

King Street-

Bradlee Safety &

Mobility

Enhancements

City of Alexandria

Department of Transportation & Environmental Services

May 16, 2024 Virtual Meeting



Agenda



Project Background

Project Goals

Community Engagement

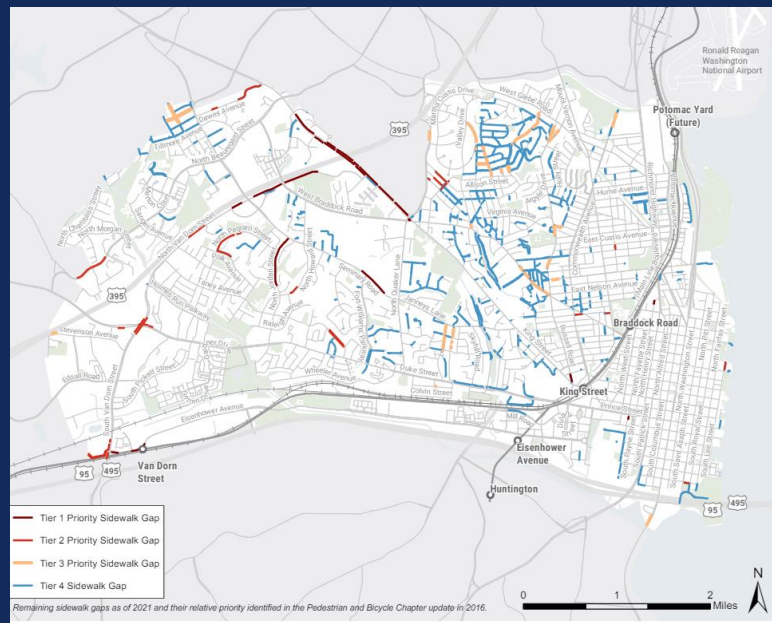
Preferred Concept

Alternatives Analysis

Interim Improvements

Upcoming Activity

Project Background



2016

Pedestrian & Bicycle Chapter of Transportation Master Plan. Identifies study area as priority sidewalk & bicycle gap location in the City.



2021

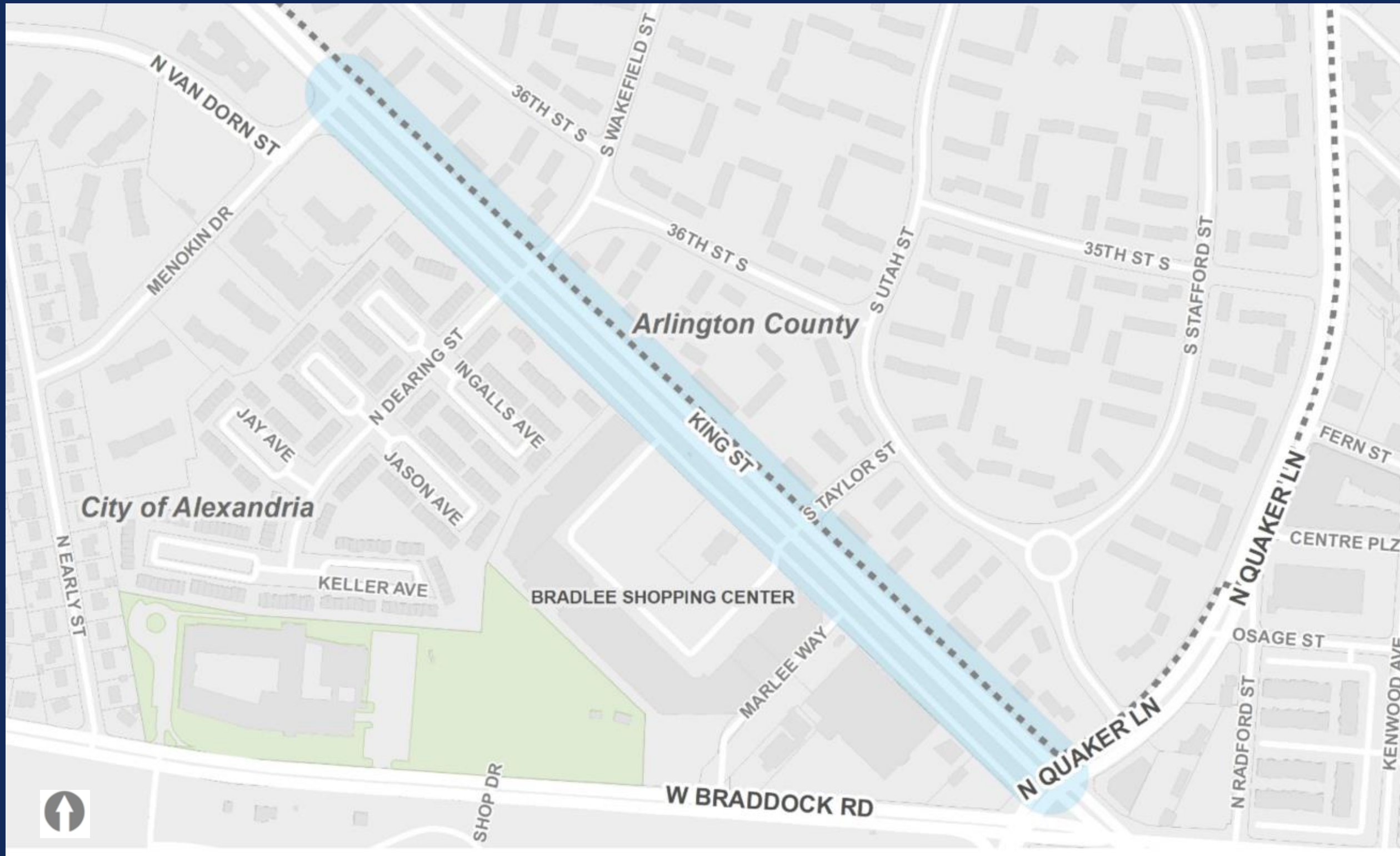
2021 Alexandria Mobility Plan reaffirms study area as priority sidewalk & bicycle gap location in the City.



2022

Citywide Crash Analysis identifies the study area as a street within the city's High Injury Network.

