

# WELCOME TO GET ON BOARD BRT

## WHAT IS BRT?

A **comfortable, reliable, new** transit option for Montgomery County.

**BRT** is a reliable, new transit option coming to Montgomery County. BRT, or Bus Rapid Transit, is a bus-based rapid transit system with features that improve reliability and capacity, so you can get where you need to go quickly.



**Rapid:** Features like limited stops, off-board fare collection, and level-boarding through all doors make for a faster ride.



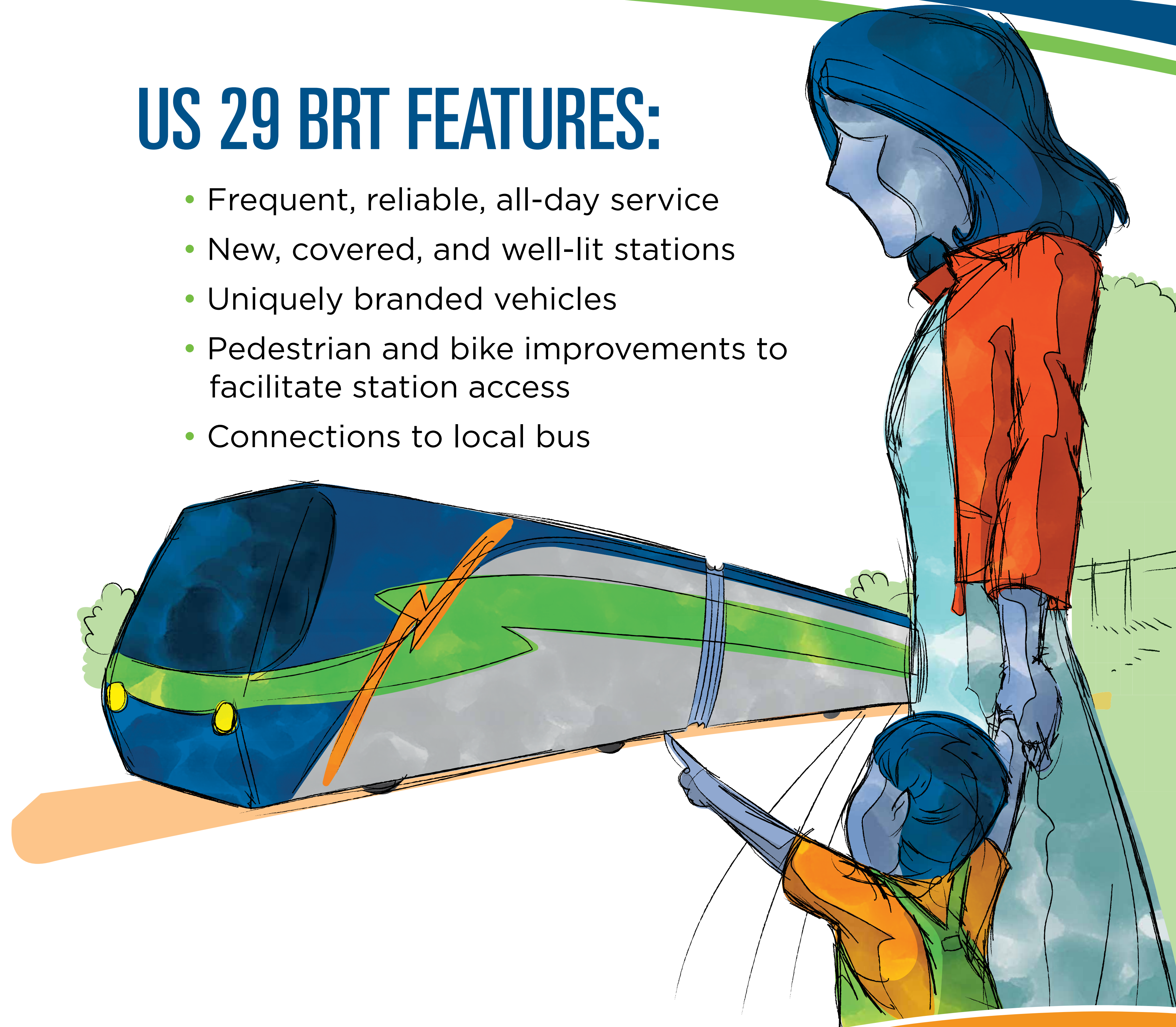
**Reliable:** You'll never wait long and you'll see real-time travel information on message boards at the station so you know exactly when the next BRT arrives.



**Relaxing:** Avoid the stress associated with driving: use Wi-Fi on-board to be more productive, read a book, or simply use the time to rest.

## US 29 BRT FEATURES:

- Frequent, reliable, all-day service
- New, covered, and well-lit stations
- Uniquely branded vehicles
- Pedestrian and bike improvements to facilitate station access
- Connections to local bus





# BRT ON US 29

MCDOT is designing and constructing a BRT service along US 29 to meet the needs of residents and businesses along this busy route.

## SERVICE PATTERNS

- The service will travel 13.5 miles from the Silver Spring Transit Center to Burtonsville
- BRT will operate two service patterns: one from Burtonsville to Silver Spring, and the other from Briggs Chaney to Silver Spring

## USE OF ROADWAY

- BRT will use existing bus-on-shoulder lanes on US 29 in the northern section of the corridor (north of Tech Road)
- BRT will travel with general traffic in the southern section of US 29 and along Lockwood Drive, Stewart Lane, Briggs Chaney Road, and Castle Boulevard

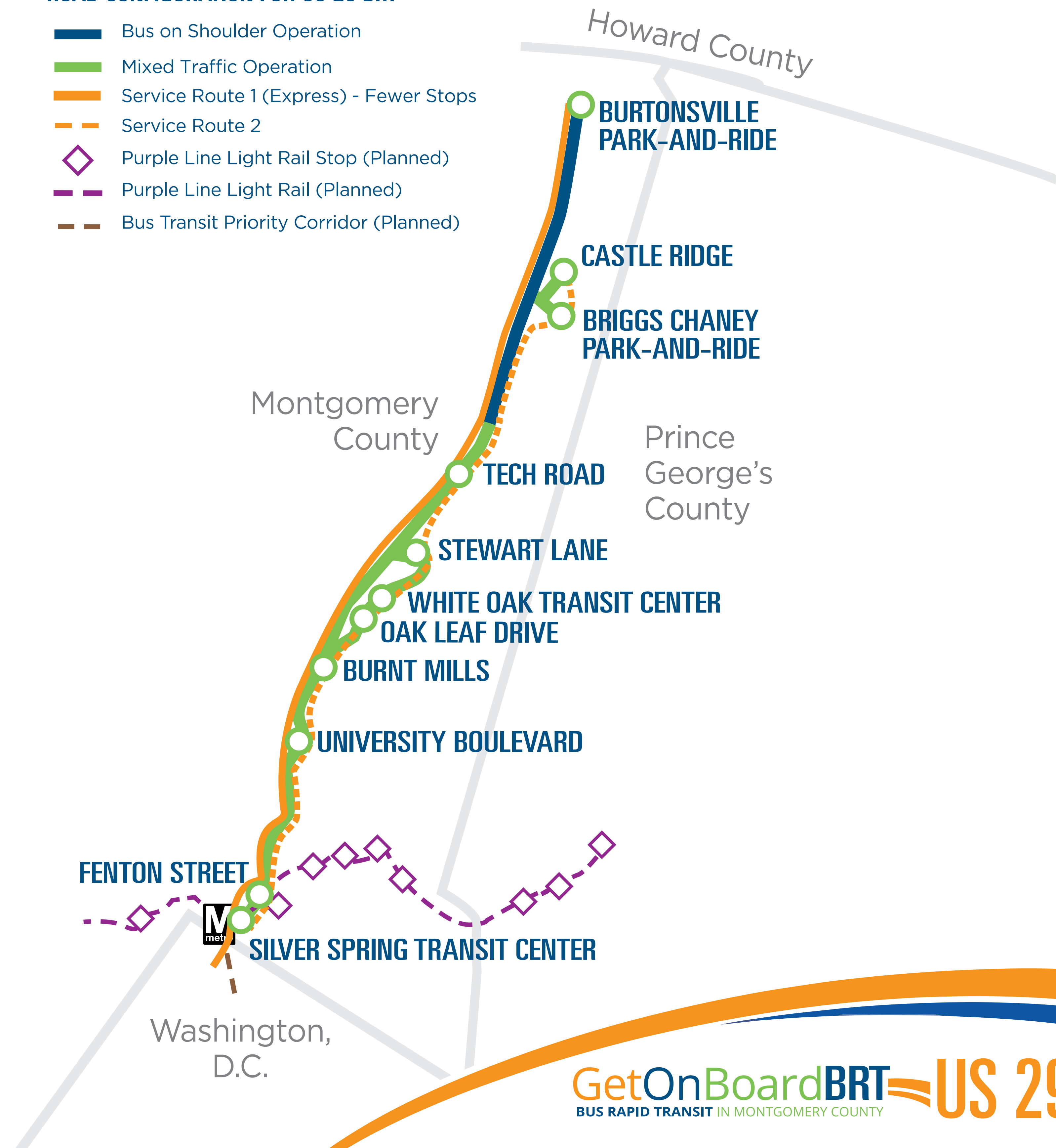
## SERVICE PLANS

- BRT will run every 7.5 minutes during the peak period (AM/PM rush hours) and every 15 minutes during the off-peak period\*
- The proposed span of service is from 6 am to midnight, 7 days a week\*
- The US 29 corridor includes local bus services that will supplement and connect to the high-frequency BRT network

*\*Service plans are preliminary and subject to change.*

### ROAD CONFIGURATION FOR US 29 BRT

- Bus on Shoulder Operation
- Mixed Traffic Operation
- Service Route 1 (Express) - Fewer Stops
- Service Route 2
- ◆ Purple Line Light Rail Stop (Planned)
- Purple Line Light Rail (Planned)
- Bus Transit Priority Corridor (Planned)



# PROJECT SCHEDULE AND BUDGET

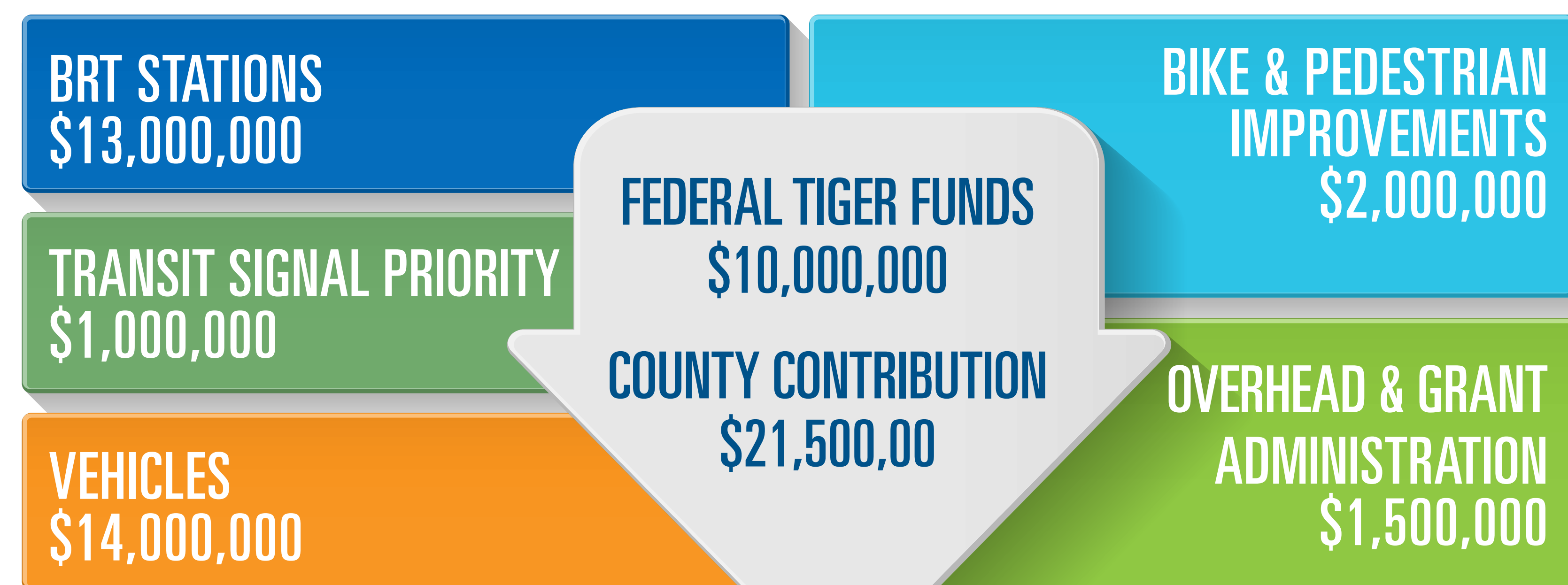
## PROJECT SCHEDULE

US 29 will be the first BRT line to open in the state of Maryland with service expected to begin in 2020.



## PROJECT BUDGET

The implementation cost for the US 29 BRT project is estimated to be \$31.5 million, \$10 million of which will be paid by the Federal government as part of a Transportation Infrastructure Generating Economic Recovery (TIGER) grant.



*Additional \$6.5M for planning and design.*

*Costs are estimated*

**TOTAL \$31,500,000**

# BRT FEATURES AT THE STATIONS

**LEVEL BOARDING** to allow for faster, easier boarding for riders with disabilities, bicycles or strollers



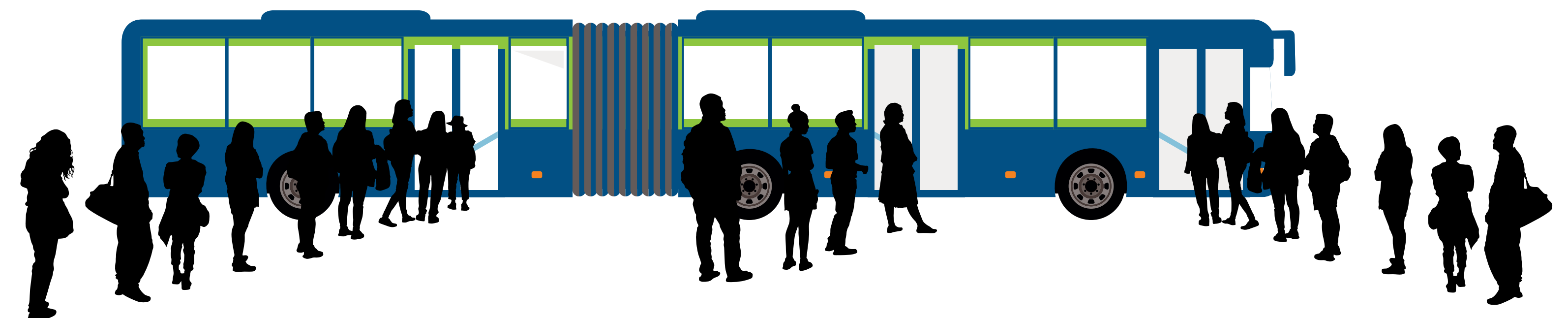
**OFF-BOARD FARE PAYMENT** at SmarTrip compatible machines, eliminating the need to wait for other riders to pay their fare



**REAL-TIME TRANSIT INFORMATION** to inform passengers when the next BRT vehicle is arriving



**ALL DOOR BOARDING** to eliminate the line at the front of the bus and speed up the boarding process



*For more information on BRT Stations, see the station design boards at Stop 3*



# BRT VEHICLES INCLUDE FEATURES TO IMPROVE YOUR RIDE

## ON-BOARD WI-FI AND USB

to catch up on the news or start your workday during your commute.

