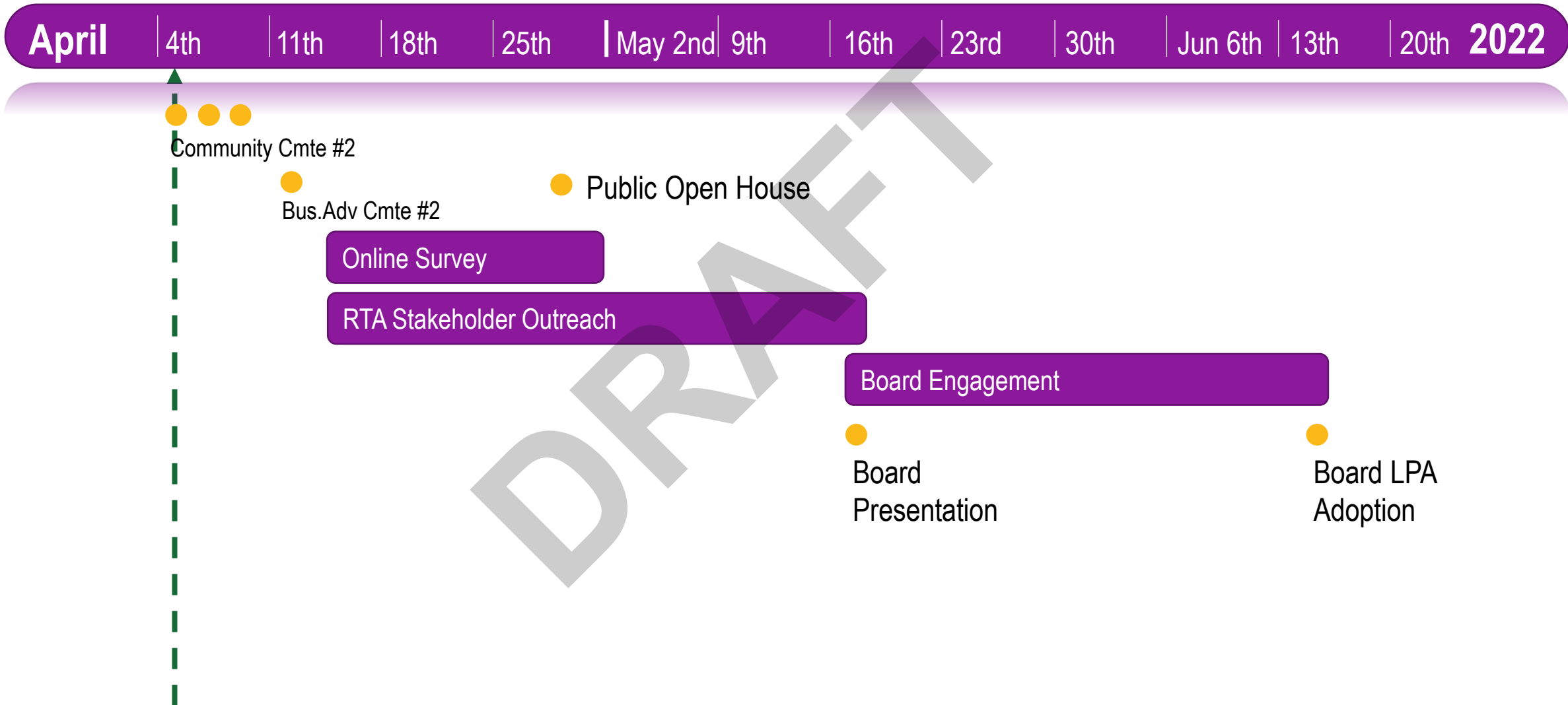
DRAFT

YOUR INPUT

What questions and comments do you have with defining transit priority?

DRAFT

ENGAGEMENT SCHEDULE

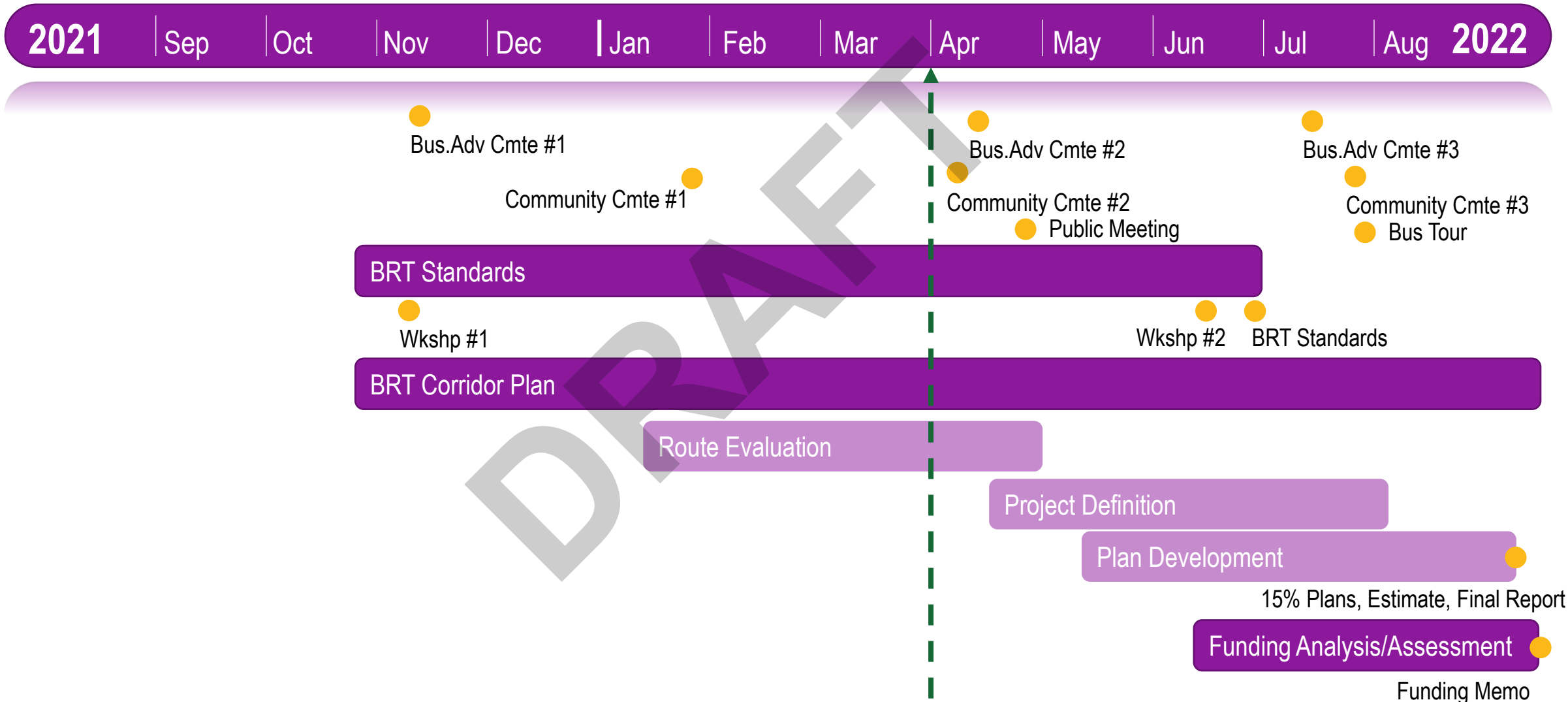


Your Input

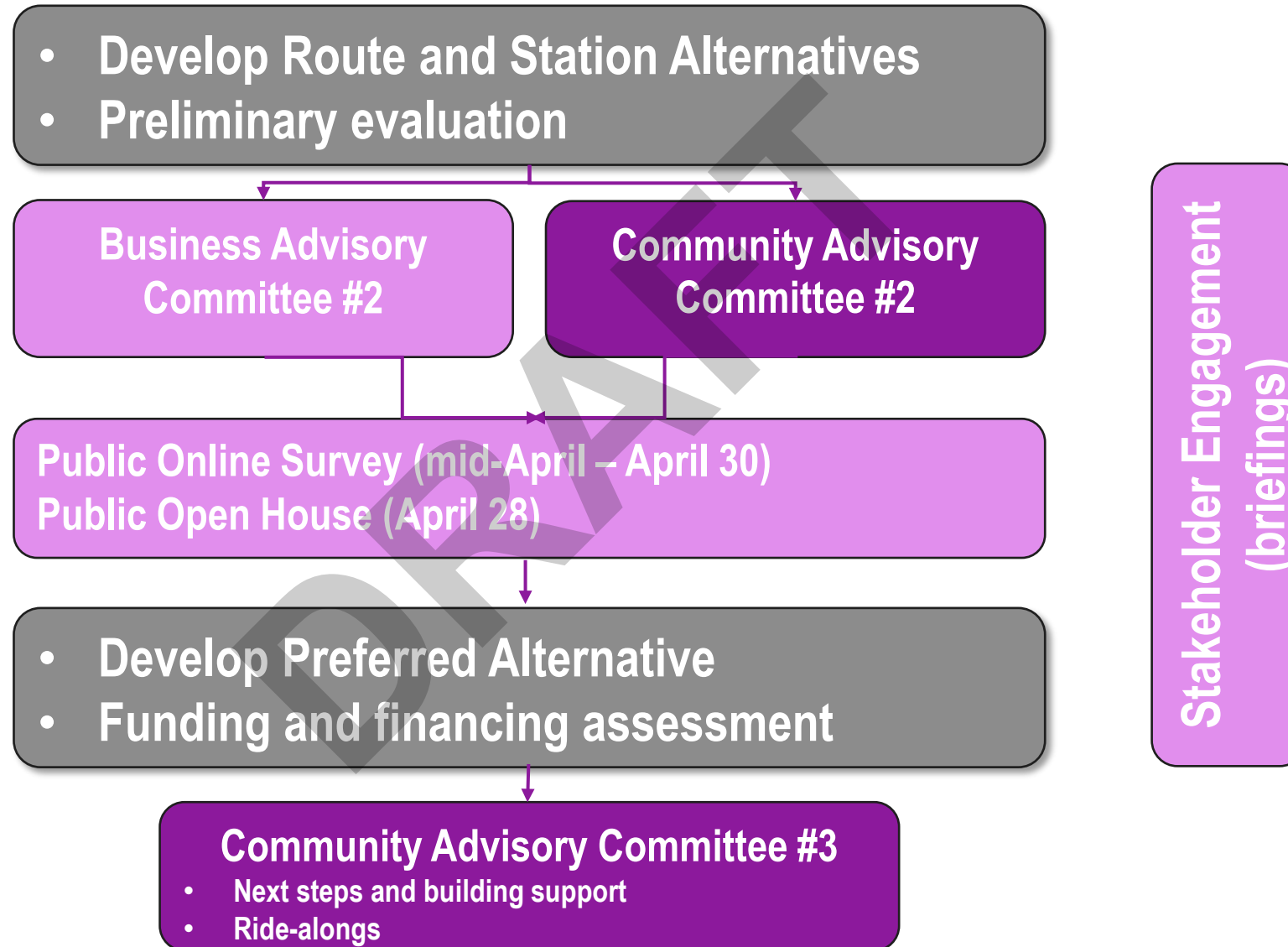
- Social Media Campaign including Advertisements
- Email Campaign
- Media Campaign
- Neighborhood Associations Meeting
- BRT Open House Public Meeting
- BRT Ride Along

How can you help us promote public feedback?

PROJECT SCHEDULE



PUBLIC ENGAGEMENT



SEND US YOUR COMMENTS:

BRT@rtaforward.org

DRAFT



WELCOME

BUS RAPID TRANSIT FEASIBILITY STUDY PUBLIC OPEN HOUSE

AT THE MEETING YOU WILL:

- Understand the project
- Watch the short introduction presentation
- Talk with project staff and ask questions
- Provide your thoughts and comments



Scan the code below to provide
feedback virtually!



Why Bus Rapid Transit?

BRT is an increasingly popular approach to deliver enhanced public transportation services to improve mobility, increase transit ridership, reduce congestion and support community investment.

- Provides similar transit service as light rail, but much cheaper to build
- Proven to increase transit use with improved frequencies, travel time and reliability
- Plays a vital role in a healthy, multimodal system that connects people to jobs, and businesses to their customers
- Supports investment in communities through corridor redevelopment and opportunities for transit-oriented development



Click to add text

How will BRT integrate with regular bus service?

BRT is an enhancement, not a replacement to the existing transit system. Once the BRT route has been selected, local bus routes will be adjusted to complement and fully integrate BRT into the transit network to provide a better transit experience.



Why Bus Rapid Transit?

Light Rail (LRT) vs Bus Rapid Transit (BRT)



Agency: Metro Transit (Green Line Ext.)
Location: Minneapolis, MN
Opened: 2027 anticipated
Corridor Length: 14.5 Miles
 36 Stations
Capital Cost: \$2.7 Billion



Agency: Albuquerque Transit Dept
Location: Albuquerque, NM
Opened : 2017
Corridor Length: 8.8 Miles
 18 Stations
Capital Cost: \$134 Million

BRT can provide similar benefits and more cost effective than LRT.

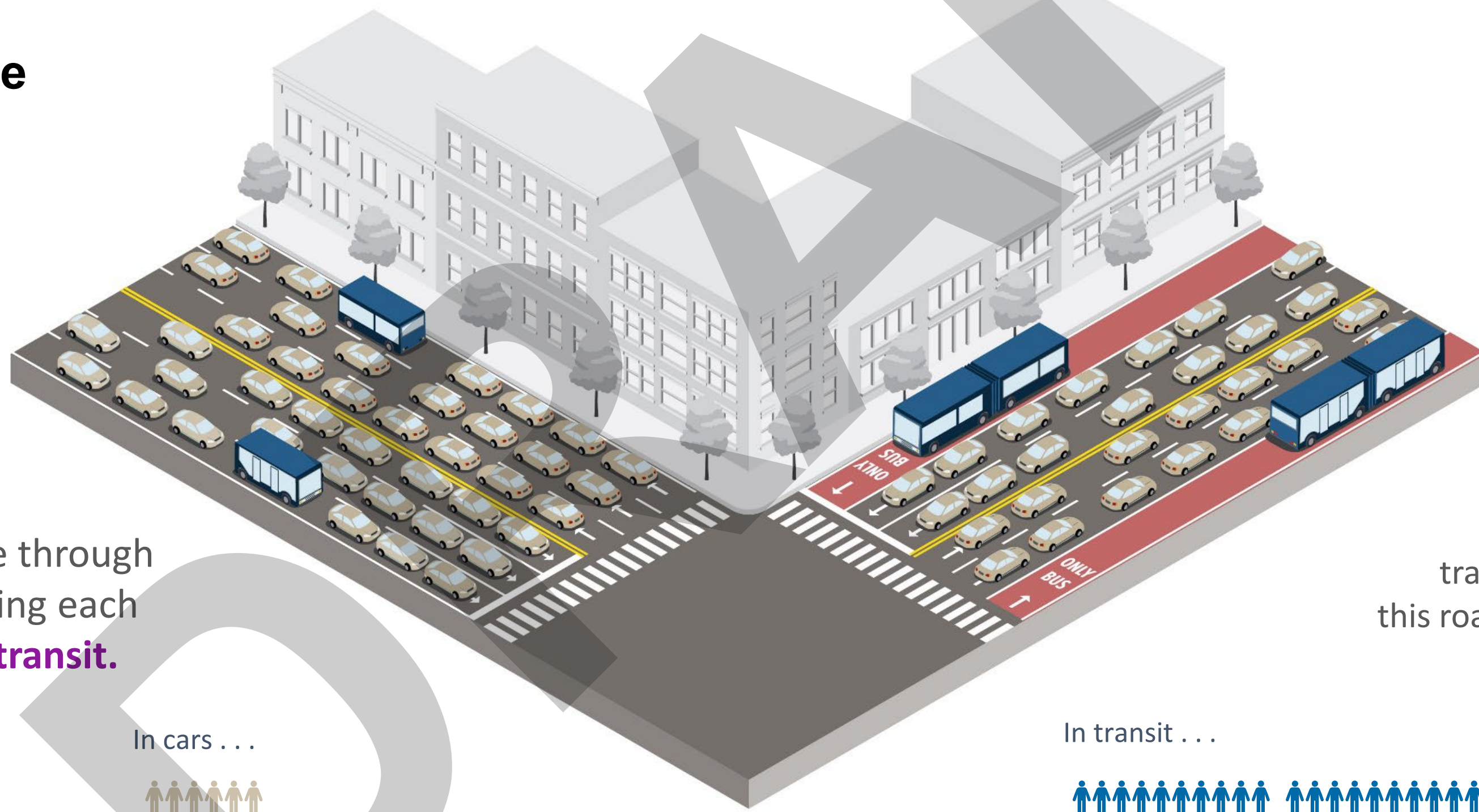
Light Rail Transit **\$75-150M** per mile

Bus Rapid Transit **\$5-20M** per mile

Planning a BRT corridor follows a similar process as LRT

Provide Equitable Transportation Choice

Use limited space more efficiently for more people



126 people move through this roadway during each light cycle. **80 in transit.**

235 people on a road with transit-only lanes move through this roadway during each light cycle. **204 in transit.**

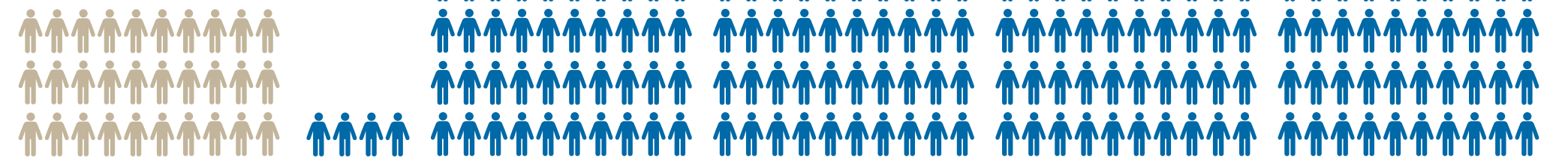
In transit . . .

In cars . . .



In transit . . .

In cars . . .



Examples of Bus Rapid Transit (BRT)



Project & Corridor Enhancements

What benefits are most important to you?

Vote for your top three choices!



**FAST &
RELIABLE
TRANSIT
SERVICE**



**CORRIDOR
REVITALIZATION**



**CONGESTION
RELIEF**



**ATTRACT
INVESTMENT IN
NEIGHBORHOODS**



**IMPROVING STREETS
FOR ALL USERS**
(Walking, Biking, Transit, and Driving)



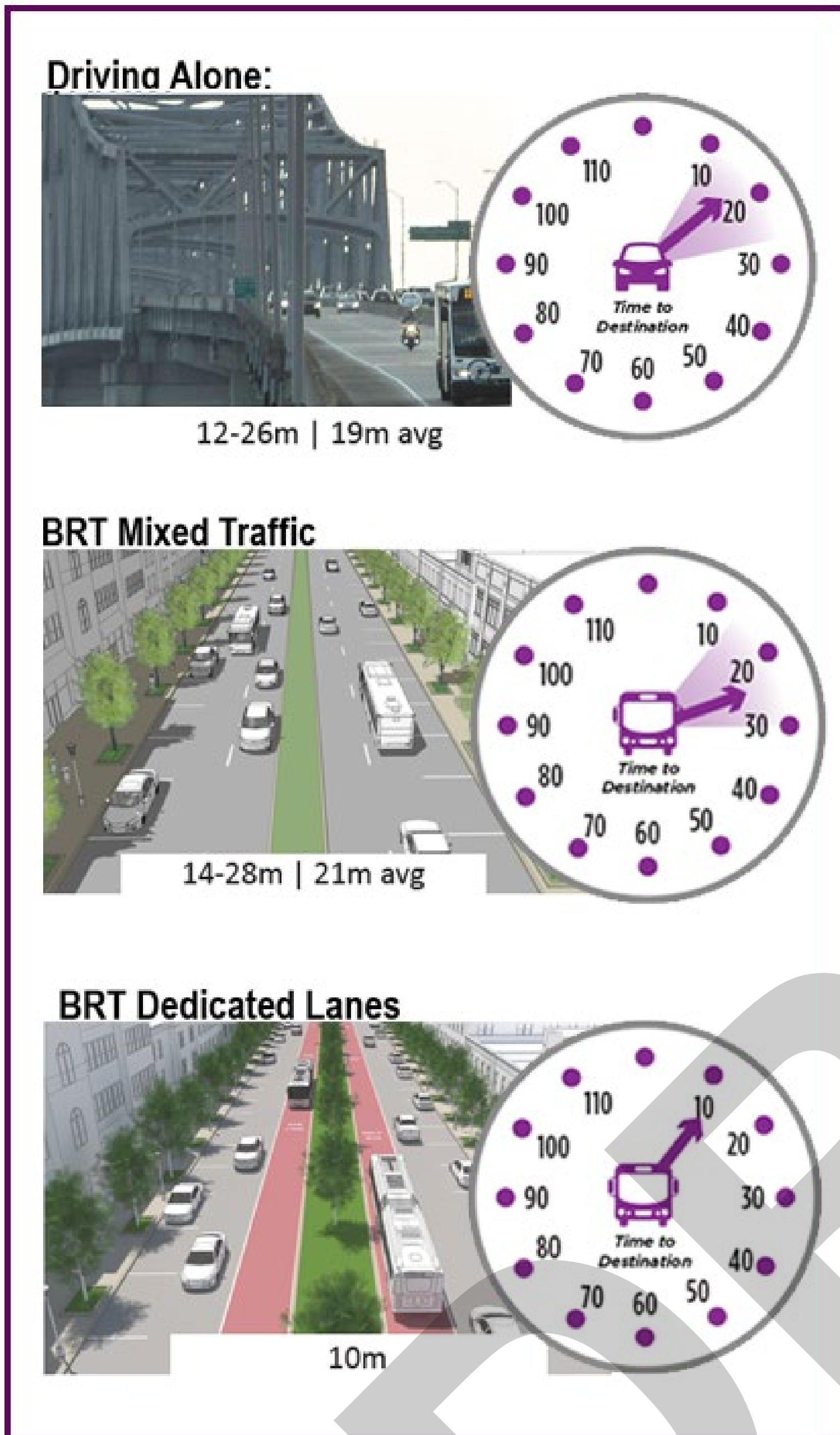
**IMPROVING STREETS FOR
DRAINAGE AND UTILITIES**

Defining Transit Priority

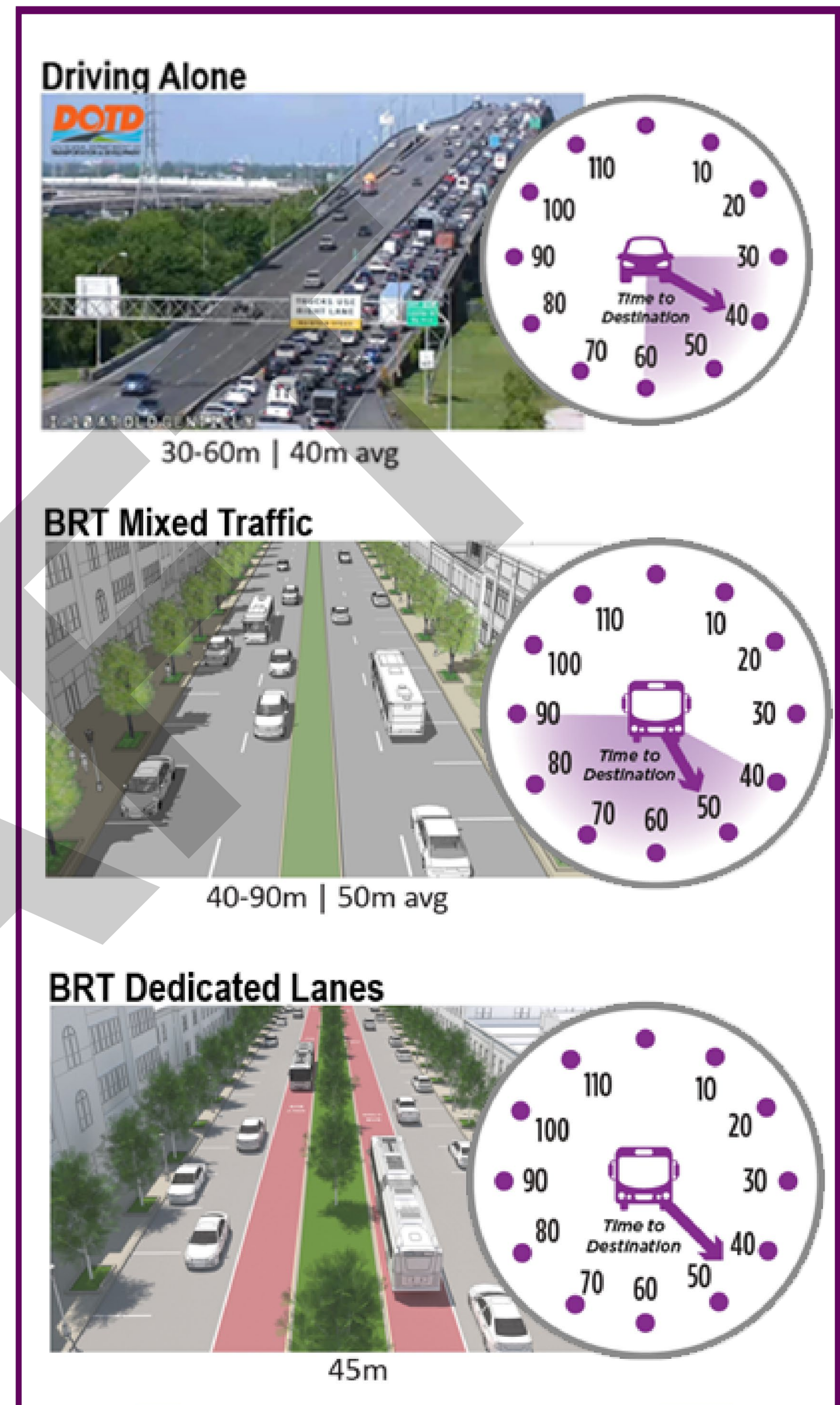
Transit priority is critical to providing fast and reliable transit service. Unreliable transit is particularly difficult for people who have inflexible work schedules, people with school-age children, and people working multiple jobs.

TRAVEL TIME

Downtown (Canal & Basin) to West Bank (Willy Terminal)



New Orleans East (Lake Forest/Read) to Downtown (Canal & Basin)



How much ADDITIONAL travel time while driving alone during rush hour would be acceptable to allow for equal or better transit commute?!



None

5 Minutes or less

10 Minutes or less

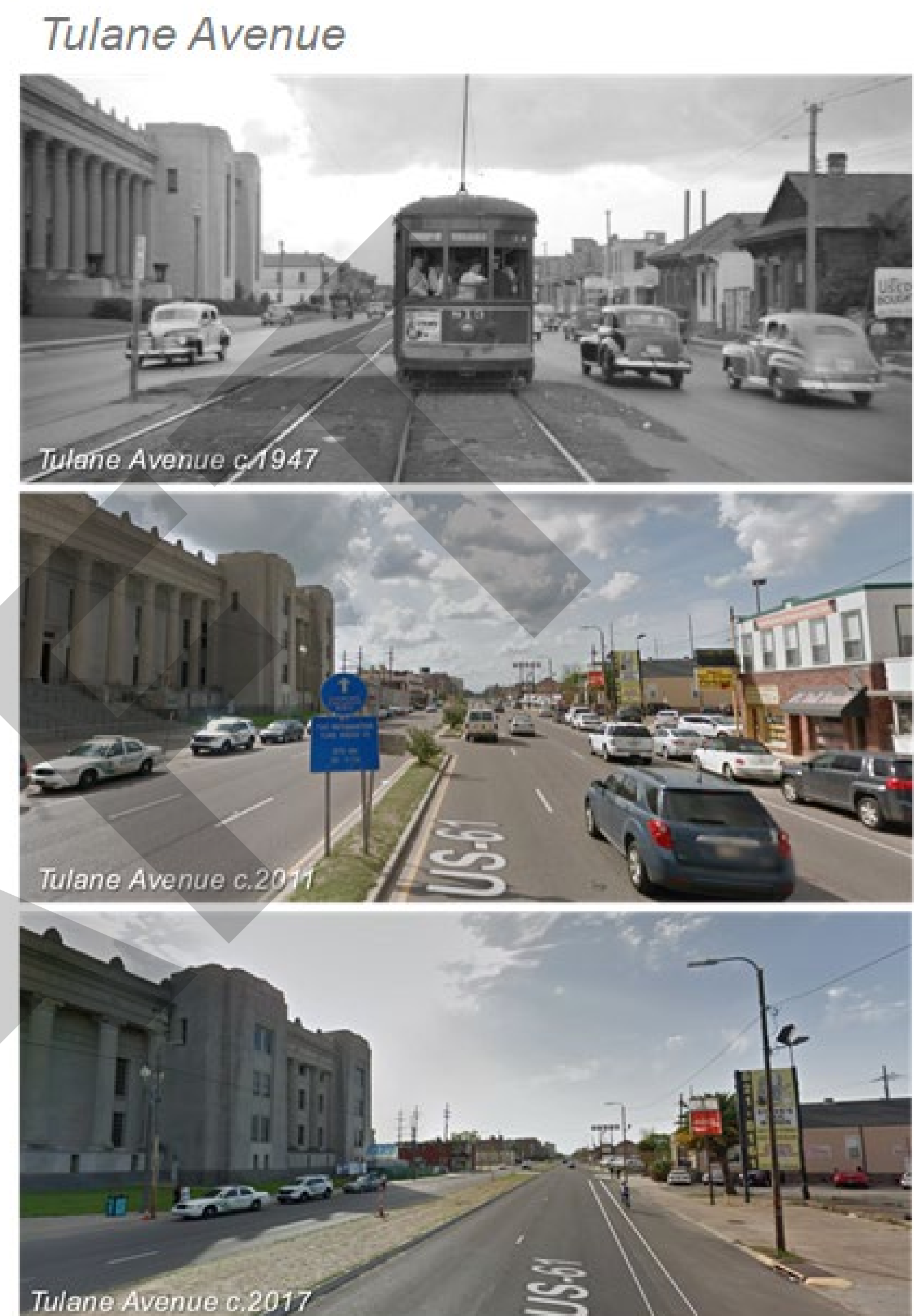
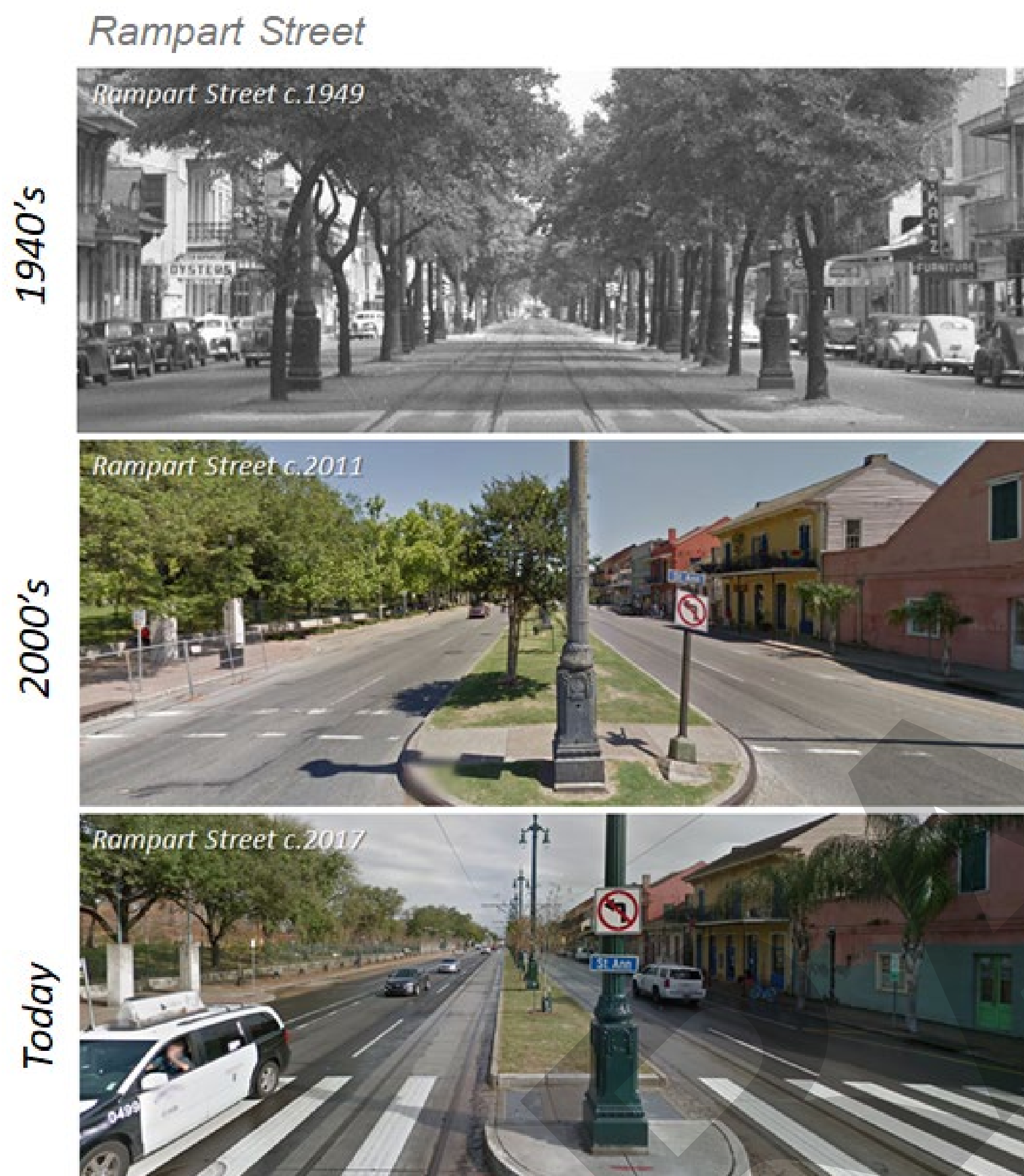
15 Minutes or less

Greater than 15 minutes

Defining Transit Priority

HISTORY OF DEDICATED LANES

New Orleans has a rich history of implementing fixed guideway for transit. However, some of that has been lost with the re-designing of our streets. The BRT project proposes to revert some of these areas back to transit uses.

