

Carnegie Park and Ride and Station Improvement Project

Transit-Oriented Communities Program

What is TOD?

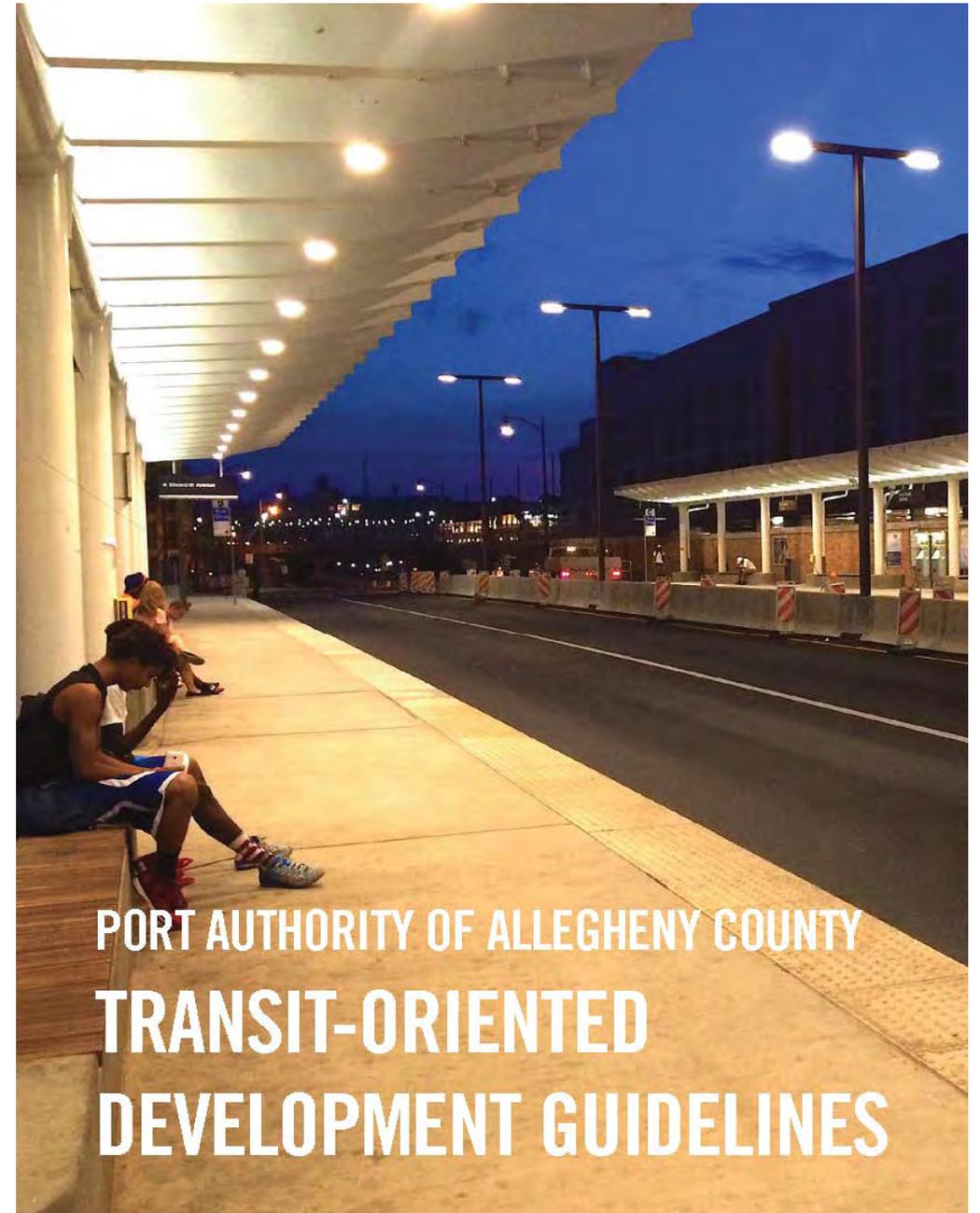
Transit-oriented development is:

- Dense.
- Mixed-use.
- Walkable.
- Close to high-quality transit.



Transit-Oriented Communities Program

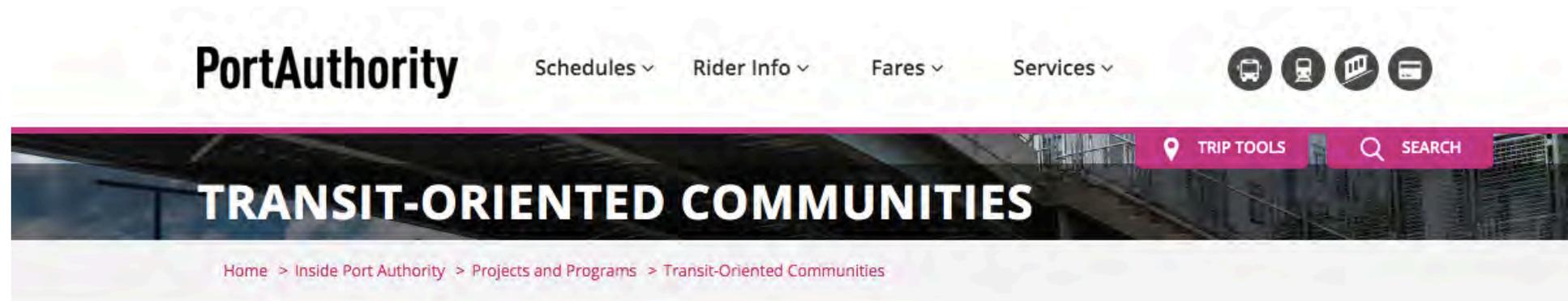
- TOD Guidelines
- TOD Zoning
- First and Last Mile
- Station Improvement Program
- Joint development



PAAC Roles in TOD

- TOD **sponsor** for joint development
- TOD **stakeholder** for any development that occurs within the “zone of influence” of current or future stations
- TOD **advocate** for sustainable land use decisions along all of the Pittsburgh region’s transit corridors

Visit our website for more info!



TOD Guidelines



Station Improvement Program



TOD Zoning Best Practices



First and Last Mile Program

Carnegie Project Website

www.PortAuthority.org/CarnegieStation



CARNEGIE STATION IMPROVEMENT PROJECT

[Home](#) > [Inside Port Authority](#) > [Projects and Programs](#) > [Carnegie Station Improvement Project](#)

Port Authority is gathering input from the community to help plan the addition of a new parking garage at Carnegie Station that would add more than 200 parking spaces as part of a transit-oriented development station improvement project.

Please check back with this page to learn about the latest information and opportunities to provide feedback.

Project Plan

The 2010 West Busway Transit-Oriented Development Assessment and Plan called for a new parking garage at Carnegie Station. Additional recommendations included first level retail space, upper floor space for offices for educational and cultural institutions, and new residential units along Logan Street.

Port Authority has secured [Congestion Mitigation and Air Quality Improvement](#)

Projects and Programs

Carnegie Station Improvement Project

Transit-Oriented Communities

Bus Stop Consolidation

Bus Rapid Transit



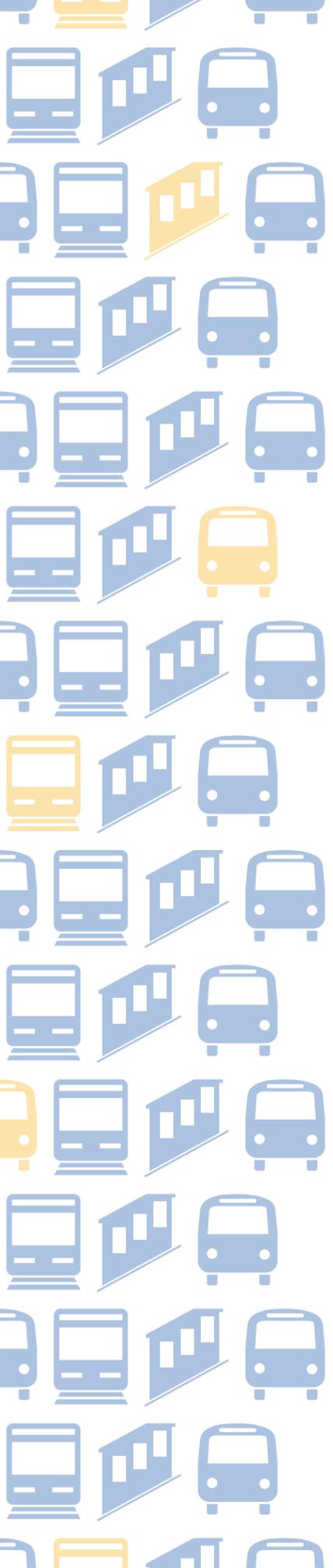
CARNEGIE STATION

PARK AND RIDE GARAGE ALTERNATIVE

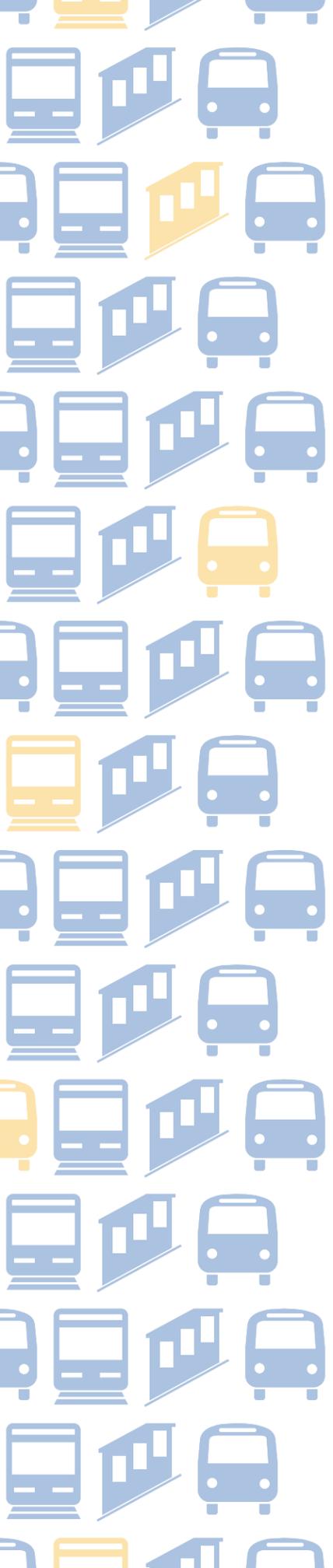
August 24, 2020



Port Authority



- 1** **Project Summary**
Funding Source: CMAQ
Project Timeline
- 2** **Garage Planning Analysis**
Safety Assessment
Carnegie Station
Zoning
Land Use
Walksheds
Gateways
Opportunities / Challenges
- 3** **Scenario #1**
Concept Design
Summary Matrix
- 4** **Scenario #2**
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- 5** **Design Review**
Summary Matrix
Concept Renderings



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PROJECT SUMMARY

FUNDING

CONGESTION MITIGATION AND AIR QUALITY (CMAQ)

- A program which provides grants to multimodal projects that provide congestion relief and contribute to air quality improvements
- Port Authority submitted a grant application to CMAQ in 2015 for Carnegie Park-and-Ride expansion
- Grant to award \$6.5 million in matching funds

PROJECT GOALS

- Increasing the current park-and-ride size to hold over 400 spaces
- Creating pedestrian and bicycle enhancements
- Designing the site for better transit connections
- Providing future space for transit-oriented community development

