

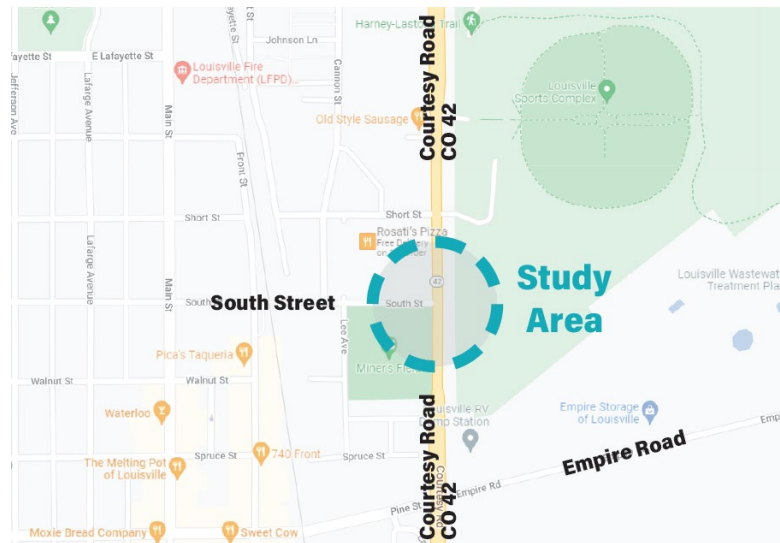
Project Sponsor: City of Louisville

Project Title: South Street Underpass

Project Phases: Design/Environmental/Construction

Background/ Project Justification: CO 42/Courtesy Road is a principal arterial that services the Cities of Louisville and Lafayette within Boulder County. CO 42 has historically been identified as a corridor which needs safety improvements and improved connectivity and mobility. Over 20,000 cars travel pass through the intersection daily (on CO 42), and this travel volume is expected to grow to 28,000 vehicles per day respectively.

354 crashes occurred along CO 42 between 2015-2019, and 1% of these crashes (4 of 354 total) took place at the CO 42/South Street intersection. Specific improvements to safety and travel demand management will support multimodal transportation, mobility, access to transit, and reduced traffic congestion.



The CO 42/South Street intersection was identified in the *Louisville Pedestrian Underpasses + Transportation Infrastructure Design* project as a potential underpass location. The purpose of identifying where grade-separated crossings are needed in the City of Louisville was to help create safe, new linkages throughout the City and encourage residents and visitors to move throughout Louisville by walking or bicycling to destinations. This underpass will connect the Open Spaces to the Downtown Core of Louisville with the recently constructed South Street Railroad underpass. The project is also in the downtown Louisville Urban Renewal Area (URA).

The project builds on the *City of Louisville's Transportation Master Plan (TMP)* and the *Future 42 Connecting People and Places Study*, which both identify the safety problem at the intersection. Overall, a combination of safety countermeasures will help both the City of Louisville and the Boulder County region move closer to regional transportation Vision Zero and safety goals, and better transportation system performance and reliability. This project is one of the first phases of the implementation identified in the *Future 42 Connecting People and Places Study*.

Project Description:

The South Street/CO 42 Underpass creates a grade-separated bicycle and pedestrian underpass of CO 42. This underpass utilizes the existing roadway of South Street, closing the roadway to motor vehicles access to CO 42. The reconfiguration of the parking lot behind the DELO plaza commercial development is also included to allow for better flow of vehicular traffic and create a new great public plaza gathering space.

Previously, the City of Louisville was awarded a TIP grant to advance the design and environmental of the entire corridor and purchase right-of-way. The South Street Underpass TIP Proposal will provide funding for 60-100% of the underpass design and construction of the CO 42/South Street intersection and underpass.

Funding Breakdown Table:

Please see below to review the funding breakdown of the project.

