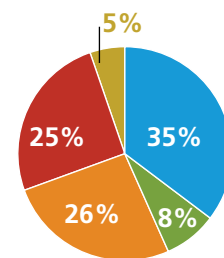
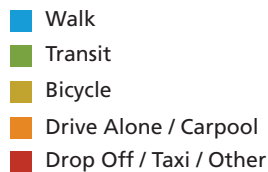


## Focus Station Area Action Plan

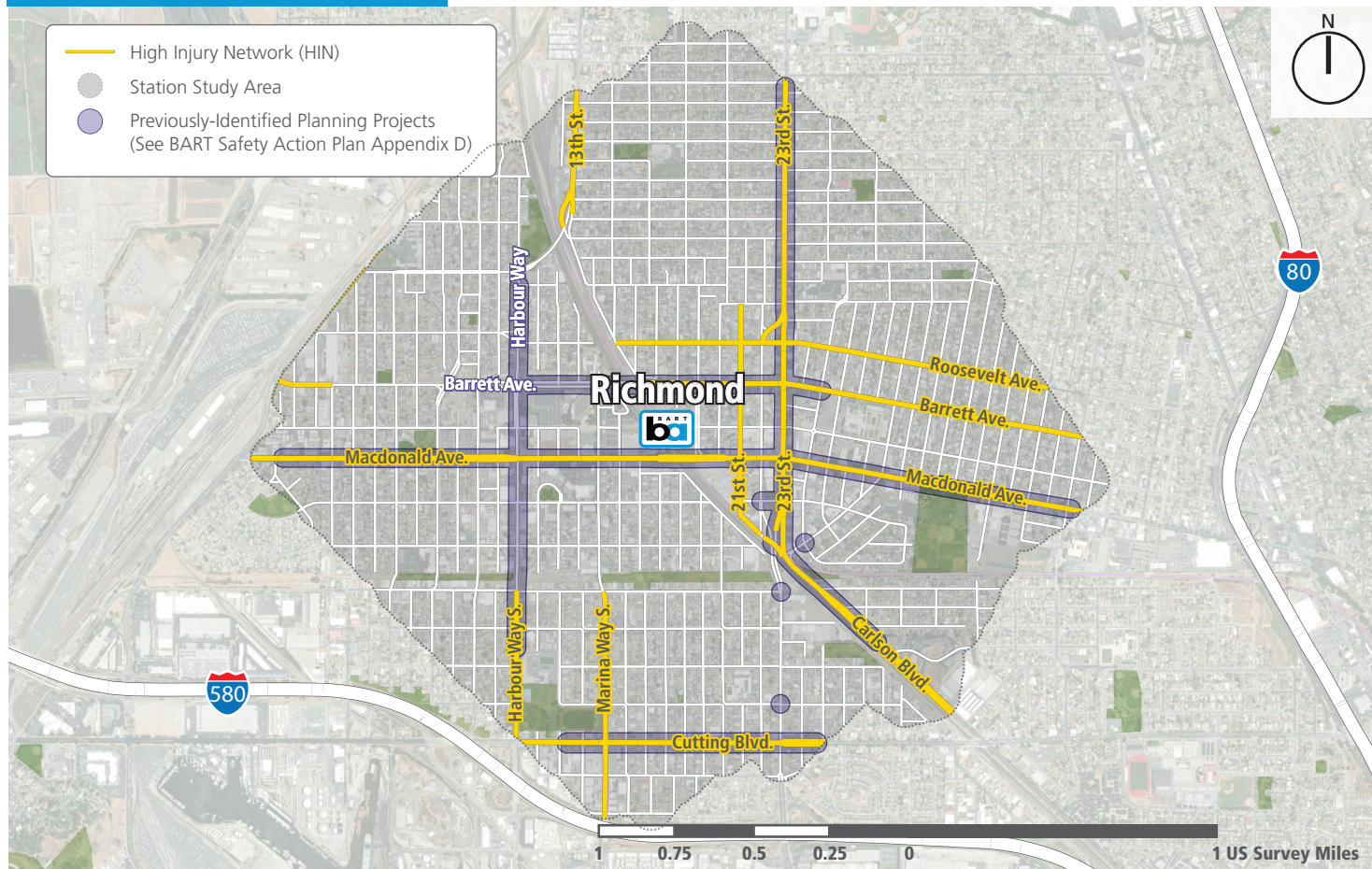
### Station at a Glance

**Station Access Type:** Balanced Intermodal

#### Access Mode Share



### Station Area Map



**Jurisdiction(s) with roads on HIN:** City of Richmond and Contra Costa County

### Safety by the Numbers

5-year Collision Data: 2019-2023

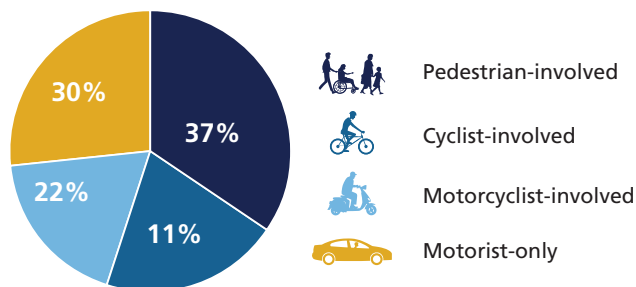
**14%** Percent of Station study area street miles on the HIN

**50** Number of people killed or severely injured (KSI)

**9%** Percent of crashes that resulted in KSI

### Killed/Severe Injury (KSI) Crashes

Total KSI: 50



## Focus Station Area Action Plan

### Key Corridors and Intersections



**Jurisdiction(s) with roads on HIN:** City of Richmond and Contra Costa County

- 1** Macdonald Avenue from 15th Street to 23rd Street
- 2** 23rd Street from Macdonald Avenue to Roosevelt Avenue
- 3** Barrett Avenue from 23rd Street to 18th Street
- 4** Macdonald Avenue & 23rd Street