## ON-BOARD BICYCLE STORAGE

lets passengers easily transfer from bicycles to BRT and decreases travel time by eliminating external bike racks on the front of the bus.

## UNIQUE BRANDING

that make BRT systems look and feel different from local buses and helps riders easily tell the difference between the BRT service and the local service.

## TRANSIT SIGNAL PRIORITY (TSP)

- A system allowing BRT vehicles to communicate with traffic signals
- Green lights can be extended and red lights can be truncated by 5-10 seconds to help BRT clear intersections when certain conditions are met. This minimizes the amount of time that BRT stops for anything other than passengers
- TSP can be monitored in real time
- MCDOT is currently working with communities along US 29 to understand where TSP would be most effective along the corridor.



# BICYCLES AND BRT

The US 29 BRT project includes improvements to the bike network along US 29.

## BIKE AND PEDESTRIAN IMPROVEMENTS

- Improvements to bike and pedestrian access near BRT stations
- Bike racks at some BRT stations
- On-board bicycle storage
- Level boarding to help easily transport bicycles onto the BRT
- 10 new Capital Bikeshare docks along the corridor

## ABOUT CAPITAL BIKESHARE

- Designed for point-to-point short trips of under 30 minutes
- 70 stations are in operation in Montgomery County with more coming soon!
- 10 new Capital Bikeshare Stations serving US 29 corridor will be funded by the project's federal TIGER Grant





# BENEFITS



## TRAVEL TIME SAVINGS:

The more efficient operation of BRT on US 29 is expected to result in a 22-35% corridor travel time savings over current local bus service.



## ACCESSIBILITY:

US 29 BRT will increase regional connections and access to a fast-growing jobs corridor, and will improve transit access and provide upward mobility to transit-dependent populations along the corridor.



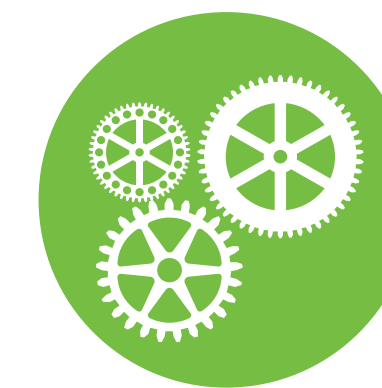
## ECONOMIC BENEFITS:

The US 29 BRT project is estimated to result in \$269-520 million of economic net benefit. Development of the White Oak Science Gateway will benefit substantially from the presence of high quality transit service such as the US 29 BRT.



## ATTRACTING NEW RIDERS AND PROVIDING BETTER SERVICE FOR EXISTING RIDERS:

US 29 BRT is projected to have 13,000 daily boardings in 2020 and 20,000 daily boardings in 2040. This number of daily boardings exceeds the ridership for most BRT lines in the United States.



## EFFICIENCY:

The US 29 BRT project team is examining how efficiencies could be implemented on all transit routes (local bus, limited stop bus, and future “Flash” BRT service) operating along the corridor through a review of service operations.

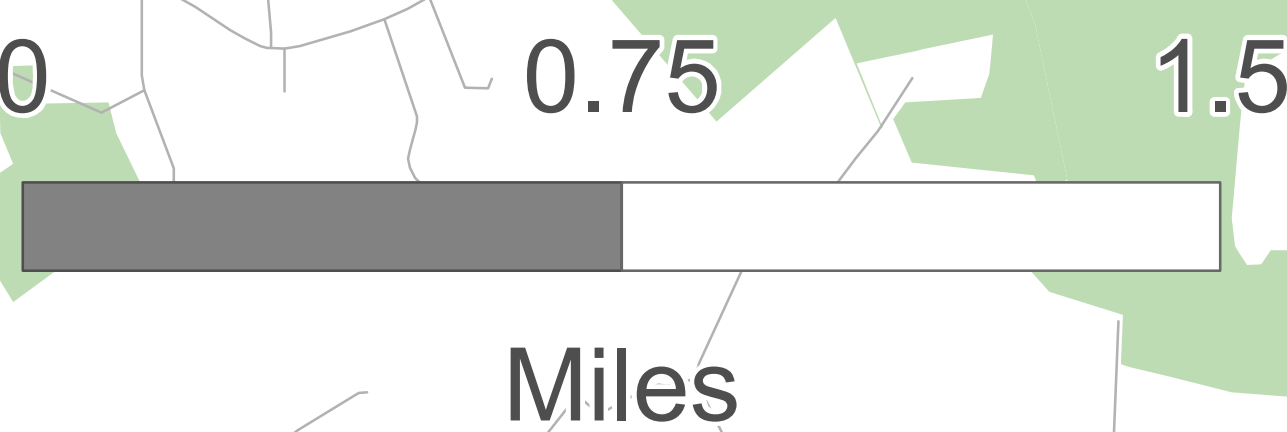
Currently the US 29 corridor is served by 19 local and six commuter bus routes that are being studied simultaneously as part of this planning process.



The US 29 Existing Transit Conditions Report (available at this workshop), identifies service gaps in the area. The project team will use this analysis along with community feedback to recommend service improvements that could be implemented alongside the launch of the BRT service.

We appreciate any comments you have on the current service, and encourage you to engage in our mapping activity!





## Legend

- High Schools
- Hospitals
- Shopping Centers
- Parks and Open Space

## Bus Rapid Transit

### Service

- Planned Briggs Chaney-Silver Spring Route
- Planned Burtonsville-Silver Spring Route

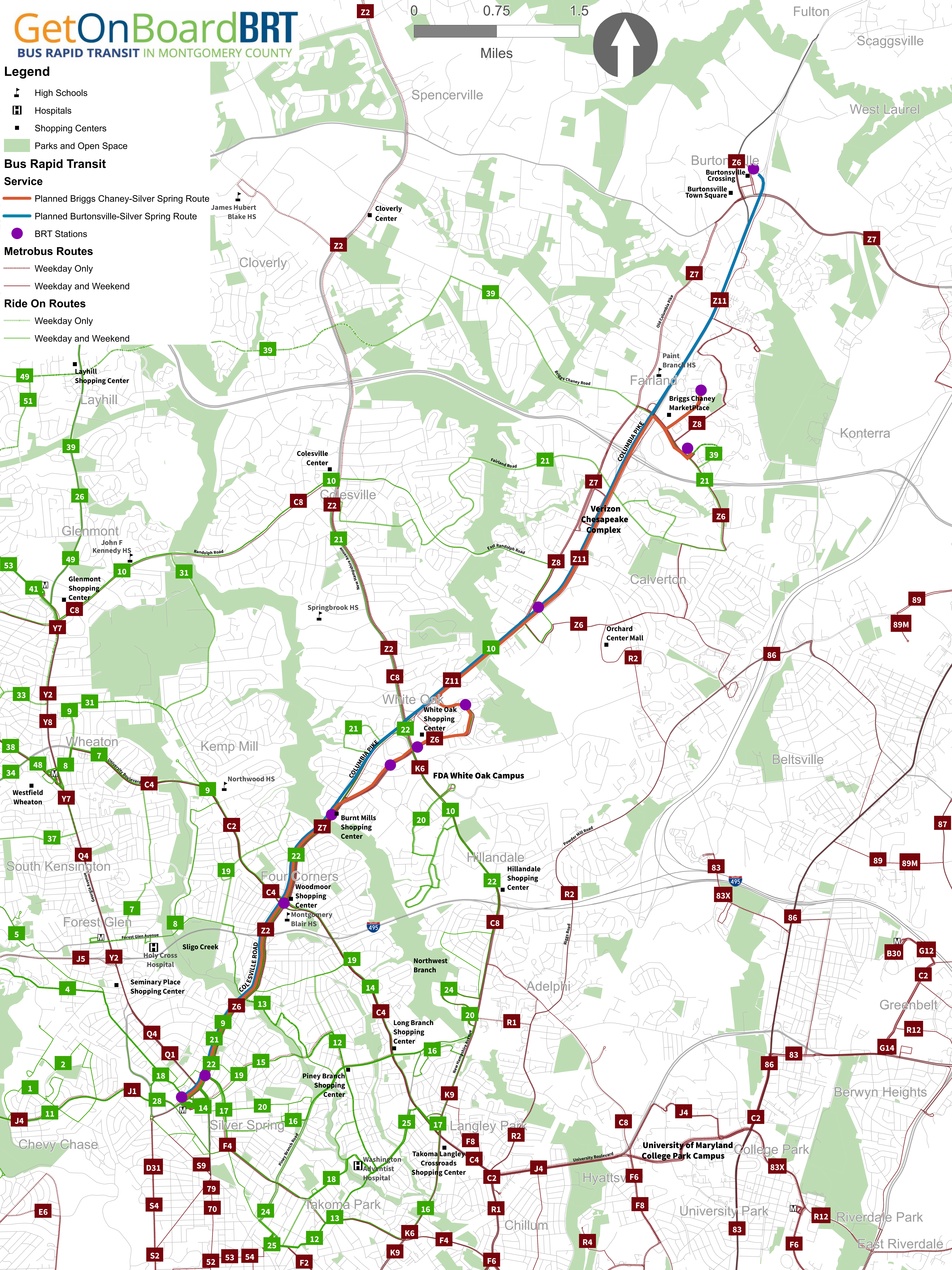
### BRT Stations

## Metrobus Routes

- Weekday Only
- Weekday and Weekend

## Ride On Routes

- Weekday Only
- Weekday and Weekend





# BRT STATION PROTOTYPE DESIGN

## Goals and Feedback

### PROTOTYPE STUDY - BACKGROUND

MCDOT received a grant from the Metropolitan Washington Council of Governments Transportation/Land-Use Connections Program (MWCOG TLC) to develop a BRT Station Prototype for the County’s future BRT Network.

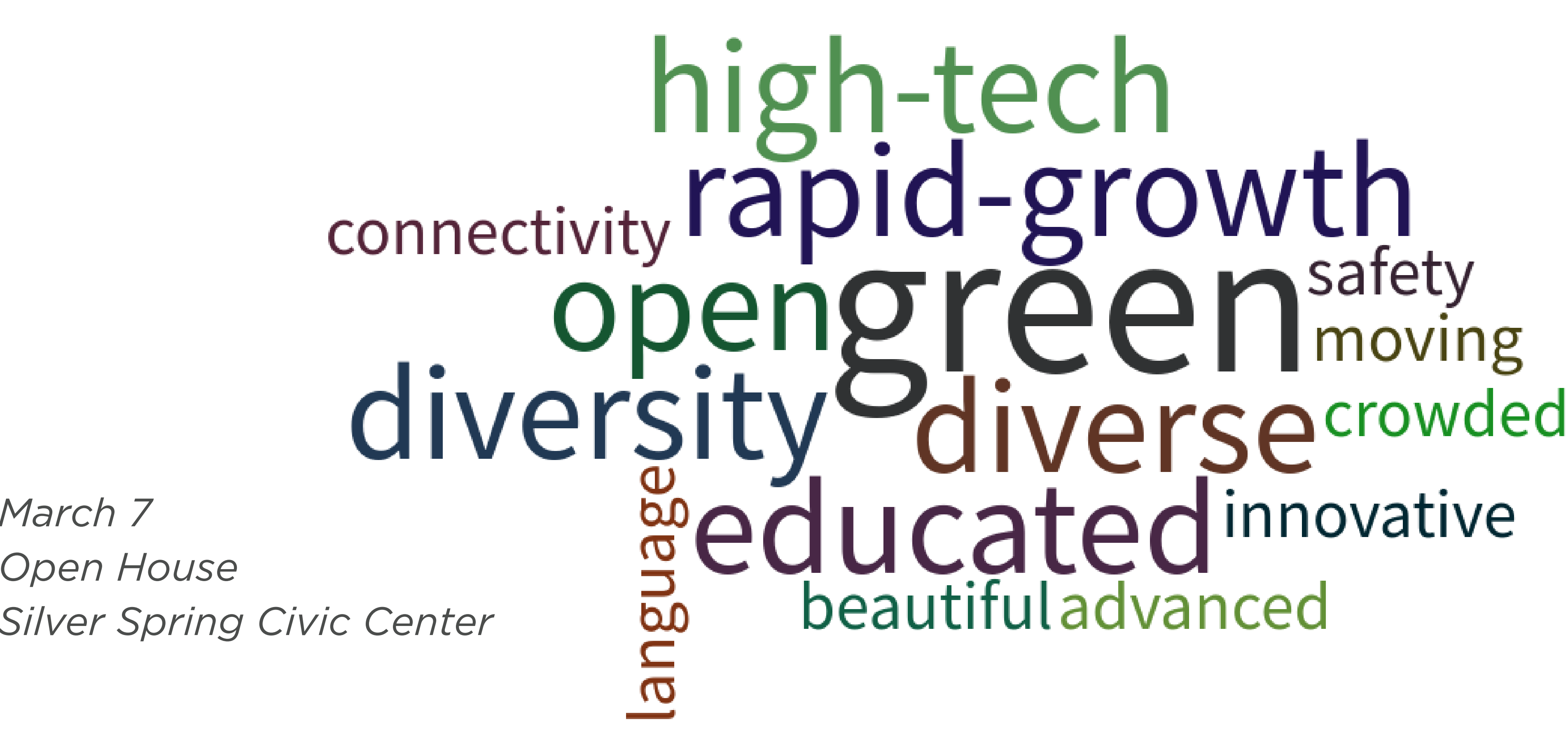
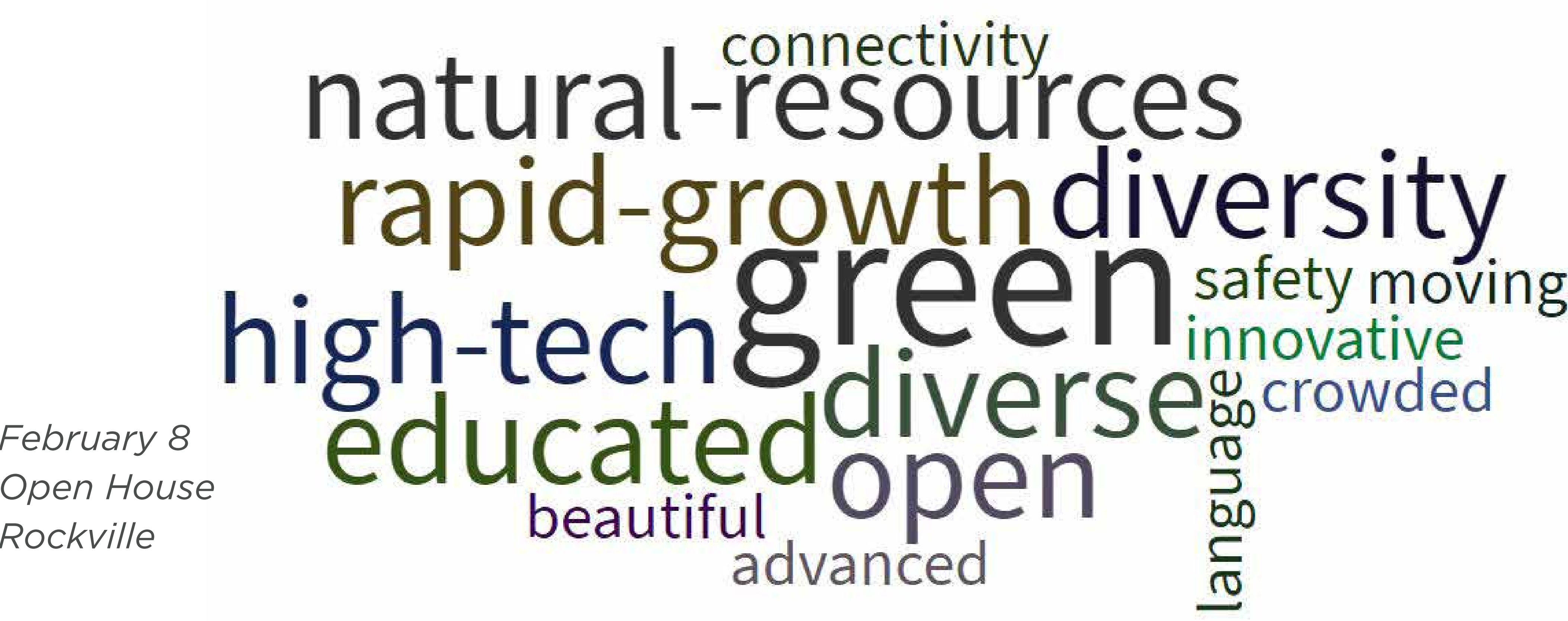
The design scope is to develop a Prototype Station Design with interchangeable, modular components, that can be adapted for all corridors with an initial focus on US 29, MD 355, and MD 586.