Project Location



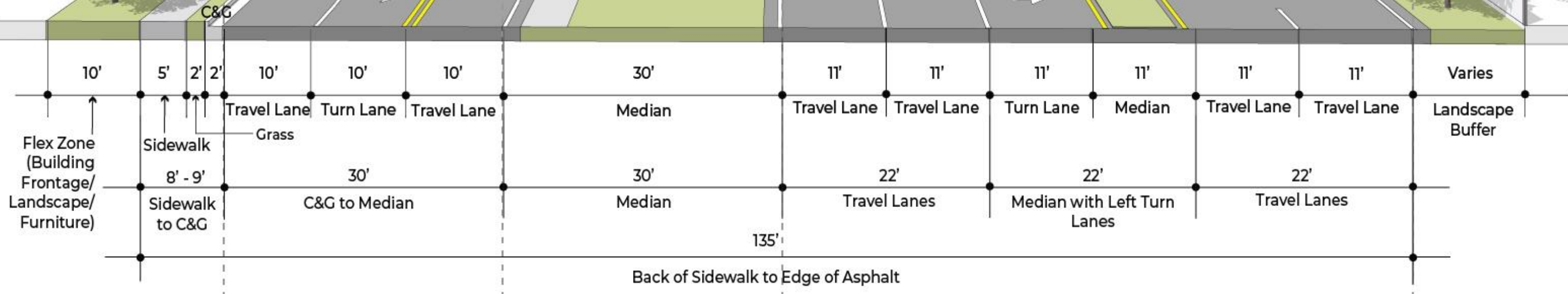
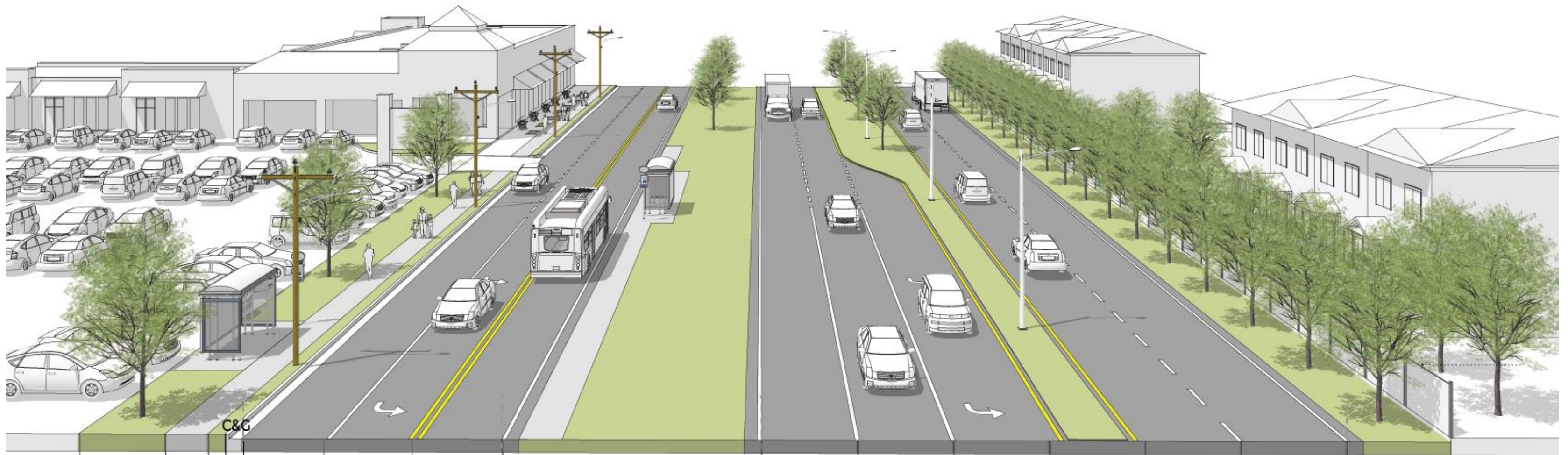
Legend / Guía

- County Boundary / Límite del Condado
- Study Corridor / Corredor del Estudio
- Open Space / Espacio Abierto

Existing Cross-Section

Bradlee Shopping Center

Fairlington



Project Goals

Improve mobility, safety, and access for all roadway users of all ages, abilities and modes of travel.

Install safer pedestrian access and bicycle facilities to connect to surrounding network.

Maintain or enhance existing transit facilities.

Improve existing stormwater treatment.



Community Engagement

2 Feedback Forms

Over 1,000 interactions



In Person Events

Pop-Ups, Community Festival & Bus Stop chats

8 Staff Presentations

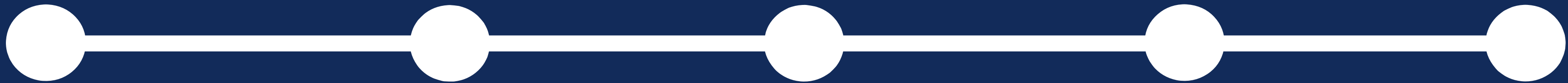
Meetings with HOA & Civic Associations

Digital Engagement

Social Media Posts, direct email notifications, website updates

Project Timeline

We Are
HERE



Project Initiation

- Data Gathering
- Staff Analysis

Issue Identification

- Phase 1
community
engagement
- Design Team
Hired
- Data Analysis

Concept Development

- Initial Concept
Development
- Phase 2 community
engagement
- Data Analysis

Concept Refinement

- Continued Analysis
- Phase 3 community
engagement
- Concept Selection
- Short-Term
Improvements

Seek Construction Funding

- Identify
applicable
funding sources
and prepare
applications



Community Priorities

Most frequently mentioned items



More trees and shade

327 mentions

Wider sidewalk space separated from vehicles

236 mentions

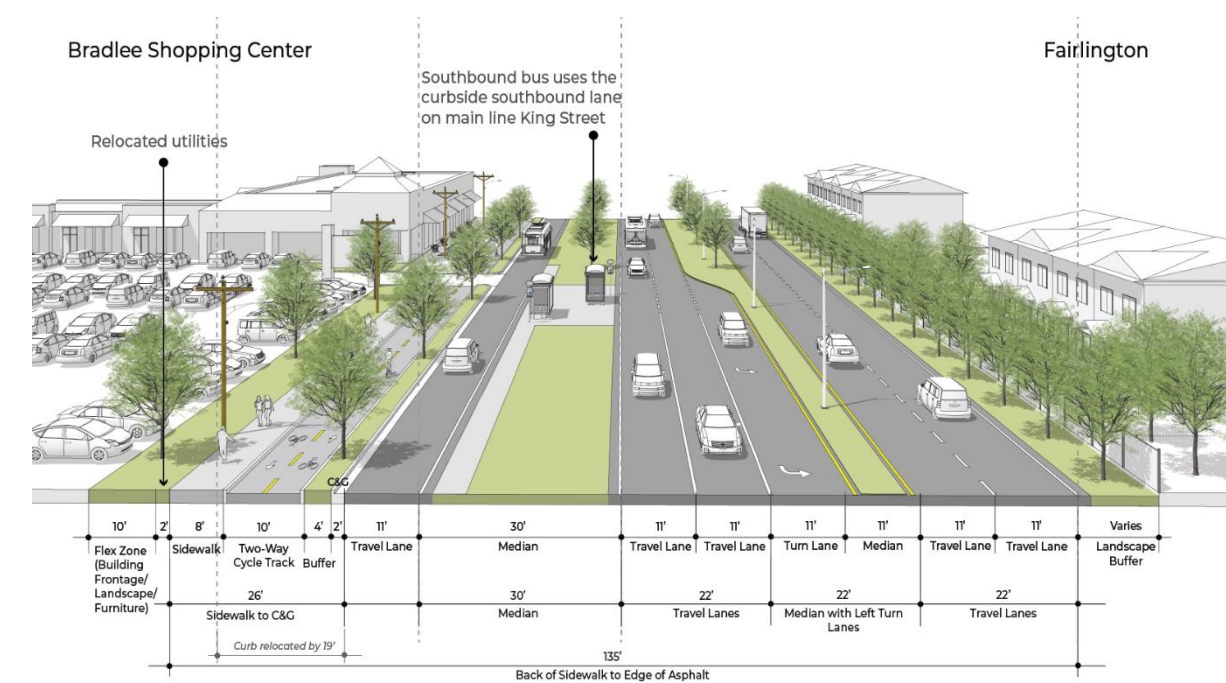
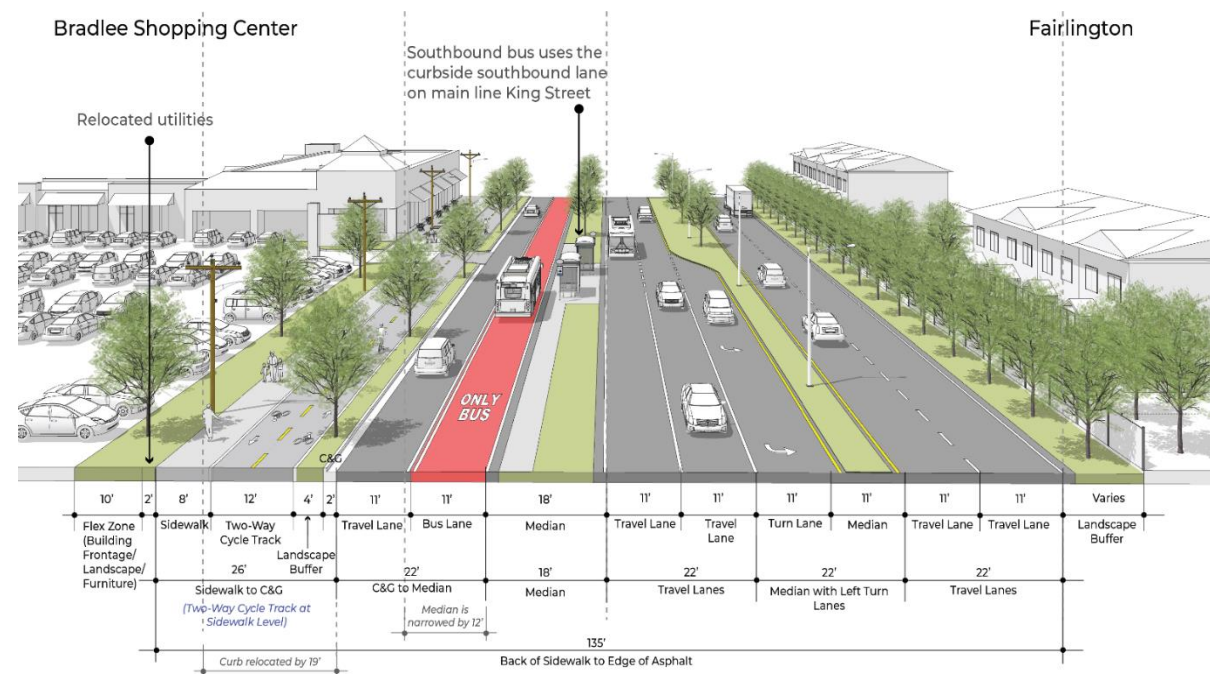
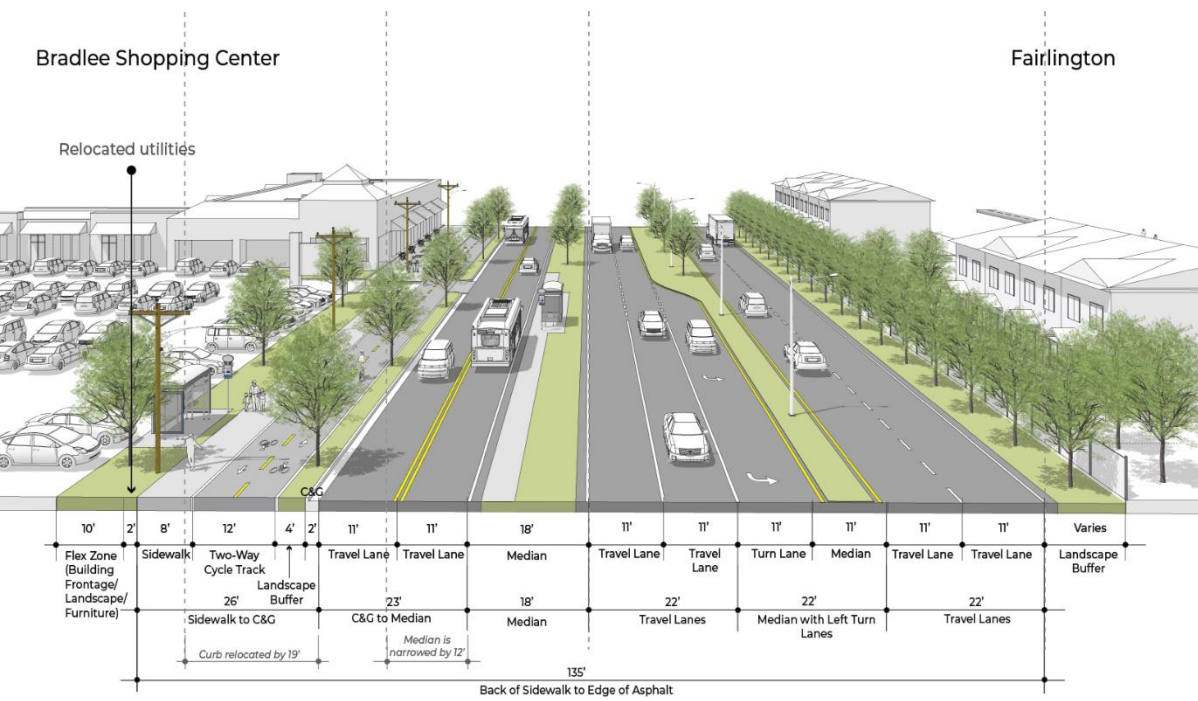
Stormwater treatment