Funding Breakdown in \$1,000s (by program year)¹					
	FY 2024	FY 2025	FY 2026	FY 2027	Total
DRCOG Requested Funds	\$	\$1,000	\$6,000	\$	\$7,000
CDOT or RTD Supplied Funds²	\$	\$	\$	\$	\$
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$	\$200	\$3,500	\$	\$3,700
Total Funding	\$	\$1,200	\$9,500	\$	\$10,700

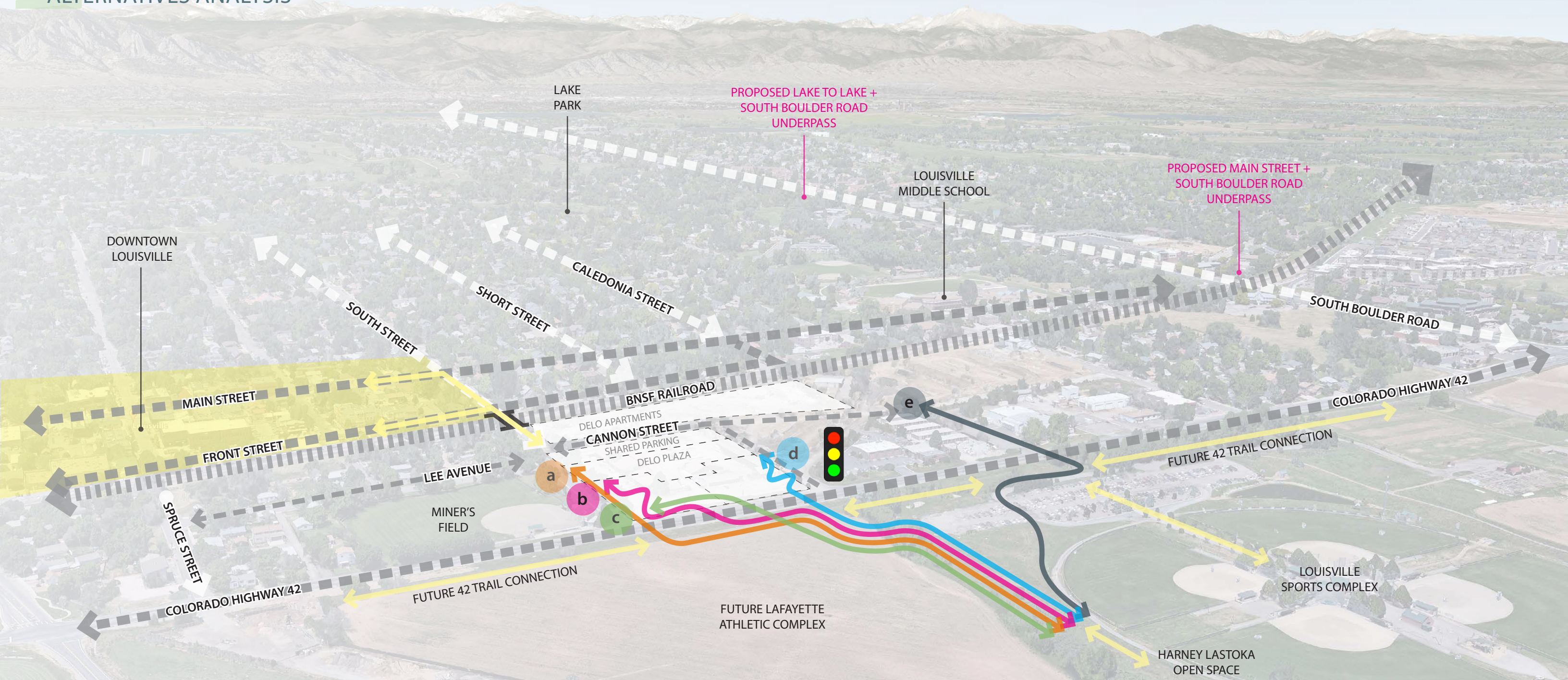
Project Location/ Map: The project will take place in the study area shown above.