PROJECT SUMMARY

TIMELINE



1

2015-2019
Funding -
submission of a
CMAQ Grant and
award

2

December '19
Project kickoff
with Authority and
consulting team



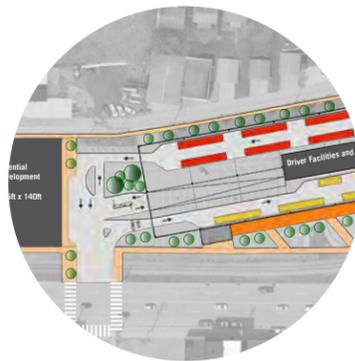
3

April '20
Site analysis
and research
for parking
structure
development



4

July '20
Present draft
concept designs
to Authority



5

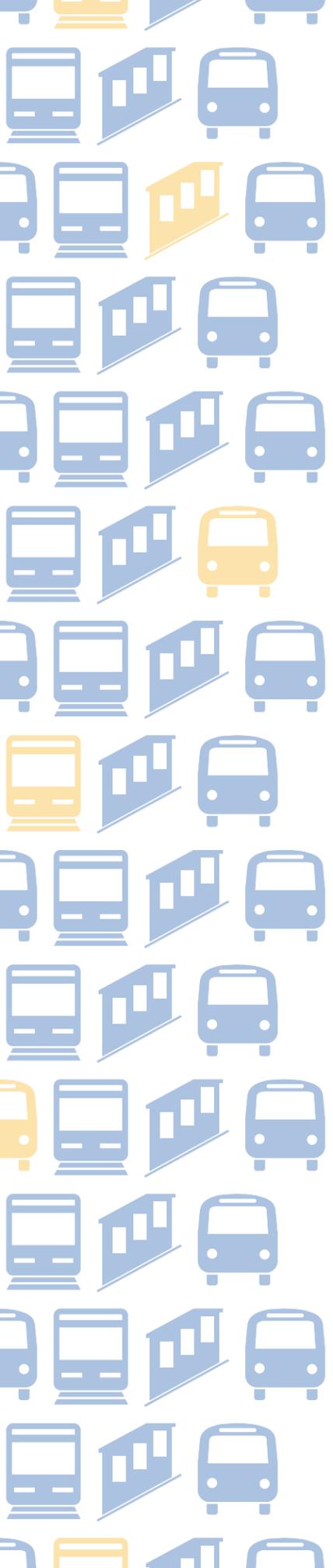
August '20
Present refined
concepts to
public



6

Next Steps
Present final
concepts to
public - move
into final design





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SAFETY ASSESSMENT

CARNEGIE STATION - OVERVIEW

PEDESTRIAN AND BICYCLE EVALUATION

- With a goal of identifying improvements for safe, accessible routes to the Authority's Carnegie Station for all users, the project team performed a pedestrian and bicycle safety evaluation.

GENERAL SIGNALIZED INTERSECTION OBSERVATIONS

- Upgrade signalized intersections to the latest technology to improve safety for all users.
- Upgrade the intersections at Campbell's Run Road, Jefferson Street, Third Avenue and Cabbage Street to have ADA-compliant pedestrian signals.

PEDESTRIAN AND BICYCLE EVALUATION

- Provide Sidewalks Along Streets
- Provide Ramps as Alternative to Stairs
- Install Curb Ramps
- Perform Sidewalk Maintenance
- Improve or Reconfigure Sidewalk
- Update Curb Ramps
- Improve Bicycle Accommodations
- Improve Pedestrian Connectivity
- Replace or Update Signage
- Add Crosswalk Markings and Stop Lines; Reposition Stop Signs
- Improve Crosswalk Markings

SAFETY ASSESSMENT

CARNEGIE STATION - BARRIERS



PROVIDE SIDEWALKS ALONG STREETS



PROVIDE RAMPS AS ALTERNATIVE TO STAIRS



INSTALL CURB RAMPS



PERFORM SIDEWALK MAINTENANCE



IMPROVE OR RECONFIGURE SIDEWALK



UPDATE CURB RAMPS

SAFETY ASSESSMENT

CARNEGIE STATION - BICYCLE AND PEDESTRIAN STUDY



IMPROVE BICYCLE ACCOMMODATIONS



IMPROVE PEDESTRIAN VISIBILITY



IMPROVE PEDESTRIAN CONNECTIVITY



REPLACE OR UPDATE SIGNAGE



ADD CROSSWALK, STOP LINES, AND SIGNS



INSTALL CURB RAMPS

CARNEGIE STATION



CHARTIERS CREEK
LOW-LYING AREAS

- Legend**
- CHARTIERS CREEK
 - PARK AND RIDE
 - WEST BUSWAY
 - LOW LYING AREAS
 - CONTOURS

ZONING

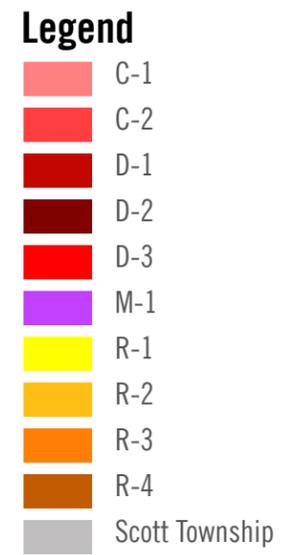
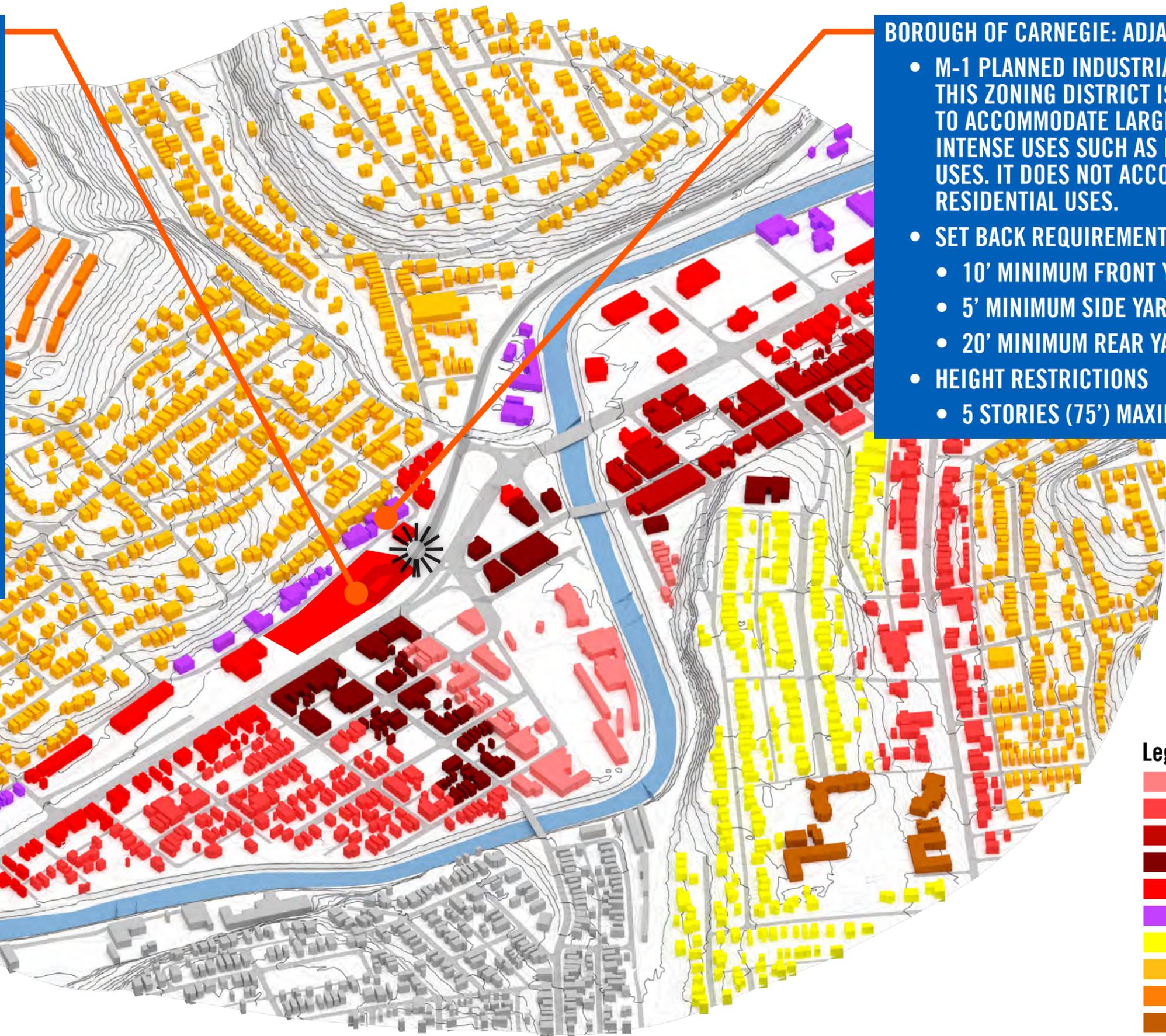
BOROUGH OF CARNEGIE: PAAC PROPERTY

- D-3 ARTERIAL DISTRICT: THE PURPOSE OF THIS DISTRICT IS TO DELINEATE AN AUTO-ORIENTED AREA FOCUSED ON EXISTING TRANSIT FACILITIES AND COMMERCIAL ESTABLISHMENTS WITH LARGER BUILDINGS AND LOTS.
- SET BACK REQUIREMENTS
 - 0 MINIMUM FRONT YARD
 - 0 MINIMUM SIDE YARD
 - 10' MINIMUM REAR YARD
- HEIGHT RESTRICTIONS
 - 5 STORIES (60') MAXIMUM

CARNEGIE BOROUGH DOES NOT HAVE SPECIFIC TRANSIT-ORIENTED DEVELOPMENT (TOD) ZONING BUT WAS A PARTICIPANT IN THE 2017-2018 TOD BEST PRACTICES PROJECT LED BY PORT AUTHORITY AND CONNECT.

BOROUGH OF CARNEGIE: ADJACENT PROPERTY

- M-1 PLANNED INDUSTRIAL DISTRICT: THIS ZONING DISTRICT IS INTENDED TO ACCOMMODATE LARGER AND MORE INTENSE USES SUCH AS INDUSTRIAL USES. IT DOES NOT ACCOMMODATE RESIDENTIAL USES.
- SET BACK REQUIREMENTS
 - 10' MINIMUM FRONT YARD
 - 5' MINIMUM SIDE YARD
 - 20' MINIMUM REAR YARD
- HEIGHT RESTRICTIONS
 - 5 STORIES (75') MAXIMUM