### BRT STATION PROTOTYPE - DESIGN GOALS

- 1. Easy to Find and Use
- 2. Accessible
- 3. Safe and Comfortable
- 4. Adaptable and Context Sensitive
- 5. Maintainable
- 6. A Good Life-Cycle Investment

### PREVIOUS PUBLIC OPEN HOUSES - WHAT WE HEARD

Describe in one word how a design might reflect the character and quality of Montgomery County?







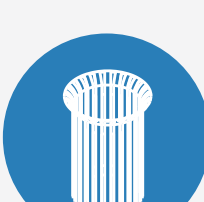
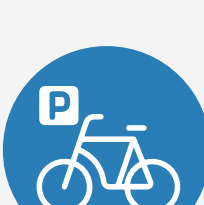






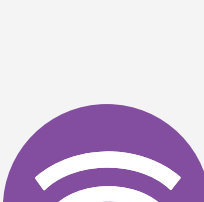


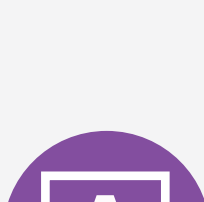







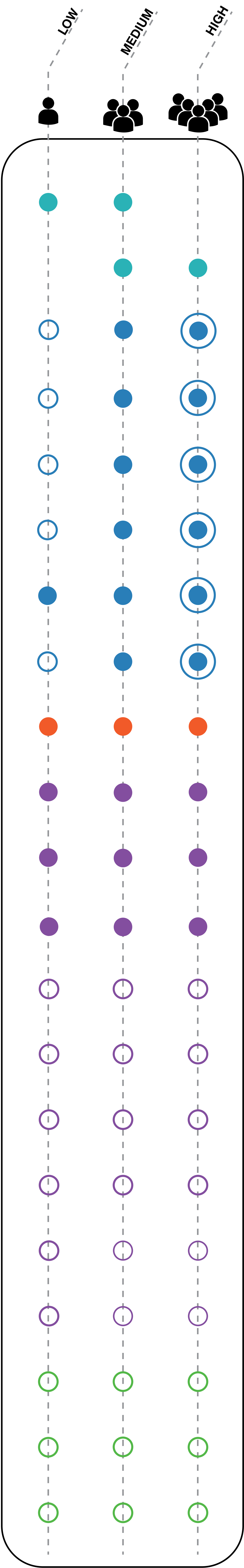
# STATION COMPONENTS MATRIX

Program, Capacity, and Context

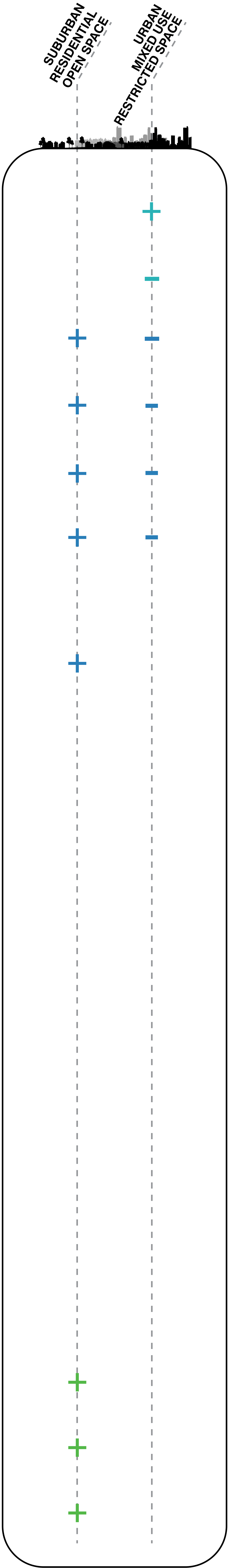
## STATION AMENITIES MENU

STATION MARKER INC. TVM	
FULL SHELTER MARKER INC. TVM	
SHELTER	
WINDSCREEN	
LEANING RAIL	
SEATING	
WASTE/RECYCLING	
BIKELOCK	
PUBLIC ART	
MAP	
INFO SCREEN / REAL-TIME	
GRID POWER	
CCTV	
ALTERNATIVE ENERGY/ SUSTAINABILITY MEASURES	
WIFI	
CELLPHONE CHARGING	
HEAT	
ADVERTISING	
TREE	
LID - LOW IMPACT DEVELOPMENT/GROUND COVER	
WATER FEATURE/CONSERVATION	

### Station Capacity



### Station Context



### STATION AMENITIES LEGEND

- INCLUSION OF AMENITIES BASED ON CAPACITY
- ADDITIONAL AMENITIES MAY BE INCLUDED
  - BASIC AMENITY REQUIREMENT
  - OPTIONAL AMENITY / SPECIFIC TO SITE CONDITIONS
- INCLUSION OF AMENITIES BASED ON SITE CONDITIONS
- ADDITIONAL AMENITIES MAY BE INCLUDED IF SITE ALLOWS
  - AMENITIES MAY NOT BE INCLUDED IF LIMITED BY SITE AREA



# BRT PROTOTYPE CONCEPT

## Components and Adjacent Improvements

### PERSPECTIVE



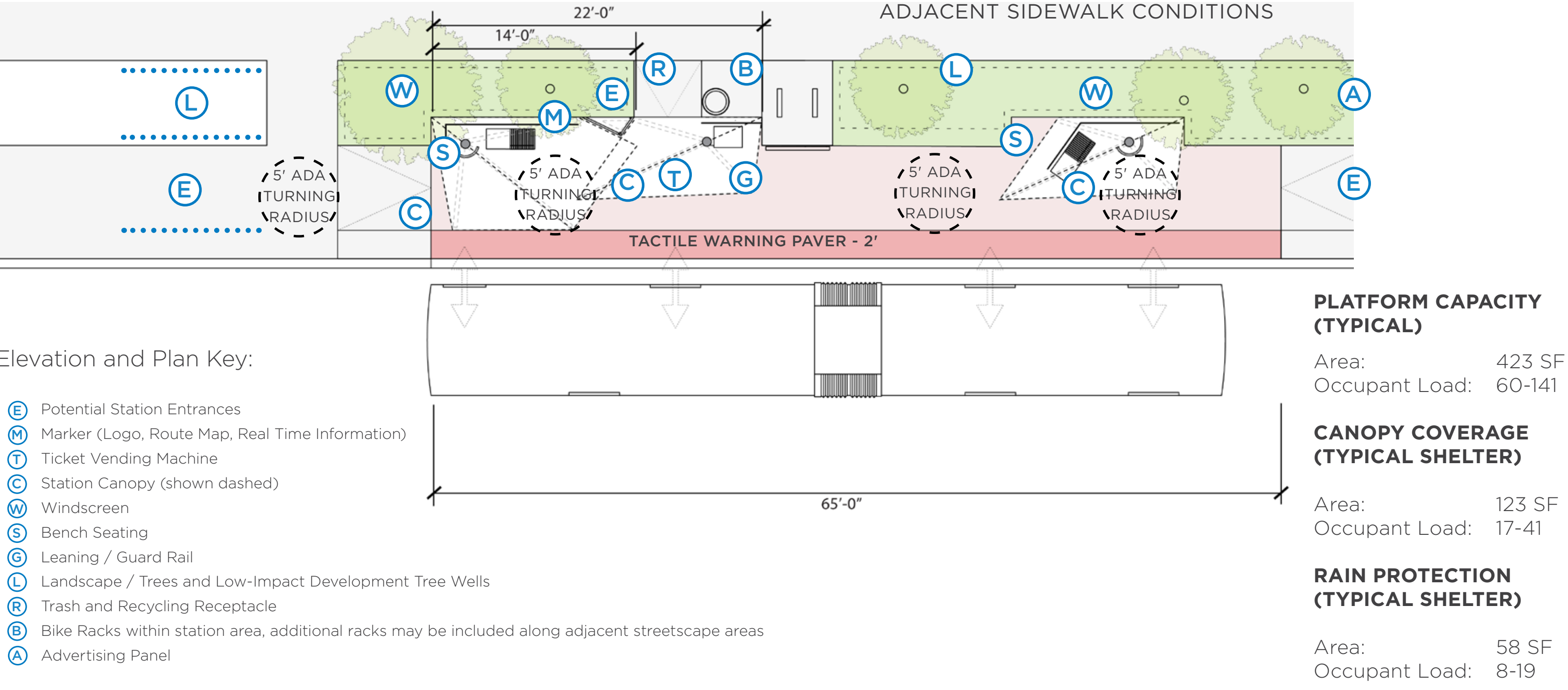
### COMPONENTS

- MARKER W/ LOGO, REAL TIME & MAP (STONE, METAL, INTEGRATED LED LIGHT)
- TICKET VENDING/READING MACHINE - TVM (FREE STANDING)
- CANOPY STRUCTURE (METAL, INTEGRATED LEANING RAIL, LIGHTING)
- CANOPY ROOF PANELS
- WINDSCREEN (FREE STANDING - BACK, SIDE, FRONT)
- SEATING (STONE, WOOD)
- TRASH/RECYCLING RECEPTACLE
- LANDSCAPE - LOW IMPACT DEVELOPMENT, TREES, AND PLANTINGS

### ADJACENT IMPROVEMENTS

- ACCESS
- POTENTIAL TREES, LANDSCAPE, STORMWATER MANAGEMENT
- BIKE RACKS

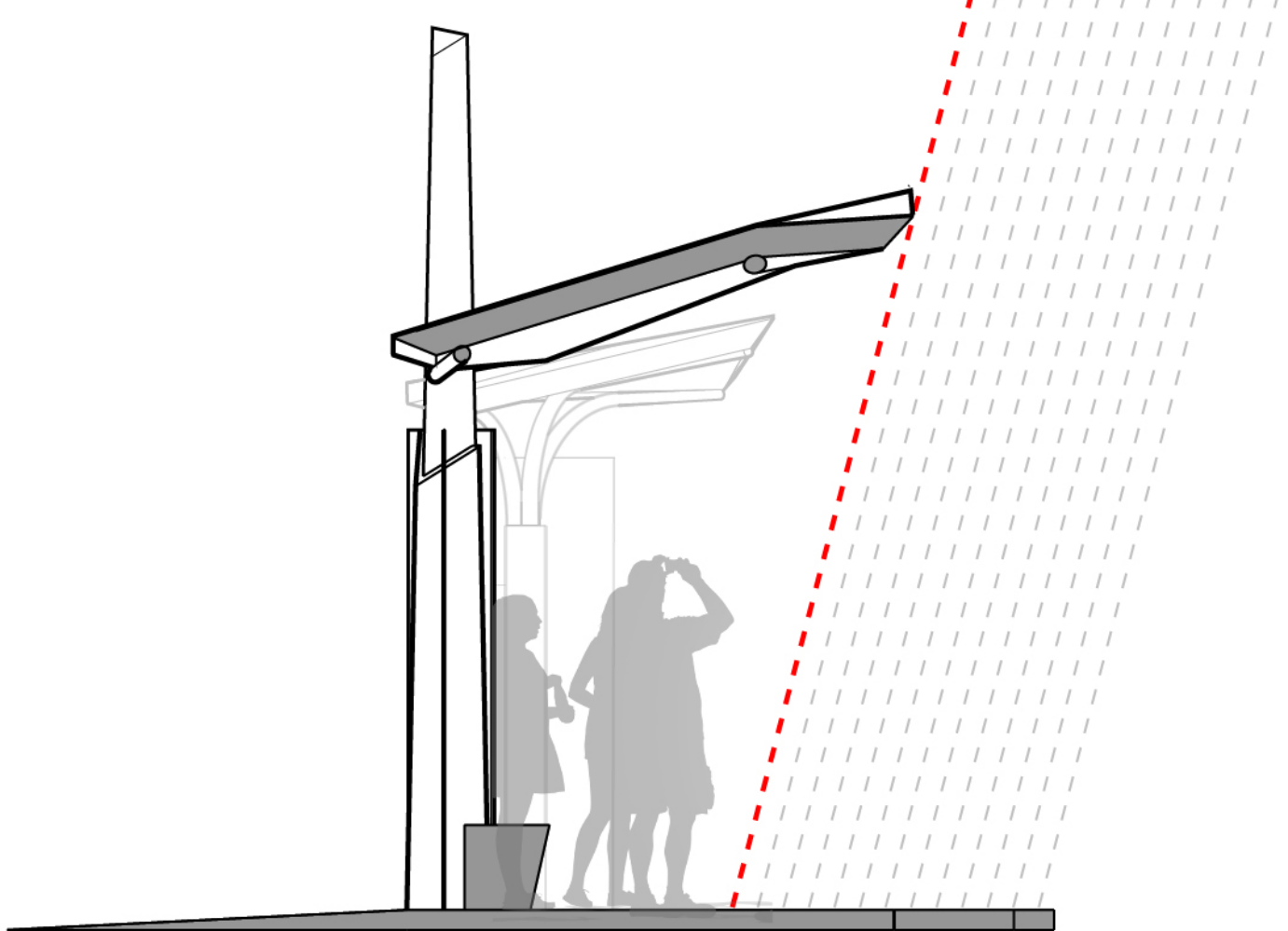
### PLAN W/ GENERAL ADJACENT IMPROVEMENTS