UNDERPASSES + TRANSPORTATION
INFRASTRUCTURE DESIGN
COMMUNITY CHARACTER + PROJECT OVERVIEW

CONCEPT DEVELOPMENT PACKAGE
DECEMBER 17, 2021

ALTERNATIVES ANALYSIS



- alt: a**
- Pros:**
- Intuitive connection to South Street + Downtown
 - Minimal impact with proposed athletic plans
- Cons:**
- Property acquisition costs
 - Tight turns required to reach grade
 - Revised parking circulation and driveway access
 - Indirect alignment required to maximize space for proposed athletic complex

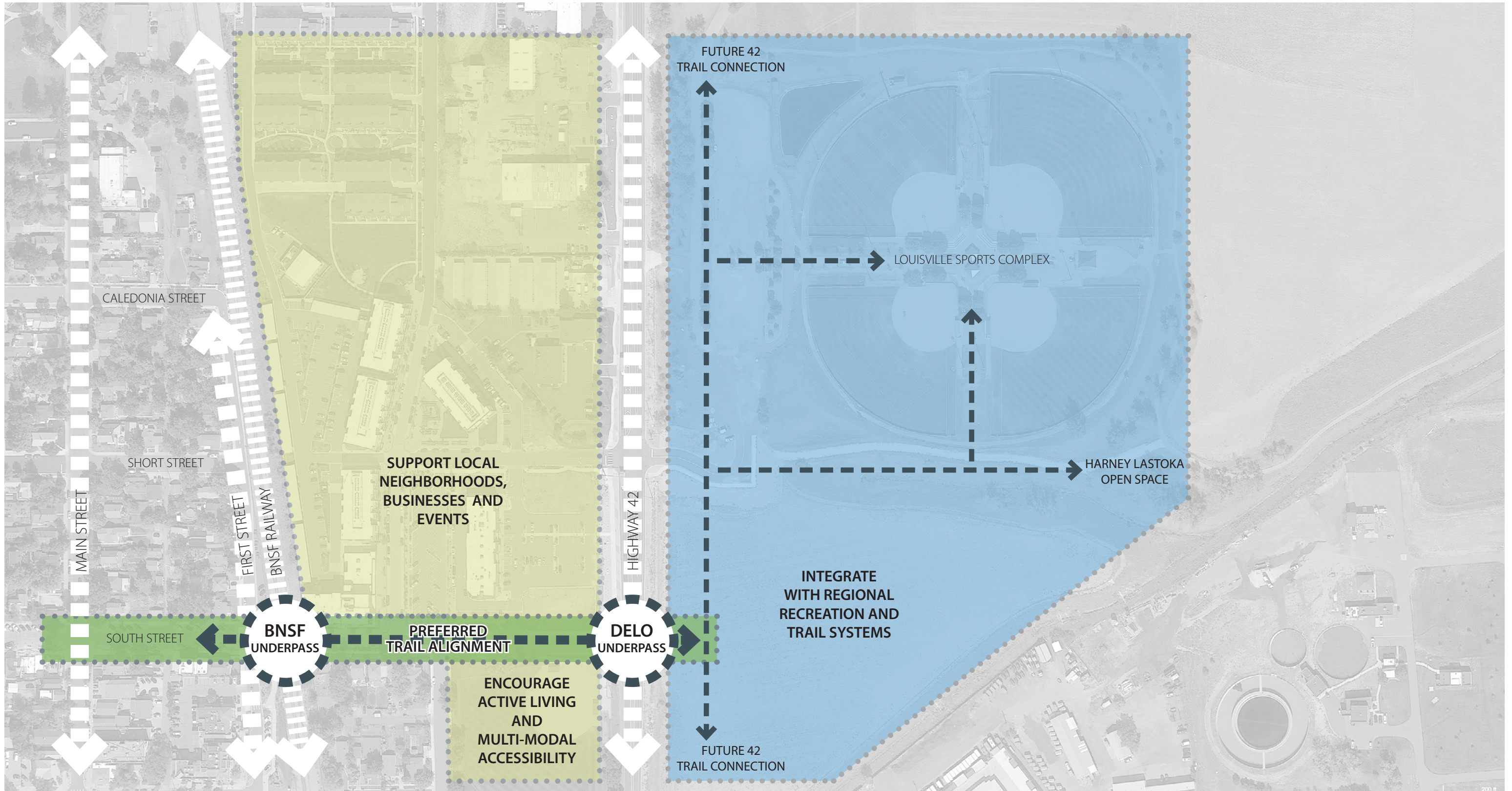
- alt: b**
- Pros:**
- Intuitive connection to South Street + Downtown
 - Minimal impact with proposed athletic plans
 - Reduced canyon effect due to switchbacks
- Cons:**
- Property acquisition costs
 - Long underpass due to diagonal crossing
 - Indirect alignment required to maximize space for proposed athletic complex