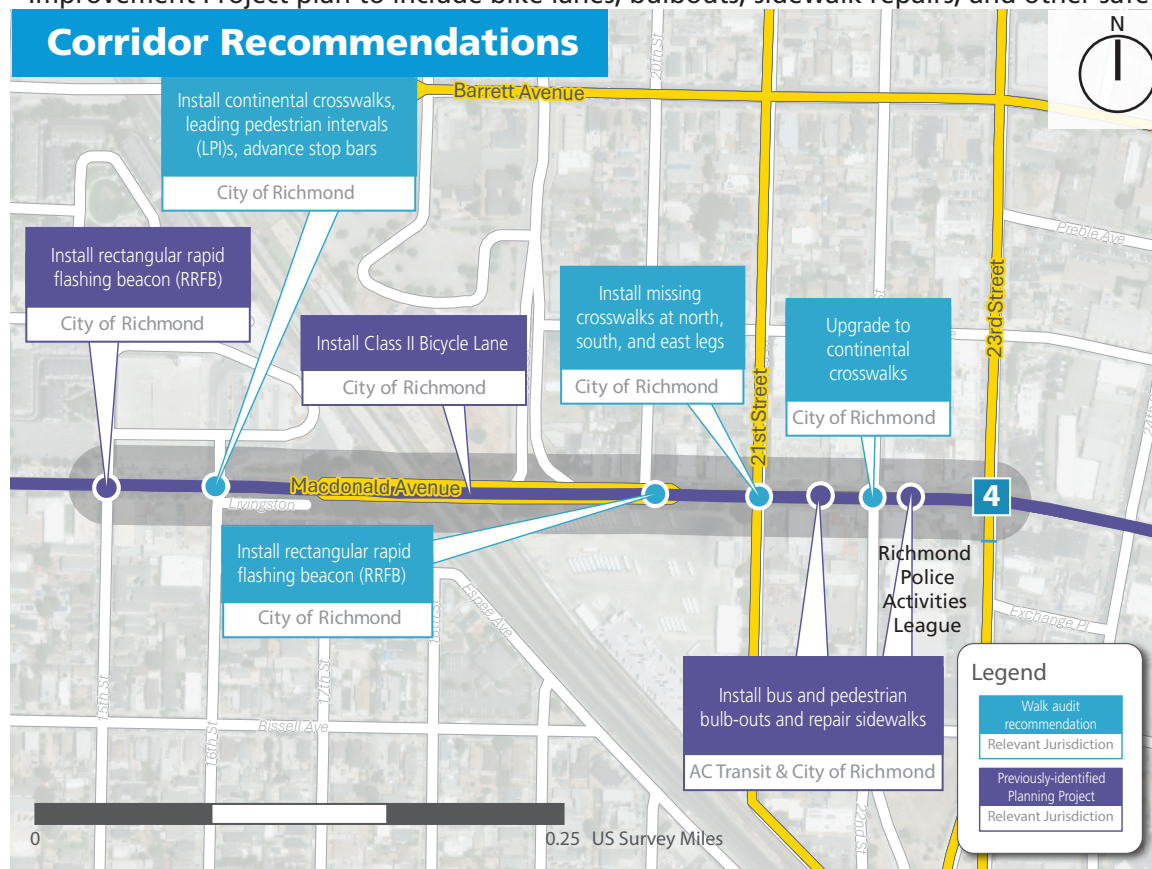
## Focus Station Area Action Plan

### 1 Macdonald Avenue from 15th Street to 23rd Street

#### Corridor Context

- This corridor provides direct access to the BART and Amtrak stations and AC Transit Lines 71, 72M, and 74.
- The Richmond Community Based Transportation plan identified bicycle and pedestrian accessibility barriers on this street and identified the Macdonald Avenue undercrossing as an unsafe rail crossing/rail barrier.
- There were 43 collisions recorded on this corridor from with one resulting in a fatality between 2019-2023. Bus drivers who rest in between shifts at the relief point on Macdonald and 21st Street have also reported unsafe crossings at this intersection due to lack of crosswalks and high speed vehicles.
- The City's Bicycle and Pedestrian Action Plan and AC Transit's Macdonald Avenue and Cutting Boulevard Transit Improvement Project plan to include bike lanes, bulbouts, sidewalk repairs, and other safety improvements.

#### Corridor Recommendations



#### Safety Benefits

##### FHWA Tier 2 Safety Countermeasures to Reduce Vehicle Speeds:

- Bulbouts reduce the width of the roadway and encourage drivers to reduce speed.

##### FHWA Tier 3 Safety Countermeasures to Manage Conflicts in Time:

- Upgraded signals with leading pedestrian intervals provide pedestrians a head start before motorists are allowed to proceed through the intersection.
- Coordinated signals encourage slower speeds by timing signals to allow vehicles moving at a certain speed to pass through a corridor without stopping.

##### FHWA Tier 4 Safety Countermeasures to Increase Attentiveness and Awareness:

- Advance stop bars increase distance between pedestrians and stopped vehicles.
- High-visibility crosswalks and rectangular rapid flashing beacons (RRFBs) make crossing pedestrians more visible to drivers and increase driver yielding compliance.

