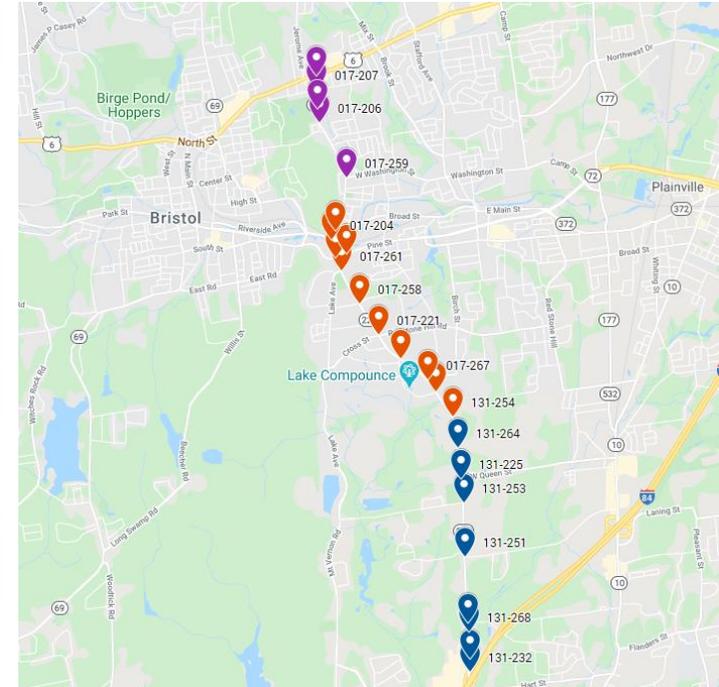




Project Advisory Committee ROUTE 229 CORRIDOR STUDY



Employee owned. Client driven.

Connecticut | Maryland | Massachusetts | New Jersey | New York | North Carolina | Ohio | Pennsylvania | Rhode Island | Texas



Using Ring Central

To Unmute/Mute, use this button

To toggle video, use this button

To ask a question, use this button



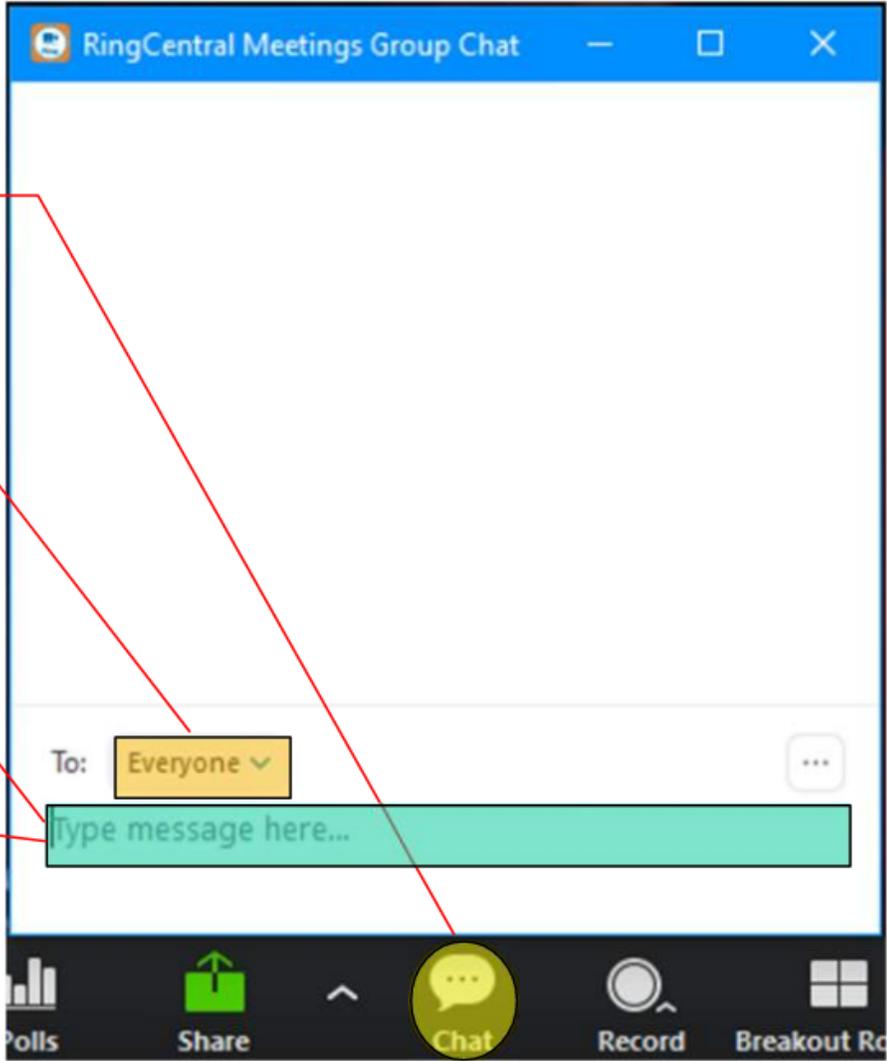
Using Ring Central - Chat

To ask a question, use this button

Select who to send the message to

Type your question here

Please send your Name and phone number/email address



Meeting Agenda

- **Introduction**
- **Project Background**
- **Proposed Improvements**
 - Northern Segment
 - Central Segment
 - Southern Segment
- **Discussion**
- **Action Items**



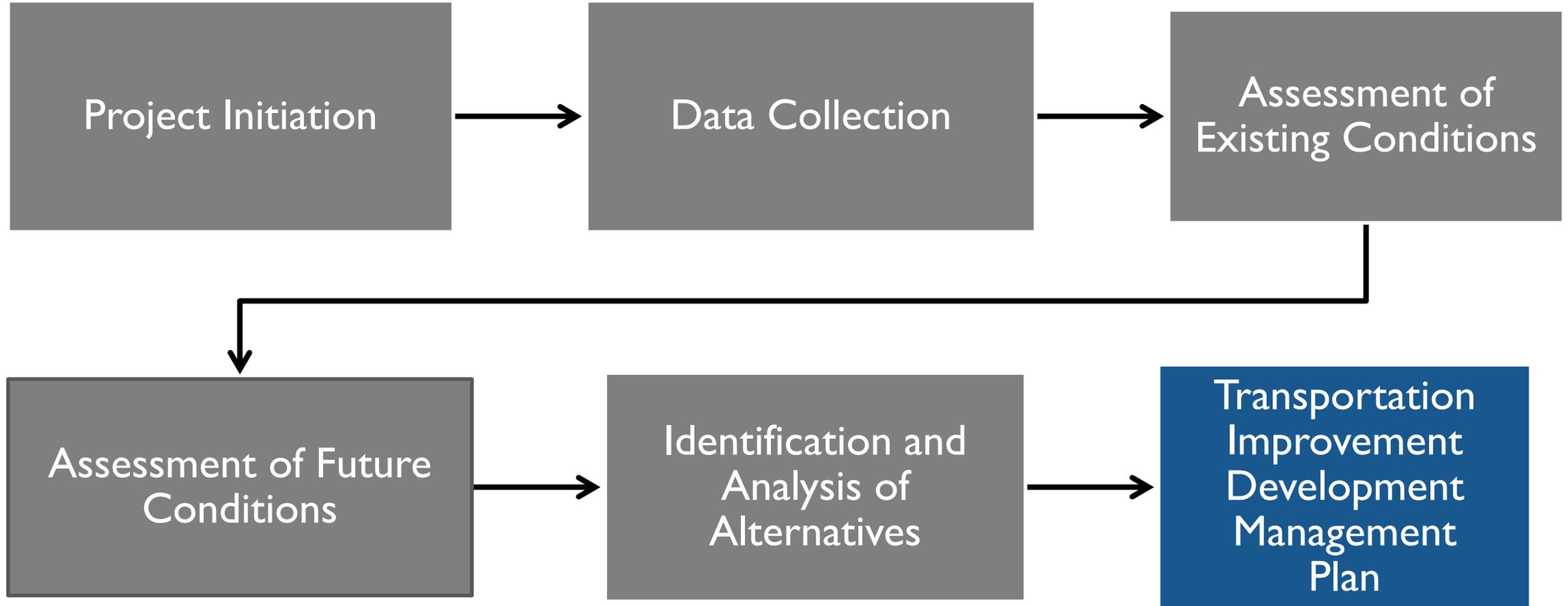
Introduction

- **Route 229 Corridor Study**
 - Evaluate safety, congestion, and transit/bike/ped mobility
 - Assess travel demand growth for a multi-modal corridor to service the future land use vision and recommendations
 - Provide spot improvements / propose countermeasures to improve safety and traffic flow