173 mentions

Space for larger bus shelters and stops

161 mentions

Alternative Concepts



Alternative 1

Two-Way Traffic with Transit

Alternative 2

One-Way Traffic & Bus Lane

Alternative 3

One-Way Shared Traffic



Alternative eliminated based on feedback from public engagement

Alternatives Analysis



**Traffic
Delay**



Safety



Transit



**Bicycle
Facilities**

Selecting The Preferred Alternative

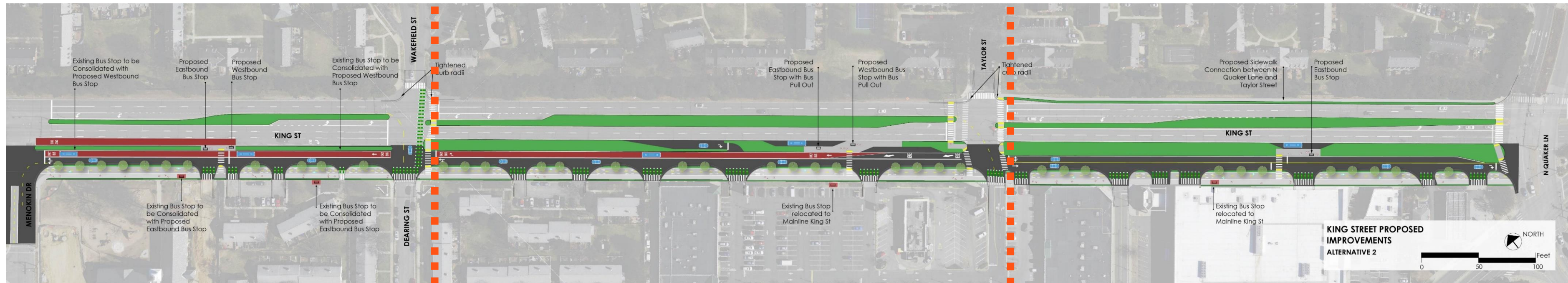
Metric	Alternative 1	Alternative 2
Traffic Delay	✓	Equal Benefit ✓
Safety	✓	Similar Benefit ✓+
Transit	✗	Greater benefit to prevent buses from being stuck behind traffic on the access road ✓
Bicycle Facilities	✓	Equal Benefit ✓