- alt: c**
- Pros:**
- Underpass is in closer proximity to the south street underpass
- Cons:**
- Grade change results in tight turns on both sides
 - Wall height will result in canyon effect on both sides
 - Impacts to both DeLo empty parcels
 - Requires significant underground utility replacement
 - Major impact to street frontage along CO-42

- alt: d**
- Pros:**
- Clear connection to existing trail on east side of CO-42
 - Potential enhancement for future development
 - Connection to proposed rail station and parking
- Cons:**
- Not an intuitive connection between trail, terminus and underpass location
 - Property acquisition costs
 - Tight turns required to reach grade
 - May be redundant with traffic signal at location

- alt: e**
- Pros:**
- Connection to future rail station and parking
 - Enhancement opportunities for future development
 - Direct connection to sports complex
- Cons:**
- Less direct route to connect to Downtown
 - Property acquisition costs

PREFERRED ALIGNMENT



10% DESIGN CONCEPT + COST ESTIMATE

SITE OBJECTIVE

Provide an accessible and unimpeded trail connection between Downtown Louisville, Delo neighborhood and the Louisville Sports Complex for pedestrians and bicyclists, under CO-42.

GOALS

Commercial Gateway: Provide a pedestrian gateway between Old Town Louisville/Delo Plaza and the Louisville Sports Complex and the City of Lafayette, extending the pedestrian promenade created with the BNSF underpass.