### SECTION

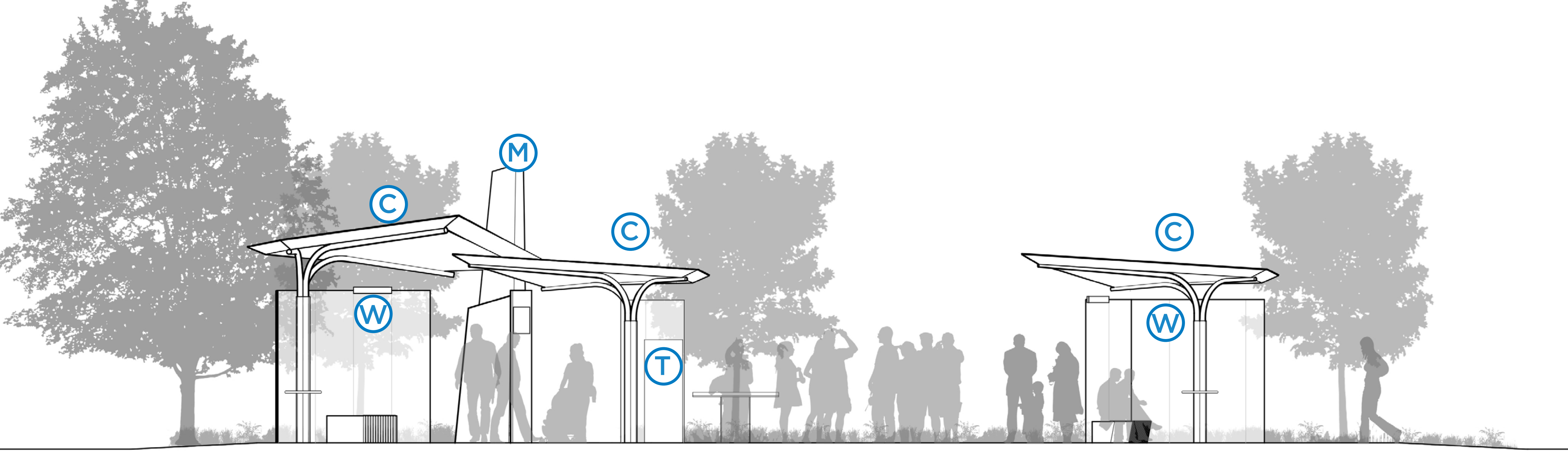


### SECTION



### SECTION RAIN SHADOW

### ELEVATION

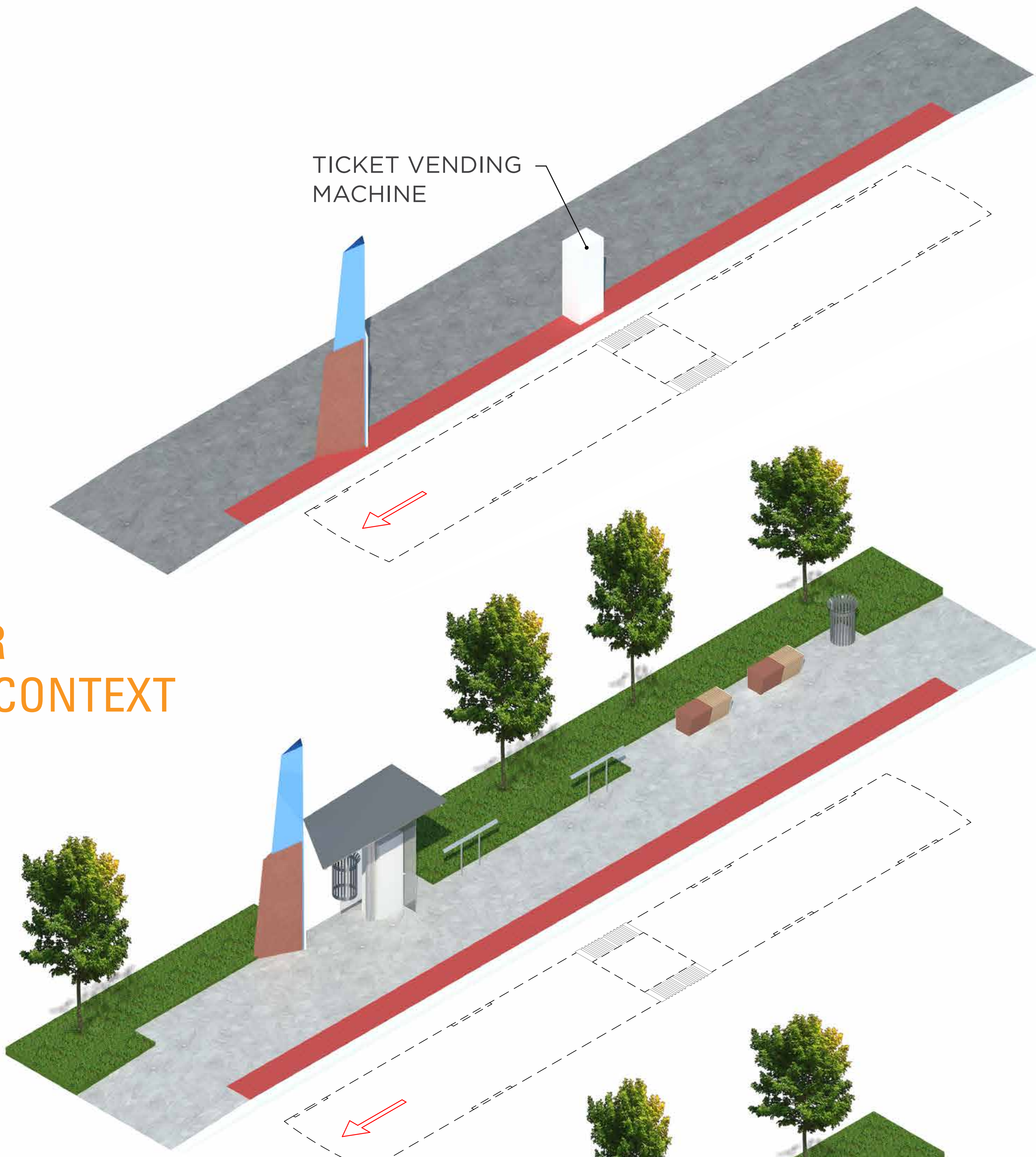




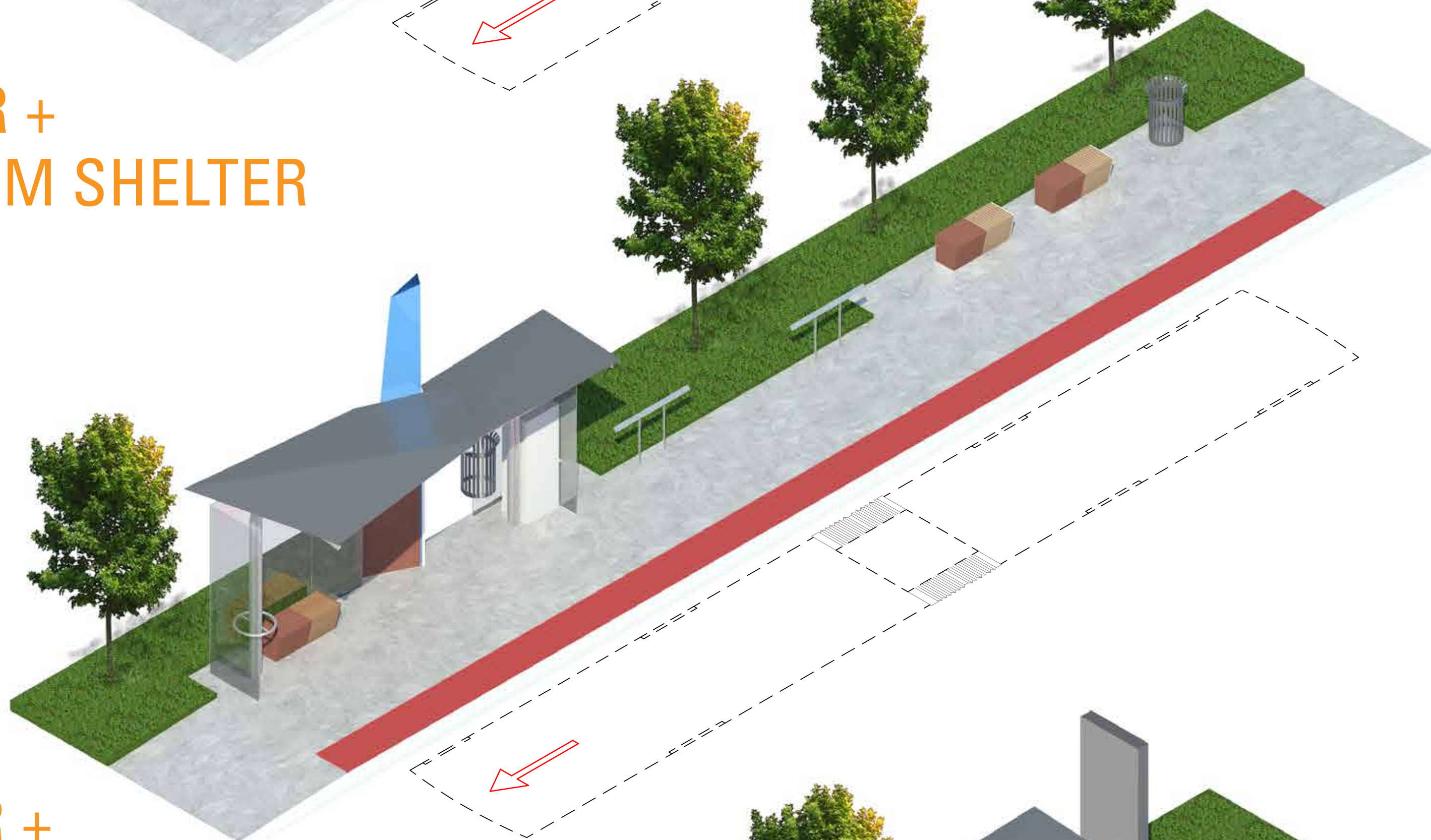
# CONCEPTUAL FRAMEWORK

Adaptability

MARKER  
URBAN CONTEXT



MARKER +  
MINIMUM SHELTER



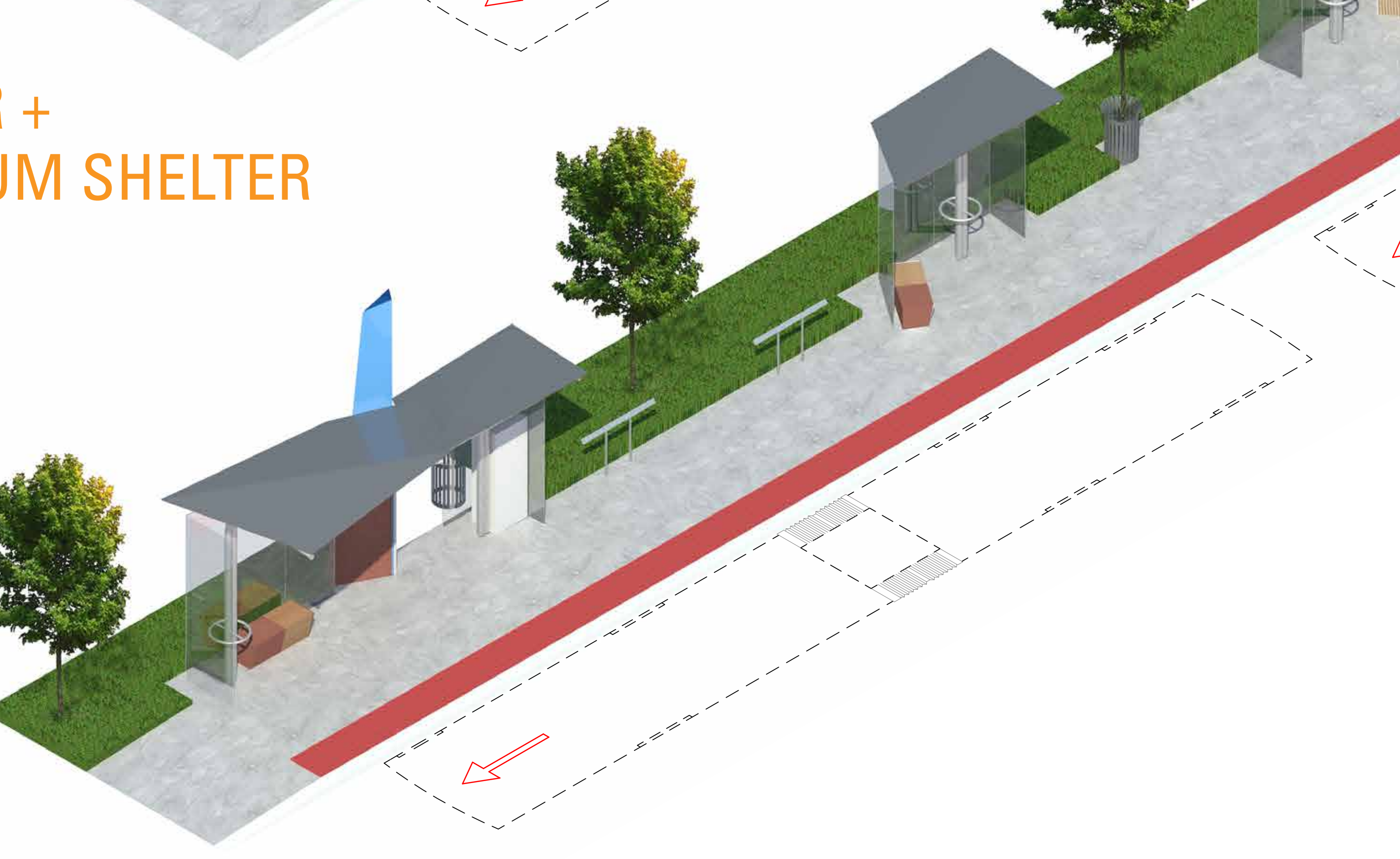
MARKER +  
MEDIUM SHELTER



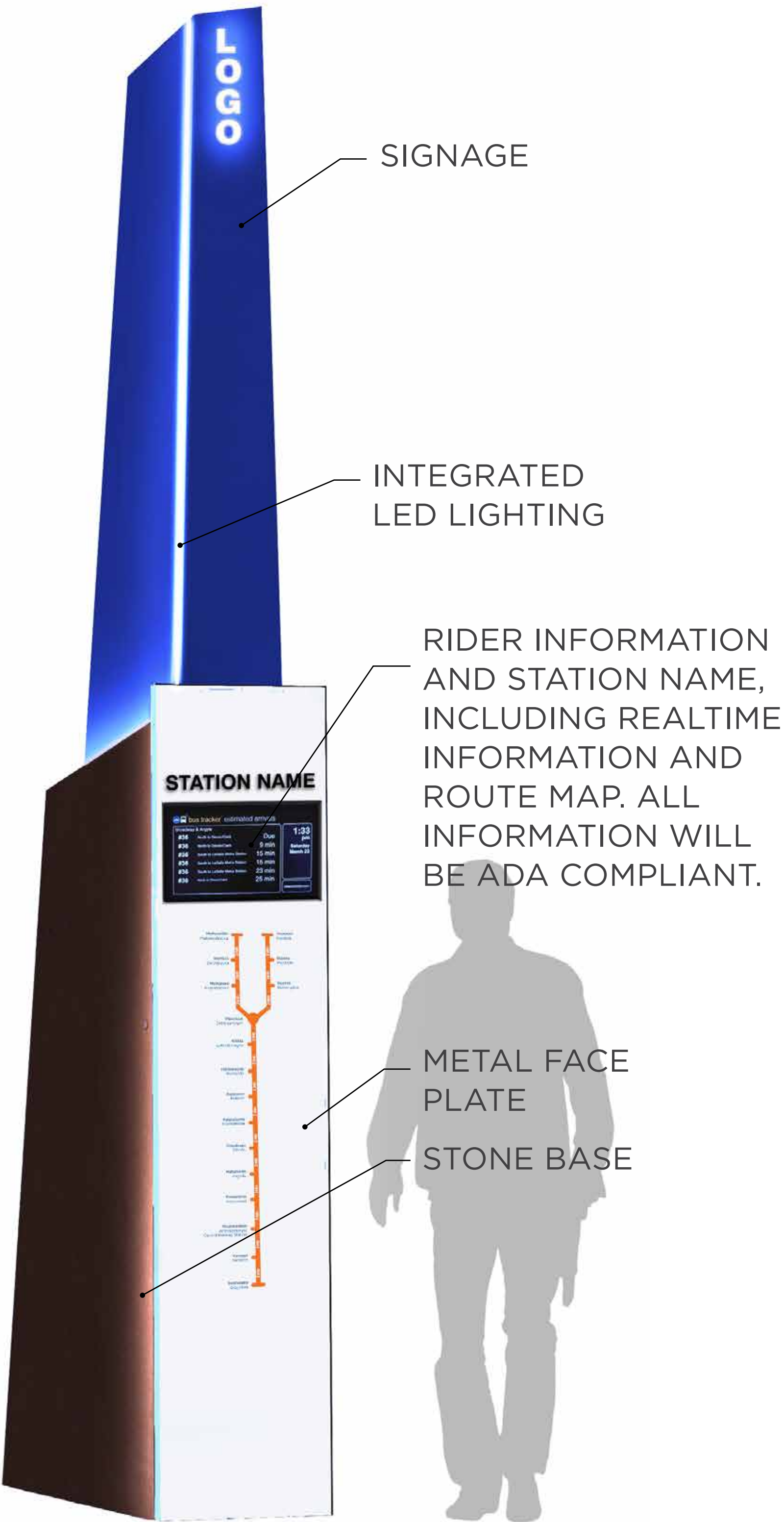
MARKER +  
LARGE SHELTER



MARKER +  
MAXIMUM SHELTER



MARKER +  
DOUBLE PLATFORM



MARKER  
(USER INTERFACE/LINE  
CONCEPT)