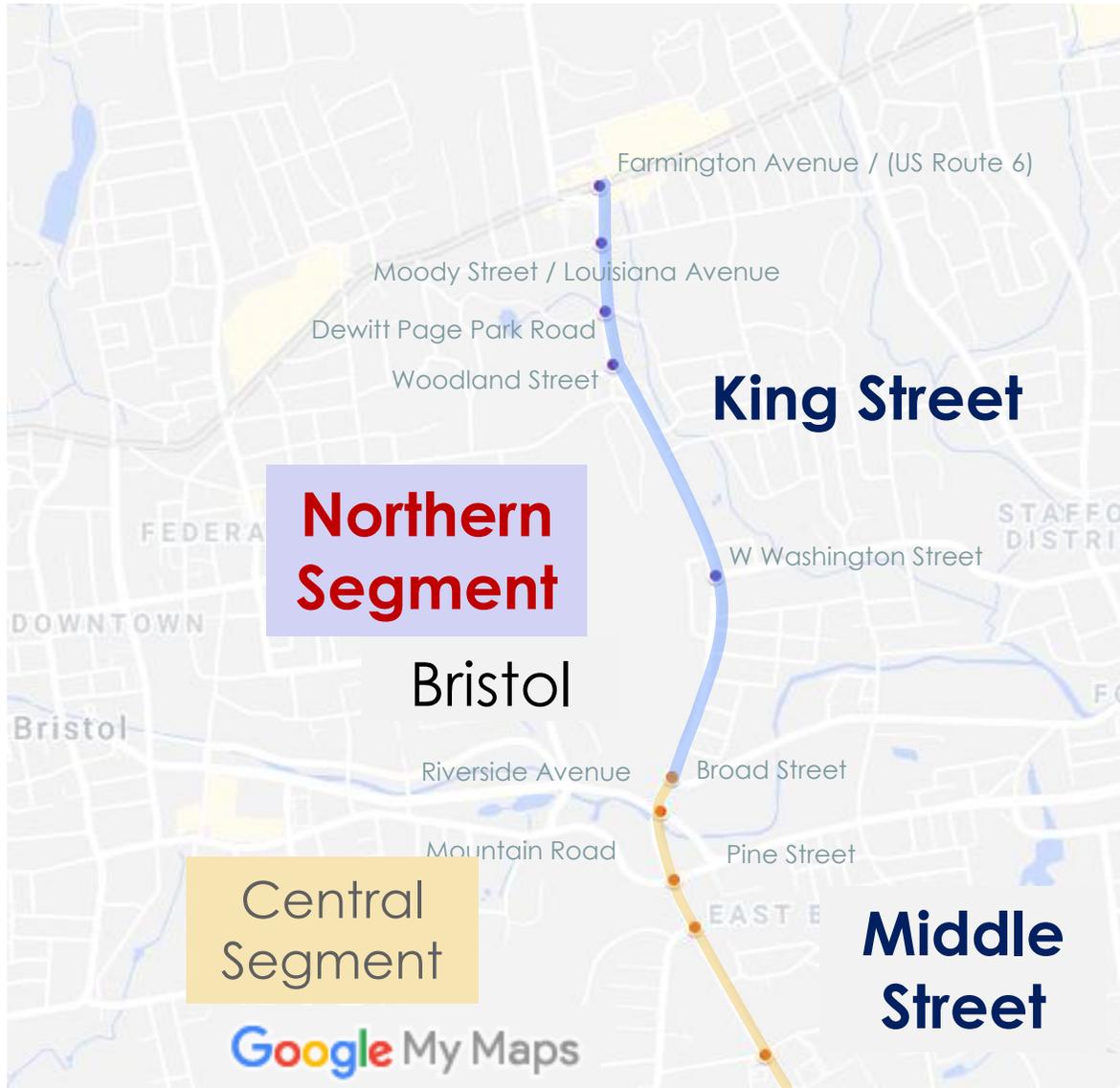


Scope / Deliverables

Planning Process



Project Improvements: Northern Segment



Northern Segment: School Zone

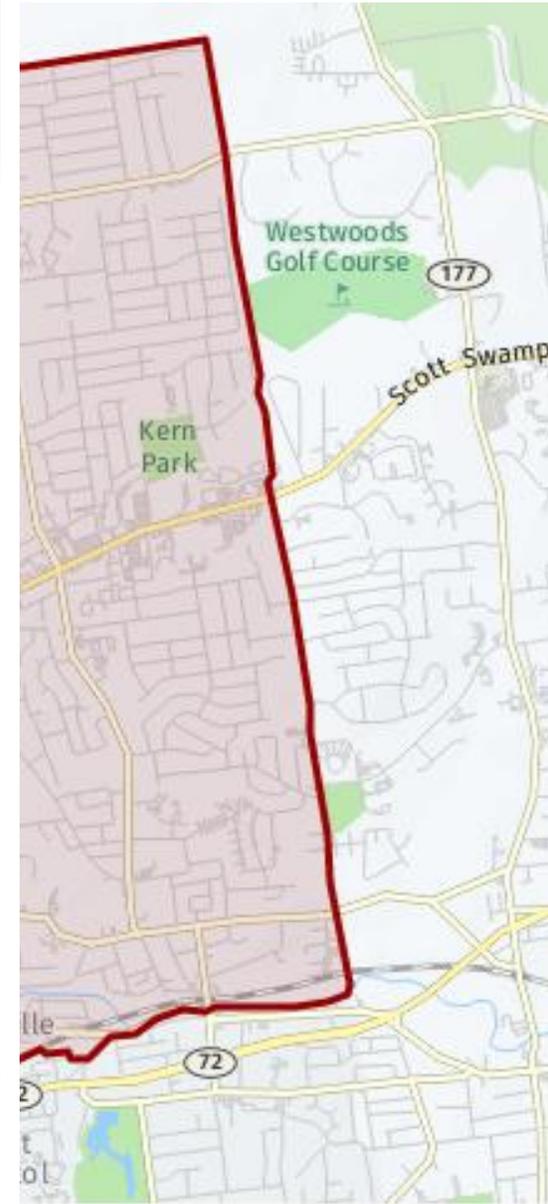
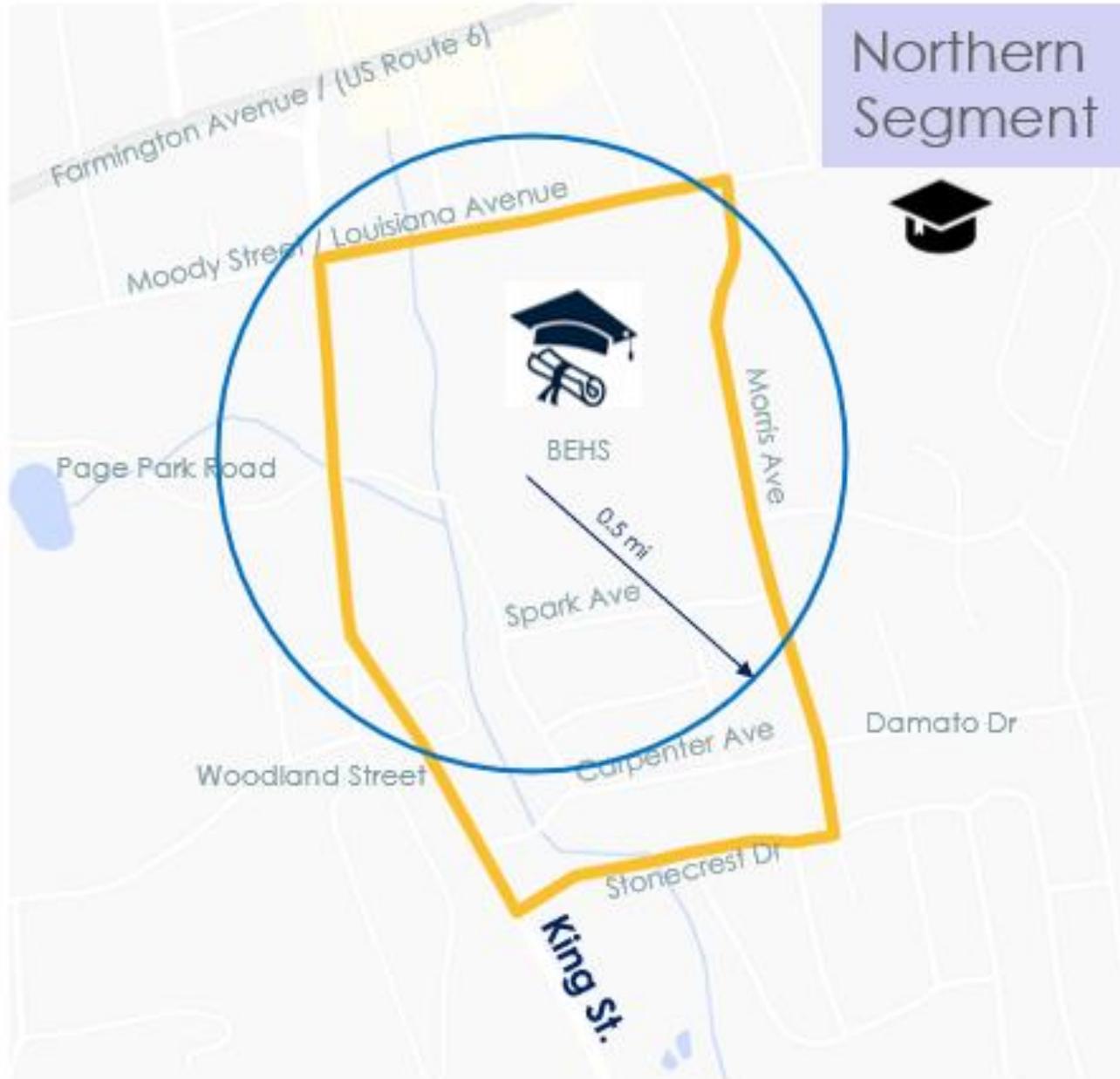
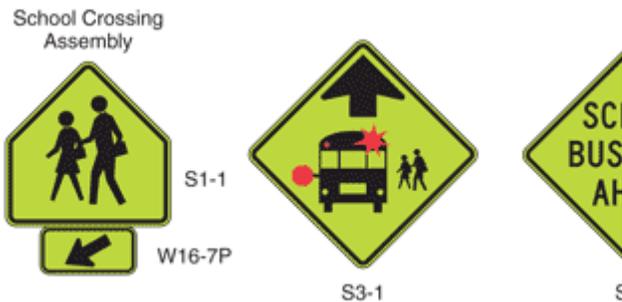
- **BEHS**

- School Enrollment
 - ▶ Existing CT Route 229
 - ▶ Proposed CT Route 2
 - ▶ School Zone Posted