#### Estimated Cost

\$XXX,XXX - \$YYY,YYY

Estimate of capital costs

2025

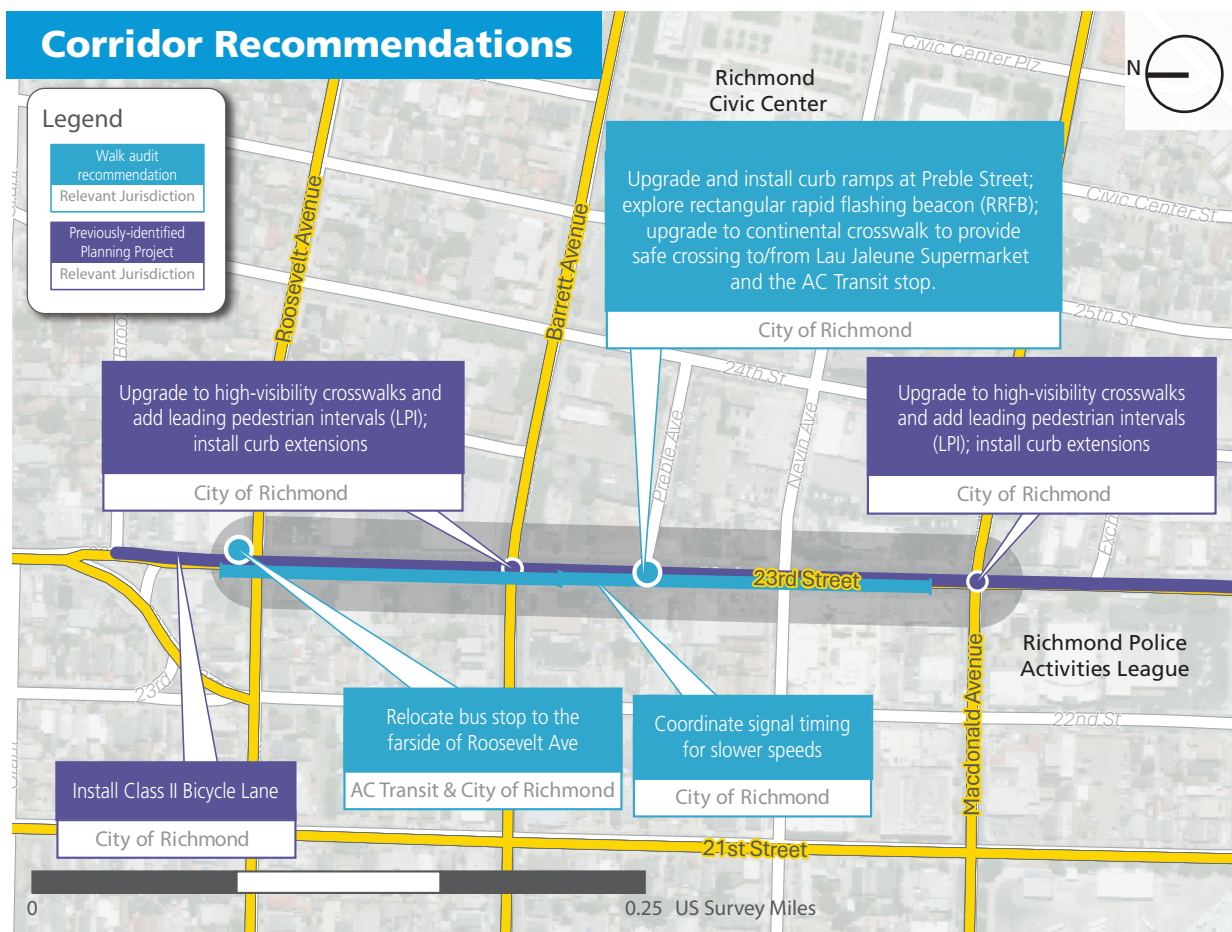
## Focus Station Area Action Plan

### 2 23rd Street from Macdonald Avenue to Roosevelt Avenue

#### Corridor Context

- 23rd Street is a one-way northbound arterial through Richmond, east of the Richmond BART Station. AC Transit Line 74 runs along 22nd and 23rd street providing access to Richmond BART.
- Survey respondents reported reckless driving on 23rd Street and a lack of marked crosswalks for people to walk across the street safely.
- This corridor segment recorded 28 collisions from 2019-2023; traffic signal and sign violations contributed to some of these. Nearly half of collisions were broadside vehicle-to-vehicle crashes.

#### Corridor Recommendations



#### Safety Benefits

##### FHWA Tier 2 Safety Countermeasures to Reduce Vehicle Speeds:

- Bulbouts reduce the width of the roadway and encourage drivers to reduce speed while turning.

##### FHWA Tier 3 Safety Countermeasures to Manage Conflicts in Time:

- Upgraded signals with leading pedestrian intervals provide pedestrians a head start before motorist are allowed to proceed through the intersection.
- Coordinated signals encourage slower speeds by timing signals to allow vehicles moving at a certain speed to pass through a corridor without stopping.

##### FHWA Tier 4 Safety Countermeasures to Increase Attentiveness and Awareness:

- High-visibility crosswalks and rectangular rapid flashing beacons (RRFBs) make crossing pedestrians more visible to drivers and increase driver yielding compliance.