LAND USE



Legend

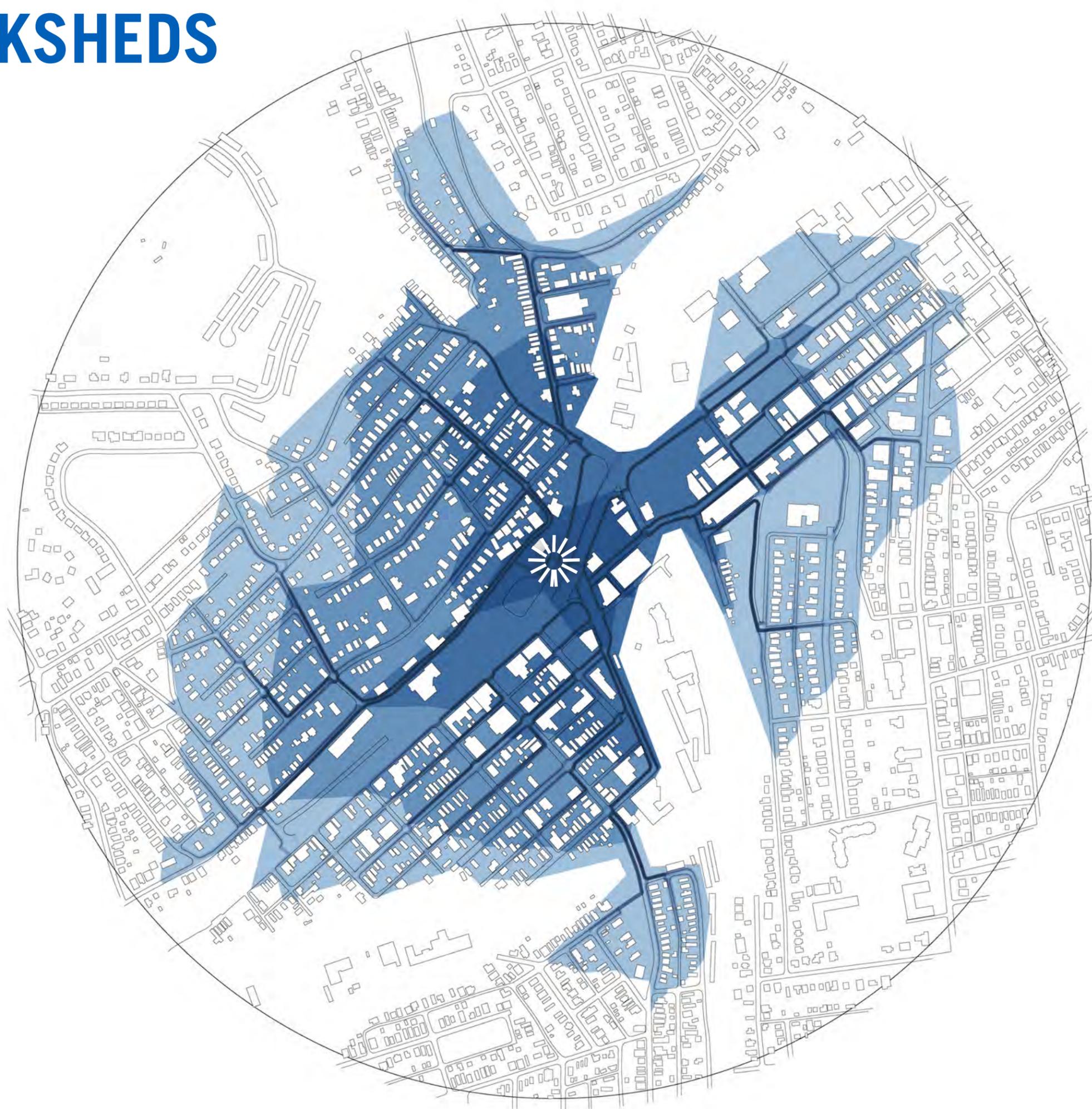
4+ units	2-3 units	Single family	Residential
Retail & Office	Industrial & Warehousing		Commercial
Institutional	Unknown		Others

WALKSHEDS

WALKABILITY

Challenges for walkability in the Carnegie Station area include:

- Lack of crosswalks
- Lack of sidewalks
- Limited crossings of Chartiers Creek



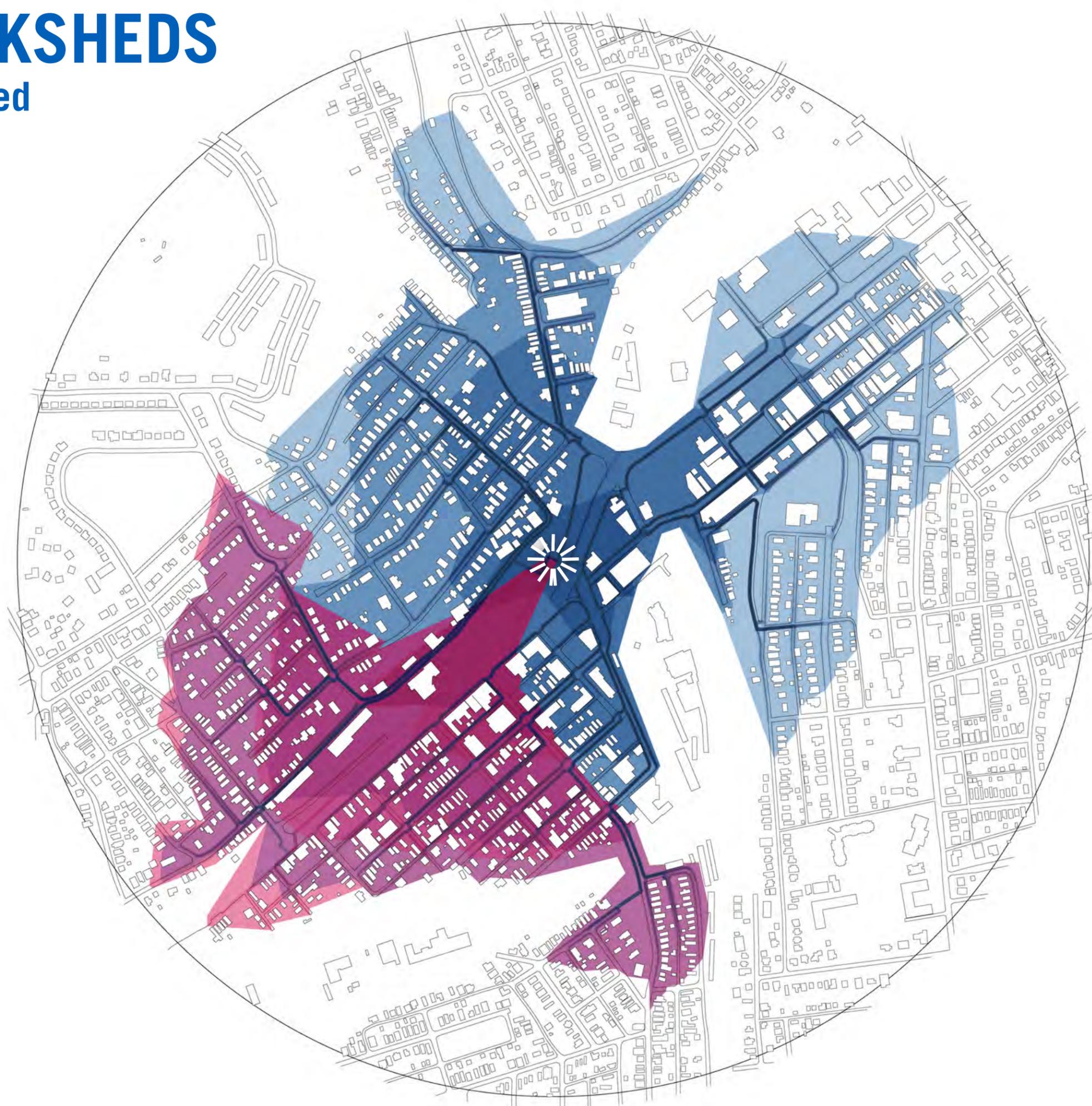
Legend

Walkshed

Existing 10 minute Walkshed

WALKSHEDS

Enhanced



ENHANCED WALKABILITY

Areas to the southwest of the Station Area would have an improved walk to the station.

This scenario assumes:

- Add a crosswalk at 3rd Avenue
- Create good quality pedestrian connections throughout Port Authority's property
- Add a sidewalk along the north edge of West Main Street
- Improvements to the pedestrian network at Carnegie would slightly expand the number of places within a ten minute walk.
- Improvements to the pedestrian network would also enhance the quality of experience for a substantial area.

