

## FULLER ROAD

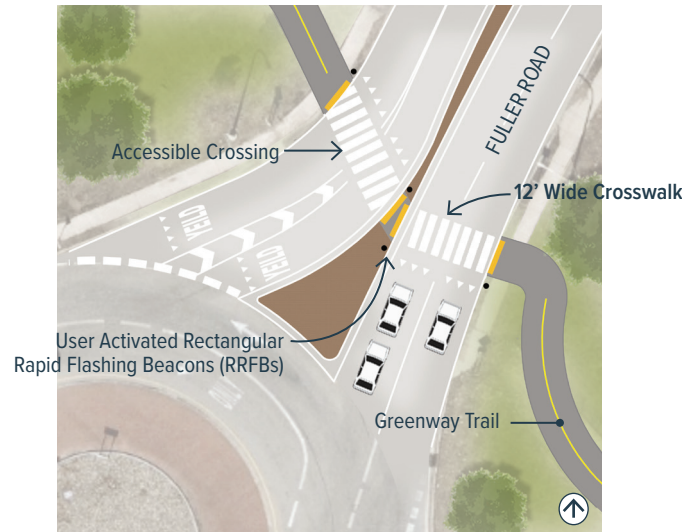


- TYPE: **CROSSING**
- CHARACTER AREA: **CAMPUS (CA)**
- CROSSING TYPES EXPLORED: **2**

In order to connect the future Patroon Creek Greenway to the Albany Pine Bush Preserve, Fuller road must be crossed. Currently, this busy roadway is challenging for bicyclists and pedestrians to cross due to minimal crossing infrastructure, relatively high traffic volumes, and the presence of a round-a-bout which only requires motor vehicles to yield, not stop.

Two different options for improving crossing conditions were explored at the intersection of Fuller Road and the Albany Pine Bush Preserve Six Mile Waterworks Park:

- **Option 1:** An enhanced at-grade crossing, including a wider crosswalk and median refuge area to accommodate trail users and user-activated Rectangular Rapid Flashing Beacons (RRFBs) to encourage cars to yield to trail users.
- **Option 2:** A new bicycle and pedestrian bridge providing a separated crossing for trail users and creating a new gateway to the Pine Bush Preserve and the Patroon Creek Greenway. This alternative would require the use of Interstate right-of-way for the eastern bridge approach.



### OPTION 1: Enhanced At-Grade Crossing

This improved crossing includes:

- New high visibility crosswalks (12-feet wide)
- User-activated RRFBs (4 total)
- Accessible curb ramps with detectable warnings
- Existing pedestrian median refuge island reconfigured to meet new crossing width

#### COST ESTIMATE: \$150,000

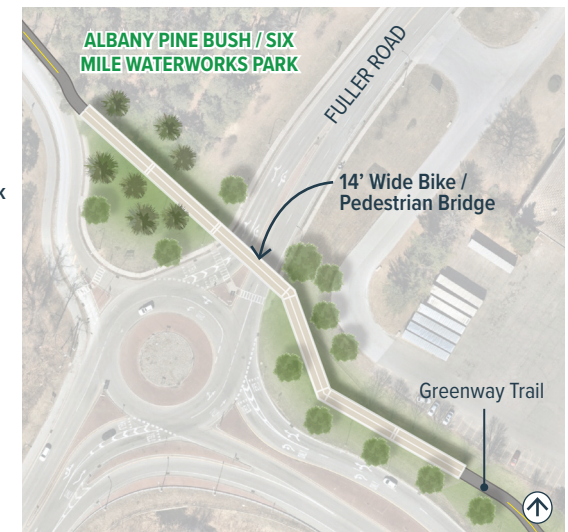
This planning level cost estimate includes the improvements listed above and also accounts for design, construction contingencies and inspection, and traffic control.

**COMFORT LEVEL:** ● ● ○ ○ ○

This option would minimally increase trail user comfort.

#### TIMEFRAME: Short-Term, 1-3 Years

This option requires minimal changes from the existing conditions and could be implemented quickly.