# PRELIMINARY “TEST FITS”

## Draft Visualizations

### URBAN MIXED-USE / CONSTRAINED CONDITIONS

US 29 - FENTON STREET



NO SHELTER



MINIMAL SHELTER



### PARK & RIDE / HIGHEST CAPACITY

US 29 - BURTONSVILLE PARK & RIDE



### SUBURBAN RESIDENTIAL / SHARED BUS STOP

MD 586 - TWINBROOK PARKWAY



### SUBURBAN COMMERCIAL

MD 355 - WATKINS MILL ROAD



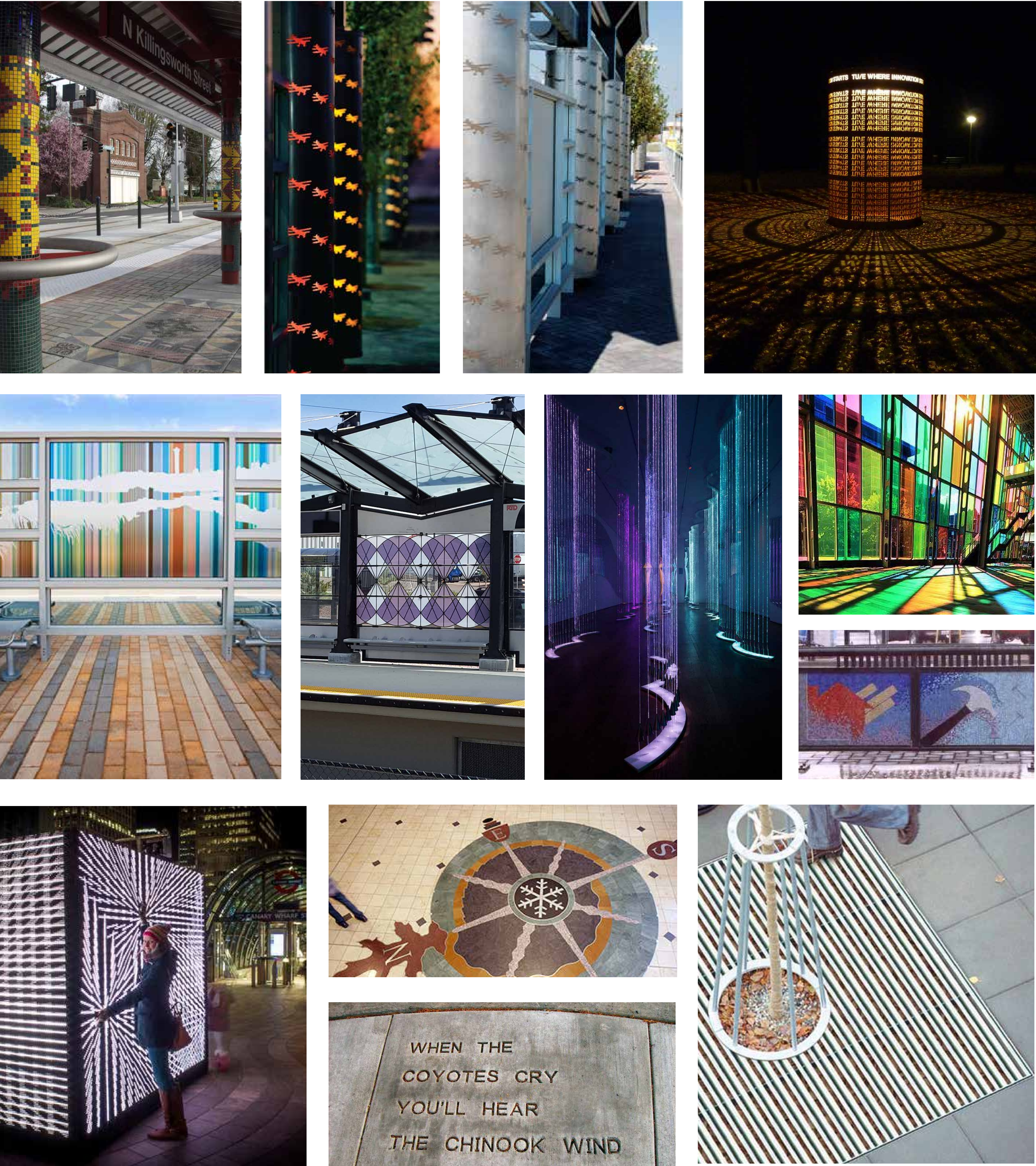


# PUBLIC ART + BRANDING

Integrated and Complementary

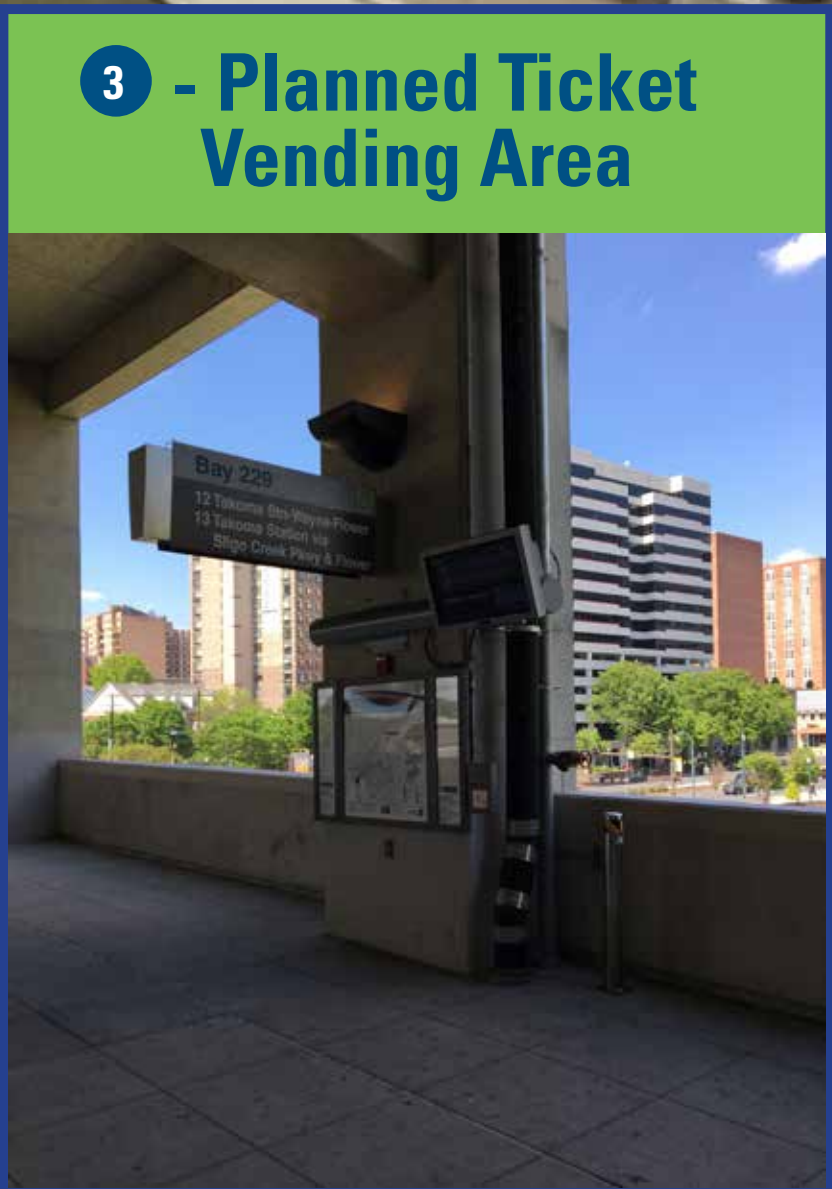
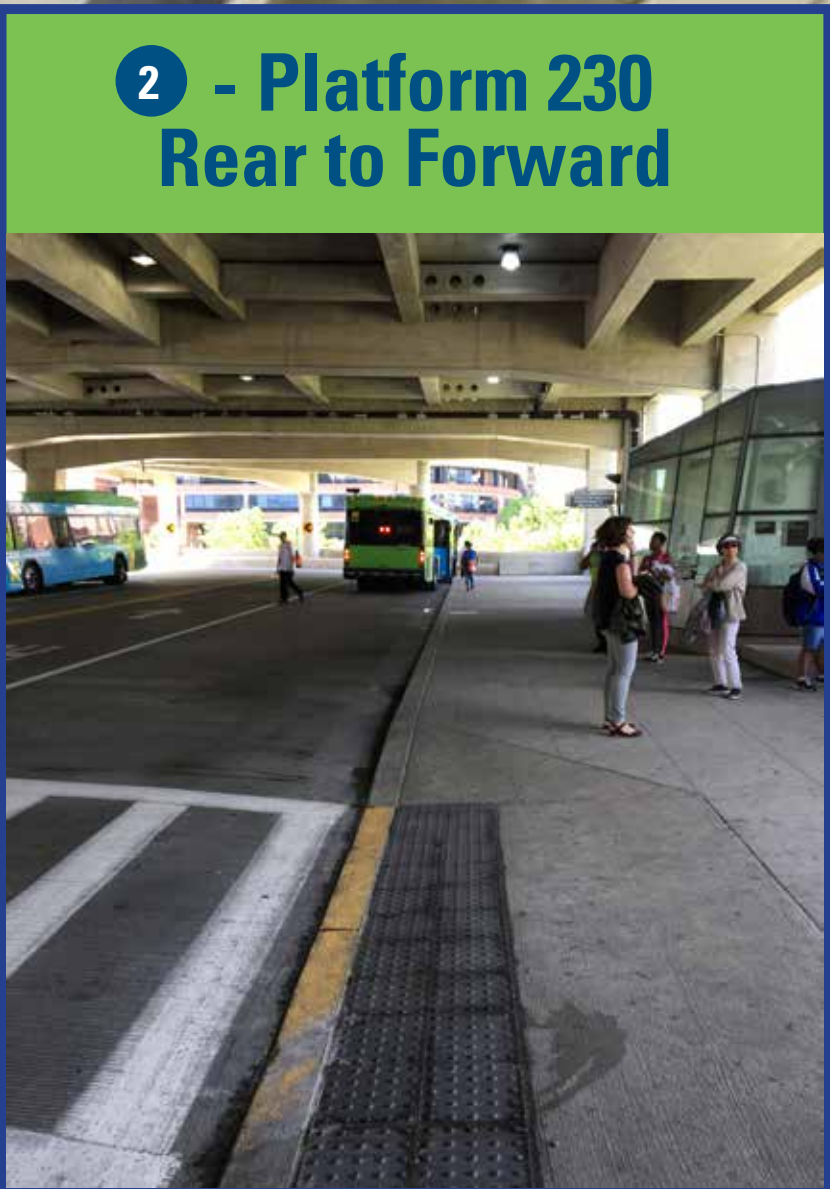
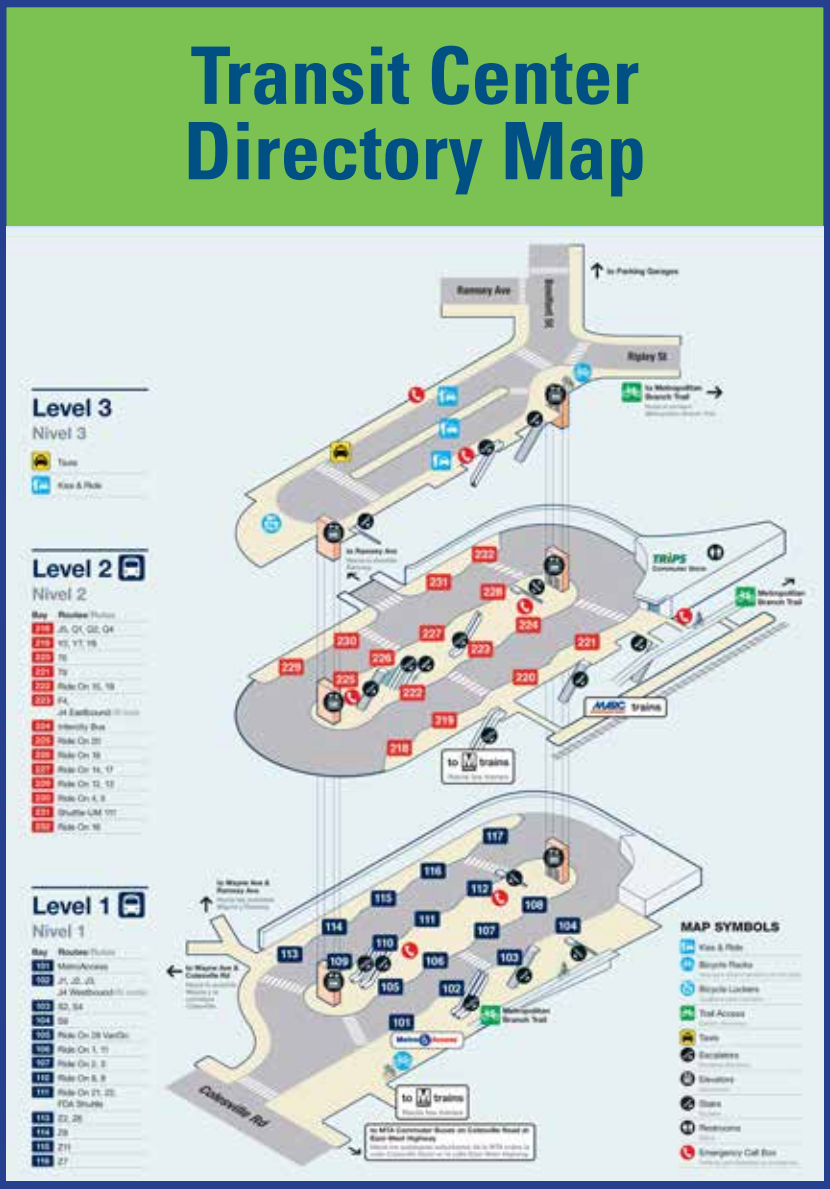
## NEIGHBORHOOD ORIENTED ART