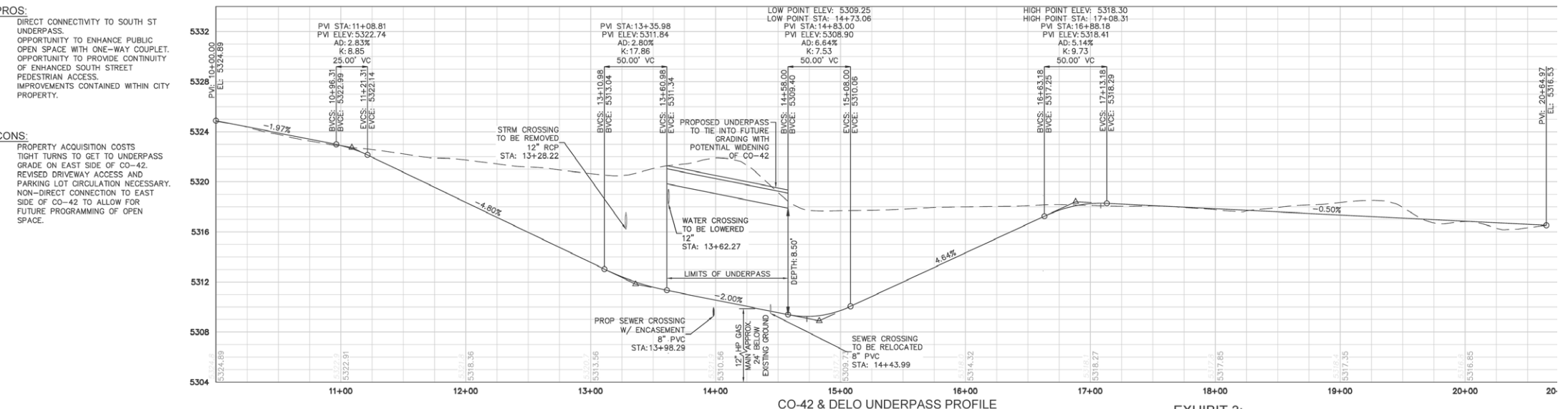
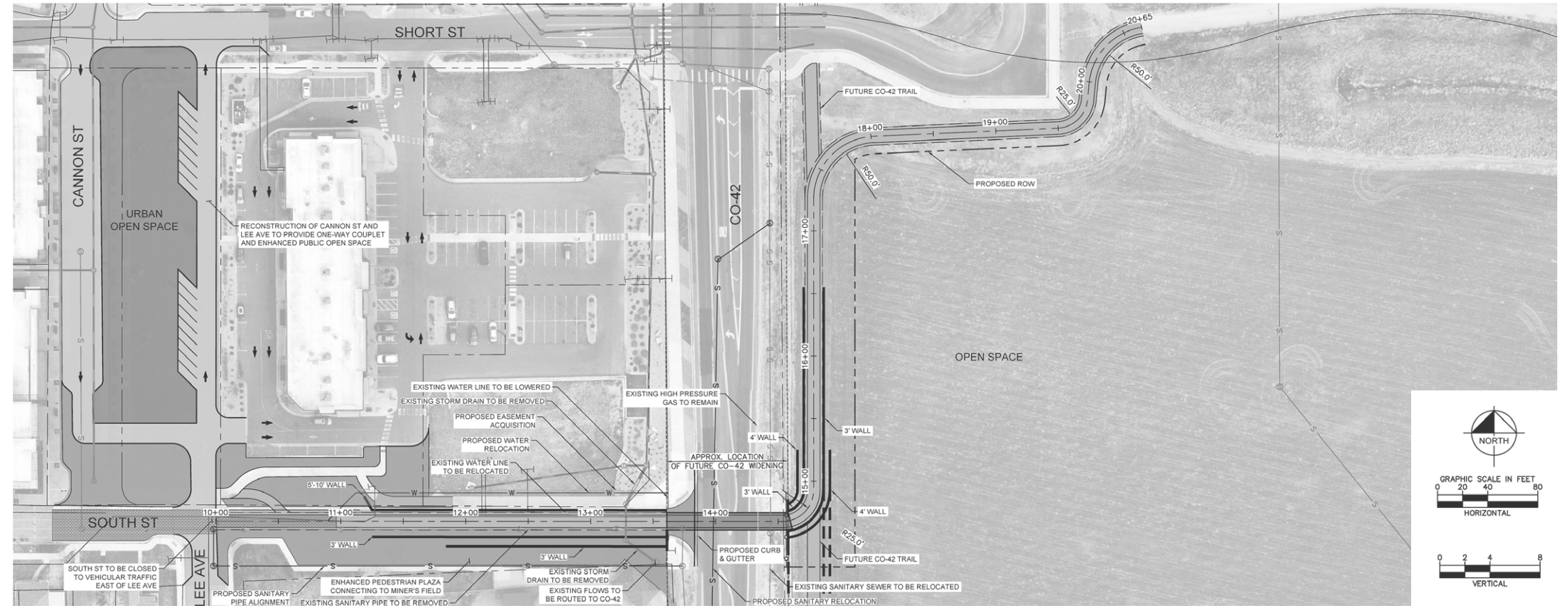
Regional Trail Connectivity: Complete the Old Town Link to provide a family friendly east-west primary trail connection (connecting the Goodhue Ditch Trail to the Farmer's Trail, Future 42 Path and Coal Creek Trail).

Neighborhood Connectivity to Services: Provide comfortable, safe, and family friendly connectivity between Old Town and Louisville Plaza (King Supers, Ace Hardware, etc.) and Seventh Generation Farm.

Safe Routes to School: Provides Safe Routes to School opportunities for adjacent Louisville and Lafayette Schools.

CO-42 Traffic Flow: Provide a safe pedestrian crossing of South Boulder Road that does not result in increased delays on CO-42.