### OPTION 2: New Pedestrian Bridge

Features of this new proposed bridge include:

- 14-foot clear width for trail users
- 17-foot vertical clearance above Fuller Road
- 100-foot long main span
- Accessible approaches (5% grade) totaling 522-feet in length

#### COST ESTIMATE: \$5,500,000\*

This planning level cost estimate is for basic amenities only. Electric utilities on the west side of Fuller Road would be impacted by the bridge and would require relocation.

**COMFORT LEVEL:** ● ● ● ● ●

This option would significantly increase trail user comfort.

#### TIMEFRAME: Mid-Term, 5-10 Years

This option requires additional planning, design, and the identification of a funding source.

*\*See page 34 for a list of assumptions and soft costs included in cost estimates for new structures.*

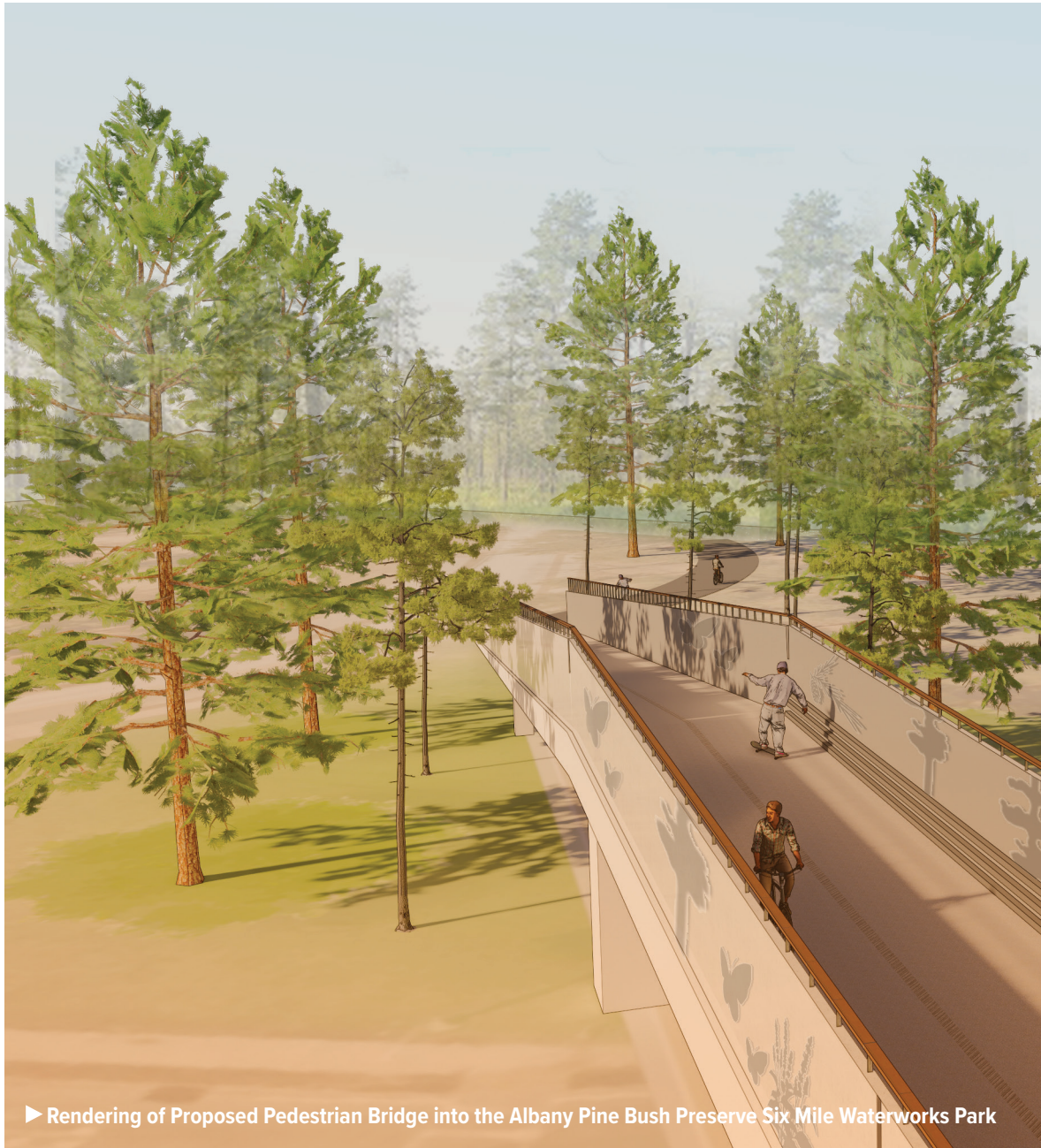


▲ **Existing Condition** at the intersection of Fuller Road and Six Mile Waterworks Park.

