

## Part 1

## Base Information

### 1. Project Title

**Connect Alameda – Engineering Design**

### 2. Project Start/End points or Geographic Area

*Provide a map with submittal, as appropriate*

Alameda Avenue  
North-South boundaries: Alameda Station to Bayaud Street  
East-West boundaries: Santa Fe Drive to Cherokee Street



### 3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*

City and County of Denver (CCD)

### 4. Project Contact Person, Title, Phone Number, and Email

Gabriella Arismendi,  
Transportation Project Manager  
P: (720) 913.4576  
Email: gabriella.arismendi@denvergov.org

### 5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?

☒ Yes ☐ No

*If yes, provide applicable concurrence documentation with submittal*

6. What planning document(s) identifies this project?	<input type="checkbox"/> <a href="#">DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)</a>	
	<input checked="" type="checkbox"/> Local plan:	<p>Denver Moves: Pedestrian and Trails  <a href="https://www.denvergov.org/content/denvergov/en/denveright/pedestrians-trails.html">https://www.denvergov.org/content/denvergov/en/denveright/pedestrians-trails.html</a></p> <p>Denver Moves: Bicycles  <a href="https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL_Denver_Moves.pdf">https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL_Denver_Moves.pdf</a></p> <p>Denver's Vision Zero  <a href="https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/visionzero/Denver-Vision-Zero-Action-Plan-draft-July2017.pdf">https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/visionzero/Denver-Vision-Zero-Action-Plan-draft-July2017.pdf</a></p> <p>Baker Neighborhood Plan  <a href="https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/Baker_Neighborhood_Plan.pdf">https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/Baker_Neighborhood_Plan.pdf</a></p> <p>Alameda Station Area Plan  <a href="https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/Alameda_station_area_Plan.pdf">https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/Alameda_station_area_Plan.pdf</a></p>
		<input type="checkbox"/> Other(s):
		<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>

7. Identify the project's **key elements**.

<input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input checked="" type="checkbox"/> Transit Other: <input checked="" type="checkbox"/> Bicycle Facility <input checked="" type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input checked="" type="checkbox"/> Roadway Operational	<p>Grade Separation</p> <input type="checkbox"/> Roadway <input checked="" type="checkbox"/> Railway <input checked="" type="checkbox"/> Bicycle <input checked="" type="checkbox"/> Pedestrian <input type="checkbox"/> Roadway Pavement Reconstruction/Rehab <input checked="" type="checkbox"/> Bridge Replace/Reconstruct/Rehab <input type="checkbox"/> Study <input checked="" type="checkbox"/> Design <input type="checkbox"/> Transportation Technology Components <input type="checkbox"/> Other:
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- **Problem Statement** What specific Metro Vision-related subregional problem/issue will the transportation project address?

The Alameda Avenue underpass between Santa Fe Drive and Cherokee Street is a critical east-west connection that has connected neighborhood and regional travelers for over a century. The Alameda Avenue underpass sees over thirty thousand cars, several hundred transit riders, and dozens of bicyclists and pedestrians per day. The project area also encompasses the Union Pacific and BNSF railroad lines, which contributes to freight and goods movement. The users of this corridor are truly multimodal and these users face severe challenges making east-west connections due to deteriorating infrastructure and the lack of safety features. The Connect Alameda project seeks to improve the connections for motorists, transit users, pedestrians, and bicyclists.



Roadway grades immediately west of Cherokee Street create adverse conditions for motorists and transit buses during summer and winter seasons. Heavy rainfall events in the summer not only make roadway flooding a concern for travelers, but unwanted pooling of water on top of a crumbling concrete retaining wall supporting the Burlington Northern Santa Fe overpass create a dam effect that creates an urban waterfall that drenches cars and trucks on eastbound Alameda causing panic, congestion, and threatens the safety and wellbeing of travelers. Local residents term of endearment for this occurrence is the ‘Alameda Waterfall’. During winter, the freeze/thaw cycle that follows snowfall generates a constant sheet of ice making it extremely difficult for motorists and RTD buses to traverse the underpass without incident.