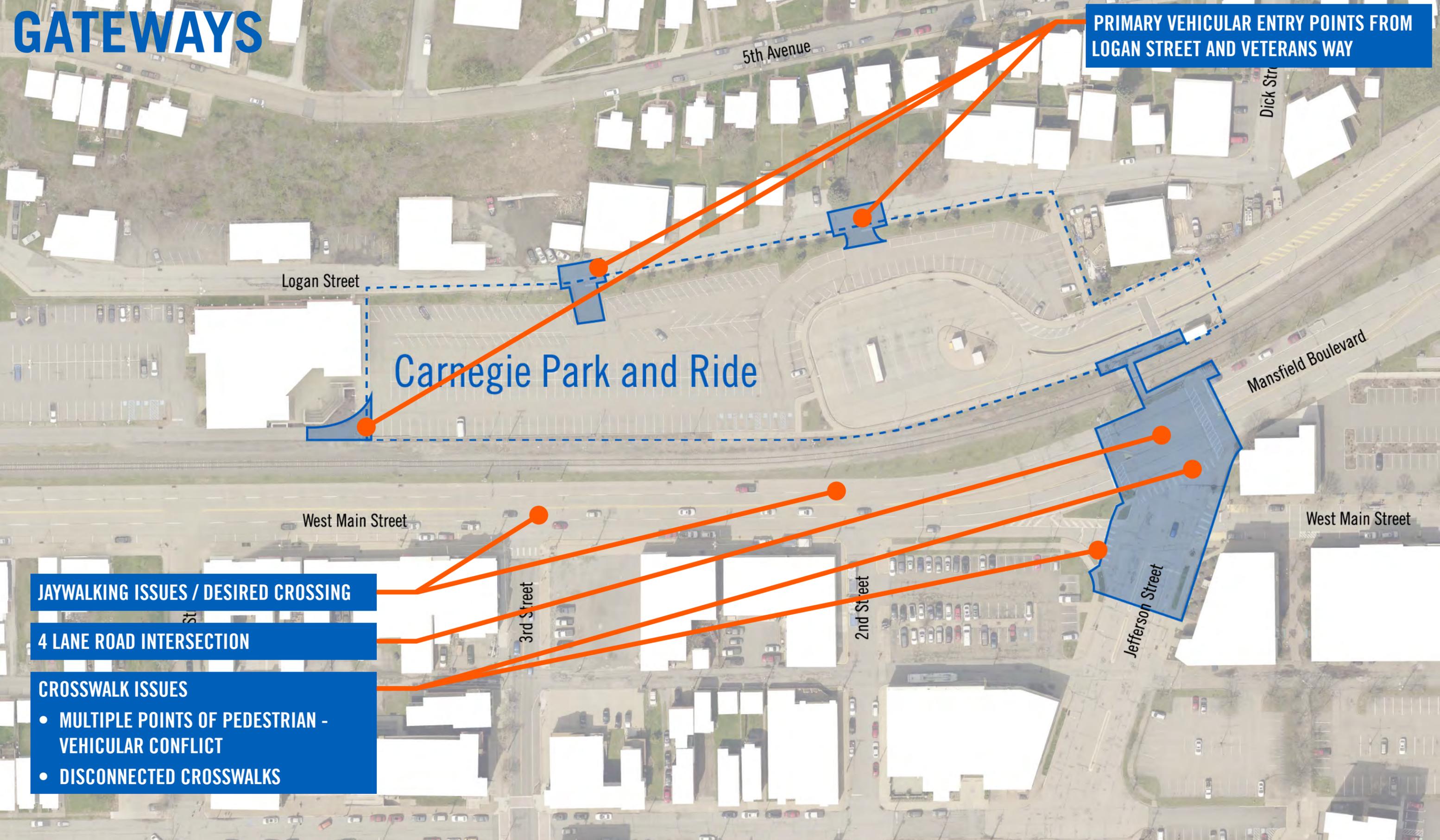
Legend

Walkshed

- Existing 10 Minute Walkshed
- Enhanced 10 Minute Walkshed

GATEWAYS

PRIMARY VEHICULAR ENTRY POINTS FROM LOGAN STREET AND VETERANS WAY



Carnegie Park and Ride

JAYWALKING ISSUES / DESIRED CROSSING

4 LANE ROAD INTERSECTION

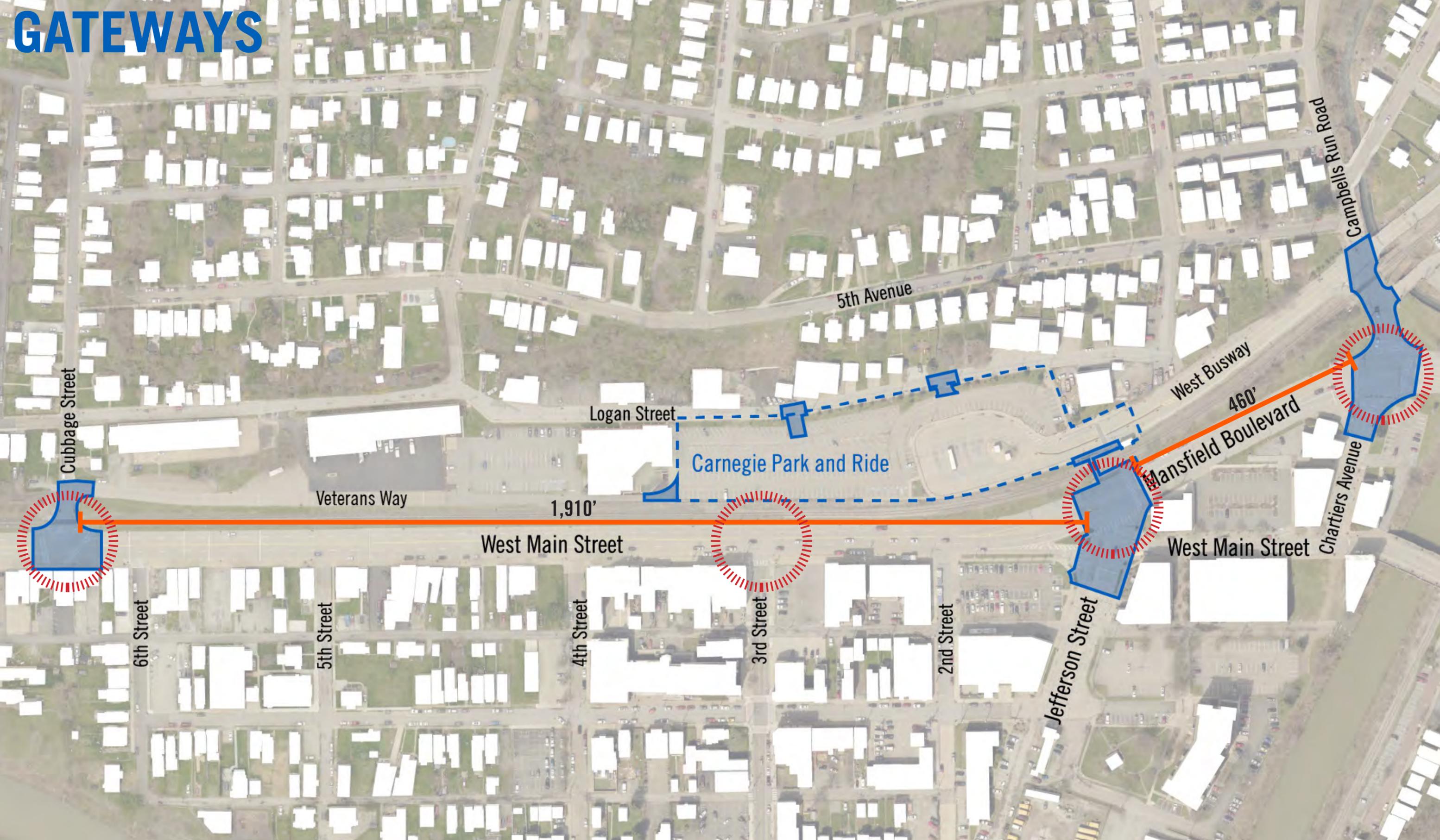
- CROSSWALK ISSUES
- MULTIPLE POINTS OF PEDESTRIAN - VEHICULAR CONFLICT
 - DISCONNECTED CROSSWALKS

Legend

- Project Area
- Gateways



GATEWAYS



Legend

- Project Area
- Gateways
- Signalized Intersections



CARNEGIE PARK AND RIDE

NORTH EAST VIEWSHED FROM BOROUGH BUILDING



OPPORTUNITIES:

- The PNR site is roughly 3 acres, allowing for flexibility in parking structure placement and size
- Significant daily ridership (with CY2017 weekday average stop use of 987)
- Access to infrastructure
- Potential enhancement to bus turn-around facilities



CHALLENGES:

- Overhead power line bisecting the existing PNR site at 3rd Street
 - Additional infrastructure costs for rerouting electric services
- Vehicle access limited from Logan Street and Veterans Way

CARNEGIE PARK AND RIDE

SOUTH WEST VIEWSHED FROM BUS TURNAROUND



OPPORTUNITIES:

- Proximity to the Carnegie Borough building, with associated on-site employment demand
- The site has frontage along West Main Street
 - West Main Street offers high visibility (ADT 10,885), an important criteria for commercial tenants
- Non-active railroad line located directly adjacent to the site
 - If acquisition of the right-of-way is feasible, potential rails to trails conversion
- Potential vehicle and pedestrian access at the 3rd Street intersection (would require new, at grade crossing)

CHALLENGES:

- Non-active railroad line located directly adjacent to the site.
 - Owned by Genesee & Wyoming, Inc. (acquired from Pittsburgh & Ohio Central Railroad)
 - If acquisition of the right-of-way is not feasible, the Borough and Port Authority may want to investigate the likelihood of adding another crossing, improving access to the site
- Currently, continuous street retail frontage or sidewalks do not exist along the north west side of West Main Street

CARNEGIE PARK AND RIDE

NORTH EAST VIEWSHED OF W. MAIN STREET ACCESS

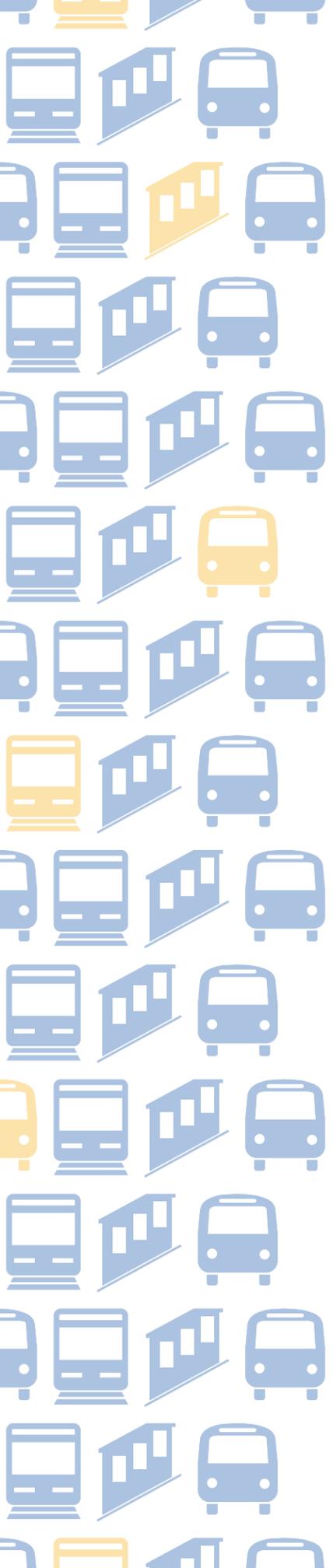


OPPORTUNITIES:

- Connection between West Busway and connector routes
 - Destinations located in close proximity:
 - Carnegie Downtown Business District
 - Andrew Carnegie Free Library and Music Hall
 - Off the Wall Productions (a multicultural performing arts theater)
 - Streetscape improvements and road diets to improve pedestrian safety (worked as two lanes during PENNDOT construction project)
 - There appears to be width to add enhanced pedestrian access
- Parking:** On Street (south side only)
Sidewalks: Varies (8'+; southeast side)
Bike Access: On street bike route
Speed Limit: 25 mph

CHALLENGES:

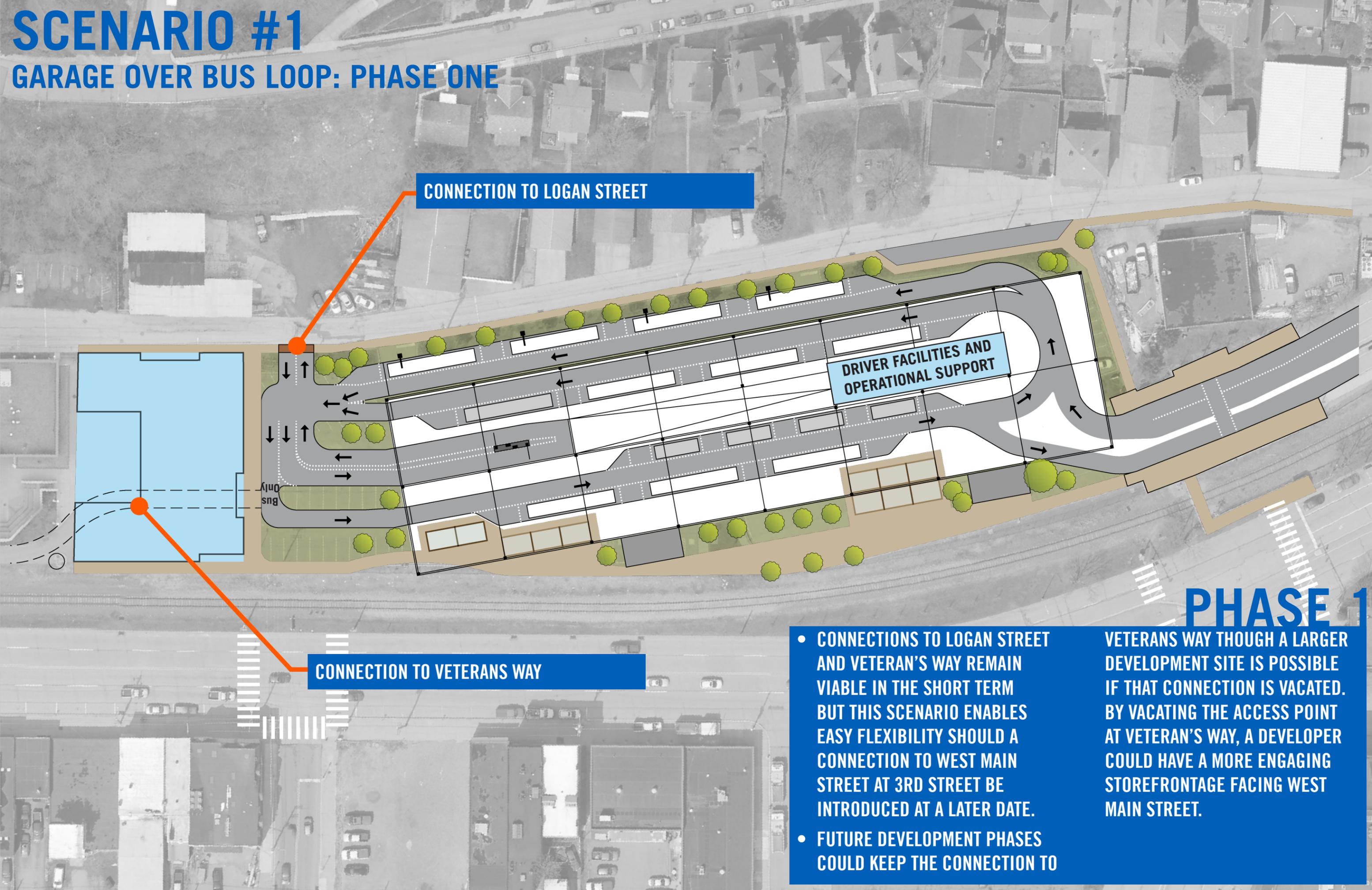
- The PNR site is adjacent to a busy state road – West Main Street
 - Four traffic lanes and one lane for parallel parking
 - Limited pedestrian crosswalks from the site crossing West Main Street – Jefferson Street, Cubbage Street, and Chartiers Avenue
- Difficult pedestrian connection to downtown Carnegie
 - Difficulty attracting bus riders to the downtown district
 - No gateway signage to the downtown commercial business district
 - Regardless of access, it can be difficult to attract certain commuters to commercial businesses at the end of the day (e.g. commuters with families)