## USING INTERSTATE ROW

The use of Interstate right-of-way (ROW) for the future Patroon Creek Greenway trail will require close coordination with the Federal Highway Administration (FHWA). The following permits and actions will likely be required:

- Any instance where the trail utilizes Interstate ROW, a use and occupancy permit will be required. This permit will also require regular renewal.
- Any instance where the trail crosses the Interstate ROW boundary line, a break in access permit will be required.
- ROW fencing must be relocated and replaced, as needed, to prevent trail users from accessing the Interstate ROW and to ensure access is maintained for FHWA.



► **Rendering of Proposed Pedestrian Bridge into the Albany Pine Bush Preserve Six Mile Waterworks Park**



## CA-1

- TYPE: **TRAIL CORRIDOR**
- CHARACTER AREA: **CAMPUS (CA)**
- LENGTH OF CORRIDOR: **1.7 MI**



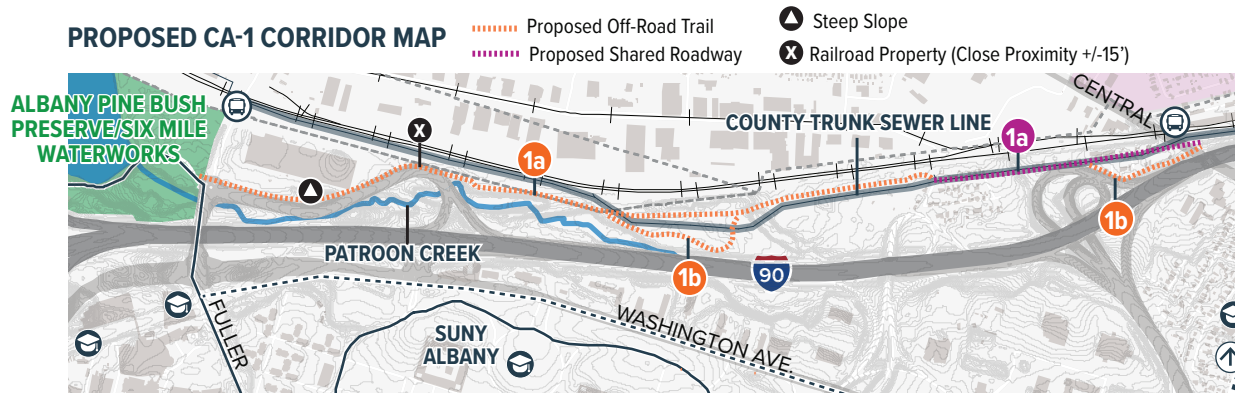
The CA-1 alignment connects the Albany Pine Bush Preserve Six Mile Waterworks Park east to Central Avenue. This alignment utilizes the space between the railroad and I-90 and generally follows the County's Patroon Creek trunk sewer easement. Two different options along this alignment corridor were identified. CA-1a is the most direct route and consists of an off-road trail between Fuller Road and Yardboro and then transitions to a shared roadway along the entire length of Yardboro Avenue. CA-1b generally follows CA1a, but deviates to the south,

where possible to provide more distance between the railroad and the trail. CA-1b also includes a shared roadway on Yardboro Avenue and an off-road trail (portions of which are an elevated boardwalk to minimize disturbance) along the northern shoreline of Patroon Creek using interstate right-of-way just south of Yardboro Avenue.