#### Estimated Cost

\$XXX,XXX - \$YYY,YYY

Estimate of capital costs

2025



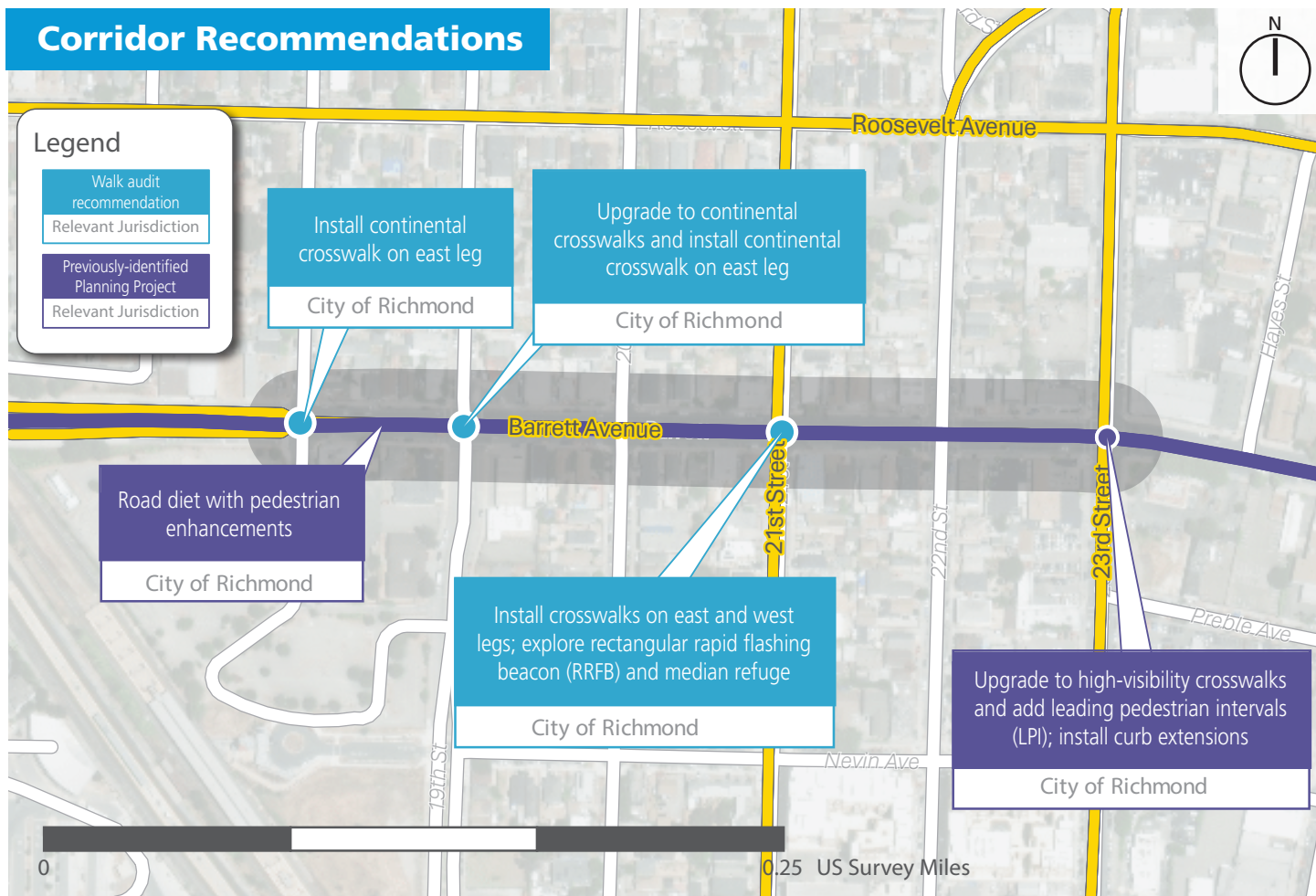
## Focus Station Area Action Plan

### 3 Barrett Avenue from 18th Street to 23rd Street

#### Corridor Context

- Barrett Avenue is an east-west arterial with four lanes that runs through a residential neighborhood. The corridor has standard bike lanes between 2nd Street and 23rd Street and west of 24th Street to San Pablo Avenue.
- Survey respondents reported near misses on Barrett Avenue and observed vehicles not stopping for red lights.
- There were 38 collisions recorded on this corridor with one resulting in a fatality. Most of the collisions were related to violations of traffic signals and signs or automobile right-of-way.

#### Corridor Recommendations



#### Safety Benefits

##### FHWA Tier 1 Safety Countermeasures to Remove Severe Conflicts:

- Medians can help reduce speeds for vehicles turning left.

##### FHWA Tier 2 Safety Countermeasures to Reduce Vehicle Speeds:

- Roadway reallocation reduces the number of lanes and the distance pedestrians have to cross.

##### FHWA Tier 4 Safety Countermeasures to Increase Attentiveness and Awareness:

- High visibility crosswalks make crossing pedestrians more visible to drivers.
- Rectangular rapid flashing beacons increase driver awareness and yielding compliance.