Things are not any better for individuals who wish to walk or bike to RTD’s Alameda Station, Platte River Trail, or the shops on Broadway. Residents must cross 10 travel lanes (150 feet of asphalt) on Alameda Avenue and Santa Fe Drive to reach the narrow shared-use path on the north side. Underneath the underpass, the 7-foot shared used path, concrete Jersey barrier, crumbling walls, inadequate lighting, dangerous pedestrian crossing points, poor signage, trash accumulation and high vehicle noise levels create an unfriendly, confusing, and unsafe environment for pedestrians and bicyclists. The lack of pedestrian and bicycle space, steep roadway slopes, crumbling walls, and stormwater issues tell the story of an underpass in need of attention and improvements.

The impacts of this situation are significant. Every person who is dissuaded from walking or biking through the underpass represents a lost potential customer for local businesses and potential loss in riders for RTD light rail and bus operations. Additionally, Athmar Park, Valverde, and Baker residents lose “eyes on the street” to keep their streets safe and lively and community members lose the potential for social interaction.



Although the underpass walls will be rehabilitated as part of an Elevate Denver bond project, the construction is only meant to be a temporary fix to the much needed and larger vision for the underpass. City and County of Denver (CCD) staff is with the community in developing a vision that will improve the connectivity and safety of Denver metro area residents moving through the corridor, no matter their mode of transportation. The next step in achieving **Connect Alameda**’s vision is to complete construction drawings from concept (10%) to 100% design and conduct impact studies to identify potential hazards and design constraints that may potentially affect proposed construction activities and operations. Completion of construction drawings to 100% includes plans, specifications, final construction cost estimates, phasing, and review process timelines. Without next steps engineering design, the ultimate vision will not be achieved.

The project’s ultimate vision addresses DRCOG’s Metro Vision overarching themes:

#### **AN EFFICIENT AND PREDICTABLE DEVELOPMENT PATTERN**

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision that meets the needs of people of all ages, incomes and abilities. The project reinvests in existing communities, provides direct, multimodal connections between urban centers and surrounding neighborhoods, and prioritizes investments in first- and final-mile connections to transit.

### **A CONNECTED MULTIMODAL REGION**

The engineering design of **Connect Alameda** sets the stage for the construction of an ultimate vision that increases access and travel choices, improves the connections between multimodal systems, increases the efficiency of our freight movement, provide first- and final-mile bicycle and pedestrian facilities and connections to transit, and upgrades existing facilities to improve transit access for older adults and mobility-limited populations.

### **A SAFE AND RESILIENT NATURAL AND BUILT ENVIRONMENT**

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision that will improve multimodal linkages to the region's parks, open spaces and developed areas.

### **HEALTHY, INCLUSIVE, AND LIVABLE COMMUNITIES**

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision that will build safe pedestrian and bicycle connections from transit stops to neighborhoods and activity centers within communities.

### **A VIBRANT REGIONAL ECONOMY**

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision that will improve personal mobility for individuals of all ages and abilities and ensures traditionally underserved populations receive at least a proportionate share of transportation benefits. It also addresses deficiencies of access at important freight corridors, while still supporting freight and goods movement through the area.

## **8. Define the **scope** and **specific elements** of the project.**

Sine 2018 CCD staff has been working with area residents, businesses, transit operators, commuters, and visitors on creating a vision for the corridor that improves connectivity and mobility for all modes, while improving the structural integrity of the underpass. The **Connect Alameda** planning study included an analysis of site constraints, assessment of structural impacts, retaining wall and cross-section configurations. After 15 community meetings and more than 250 personal interactions throughout the months of October to December 2018, **Connect Alameda's** ultimate vision includes (Figures 1 & 2):

- 10' sidewalk on the south side
- 10'-15' path on the north side
- Reconstruction and expansion of both underpass walls
- Reconstruction of rail line bridges
- Construction of new rail lines for RTD, Union Pacific, and BNSF
- Construction of a pedestrian overpass from RTD's Alameda Station and TOD to Galapago Street Bikeway
- Roadway resurfacing and slope reconstruction
- Drainage improvements
- Improvements to the Santa Fe Dr. and Cherokee Str. Intersections

Now that there is a vision for the area that follows the needs and wants of area stakeholders, CCD needs to proceed with next level engineering design of the ultimate vision. Completion of Construction Drawings to 100% includes plans, Specifications, final construction cost estimates, phasing, and review process timeline. Impact studies to identify potential hazards and design constraints that may potentially affect proposed construction activities and operations will also be conducted. The engineering conceptual design of **Connect Alameda's** ultimate vision can be found in Attachment A.