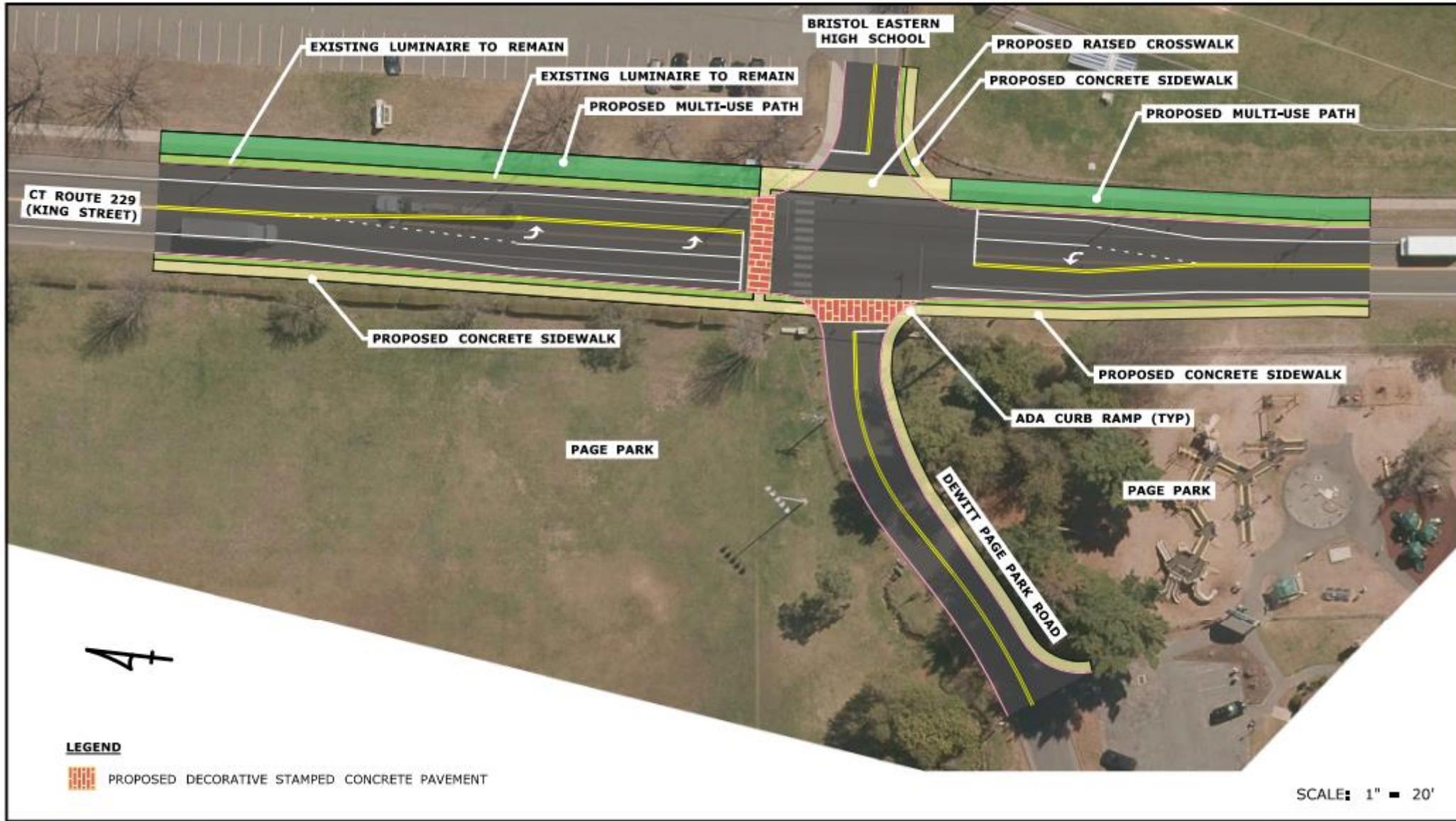
- **School Zone:**

- CT Gen Stat § 14-212
- Segment of CT Route 229

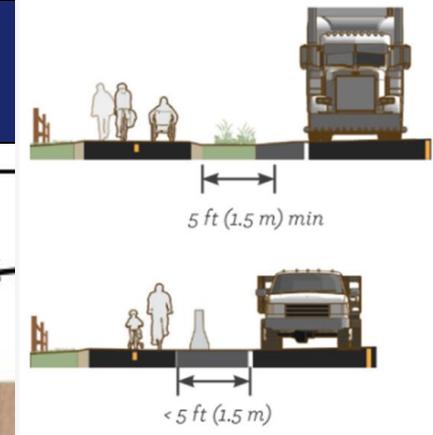
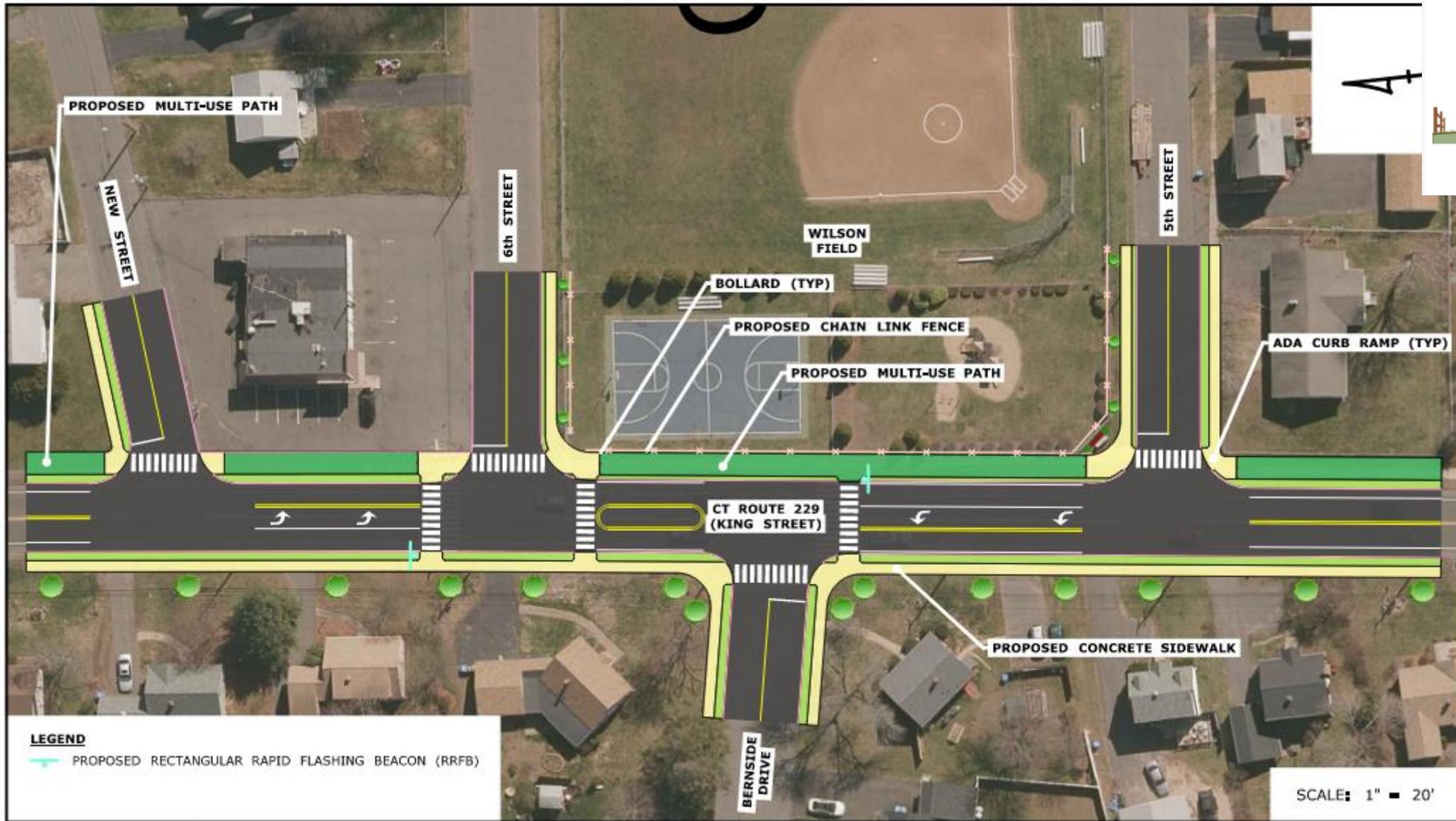
- **Signage:**



Northern Segment: Page Park / BEHS @ CT Route 229



Northern Segment: Wilson Park Area



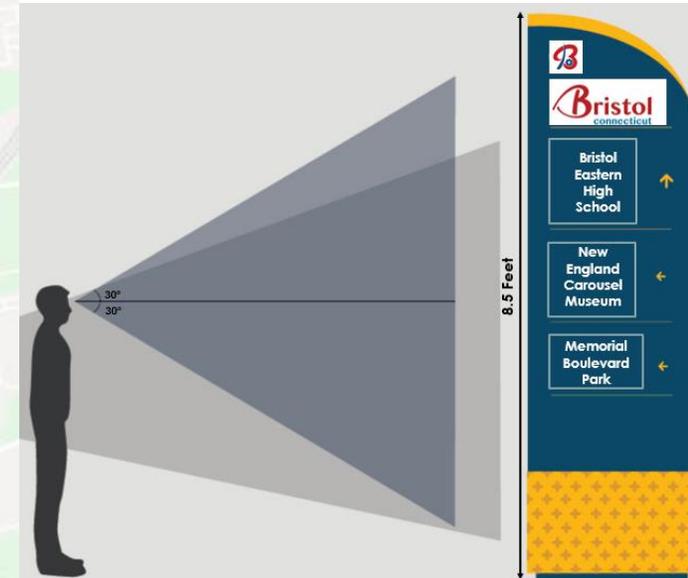
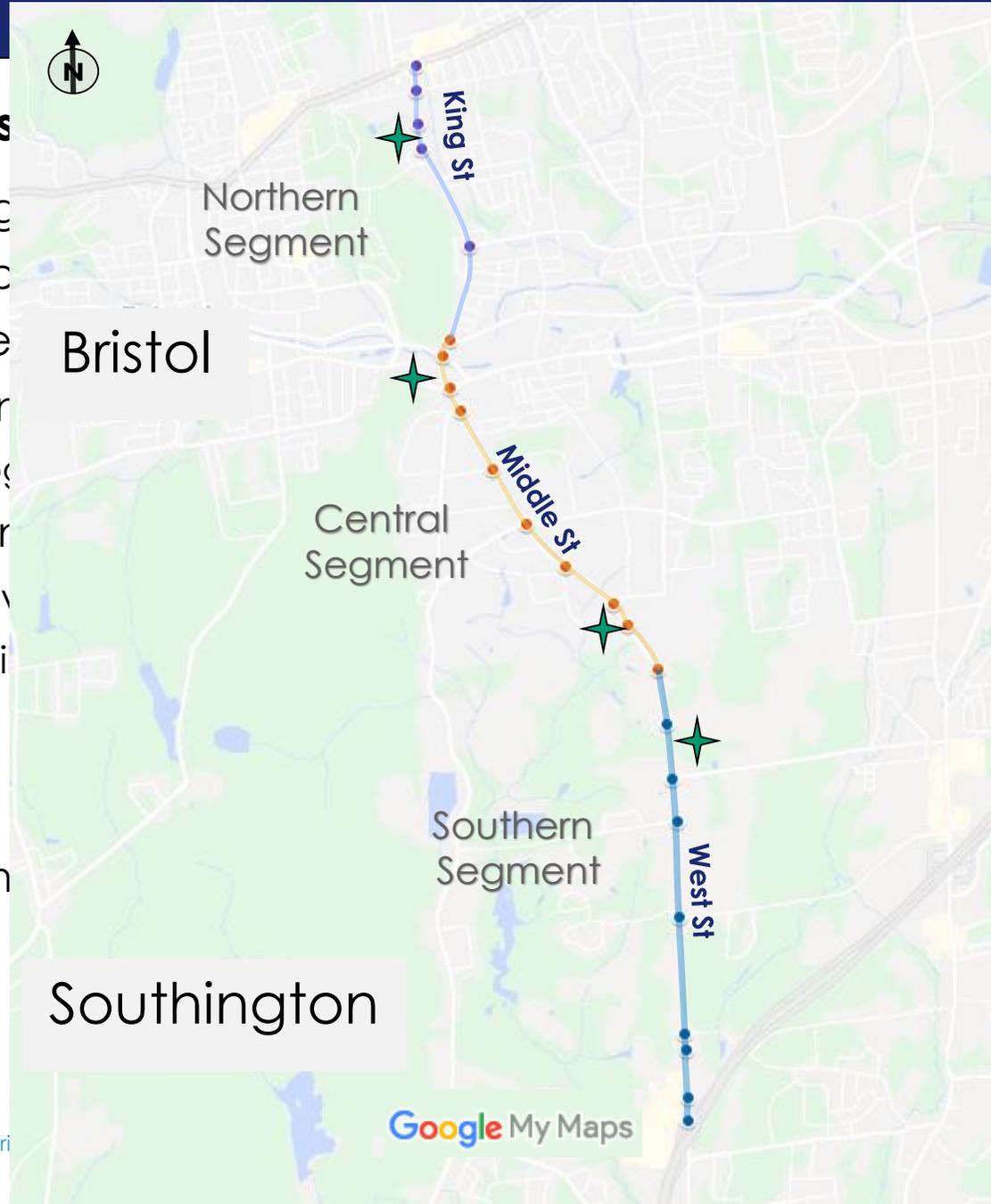
Gateway Sign

■ Design considerations

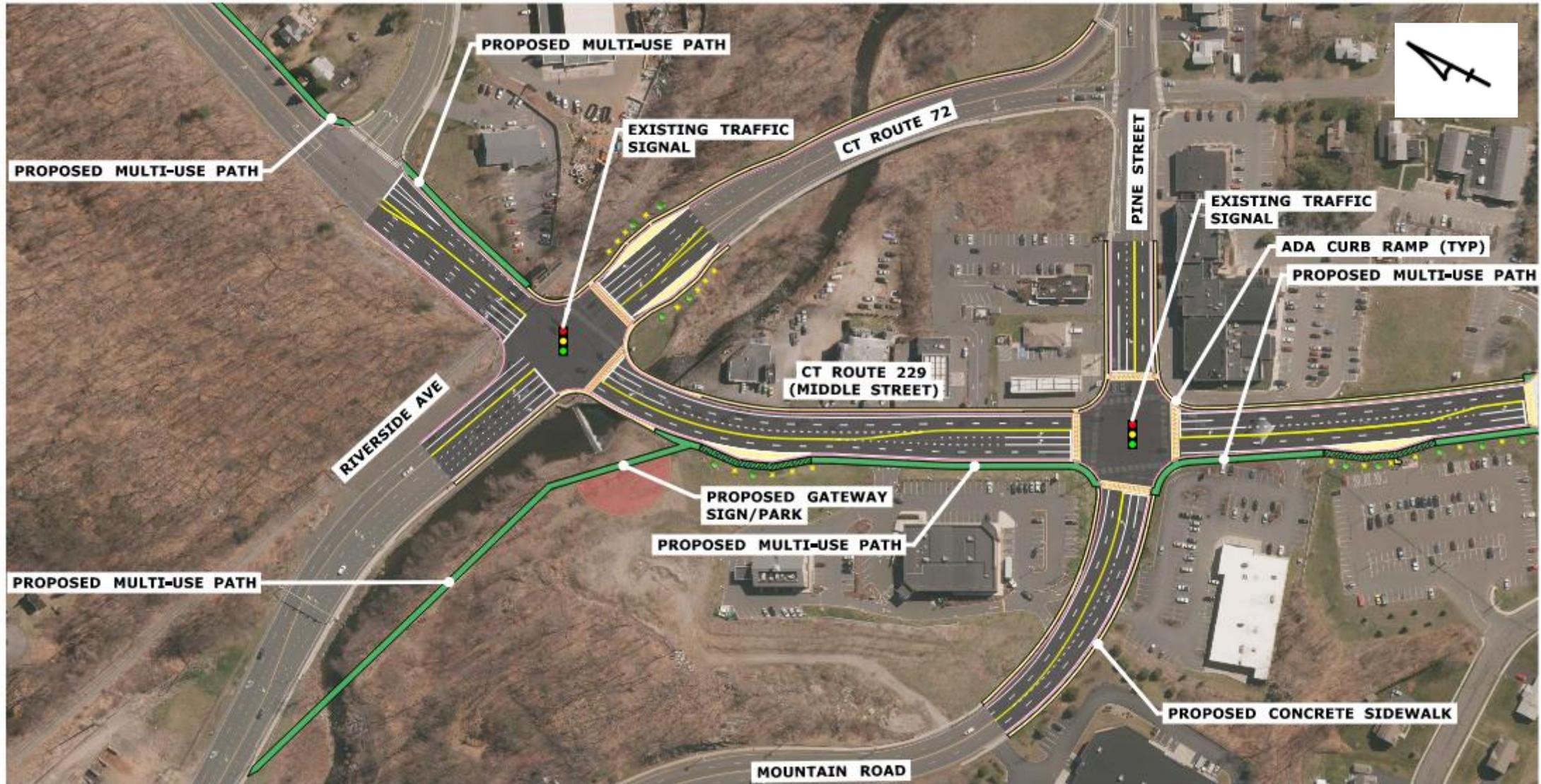
- Community branding
- The overall style, color
- Whom will the sign see
- Type of information in
 - ▶ Symbols/maps/pictographs
- Placement- if the sign
- Other supplemental v
 - ▶ information kiosks, mi