Potential challenges along this alignment include:

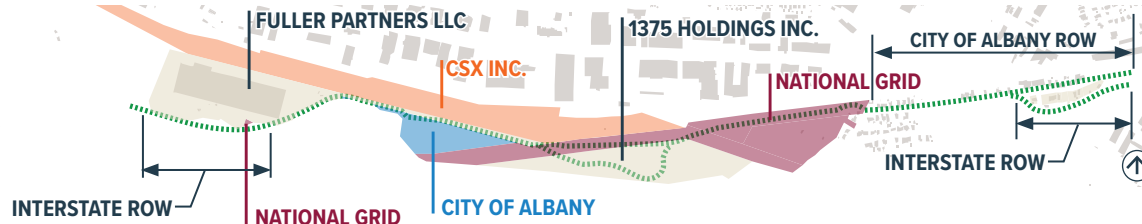
- Lack of north-south connectivity along the corridor;
- Steep slopes between the Fuller Road ramp and Fuller Partners LLC property;
- Use of private, electric utility, and Interstate ROW properties and the County's sewer easement; and,
- Close proximity to the railroad ROW. All sections of the future trail within 50-feet of the railroad ROW will require 8-foot high fencing.

### PROPOSED CA-1 CORRIDOR MAP



\*Note: alignment width is not to scale.

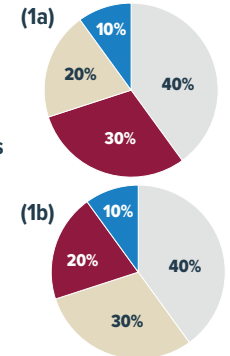
### LAND OWNERSHIP



## LAND OWNERSHIP

This alternative alignment is proposed on the following properties:

- Road Right-of-Way**
  - City of Albany
  - Interstate
- Private (Industrial) Properties**
  - Fuller Partners LLC
  - Fuller Realty
  - 1375 Holdings Inc.
- Municipal Properties**
  - City of Albany
- Electric Utility Properties**
  - National Grid



\*Percentages are approximate.

## CONNECTIVITY

This alignment alternative provides connections to the following bicycle/trail infrastructure and parks:

- Existing Bicycle Infrastructure**
    - Multi-use path on Fuller Road
    - The Albany Pine Bush Preserve trail system
  - Proposed Bicycle Infrastructure**
    - Proposed multi-use path on Washington Avenue
  - Parks + Open Spaces**
    - The Albany Pine Bush / Six-Mile Waterworks Park
- CONNECTIVITY SCORE: 2.4 connections per mile**

## EQUITY

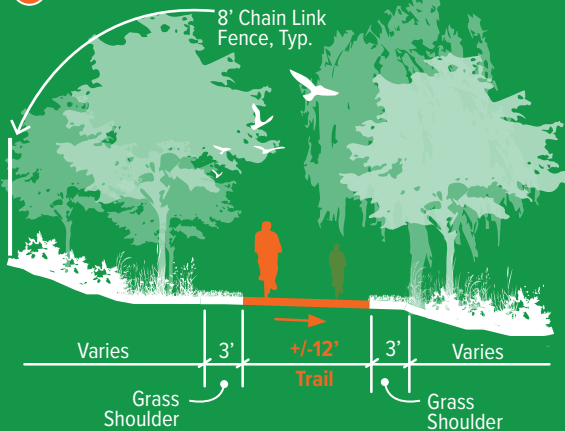
This alignment alternative connects to the following:

- Public Transit** (0.1 point each)
  - Bus stop on Fuller Road (routes 117 and 190)
  - Bus stop on Central Avenue (routes 1 and 807)
  - Planned BusPlus Purple Line via SUNY Albany
- Schools + Institutions** (0.1 point each)
  - Tech Valley High School
  - Colleges of Nanoscale Science & Engineering
  - SUNY Albany
  - Harriman Campus
- Potential Environmental Justice Area (PEJA)**
  - Immediately adjacent to a PEJA (1 point)