Alternatives

Alternative 1: Two-Way Traffic with Transit



Alternative 2: One-Way Traffic with Transit and Bus



Menokin Dr

N. Dearing St

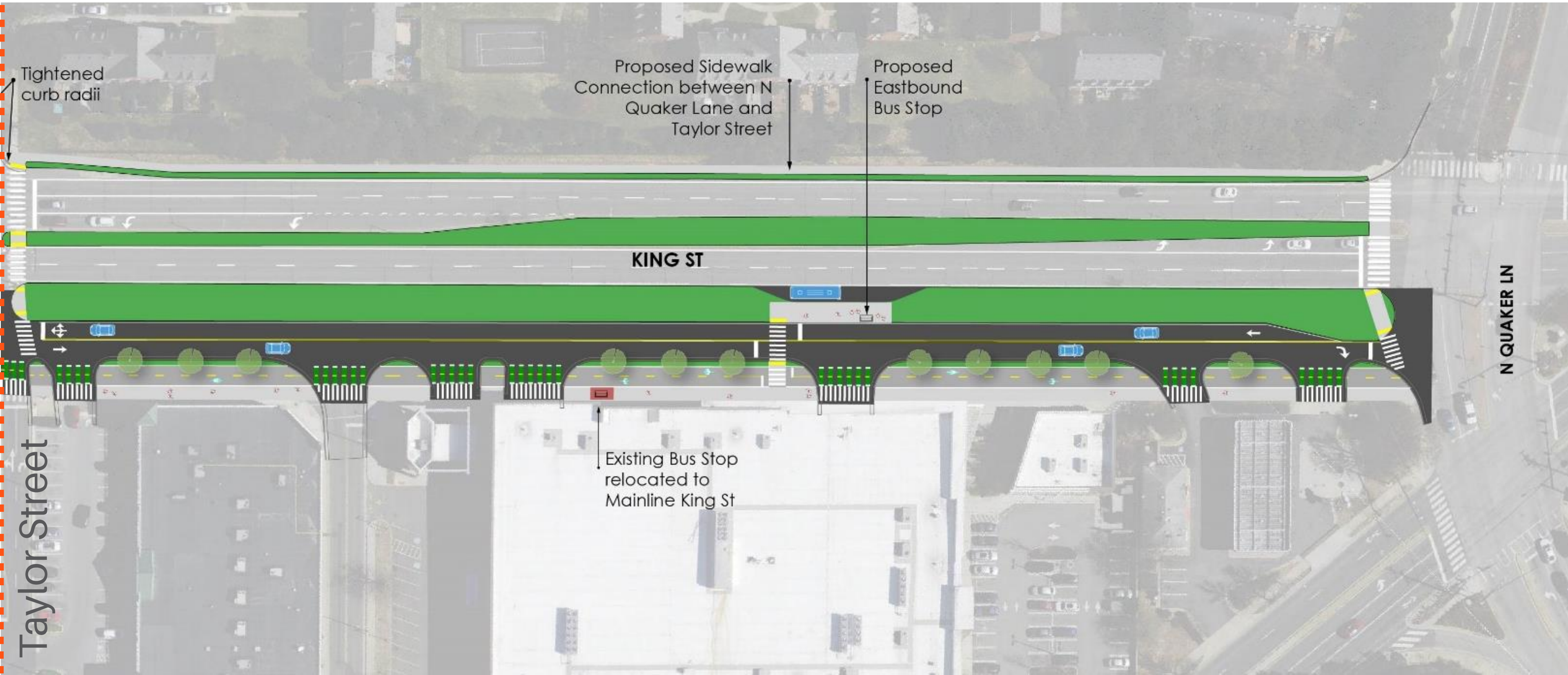
Taylor Street

N. Quaker Ln

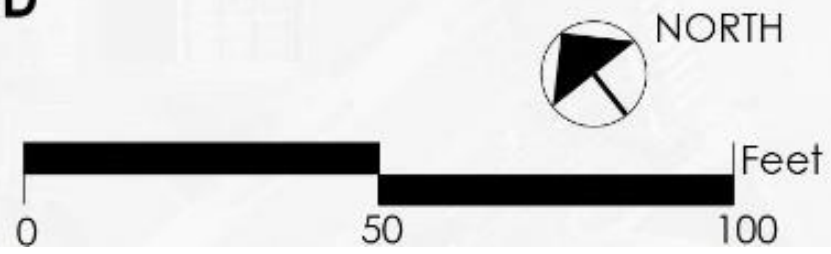
KING STREET PROPOSED IMPROVEMENTS
ALTERNATIVE 1