■ Locations:

- South of ESPN Drive
- South of West Queen
- Woodland Road
- Trident area



Central Segment: Trident



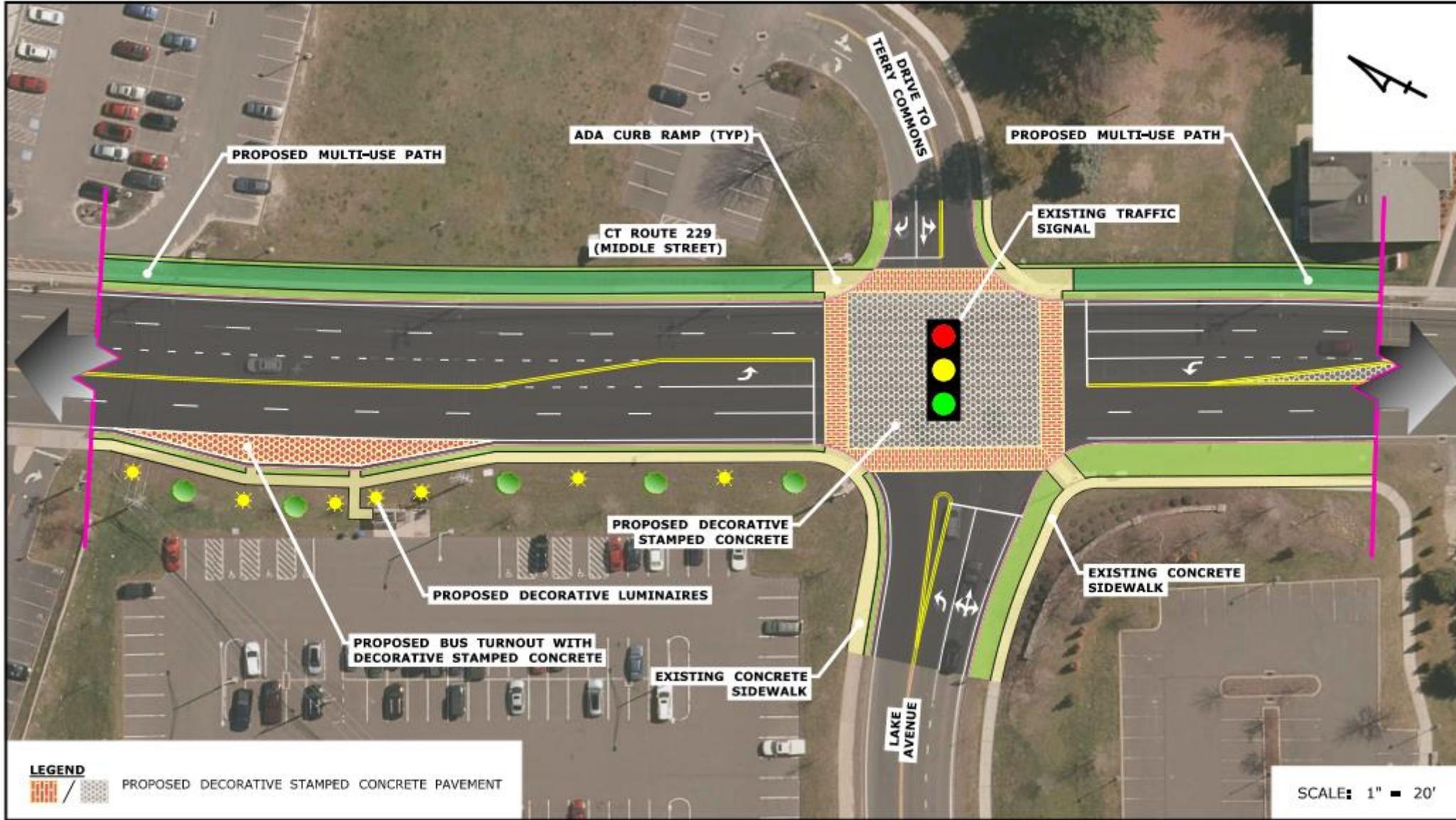
LEGEND



PROPOSED DECORATIVE STAMPED CONCRETE PAVEMENT

SCALE: 1" = 80'

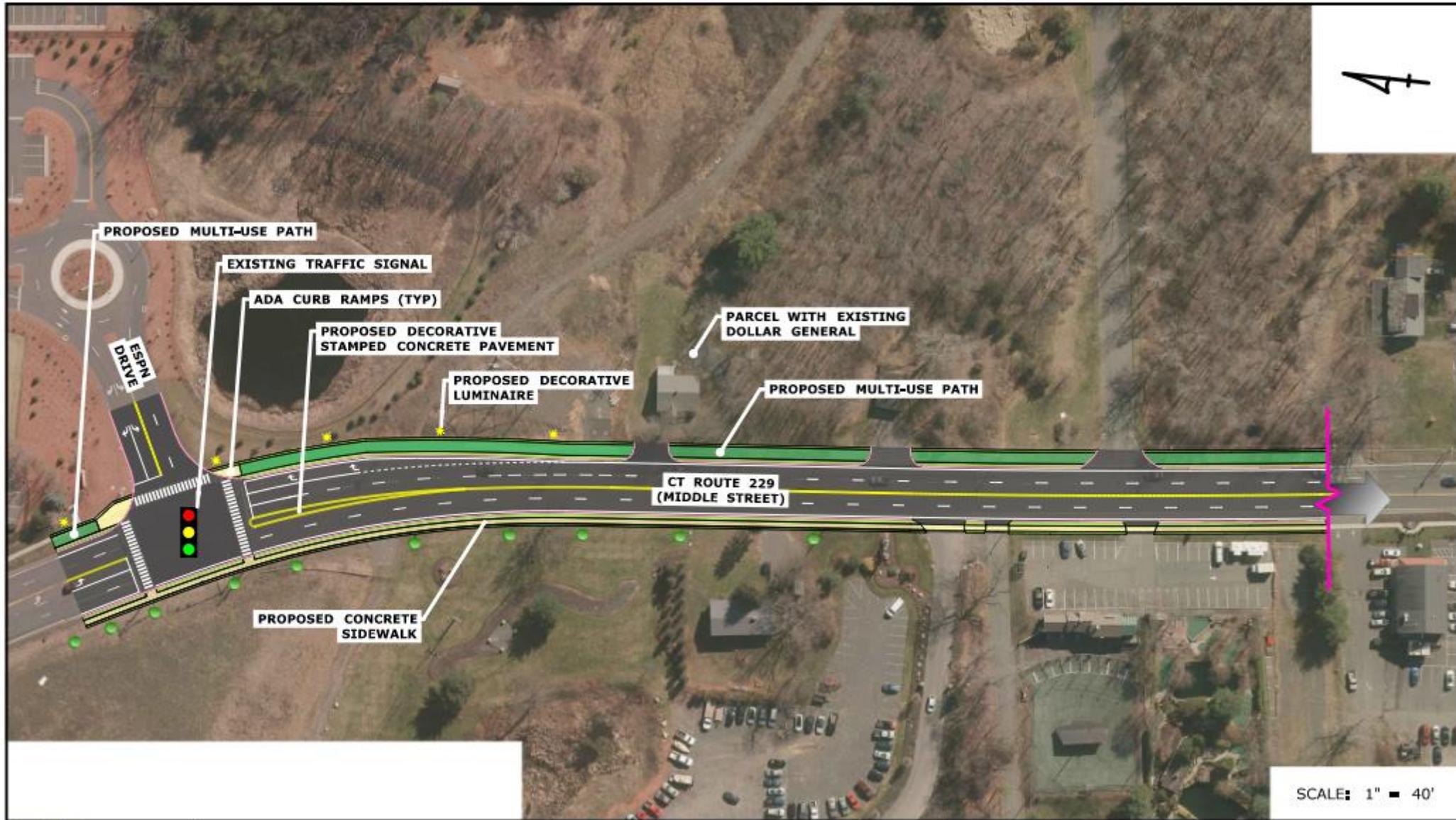
Central Segment: Lake Avenue @ CT Route 229



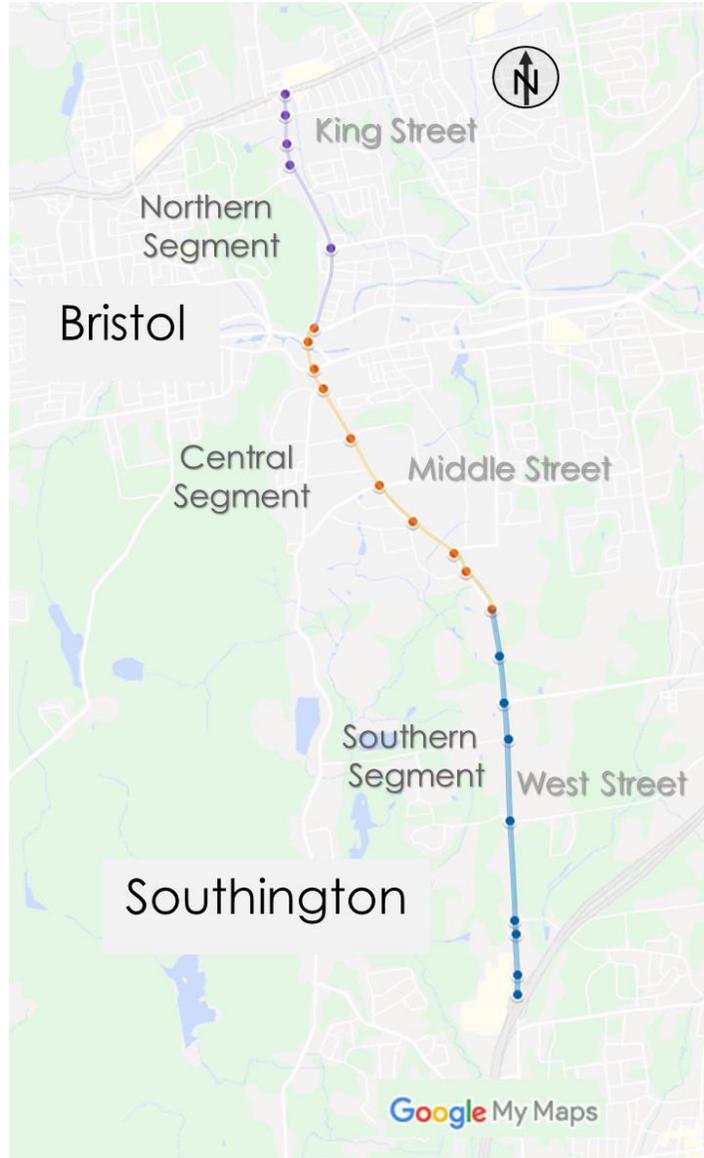
Southern Segment



Southern Segment: Two through Southbound Lanes



Multimodal Accommodations



Transit



Preliminary Traffic Data: Transit



■ CTfastrak Route 102

- The average weekday daily ridership in 2019 totaled 1,294 boardings and alightings.
- Three percent (3%) of daily trips board and alight within 0.5 miles of CT Route 229.