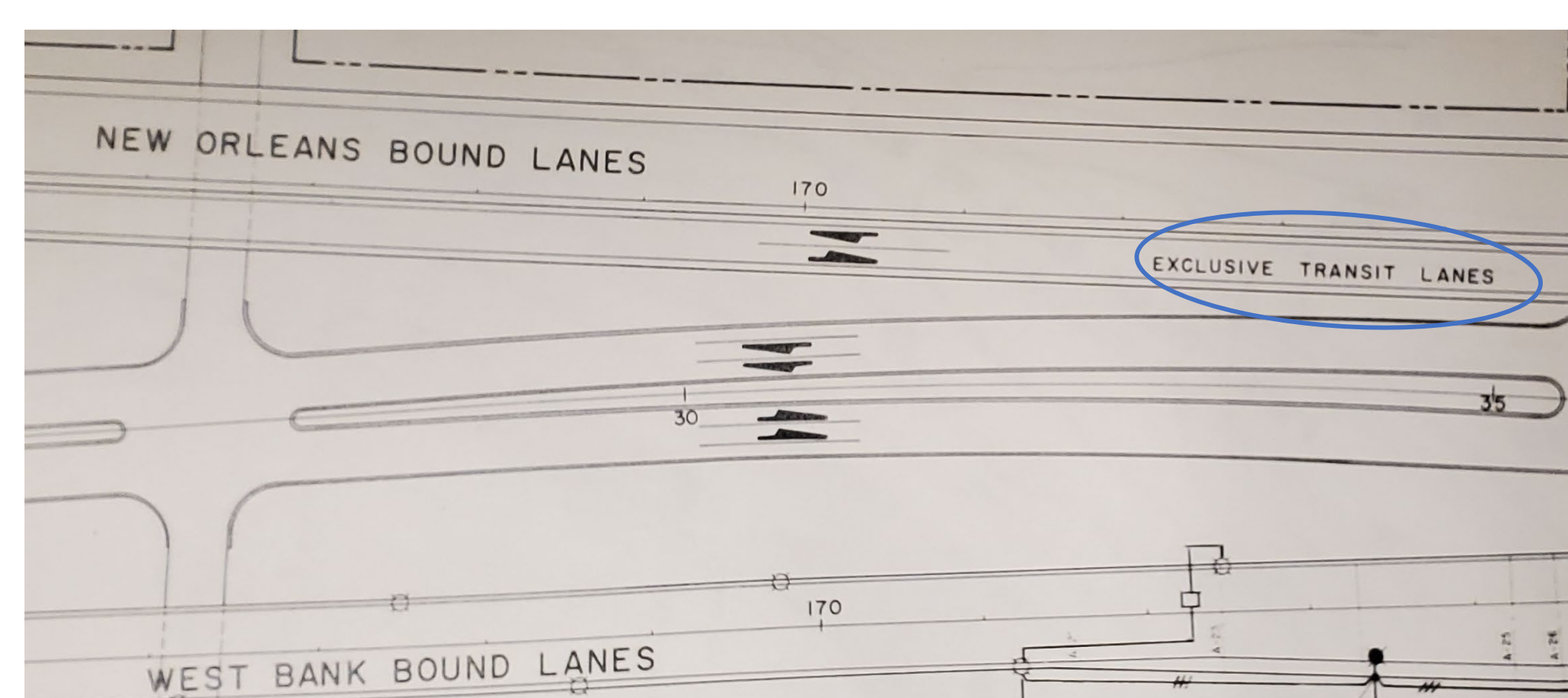


Neutral Ground

- Opportunity for dedicated guideway use
- Historic precedent

US 90 Bridge HOV

- Current configuration no meets today's travel patterns
- Original function was 2-way with transit use
- Restoring HOV lane to original configuration is grant compliant
- Key to BRT success and connection to West Bank

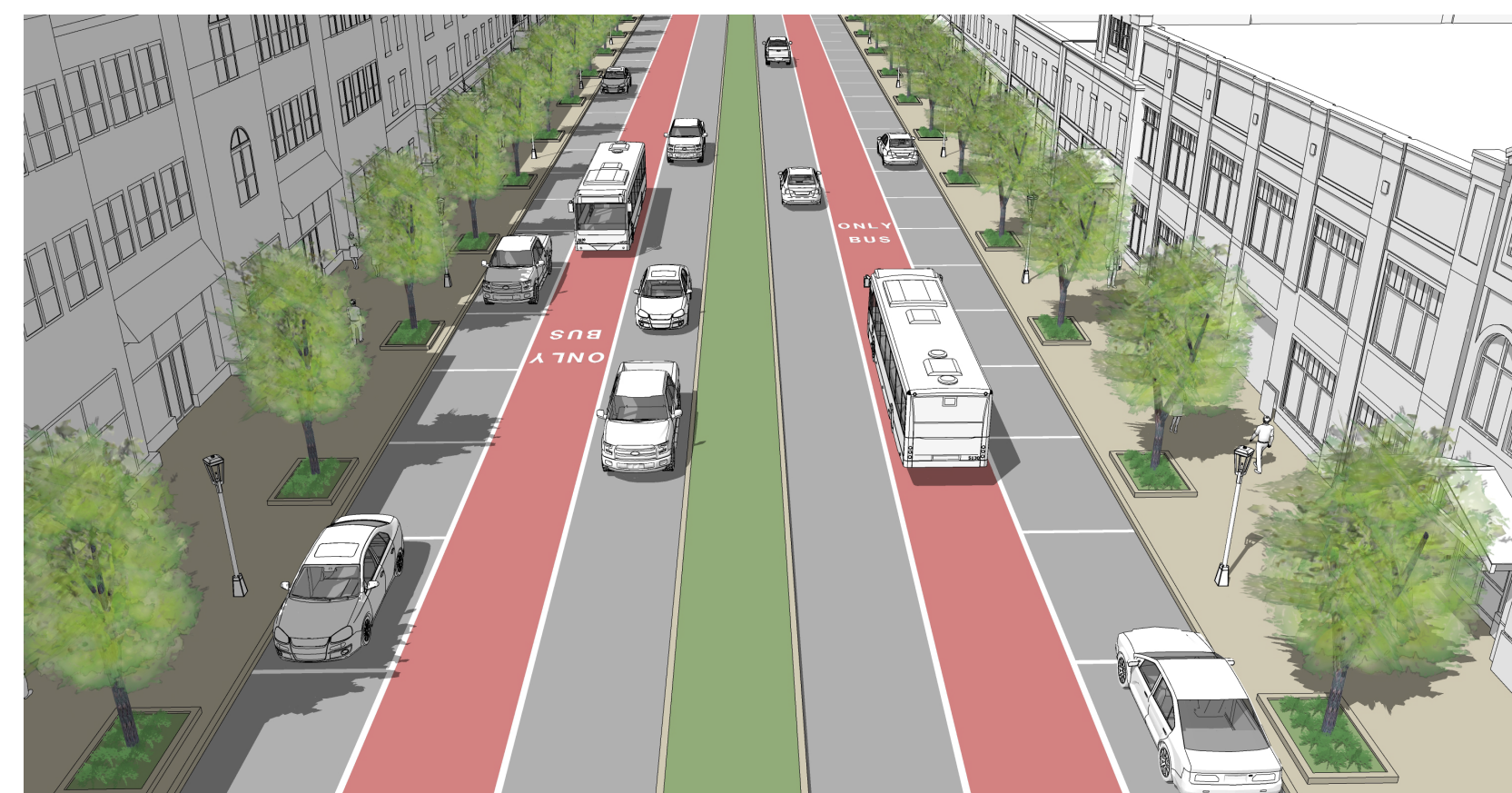
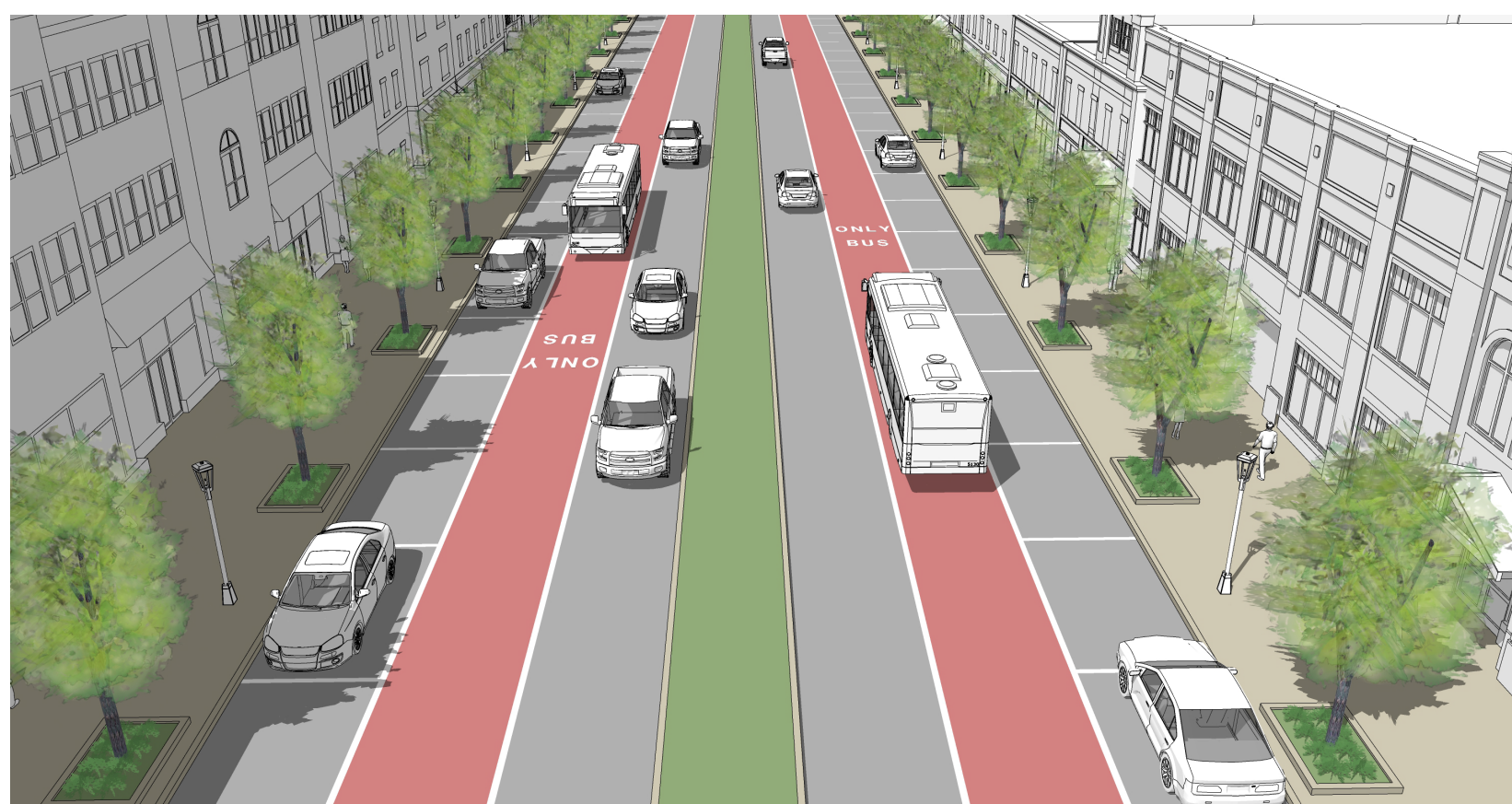


Defining Transit Priority

GUIDEWAY

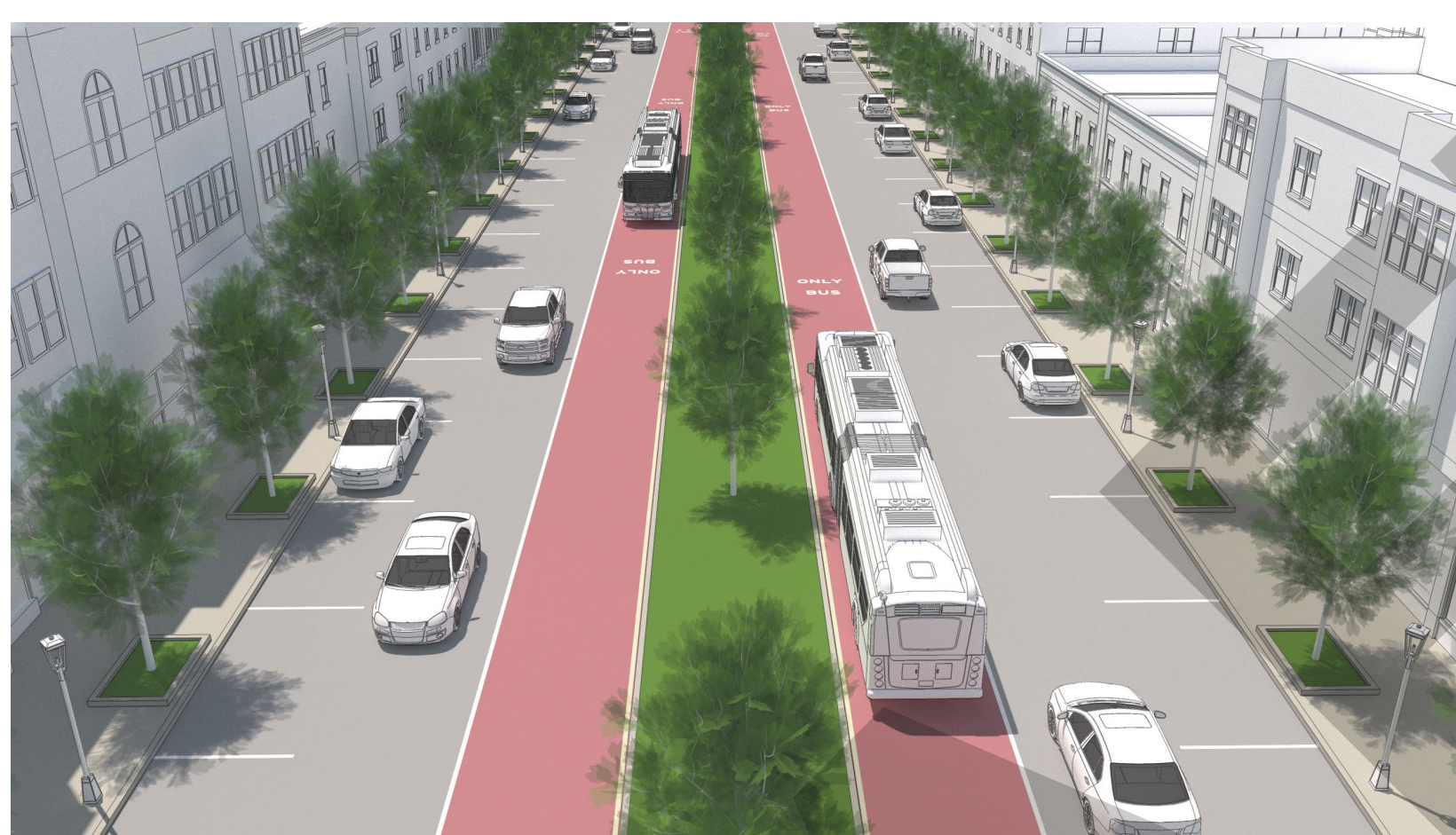
Curb-running BRT Options

- Restricted parking lane “BAT Lane”
- Dedicated Lane (Fixed Guideway)
- Driveway/On-Street Parking conflicts
- Lower capital cost

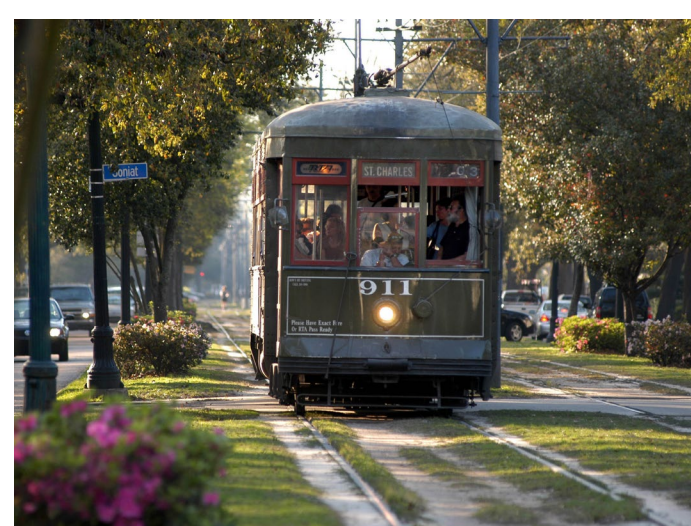


Center-running BRT Options

- Dedicated Lane (Fixed Guideway)
- Fewer traffic conflicts
- Highest transit priority
- Left turn impacts
- Higher capital costs



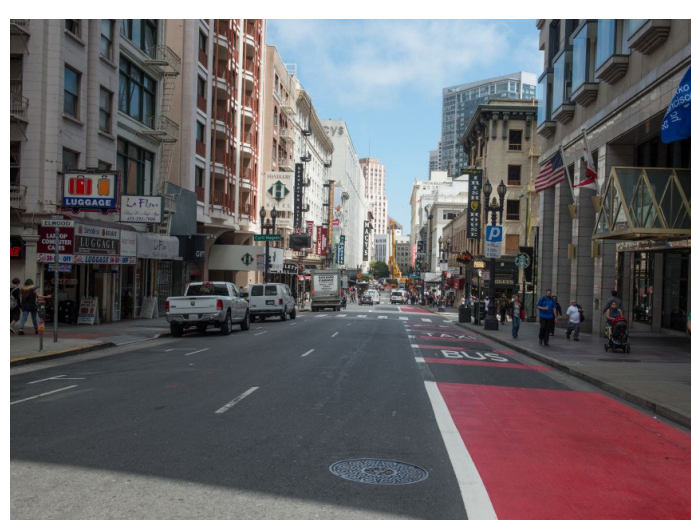
What aspect of the current right-of-way would you support modifying or eliminating for fast and reliable transit? (Mark All That Apply)



UTILIZATION OF THE NEUTRAL GROUND, WIDE



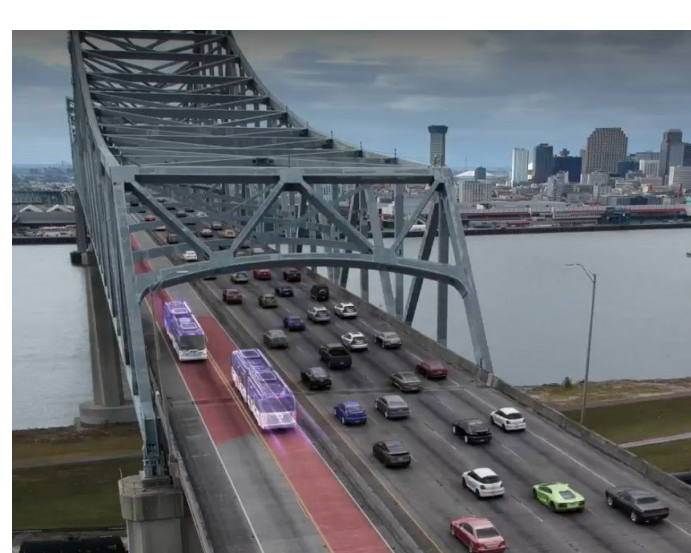
UTILIZATION OF THE NEUTRAL GROUND, NARROW



UTILIZATION OF PARKING



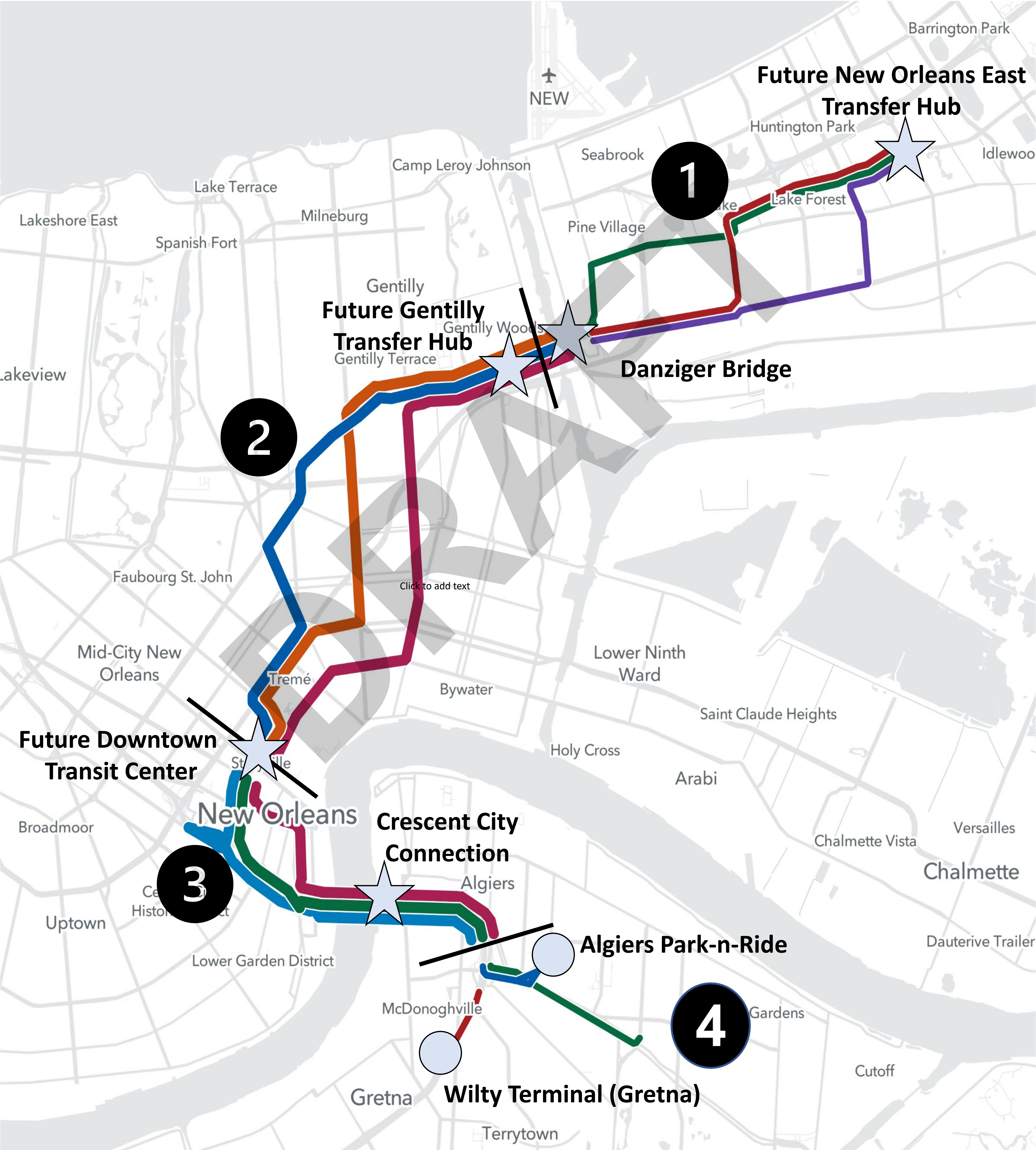
CONVERSION OF A TRAVEL LANE



CONVERSION OF HOV TO TRANSITWAY

Defining The Route

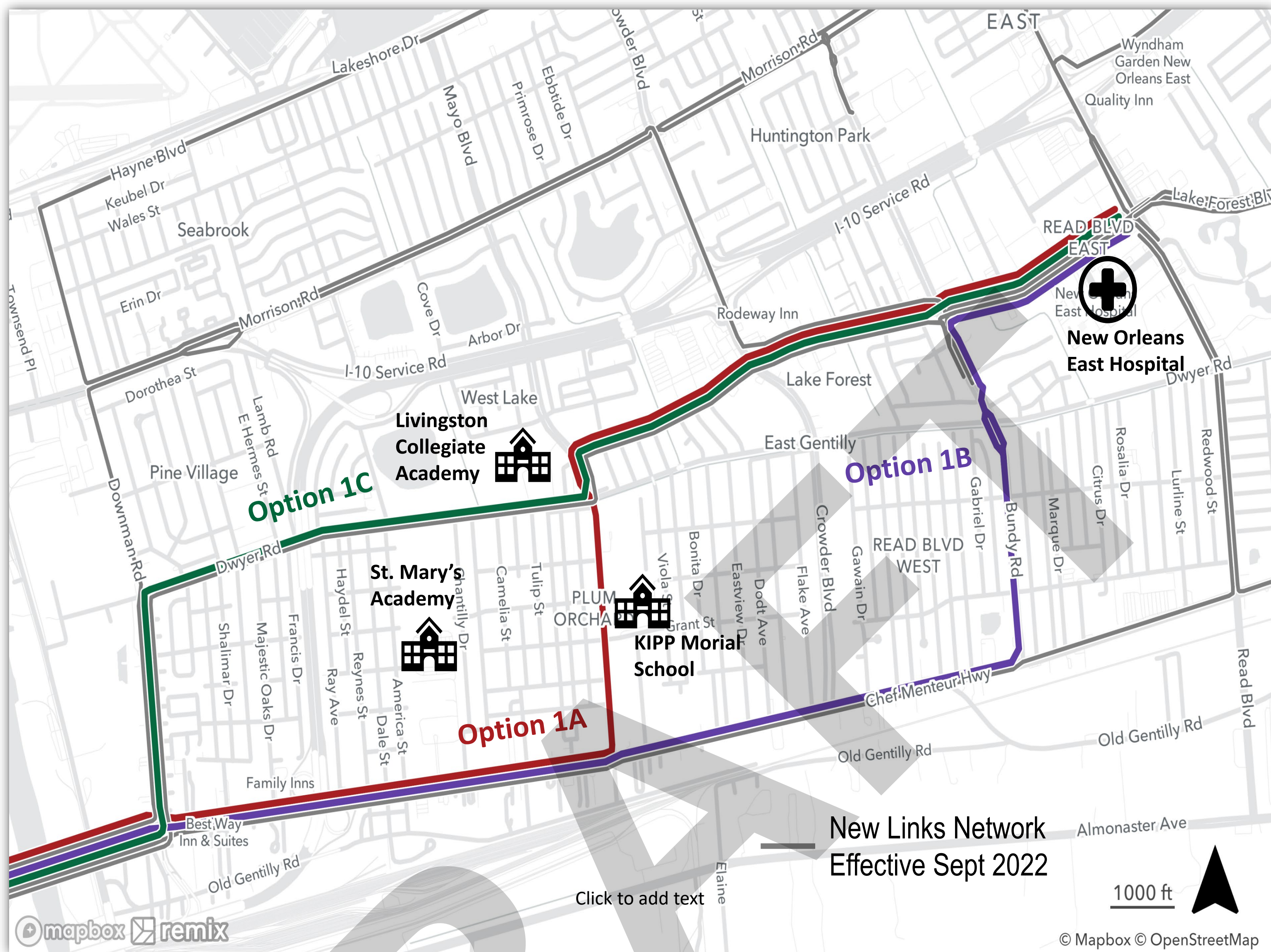
The route for this first corridor will connect New Orleans East (Read Blvd and Lake Forest) to Canal & Basin and then cross over to Algiers. The study area is broken into 4 segments, each with 3 route options.



Defining The Route

SEGMENT 1

The route for this first corridor will connect New Orleans East (Read Blvd and Lake Forest) to Canal & Basin and then cross over to Algiers. The study area is broken into 4 segments, each with 3 route options. Between 20% and 30% of households in this segment do not have access to a vehicle.



What route option do you prefer for BRT? Vote for your top choice!