Canopy Structure, Windscreens / Railings, Pavement





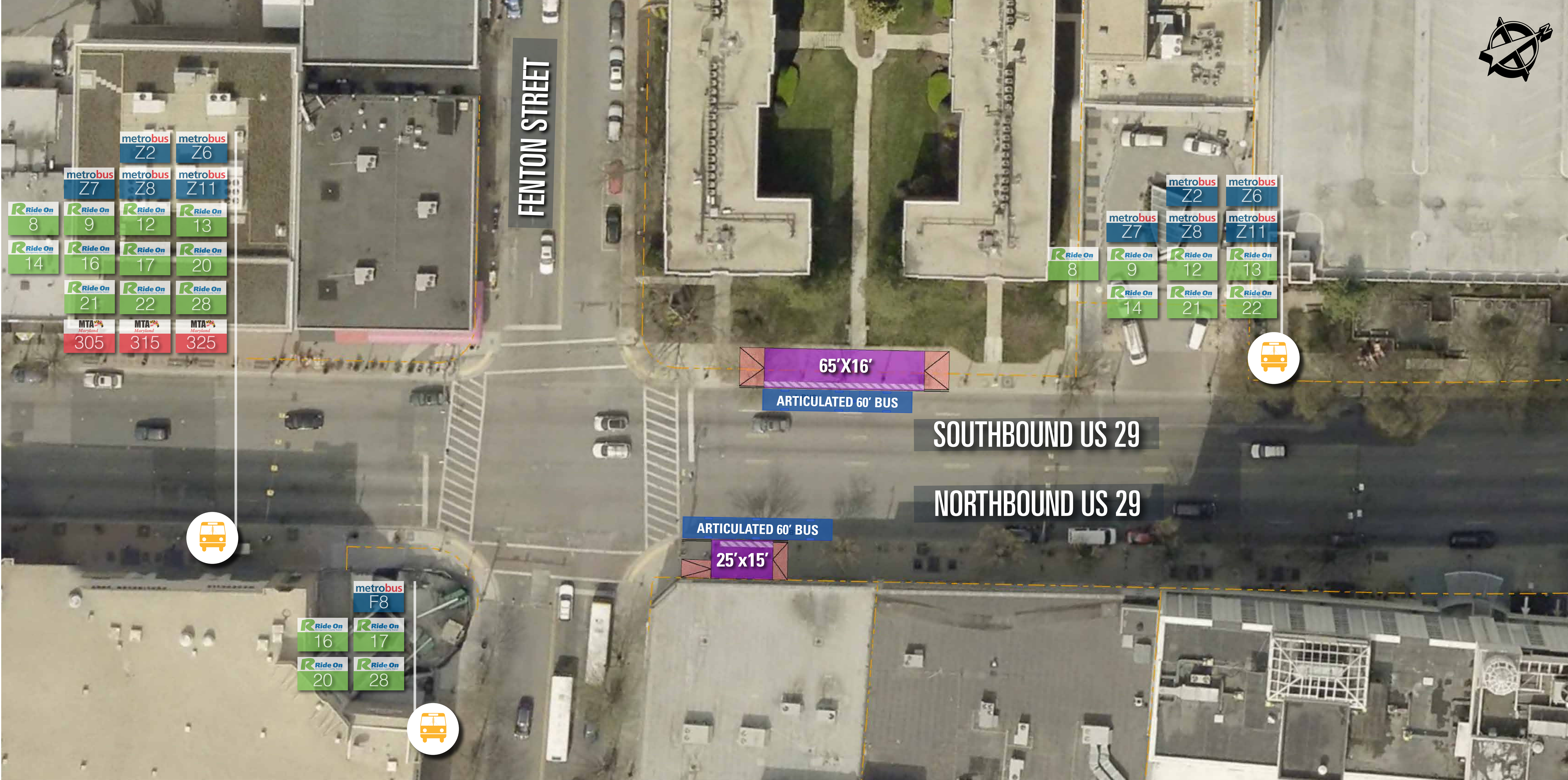
# SILVER SPRING TRANSIT CENTER



Legend		
Platform	Existing ROW	BIKE LANE
Sidewalk	Retaining Wall	STORMWATER MGMT SYSTEM
Landscapping / Storm Water Management	Relocated Bus Stop	OPERATOR REST STATION
Comfort Station	Concrete Pavement	CURRENT BUS STOP
Bikeshare Station	LANDSCAPING	
Resurfacing	RELOCATED BUS SHELTER	
Asphalt	BIKESHARE STATION	



# FENTON STREET

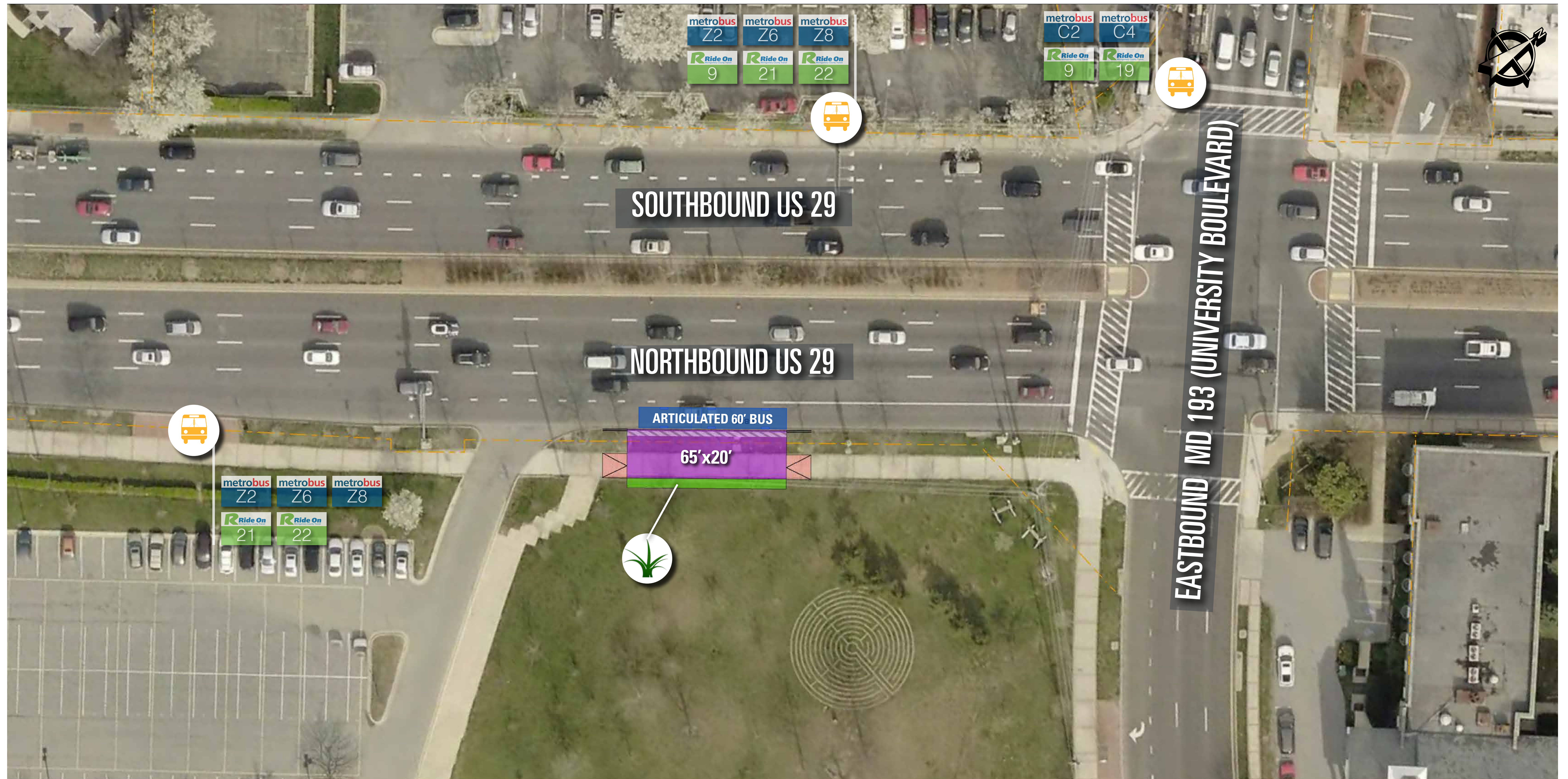


**Legend**



















Platform	Existing ROW	BIKE LANE
Sidewalk	Retaining Wall	STORMWATER MGMT SYSTEM
Landscapping / Storm Water Management	Relocated Bus Stop	OPERATOR REST STATION
Comfort Station	Concrete Pavement	CURRENT BUS STOP
Bikeshare Station	LANDSCAPING	
Resurfacing	RELOCATED BUS SHELTER	
Asphalt	BIKESHARE STATION	