■ Express Route 502

- The average weekday daily ridership in 2019 totaled 210 boardings and alightings.
- Three percent (3%) of daily trips board and alight within 0.5 miles of CT Route 229.

■ Local 541 Bristol

- Known as “Tunxis Community College”
- The average weekday daily ridership in 2019 totaled 270 boardings and alightings.
- The nearby bus stops account for approximately twenty percent (20%) of average weekday daily bus ridership.



CROSS SECTIONS

Transit Need Index

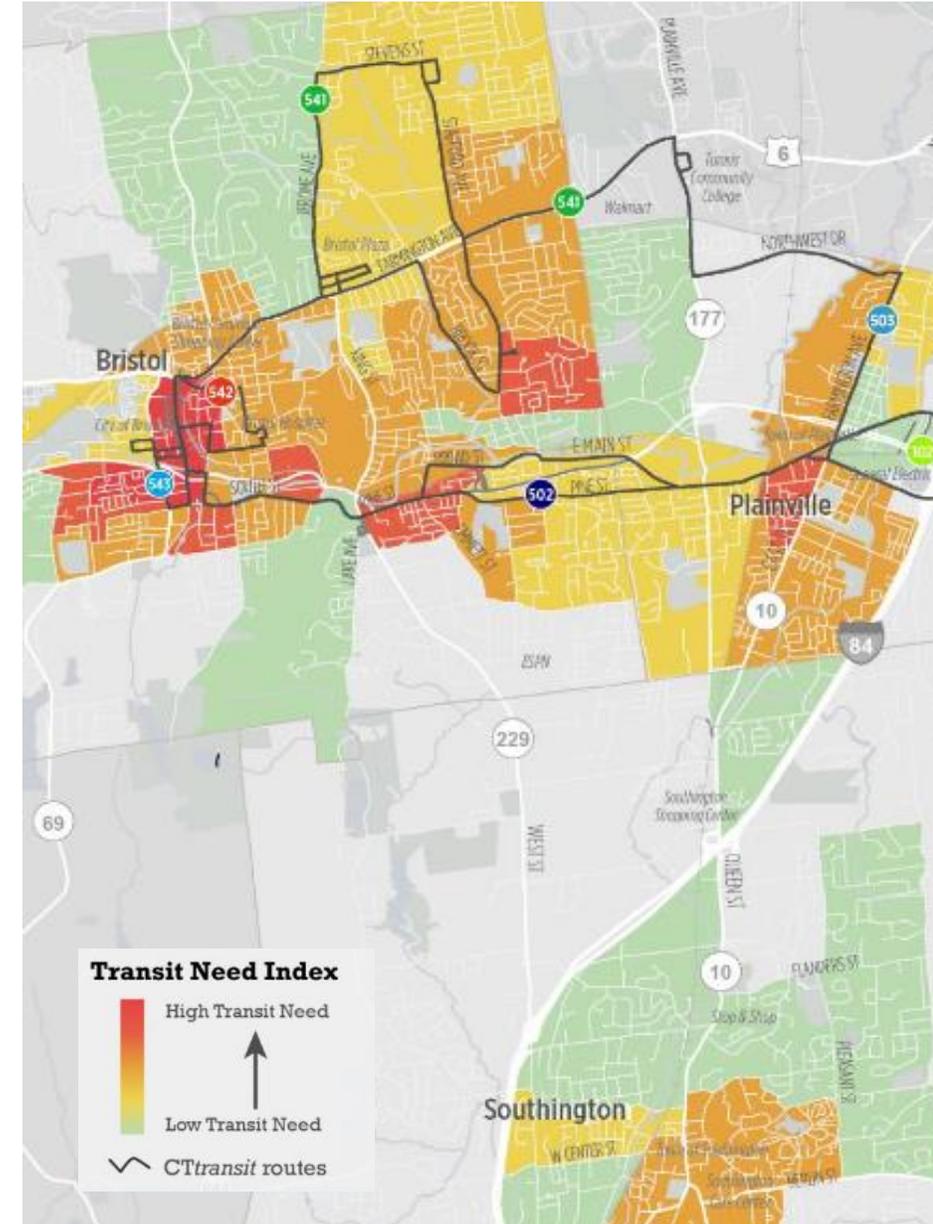
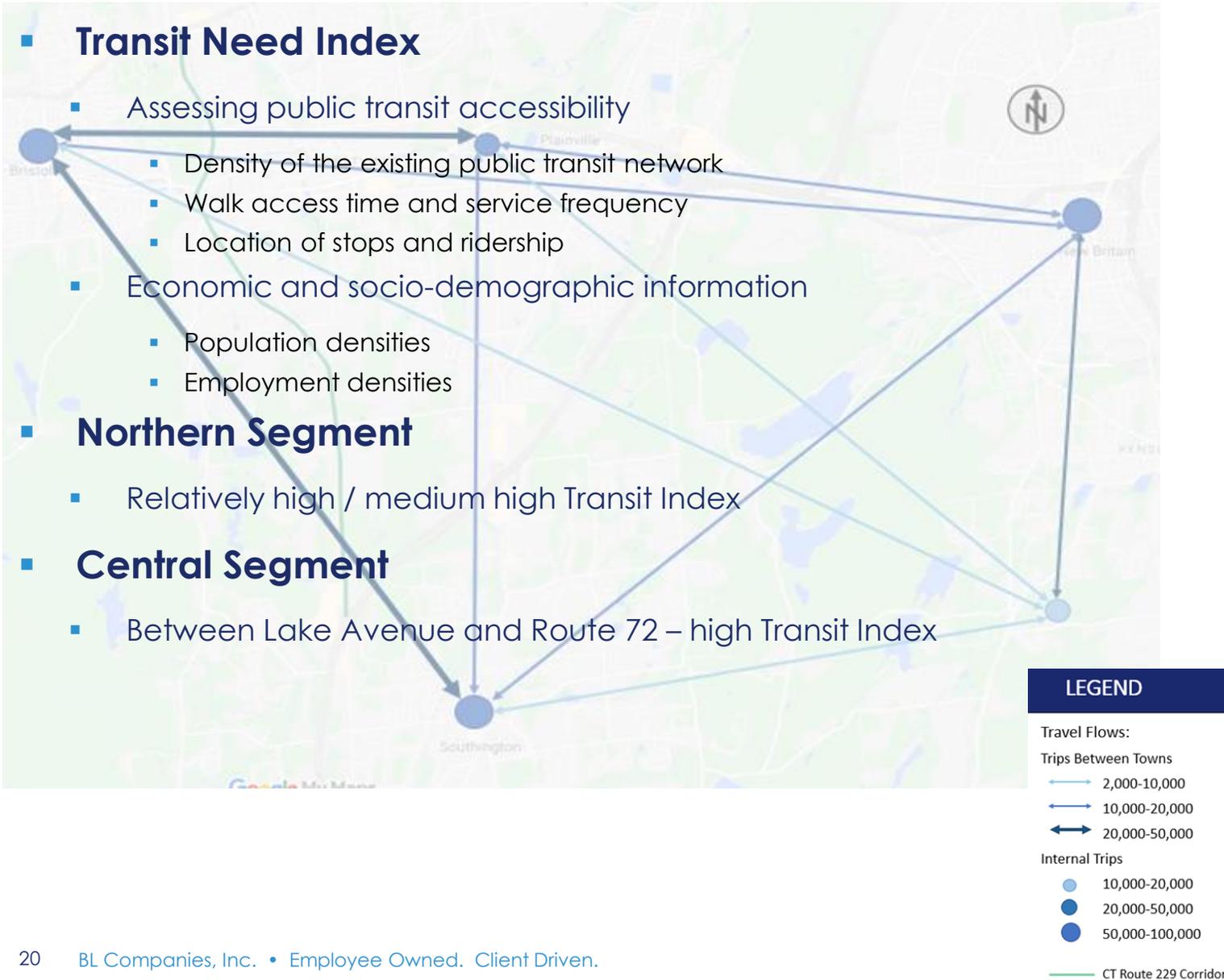
- Assessing public transit accessibility
 - Density of the existing public transit network
 - Walk access time and service frequency
 - Location of stops and ridership
- Economic and socio-demographic information
 - Population densities
 - Employment densities

Northern Segment

- Relatively high / medium high Transit Index

Central Segment

- Between Lake Avenue and Route 72 – high Transit Index



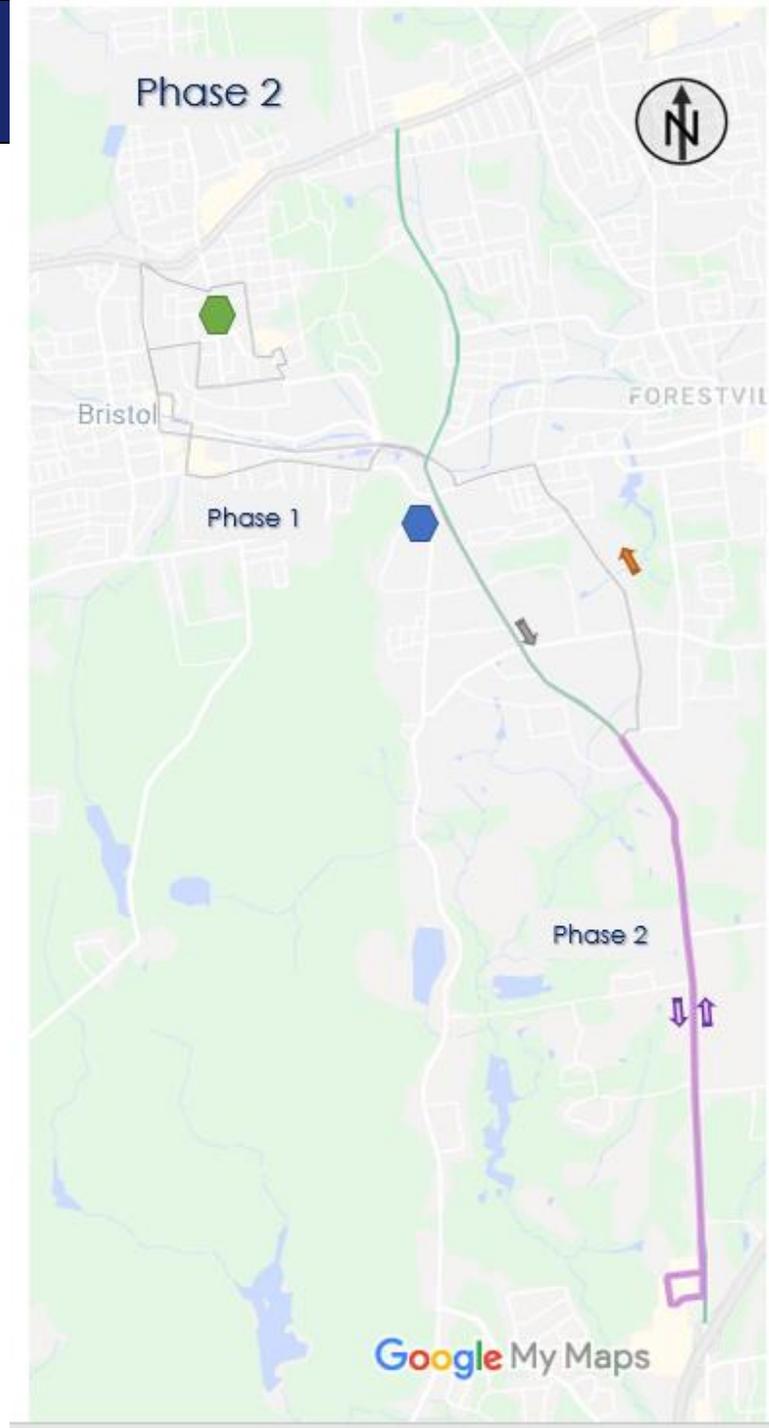
Proposed Route 542 - Phase 1

- **Local NEW Route 542** - Phase 1 services:
 - JF Kennedy Apartments
 - Gaylord Towers
 - City Hall / Downtown Bristol
 - Bristol Hospital
 - Riverview Apartments
 - Trident Commercial Area
 - Lake Avenue Park-and-Ride
 - Redstone Commons
 - Enterprise Drive Commercial Park
 - Bristol Business Park
 - ESPN