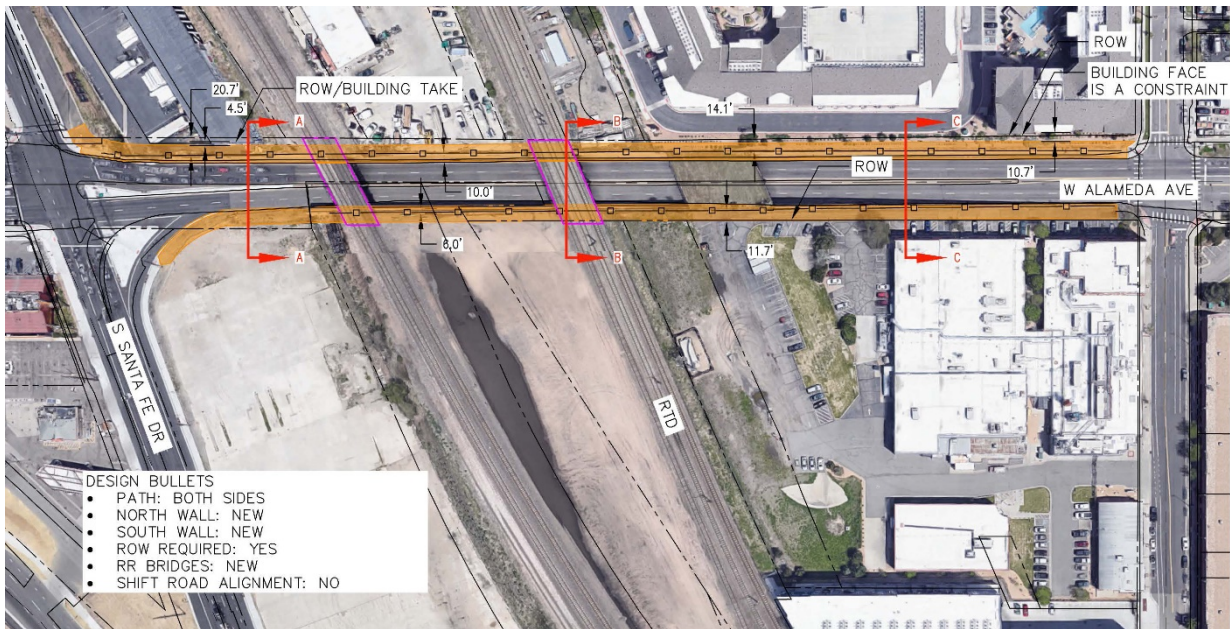


Figure 1 - Connect Alameda Underpass Conceptual Design

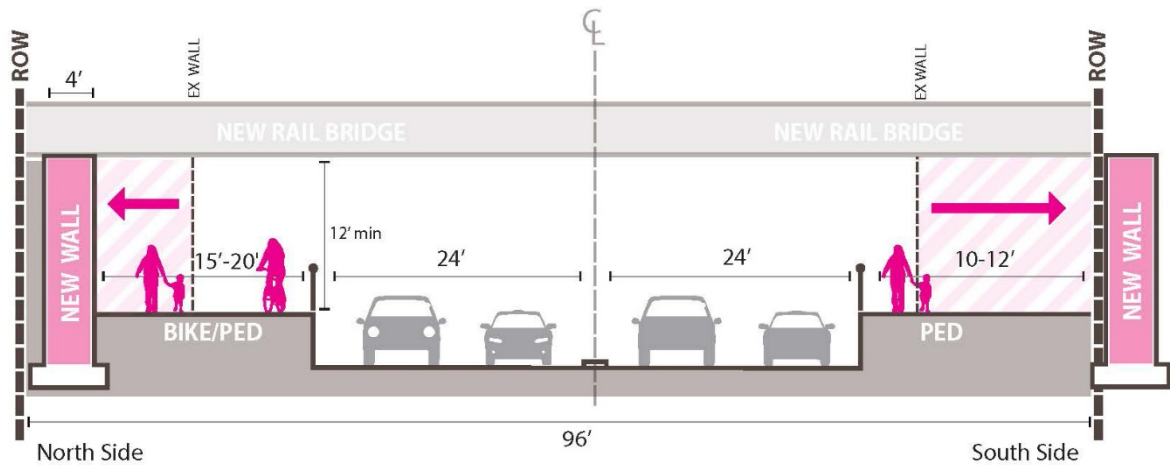


Figure 2 - Connect Alameda Underpass Conceptual Cross-Section

9. Would a smaller DRCOG-allocated funding amount than requested be acceptable, while maintaining the original intent of the project?

☐ Yes ☒ No

*If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.*

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>		<b>\$9.4 million</b>
<b>2. Total amount of DRCOG Subregional Share Funding Request</b>	<b>\$7.6</b>	<b>80% of total project cost</b>
<b>3. Outside Funding Partners (other than DRCOG Subregional Share funds)</b> List each funding partner and contribution amount.	<b>\$\$ Contribution Amount</b>	<b>% of Contribution to Overall Total Project Cost</b>
City and County of Denver - CIP	\$1.8 M	20%
	\$	
<b>Total amount of funding provided by other funding partners (private, local, state, Regional, or federal)</b>	<b>\$1.8</b>	

<b>Funding Breakdown (year by year)*</b>		<i>*The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2019.</i>			
	FY 2020	FY 2021	FY 2022	FY 2023	Total
<b>Federal Funds</b>	\$7.6	\$	\$	\$	<b>\$7.6</b>
<b>State Funds</b>	\$	\$	\$	\$	<b>\$0</b>
<b>Local Funds</b>	\$	\$1.8	\$	\$	<b>\$1.8</b>
<b>Total Funding</b>	\$7.6	\$1.8	\$0	\$0	<b>\$9.4</b>
<b>4. Phase to be Initiated</b> <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Design	Design	Choose an item	Choose an item	

**5. By checking this box,** the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.



### Budget Breakdown –

Cost estimates produced by Connect Alameda consultants are as follows:

Design	Years Out
Estimated Year When Design Services are Needed	2020