Alternative 1 & 2



KING STREET PROPOSED IMPROVEMENTS
ALTERNATIVE 1

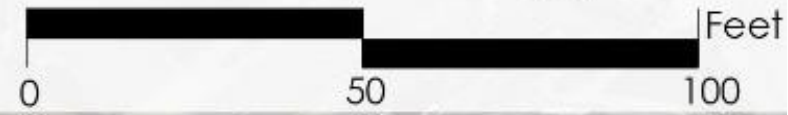


Alternative 1

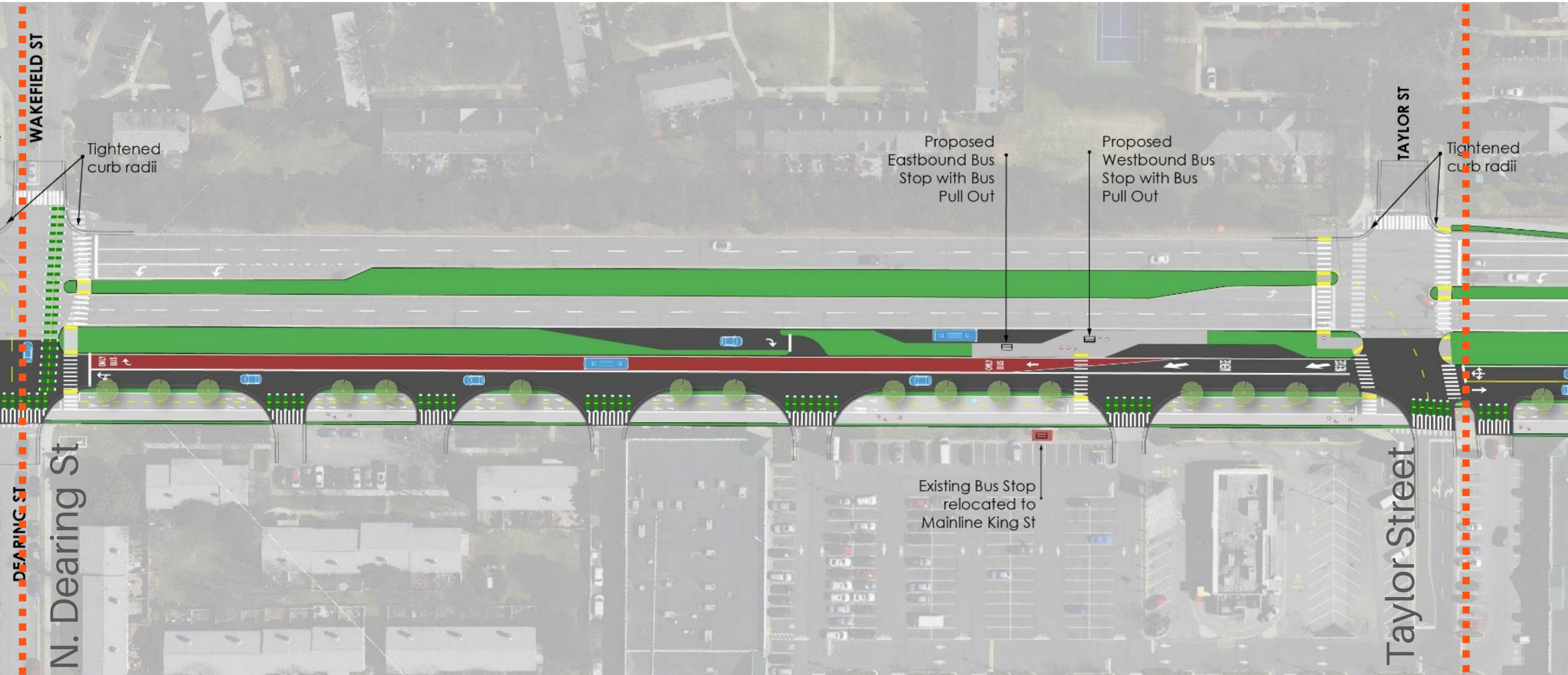


KING STREET PROPOSED IMPROVEMENTS

ALTERNATIVE 2

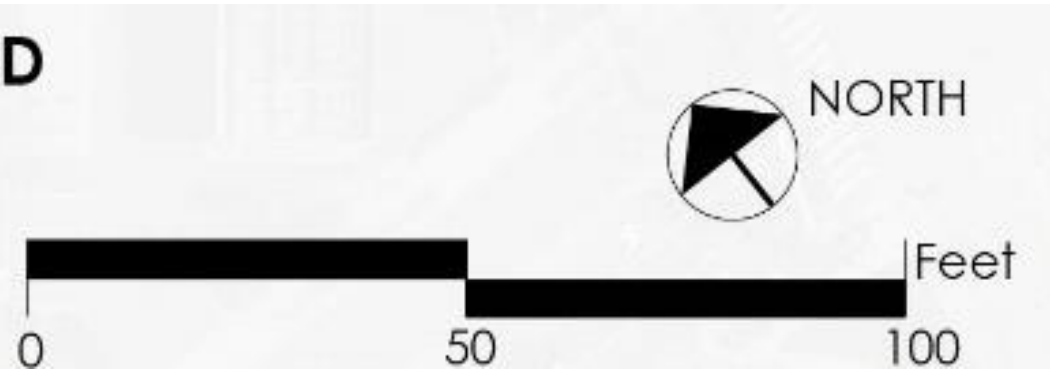


Alternative 2

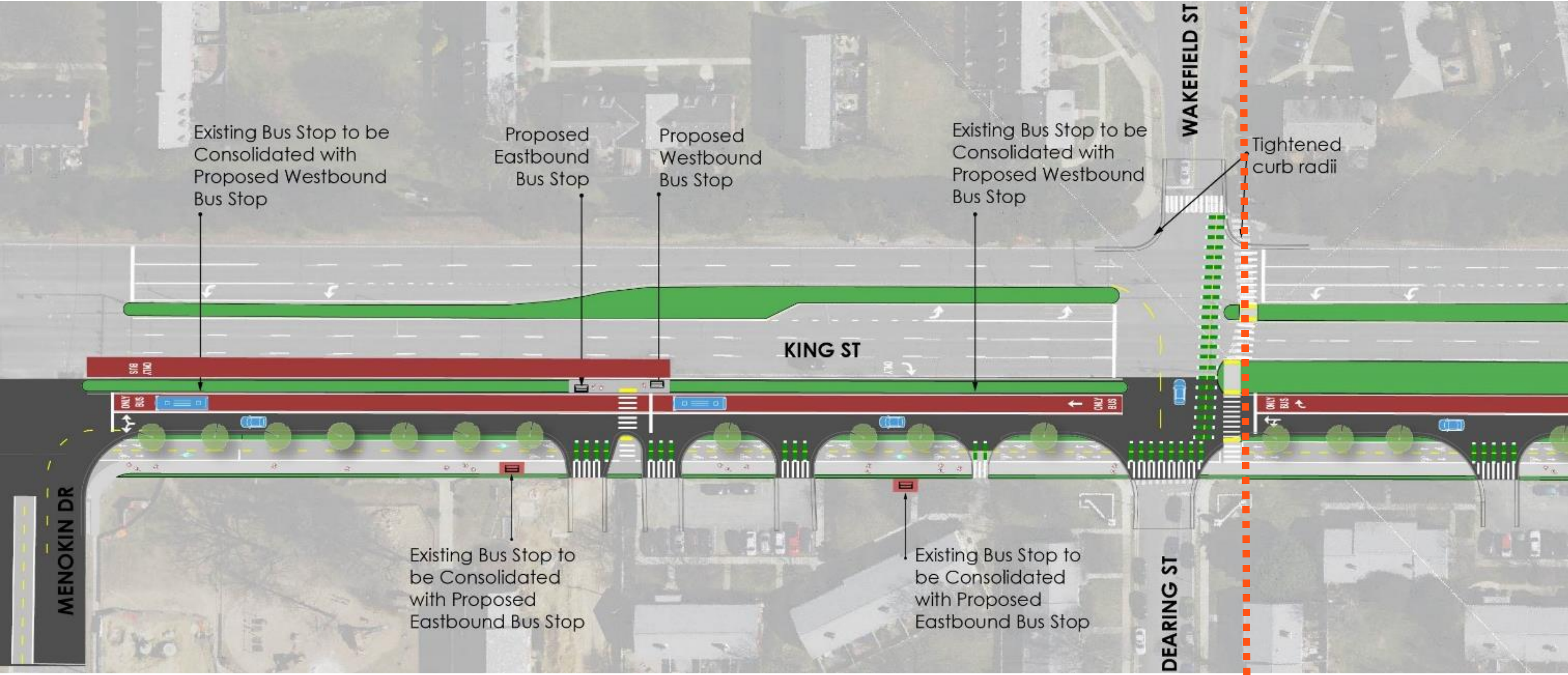


KING STREET PROPOSED IMPROVEMENTS

ALTERNATIVE 2

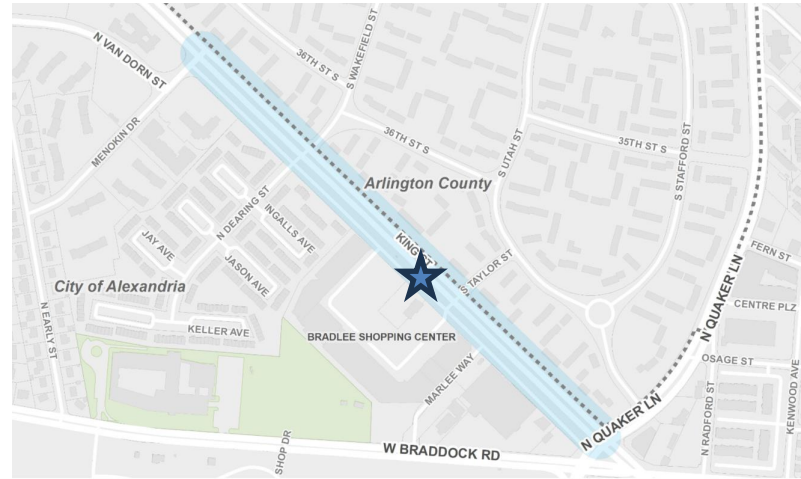


Alternative 2



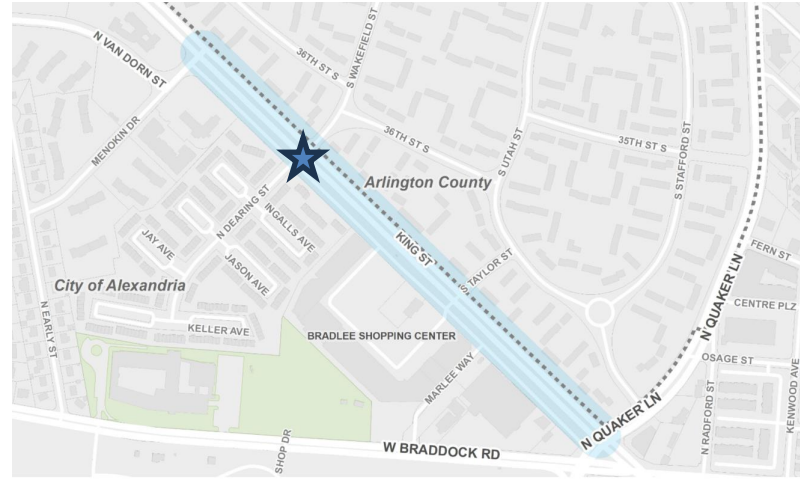
Alternative 2

Access Road looking West near the McDonald's Driveway

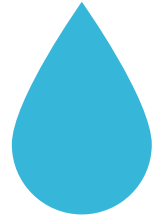


Alternative 2

From King Street, Looking at North Dearing Street



Additional Treatments