# NORTHBOUND UNIVERSITY BOULEVARD

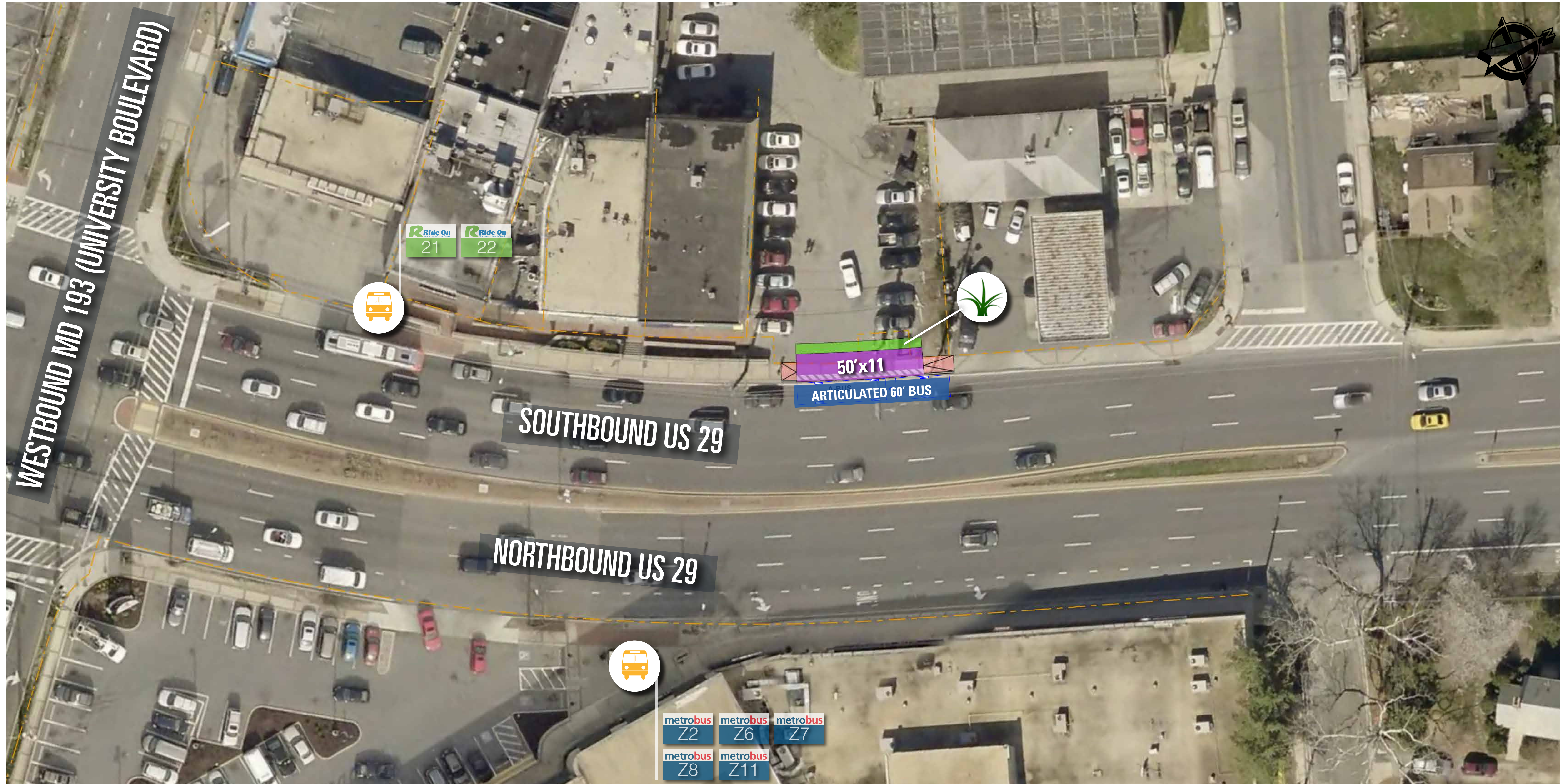


# Legend



















	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscapping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# SOUTHBOUND UNIVERSITY BOULEVARD

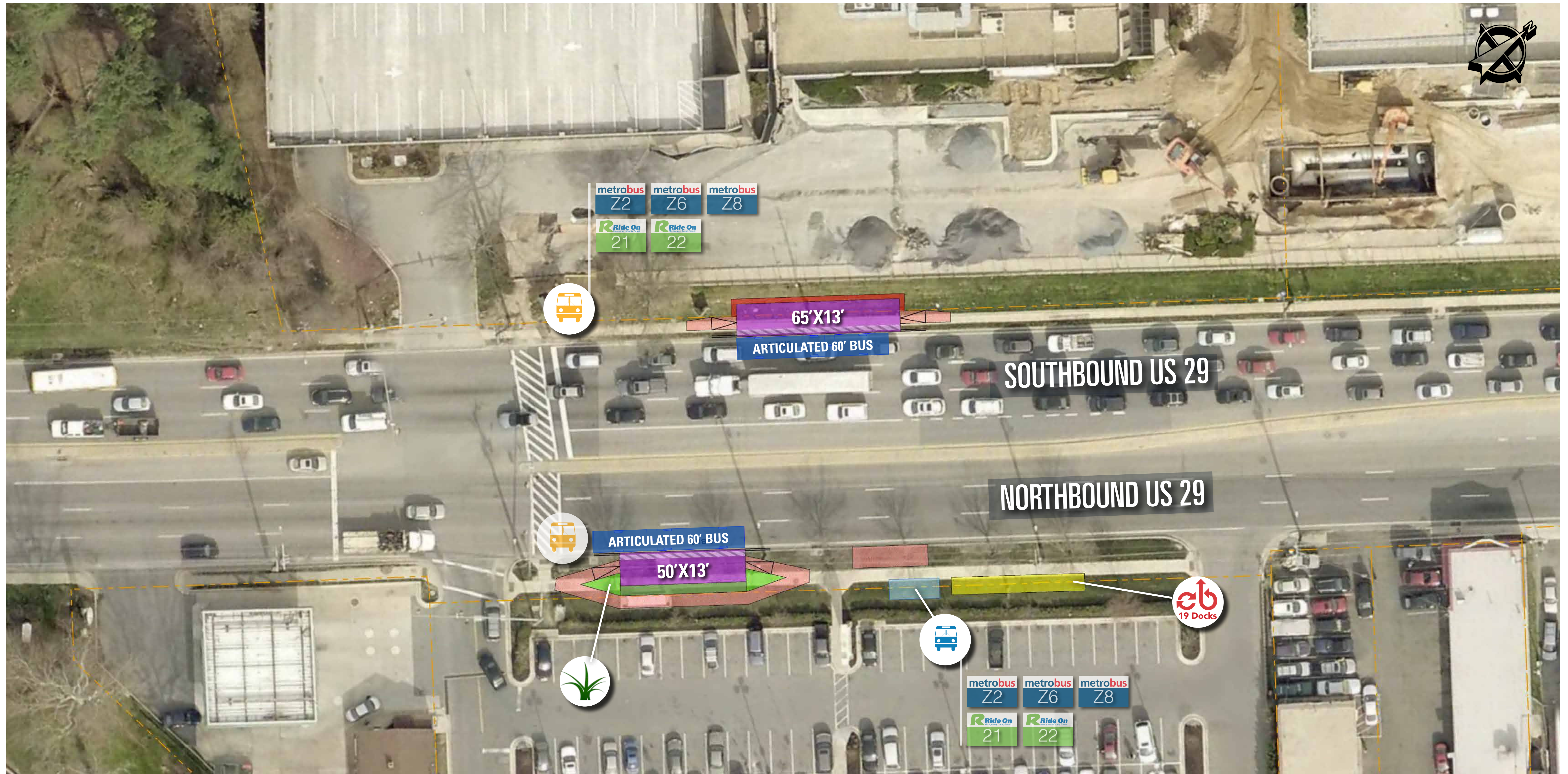


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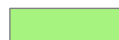





	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscaping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# BURNT MILLS



# Legend



















	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscapping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# OAK LEAF DRIVE

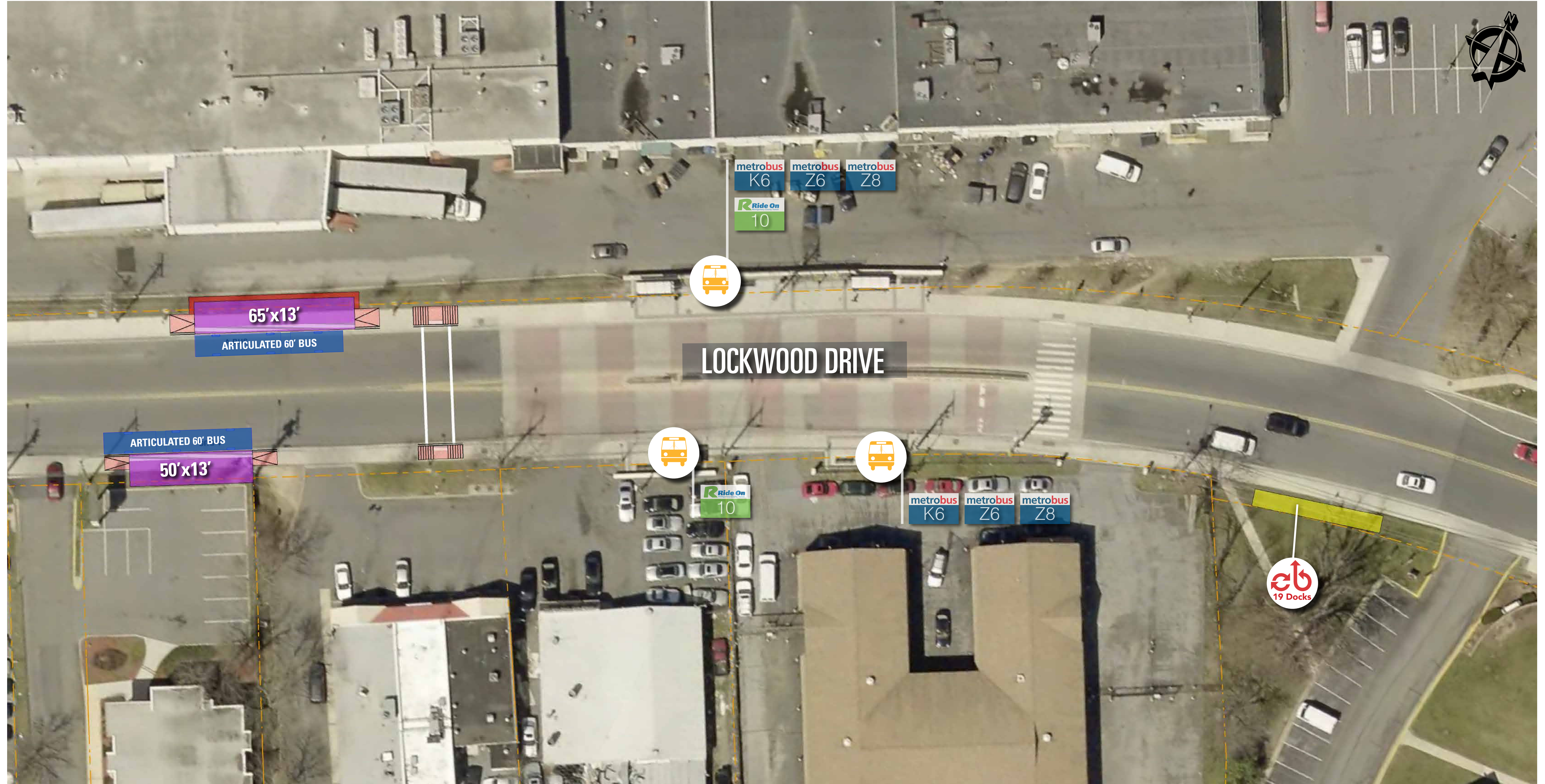


# Legend



















	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscaping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# WHITE OAK TRANSIT CENTER



# Legend







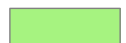











	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscapping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
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	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# STEWART LANE

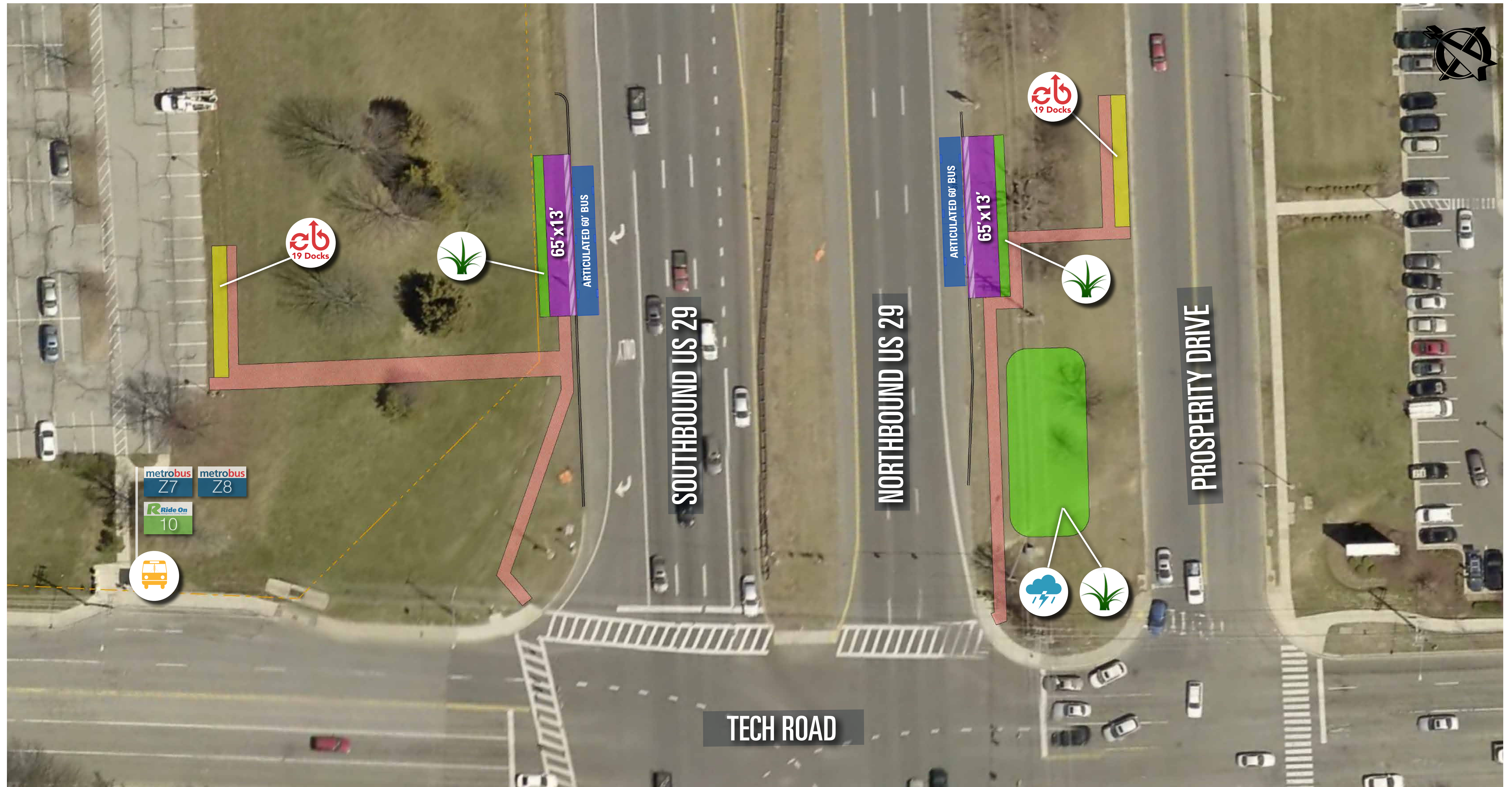


# Legend



















	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
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	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# TECH ROAD