**EQUITY SCORE: 1.7**

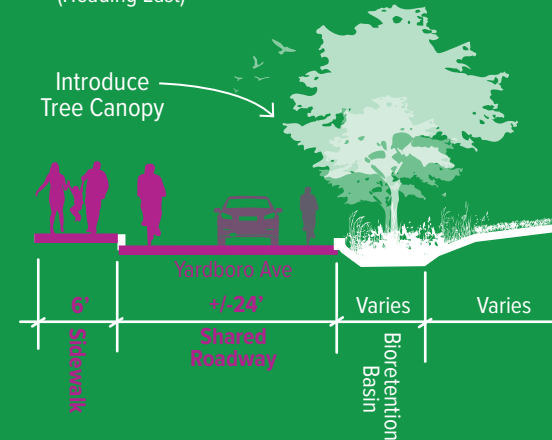
## ► TYPICAL FACILITY TYPES: CA-1A

## 1a Typical Off-Road Trail (Heading East)\*



\*Generally follows sewer easement and rail corridor

## 1a Typical Shared Roadway on Yardboro Avenue (Heading East)

**COST: \$6,000,000**

Approximately 4,700 linear feet of fencing is required along railroad and interstate ROW, which increases costs.

**CONSISTENCY:**

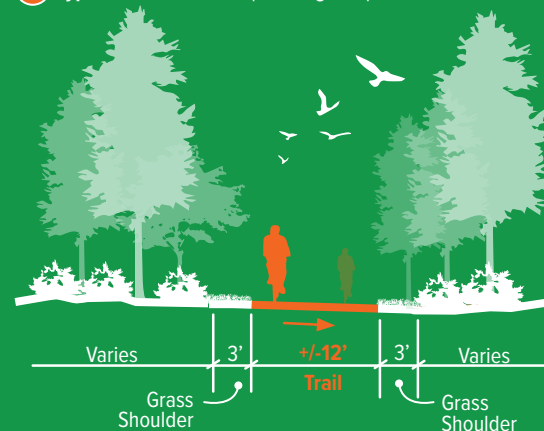
A majority of trail is off-road, however the shared road detracts from the greenway experience.

**TIMEFRAME: Mid-Term, 5-10 Years**

Requires significant coordination with utilities, additional design and analysis, and identification of a funding source.

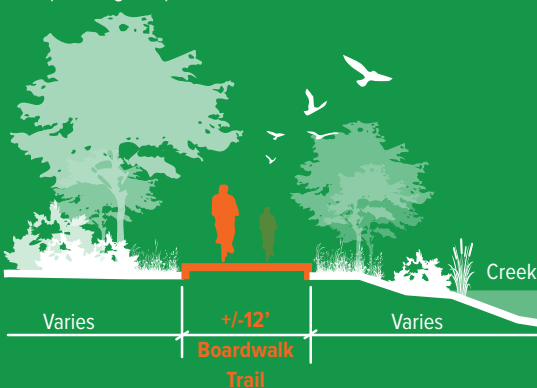
## ► TYPICAL FACILITY TYPES: CA-1B

## 1b Typical Off-Road Trail (Heading East)\*



\*Farther from rail corridor, generally follows Patroon Creek

## 1b Boardwalk Trail South of Yardboro Avenue (Heading East)

**COST: \$8,500,000**

The inclusion of approximately 550 linear feet of boardwalk to minimize disturbance along Patroon Creek increases costs.

**CONSISTENCY:**

Most of the trail is off-road and the boardwalk provides a unique experience. The shared road may detract from the trail experience.

**TIMEFRAME: Mid-Term, 5-10 Years**

Requires significant coordination with utilities, additional design and analysis, and identification of a funding source.



▲ Existing Conditions along CA-1.

**ADDITIONAL CONSIDERATIONS**

Other considerations related to environmental impacts and trail construction include:

- The trail corridor is often in close proximity to Patroon Creek. The future trail should be designed and constructed in a way that minimizes impacts to the creek, while also identifying opportunities to integrate restoration into the project to improve the ecological health of the creek and surrounding areas.
- Given the close proximity to the railroad ROW, construction contractors will be required to purchase a special insurance policy, drainage will have to be directed away from the railroad ROW, and railroad flagging and protective services will be required during construction.
- Construction access may be challenging along this corridor and could result in higher construction costs.