Option 1A



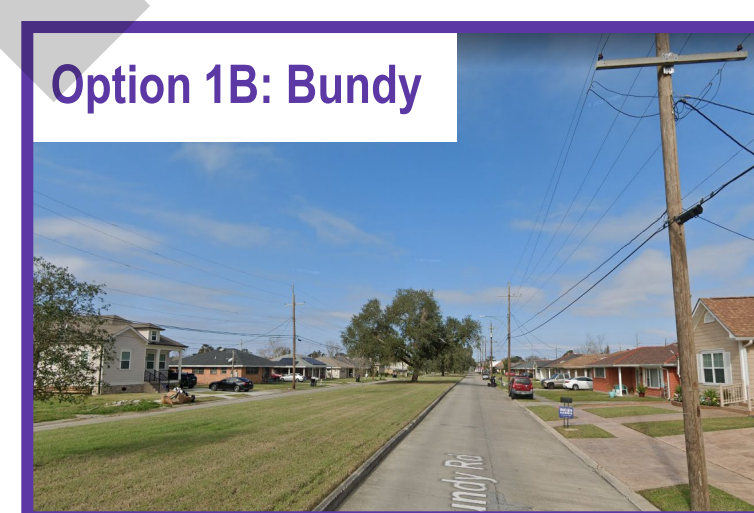
Key Destinations:

- New Orleans East Hospital
- Livingston Collegiate Academy
- KIPP Morial School

Key Statistics:

- 1,351 Total Employment
- 6,165 Total Population
- 1,017 Existing Riders

Option 1B



Key Destinations:

- New Orleans East Hospital

Key Statistics:

- 1,360 Total Employment
- 8,051 Total Population
- 1,022 Existing Riders

Option 1C



Key Destinations:

- New Orleans East Hospital
- Livingston Collegiate Academy
- KIPP East Community Primary

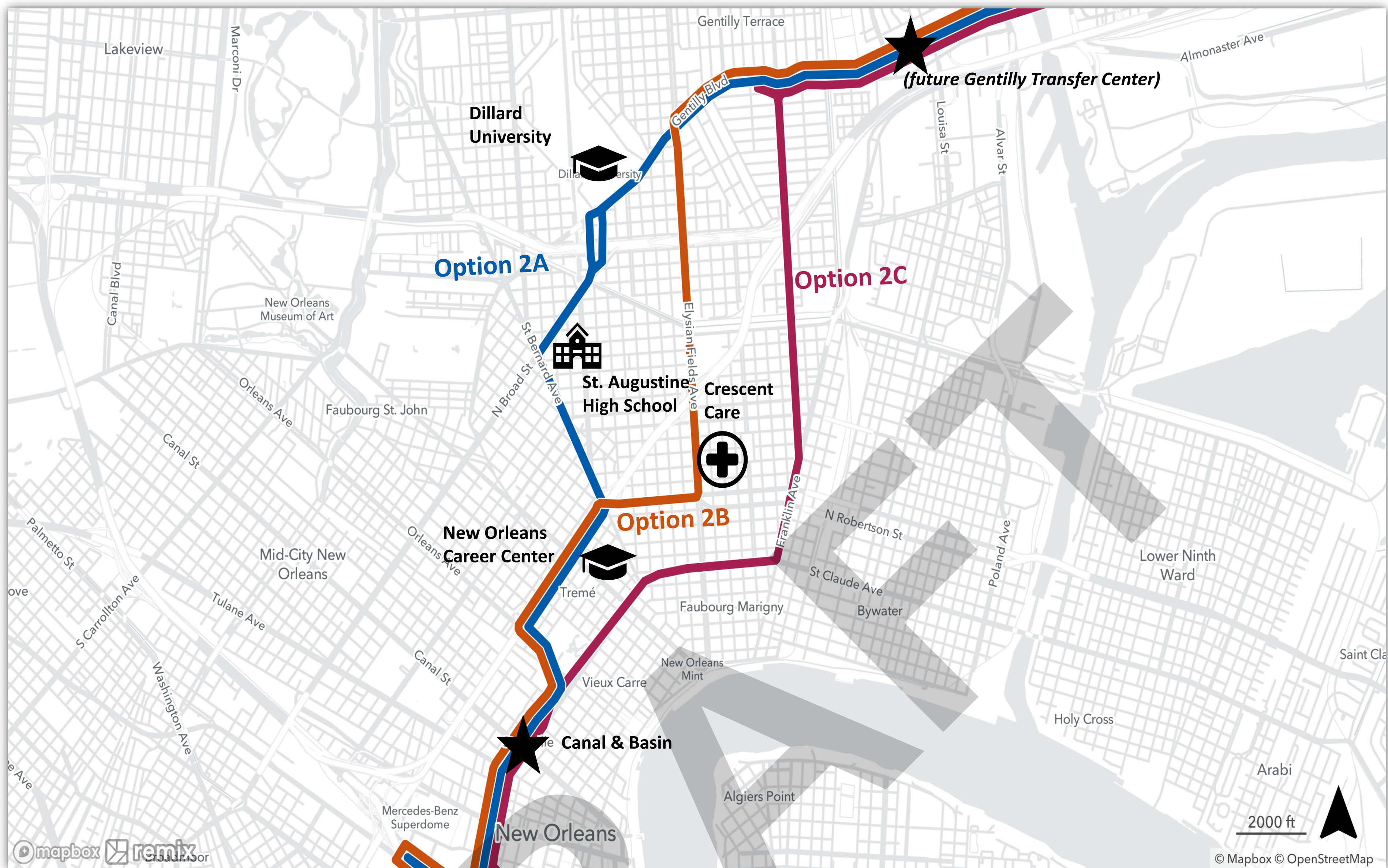
Key Statistics:

- 3,263 Total Employment
- 12,213 Total Population
- 1,053 Existing Riders

Defining The Route

SEGMENT 2

Segment 2 goes between Danziger Bridge and the future Downtown Transit Center on Basin St at Canal St. There will be approximately 6-8 stations along the way at major intersections. Between 30% and 50% of households in this segment do not have access to a vehicle.



What route option do you prefer for BRT? Vote for your top choice!

Option 2A



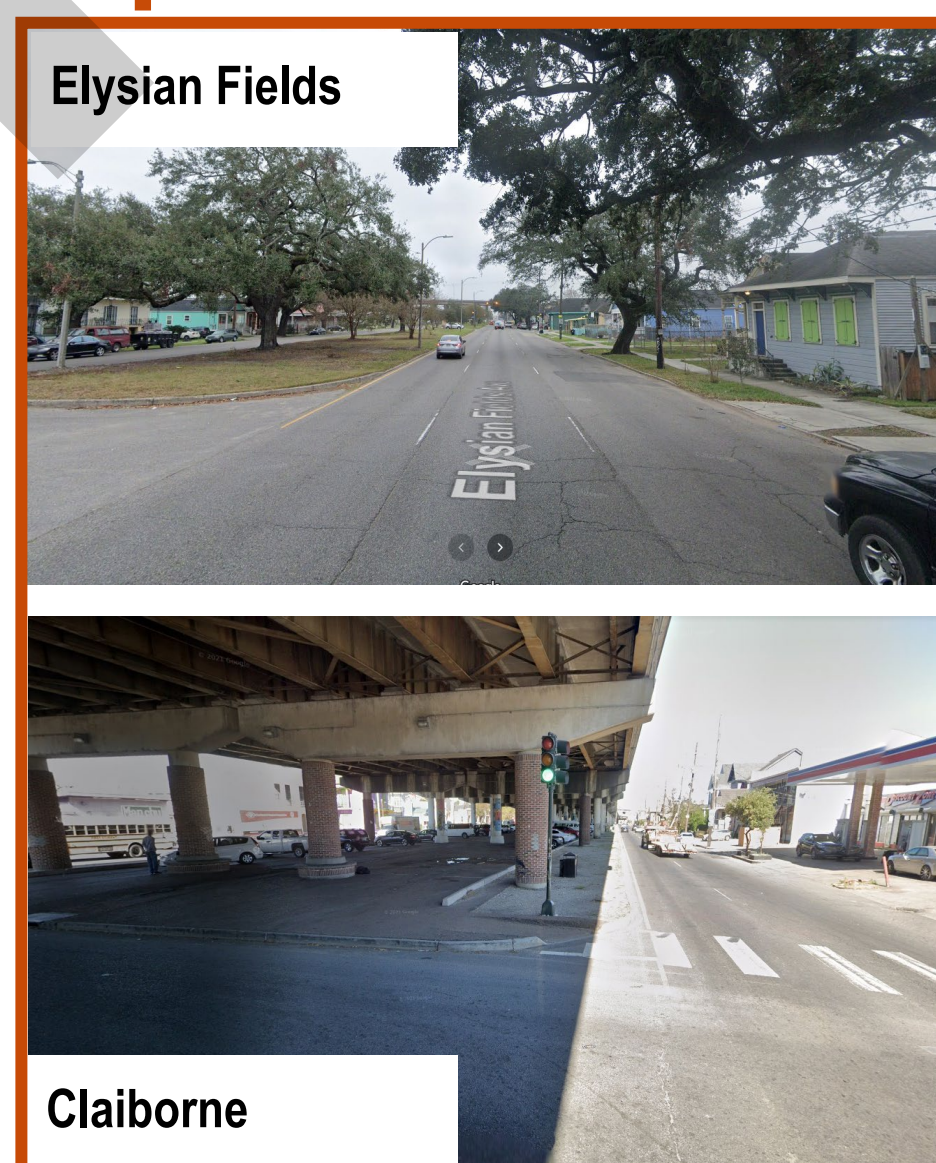
Key Destinations:

- Dillard University
- Morris Jeff Community School
- Nova Nora Library

Key Statistics:

- 16,261 Total Employment
- 37,154 Total Population
- 11,499 Existing Riders

Option 2B



Key Destinations:

- Dillard University
- Morris Jeff Community School
- Crescent Care

Key Statistics:

- 15,754 Total Employment
- 17,065 Total Population
- 11,184 Existing Riders

Option 2C



Key Destinations:

- French Quarter/Marigny

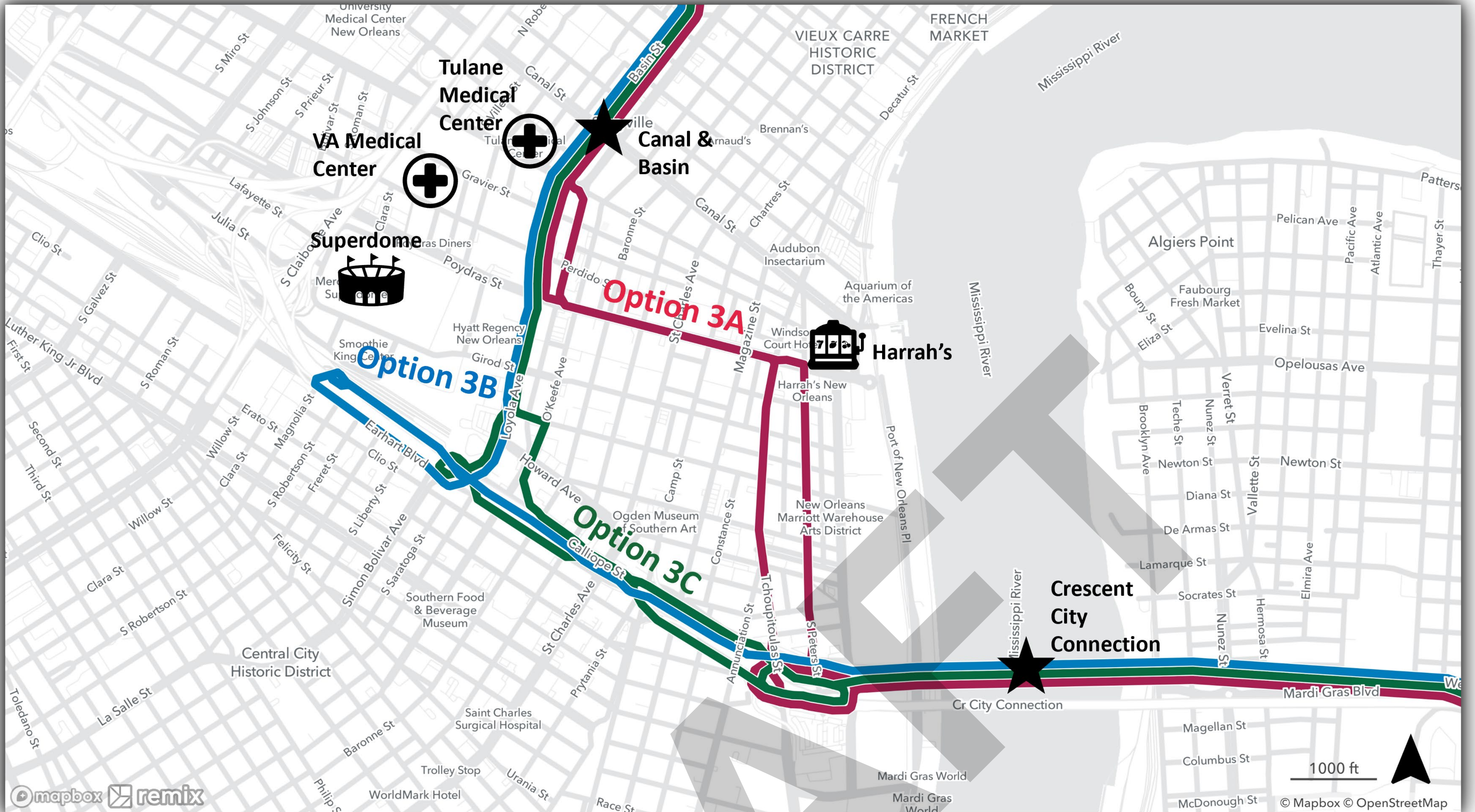
Key Statistics:

- 19,946 Total Employment
- 21,005 Total Population
- 11,366 Existing Riders

Defining The Route

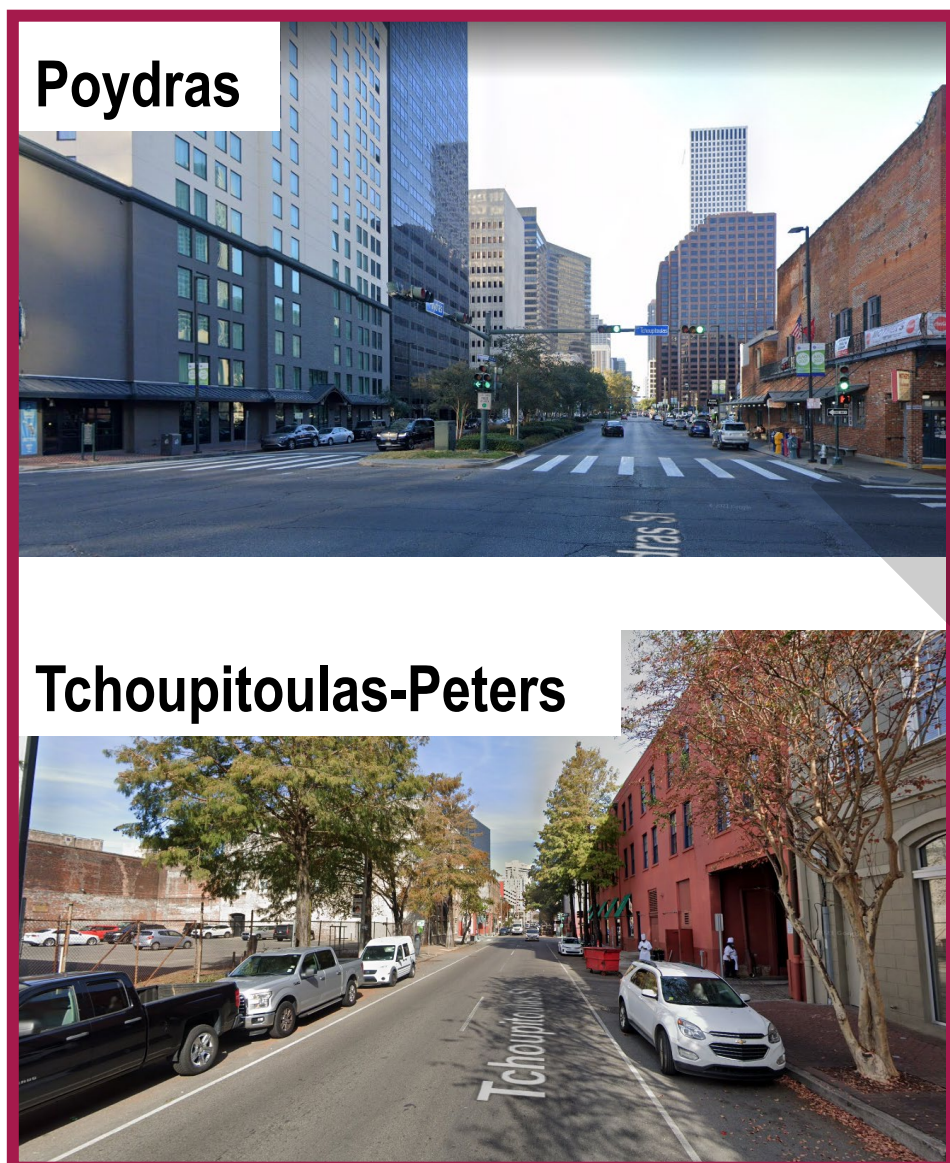
SEGMENT 3

This segment goes through downtown from the Downtown Transit Center to the Crescent City Connection bridge. Between 45% and 79% of households in this segment do not have access to a vehicle.



What route option do you prefer for BRT? Vote for your top choice!

Option 3A



Key Destinations:

- Tulane Medical Center
- CBD
- Convention Center

Key Statistics:

- 54,162 Total Employment
- 3,890 Total Population
- 13,939 Existing Riders

Option 3B



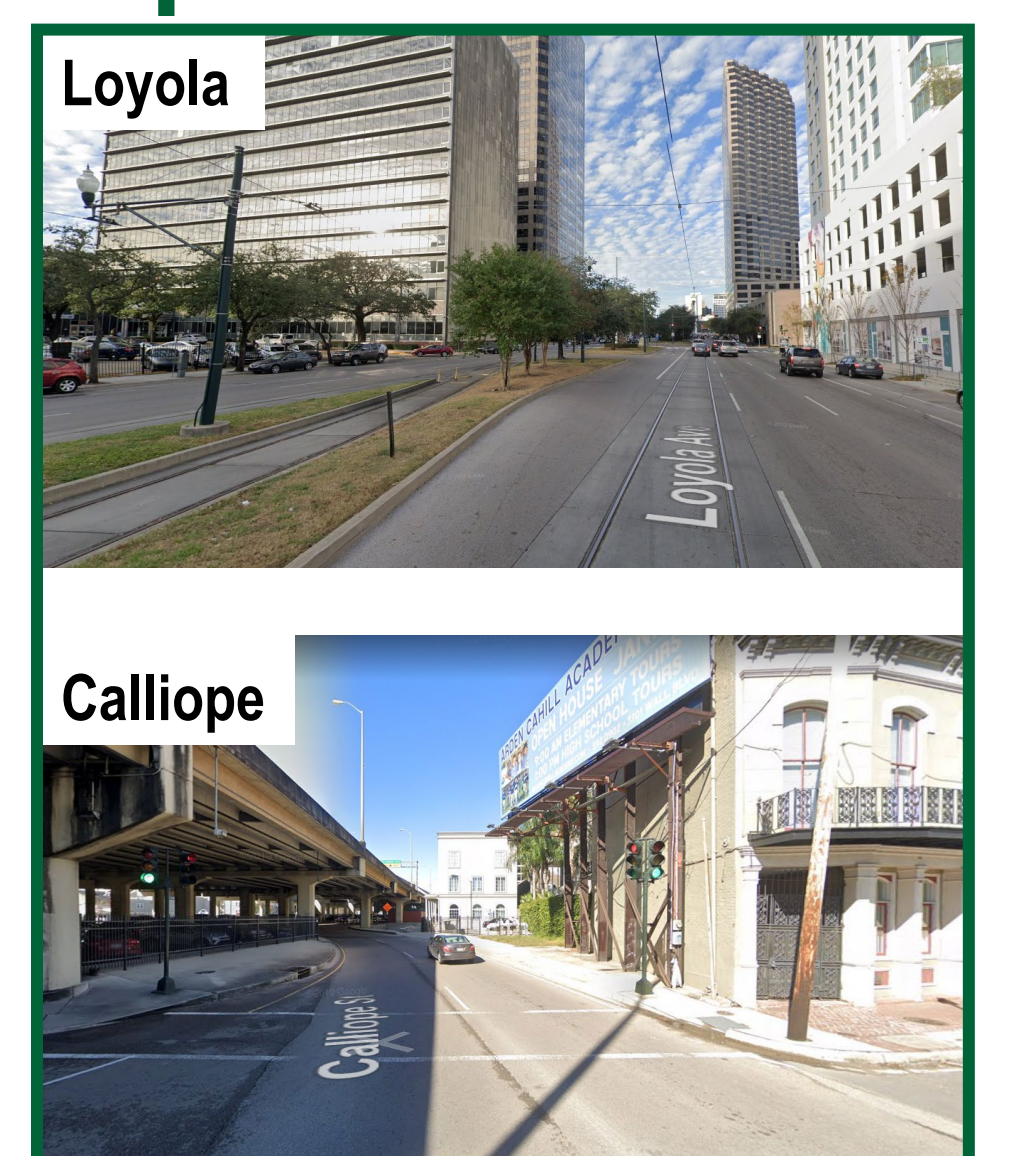
Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal

Key Statistics:

- 36,294 Total Employment
- 4,150 Total Population
- 11,094 Existing Riders

Option 3C



Key Destinations:

- Tulane Medical Center
- Union Passenger Terminal
- Transfer to Uptown

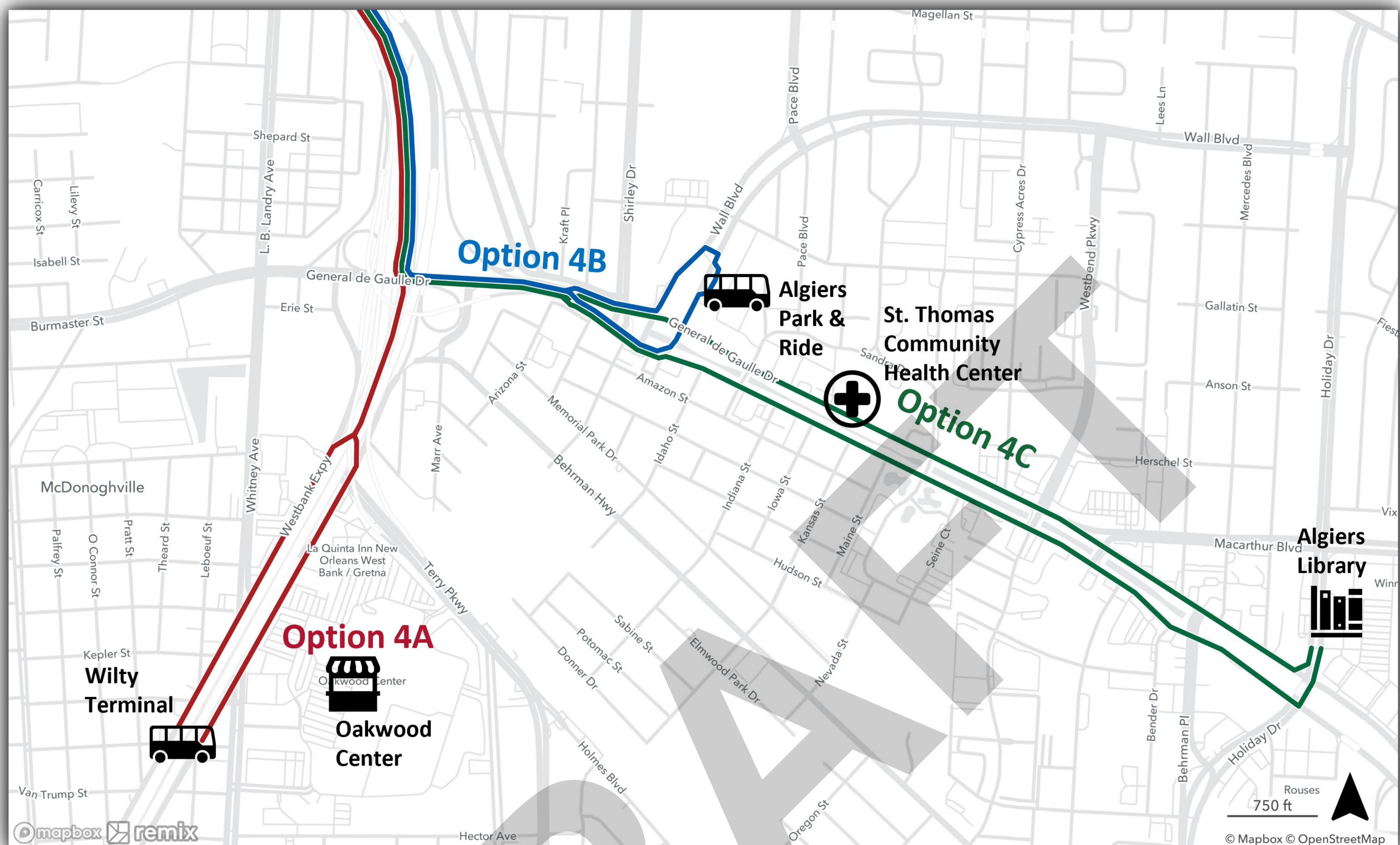
Key Statistics:

- 32,154 Total Employment
- 2,365 Total Population
- 10,528 Existing Riders

Defining The Route

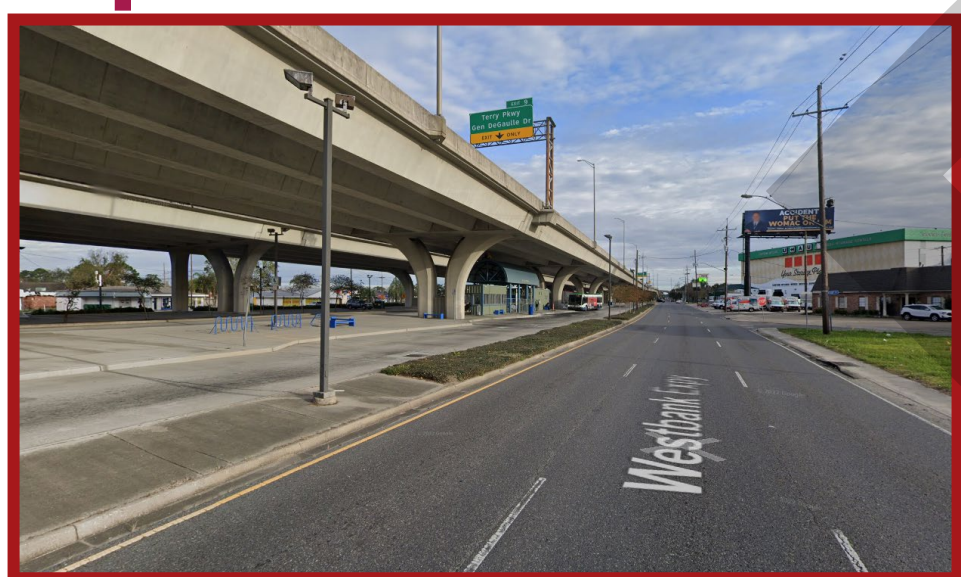
SEGMENT 4

This segment is the end of the line on the West Bank. The three options are the different choices for the last stop of this initial route and will have one to three stations. Between 25% and 51% of households in this segment do not have access to a vehicle.



What route option do you prefer for BRT? **Vote** for your top choice!