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SCENARIO #1

GARAGE OVER BUS LOOP: PHASE ONE



CONNECTION TO LOGAN STREET

CONNECTION TO VETERANS WAY

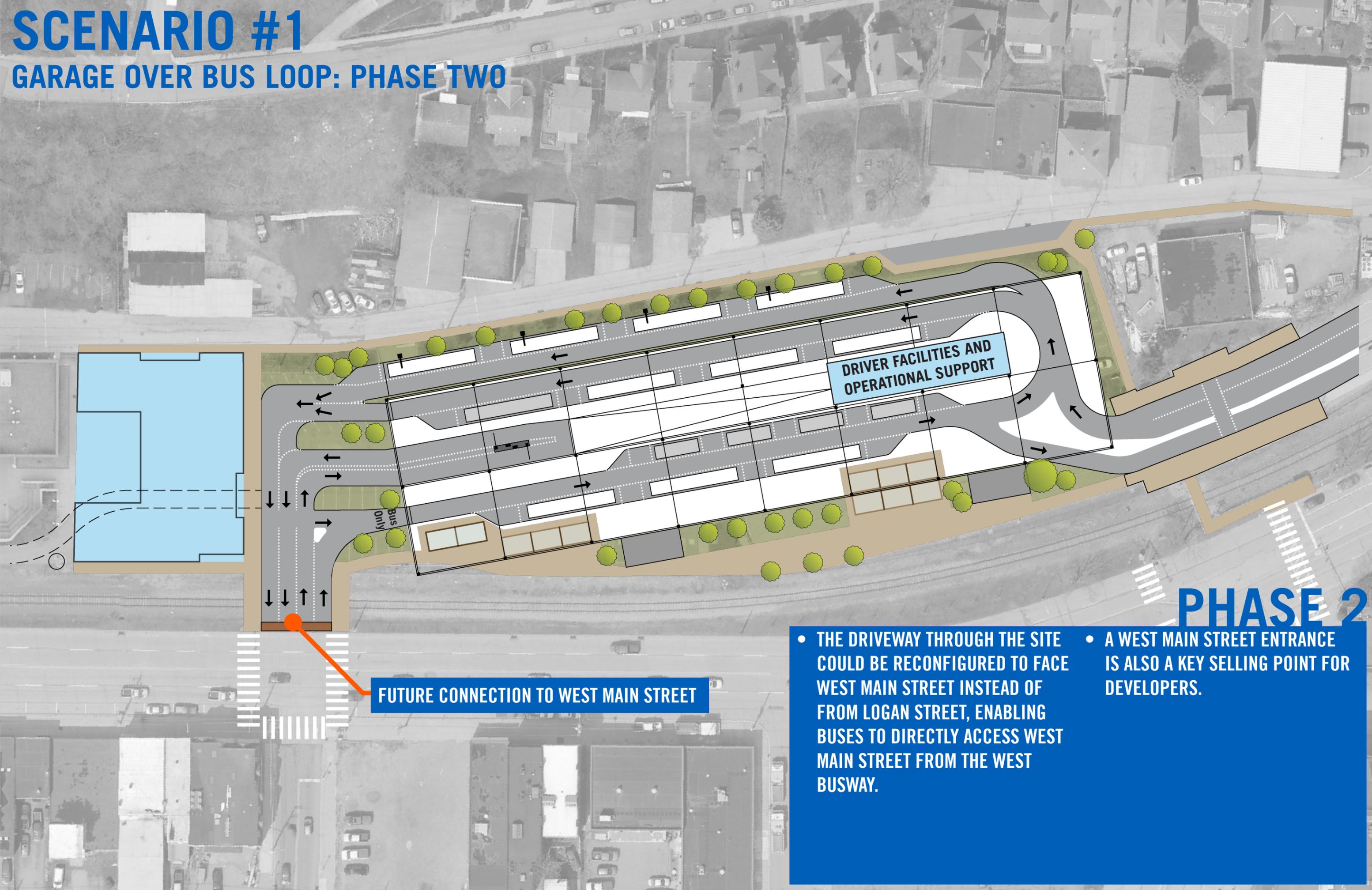
DRIVER FACILITIES AND OPERATIONAL SUPPORT

PHASE 1

- CONNECTIONS TO LOGAN STREET AND VETERAN'S WAY REMAIN VIABLE IN THE SHORT TERM BUT THIS SCENARIO ENABLES EASY FLEXIBILITY SHOULD A CONNECTION TO WEST MAIN STREET AT 3RD STREET BE INTRODUCED AT A LATER DATE.
- FUTURE DEVELOPMENT PHASES COULD KEEP THE CONNECTION TO VETERANS WAY THOUGH A LARGER DEVELOPMENT SITE IS POSSIBLE IF THAT CONNECTION IS VACATED. BY VACATING THE ACCESS POINT AT VETERAN'S WAY, A DEVELOPER COULD HAVE A MORE ENGAGING STOREFRONTAGE FACING WEST MAIN STREET.

SCENARIO #1

GARAGE OVER BUS LOOP: PHASE TWO



DRIVER FACILITIES AND OPERATIONAL SUPPORT

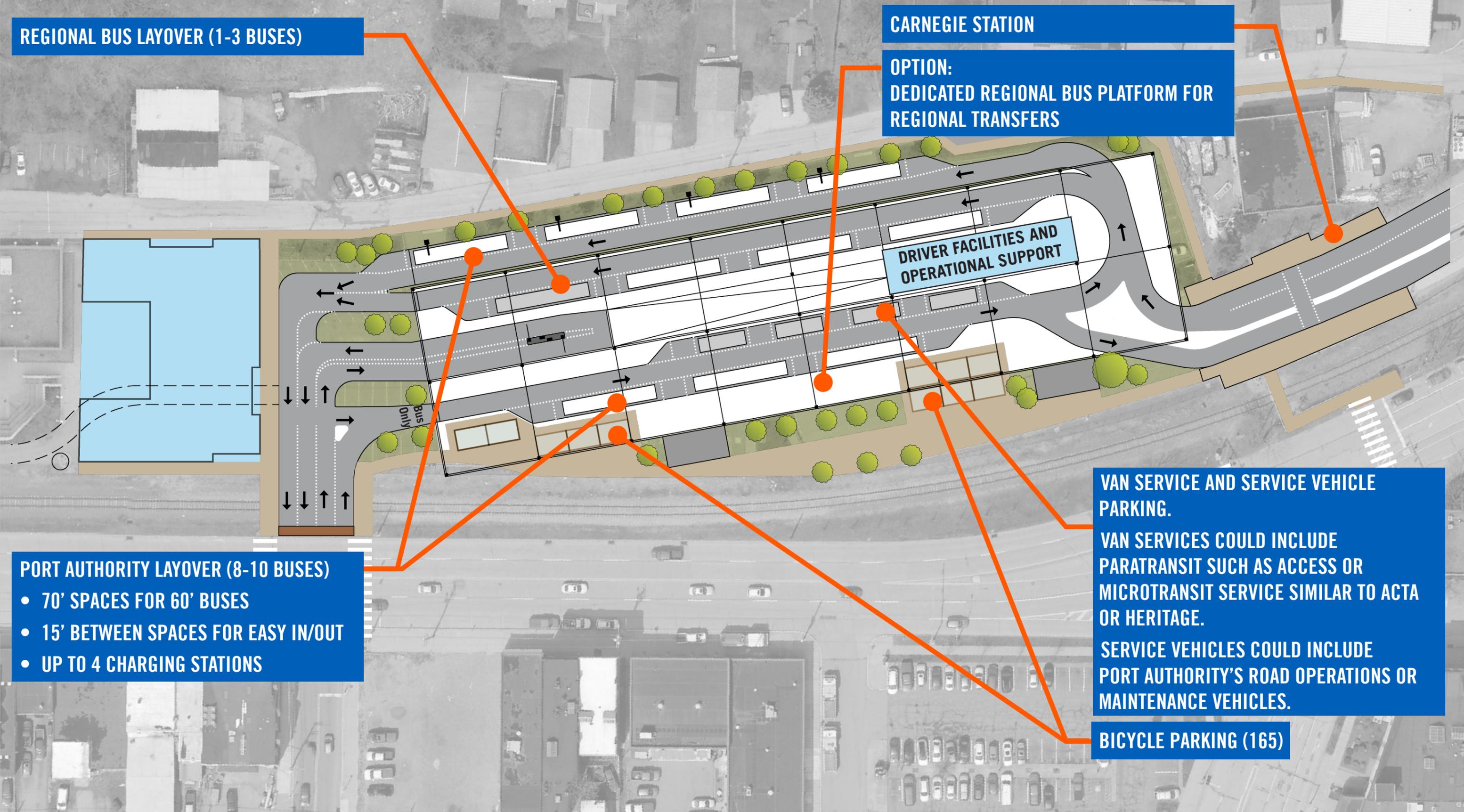
FUTURE CONNECTION TO WEST MAIN STREET

PHASE 2

- THE DRIVEWAY THROUGH THE SITE COULD BE RECONFIGURED TO FACE WEST MAIN STREET INSTEAD OF FROM LOGAN STREET, ENABLING BUSES TO DIRECTLY ACCESS WEST MAIN STREET FROM THE WEST BUSWAY.
- A WEST MAIN STREET ENTRANCE IS ALSO A KEY SELLING POINT FOR DEVELOPERS.

SCENARIO #1

GARAGE OVER BUS LOOP: PHASE TWO



REGIONAL BUS LAYOVER (1-3 BUSES)

CARNEGIE STATION

**OPTION:
DEDICATED REGIONAL BUS PLATFORM FOR
REGIONAL TRANSFERS**

**DRIVER FACILITIES AND
OPERATIONAL SUPPORT**

PORT AUTHORITY LAYOVER (8-10 BUSES)