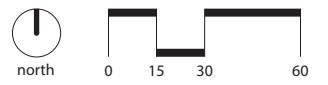
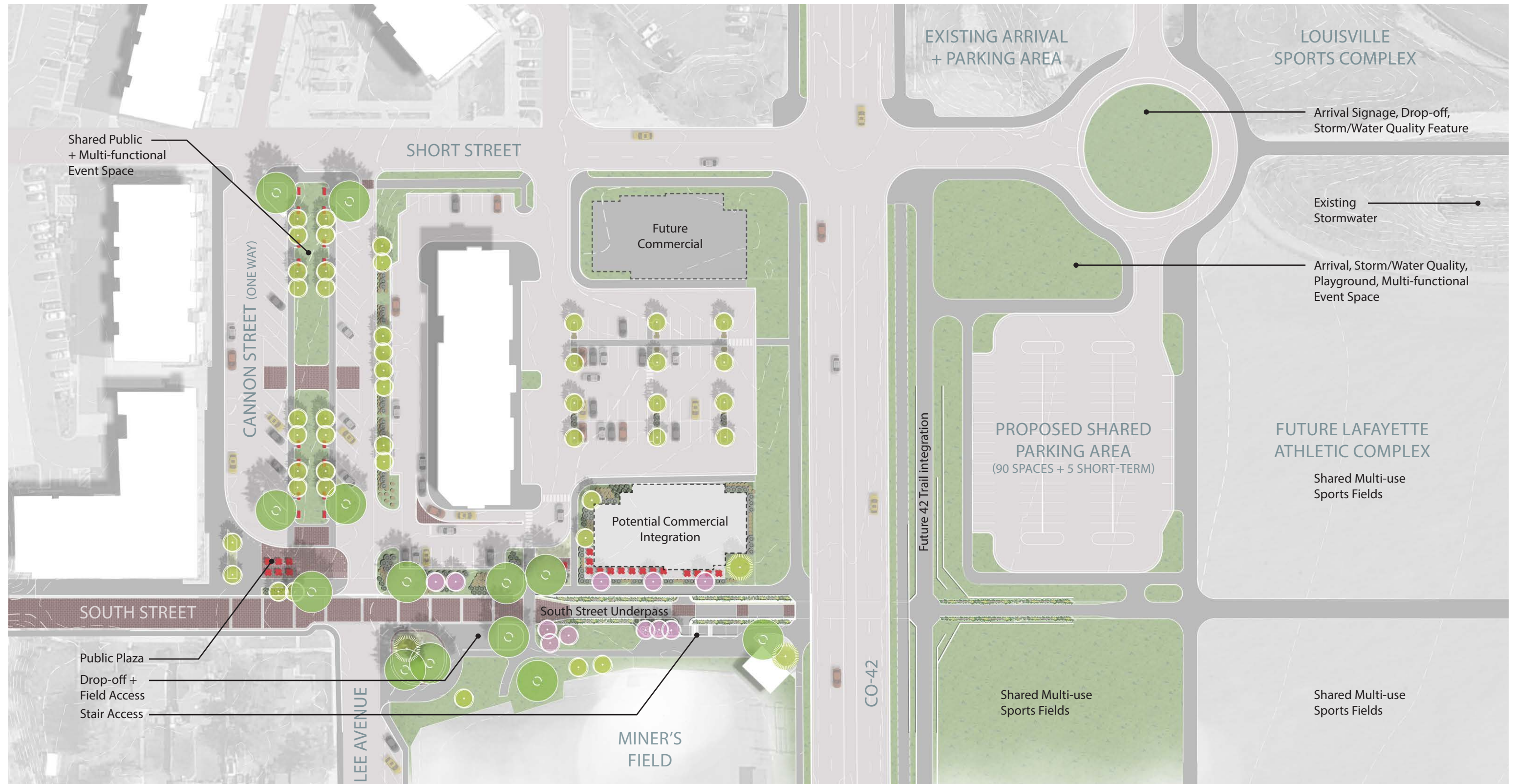
COST (10% DESIGN)	+	CONTINGENCY (50%)	=	PROJECT ESTIMATE
\$9,262,135		\$3,562,400		\$12,824,535