Option 4A



Key Destinations:

- Wilty Terminal

Key Statistics:

- 1,445 Total Employment
- 2,230 Total Population

Option 4B



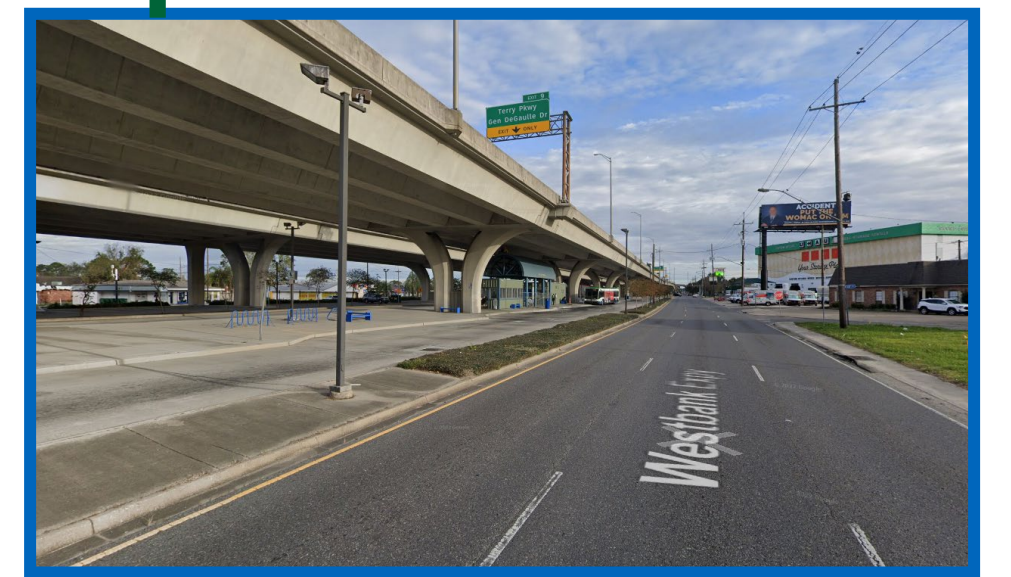
Key Destinations:

- Algiers Library

Key Statistics:

- 4,153 Total Employment
- 9,336 Total Population

Option 4C



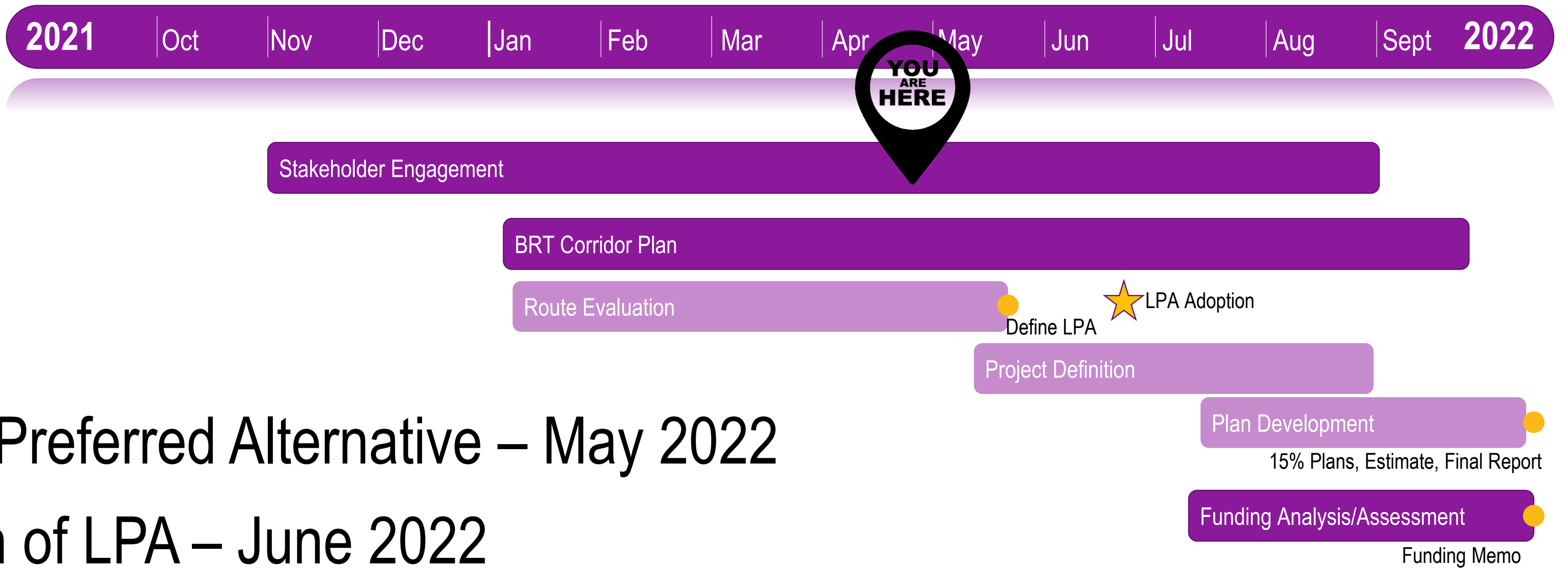
Key Destinations:

- Algiers Park and Ride

Key Statistics:

- 1,306 Total Employment
- 3,464 Total Population

Next Steps



- Define Locally Preferred Alternative – May 2022
- Board Adoption of LPA – June 2022
- Feasibility Study Completion – Sept/Oct 2022

FUTURE PHASES &

Potential Funding Sources

Federal Sources

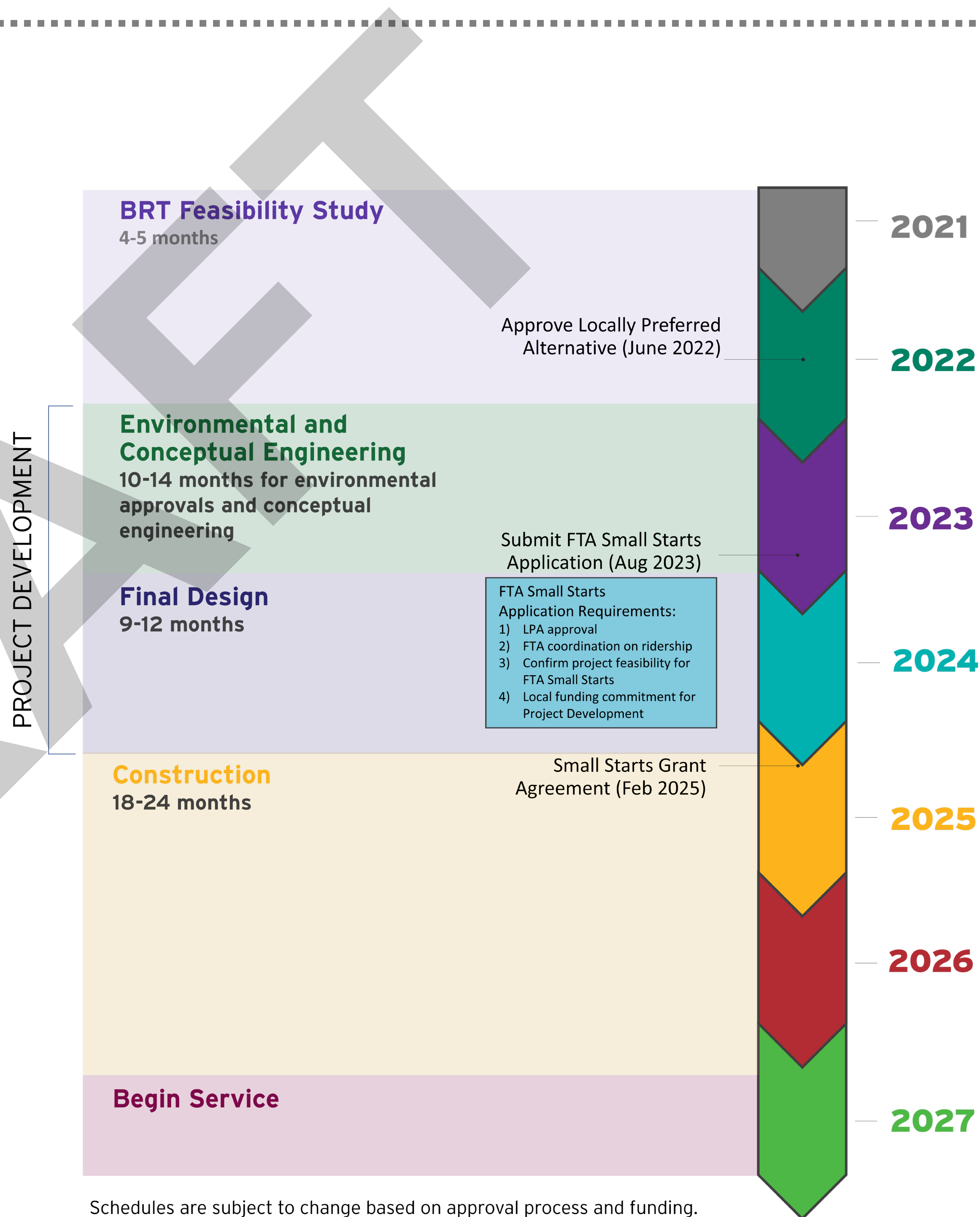
- Federal Transit Administration (FTA) Small Starts:
 - Competitive funding program for transit projects under \$400 million and requesting less than \$150 million
 - Corridor-based BRT systems eligible to apply
 - Awards up to 80% of eligible project costs
 - Most competitive applications request 50% to 60% federal funds
- Non-FTA Discretionary Grant Programs include:
 - Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
 - Infrastructure For Rebuilding America (INFRA)

State Sources

- LADOTD Road Transfer Program Funds – As an effort to right-size the state highway system, the LADOTD has established a voluntary program that transfers ownership of select state roads to the local government. Before the transfer, road improvements will be completed; this could include BRT improvements.

Local Sources

- Local funding sources will fund remaining design and construction activities and may be required to make up any remaining funding gaps for capital and operating costs for the project.



Thank you for coming and continue to stay involved by visiting RTA's website at www.norta.com.

Email us at brt@rtafoward.org

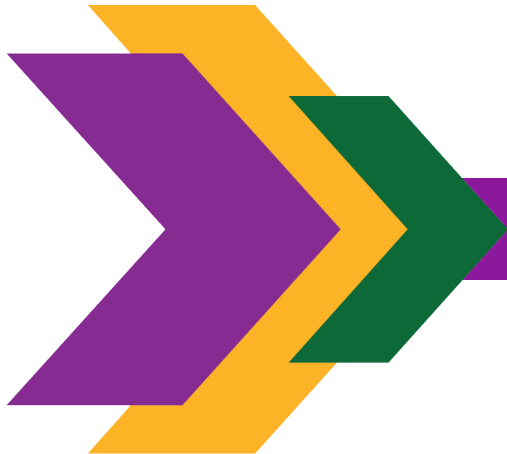
Stay connected on Facebook, Twitter and Instagram at [@NewOrleansRTA](https://www.instagram.com/NewOrleansRTA)

Scan to take the BRT survey:



BRT STANDARDS WORKSHOP #1

November 1, 2021
New Orleans Regional Planning Commission



Introductions

Project Overview

Schedule

Workshop Introduction

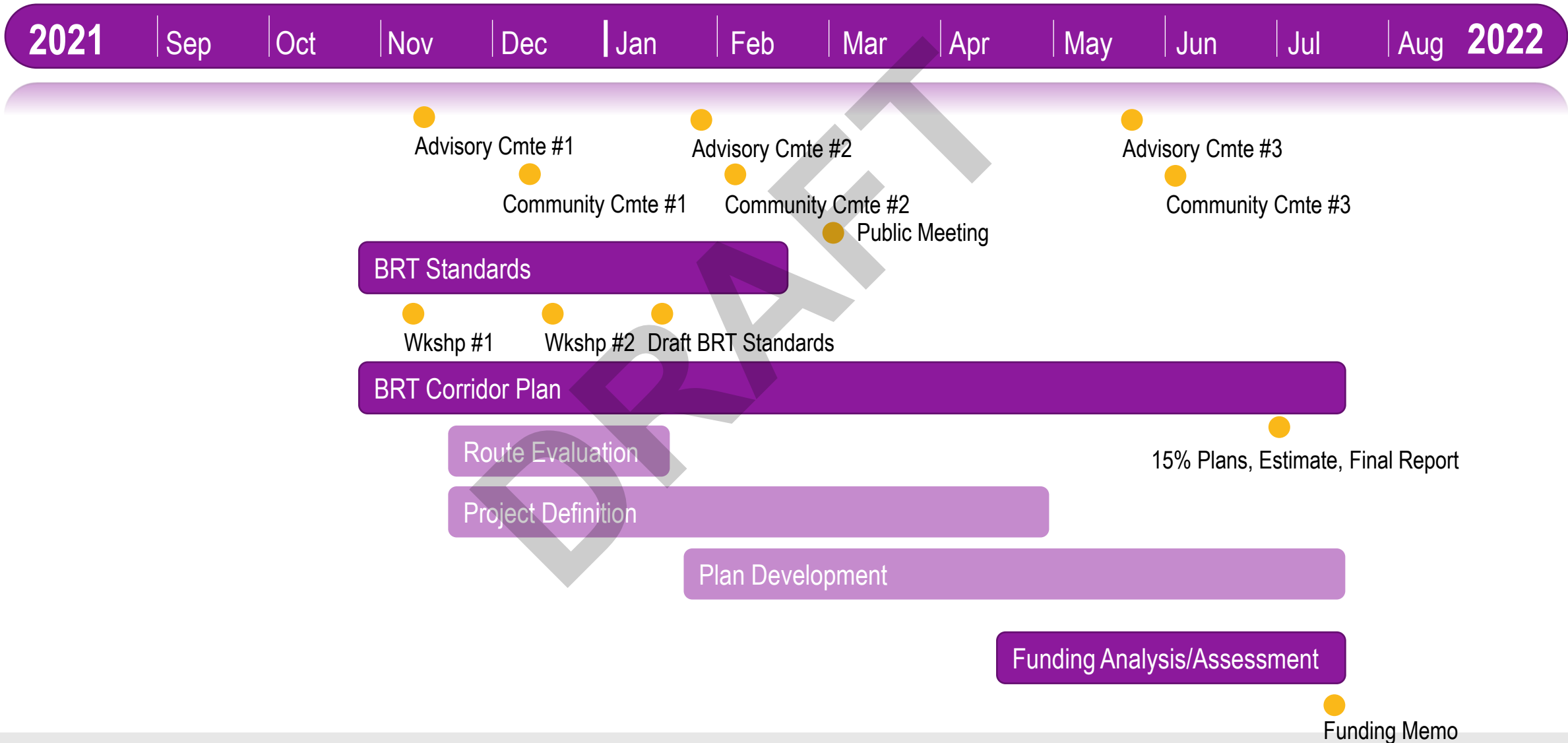
BRT Definitions

BRT Standards

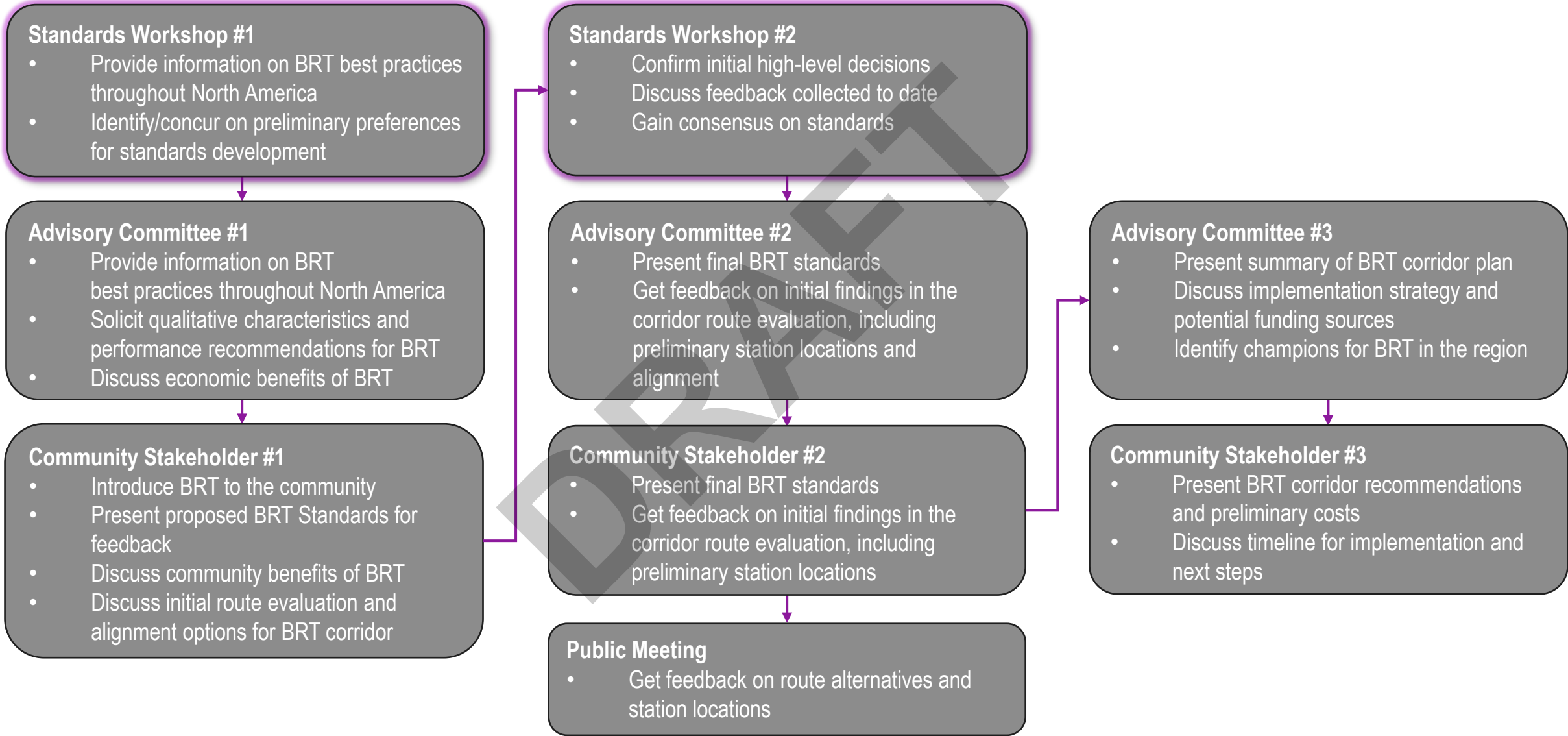
Summary & Next Steps

DRAFT

PROJECT SCHEDULE



ENGAGEMENT STRATEGY



WHAT IS BRT?

DEFINING BRT

ART/BRT “LITE”

Enhanced Stations, Upgraded Technology, Increased Frequency

PREMIUM BRT

Dedicated or Grade-Separated Runningway, Level Boarding, Off-Board Fare Collection, Upgraded Vehicle and station Technology, System Branding

Tulsa Aero
Omaha ORBT
Kansas City MAX
Cincinnati Metro Plus
San Antonio Primo

Grand Rapids Silverline
Richmond Pulse

San Bernardino SBX
Eugene EmX
El Paso BRIO
Albuquerque ART

Cleveland HealthLine
CTfastrak
Minneapolis Orange Line
LA Metro Orange Line

Prospect Avenue MAX

DEFINING BRT



Agency

- Kansas City Area Transportation Authority

Location

- Kansas City, Missouri

Revenue Operations

- 2019

Corridor Length

- 10 Miles, 26 Stations

Capital Cost

- \$56M

BRT Characteristics

- Mixed Traffic with Bus Lane Segments
- Level Boarding
- Off-Board Fare Collection
- Traffic Signal Priority
- Real-Time Arrival Signage
- Station WiFi
- Smart Interactive Kiosks
- Signature Brand
- BRT-Style CNG Vehicles
- Custom Station Architecture
- Mobility Hubs
- Bike/Ped Accommodations

EmX Green Line

DEFINING BRT



Agency

- Lane Transit District

Location

- Eugene & Springfield, Oregon

Revenue Operations

- 2007

Corridor Length

- 4 Miles, 10 Stations (2007) / 7.8 Miles, 14 Stations (2011) / 9 Miles, 17 Stations (2017)

Capital Cost

- \$25M (2007), \$41.3M (2011), \$96.5M (2017)

BRT Characteristics

- Dedicated Center-running Bus Lanes
- Level Boarding
- Off-Board Fare Collection
- All-door Boarding
- Traffic Signal Priority
- Real-Time Arrival Signage
- Signature Brand
- BRT-Style Hybrid Vehicles
- Custom Station Architecture
- Bike/Ped Accommodations

CTfastrak

DEFINING BRT



Agency

- Connecticut Transit

Location

- Hartford & New Britain, Connecticut

Revenue Operations

- 2015

Corridor Length

- 9.4 Miles, 10 Stations

Capital Cost / O&M Cost

- \$570M / \$25.9M

BRT Characteristics

- Dedicated Bus Lanes
- Level Boarding
- Off-Board Fare Collection
- All-door Boarding
- Traffic Signal Priority
- Real-Time Arrival Signage
- Signature Brand
- BRT-Style Hybrid Vehicles
- Custom Station Architecture
- Bike/Ped Accommodations

Albuquerque Rapid Transit

DEFINING BRT



Agency

- Albuquerque Transit Department

Location

- Albuquerque, New Mexico

Revenue Operations

- 2017

Corridor Length

- 8.8 Miles, 18 Stations

Capital Cost

- \$134M

BRT Characteristics

- Dedicated Center-running Bus Lanes
- Level Boarding
- Off-Board Fare Collection
- All-door Boarding
- Traffic Signal Priority
- Real-Time Arrival Signage
- Station WiFi
- Signature Brand
- BRT-Style Electric Vehicles
- Custom Station Architecture
- Bike/Ped Accommodations

Curitiba, Brazil

DEFINING BRT



Agency

- Rede Integrada de Transporte (Integrated Transportation Network)

Location

- Curitiba, Brazil

Revenue Operations

- 1974

System Length

- 50.6 Miles, 21 Transit Centers

BRT Characteristics

- Dedicated Bus Lanes
- Level Boarding
- Off-Board Fare Collection
- All-door Boarding
- Traffic Signal Priority
- Real-Time Arrival Signage
- Station WiFi
- Signature Brand
- Bi-Articulated Vehicles
- Custom Station Architecture

DEFINING BRT

Feature	Prospect Ave MAX	EmX Green Line	CTfastrak	ABQ Rapid Transit
Speed	12.9 MPH	12.84 MPH	29.7 MPH ¹	16.6 MPH ²
Weekday Headway	10min (5:30am – 6:30pm) / 30min (Early AM & Night)	10min / 30min (Night)	7.5min Peak / 12min Off Peak / 20min Evening	8 – 15 min
Operating Cost	\$3.6M	Not Reported	\$25.9M (8 Routes)	\$2.4M
Operating Cost per Vehicle Revenue Hour	\$143.55	\$191.25	\$221.46	Not Reported

¹ On CTfastrak Busway Only

² ART Green Line

Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast and efficient service that may include:

- Dedicated lanes
- Busways
- Traffic signal priority
- Off-board fare collection
- Elevated platforms
- Enhanced stations.



Feature	Corridor-Based BRT	Fixed-Guideway BRT
Right-of Way	Arterial corridor	Majority in dedicated ROW
Investment focus	Substantial investment in a specific corridor	Substantial investment in a single route within a defined corridor
Defined Stations	Yes	Yes
Traffic Signal Priority for Buses	Yes	Yes
Short Headways	Yes	Yes
Bidirectional Service Operations	Substantial part of weekdays	Substantial part of weekdays and weekends



Operations & Service Goals



BRT Guideway Alternatives



Station Design Components



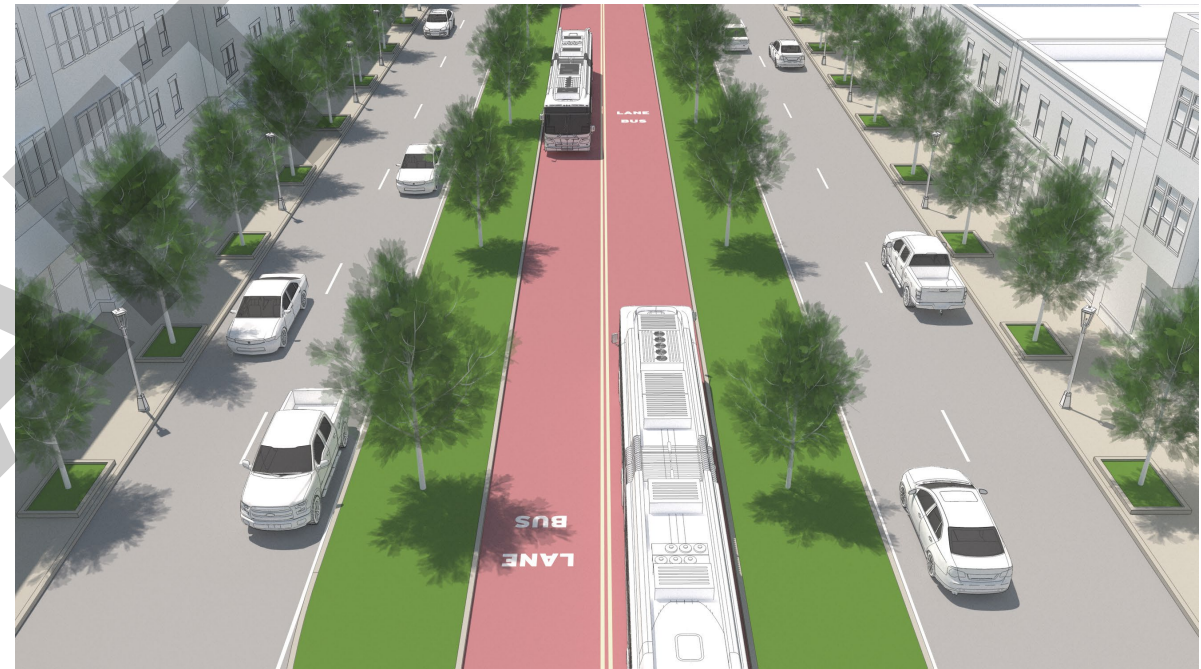
Technology

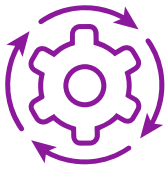


Vehicle Standards



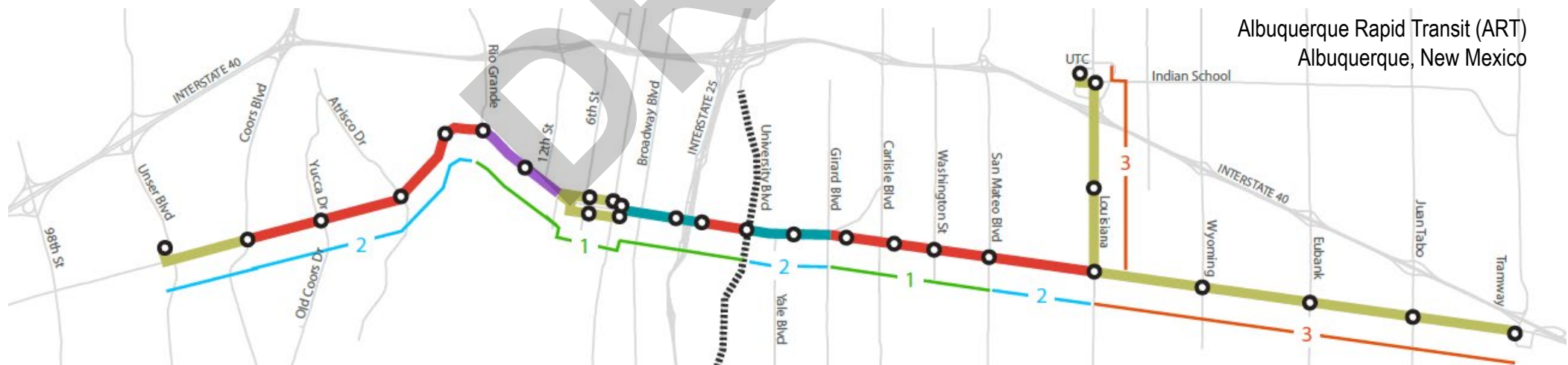
Branding

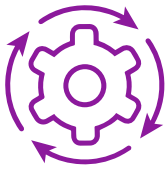




- **On-Time Performance/Reliability**
- **Headway**
- **Span of Service**
- **Stop/Station Spacing**
- **Open vs. Closed System**

Setting a framework for the levels of service and operations will guide development of service standard definitions for BRT service.





ON-TIME PERFORMANCE/ RELIABILITY

OPERATIONS

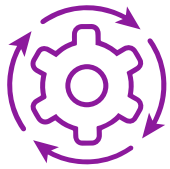
Existing RTA Definition:

- Departures are considered on-time, if made between 1 minute early and 5 minutes after the scheduled departure times.
- Current OTP goal= 80%

BRT Recommendation:

- Greater performance than existing local bus standard
- Incorporation of BRT technologies and infrastructure allows for a higher standard of on-time performance and reliability.

Bus System On-time Performance Comparison	SFMTA (San Francisco)	CTA (Chicago)
OTP Target	At least 85 % of vehicles must run on time.	65% of customers on every route be able to board on-time buses.
Definition	1 minute early – 4 minutes late	1 minute early – 5 minutes late



SPAN OF SERVICE

Service Span: The extent of time over which service is provided

Days of the week:

- Industry best practice: service 7 days/week

Hours of the day:

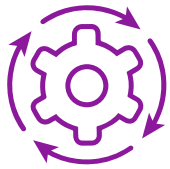
- FTA Minimum: 14 hours
- Typical: 18-20 hours

BRT Recommendation:

- Similar to or greater than local bus service

OPERATIONS

Typical BRT Service Hours (APTA)			
City/BRT System	Weekdays	Saturday	Sunday
South Busway (Miami)	24 hrs	24 hrs	24 hrs
Transitway (Ottawa)	4am – 2am	5am – 2am	6am – 2am
Pittsburgh	5am – 1am	5am – 1am	5am – 1am
99-B Line (Vancouver)	5am – 1am	5am – 1am	5am – 1am
MAX (Kansas City)	5am – 1am	5am – 1am	5am – 1am
Orange Line (LA)	4am – 12am	4am – 12am	4am – 12am
San Pablo (Oakland)	5am – 12am	5am – 12am	5am – 12am
Silver Line (Boston)	5am – 12am	5am – 12am	6am – 12am
Viva (York Region)	6am – 12am	6am – 12am	6am – 12am
MAX (Las Vegas)	5am – 10pm	5am – 10pm	5am – 10pm
Eugene EmX	5am – 11pm	7am – 11pm	8am – 8pm
Los Angeles Metro	6am – 0pm	6am – 8pm	8am – 7pm



HEADWAY

Headway: Average interval of time between transit vehicles moving in the same direction on the same route.

Best Practice:

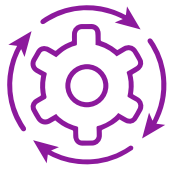
- Peak maximum of 10 mins
- All day Maximum of 30 mins

BRT Recommendation:

- Defined minimum and maximum to guide expectations, **10 - 15 minutes**
 - Based on ridership thresholds

OPERATIONS

Minimum Headways (APTA)	LTD EmX	York Region Viva	Pittsburgh East Busway	Seattle RapidRide
Early Morning (before 6am)	30 mins	None (service provided by parallel local service)	15 mins	N/A
Weekdays (18 hours)	10 mins	15 mins	15 – 20 mins (15 mins daytime, 20 or 30 mins late evenings)	10 mins
Saturdays (15-18 hours)	15 mins	15 mins	15 – 20 mins (15 mins daytime, 20 or 30 mins late evenings)	10-15 mins
Sundays (15-18 hours)	15 mins	15 mins	15 – 20 mins (15 mins daytime, 20 or 30 mins late evenings)	10-15 mins
Late night (after midnight)	30 mins	None (service provided by parallel local service)	None (service operated until 1am, some local service operated until 2am)	N/A



STOP/STATION SPACING

OPERATIONS

BRT station spacing

- Urban vs. suburban location
- Corridor-dependent
- Activity centers
- High transfer locations
- Local input

BRT Recommendation:

- Corridor - specific spacing
- Closer in Urban area
- Spread in Suburban area
- Focused on Activity Centers

City/ BRT System	System Type	Station Spacing (miles)
Cleveland HealthLine	Arterial Corridor	.18
Kansas City Main Street MAX	Arterial Corridor	.27
Eugene Green Line	Arterial Corridor	.38
Fort Collins Mason Corridor	Exclusive ROW on old rail line with adjoining multi-use trail	.41
Minneapolis A-Line Snelling Ave	Arterial Corridor	.5
Grand Rapids Rapid Silver Line	Arterial Corridor	.53
Albuquerque ART	Arterial Corridor	.54
San Bernardino SbX Greenline	Arterial Corridor	1.0
Los Angeles Orange Line	Exclusive ROW on old rail line with adjoining multi-use trail, parallel to Freeway	1.0
Hartford CTfastrak New Britain Busway	Exclusive ROW on old rail line with adjoining multi-use trail	1.04
Pittsburgh MLK East Busway	Arterial Corridor	1.04
San Diego	Freeway	4 - 5

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BRT

- Curb-running
- Median-running
- Mixed Traffic
- Dedicated Lane (Fixed Guideway)
- BAT Lane (Business Access and Transit)
- Queue Jump Lanes
- Transit Signal Priority

Establishing a preference for guideway configurations will help guide the development of standards of guideways across multiple BRT corridors.