	Estimated Cost
Planning	\$2,700,000.00
Geotechnical	\$750,000.00
Survey	\$500,000.00
Materials Testing / Special Inspections	\$500,000.00
Commissioning	N/A
Other: PUC/railroad coordination	\$385,000.00
Design	\$4,984,000.00
<b>TOTAL:</b>	<b>\$9,434,000.00</b>

## Part 2 Evaluation Criteria, Questions, and Scoring

### A. Subregional significance of proposed project

WEIGHT **30%**

Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the subregional significance of the proposed project.

**1. Why is this project important to the Denver subregion?**

The Alameda Avenue underpass is a critical east-west connection that has been connecting neighborhoods and regional travelers for over a century. With the nearest grade separated crossings of the rail lines at Mississippi Avenue and 6th Avenue, this underpass sees over 30,000 cars, several hundred transit riders, and dozens of bicyclists and pedestrians per day. Though the users are truly multi-modal, making the connection through the underpass can be an uncomfortable and challenging experience for all modes.

Recognizing the critical importance of this underpass and its significant impact it has with connecting neighborhoods, CCD made it a priority to work with the community to develop a vision for the area that encourages pedestrian, bicycle, and transit trips and creates safer conditions for motor vehicles. The **Connect Alameda** ultimate vision calls for new sidewalk on the south section of Alameda Avenue, improvements to the shared-used paths on the north, reconstruction and expansion of the underpass walls, reconstruction of rail line bridges, roadway resurfacing, drainage improvements, overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive.