## CENTRAL AVE.

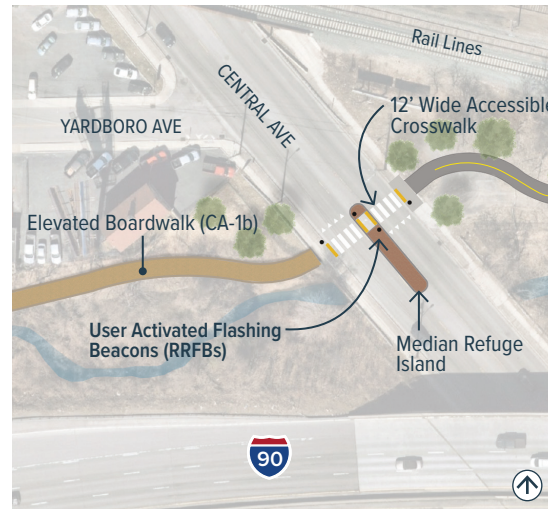


- TYPE: **CROSSING**
- CHARACTER AREA: **COMMERCIAL/RETAIL (CR)**
- CROSSING TYPES EXPLORED: **3**

Central Avenue is an important crossing for the future Patroon Creek Greenway and it provides a critical connection between alignment alternatives CA-1 and CR-1. Currently, this busy roadway is challenging for bicyclists and pedestrians to cross due to a lack of crossing infrastructure at this location, high traffic volumes, and poor visibility due to the railroad and I-90 bridges to the north and south.

Three different options for improving crossing conditions were explored:

- Creation of a median refuge island with a user-activated Rapid Rectangular Flashing Beacon (RRFB) to encourage cars to yield to trail users. This crossing option could be paired with alternatives CA-1a or CA-1b. If paired with CA-1a, the existing sidewalk between Yardboro Avenue and the proposed crossing would need to be upgraded to a shared-use path.
- A new signalized intersection at Yardboro Avenue and Central Avenue. Challenges with this option include sight distances to the signal heads, proximity to the railroad, and a large number of overhead and underground utilities. Additional studies to required to advance this option could include traffic counts, gap studies, warrant analyses, and sight distance measurements.
- A new pedestrian bridge over Central Avenue. This option would have to be paired with a western trail approach located to the south of Yardboro Avenue and north of Patroon Creek, which uses Interstate right-of-way.



### OPTION 1: Median Refuge Island

This proposed crossing includes:

- A new high visibility crosswalk (12-feet wide)
- User-activated RRFBs (4 total)
- Accessible curb ramps with detectable warnings
- New pedestrian median refuge island

#### COST ESTIMATE: \$200,000

This planning level cost estimate includes the improvements listed above and also accounts for design, construction contingencies and inspection, and traffic control.

#### COMFORT LEVEL: ● ● ○ ○ ○

This option would slightly increase trail user comfort by providing a two-stage crossing.

#### TIMEFRAME: Short-Term, Less Than 5 Years

This option requires minimal changes from the existing conditions and could be implemented quickly.



### OPTION 2: New Traffic Signal

This proposed crossing includes:

- A new traffic signal at the intersection of Yardboro and Central Avenues
- New high visibility crosswalks (12-feet wide)
- Accessible curb ramps with detectable warnings

#### COST ESTIMATE: \$550,000

This planning level cost estimate includes the improvements listed above and also accounts for design, construction contingencies and inspection, and traffic control.

#### COMFORT LEVEL: ● ● ● ○ ○

This option would increase trail user comfort by providing a dedicated signal phase for trail users to cross Central Avenue.

#### TIMEFRAME: Short-Term, Less Than 5 Years

This option requires additional planning, design, and the identification of a funding source. It also requires coordination with NYSDOT to determine whether a traffic signal could be permitted and installed in this location.



### OPTION 3: New Pedestrian Bridge

Features of this new proposed bridge include:

- 14-foot clear width for trail users
- 17-foot vertical clearance above Central Avenue
- 130-foot long main span
- Accessible approaches (5% grade) totaling 587-feet in length

#### Potential Conflict

The eastern approach of the proposed bridge overlaps with the Albany County Water Purification District's access road. If this crossing alternative is advanced further, close coordination with the County will be required to avoid impacts to the County's sewer infrastructure and ensure their access is maintained at all times.