- 70' SPACES FOR 60' BUSES
- 15' BETWEEN SPACES FOR EASY IN/OUT
- UP TO 4 CHARGING STATIONS

**VAN SERVICE AND SERVICE VEHICLE
PARKING.**

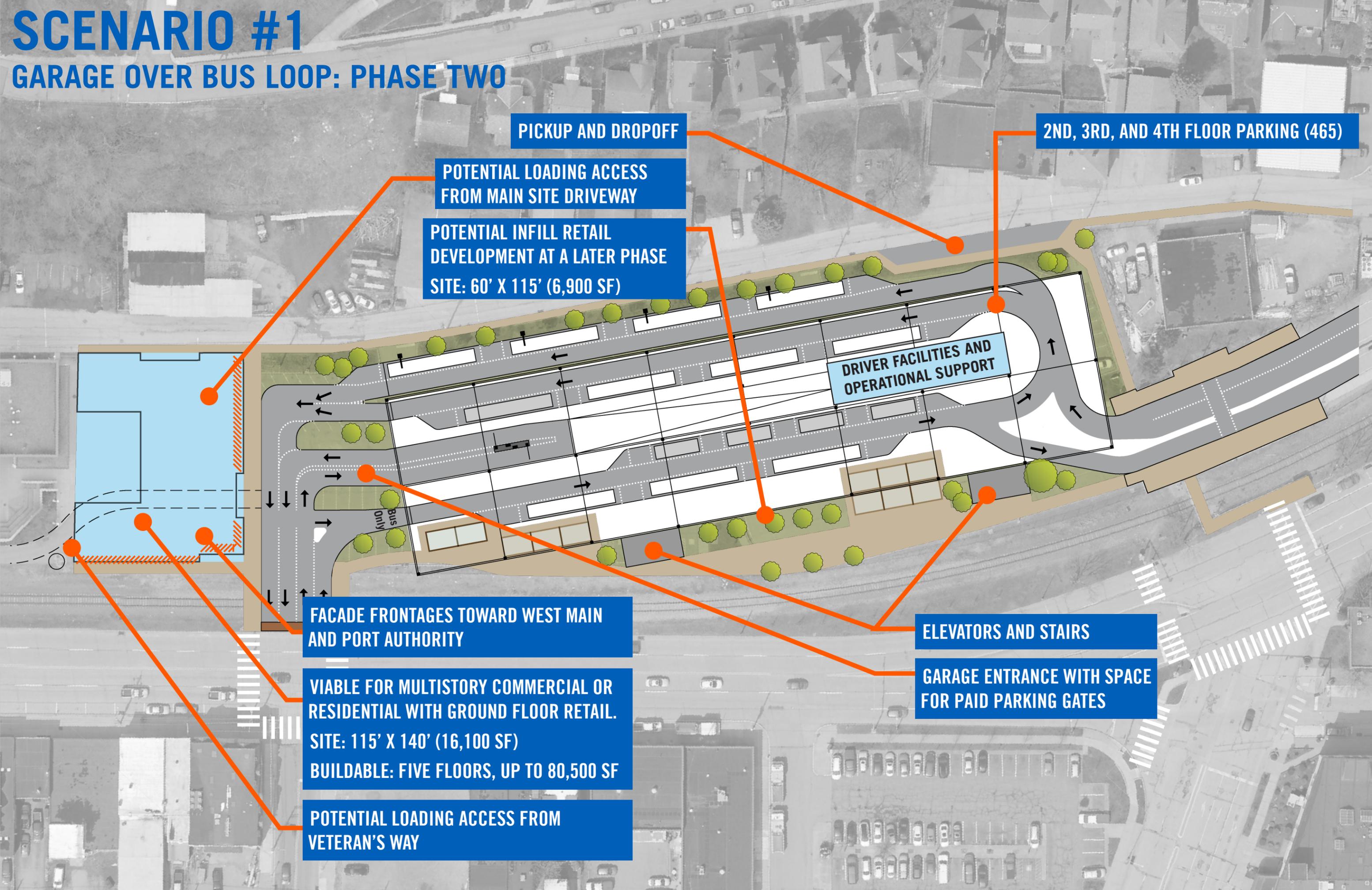
**VAN SERVICES COULD INCLUDE
PARATRANSIT SUCH AS ACCESS OR
MICROTRANSIT SERVICE SIMILAR TO ACTA
OR HERITAGE.**

**SERVICE VEHICLES COULD INCLUDE
PORT AUTHORITY'S ROAD OPERATIONS OR
MAINTENANCE VEHICLES.**

BICYCLE PARKING (165)

SCENARIO #1

GARAGE OVER BUS LOOP: PHASE TWO



PICKUP AND DROPOFF

POTENTIAL LOADING ACCESS FROM MAIN SITE DRIVEWAY

POTENTIAL INFILL RETAIL DEVELOPMENT AT A LATER PHASE
SITE: 60' X 115' (6,900 SF)

2ND, 3RD, AND 4TH FLOOR PARKING (465)

DRIVER FACILITIES AND OPERATIONAL SUPPORT

FACADE FRONTAGES TOWARD WEST MAIN AND PORT AUTHORITY

ELEVATORS AND STAIRS

VIAIBLE FOR MULTISTORY COMMERCIAL OR RESIDENTIAL WITH GROUND FLOOR RETAIL.
SITE: 115' X 140' (16,100 SF)
BUILDABLE: FIVE FLOORS, UP TO 80,500 SF

GARAGE ENTRANCE WITH SPACE FOR PAID PARKING GATES

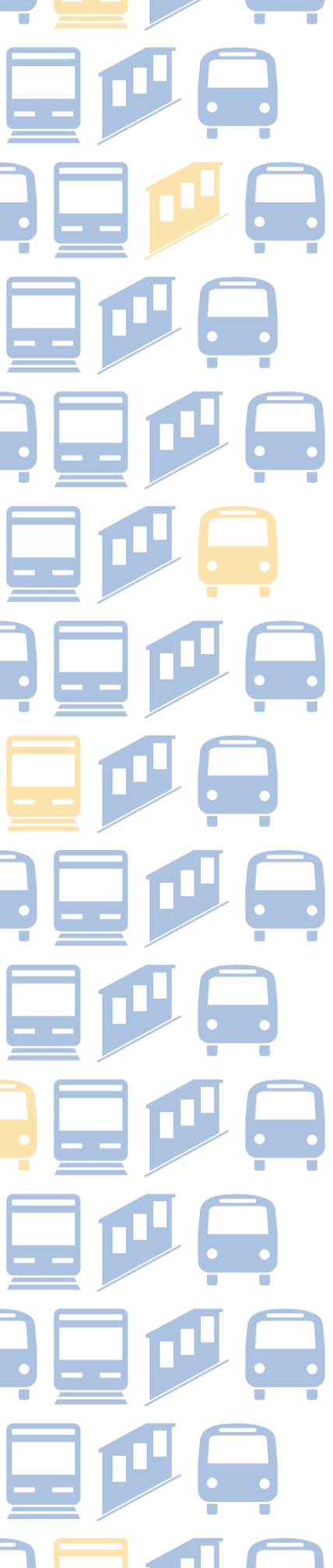
POTENTIAL LOADING ACCESS FROM VETERAN'S WAY

SUMMARY MATRIX

GARAGE OVER BUS LOOP

SCENARIO #1 GARAGE OVER BUS LOOP	
TOTAL PARKING SPACES	465
BIKE PARKING FACILITIES	165
PICK UP DROP OFF ZONE (LINEAR FEET)	75
DROP OFF DISTANCE TO STATION PLATFORM (MINUTES)	1
PICK UP DROP OFF ZONE (LINEAR FEET)	75
BUS LAYOVER SPACES (60' ARTICULATED)	11-13
VEHICULAR ACCESS POINTS (TOTAL)	1-2
ACTIVE FRONTAGE	19%

POTENTIAL TOD FRONTAGE: 115'
GARAGE FRONTAGE: 482'
TOTAL: 597'



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SCENARIO #2

STAND ALONE GARAGE: PHASE ONE



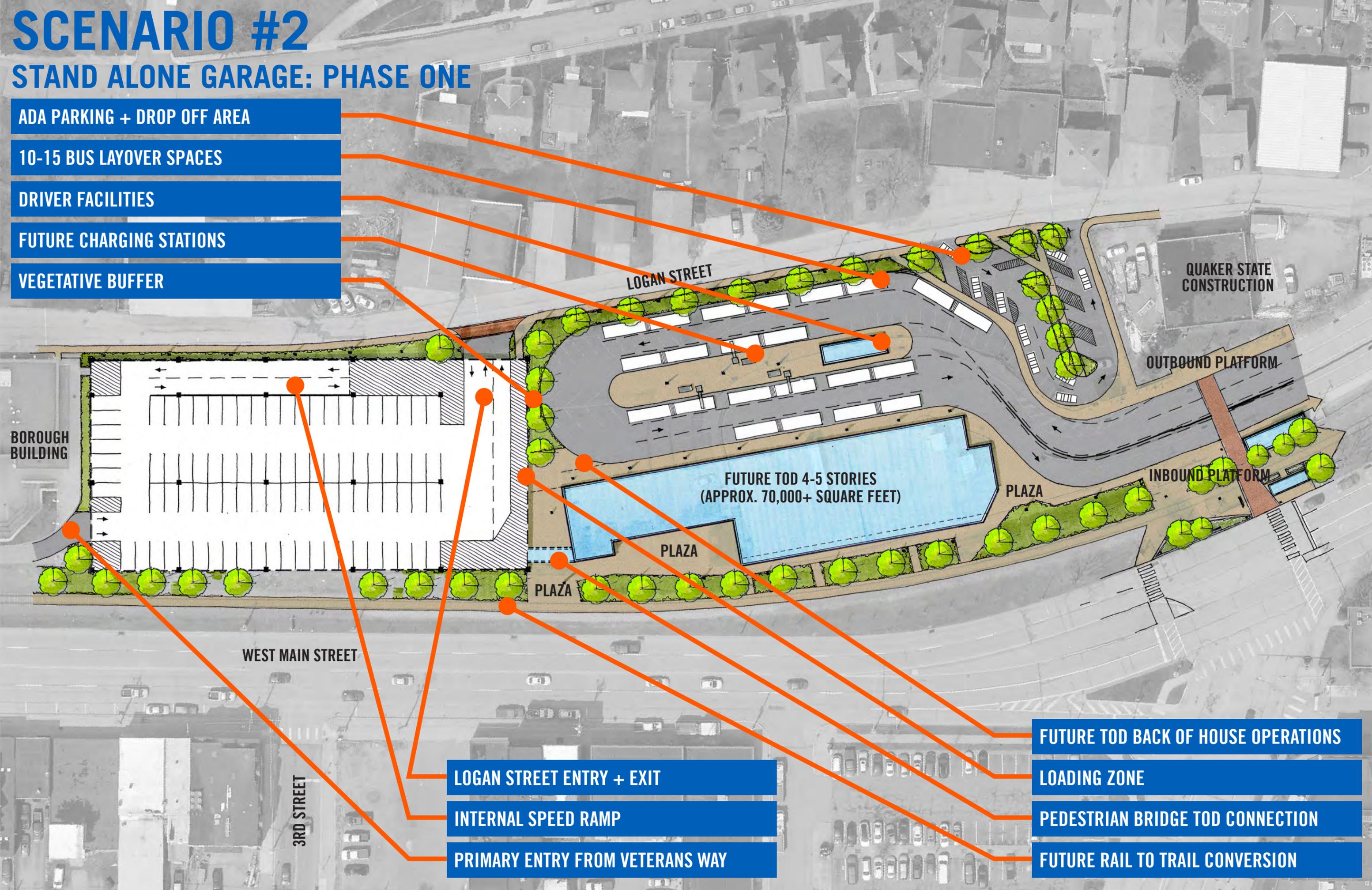
PHASE 1

- GARAGE ENTRY FROM VETERANS WAY WITH AN ENTRY/EXIT FROM LOGAN STREET
- GARAGE PARKING TOTAL: 430+/-
- SEPARATE DROP-OFF AREA
- TOD (4-5 STORY MIXED-USE): 70,000+/- SQUARE FEET
- PEDESTRIAN BRIDGE CONNECTION
- PARKING + LOADING MAY BE PROVIDED WITHIN GARAGE OR HAVE ACCESS FROM GARAGE
- TOD AREA INITIALLY DEVELOPED AS SURFACE PARKING WITH ACCESS FROM GARAGE
- BUS LOOP AT REAR OF SITE
- MINIMUM 12 60' ARTICULATED BUSES
- MAXIMUM 15 60' ARTICULATED BUSES
- INCLUDES INFRASTRUCTURE FOR FUTURE CHARGING STATIONS WITHIN ISLAND
- DRIVER FACILITIES IN ISLAND

SCENARIO #2

STAND ALONE GARAGE: PHASE ONE

- ADA PARKING + DROP OFF AREA
- 10-15 BUS LAYOVER SPACES
- DRIVER FACILITIES
- FUTURE CHARGING STATIONS
- VEGETATIVE BUFFER