The next step in achieving **Connect Alameda's** vision is to complete construction drawings from concept (10%) to 100% design and conduct impact studies to identify potential hazards and design constraints that may potentially affect proposed construction activities and operations. Completion of construction drawings to 100% will help move the project forward to construction and improving the lives of community members.

Completing engineering design for **Connect Alameda** is critical to the Denver subregion because it will reinvest in existing communities and connections that increase access, safety, and travel choices. Thanks to Elevate Denver's Bond funds, Denver is able to address the immediate safety and multimodal improvements needs of the underpass walls; however these funds do not fund the long-term safety concerns or the need to properly connect the Baker, Athmar, and Valverde neighborhoods to RTD's Alameda Station, Platte River Trail, the shops on Broadway, or the future mixed-use development.

**2. Does the proposed project cross and/or benefit multiple municipalities? If yes, which ones and how?**

The engineering design of **Connect Alameda's** ultimate vision provides modest benefits to City of Lakewood residents. Alameda Avenue is heavily used by Lakewood residents trying to reach RTD's Alameda Station on their commute to downtown Denver or Denver's Tech Center or the unique shops and restaurants along Broadway Avenue. Commercial vehicles passing through the corridor attempting to reach the Cherry Creek center experience the same crumbling walls and stormwater issues as Denver resident when traversing through the area.

**3. Does the proposed project cross and/or benefit another subregion(s)? If yes, which ones and how?**

Just like Lakewood, **Connect Alameda's** ultimate vision engineering design provides modest benefits to the Jefferson County subregion. RTD's Alameda Station is heavily used by City of Lakewood residents who prefer to use Alameda Station over Broadway or Sheridan Station to reach downtown Denver or Denver's Tech Center. The same can be said for motorist and commercial vehicles traversing the corridor to reach the Cherry Creek commercial center.

4. How will the proposed project address the specific transportation problem described in the **Problem Statement** (as submitted in Part 1, #8)?

CCD has recognized the importance of this corridor and its significant impact it has with connecting local and regional neighborhoods and business centers. Denver made it a priority to work with the community to develop a vision that encourages pedestrian, bicycle, and transit trips and creates safer conditions for motorists. The **Connect Alameda** ultimate vision calls for shared-used paths on both sides of the underpass, reconstruction of underpass walls, reconstruction of new rail lines bridges, roadway resurfacing, drainage improvements, an overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive. The ultimate vision addresses the transportation issues and concerns brought up by area stakeholders and identified in this application. The engineering conceptual design of **Connect Alameda's** ultimate vision can be found in Attachment A.

The next step in achieving **Connect Alameda's** vision is to complete construction drawings from concept (10%) to 100% design and conduct impact studies to identify potential hazards and design constraints that may potentially affect proposed construction activities and operations. Completion of construction drawings to 100% includes plans, specifications, final construction cost estimates, phasing, and review process timelines. Without next steps engineering design, the ultimate vision will not be achieved.

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the **completed** project allow people and businesses to thrive and prosper?

Making the connection through the Alameda Avenue underpass can be an uncomfortable and challenging experience for all modes. The lack of pedestrian and bicycle space, steep roadway slopes, crumbling walls, and stormwater issues tell the story of an underpass in need of attention and improvements. The social and economic impacts of this situation are significant. Every person who is dissuaded from walking or biking through the underpass represents a lost potential customer for local businesses either along Broadway or near the transit station. The existing physical infrastructure also presents a loss of potential RTD light rail riders. Additionally, communities lose "eyes on the street" to keep the streets safe and lively and community members lose the potential for social interaction.

When complete, **Connect Alameda** will celebrate, promote, and connect key assets and neighborhoods; strengthen the physical, environmental, and economic of central Denver as a whole. The ultimate vision will create safe pedestrian conditions on both sides of the street for Athmar Park and Valverde neighborhood residents. The extra wide shared-used path on the north will enhance bicycle connectivity between Platte River Trail, RTD Station, and the Broadway Avenue shops and restaurants. The overpass will provide additional, more comfortable facilities to reach RTD's Alameda Station and all the future Transit Oriented Development (TOD). Lastly, the roadway clearance modifications plus stormwater reconstruction will enhance safety for motorists. These project elements create a thriving sustainable and resilient multimodal project.