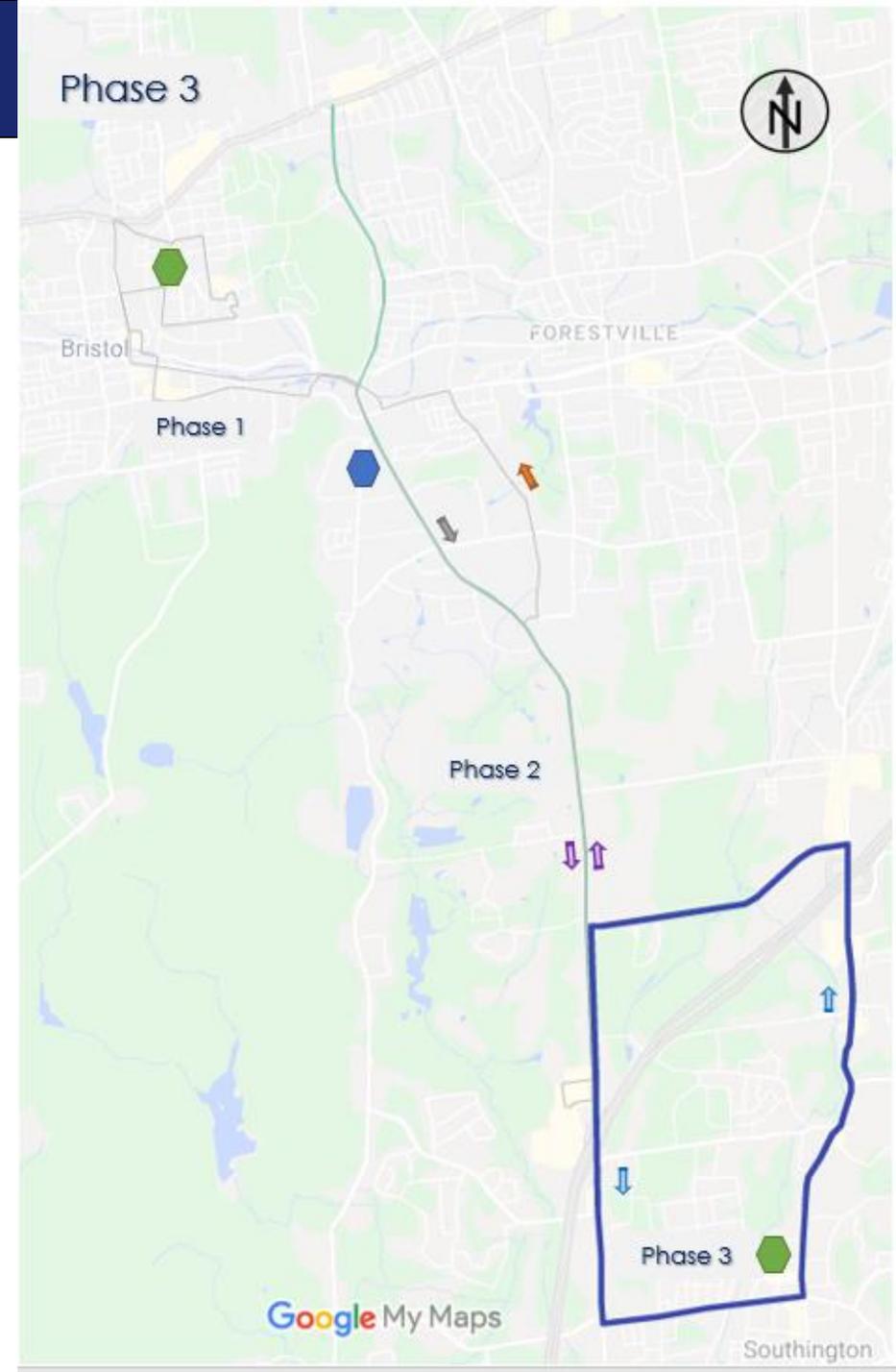
Proposed Route 542 - Phase 2

- **Local NEW Route 542** – Phase 2 services:
 - ESPN
 - Courtyard Marriott
 - UConn Health Southington
 - Executive Blvd Shopping Center



Proposed Route 542 - Phase 3

- **Local NEW Route 542** – Phase 3 services:
 - UConn Health Southington
 - Executive Blvd Shopping Center
 - Dartmoor West Townhomes
 - Summer Ridge Apartments
 - Clocktower Square
 - Cornerstone Court
 - Southington Care Center
 - Renaissance Commons
 - Southington Town Hall / Downtown Southington



Bus Stop Amenities

■ Bus Stop Locations

- Convenient, Comfortable, and Safe Locations
- Visible and Easily Identifiable
- Real-time Information on Available Services
- Pedestrian and Bicycle Access
- Integration with Surrounding Development
- Amenities that Make the Wait Comfortable

■ Bus Shelters Amenities

- Landing pad
- Shelter with wait area and benches
- Arrival /Departure Variable Sign Information
- Bike Racks / Lockers
- Lighting
- Charging Station / WiFi
- Recycling / Waste Bins
- Water Fountain
- Sidewalk / Landscaping



Pedestrian / Bike



ADA / PROWAG Compliance

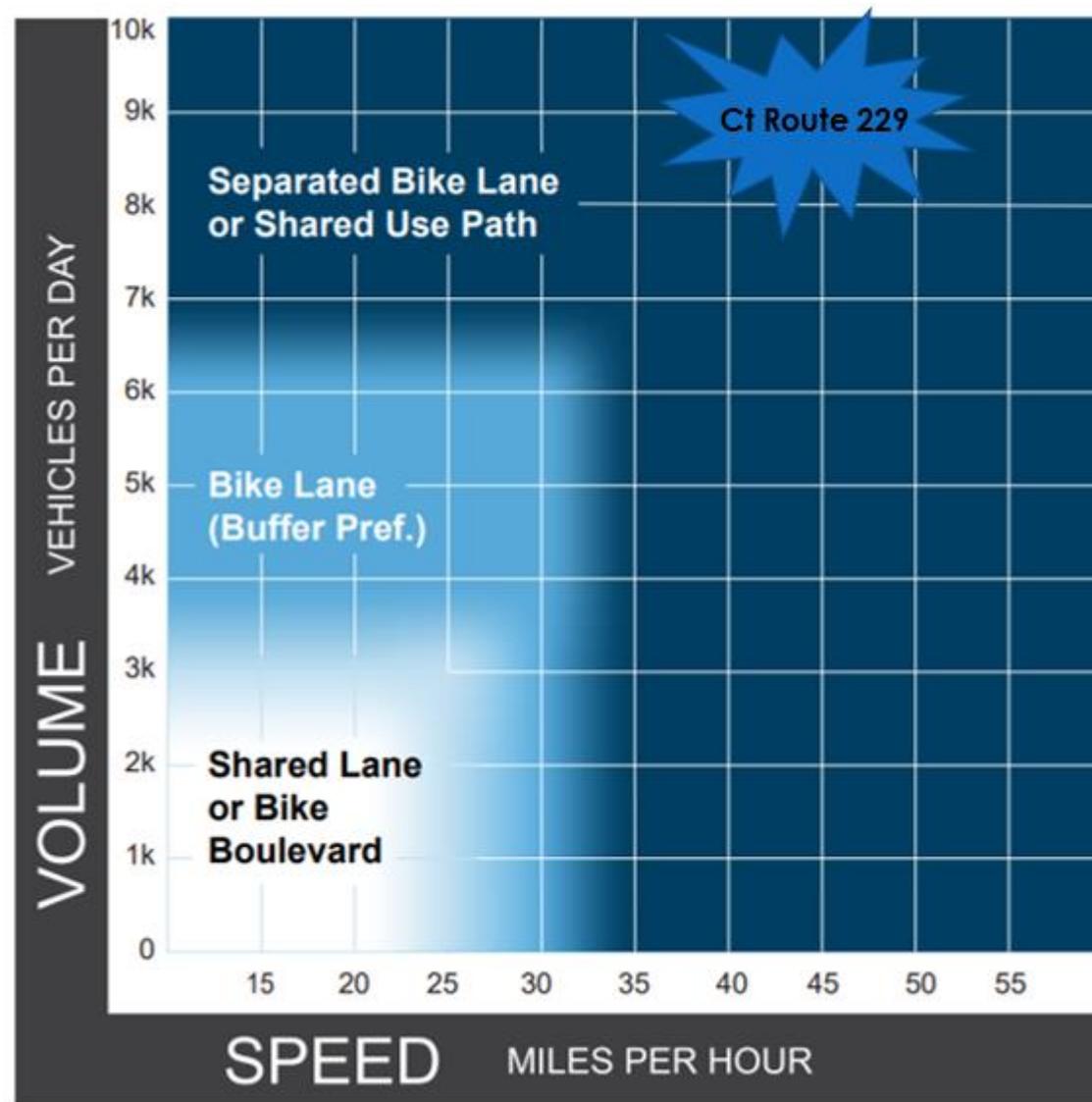
- **Sidewalks:**
 - width and condition
 - surface type
 - curb & snow shelf presence
 - ramps and flares
 - detectable warning panels (Truncated Domes)
 - obstructions along sidewalk & continuity
- **Placement of pedestrian push buttons**
- **Slopes for pedestrian paths**



Multi-Use Path Design Standards

CT Route 229 Conditions

- Travel speeds 40-50mph
- ADTs:
 - ▶ Northern segment: 15,000
 - ▶ Central segment: 18,000
 - ▶ Southern Segment: 21,000



FHWA Bikeway Selection Guide

Multi-use Path Design Standards

Multi-Use Path

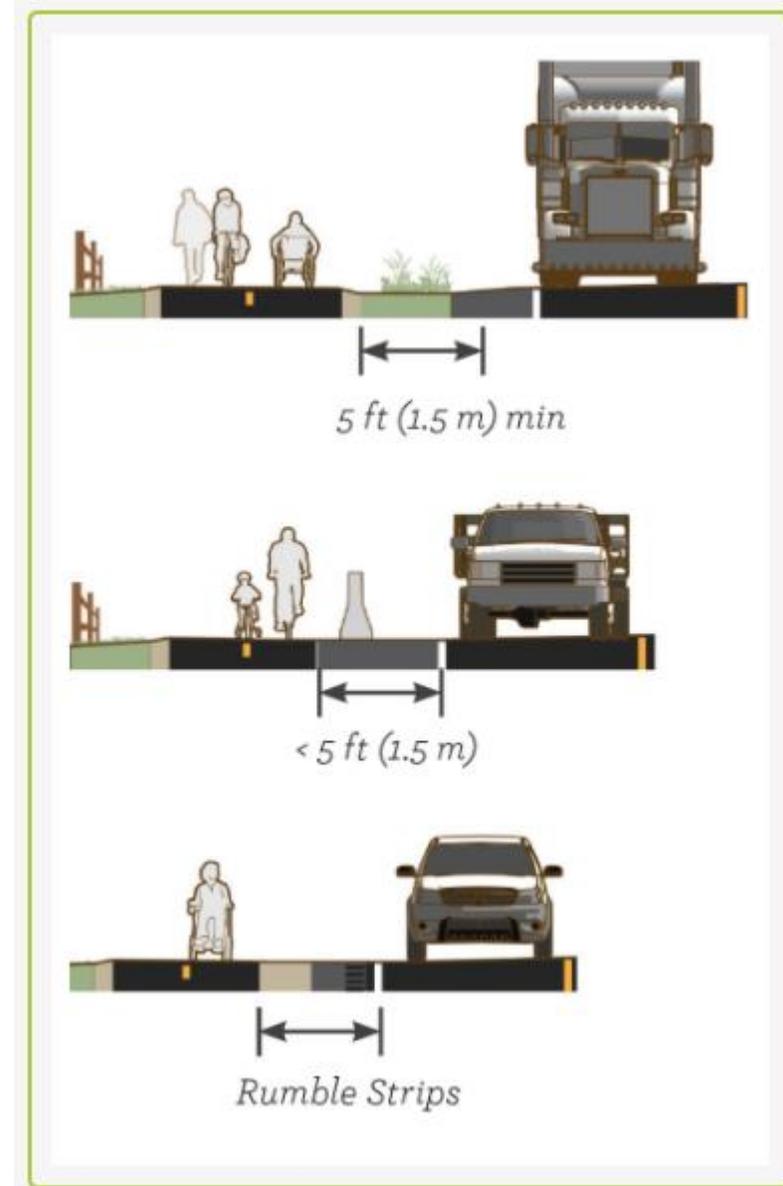
- 10' Wide
- Min. 5' unpaved separation from vehicles
- If less physical barrier
 - Guiderail
 - Rumble strips