NEW ORLEANS OPPORTUNITIES

GUIDEWAY

Neutral Ground

- Opportunity for dedicated guideway use
- Historic precedent

Stormwater Management

- Opportunity for green solutions integrated with the guideway



Rampart Street



1940's



2000's



Today

Tulane Avenue



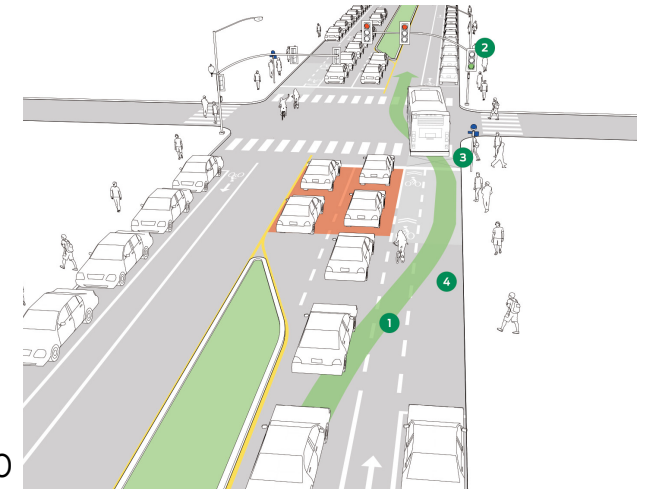


BRT GUIDEWAY CONFIGURATIONS

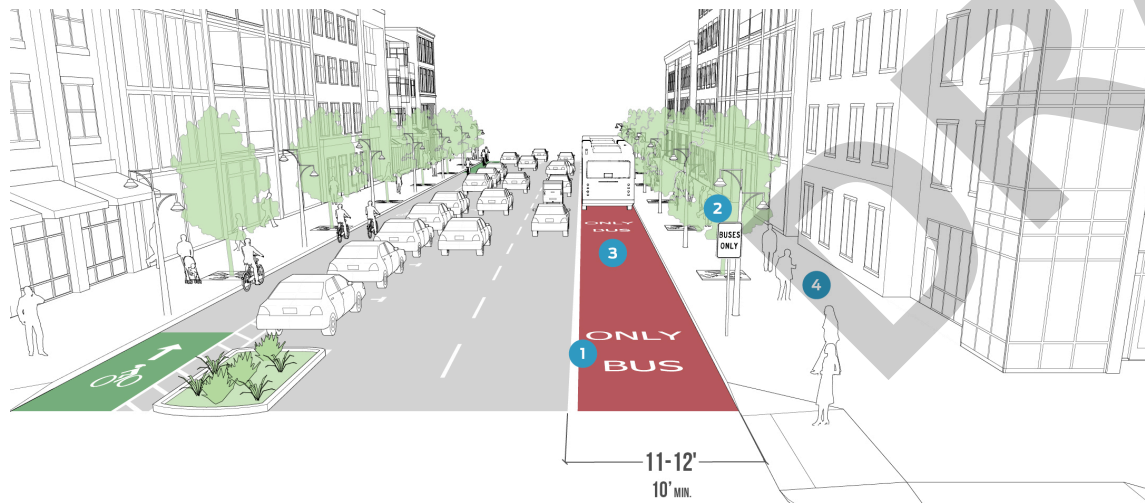
GUIDEWAY

BRT

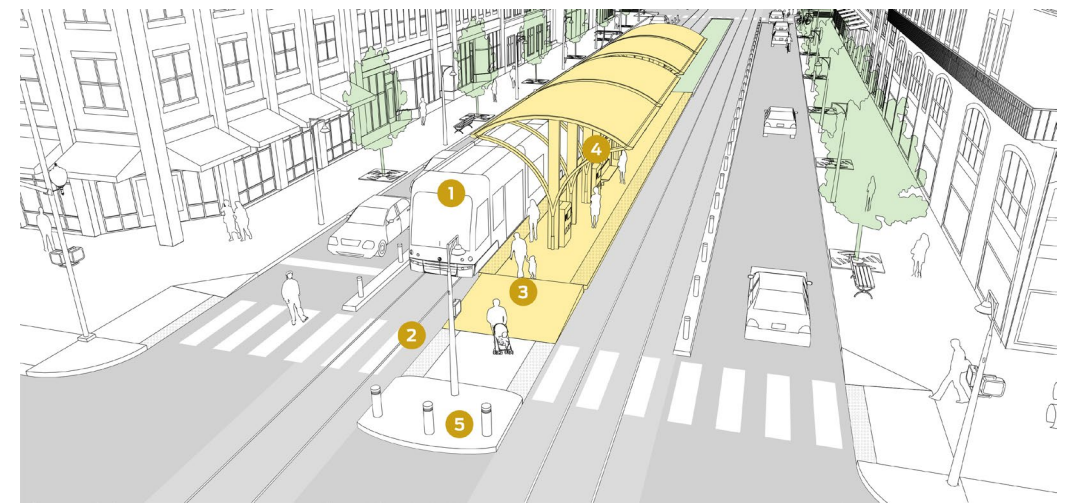
- Mixed traffic, BAT lanes, queue jump lanes
- Curb-running vs. Median-running lanes



Queue-Jump Lane, NACTO



Curb-Running Lane, NACTO





Median-Running Lane, NACTO



BRT GUIDEWAY CONFIGURATIONS



GUIDEWAY

Lane Configuration	Advantages	Disadvantages
<p>Mixed Traffic</p> 	<ul style="list-style-type: none"> + Low capital costs 	<ul style="list-style-type: none"> - Slower travel time - Conflicts with traffic - Driveway/on-street parking conflicts
<p>BAT Lanes</p> 	<ul style="list-style-type: none"> + Does not impact turning movements + Allows standard vehicles and local routes + Modest prioritization of transit + Passenger waiting at curb in streetscape + Lower capital cost 	<ul style="list-style-type: none"> - Right turning traffic conflicts - Driveway/on-street parking conflicts - Platform/sidewalk integration challenges in limited right-of-way



BRT GUIDEWAY CONFIGURATIONS

GUIDEWAY

Lane Configuration	Advantages	Disadvantages
<p>Median Alignment Dedicated</p> 	<ul style="list-style-type: none"> + Fewer traffic conflicts + Easier pedestrian crossings + May facilitate off-board fare collection + Can combine stations for both directions 	<ul style="list-style-type: none"> - Impacts left turning traffic - Impacts crossing traffic - Passenger waiting in median - May require special vehicles (left doors) - Higher capital cost
<p>Curb Alignment Dedicated</p> 	<ul style="list-style-type: none"> + Does not impact left turns + Allows standard vehicles and local routes + Passenger waiting at curb in streetscape + Lower capital cost 	<ul style="list-style-type: none"> - Right turning traffic conflicts - Driveway/on-street parking conflicts - Platform/sidewalk integration challenges in limited right-of-way



BRT GUIDEWAY CONFIGURATIONS

GUIDEWAY

BRT Recommendation:

Context-Specific Guideway Configuration

- Median-running Dedicated – wide arterial streets, operates as trunk line
- Curb-running Dedicated – arterial streets, lower cost than median-running
- Contraflow Lane – one-way street networks, more direct transit routing
- Offset Lane – near curb-running, allows for on-street parking, right turns, and/or dedicated bikeways

Transit Signal Priority (TSP)

- Throughout corridor, improves travel time reliability

Other Considerations:

Mixed Traffic Curb-Running

- Queue jumps at most congested intersections
- Far-side stops preferred

BAT Lane

- Queue jumps/right turn lane at congested intersections
- Far-side stops preferred



BRT GUIDEWAY CONFIGURATIONS

Dedicated Lanes:

- FTA Requirement for Fixed Guideway BRT: 50% (only for New Starts)
- Additional FTA Funding for operations through 5307 and 5337.

GUIDEWAY

City/BRT System	System Type	% Alignment Dedicated Lane
Minneapolis A-Line Snelling Ave	Arterial Corridor	0%
San Bernardino SbX Greenline	Arterial Corridor	37%
Kansas City Main Street Max	Arterial Corridor	52%
Fort Collins Mason Corridor	Exclusive ROW on old rail line with adjoining multi-use trail	60%
Eugene Green Line	Arterial Corridor	60%
Cleveland HealthLine	Arterial Corridor	63%
Grand Rapids Rapid Silver Line	Arterial Corridor	66%
Los Angeles Orange Line	Exclusive ROW on old rail line with adjoining multi-use trail, parallel to freeway	73%
Albuquerque ART	Arterial Corridor	82%
Hartford CTfastrak New Britain Busway	Exclusive ROW on old rail line with adjoining multi-use trail	100%
Pittsburgh MLK East Busway	Arterial Corridor	100%

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BRT GUIDEWAY CONFIGURATIONS

GUIDEWAY

Dedicated Lanes:

- FTA 5307 Urban Formula Funds
 - Must be over 50% dedicated lanes
 - Length is a consideration
 - Can be used for operations and capital
 - Reported as Rapid Bus
- FTA 5337 State of Good Repair Funds
 - Funding is based on the direction route miles and fixed guideway vehicle revenue miles
 - Restricted to maintenance, replacement, and rehabilitation of capital assets, along with the development and implementation of transit asset management plans.
 - Available 7 years after start of operations

Tulsa, OK	Peoria Ave BRT	Route 66 BRT	Total
Directional Route Miles	32.7	23.24	
5307 RB Appropriation	\$2,233,000	\$1,325,000	\$3,558,000
Less MB Appropriation	(\$913,000)	(\$512,000)	(\$1,425,000)
Net Increase in 5307	\$1,320,000	\$813,000	\$2,133,000

Tulsa, OK	Peoria Ave BRT	Route 66 BRT	Total
Fixed Guideway %	50%	50%	
5337 SG Appropriation	\$1,123,000	\$566,000	\$1,689,000



BRT Station Standards

- Typical Station Location
- Typical Station Length/Width
- Typical Platform Height
- Shelter Style/Design
- Typical Station Amenities

Corridors will vary in character and alignment, so it is important to develop typical station preferences to guide design standards development.

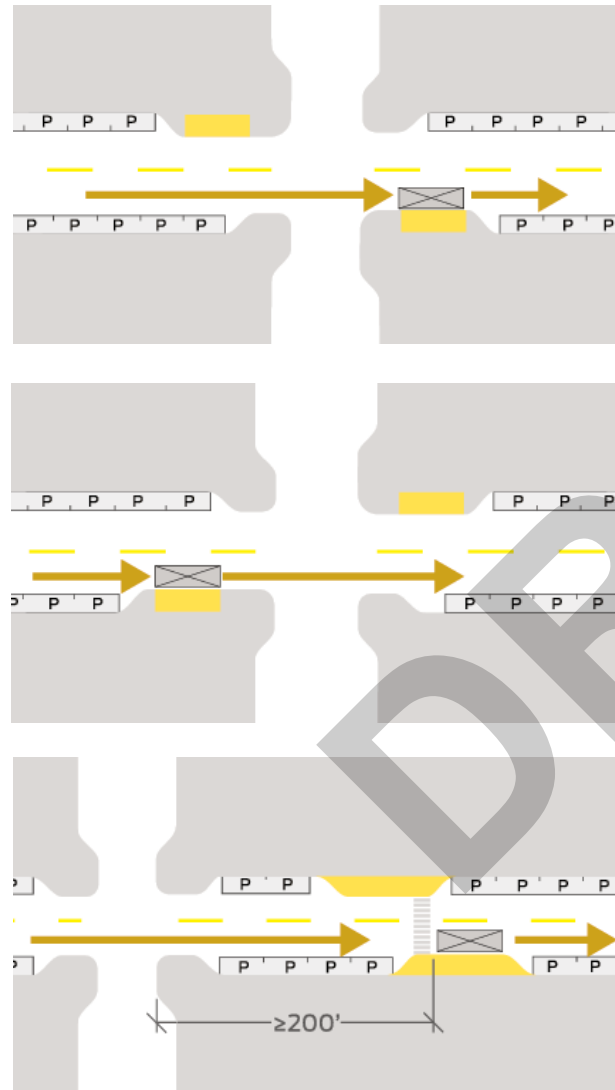


Grand Rapids – The Rapid Station Example



STATION LOCATION

STATIONS



Far Side (recommended)

- Allows vehicles to clear an intersection before stopping
- Supports TSP
- Typically improves travel time
- Can result in intersection blocking of queued vehicles behind bus
- Safer because pedestrians cross street behind the bus

Near Side

- Minimizes blocking of intersection due to queued vehicles behind bus
- Keeps far side clear for turning vehicles onto transit street
- Near side stops may be needed at certain transfer locations

Mid-Block

- Require signalized or other safe pedestrian crossings at mid-block location
- Avoid heavy traffic and unsafe intersections
- Typically occur at high-volume destinations or along long blocks



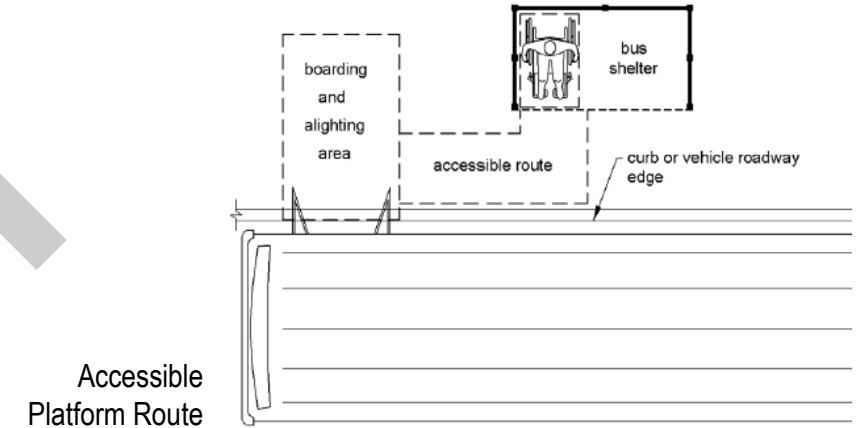
BRT STATION PLATFORM LENGTH & WIDTH

Platform Length

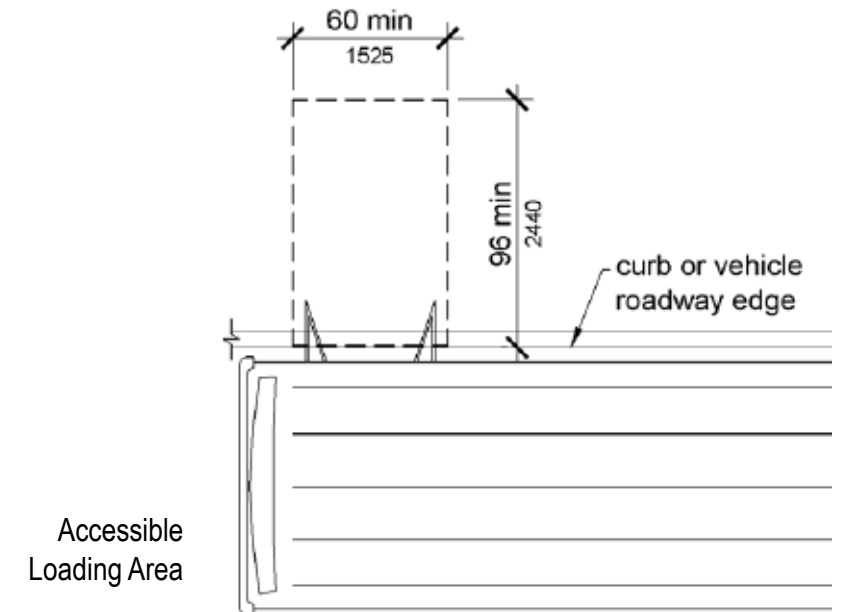
- Determined by vehicle type, level/non-level boarding, available median or ROW space
- Longer than longest vehicle accessing the station
- Multiply by # of vehicles expected to access the station at one time

Platform Width

- Determined by level/non-level boarding, available median or ROW space
- Station-specific location-dependent (8'-15')
- Accessibility, shelter style are factors



Accessible Platform Route



Accessible Loading Area



BRT STATION PLATFORM LENGTH & WIDTH

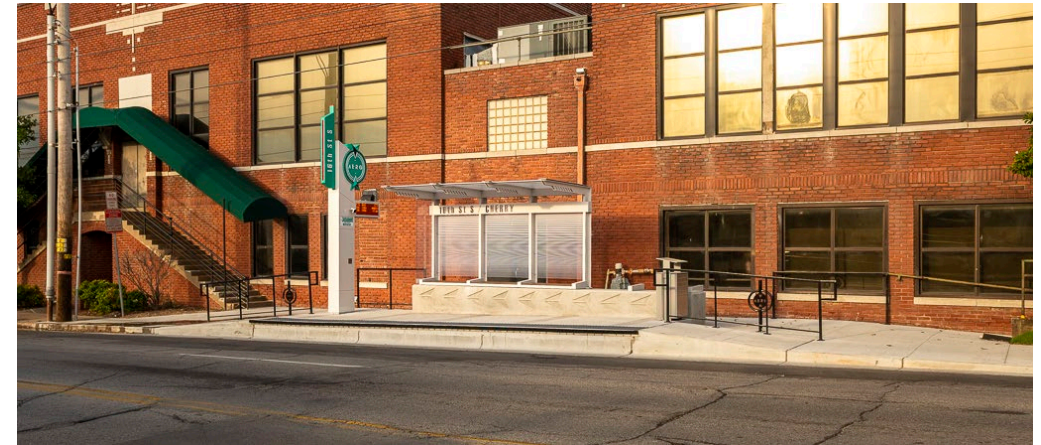
STATIONS

Station Platform Design Factors:

- Station type (curb vs median)
- Vehicle type/length
- Boarding operation (front door, all door, etc)
- Level or non-level boarding operation
- Available ROW



ABQ Rapid Transit
Station Length



Tulsa Peoria Ave AERO
Station Length



PLATFORM HEIGHT

STATIONS

Level vs. Non-level Boarding

- Determined by vehicle and desired boarding type
- Level-boarding provides quick and easy vehicle access for all transit-users



Guide Stripe Marking (IndyGo – Indianapolis, IN)



Magnetic Precision Docking (EmX – Eugene, OR)

Precision Docking

- Physical Guide – Guide striping, rub rails, guide wheel, and kassel curb
- Optical Guidance – Automatic or driver operated, based upon painted line, high- maintenance
- Magnetic – Strip in pavement, controls lateral movement, driver controls stopping and starting



Kassel Curb



Level-boarding Curb with Rub Rail (MAX – Kansas City, MO)

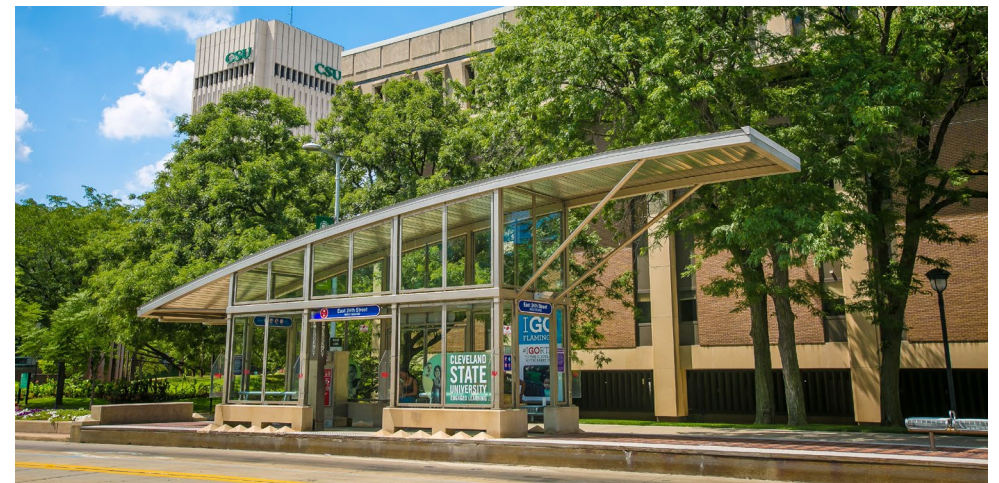


SHELTER STYLE/DESIGN

STATIONS

Shelter Design Factors:

- Level of Protection
- Modularity
- Off-the-Shelf vs. Custom Architecture
- Ridership Needs





BRT STATION AMENITIES

STATIONS

Station Amenity Factors:

- Existing station standards vs. develop new for BRT
- Typical amenities to consider:
 - Seating
 - Lighting
 - Trash receptacles
 - Station communication technologies
 - Security technologies
 - Bike storage
 - Vending
 - Public art
 - Landscaping





BRT Technology Standards

- Fare Collection Technology
- Guideway/Vehicle Technology
- Station Technology

Innovative technology helps make BRT a premium service and helps systems operate at a higher frequency. Developing preferences for what technologies to include in BRT design standards will help improve RTA's service offerings.

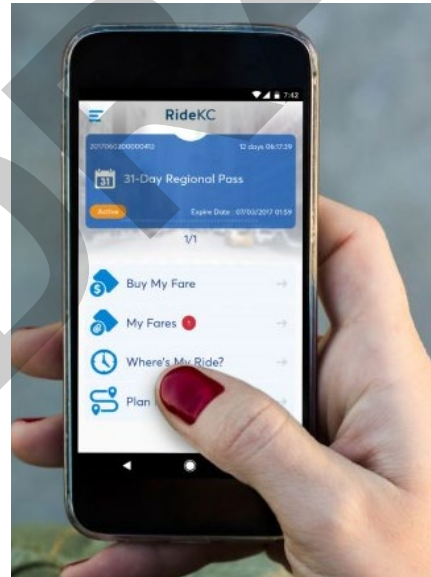
FARE COLLECTION

On-Board Payment

- Standard on-board payment can be utilized at lesser-used stations

Off-Board Payment, Proof of Purchase

- Mobile Ticketing
- Proof of Payment – most expensive O&M costs
- May require legislative changes for enforcement
- Potentially compatible with other modes, e.g. parking, Uber, Lyft, Bird



TECHNOLOGY

City/BRT System	Fare Collection Approach
VTA (Santa Clara Valley) BRT 1 (proposed)	ART: Off-board payment at major stations, on-board payment at lesser-used stations. BRT 'lite': Off-board fare collection, on-board inspectors, fines Premium: Faregates/turnstiles at all stations, no proof-of-purchase necessary
Cleveland, OH HealthLine	Off-board fare collection at all stations
San Bernardino, CA	On-board fare collection
Fort Collins, CO	On-board fare collection
Las Vegas, NV	Off-board fare collection at all stations
Hartford, CT FasTrak	Off-board fare collection at all stations
Eugene, Oregon EmX	Off-board fare collection at all stations
Albuquerque, NM Rapid Transit	Off-board fare collection at all stations
Pittsburgh	On-board fare collection
Los Angeles, CA Orange Line	On-board fare collection at all stations
Kansas City, MO	On-board fare collection at all stations

GUIDEWAY / VEHICLE TECHNOLOGY

TECHNOLOGY

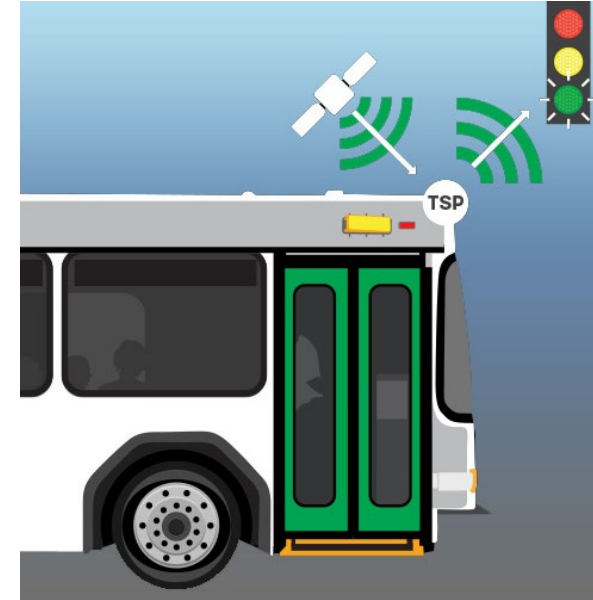
Transit Signal Priority

- Allows vehicles and traffic signals to communicate through sensors to extend green time or truncate red time.
- Very effective at intersections with less cross traffic and fewer turning patterns; effective in dedicated lanes or mixed traffic.

Progressive Signal Timing

- Signals timed to support travel speeds of transit vehicles (between 15-20 mph)
- Minimizes delays in bus service and encourages consistent vehicle speeds

WiFi On-board



GUIDEWAY / VEHICLE TECHNOLOGY

TECHNOLOGY

Automated Vehicle Location (AVL)

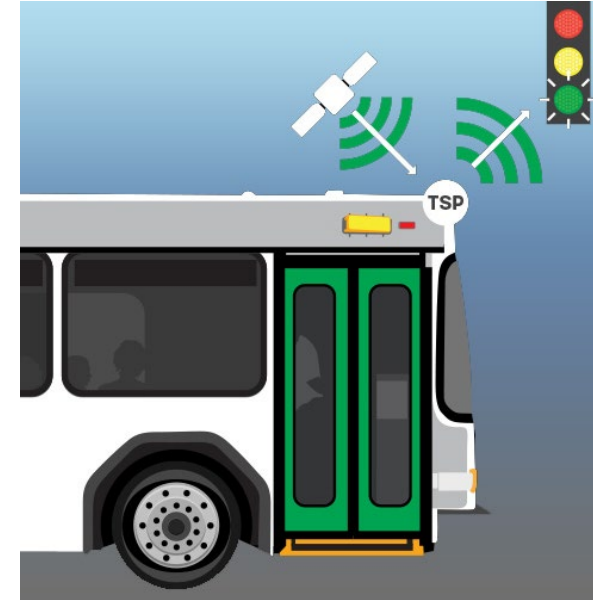
- Allows for notification to dispatchers and passengers of real-time bus locations
- Allows for calibration of transit signal priority and provides data for analytical purposes

Automated Enforcement

- Camera monitoring on vehicles or through traffic signals to discourage unauthorized vehicles from using dedicated bus lanes

Connected Vehicle Applications

- Enables vehicles to “talk” to one another via short-range radio signals



Real Time Information

- One of the most common requests by transit users
- Provides more rail-like experience when provided on screens at stations



WiFi

- Passenger-expected amenity
- Free Station WiFi provided by several North American agencies: MTA, ABQ, UTA, KCATA

Community-Based Digital Info Kiosks

- Transit-supportive content for wayfinding, mobility connections, system information

CCTV/Security Cameras

- Safety and security monitoring, crime deterrence





BRT Vehicle Standards

- Vehicle Size
- Vehicle Propulsion
- Vehicle Make & Design

Vehicle type is an important decision as the vehicle impacts guideway design, station placement & design and facility layout. Identifying vehicle preferences will guide the overall design for the BRT system.



BRT VEHICLES

VEHICLES

Typical Length

- 40' – 60'

Speed

- up to 65 mph

Capacity

- 60-90 (seated + standing)

Types:

- Standard low-floor BRT bus
- “Over the road” coach
- Articulated bus
- Double decker (not common)





BRT VEHICLES

VEHICLES

Vehicle Considerations

- Design criteria to meet service needs
- Buy America and Altoona Requirements
- Advanced propulsion technology
- Specification and procurement
- Provide sufficient capacity - anticipated ridership
- Be appealing to riders - easy to board, multiple doors, low floor, wide aisles
- Delivery scheduling – 18+ months
- Warranty and field service
- Coordinate with service identity/branding





PROPULSION

Diesel

Diesel Hybrid

Compressed Natural Gas (CNG)

- Fueling infrastructure

Electric

- Battery Electric Buses (BEB) becoming a popular choice for BRT
- Range, capacity, charging infrastructure considerations

VEHICLES





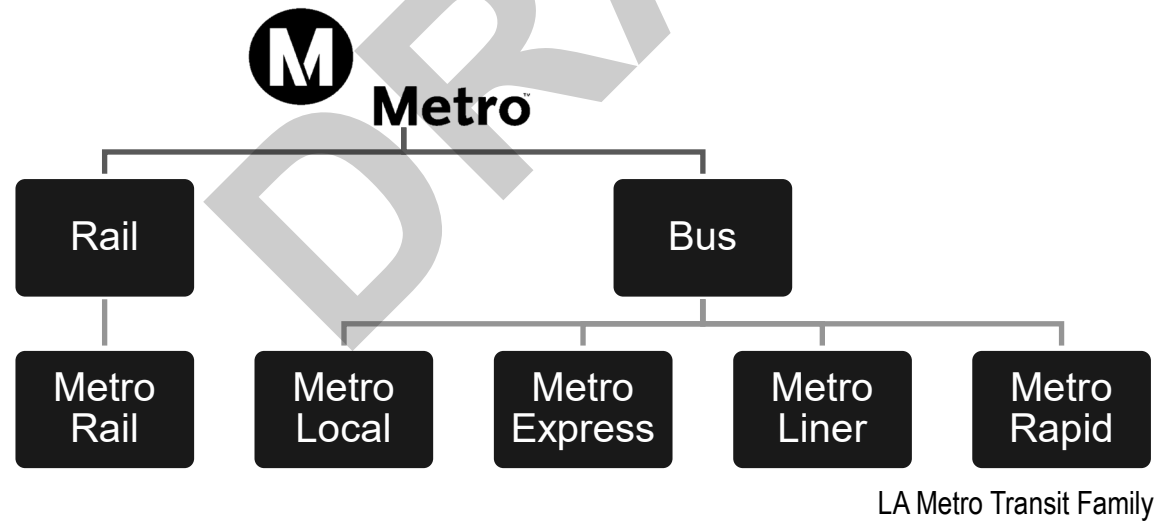
BRT Branding Standards

- Separate System Brand for BRT vs. Existing Local Service
- Vehicle Branding
- Station Branding
- Advertising

Establishing a preference for system branding and advertising will help BRT stand out from other transit modes as a separately branded, premium service offered by RTA.