6. How will connectivity to different travel modes be improved by the proposed project?

Existing conditions through the underpass can be an uncomfortable and challenging experience for all modes. The lack of pedestrian and bicycle space, steep roadway slopes, crumbling walls, and stormwater issues dissuade area residents from using the corridor in other ways than just driving.

The primary goal of the **Connect Alameda** visioning study was to understand what infrastructure improvements were needed to encourage individuals to reach RTD's Alameda Station, future mixed-use development, Platte River Trail, and the Broadway shops, restaurants, two-way cycletrack facility. The ultimate vision, which calls for a shared-used path on north, sidewalk on the south, overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive, will improve connectivity to different travel modes by



providing safe and convenient facilities for people of all ages and abilities. Only by providing such facilities, will individuals feel comfortable to switch from their preferred methods of transportation.

**7. Describe funding and/or project partnerships (*other subregions, regional agencies, municipalities, private, etc.*) established in association with this project.**

Through the visioning planning effort CCD established strong, non-financial partnerships with RTD and CDOT. The engineering design will continue those partnerships in order to build a project that incorporates CDOT's I-25 PEL planning efforts while anticipating RTD, Union Pacific, and BNSF current and future growth needs.

## B. DRCOG Board-approved Metro Vision TIP Focus Areas and Specific Denver Goals

WEIGHT

**30%**

Provide ***qualitative and quantitative*** (derived from Part 3 of the application) responses to the following questions on how the proposed project addresses the three DRCOG Board-approved Focus Areas (in bold).

### VULNERABLE POPULATIONS AND EQUITY

1.A. Describe how the project will **improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services)** as defined in the [Adopted 2020-2023 TIP Policy](#):

Mobility is a key component of helping vulnerable populations thrive socially, physically, and economically. **Connect Alameda** improves the mobility and access to Baker, Athmar Park, and Valverde neighborhoods. All three neighborhoods, particularly Athmar and Valverde, have a relatively large percentage of elderly and low-income residents living on fixed incomes. Existing Athmar and Valverde residents must cross 10 travel lanes and 150 feet of asphalt (almost an entire football field) to reach the narrow-shared path on the north. Underneath the underpass, the 7-foot shared used path, concrete Jersey barrier, crumbling walls, inadequate lighting, dangerous pedestrian crossing points, poor signage, trash accumulation and high noise levels create an unfriendly, confusing, and unsafe environment for any individual (no matter their age or ability).

**Connect Alameda** will build infrastructure improvements that will optimize mobility, accessibility, and human performance by constructing a wide sidewalk on the south side of the corridor, drastically improve the north shared-use path to exceed current bicycle design standards and reduce crossing distances at both Santa Fe Drive and Cherokee Street. The project also aims to build an overpass that will help Baker residents reach RTD's Alameda Station and future mixed-used development nearby safely without having to cross Alameda at-grade.

1.B. Describe how your project is consistent with **Denver's commitments to Equity principles** as defined below, and discussed in more detail in Chapter 4, Access to Opportunity, in the [Blueprint Denver \(Public Review Draft August 6, 2018\)](#).

***Equity is providing everyone with access to opportunity regardless of income level, race, ethnicity, gender, ability, or age.***

Integrating equity considerations into the transportation design process is a policy priority of Mayor Hancock and Denver Public Works. The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision for an area in need of connectivity to jobs, education, and health care facilities. Median household incomes in Baker, Valverde, and Athmar Park neighborhoods is lower than Denver's median income. The Valverde, Athmar Park, and Baker are highlighted under *Denver's Neighborhood Equity Index* as neighborhoods where residents face the highest hurdles to leading healthy lives. The Alameda Avenue underpass is a physical barrier for these communities to reach the grocery stores, shops, and restaurants along Broadway, the Platte River Trail for recreational purposes, and RTD's light rail station for greater access throughout the Denver Metropolitan Area. The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision for an area in need of connectivity to jobs, education, and health care facilities.