Stormwater Treatment



Signal Timing Adjustments



Transit Signal Priority



Leading Pedestrian Intervals



Hardening Pedestrian Refuges



Consolidated & Enhanced Bus Shelters



Pedestrian Lighting



Increased Canopy Cover Over Sidewalk and Cycle Track



Protected Cycle Track and Sidewalk



Dedicated Bicycle Crosswalk Across King Street

Alternatives Analysis



**Traffic
Delay**



Safety

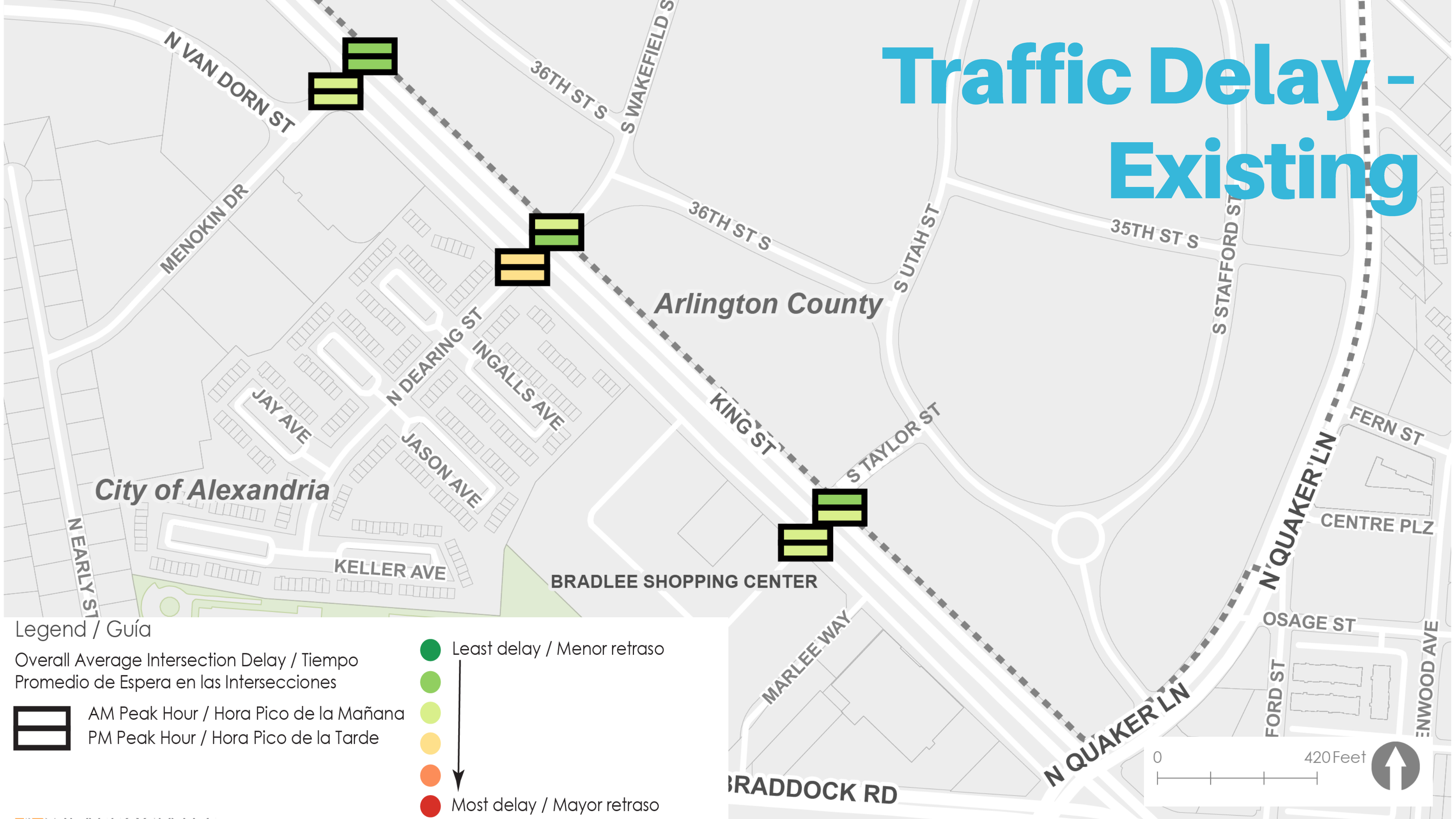


Transit



**Bicycle
Facilities**

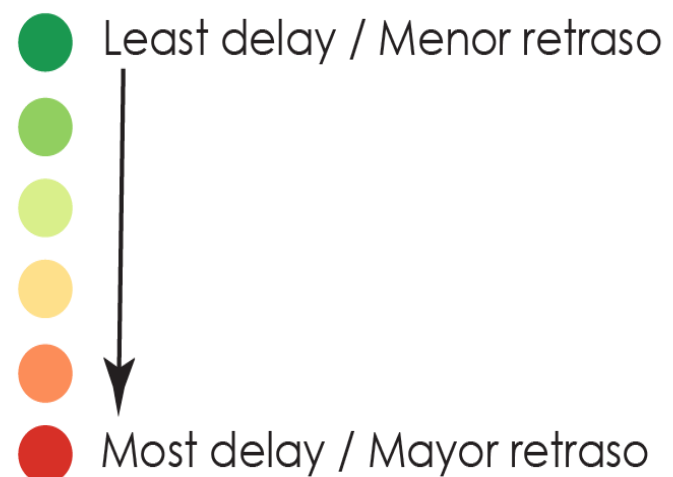
Traffic Delay - Existing



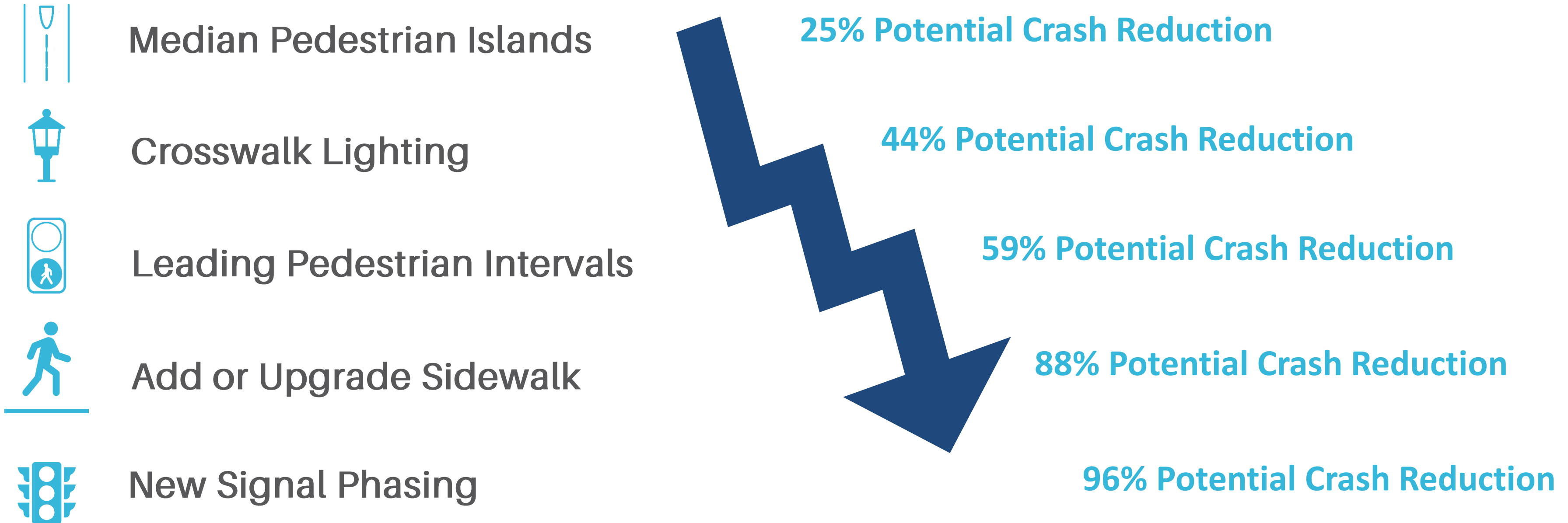
Legend / Guía

Overall Average Intersection Delay / Tiempo Promedio de Espera en las Intersecciones