### COST ESTIMATE: \$6,500,000\*

This planning level cost estimate is for basic amenities only. Overhead electric utilities on the west side of Central Avenue would be impacted by the bridge and require relocation.

### COMFORT LEVEL: ● ● ● ● ●

This option would significantly increase trail user comfort by providing a separated crossing.

### TIMEFRAME: Mid-Term, 5-10 Years

This option requires additional planning, design, the identification of a funding source, and coordination with the railroads and the Albany County Water Purification District.

\*See page 34 for a list of assumptions and soft costs included in cost estimates for new structures.



▲ Existing Conditions along Central Avenue at the intersection of Yardboro Avenue.



## CR-1

- TYPE: **TRAIL CORRIDOR**
- CHARACTER AREA: **COMMERCIAL / RETAIL (CR)**
- LENGTH OF CORRIDOR: **.80 MI**

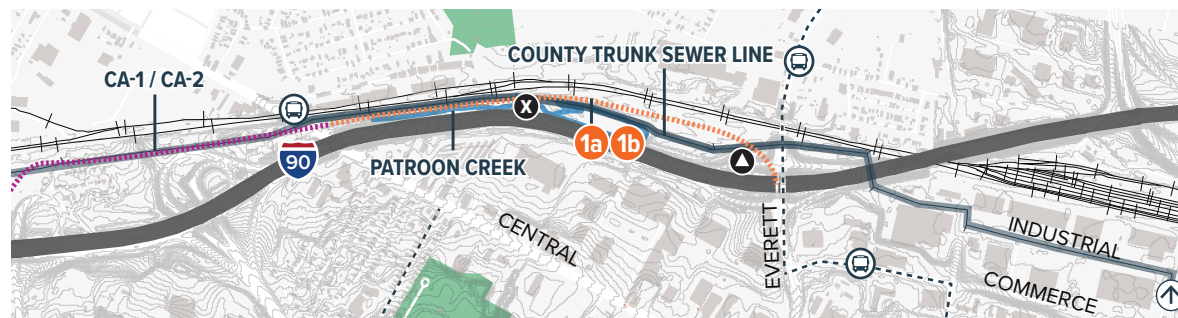


The CR-1 alignment connects the Central Avenue east to Everett Road. Similar to CA-1, this alignment utilizes the space between the railroad and I-90 and generally follows the County's Patroon Creek trunk sewer easement. Two different options along this alignment corridor were identified. The first option, CR-1a, parallels the County's trunk sewer easement. The second option, CR-1b, uses the same alignment as CR-1a, but also includes stream restoration along 80% of the trail's length (approximately 3,300 linear feet).

Potential challenges along this alignment include:

- A pedestrian bridge is needed to help trail users traverse the 24-foot elevation change between CR-1 and Everett Road Bridge at the east end of the trail corridor;
- The trail traverses property owned by the Consolidated Rail Corp. The trail corridor is also located within 50-feet of the railroad ROW along approximately 50% of its length, which will require 8-foot high fencing;
- Use of National Grid property and interstate ROW;
- Close proximity to the County trunk sewer line and in some areas it may not be possible to maintain a clear access lane of 10-feet wide for the County;
- This corridor is prone to flooding and drainage issues; and,
- Billboard companies share the County sewer easement and regularly access the existing gravel drive to maintain the billboards along I-90.

### PROPOSED CR-1 CORRIDOR MAP



\*Note: alignment width is not to scale.

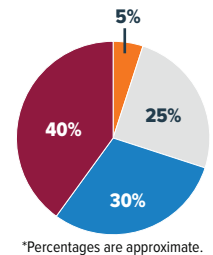
### LAND OWNERSHIP



### LAND OWNERSHIP

This alternative alignment is proposed on the following properties:

- Railroad**
  - Consolidated Rail Corp
- Road Right-of-Way**
  - Interstate
- Municipal Properties**
  - City of Albany
- Electric Utility Properties**
  - National Grid



\*Percentages are approximate.