DRAFT

RideKC



VEHICLE BRANDING

BRANDING



LA Metro Bus Fleet



Greater Cleveland RTA
HealthLine BRT Vehicle



VelociRFTA BRT Vehicle
Aspen, CO



KCATA Local/BRT Bus
Kansas City, MO

STATION BRANDING

BRANDING



VelociRFTA BRT



Tulsa Peoria Ave AERO



Sun Metro Brio



KCATA Prospect MAX BRT

Shelters

- Impact of 3rd party contracts for installation/maintenance

Vehicles

- Advertising vs. System branding



Meeting Follow-up

- Summary materials will be sent to all invitees
 - Presentation
 - Notes Summary

Next Steps

- Advisory Committee Meeting #1 - feedback
- Community Stakeholder Meeting #1 - feedback
- Standards Development
- BRT Standards Workshop #2 - recommendations
- Standards Refinement
- Application of Standards to Corridor Alternatives

REVIEW & QUESTIONS

DRAFT





BUS RAPID TRANSIT FEASIBILITY STUDY **BRT Standards/Technical Advisory**

Committee

Wednesday, June 15, 2022

11:00am – 1:00 pm



Welcome and Introductions

- BRT Standards Update
- Overview of Tier 1 Evaluation Process
- Public Feedback Summary
- Tier 2 Evaluation Process Discussion
- Next Steps



RTA

- **Dwight Norton, Sr. Director of Strategic & Long-Term Planning**

Project Consultant Team Representatives

- **Iam Tucker, Ronnie Schuman – ILSI – Prime Consultant**
- **Bobby Hosack, Chris Handzel, Devin Foil – HNTB – Planning Consultant**



Operations & Service Goals



BRT Guideway Alternatives



Station Design Components



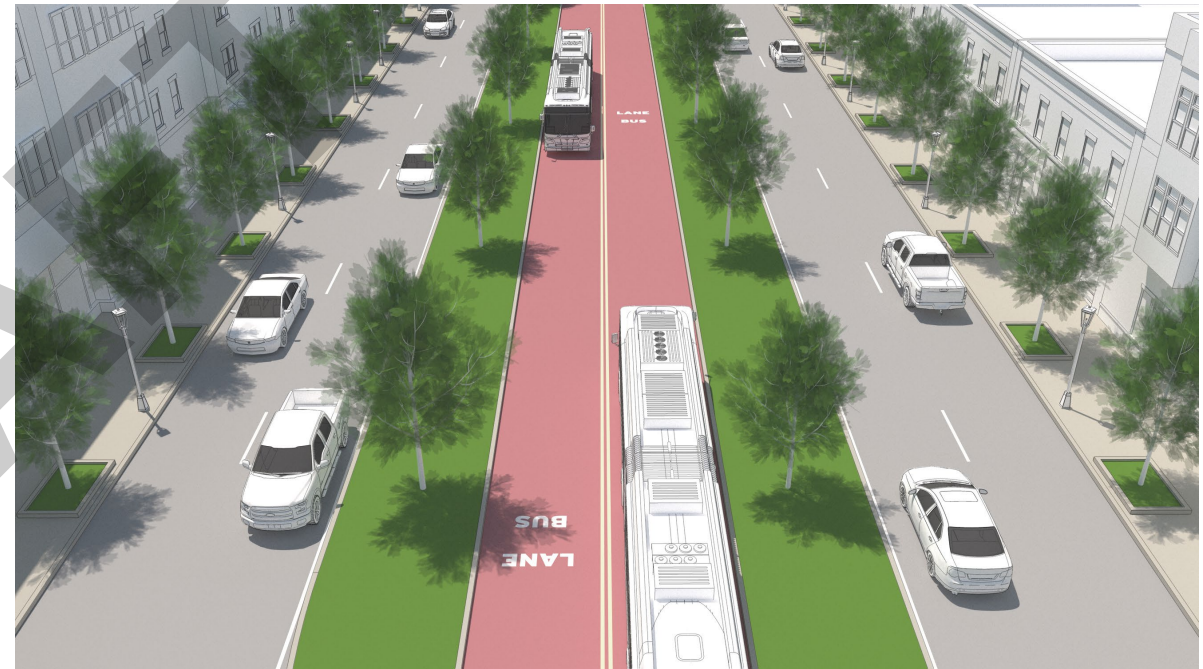
Technology

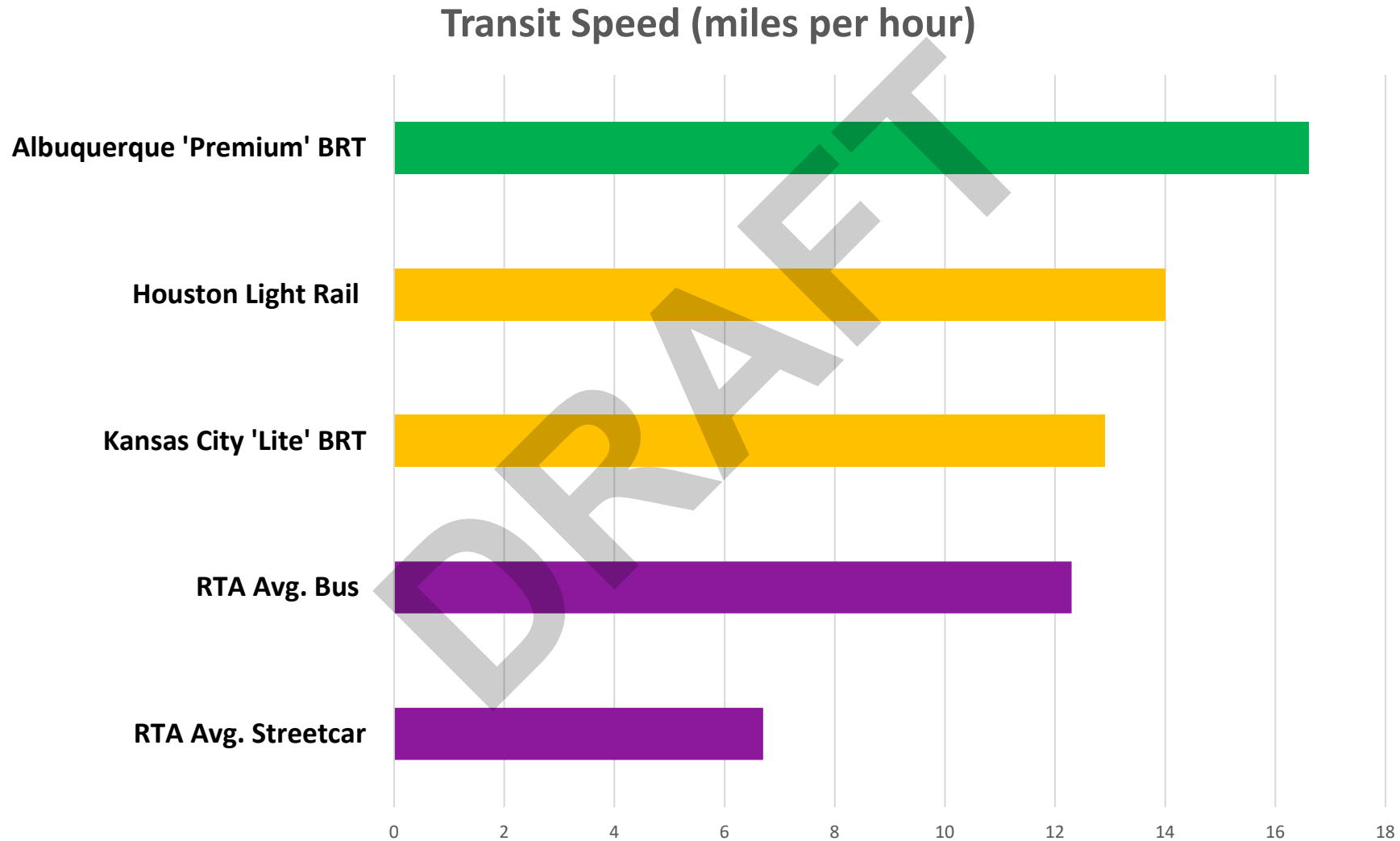


Vehicle Standards



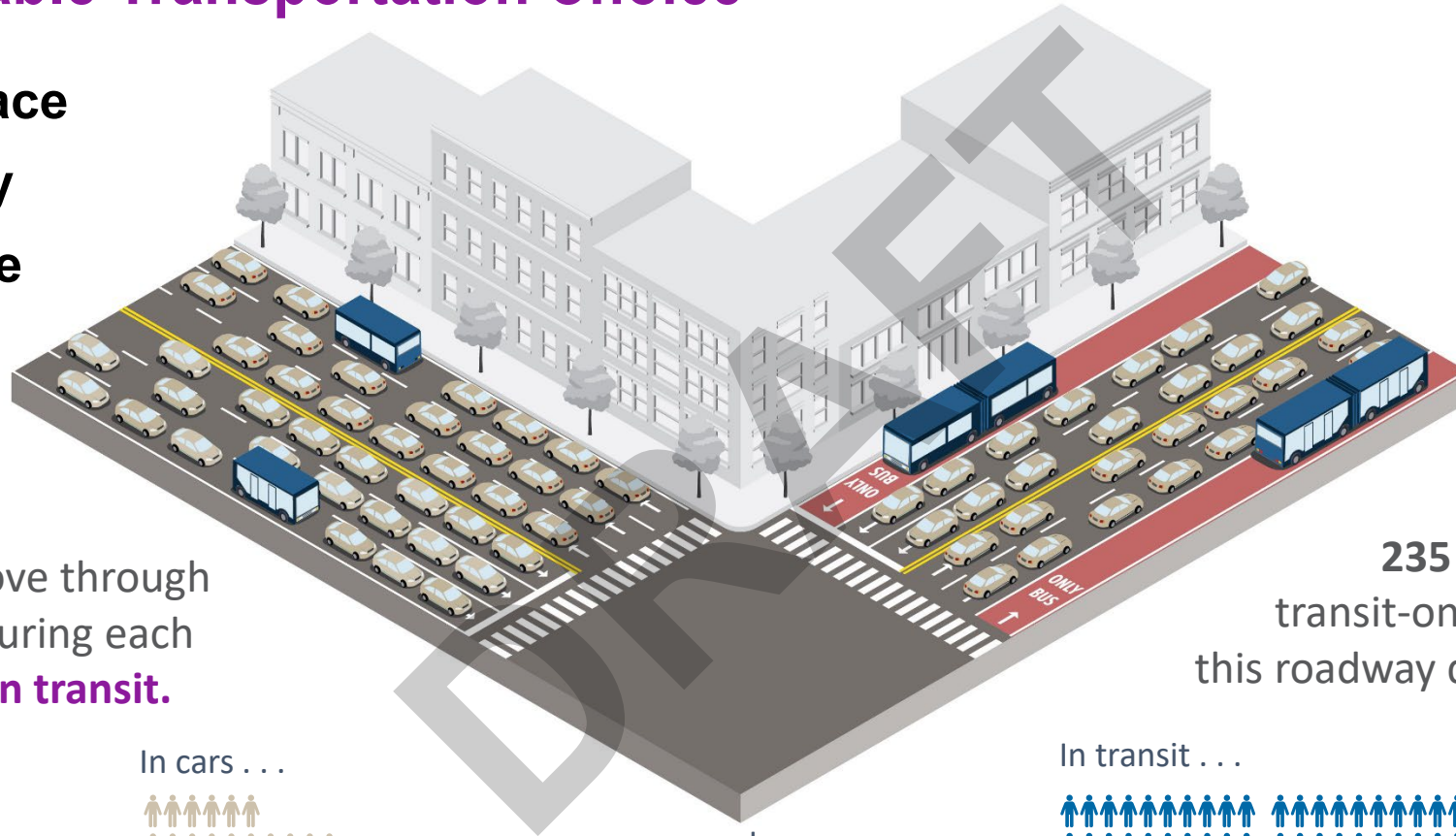
Branding





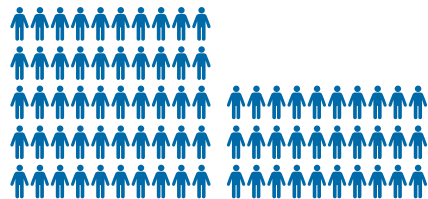
Provide Equitable Transportation Choice

Use limited space more efficiently for more people



126 people move through this roadway during each light cycle. **80 in transit.**

In transit . . .



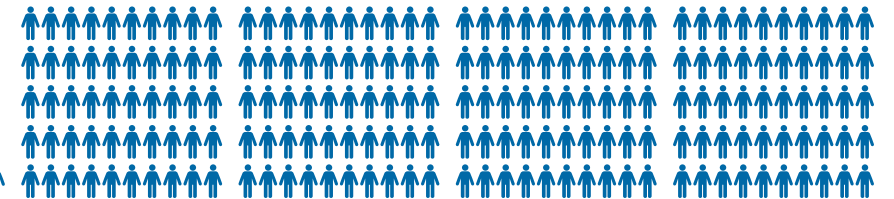
In cars . . .



235 people on a road with transit-only lanes move through this roadway during each light cycle.

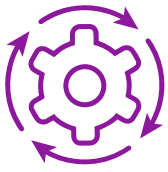
204 in transit.

In transit . . .



In cars . . .





OPERATIONS

Performance/Reliability:

- Greater than 80% on-time performance (1 minute early to 5 minutes late)

Headway:

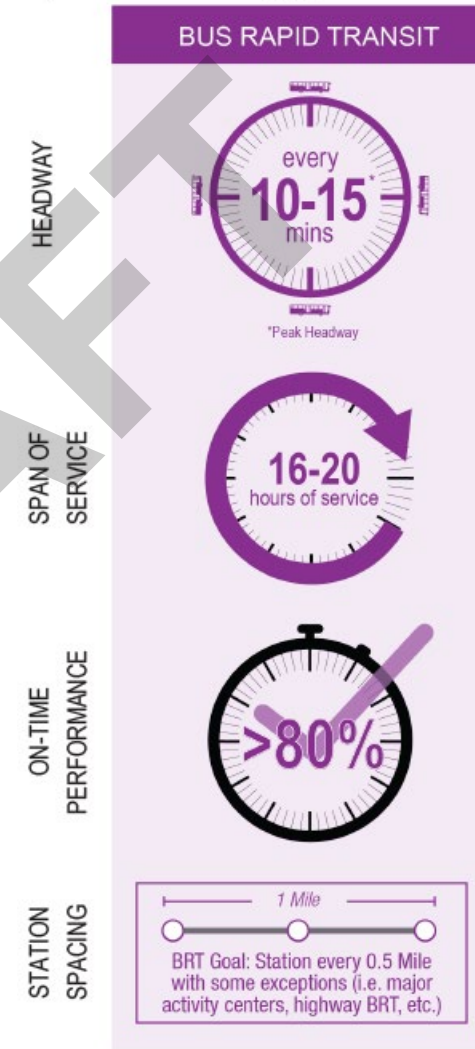
- Peak: 10 minutes (6-9AM, 3-7PM)
- Off-Peak: 15 minutes

Service Span:

- 16-20 hours of service daily

Station Spacing:

- Station every 0.5 miles with some exceptions





Typologies

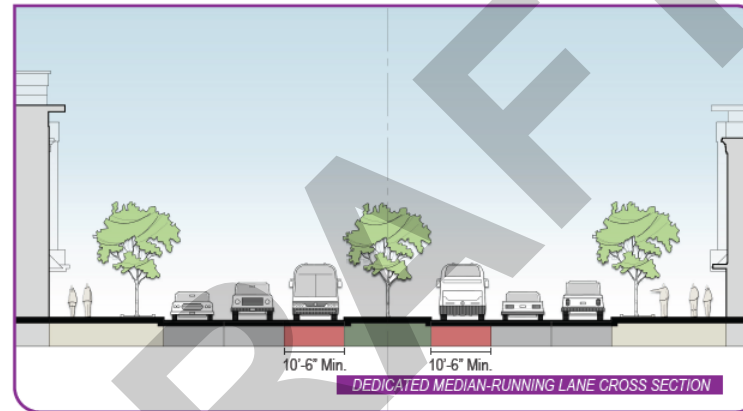
- Mixed Traffic
- BAT Lane (Business Access and Transit)
- Queue Jump Lanes
- Dedicated Curb-running Lane
- Dedicated Median-running Lane
- Exclusive Median Busway
- Exclusive Separate Busway
- Contraflow Lanes
- Offset Lane

GUIDEWAY TREATMENT

DEDICATED MEDIAN-RUNNING LANES

» FTA Fixed Guideway Eligible: YES

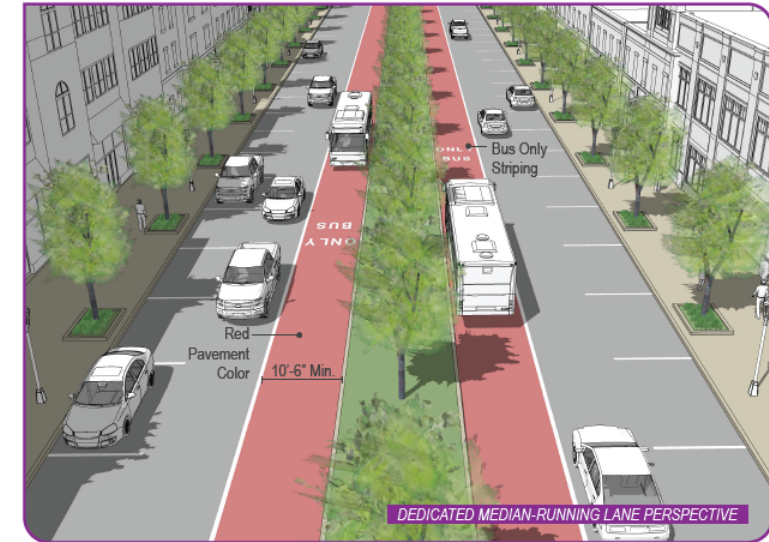
» Median dedicated guideways are lanes along the median exclusively for the use of transit vehicles. This lane typology can require transit vehicles to have left door loading and/or more complicated intersection treatments such as crossover lanes. This configuration may be considered along neutral grounds.



- » Minimum lane width of 10'-6" shall be met, but 12' lane width is preferred. If no median is present, the minimum lane width is 11' as the transit lane will be directly adjacent to opposing traffic.
- » Pavement marking, and signage shall be used to indicate that the lane is dedicated to transit vehicles at all times (MUTCD §3D-01).
- » Parking and pick-up/drop-off is prohibited. If the dedicated running way is located in an area with high TNC usage, additional signage and enforcement measures may be required.
- » Barriers or lane delineations are optional. These require additional right-of-way to be implemented, with 2' minimum for physical barriers or buffer spaces.
- » Extra consideration should be given to pedestrian accommodations on streets with median dedicated lanes as riders will have to wait at stations in the median for the bus. Components such as mid-block crosswalks, High-intensity Activated crossWalk (HAWK) signals, and pedestrian refuge islands should be considered.

GUIDEWAYS

GUIDEWAYS



- » Depending on station location and configuration, left side vehicle doors may be required.
- » To avoid conflicts with center-running transit vehicles, left turns should be prohibited, or accommodated using left-turn lanes and dedicated signal phases.
- » Left turns from the center bus lane shall be prohibited, during hours where headways are 15 minutes or less. They may be permitted at other times of day with longer headways.
- » Maintain a minimum of 1:1 tree replacement for those impacted along BRT corridors. Where possible, investigate opportunities to supplement the existing tree canopy to preserve the visual aesthetics and sustainability benefits along these transit corridors.

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Application Guide

TPOLOGY

1. **Mixed Traffic:** Lanes utilizing existing curb-side traffic lanes to operate transit vehicles in mixed traffic. These lanes rely heavily on use of traffic signal priority (TSP) to facilitate the reliability of rapid service.
2. **Business Access and Transit (BAT) Lanes:** Curb-running semi-dedicated lanes which allow private vehicles to share the lane with through transit vehicles to turn right or access a local business entrance.
3. **Queue Jump Lanes:** This treatment allows buses to “jump” to the front of the queue at a traffic signal and move ahead of traffic as the signal turns green.
4. **Dedicated Curb-Running Lane:** Curb-running dedicated lanes are for transit vehicles only and require pavement markings, signage, and/or physical barriers to denote them as dedicated for transit vehicles.
5. **Dedicated Median-Running Lane:** These lanes are reserved for bus use only and does not allow for the use of private vehicles. This treatment operates in the median-side lane as opposed to the curb-running lane.
6. **Exclusive Median Busway:** Exclusive median busways operate in the existing median with station infrastructure located on the outside of the guideway. These lanes eliminate the need for left door loading buses.
7. **Exclusive Separated Busway:** A completely separated busway from an existing roadway. These are exclusively for transit vehicles, but often run parallel to multi-use trails or in rail rights-of-way and other corridors.
8. **Contraflow Lanes:** Dedicated transit vehicle lane running in the opposite direction of adjacent lanes of travel. These can be applied to one way roadways in the opposite direction or on the left side of the road.
9. **Offset Lane:** Dedicated bus lanes on the outside of the travel way. As opposed to curb-running lanes, these lanes are offset to accommodate adjacent parking, bicycle lanes, loading zones, and other uses.

TRANSIT PRIORITY	FTA FIXED GUIDEWAY	CONSIDERATIONS
Low	No	For BRT light applications or limited areas when dedicated lanes are not feasible
Medium	Yes	Use in areas when dedicated curb-running lanes are desired but heavy right turn demand exists.
Medium	Yes	Use at low level of service intersections with high traffic volumes (500 vehicles per hour)
High	Yes	Use when no on-street parking to dedicate the curb lane to transit and limited ROW to accommodate center median stations
High	Yes	Use in congested corridors with adequate ROW to give highest priority to transit and allow non-transit curbside uses
High	Yes	Similar to Median-Running Lanes, use when ROW allows wide medians to allow station infrastructure outside the guideway
High	Yes	Use along abandoned, new ROW, or other areas where existing roadways are not present
High	Yes	Use on one-way streets when transit operations require dedicated travel against the flow of traffic
Medium	Yes	Similar to BAT lanes, use with curb-running applications when accommodating on-street parking or bike lanes



STATIONS

Recommendations

- Station Location
- Station Type
- Platform Size
- Amenities
- Infrastructure



Application Guide

STATION LOCATION	PREFERENCE	CONSIDERATIONS
FAR SIDE	Preferred	For BRT light applications or limited areas when dedicated lanes are not feasible
NEAR SIDE	Secondary	Use in areas when dedicated curb-running lanes are desired but heavy right turn demand exists.
MID-BLOCK	Special Cases	Use at low level of service intersections with high traffic volumes (500 vehicles per hour)

STATION TYPE	PREFERENCE	CONSIDERATIONS
CURBSIDE	Preferred	Use with curbside guideway, can be nearside, farside, or mid-block. Coordinate with bike lanes if planned or present
CENTER MEDIAN	Preferred	Use with center-running guideway in constrained corridor, may require left door boarding of vehicles
OUTSIDE MEDIAN	Secondary	Use with center-running guideway when left turn lanes need to be preserved, accommodates right door boarding

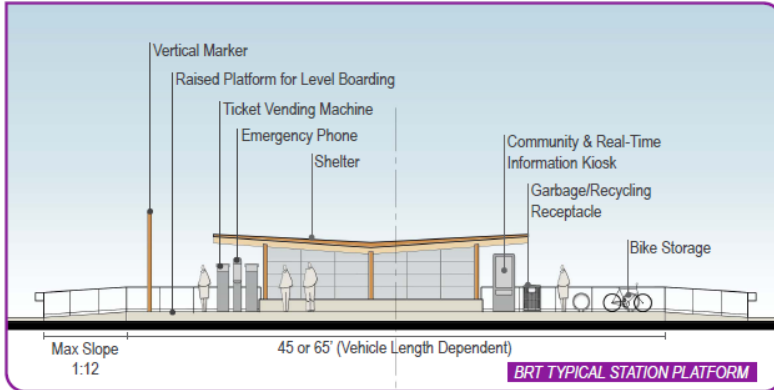


STATIONS

PLATFORM SIZE

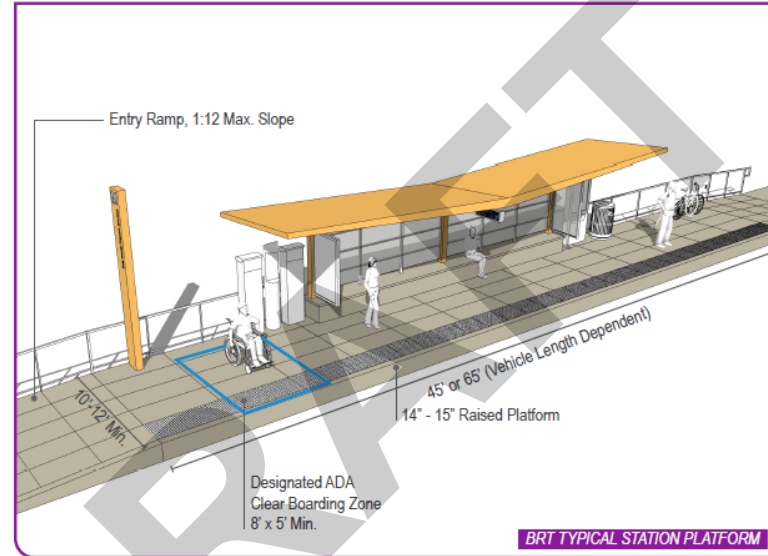
STATION PLATFORMS

- » Station platforms are designated transit areas that accommodate bus loading and passenger amenities.



- » For BRT applications, platforms shall be level boarding with curb height between 14-15".
- » Platform length for BRT shall be 45' for one low-floor 40' vehicle or 65' for one low-floor 60' articulated vehicle. Planning process for each corridor and station will determine the vehicle type for that specific alignment.
- » Preferred platform width for BRT shall be a minimum of 10-12'.
- » Maintain a 5' x 8' clear boarding zone at front door for ADA compliance.
- » All BRT station access ramps shall be a minimum of 1:12 slope to be ADA compliant.
- » Provide a reinforced concrete bus pad (bus apron) along the full length of the platform to provide a consistent surface for bus loading operations. This bus pad will prevent pavement heaving and maintain vertical control at level boarding platforms. Refer to RTA Transit Facility Guidelines for more information.

STATIONS



- » Shelters on BRT platforms shall be placed clear of the ADA clear boarding zone and clear of both the front and rear-door of the transit vehicle.
- » Level boarding should be used when possible to expedite boarding and alighting and provide a premium transit experience for riders.
- » Level boarding platforms shall include a 24" depth tactile warning strip at the platform edge consisting of raised truncated domes.
- » In constrained areas that cannot accommodate level boarding, first consider a near-level boarding platform (10"), then curb level platform (6") to minimize delay at the station.
- » Where possible, maximize entry points to the level boarding platform, to include ramps at each end as well as a step up at the rear of the platform.
- » Consider grade transitions and drainage design between the sidewalk, platform, and crown of the roadway, particularly in areas with a curb bumpout.





STATIONS

STATION SUSTAINABILITY

LANDSCAPING

- » Properly selected and located landscaping around BRT facilities can provide visual enhancements, passenger comfort, and tie the station or facility into the surrounding neighborhood context.

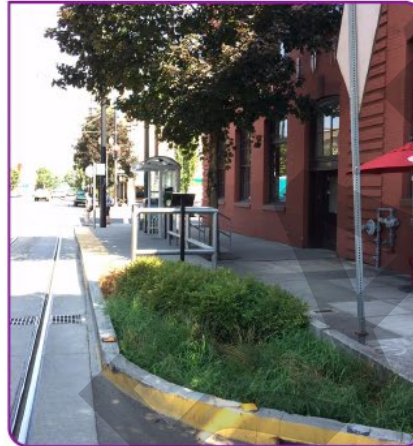


// HNTB

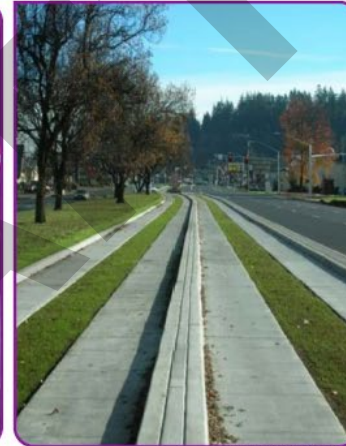
- » Maintain a minimum of 1:1 tree replacement for those impacted along BRT corridors. Where possible, investigate opportunities to supplement the existing tree canopy to preserve the visual aesthetics and sustainability benefits along these transit corridors.
- » When considering landscaping at BRT facilities, select plants that are low maintenance, water-efficient, and achieve the desired goal such as providing shade, visual screening, stormwater management, corridor beautification, or a combination of each.
- » Widespread use water-efficient native landscaping decreases the likelihood of water shortages in communities, protects our natural ecosystems, and saves money due to less water utilization.
- » RTA will need to consider the amount of staff and resources required to support the maintenance of landscaping around stations and BRT facilities. While using native plants does not require a permanent irrigation system, hand watering may be needed upon installation and until establishment, and ongoing maintenance of the landscape will be required.

STORMWATER MANAGEMENT

- » Water efficiency measures include rainwater management practices such as green roofs, rain barrels, cisterns, vegetated swales, and bioretention areas.



// NACTO



// Lane Transit District EmX

- » Water efficiency's primary goal is to reduce runoff volume. Rainwater management can help improve water quality by replicating the natural hydrology of an undisturbed site.
- » Stormwater management reduces runoff, improves air quality, helps minimize erosion, and water pollution.
- » Although they add aesthetic and functional value, stormwater management practices add cost to the station design. Regular maintenance may also be needed to maximize functionality.

STATIONS



LAST-MILE CONNECTIONS

- » Where possible, connections via other emerging last-mile modes and technology such as e-scooters, ride shares, and bike share programs, should be considered. Connections to these modes will vary station to station.



RIDESHARE HAILING SIGNAGE OPTION

// City of Ferndale, MI



BLUE BIKE BIKESHARE

// HNTB

- » Designated ride share hailing areas shall not be located within the BRT station platform area.
- » In areas with high scooter use, designate space within 30-50' of the station area for scooter parking. The area should be large enough to accommodate at least 4 scooters and can be in the form of pavement markings to denote a "scooter corral".



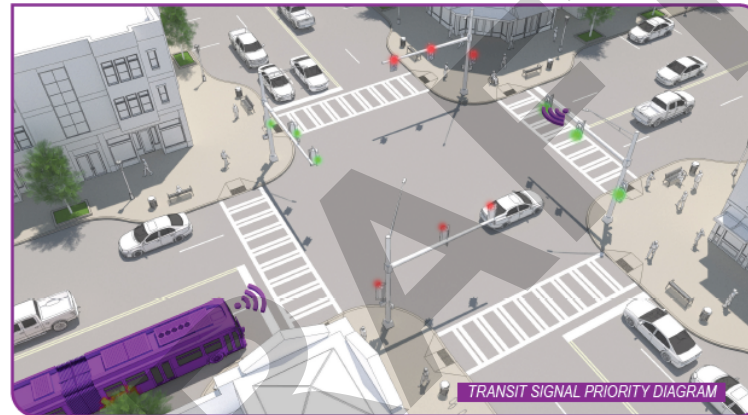
Recommendations

- Transit Signal Priority
- Station WiFi
- Station Communications
- Station Security
- Fare Collection Technology

GUIDEWAY TECHNOLOGY

TRANSIT SIGNAL PRIORITY

» Transit signal priority (TSP) is a technology that allows the traffic signal and the transit vehicle to communicate through sensors. These sensors can extend the green phase or truncate the red phase of the signal cycle.



TRANSIT SIGNAL PRIORITY DIAGRAM

SIGNAL TREATMENT	LANE TYPES	STOP TYPES
Green Phase Extension	Dedicated Running Way, Exclusive Busway, Mixed Traffic	Farside, Offline, or Inline
Green Phase Reallocation	Dedicated Running Way, Exclusive Busway, Mixed Traffic	Farside, Offline, or Inline
Red Phase Truncation	Dedicated Running Way, Exclusive Busway, Right-turn BAT Lane, Queue Jump Lane	Nearside, Farside, Offline, or Inline
Upstream Green Phase Truncation	Mixed Travel	Nearside, Farside, or Offline
Phase Insertion/Phase Sequence Change	Dedicated Running Way, Exclusive Busway	Any Station Type
Phase Reserve	Dedicated Running Way, Exclusive Busway, Mixed Traffic	Any Station Type

// NACTO Transit Street Design Guide, pg. 154

- » Evaluate traffic operations and implement TSP where possible, especially for signals at intersections with risk of delays to improve on-time performance and expedite running times.
- » Coordinate with LaDOTD on standards for signal prioritization.
- » Additional transit signal priority for BRT or an advanced connected vehicle approach should be considered to give BRT a higher priority where it overlaps with other bus service.
- » Traffic signals may require upgrades to accept TSP technology.

TECHNOLOGY

TECHNOLOGY



TRANSIT SIGNAL PRIORITY DIAGRAM

- » Coordinate TSP requirements with vehicle procurement to ensure compatibility.
- » Special consideration should be given to intersections where BRT routes intersect as TSP may increase wait times on cross streets.
- » In portions of the corridor where TSP cannot be implemented, progressive signal timing (PST), a method of signal timing where signals are timed to support travel speeds of transit vehicles (between 15-20 mph), is acceptable and should be applied to BRT corridors.
- » When an BRT vehicle operates on a single corridor, progressive signal timing can be utilized to improve the travel time between stations. However, when the bus stops, it gets out of the progression and then must wait for the next signal progression to begin, thus causing a significant delay.
- » Investigate future advanced connected vehicle technologies to give BRT additional priority in a corridor.

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VEHICLES

Recommendations

- Vehicle Specifications
- Vehicle Operations

VEHICLES

VEHICLE SPECIFICATIONS

- » Real-time arrival technology can improve passenger satisfaction, help reduce wait times, and increase ridership.



- » Select a vehicle size to provide sufficient capacity to accommodate anticipated ridership. Typical BRT lines use 40' low-floor buses or 60' articulated buses.
- » Evaluate vehicle propulsion options to determine diesel, diesel hybrid, compressed natural gas, and electric for the BRT fleet.
- » Coordinate specifications with the service identity/branding and desired passenger amenities such as Wi-Fi, video displays, USB charging, and bicycle storage.
- » Comply with Buy America and Altoona requirements when using federal funding to procure vehicles.
- » Plan ahead for procurement timelines since vehicles are a long long item and often take 18+ months to deliver from the time an order is placed.