AM Peak Hour / Hora Pico de la Mañana
 PM Peak Hour / Hora Pico de la Tarde

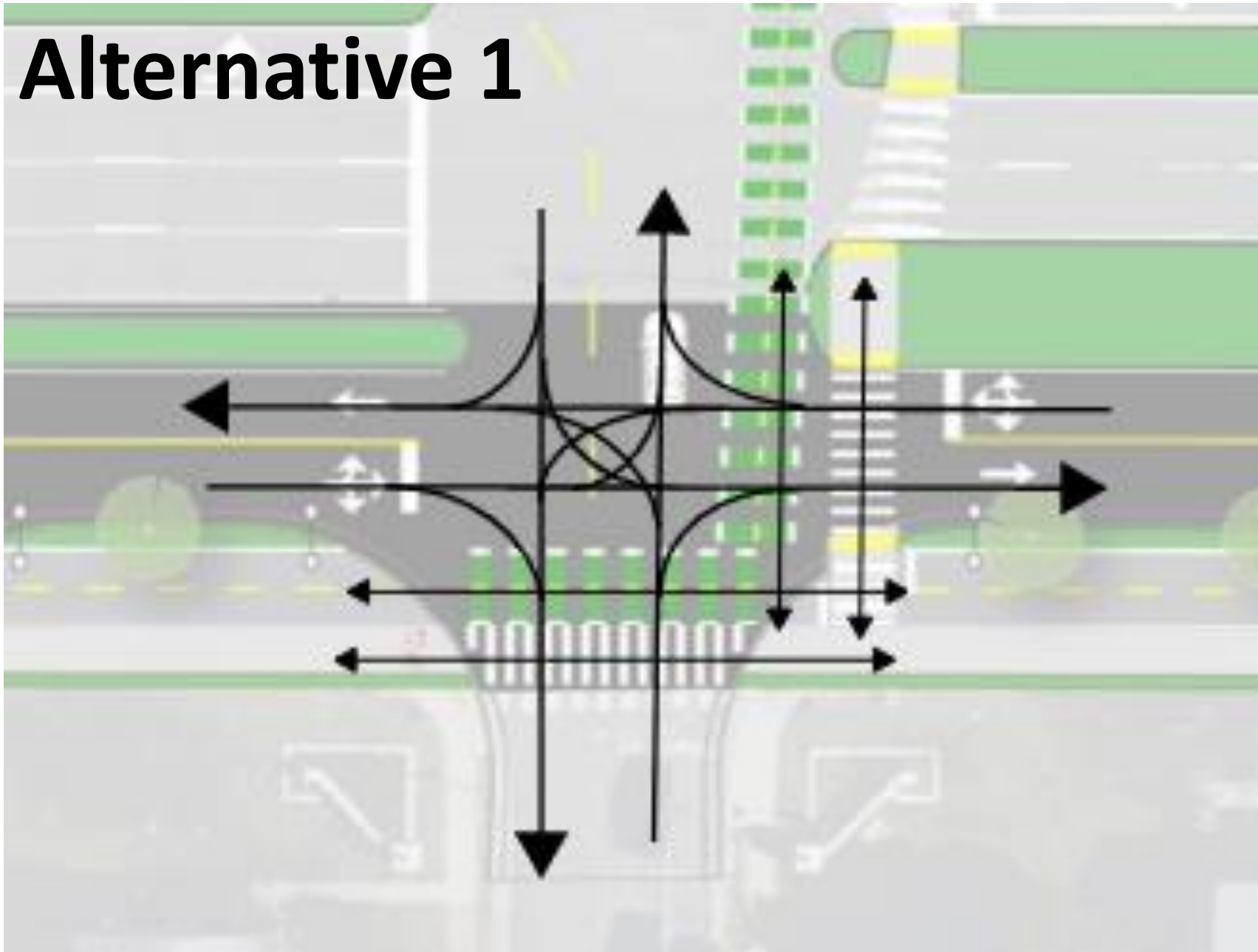


Safety - Crash Reduction Factors

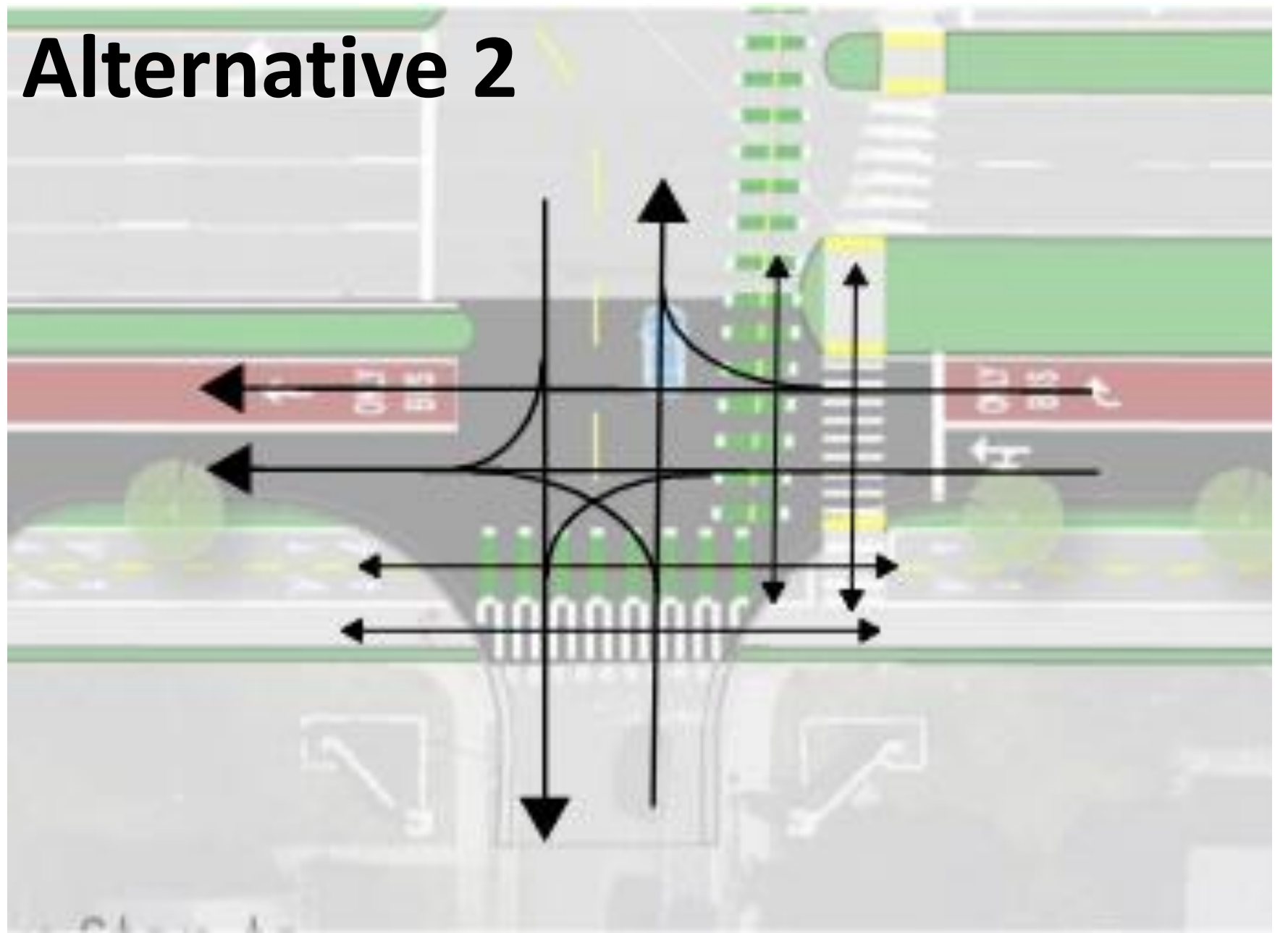


Safety - Potential Conflict Points

Alternative 1



Alternative 2



Transit - Bus Delay Due to Vehicles

PM Peak Traffic

Conditions



Existing Conditions



Alternative 1



Alternative 2

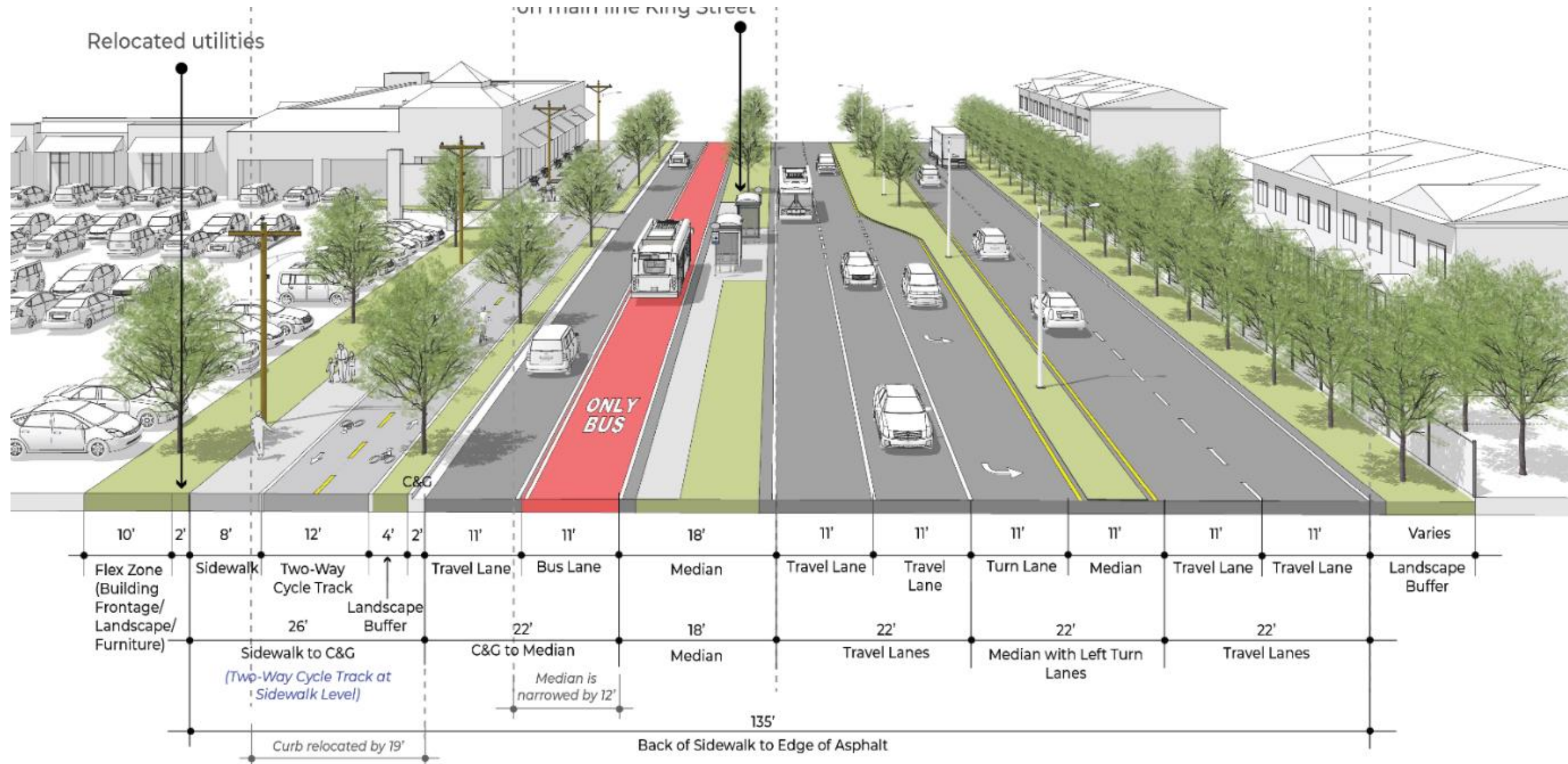
Proposed Bike Facilities -

Alternatives 1 & 2



Alternative 2: One-Way

Traffic & Bus Lane



Interim Improvements Toolbox



Tree Plantings