Sidewalks:

- 5' wide and continuous
- curb & snow shelf presence
- ADA compliant ramps



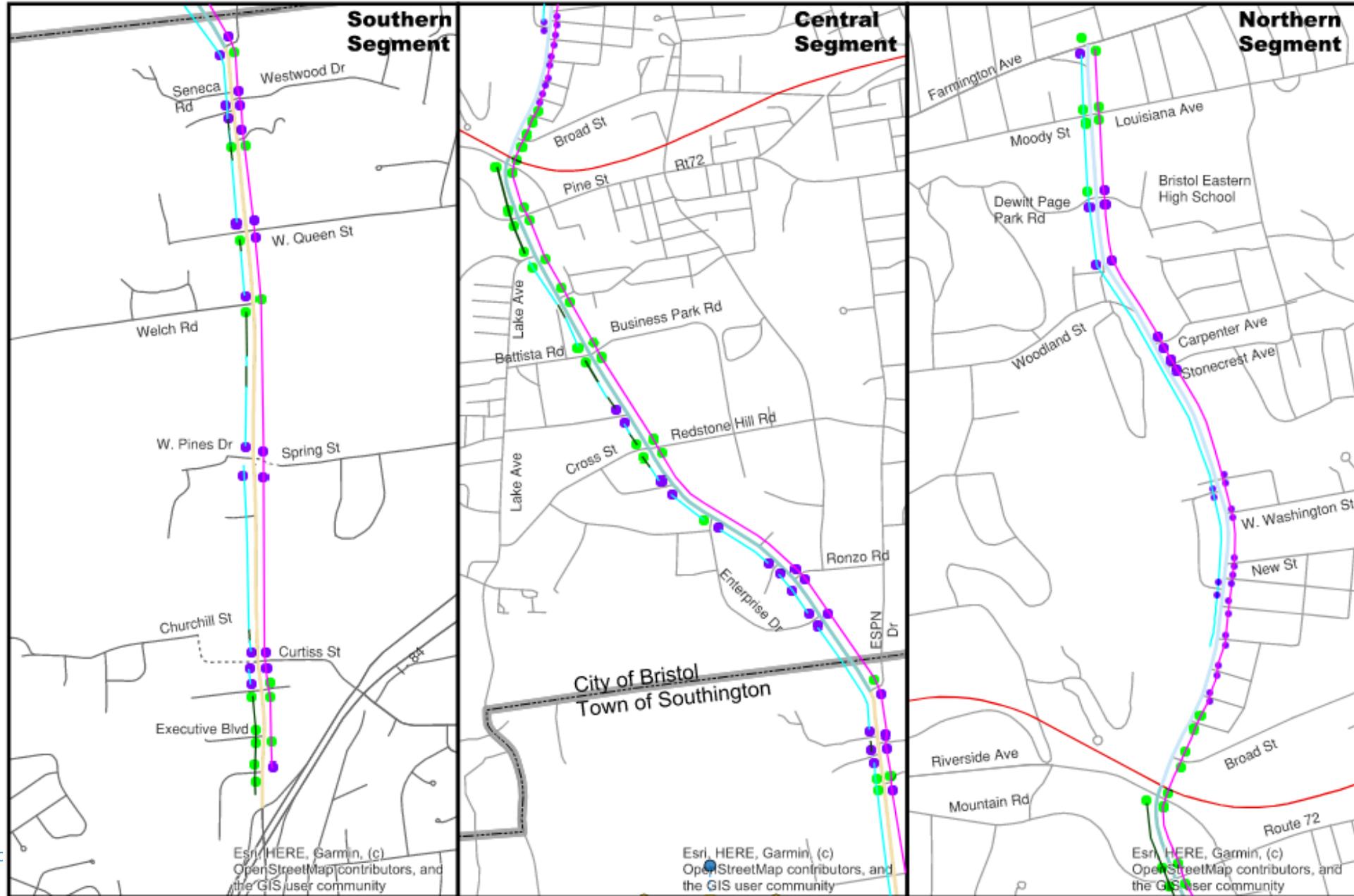
Design Guide



Proposed Crosswalks

Legend

- Segment**
- Northern Segment
 - Central Segment
 - Southern Segment
- Town Boundary
- Proposed Handicap Ramp
 - Existing Handicap Ramp
- Proposed Sidewalk
 - Proposed Multi-Path
 - Existing Sidewalk
 - CT Rail
 - CT Roads



Proposed Crosswalks

Legend

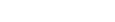
Segment

- Northern Segment
- Central Segment
- Southern Segment

 Town Boundary

 Proposed Pedestrian Push Button

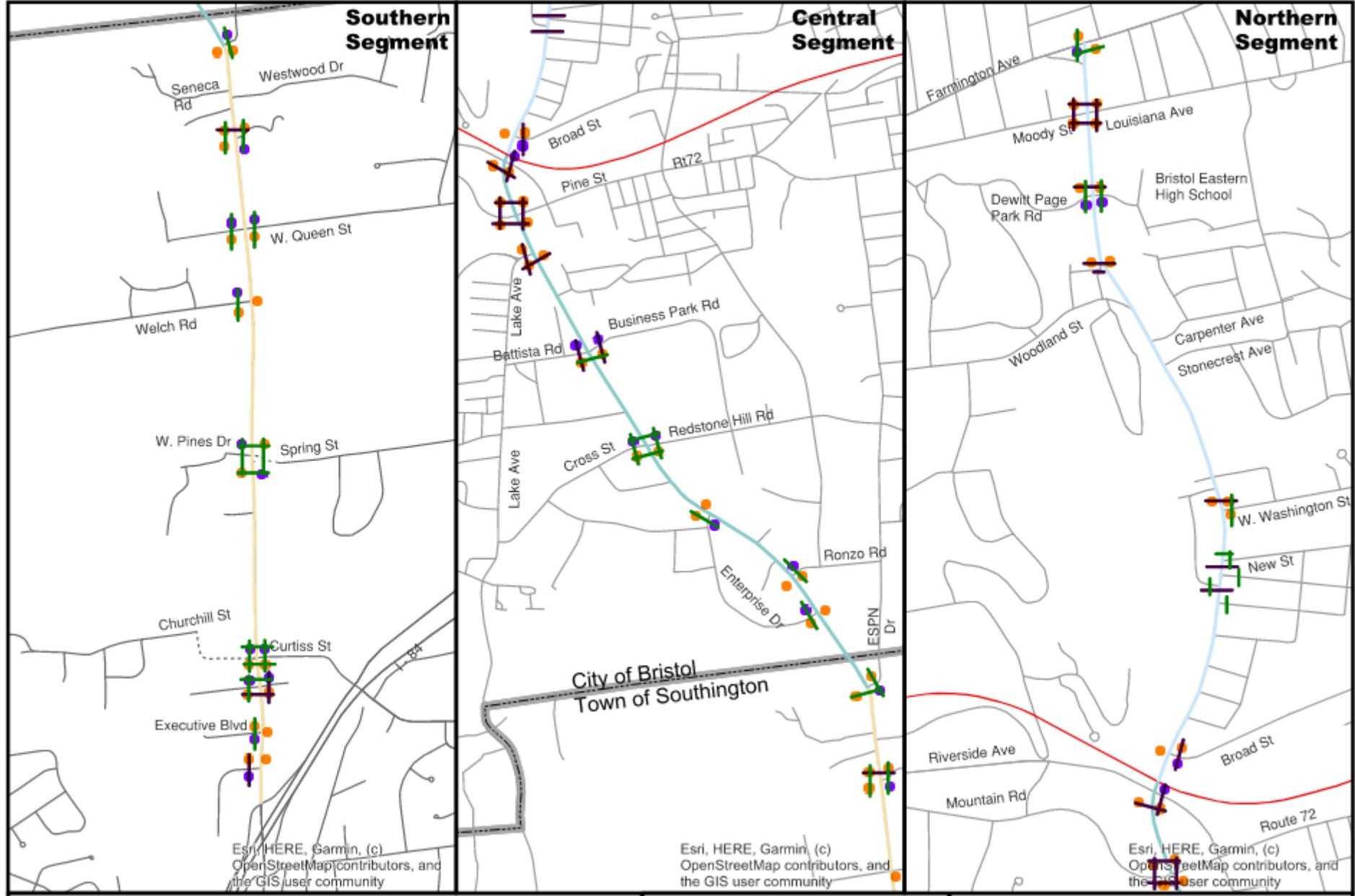
 Pedestrian Push Button

 Proposed Crosswalk

 Crosswalk

 CT Rail

 CT Roads



Summary of Proposed additional Pedestrian Facilities

	Norther Segment (King Street)	Central Segment (Middle Street)	Southern Segment (West Street)
Crosswalk	11	9	17
Ramp	30	24	21
Push Button	15	21	13



Build, Analyze & Compare Traffic Scenarios

- **Scenarios:**

- EXISTING Conditions
- NO BUILD Conditions
- BUILD Conditions
- BUILD with Improvements Conditions

- **Periods:**

- Morning Peak Hour
- Midday Peak Hour
- Evening Peak Hour

- **Purpose:**

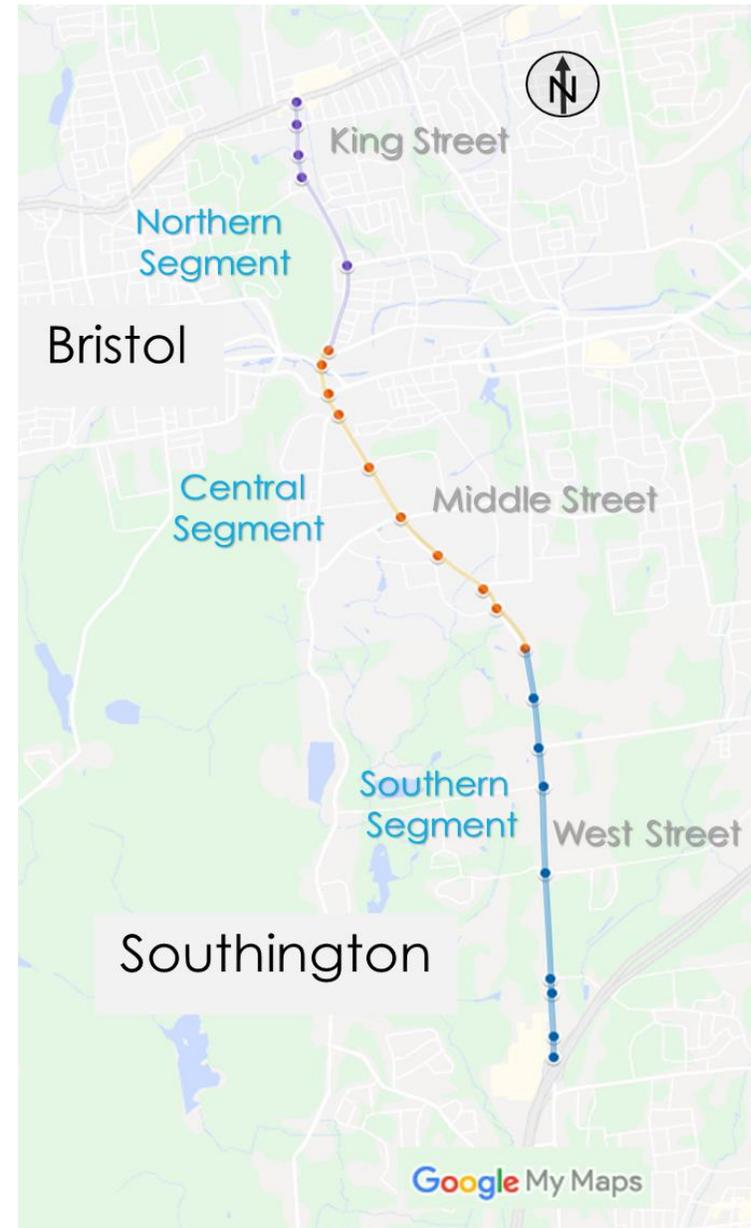
- To determine impact, if any, of land development on the adjacent roadway network
- Recommend mitigation, if needed (Build Imp Scenario)