#### Estimated Cost

\$XXX,XXX - \$YYY,YYY

Estimate of capital costs

2025

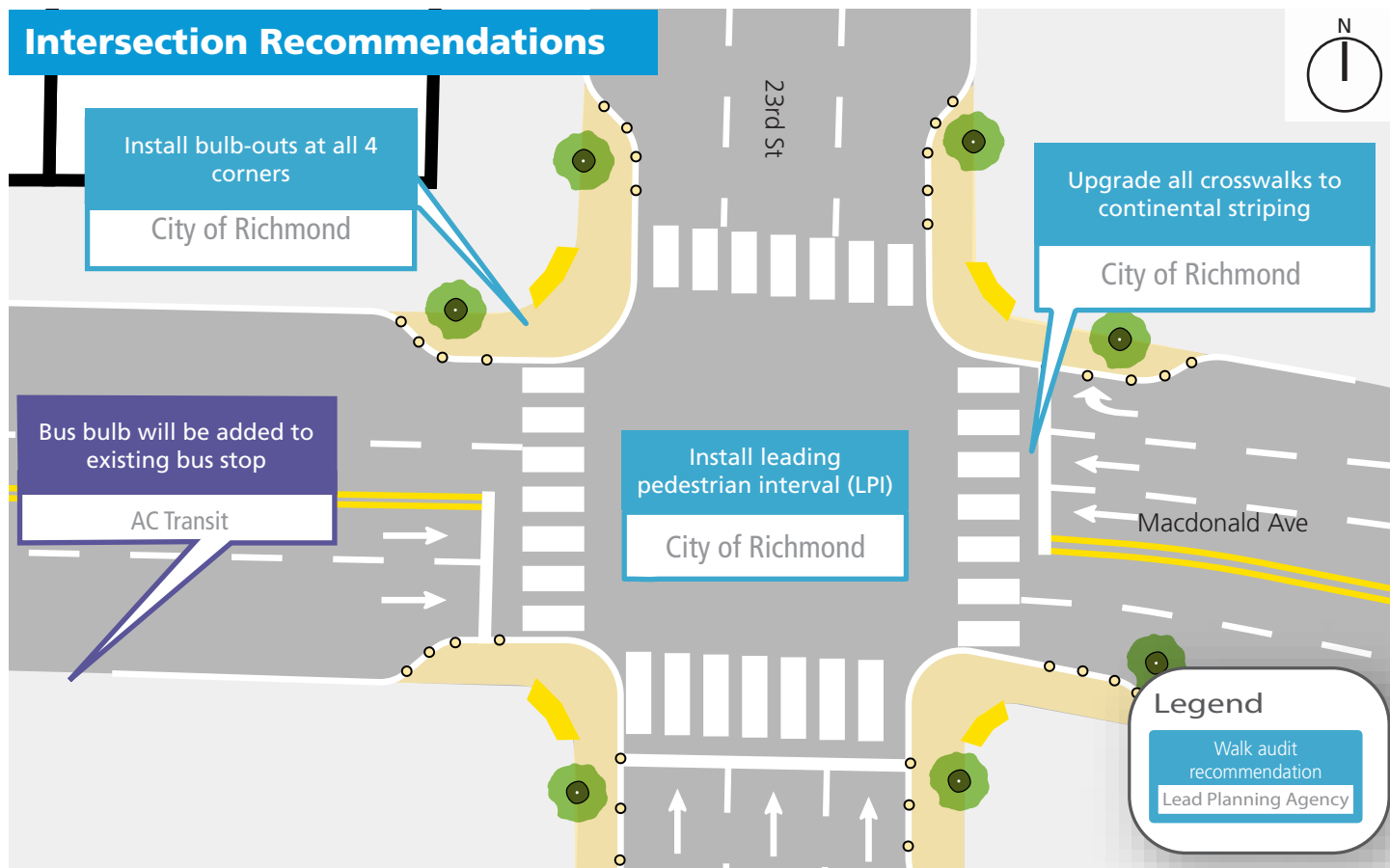
## Focus Station Area Action Plan

### 4 Macdonald Avenue & 23rd Street

#### Intersection Context

- Macdonald Avenue and 23rd Street is the intersection of an east-west two-way arterial and a northbound one-way arterial. It is located near the Richmond Police Activities League which provides youth after school programs. Many students and families were observed in this area during the walk audit.
- Survey respondents reported frequent commercial loading activity at this intersection.
- Eight vehicle-to-vehicle crashes were recorded near this intersection from 2019 to 2023, and half of them were related to traffic signal or sign violations.

#### Intersection Recommendations



#### Safety Benefits

##### FHWA Tier 2 Safety Countermeasures to Reduce Vehicle Speeds:

- Bulbouts reduce the width of the roadway, reduce pedestrian crossing distance, and encourage drivers to reduce speed.

##### FHWA Tier 3 Safety Countermeasures to Manage Conflicts in Time:

- Upgraded signals with leading pedestrian intervals to provide pedestrians a head start before motorists are allowed to proceed through the intersection.

##### FHWA Tier 4 Safety Countermeasures to Increase Attentiveness and Awareness:

- High-visibility crosswalks make crossing pedestrians more visible to drivers.

#### Estimated Cost

\$XXX,XXX - \$YYY,YYY

Estimate of capital costs

2025