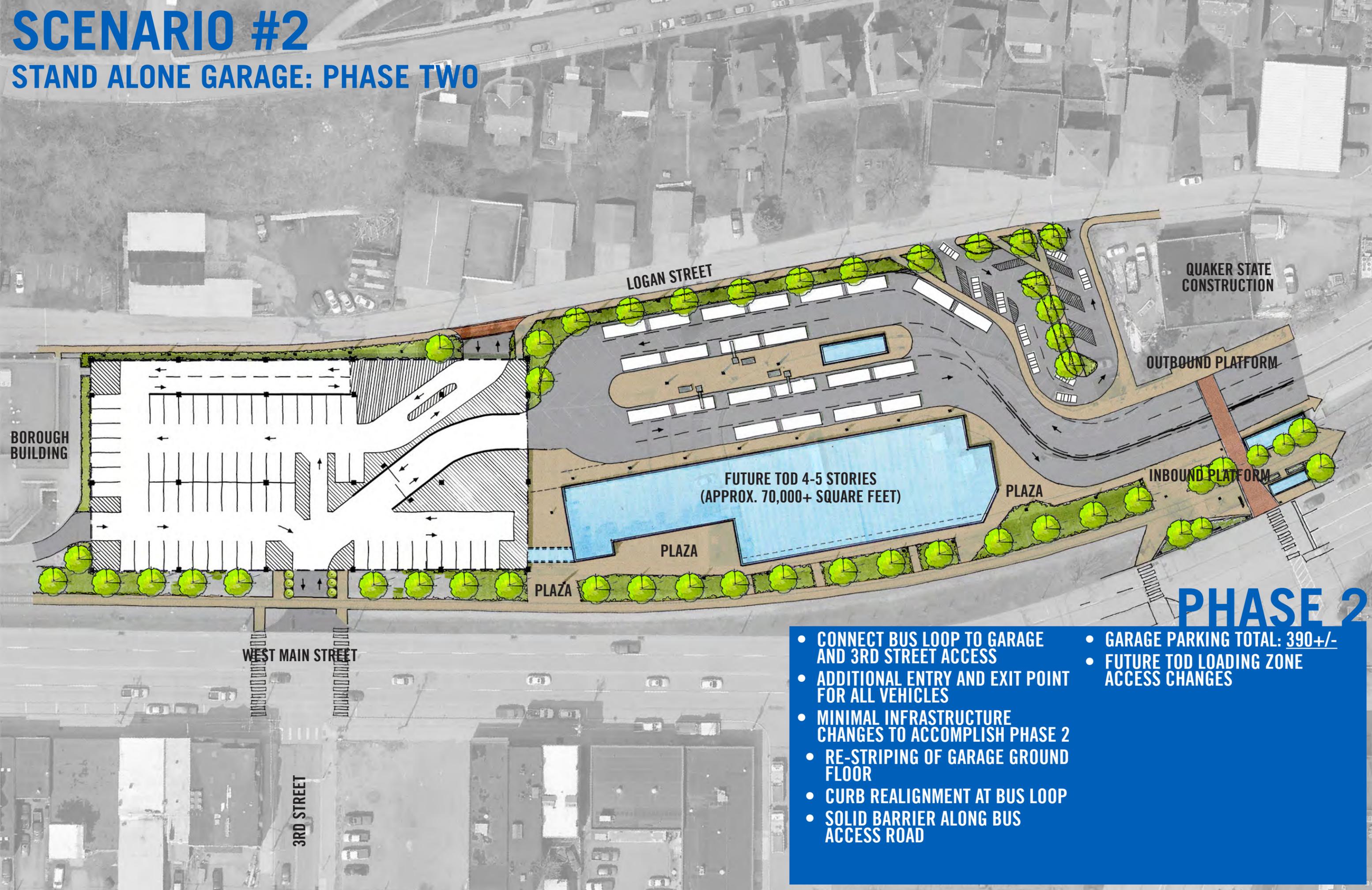


- LOGAN STREET ENTRY + EXIT
- INTERNAL SPEED RAMP
- PRIMARY ENTRY FROM VETERANS WAY

- FUTURE TOD BACK OF HOUSE OPERATIONS
- LOADING ZONE
- PEDESTRIAN BRIDGE TOD CONNECTION
- FUTURE RAIL TO TRAIL CONVERSION

SCENARIO #2

STAND ALONE GARAGE: PHASE TWO



PHASE 2

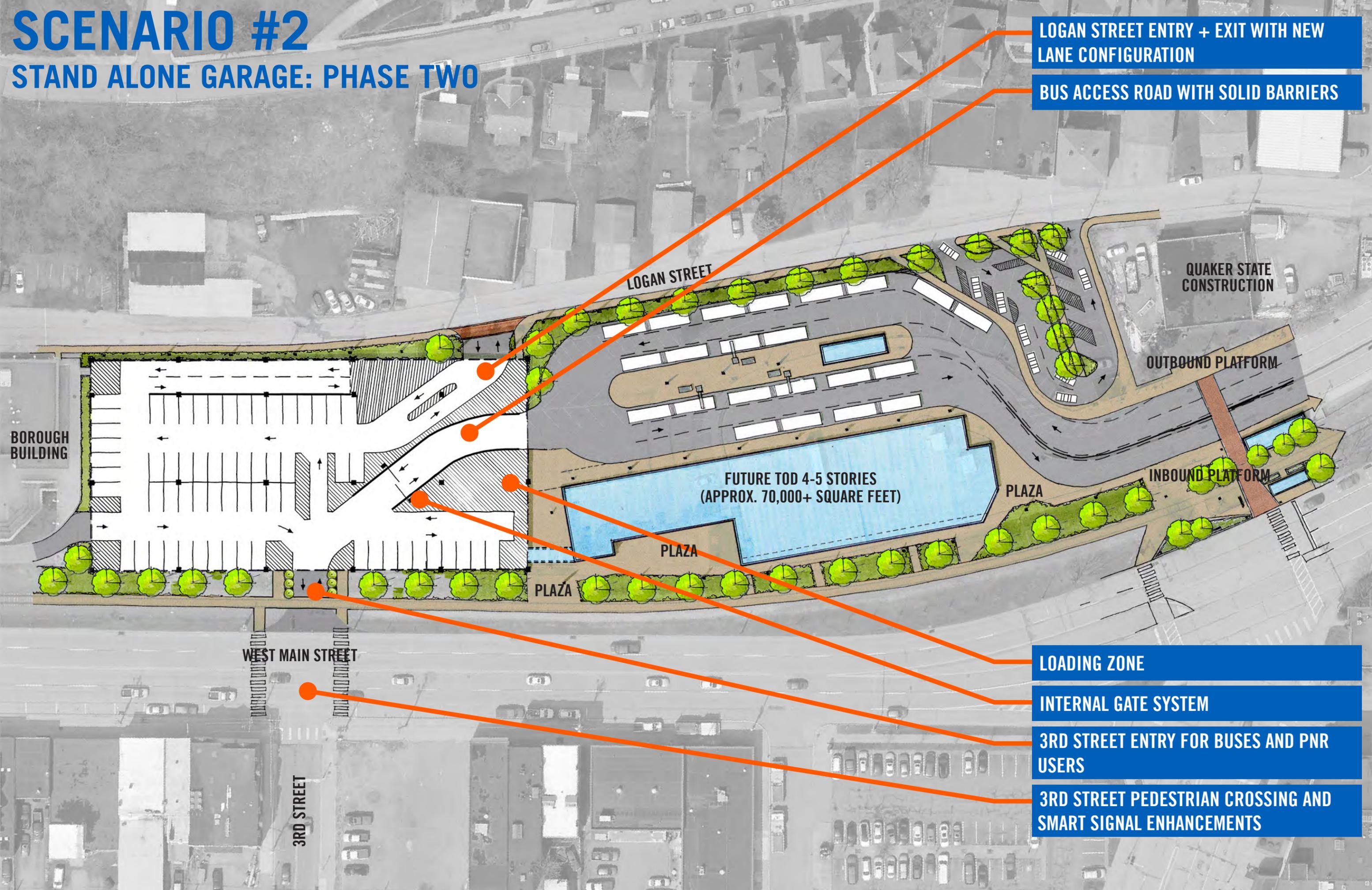
- CONNECT BUS LOOP TO GARAGE AND 3RD STREET ACCESS
- ADDITIONAL ENTRY AND EXIT POINT FOR ALL VEHICLES
- MINIMAL INFRASTRUCTURE CHANGES TO ACCOMPLISH PHASE 2
- RE-STRIPING OF GARAGE GROUND FLOOR
- CURB REALIGNMENT AT BUS LOOP
- SOLID BARRIER ALONG BUS ACCESS ROAD
- GARAGE PARKING TOTAL: 390+/-
- FUTURE TOD LOADING ZONE ACCESS CHANGES

SCENARIO #2

STAND ALONE GARAGE: PHASE TWO

LOGAN STREET ENTRY + EXIT WITH NEW LANE CONFIGURATION

BUS ACCESS ROAD WITH SOLID BARRIERS



LOADING ZONE

INTERNAL GATE SYSTEM

3RD STREET ENTRY FOR BUSES AND PNR USERS

3RD STREET PEDESTRIAN CROSSING AND SMART SIGNAL ENHANCEMENTS

BOROUGH BUILDING

LOGAN STREET

QUAKER STATE CONSTRUCTION

OUTBOUND PLATFORM

FUTURE TOD 4-5 STORIES
(APPROX. 70,000+ SQUARE FEET)

PLAZA

INBOUND PLATFORM

PLAZA

PLAZA

WEST MAIN STREET

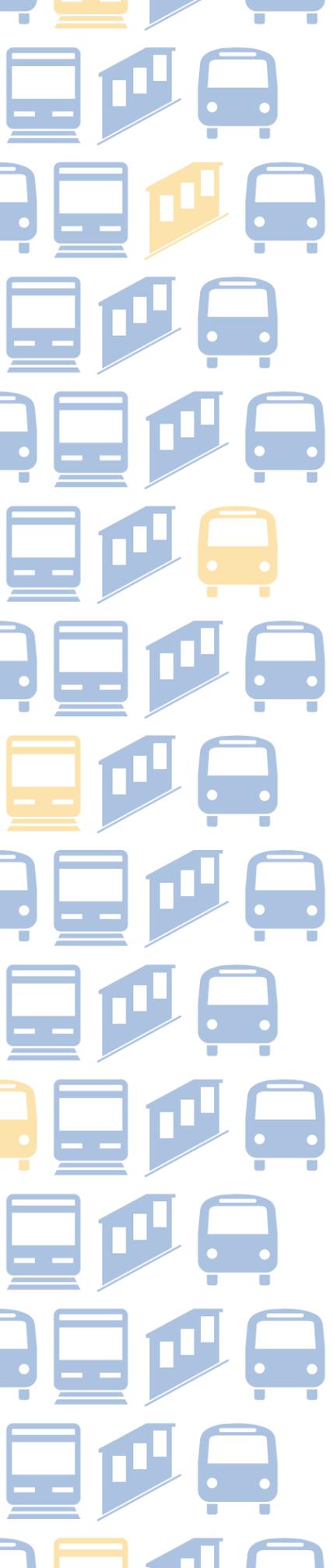
3RD STREET

SUMMARY MATRIX

STAND ALONE GARAGE

SCENARIO #2 STAND ALONE GARAGE	
TOTAL PARKING SPACES	428
BIKE PARKING FACILITIES	80
PICK UP DROP OFF ZONE (LINEAR FEET)	90
DROP OFF DISTANCE TO STATION PLATFORM (MINUTES)	0.30
PICK UP DROP OFF ZONE (LINEAR FEET)	90
BUS LAYOVER SPACES (60' ARTICULATED)	12-15
VEHICULAR ACCESS POINTS (TOTAL)	3-4
ACTIVE FRONTAGE	52%

POTENTIAL TOD FRONTAGE: 330'
GARAGE FRONTAGE: 300'
TOTAL: 630'