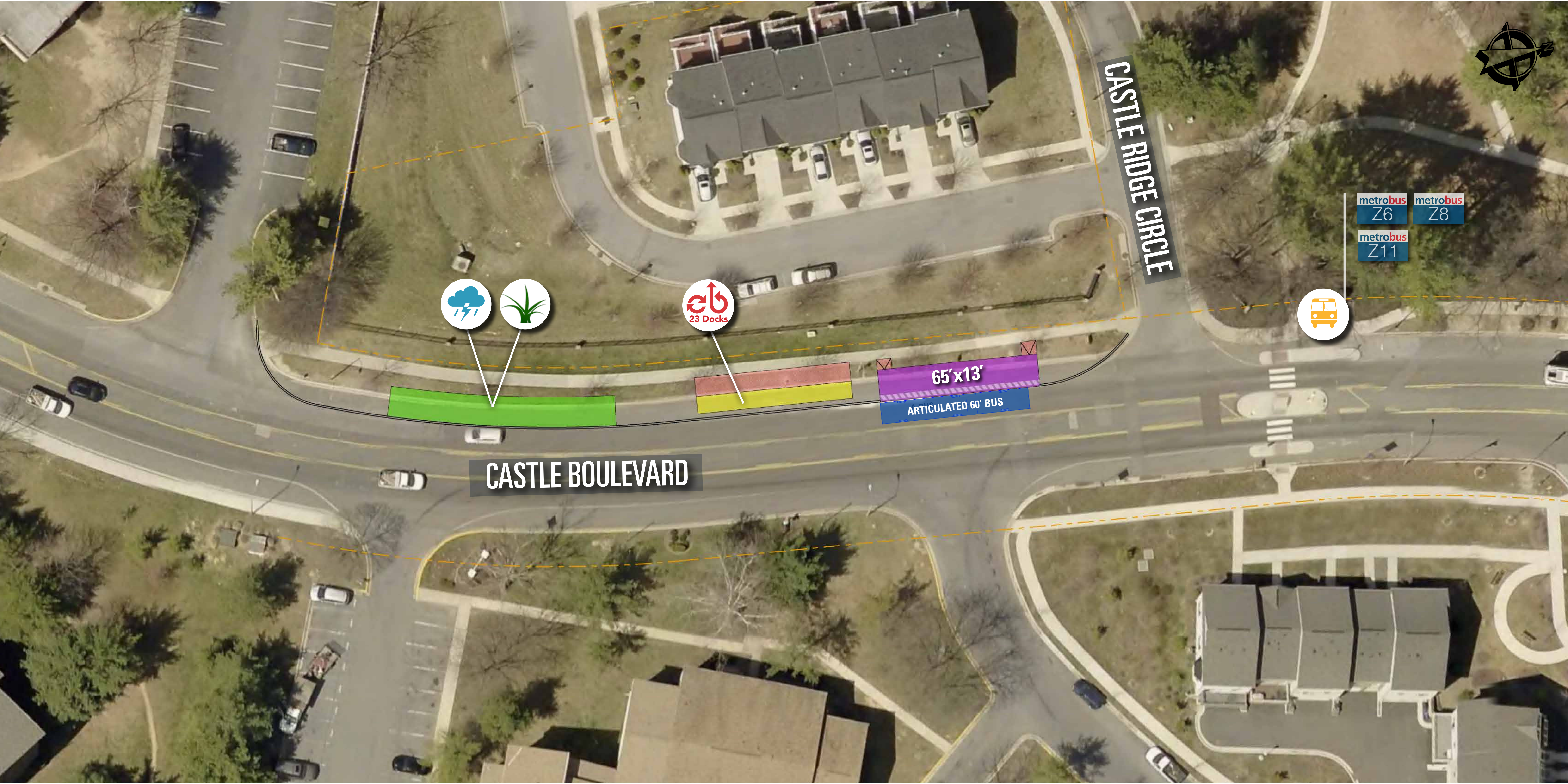


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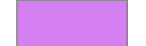

















	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscapping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
	Bikeshare Station		LANDSCAPING		
	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		



# CASTLE BOULEVARD

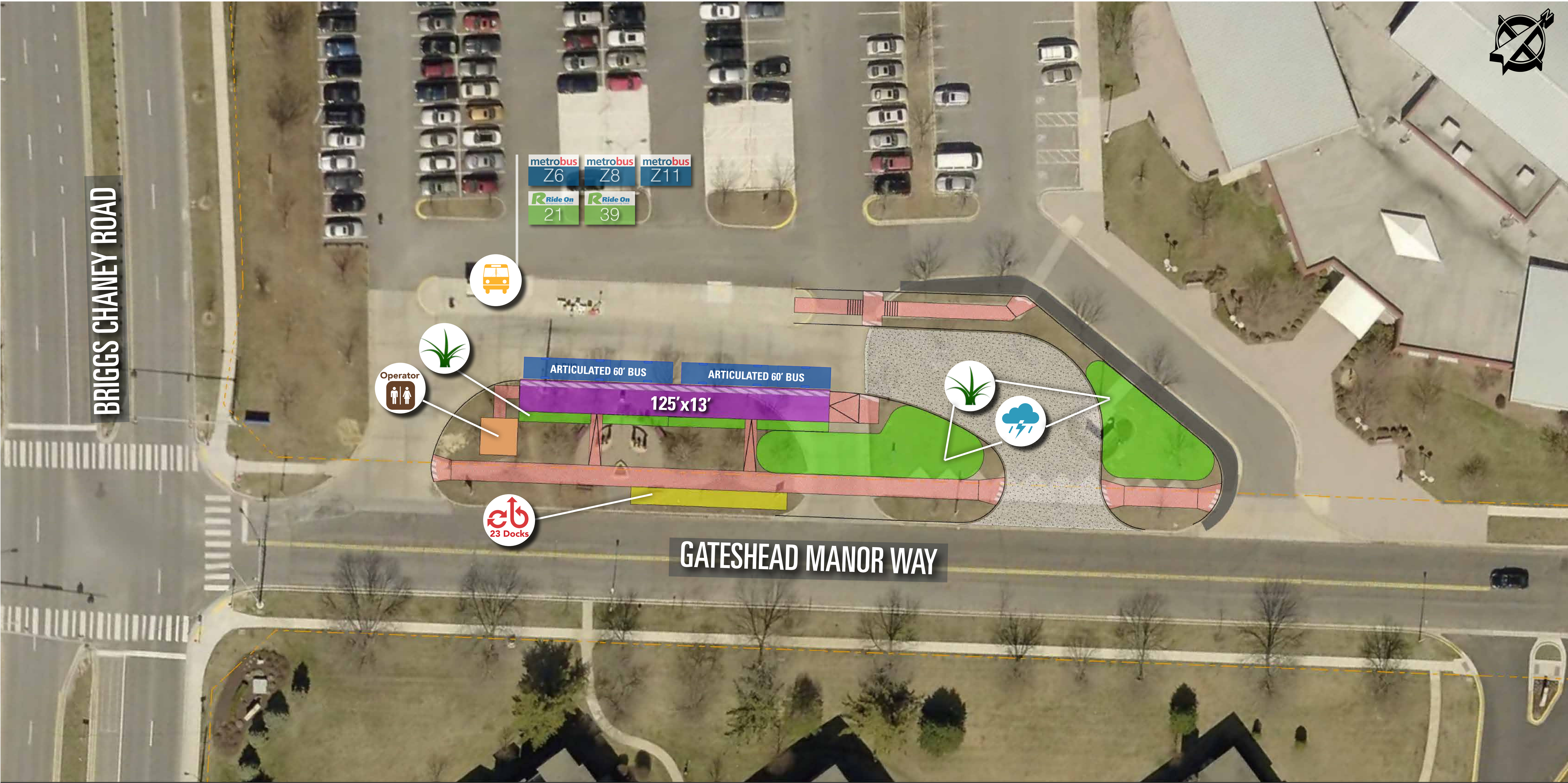


# Legend

	Platform		Existing ROW		BIKE LANE
	Sidewalk		Retaining Wall		STORMWATER MGMT SYSTEM
	Landscapping / Storm Water Management		Relocated Bus Stop		OPERATOR REST STATION
	Comfort Station		Concrete Pavement		CURRENT BUS STOP
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	Resurfacing		RELOCATED BUS SHELTER		
	Asphalt		BIKESHARE STATION		

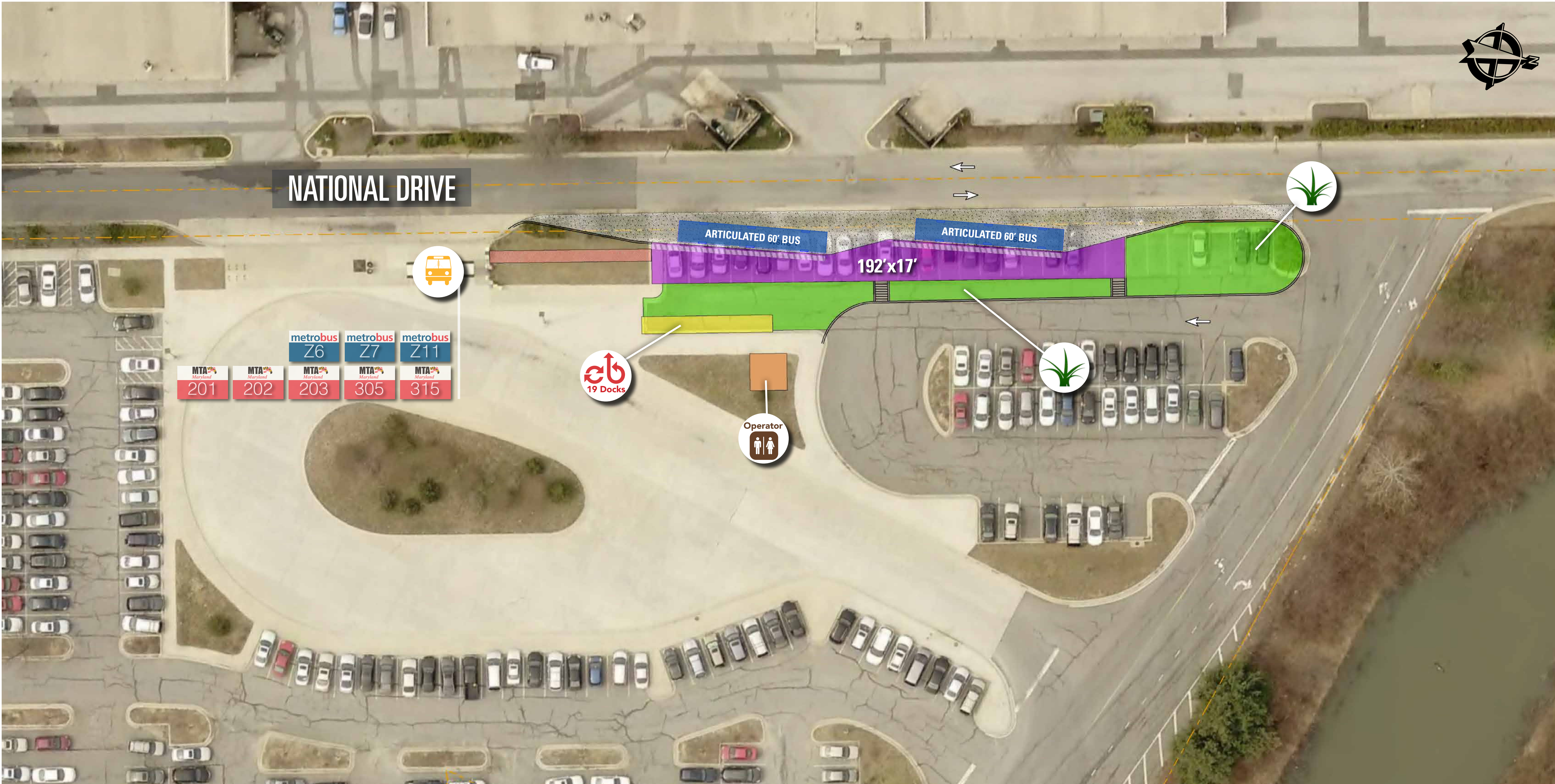


# BRIGGS CHANEY PARK and RIDE





# BURTONSVILLE PARK and RIDE



Legend		
Platform	Existing ROW	BIKE LANE
Sidewalk	Retaining Wall	STORMWATER MGMT SYSTEM
Landscapping / Storm Water Management	Relocated Bus Stop	OPERATOR REST STATION
Comfort Station	Concrete Pavement	CURRENT BUS STOP
Bikeshare Station	LANDSCAPING	
Resurfacing	RELOCATED BUS SHELTER	
Asphalt	BIKESHARE STATION	



# COMMUNITY MEETINGS



We are meeting with local stakeholders and community members to gather meaningful feedback during planning and design.

**There are many ways to participate!**

## ATTEND A CAC MEETING

Corridor Advisory Committees (CACs) membership was established for the US 29 project by MCDOT to represent community stakeholders (area residents, businesses, community organizations and others) in the BRT system planning. The public is welcome to attend and observe the committee discussions.

## ATTEND AND COLLABORATE AT AN OPEN HOUSE

Engage with staff working on all aspects of the US 29 BRT project at a series of Open Houses in Spring 2018. Staff will provide additional details of the final design for the BRT stations and the BRT operations plan. Participants will also have an opportunity to review the local bus service recommendations that are being considered for the launch of the BRT service.

## COMMUNITY UPDATES

If you represent an organization such as a Civic Association, Chamber of Commerce, neighborhood association, or community advocacy organization, please invite us to one of your meetings where we can give a presentation on the project. You can speak with an MCDOT representative at any project meeting or go online at [GetOnBoardBRT.com](http://GetOnBoardBRT.com) to request a project briefing.



# HOW TO GET INVOLVED

We want to make sure that everyone's voice is heard. If you or your neighbor can't attend a meeting, there are still ways to learn more about the US 29 BRT project and get involved.



## FIND US AT PUBLIC EVENTS

Find us at community events and festivals, such as National Night Out, Silver Spring Farmers Market, Metro stations, and more!

## SIGN UP TO RECEIVE PROJECT UPDATES

Please sign up for our mailing list to receive project updates. We can also provide project information and updates for e-newsletters to your community and business groups.

## FOLLOW US ON SOCIAL MEDIA

Project updates and events are shared on our Facebook and Twitter pages. You can get up to the minute details as we share live video, pictures, and details from events, and informational posts about the project.

 @GetOnBoardBRT 
  GetOnBoardBRT 
  GetOnBoardBRT



## SHARE YOUR FEEDBACK

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