Curb Radii Tightening



Signal Timing Adjustments



No Turn On Red Signs



Bicycle
Wayfinding
Signs



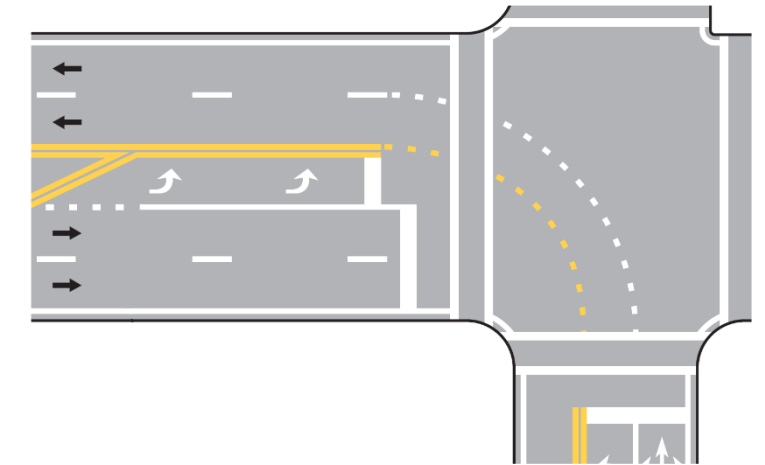
Sharrows



Speed
Feedback
Signs

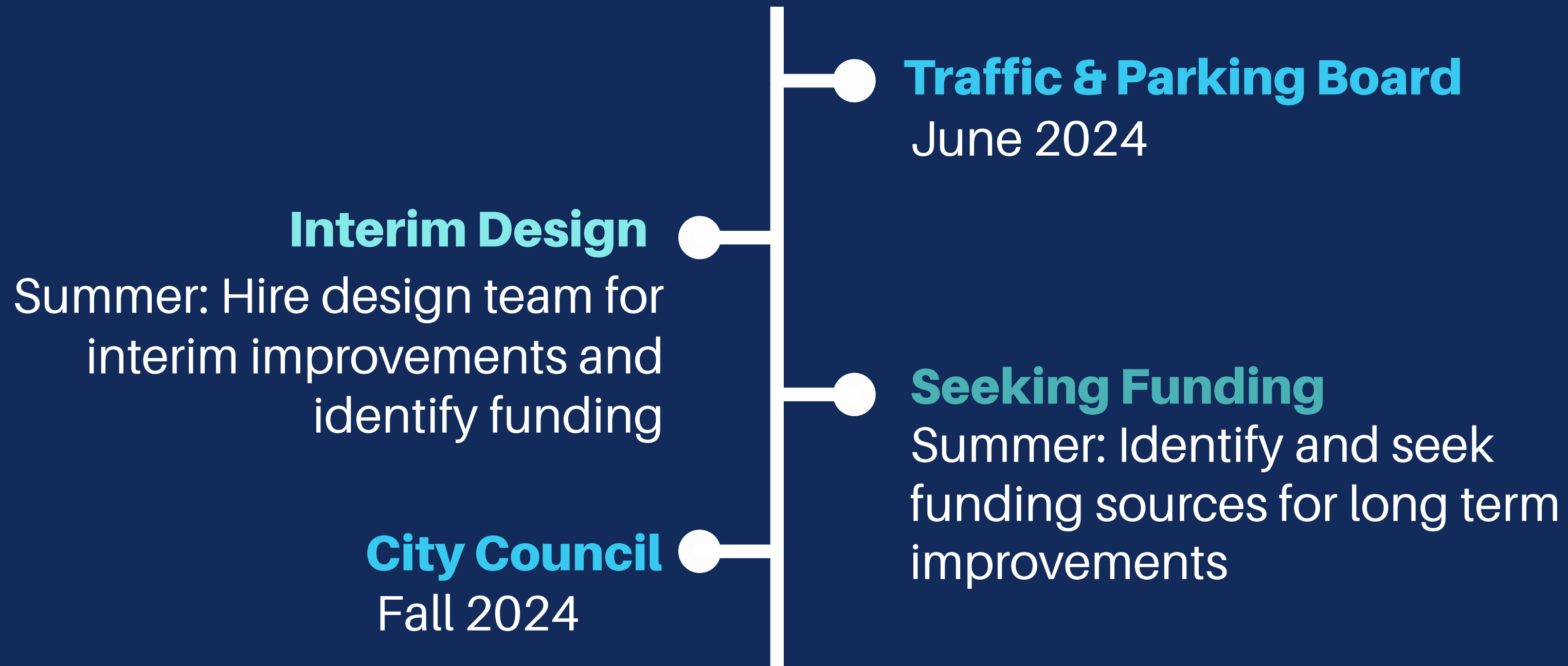


Pedestrian Refuge
Islands With Flex Posts



Intersection Lane
Markings

Upcoming Activity



Stay Informed



Visit the shared project website at:

www.alexandriava.gov/go/4769



Sign up to receive email updates for the project - link on the project website.



Questions & Comments

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