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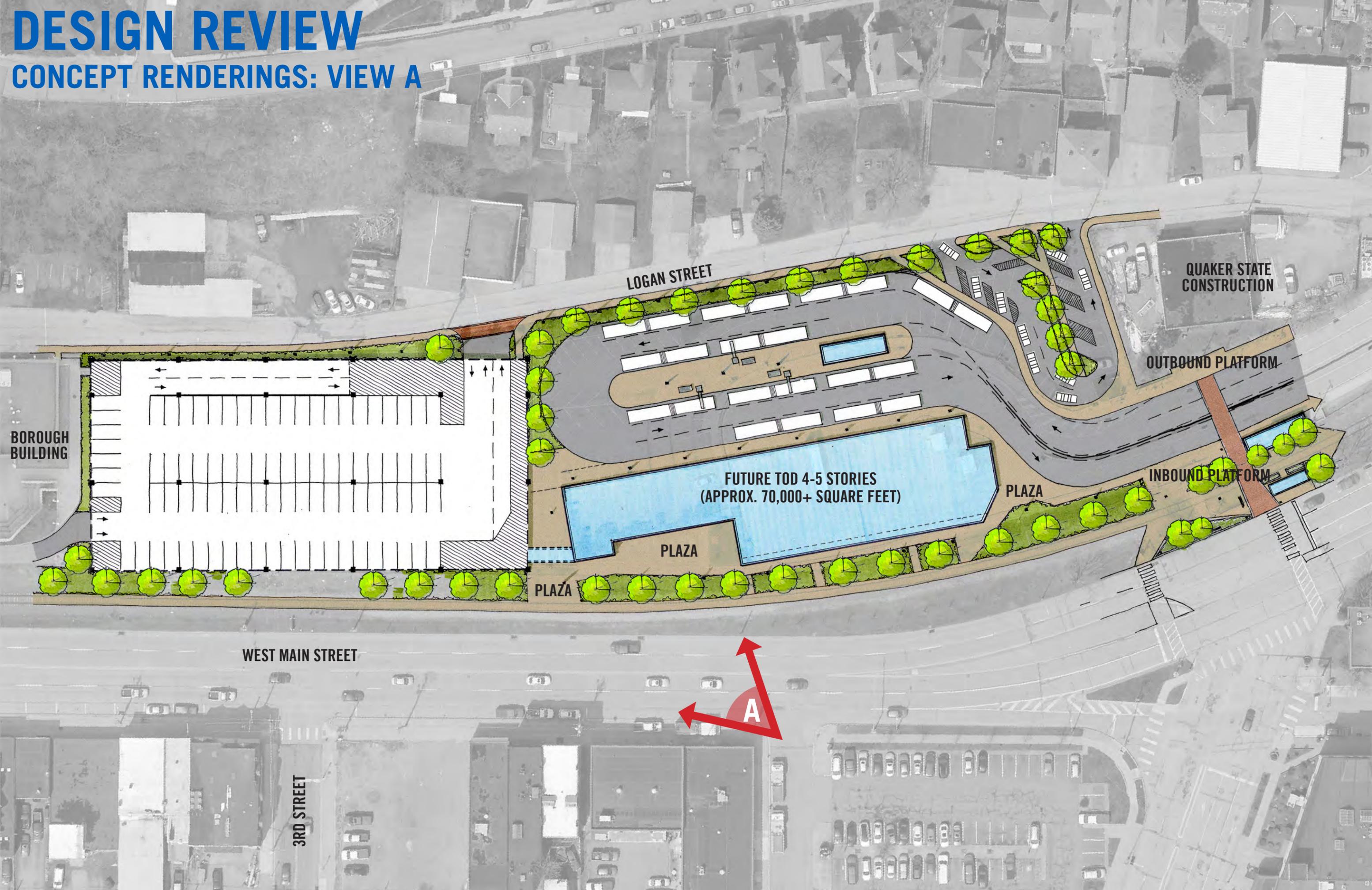
DESIGN REVIEW

SUMMARY MATRIX

SCENARIO #2 STAND ALONE GARAGE		
SCENARIO #1 GARAGE OVER BUS LOOP		
TOTAL PARKING SPACES	465	428
BIKE PARKING FACILITIES	165	80
PICK UP DROP OFF ZONE (LINEAR FEET)	75	90
DROP OFF DISTANCE TO STATION PLATFORM (MINUTES)	1	0.30
PICK UP DROP OFF ZONE (LINEAR FEET)	75	90
BUS LAYOVER SPACES (60' ARTICULATED)	11-13	12-15
VEHICULAR ACCESS POINTS (TOTAL)	1-2	3-4
ACTIVE FRONTAGE	19%	52%

DESIGN REVIEW

CONCEPT RENDERINGS: VIEW A



LOGAN STREET

QUAKER STATE CONSTRUCTION

OUTBOUND PLATFORM

BOROUGH BUILDING

FUTURE TOD 4-5 STORIES
(APPROX. 70,000+ SQUARE FEET)

INBOUND PLATFORM

PLAZA

PLAZA

PLAZA

WEST MAIN STREET



3RD STREET

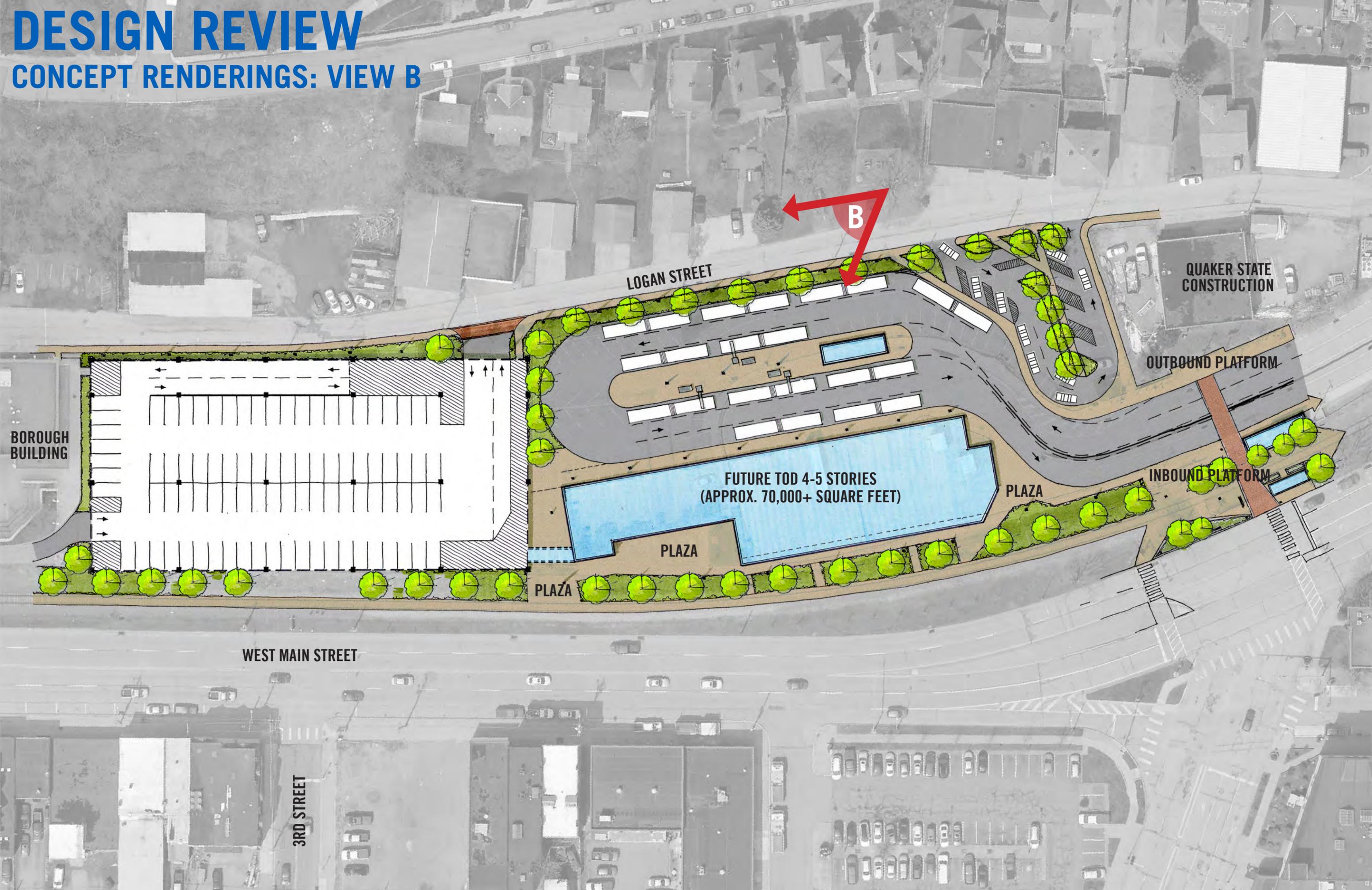
DESIGN REVIEW

CONCEPT RENDERINGS: VIEW A



DESIGN REVIEW

CONCEPT RENDERINGS: VIEW B



B

LOGAN STREET

QUAKER STATE CONSTRUCTION

OUTBOUND PLATFORM

BOROUGH BUILDING

FUTURE TOD 4-5 STORIES
(APPROX. 70,000+ SQUARE FEET)

INBOUND PLATFORM

PLAZA

PLAZA

PLAZA

WEST MAIN STREET

3RD STREET

DESIGN REVIEW

CONCEPT RENDERINGS: VIEW B



QUESTIONS

CARNEGIE PARK AND RIDE GARAGE ALTERNATIVE

August 24, 2020

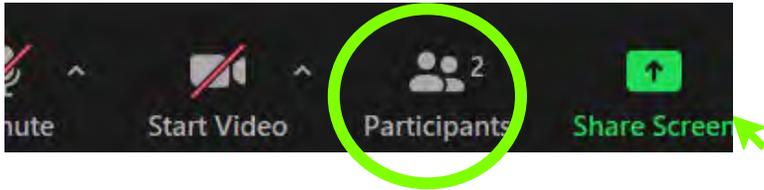


Port Authority

Raising your hand in Zoom

By desktop/laptop:

1. Click “Participants” on the Zoom Menu Bar at the bottom of the Zoom window.

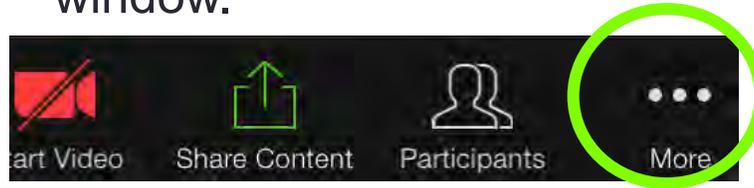


2. A white “Participants” box will open. At the bottom of this screen, click, “Raise Hand.”

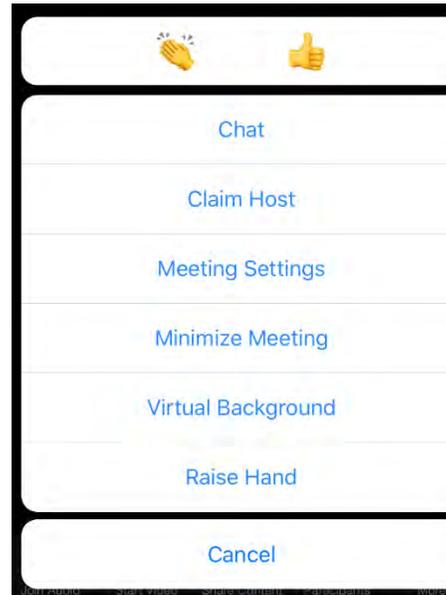


By IOS/Android:

1. Click “More” on the Zoom Menu Bar at the bottom of the Zoom window.



2. Choose “raise hand”



By telephone:

1. *6 to mute/unmute
2. *9 to raise hand