Level of Service	Average Control Delay of Intersection	
	SIGNALIZED (seconds per vehicle)	UNSIGNALIZED (seconds per vehicle)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

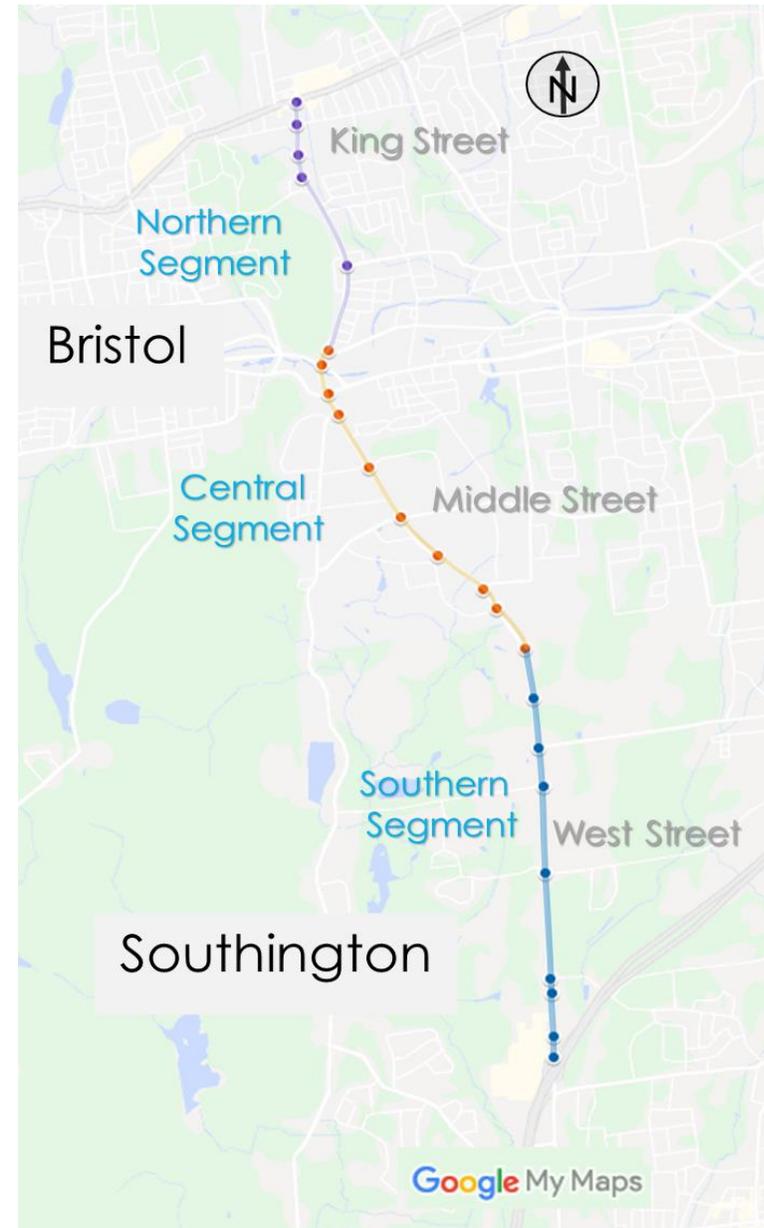
Traffic Operations of the Corridor - AM

		Existing	No Build	Build	Build Improved
Location / Level of Service (LOS)					
King Street	at Farmington Avenue / US6	B	B	B	B
	at Moody Street / Louisiana Avenue	A	B	B	B
	at Page Park Road / High School	A	A	A	A
	at Woodland Street	A	A	A	A
	at West Washington Street	C	C	D	C
	at Broad Street	A	A	A	A
Middle Street	at Riverside Avenue / Relocated Route 72	C	C	D	D
	at Mountain Road / Pine St	F	F	F	D
	at Lake Avenue / Terry Commons Driveway	B	C	C	B
	at Battista Road / Business Park Drive	B	B	C	B
	at Cross Street / Redstone Hill Road	B	B	C	C
	at Enterprise Drive North	A	A	A	A
	at Driveway / Ronzo Road	B	B	B	B
	at Enterprise Drive South	A	A	C	C
	at ESPN Drive	A	A	B	B
West Street	at Private Drive / Ridgeview Estates	A	A	F	B
	at West Queen Street	D	E	F	D
	at Welch Road	D	E	F	B
	at Spring Street	A	A	C	B
	at Curtiss Street	A	B	F	D
	at Corporate Drive / Centrion Plaza Drive	B	C	E	D
	at Executive Boulevard North	A	A	B	A
	at Executive Boulevard South	B	B	D	A
	at I-84 WB On Ramp / I-84 WB Off Ramp	A	A	B	C



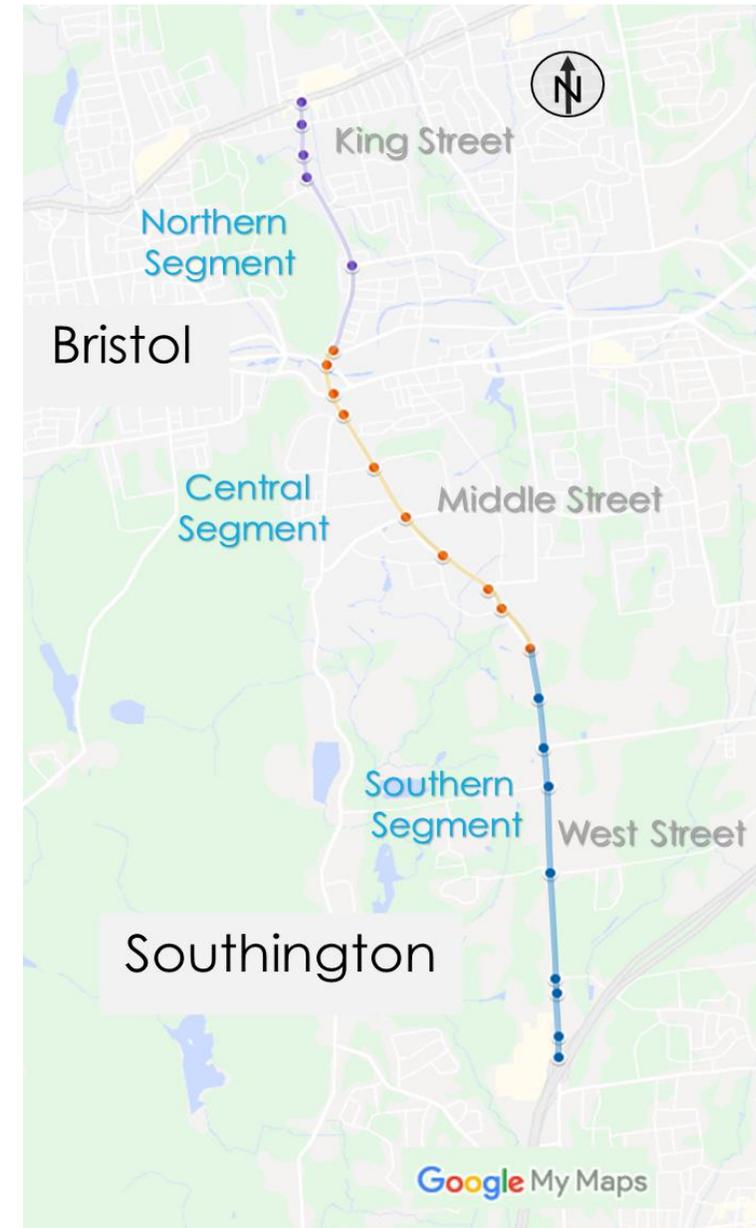
Traffic Operations of the Corridor - MD

		Existing	No Build	Build	Build Improved
Location / Level of Service (LOS)					
King Street	at Farmington Avenue / US6	B	B	C	C
	at Moody Street / Louisiana Avenue	B	B	C	B
	at Page Park Road / High School	A	A	A	A
	at Woodland Street	A	A	A	B
	at West Washington Street	B	C	D	C
	at Broad Street	B	B	B	A
Middle Street	at Riverside Avenue / Relocated Route 72	C	C	D	C
	at Mountain Road / Pine St	D	E	F	E
	at Lake Avenue / Terry Commons Driveway	B	B	B	B
	at Battista Road / Business Park Drive	A	A	B	C
	at Cross Street / Redstone Hill Road	B	B	D	D
	at Enterprise Drive North	A	A	A	A
	at Driveway / Ronzo Road	A	B	D	D
	at Enterprise Drive South	A	A	A	A
	at ESPN Drive	A	A	C	C
West Street	at Private Drive / Ridgeview Estates	A	A	F	B
	at West Queen Street	C	D	F	F
	at Welch Road	B	C	F	C
	at Spring Street	A	A	B	B
	at Curtiss Street	A	A	F	D
	at Corporate Drive / Centrion Plaza Drive	A	A	D	A
	at Executive Boulevard North	A	A	A	A
	at Executive Boulevard South	B	B	C	A
	at I-84 WB On Ramp / I-84 WB Off Ramp	A	A	C	C



Traffic Operations of the Corridor - PM

		Existing	No Build	Build	Build Improved
Location / Level of Service (LOS)					
King Street	at Farmington Avenue / US6	C	C	D	D
	at Moody Street / Louisiana Avenue	B	C	D	C
	at Page Park Road / High School	A	A	A	A
	at Woodland Street	A	B	E	C
	at West Washington Street	D	D	F	E
	at Broad Street	B	B	C	B
Middle Street	at Riverside Avenue / Relocated Route 72	E	F	F	D
	at Mountain Road / Pine St	F	F	F	D
	at Lake Avenue / Terry Commons Driveway	C	C	C	B
	at Battista Road / Business Park Drive	B	B	C	C
	at Cross Street / Redstone Hill Road	B	C	F	C
	at Enterprise Drive North	A	A	D	C
	at Driveway / Ronzo Road	B	B	F	C
	at Enterprise Drive South	A	A	B	B
	at ESPN Drive	B	B	F	B
West Street	at Private Drive / Ridgeview Estates	B	B	F	B
	at West Queen Street	D	E	F	F
	at Welch Road	E	F	F	C
	at Spring Street	A	A	C	C
	at Curtiss Street	E	F	F	B
	at Corporate Drive / Centrion Plaza Drive	A	B	D	B
	at Executive Boulevard North	A	B	B	B
	at Executive Boulevard South	B	B	D	B
	at I-84 WB On Ramp / I-84 WB Off Ramp	B	B	C	C



Next Steps:

WRAP UP:

- **Post the Report on website**
 - 30-day comment period
- **Incorporate revisions**
- **Finalize**



Thank You for your time!



Any Questions?

