

C O N N E C T

ALAMEDA

**Alameda Underpass  
Conceptual Design Study**  
*Executive Summary*

May 2019

# Executive Summary

## Study Area

The study area focuses on the Alameda Avenue right-of-way between South Cherokee Street and South Santa Fe Drive; it includes the roadway, its parallel mixed use-path, the existing retaining walls and the two freight and light rail overpasses. Adjacent land use includes a mix of residential, commercial and industrial uses, with a significant amount of recent and in-progress redevelopment, including the 75-acre Broadway Park redevelopment.

## Project Need and Goals

The Alameda Underpass presents a number of functional and experiential deficiencies along the study corridor. Foremost among these issues is the narrow width of the pedestrian/cyclist pathway and the condition of the existing retaining walls, which exhibit significant water damage and spalling. Local stakeholders express a strong desire for better connectivity to local destinations and regional trail infrastructure, as well as a need for better lighting and better intersection design to reduce modal conflict. Inadequate drainage above and within the corridor combines with roadway slope to create significant icing during winter months.

The goal of this study is to respond to these issues by establishing a comprehensive, multi-modal vision for the Alameda Underpass Area, and to help plan for the future, potentially phased implementation of those improvements.

## Public Outreach

The study focused on an informal public involvement process. In place of more traditional open houses, the study set up staffed information booths at varied places and times around the study area, including grocery stores, the LRT station and youth sports tournaments.

Public outreach focused on understanding stakeholder priorities within the horizontally-

constrained corridor. The results showed strong support for a path on both sides, and if a path could only be on one side, then on the north. The public favored stronger separation between pedestrians/cyclist and motorists, over stronger separation between pedestrians and cyclists.

## Technical Parameters

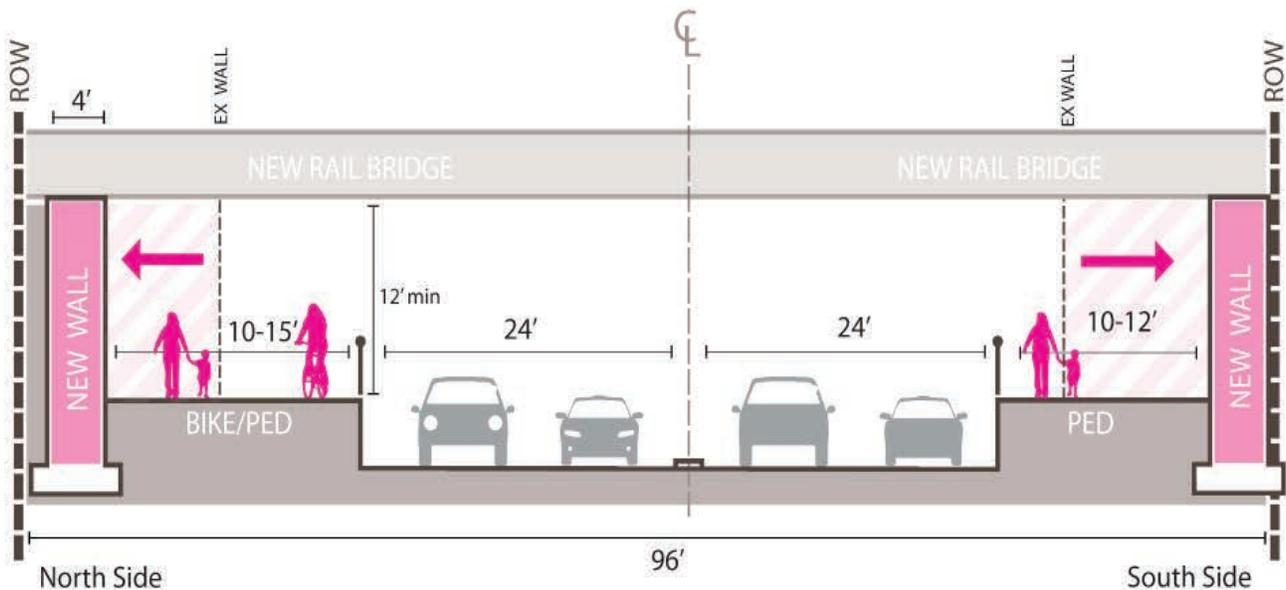
The corridor's most critical parameter is the structural interdependence of the existing underpass walls and the two rail bridges. These walls serve as abutments for both the freight and LRT bridges, so that any option that removes one or both walls must also reconstruct both rail bridges.

Neither rail service can be taken out of service for more than 8 – 12 hours, requiring both rail lines to be re-routed to reconstruct the bridges. These re-routes would require property acquisition on both sides of Alameda Avenue.

The study includes evaluation of alternatives which would relocate the underpass walls further from the existing roadway, as well as potential alignments for a north-south, grade-separated pedestrian and cycle path over Alameda. On both sides of the roadway, existing walls are approximately 20 feet from City right-of-way boundary. Relative to the potential north-south path, the City does not own any property that could be used for this alignment, and coordination with adjacent property owners, including RTD, would be required.

## Refined Alternatives

Options for enhanced pedestrian/cyclist facilities fit into three broad categories: cross the tracks at grade, cross above the tracks (an east-west bridge) or cross below the tracks. The first option was discarded due to unlikelihood of approval by the Public Utilities Commission. The second option was discarded due to bridge length and likely cost. Options within the last category looked at keeping both walls and bridges, moving one wall, and moving both walls.



**Alternative 1A.** Keeping both walls and bridges was considered a 'base' option that could provide immediate multi-modal safety enhancements such as refaced walls and enhanced lighting, but would not address the community's larger concerns regarding connectivity and comfort. This option was estimated to cost approximately \$5 million.

**Alternative 9.** Reconstructing and moving one wall (and bridges) was considered a conservative option that would respect adjacent property owner concerns on the south side of the roadway, provide a slightly widened pedestrian/cycle path on the north side and a minimal width sidewalk on the south side of the roadway. This option was estimated at approximately \$52 million, excluding acquisition for railroad relocation.

**Alternative 12.** Reconstructing and moving both walls (and bridges) was considered a more extensive option that would provide widened pedestrian/cycle paths on both sides of the roadways. This option was estimated at approximately \$64 million, excluding right-of-way acquisition for railroad relocation.

## Preferred Alternative

Alternative 12, moving both walls and bridges, was judged to offer the best long-term enhancement to multi-modal connectivity and experience. The preferred option includes enhancement and expansion of east-west pedestrian/cyclist infrastructure, intersections improvements related to roadway alignment and pedestrian safety at both the Cherokee and Santa Fe intersections, a north-south pedestrian/cyclist trail and a grade-separated pedestrian/cyclist bridge across Alameda. Depending on funding and maintenance mechanism, the preferred alternative could also integrate a wide variety of horizontal and vertical urban design enhancements.

## Next Steps

The City of Denver is in the process of exploring and pursuing funding for design and construction of the recommended improvements. In addition, the City is coordinating with RTD relative to property acquisition or easement for the north-south path. Finally, potential urban design enhancements along the corridor would require an organization willing to take on long-term maintenance of these elements; no such organization, such as a Business Improvement District (BID) currently exists. Inclusion of these types of improvement would require formation of such an organization.