VEHICLES

VEHICLE OPERATIONS

- » BRT vehicle considerations impact service operations, facility infrastructure, and platform and guideway decisions.



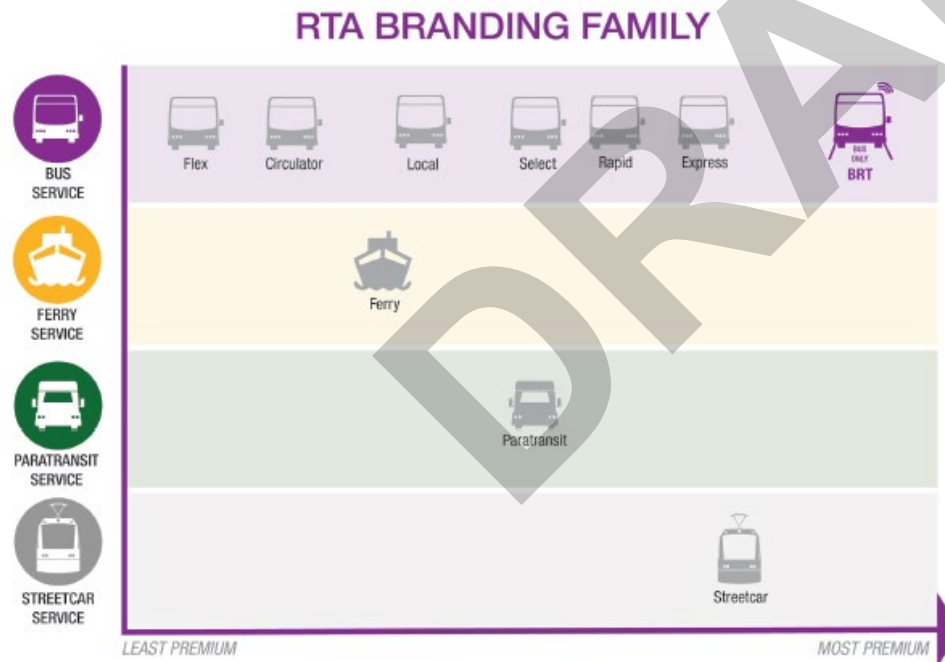
- » When evaluating propulsion options, include required infrastructure for fueling/charging at the vehicle maintenance facility and transfer/transit facilities.
- » Maintain flexibility of the BRT fleet for maximum interoperability with other BRT lines.
- » Determine if left door boarding is needed based on guideway and station design decisions and consider impacts to the BRT fleet and operations.
- » Vehicle sizes must align with decisions on platform length and layout.
- » Prior to launching a BRT line, conduct vehicle testing and driver training. In particular, if utilizing level-boarding platforms, conduct driver training at a test level-boarding curb to maintain proper ADA tolerances for vehicle loading.

RTA BRT DESIGN STANDARDS | 99



Recommendations

- System
- Vehicle
- Station



BRANDING

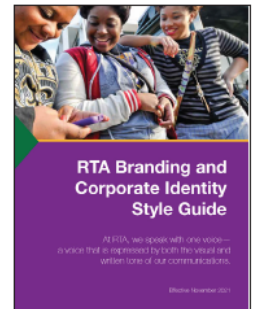
IMPLEMENTATION

Early action should be taken in the marketing and advertising of the new rapid transit services in RTA's family of services. The following steps are recommended in the eventual roll-out of BRT service brand.

- » Arrange for uniquely identifiable, separate branding for all BRT assets and facilities.
- » All BRT facilities, assets, and marketing and education materials shall be branded with the selected BRT logos and other branding markers.

The development and adoption of a Strategic Branding and Marketing Plan is recommended, and can be incorporated into the RTA Branding and Corporate Identity Style Guide. The plan should detail the following branding topics:

- » Standards for size, color, and typical logo placement on all BRT assets
- » Standards for any associated graphics, tag lines, or other colors to accompany the identified logo
- » Digital Communication Content Guidelines



RTA Branding and Corporate Identity Style Guide

The rollout of the BRT brand should include a marketing campaign with a strong emphasis on educating users on the premium amenities of the services and how to utilize the services since these will be new modes of transit in the New Orleans region.

The marketing campaign should emphasize and provide guidance on using the following elements of BRT service, as applicable to a specific corridor:

- » All signage users will encounter
- » Safety and security guidance for features new to the system
- » Guidance on encountering the transit guideway
- » How to use a BAT lane and/or a queue jump lane
- » Identifying the difference between typical bus stops and BRT stations
- » How to use real-time information screens
- » Utilizing off-board fare collection at the station and on the vehicle
- » Identifying the difference between BRT, and local bus service vehicles
- » Boarding and alighting (level boarding access)

TRANSIT AGENCY BRANDING & MARKETING PLANS

- » Roaring Fork Transportation Authority implemented an Identity Guideline document for the entire transit agency including their rapid transit mode, VelociRFTA. This document outlined where, when, and how to use each logo type across the RFTA system.
- » Santa Barbara MTD implemented a marketing & communications plan outlining the agency's marketing goals and strategies as well as how to communicate the service offerings.

What questions or suggestions do you have for the RTA BRT Standards?



Operations & Service Goals



BRT Guideway Alternatives



Station Design Components



Technology



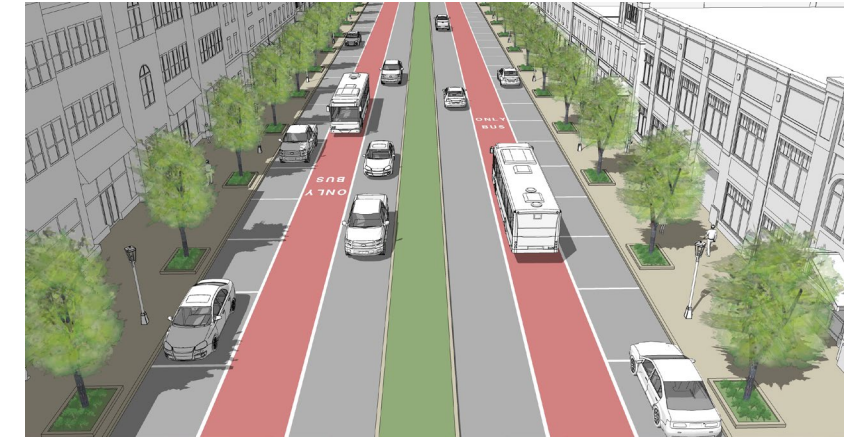
Vehicle Standards



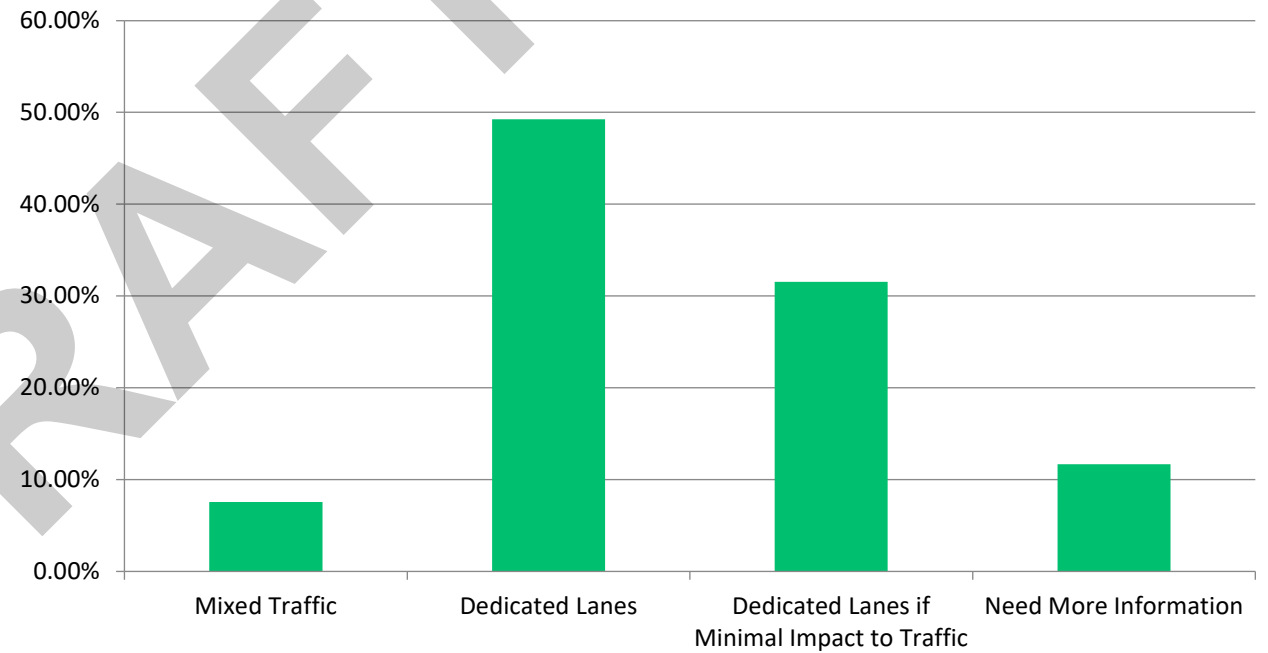
Branding

Variations of Dedicated Lanes

Curb-running BRT



Center-running BRT



DEFINING TRANSIT PRIORITY

What aspect of the current right-of-way would you support modifying or eliminating for fast and reliable transit?

UTILIZATION OF THE NEUTRAL GROUND, WIDE



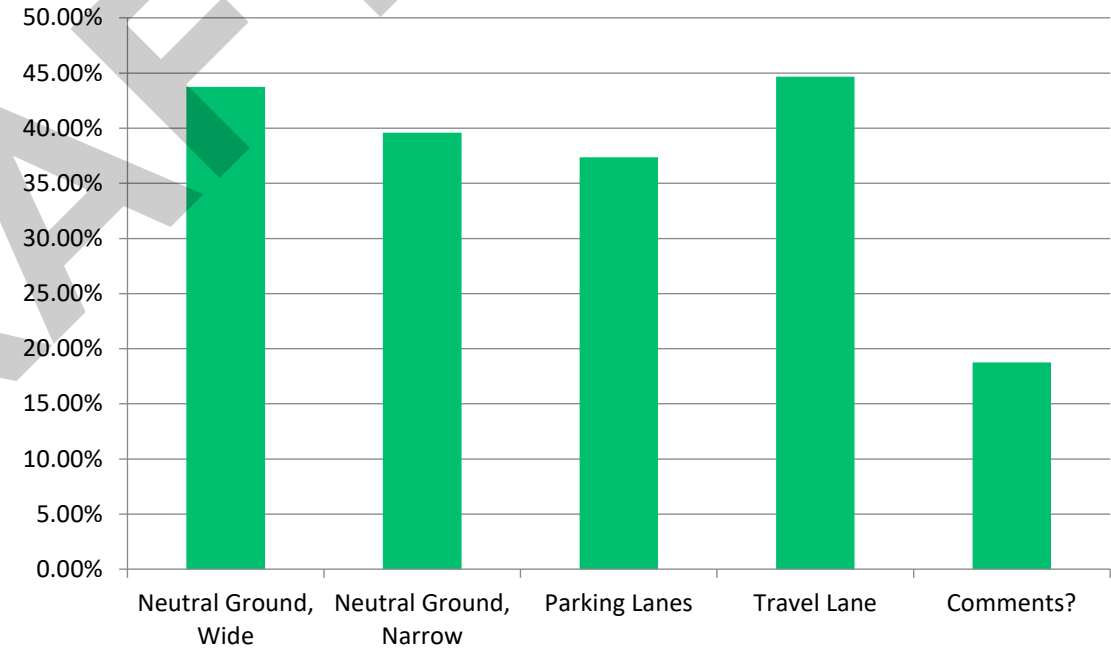
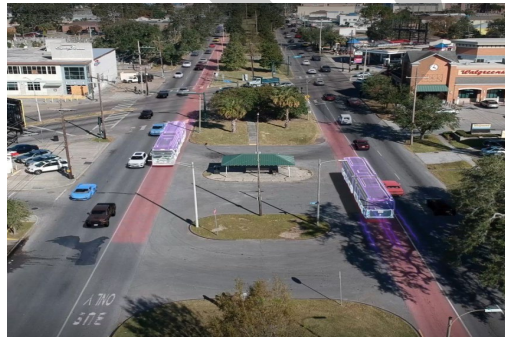
UTILIZATION OF THE NEUTRAL GROUND, NARROW



UTILIZATION OF PARKING

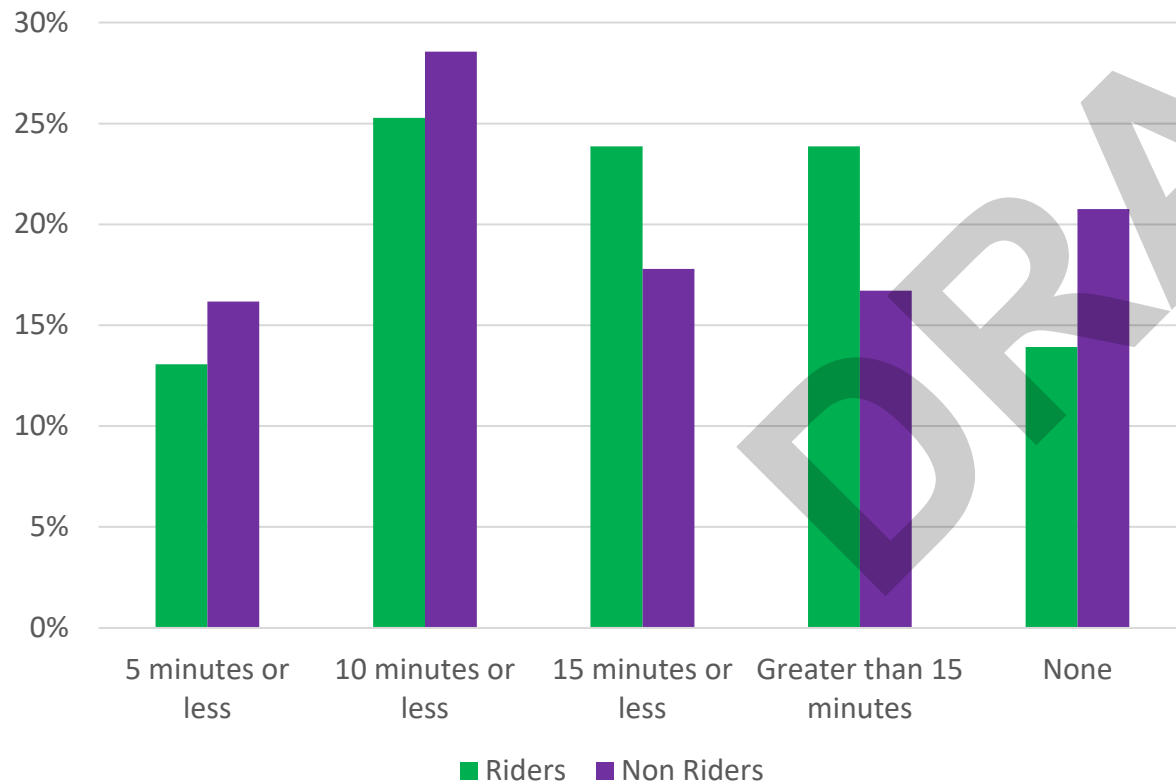


CONVERSION OF A TRAVEL LANE



DEFINING TRANSIT PRIORITY

How much ADDITIONAL travel time while driving alone during rush hour would be acceptable to allow for equal or better transit commute between Downtown and New Orleans East



Driving Alone

30-60m | 40m avg

BRT Mixed Traffic

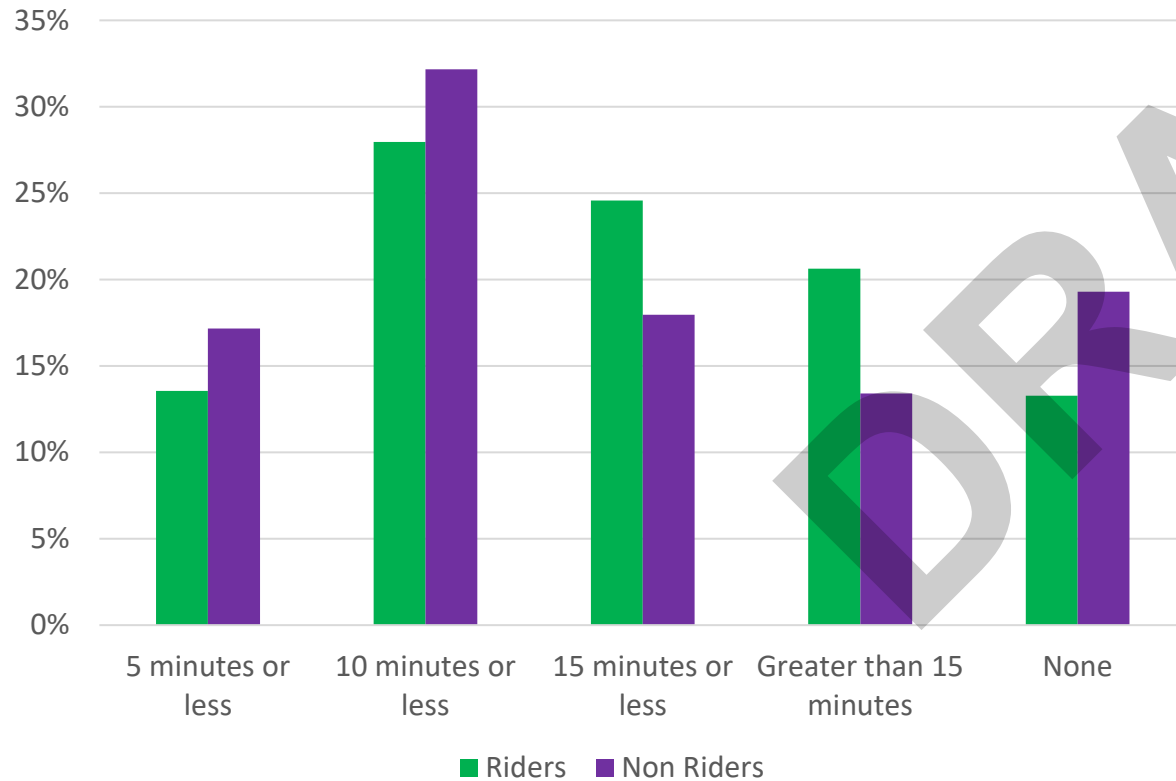
40-90m | 50m avg

BRT Dedicated Lanes

45m

DEFINING TRANSIT PRIORITY

How much ADDITIONAL travel time while driving alone during rush hour would be acceptable to allow for equal or better transit commute between Downtown and the West Bank?



Driving Alone:

12-26m | 19m avg

BRT Mixed Traffic

14-28m | 21m avg

BRT Dedicated Lanes

10m

BRT GOALS



Connect to opportunities through fast and efficient service.



Provide equitable transportation choice to meet communities needs.



Promote investment in neighborhoods.



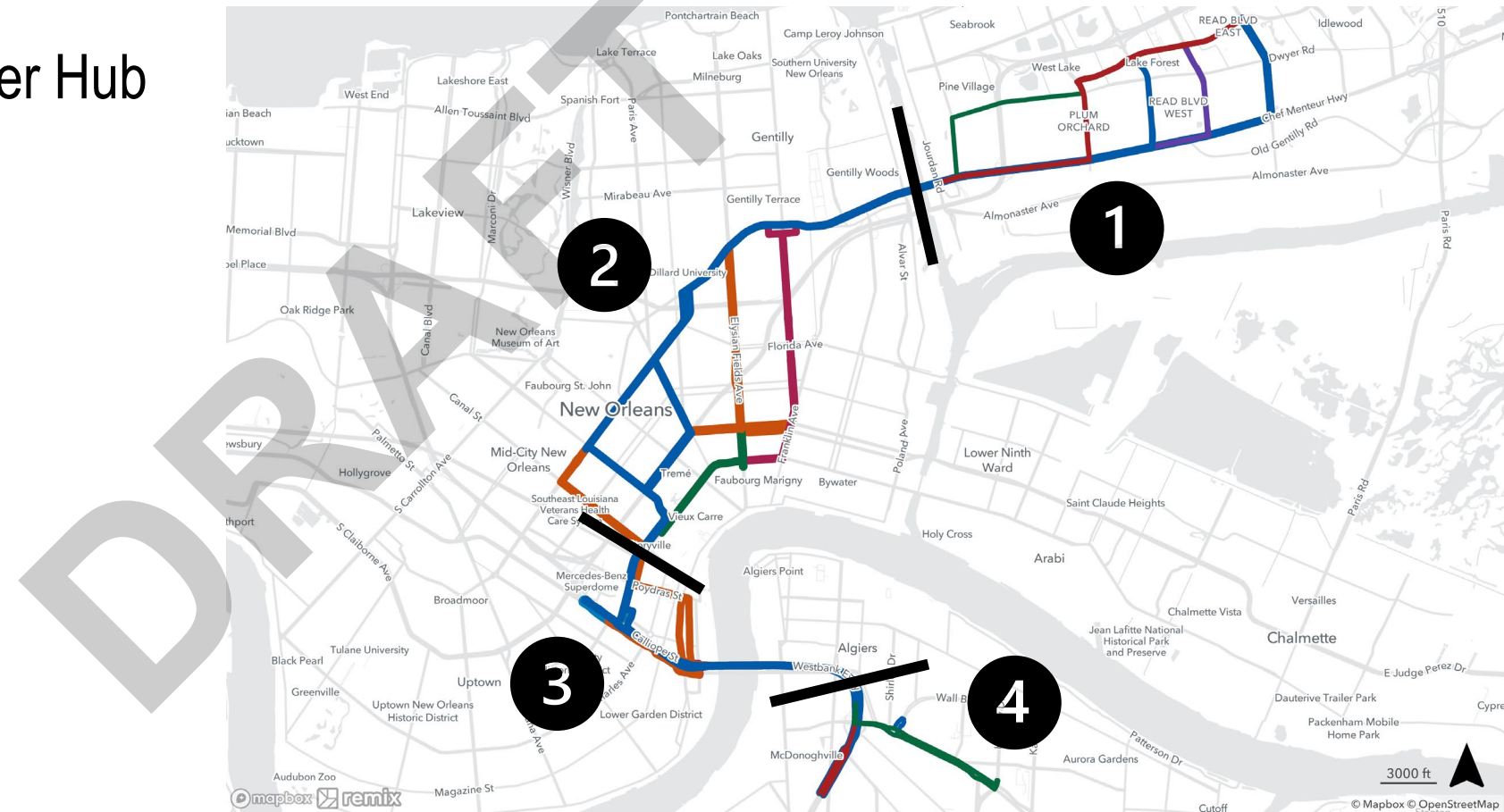
Support a sustainable and healthy community.



DEFINING THE ROUTE

KEY NODES

- ★ New Orleans East Transfer Hub
- ★ Danziger Bridge
- ★ Gentilly Transfer Hub
- ★ Downtown Transit Center
- ★ Crescent City Connection
- Willy Terminal (Gretna)
- Algiers Park-n-Ride



DEFINING THE ROUTE

Goals	Objectives	Criteria	Measure	Metric	Methodology
Customer Experience	Provide reliable, frequent service	Footprint	Providing High-Quality Transit Stations	Width of ROW tells us whether the existing condition would require full or partial appropriation of ROW to transit, or grade-separation to introduce two-way dedicated pathway and include station(s) (Note: directional stations may be staggered to fit if necessary)	Utilize City of New Orleans Parcel data to approximate ROW, RTA to provide centerline file. JIDROW divided by 12, areas identified as supporting 5 or more lanes were flagged as fixed guideway.
		System Connectivity	Connections to existing transit service	Count of connecting routes utilizing New Links (Exclude Downtown Transit Center)	Count of existing routes with stops that intersect the route alignment. Excludes downtown.
	Accessibility to Customer Base	Transit User Experience	Capture rate of existing riders	Riders at other stops located within one-half mile of the route alignment	Sum of existing ridership based on pre-covid 2019 data.

DEFINING THE ROUTE

Goals	Objectives	Criteria	Measure	Metric	Methodology
Land Use Policy	Support compact & mixed-use development	Planned Development	Planned Densities within 1/4 mile of route alignments	Population density within alignment area	Utilize NORPC future (2044) demographic data.
			Planned Densities within 1/4 mile of route alignments	Employment density within alignment area	Utilize NORPC future (2044) demographic data.
	Encourage compact & connected development by increasing service to and from activity & employment centers	Existing Density	Residential Density within 1/4 mile of alignment	Population per square mile near alignment	Utilize 2015-2019 American Community Survey (ACS) 5-year estimates
			Employment Density within 1/4 mile of alignments	Employment per square mile near alignment	Utilize 2019 Census LEHD Origin-Destination Employment Statistics
		Development Patterns	Development Trends	Building Permits within 1/4 mile of alignment	City of New Orleans Building Permit Data
		Increasing service connections	Connection between Planned and Existing Development	Direct connection between new development and existing density	
		Connectivity to Trip Generators	Connection to key activity centers	Count of connection to key activity centers (RTA to provide essential service layer) 1/4 mile within route	Essential Service points

DEFINING THE ROUTE

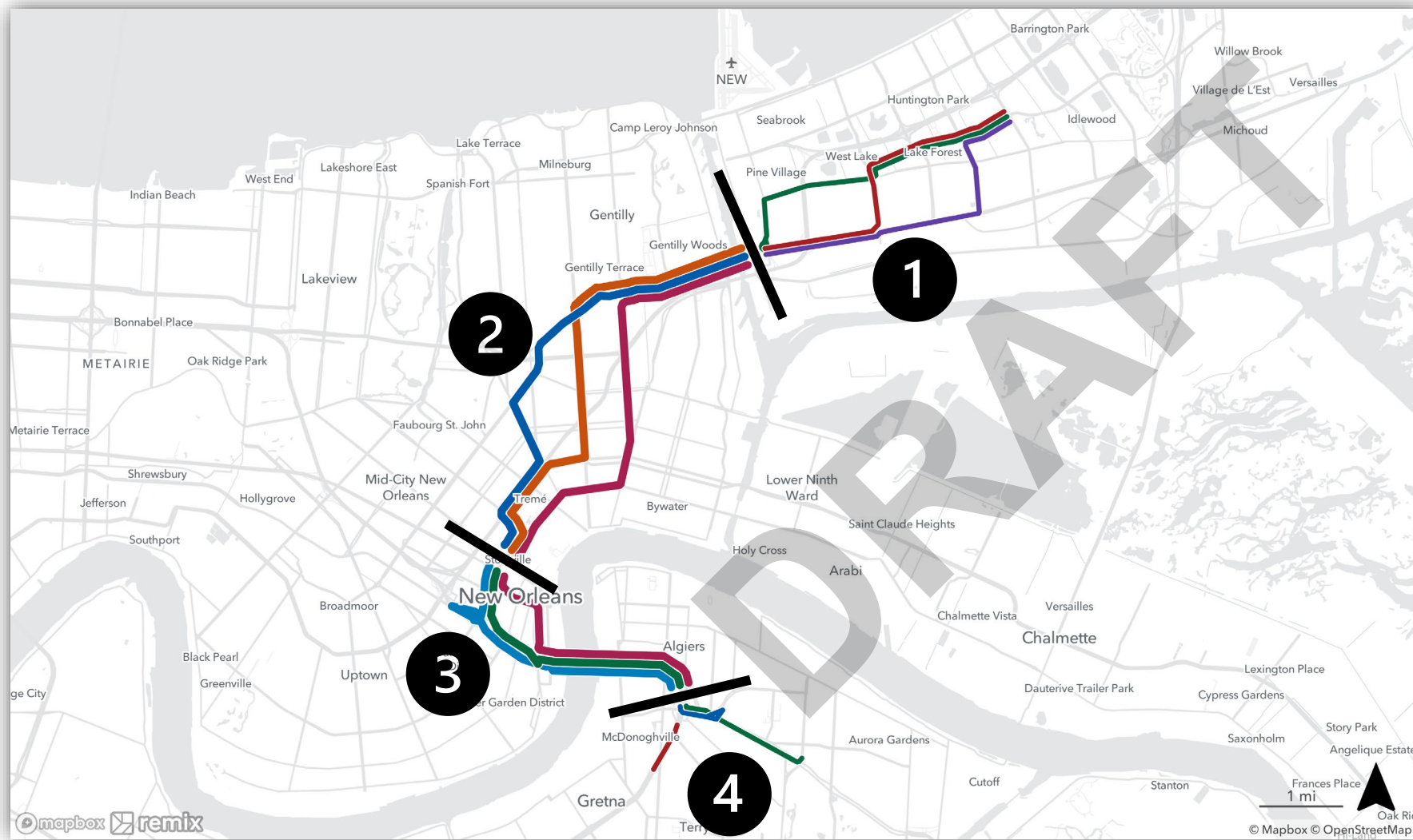
Goals	Objectives	Criteria	Measure	Metric	Methodology
Implementation & Operations	Define and select transit projects that are cost-effective	Ridership	BRT ridership totals	STOPS ridership results	STOPS
		Productivity	BRT only trips per revenue hour	STOPS ridership results and conceptual operating plan revenue hours	STOPS
		Potential Capital Cost Implications	New or Complex Infrastructure needs	Cost Estimates - Standard, High or Very High cost implications (related to typical roadway work)	Assume \$20 Million a mile for portion of route that ROW is sufficient/\$5 million a mile for BRT Lite treatments
	Choose transit projects that have support from the public and government agencies	ROW Conditions	Supportiveness of existing conditions for project development for transit priority (guideway, TSP, queue jumps)	ROW Width	Utilize City of New Orleans Parcel data to approximate ROW
		Potential Environmental Impacts	Prevalance of Environmental Constraints	# of potential environmental constraints	property acquisition, visual impacts, section 4(f) resource impacts, construction impacts and social justice impacts

DEFINING THE ROUTE

Goals	Criteria	Measure	Metric	Methodology	
Sustainability		Inbound	# of minutes to end of segment	Range of travel time reported by Google. Ex: 35min - 70min = 35minutes of variability	
		Outbound	# of minutes to end of segment	Range of travel time reported by Google. Ex: 35min - 70min = 35minutes of variability	
		Inbound	# of minutes to end of segment	Congested speed, plus dwell (15 sec), Stop spacing of 1/2 mile plus accel/decel. (Google Travel Time as base)	
		Outbound	# of minutes to end of segment	Congested speed, plus dwell (15 sec), Stop spacing of 1/2 mile plus accel/decel. (Google Travel Time as base)	
		Inbound	# of minutes to end of segment	Free flow speed, plus dwell (15 sec), Stop spacing of 1/2 mile.	
		Outbound	# of minutes to end of segment	Free flow speed, plus dwell (15 sec), Stop spacing of 1/2 mile.	
		Inbound	# of minutes to end of segment	Improvement over mixed traffic	
		Outbound	# of minutes to end of segment	Improvement over mixed traffic	
	Transportation Network benefits		Increase of system-wide transit trips	Total system ridership as a result of BRT alternative	STOPS
			Reduce VMT	Reduction in PMT as a result of the BRT	STOPS