- PROS:**
- DIRECT CONNECTIVITY TO SOUTH ST UNDERPASS.
 - OPPORTUNITY TO ENHANCE PUBLIC OPEN SPACE WITH ONE-WAY COUPLETS.
 - OPPORTUNITY TO PROVIDE CONTINUITY OF ENHANCED SOUTH STREET PEDESTRIAN ACCESS.
 - IMPROVEMENTS CONTAINED WITHIN CITY PROPERTY.
- CONS:**
- PROPERTY ACQUISITION COSTS
 - TIGHT TURNS TO GET TO UNDERPASS GRADE ON EAST SIDE OF CO-42.
 - REVISED DRIVEWAY ACCESS AND PARKING LOT CIRCULATION NECESSARY.
 - NON-DIRECT CONNECTION TO EAST SIDE OF CO-42 TO ALLOW FOR FUTURE PROGRAMMING OF OPEN SPACE.

EXHIBIT 3: CO-42 & DELO UNDERPASS PLAN AND PROFILE

SITE PLAN



SITE AERIAL





Project Sponsor: City of Louisville

Project Title: Via Appia – Complete Streets and Safety Improvements

Project Phases: Design/Construction

Background/ Project Justification:

Via Appia is a key arterial in the City of Louisville that serves as a key connection between South Boulder Road and McCaslin Boulevard, and supports several activity centers within the City, including the Recreation and Senior Center, Police Department and Municipal Court, Parks and Open Spaces (Cottonwood Park, Arboretum, Warembourg Park, skate park, etc.).

Via Appia connects many neighborhoods to South Boulder Road, McCaslin Boulevard, and Downtown Louisville via Pine Street. There are two vehicle lanes and a bike lane in each direction. The roadway is served by both the DASH and 228 transit routes, with some of the highest boarding areas surrounding the South Boulder Road intersection. While there is a relatively low annual average daily traffic (AADT) of 10,000 vehicles per day, there is heavy pedestrian and bicycle use with people accessing transit and amenities, poor visibility at certain intersections (including Pine Street and Via Appia), and travel speeds are high given the surrounding context of mostly single-family and multi-family homes.



The project builds on *The City of Louisville's Transportation Master Plan (TMP)*, which identifies the safety problem and highlights the lack of comfortable multimodal connectivity along the corridor. 122 crashes occurred on the corridor between 2015-2019 within a 0.02-mile radius, and 5% of the crashes involved a serious injury. Over the past three years, Louisville has installed multimodal transportation amenities on key arterials to promote walk and bike-ability, pedestrian safety, and reduced speeds and crashes. This project would create similar improvements on Via Appia. Overall, a combination of safety countermeasures will help both the City of Louisville and the Boulder County region move closer to regional transportation Vision Zero and safety goals, and better transportation system performance and reliability.

Project Description:

The Via Appia Complete Streets and Safety Improvements project will convert the roadway from four lanes to two lanes and will incorporate buffered bicycle lanes to increase separation between bicyclists and vehicular traffic, increased signage to address poor visibility at existing trail crossings, and additional crosswalk markings and bump outs to increase safety for pedestrians. There will also be several

elements that will improve access to transit stops, such as refuge island improvements to shorten pedestrian crossings and provide safer spaces for rest.

The Via Appia – Complete Streets and Safety Improvements TIP Proposal will provide funding for 80% of the design and construction phases of the corridor wide improvements.

Funding Breakdown:

Please see below to review the funding breakdown of the project.

Funding Breakdown in \$1,000s (by program year)¹				
	FY 2024	FY 2025	FY 2026	Total
DRCOG Requested Funds	\$160	\$2,400	\$	\$2,560
CDOT or RTD Supplied Funds²	-	-	-	\$0
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$40	\$600	-	\$640
Total Funding	\$200	\$3,000	-	\$3,200

Project Location/ Map: The project will take place along the study area shown above. Additionally, Via Appia is identified as an unfunded high-priority corridor in the City of Louisville’s TMP. The map below highlights that the road is an unfunded high priority.