### CONNECTIVITY

This alignment alternative provides connections to the following bicycle/trail infrastructure and parks:

- Proposed Bicycle Infrastructure**
  - Proposed protected / buffered bike lane on Everett Road
  - Proposed conventional bike lane on Watervliet Ave Ext
- Parks + Open Spaces**
  - Town of Colonie / West Albany Pocket Park (if bridge to First Prize redevelopment site was built)

**CONNECTIVITY SCORE: 3.8** connections per mile

### EQUITY

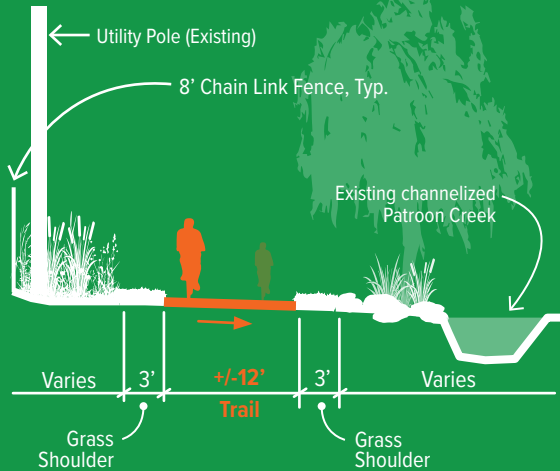
This alignment alternative connects to the following:

- Public Transit** (0.1 point each)
  - Bus stop on Central Avenue (routes 1 and 807)
  - Bus stop on Everett Road (routes 125 and 737)
  - Bus stop on Watervliet Ave Ext (route 125)
- Potential Environmental Justice Area (PEJA)**
  - Immediately adjacent to a PEJA (1 point)

**EQUITY SCORE: 1.3**

## ► TYPICAL FACILITY TYPES: CR-1A

## 1a Typical Off-Road Trail (Heading East)

**COST: \$4,000,000**

Significant coordination with utilities and the railroad and limited construction access contribute to the cost.

**CONSISTENCY:**

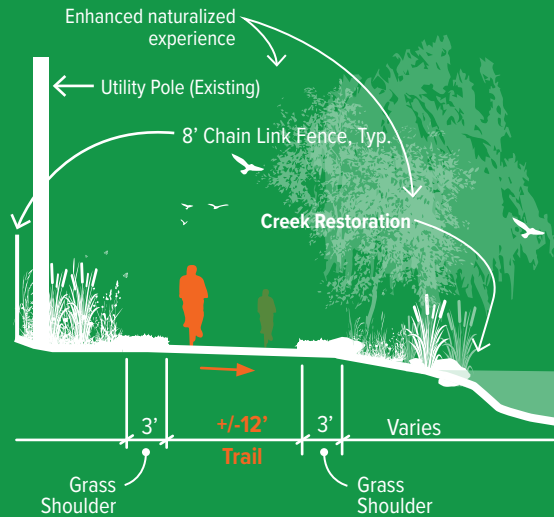
This entire alternative is off-road creating a comfortable and direct trail connection. The close proximity of the railroad and I-90 detract from the overall experience.

**TIMEFRAME: Mid-Term, 5-10 Years**

Requires significant coordination with utilities and the railroad.

## ► TYPICAL FACILITY TYPES: CR-1B

## 1b Typical Off-Road Trail with Creek Restoration (Heading East)

**COST: \$10,500,000**

Restoration of Patroon Creek's shoreline and floodplain constitute a majority of this option's cost.

**CONSISTENCY:**

Restoration of Patroon Creek in this alternative could transform the trail into a unique destination and provide a natural respite from the surrounding dense development.

**TIMEFRAME: Mid-Term, 5-10 Years**

If restoration of Patroon Creek and its floodplain is a priority, this project could be done at the same time as trail construction.



▲ Existing Conditions along the County sewer easement access drive.

**Proposed Bridge to Connect First Prize****COST ESTIMATE: \$8,500,000**

- 14-foot clear width for trail users
- 23-foot vertical clearance above railroad
- 175-foot long main span
- Accessible approaches 415-feet in length each
- Requires relocation of overhead electric lines

\*A +/- 15' buffer can generally be maintained from the edge of proposed trail to rail property. Exceptions to this are noted on the previous page.