Tier 1 Routes

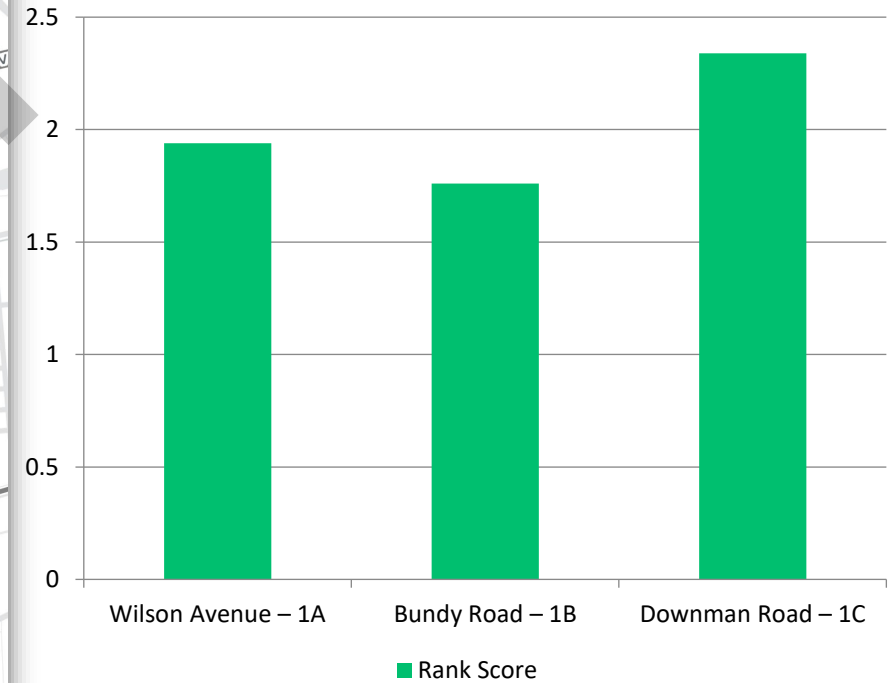
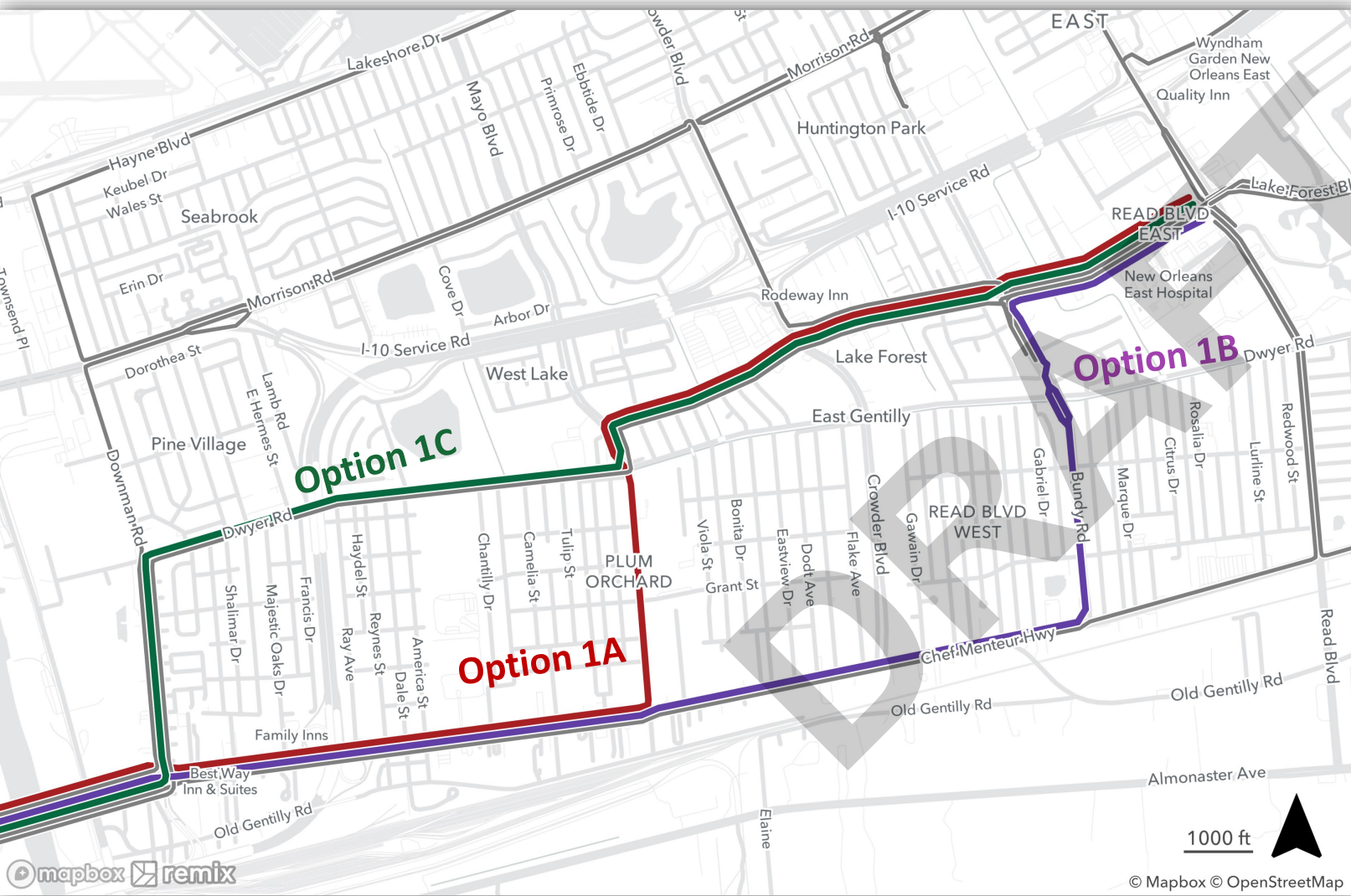
DEFINING THE ROUTE



- 3 alternatives per segment
 - Segments 1, 3, & 4 identified through qualitative analysis
- Segment 2
 - Claiborne/Elysian Fields & Rampart/Franklin selected based on project goals
 - Seek to promote redevelopment and conformity with existing plans

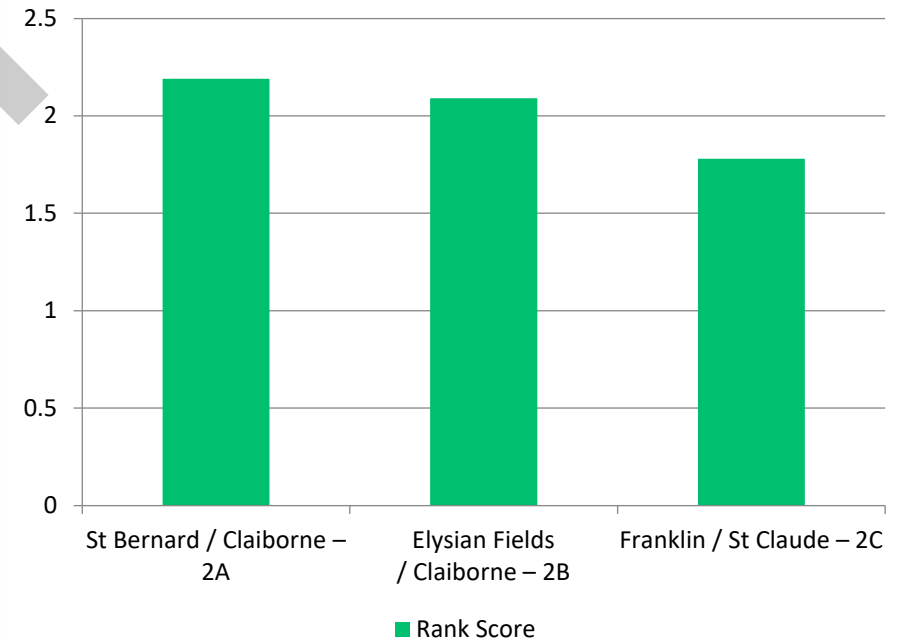
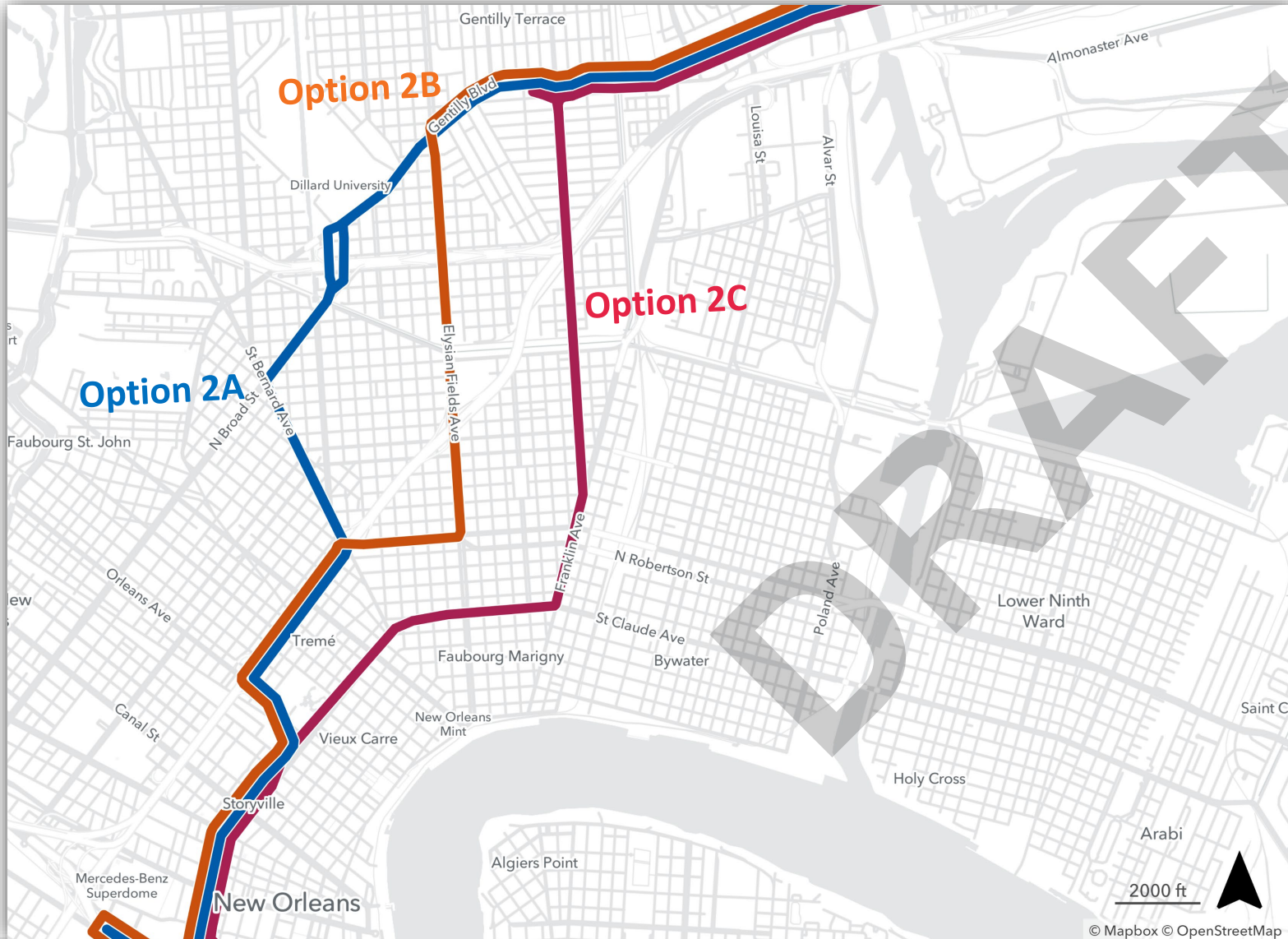
Potential BRT Routes – Segment 1

DEFINING THE ROUTE



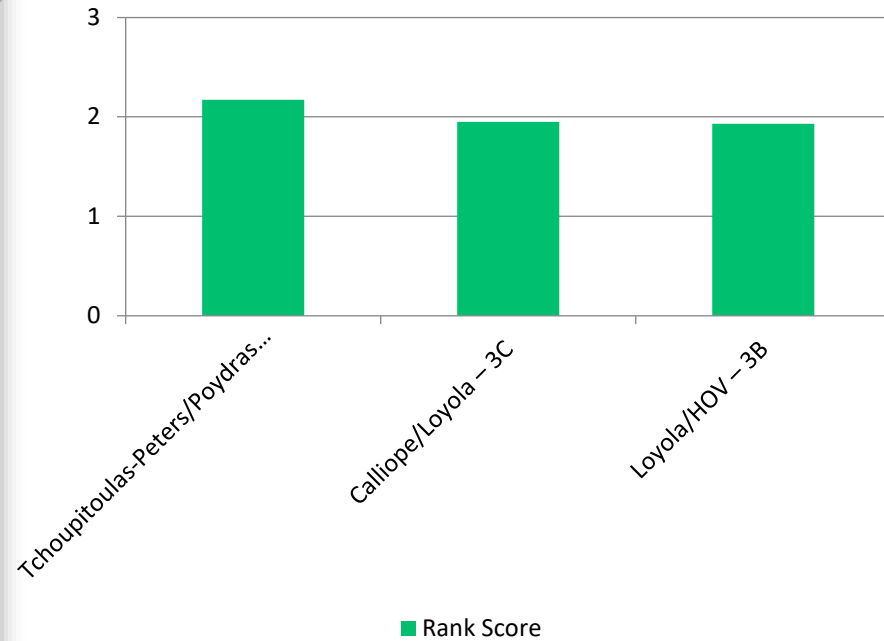
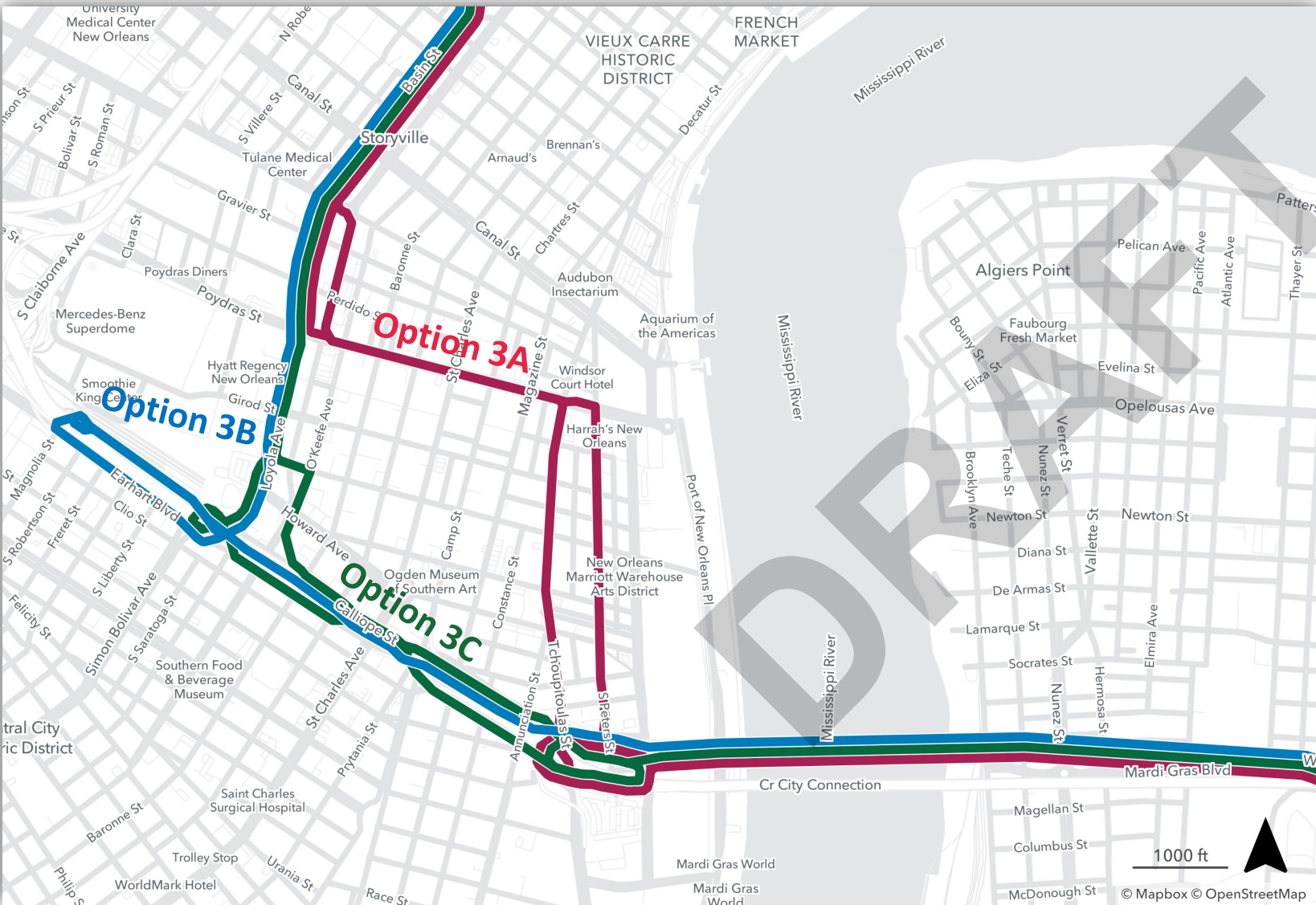
Potential Routes – Segment 2

DEFINING THE ROUTE



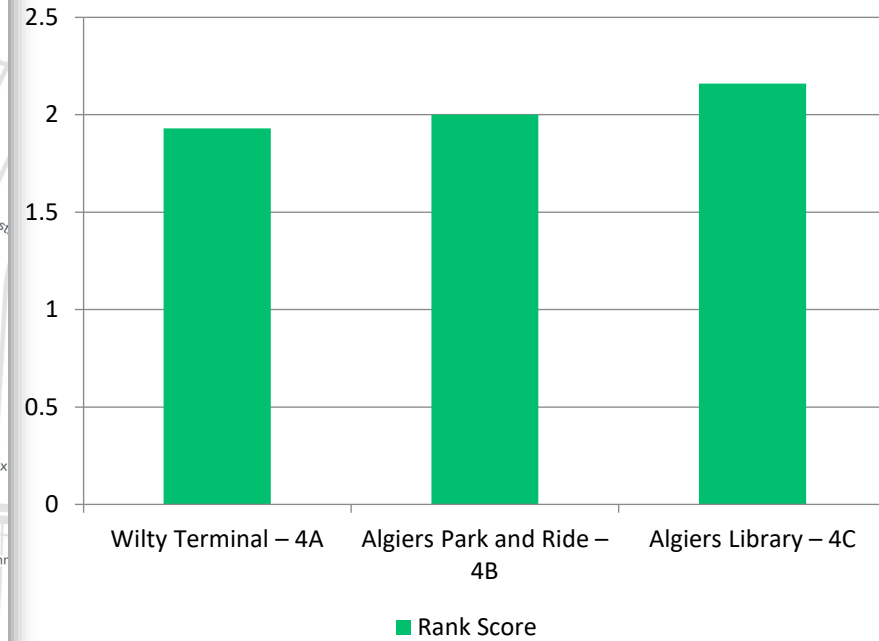
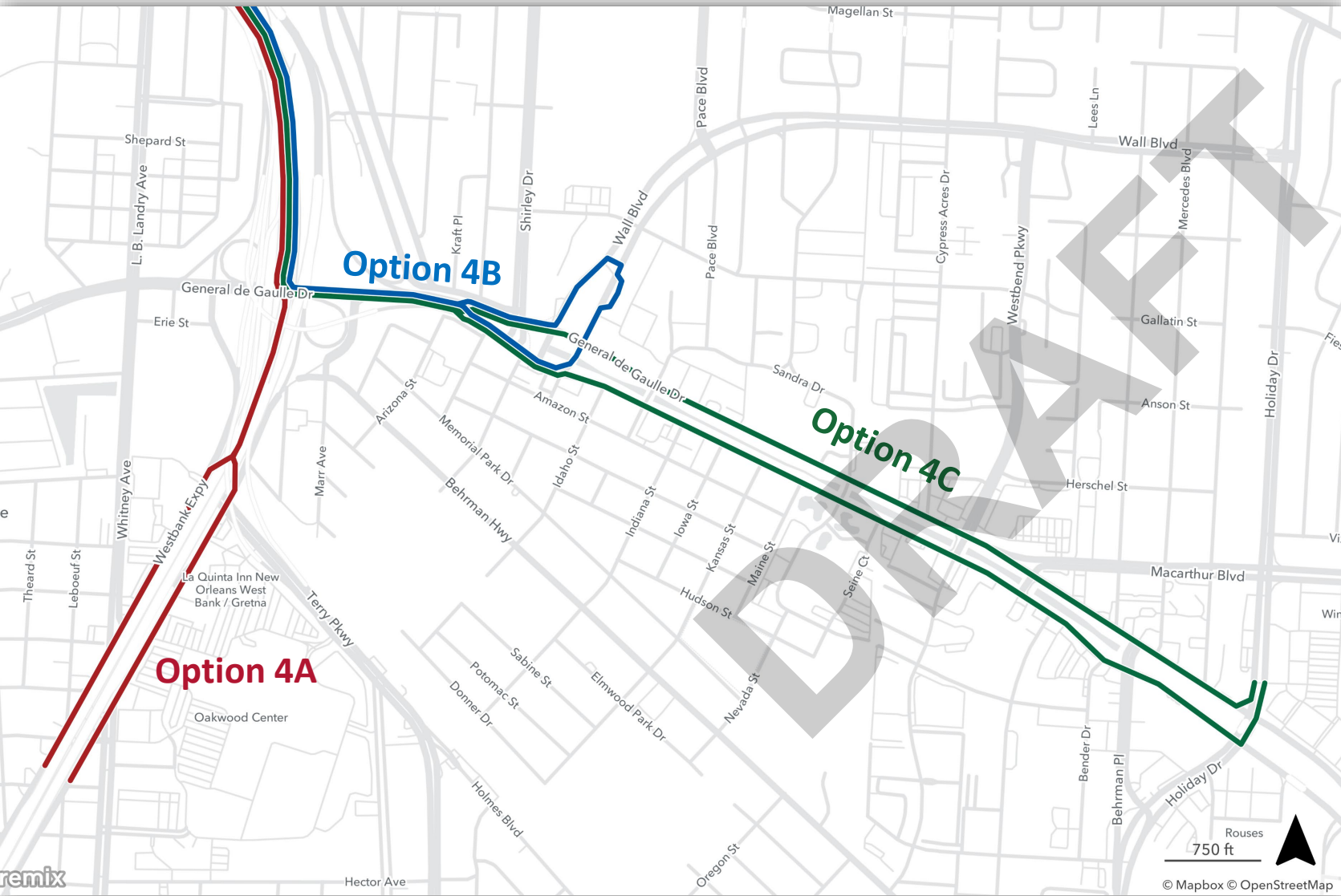
Potential Routes – Segment 3

DEFINING THE ROUTE



Potential Routes – Segment 4

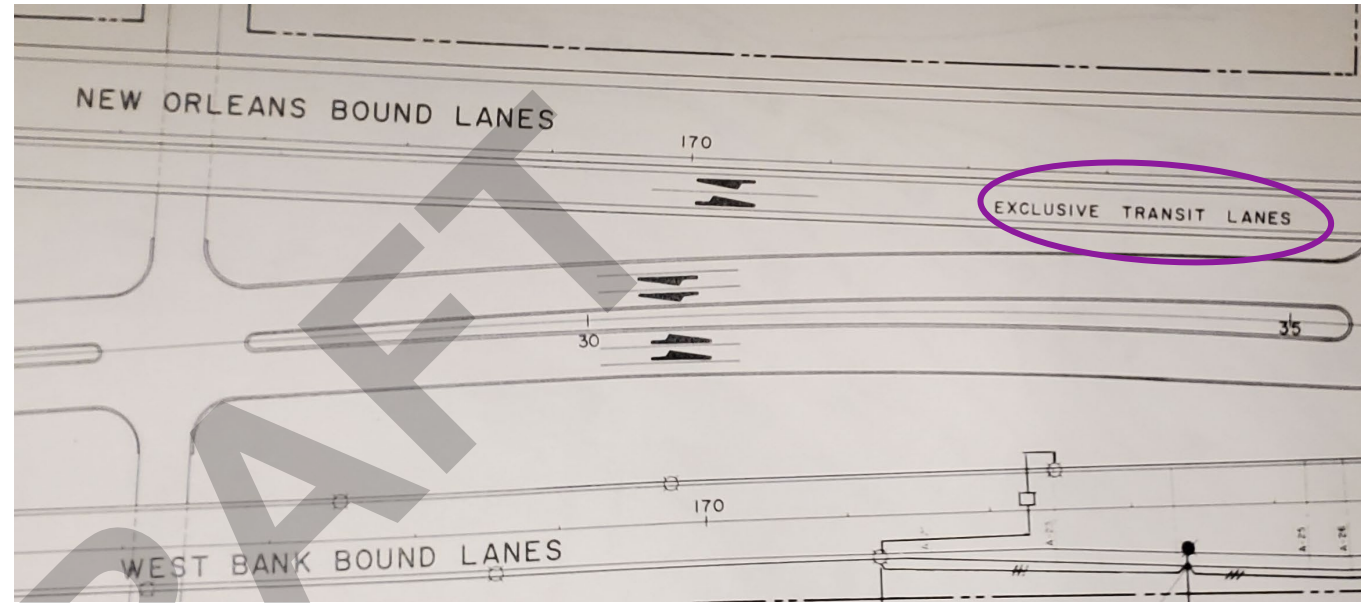
DEFINING THE ROUTE



History of Dedicated Lanes

US 90 Bridge HOV

- Current configuration no meets today's travel patterns
- Original function was 2-way with transit use
- Restoring HOV lane to original configuration is grant compliant
- Key to BRT success and connection to West Bank



Preliminary Traffic Assessment

US 90 Crescent City Bridge Traffic Operations (not including HOV / managed lanes)

	With HOV Lanes		Without HOV Lanes (HOV Volume x 1)		Without HOV Lanes (HOV Volume x 2)		3% Shift to Transit	
	WB Bridge (AM/Inbound) *	EB Bridge (PM/Outbound)	WB Bridge (AM/Inbound) *	EB Bridge (PM/Outbound)	WB Bridge (AM/Inbound) *	EB Bridge (PM/Outbound)	WB Bridge (AM/Inbound) *	EB Bridge (PM/Outbound)
LOS	D	D	E	E	F	E	D	D
Density (pc/mi/ln)	30.2	30.9	36.2	35.6	45.0	41.8	34.7	34.0
Average Modeled Speed (mph)**	57.0	60.1	55.3	57.5	50.4	53.6	55.9	58.4
Average Field Noted Speed (mph)	33.8	53.9						
General Purpose Lanes Volume	5657	6141	6671	6816	7686	7490	6471	6611
Person Throughput	5657	6141	7686	7490	7686	7490	7455	7266
* Congestion west of the bridge may impact bridge operation								
**Free-Flow Speeds identified to be 57.0 mph for WB and 62.0 mph for EB								

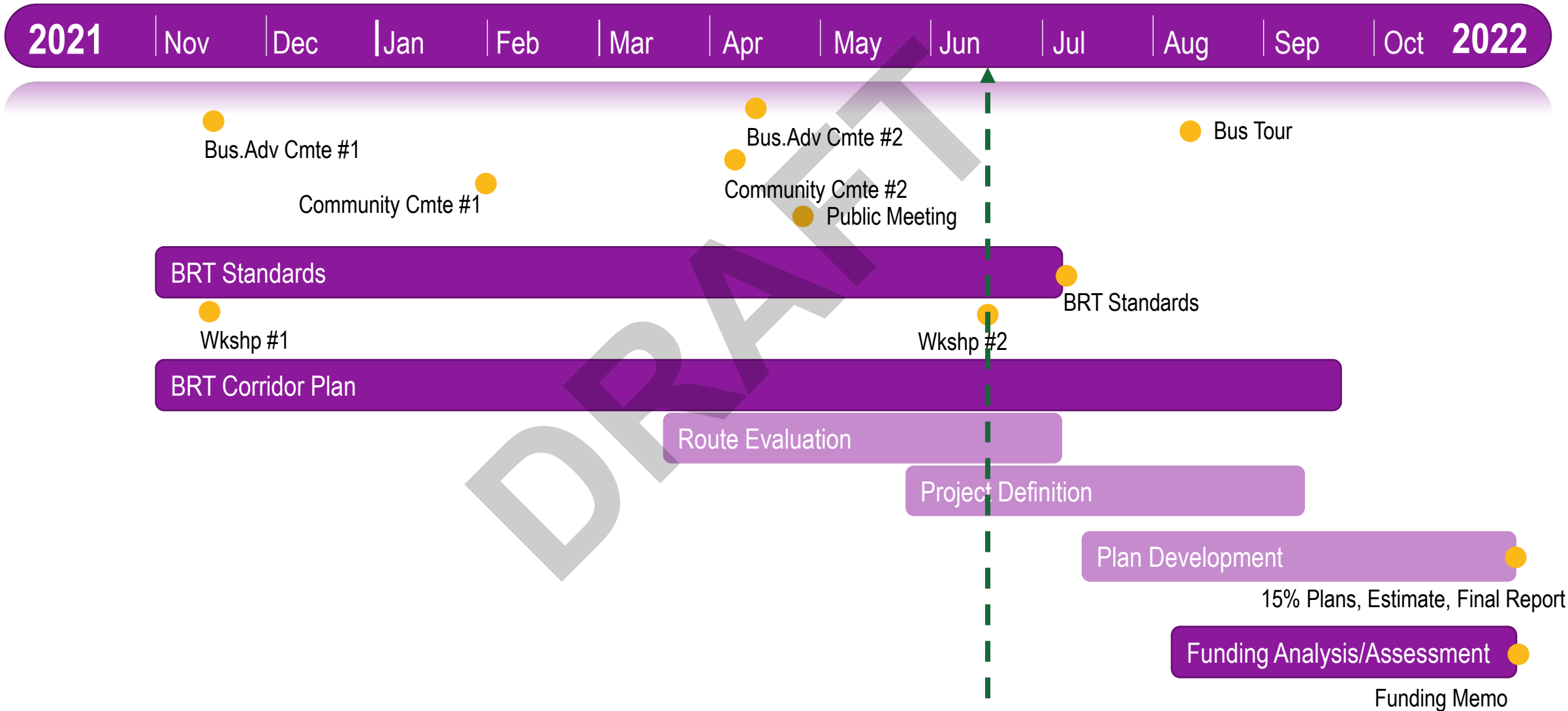
- AM: Peak 15 minutes between 6:00 AM and 7:00 AM
- PM: Peak 15 minutes between 4:00 PM and 5:00 PM
- Business US 90 East is WB through the study area, and is defined above as "WB Bridge (AM/Inbound)"
- Business US 90 West is EB through the study area, and is defined above as "EB Bridge (PM/Outbound)"

Tier 2 Criteria

- Current Demographics
- Future Demographics
- Future Land use
- Ridership Potential
- Travel Time
- Connection to Essential Services
- Capital Cost
- ROW impacts
- ROW availability
- Funding Feasibility

What suggestions do you have for the final evaluation criteria?

PROJECT SCHEDULE



SEND US YOUR COMMENTS:

BRT Feasibility Study

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Planning***

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