# Measuring Access to Opportunity

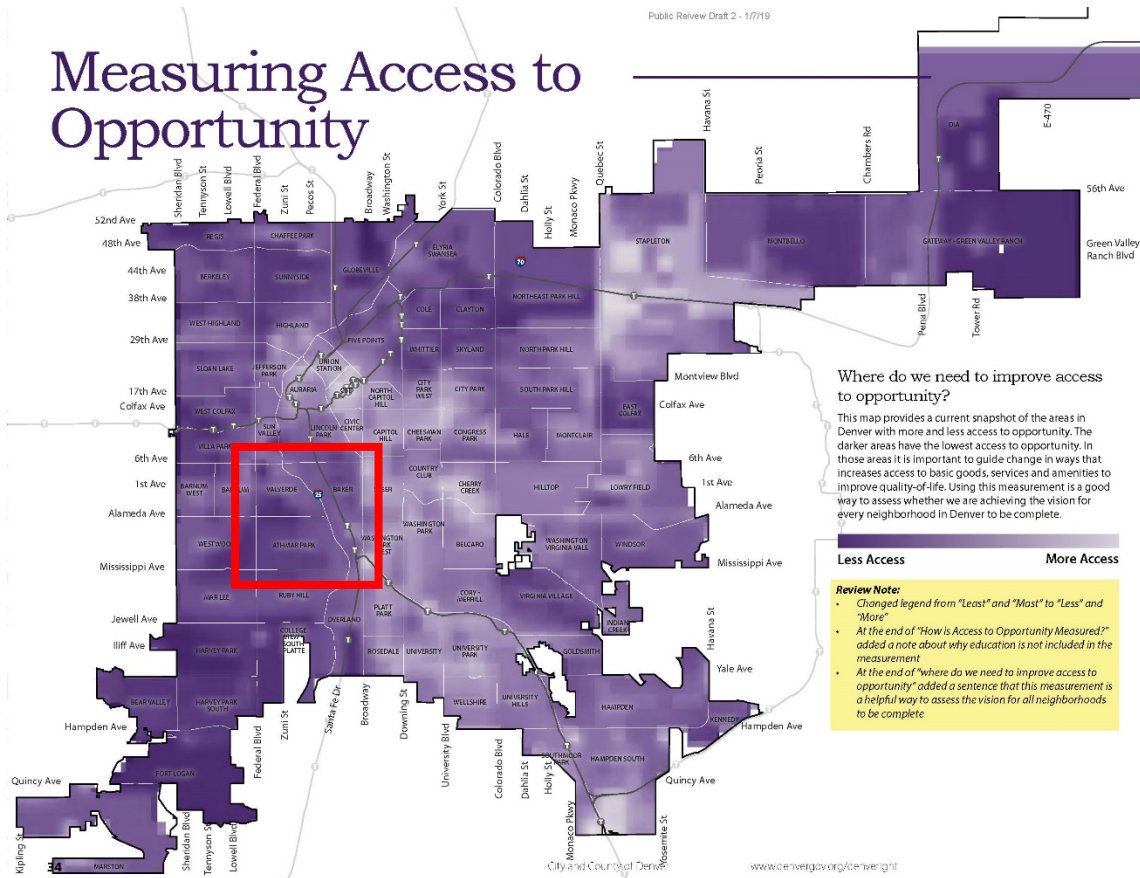


Figure 3 - Blueprint Denver, Equity

## RELIABILITY OF THE MULTIMODAL TRANSPORTATION NETWORK

2.A. Describe how the project will **increase reliability of existing multimodal transportation network** as defined in the **Adopted 2020-2023 TIP Policy**:

**Connect Alameda** will increase the reliability of our transportation network by adding capacity to our pedestrian and bicycle network by constructing a wide sidewalk on the south side of the corridor, addressing CCD area's largest arterial sidewalk gap, drastically improve the north shared-use path to exceed current bicycle design standards, reducing crossing distances on Santa Fe Drive and Cherokee Street, and building an bicycle and pedestrian overpass over Alameda Avenue to provide a grade-separated connection to RTD's Alameda Station.

The construction of the new walls, rail line bridges, and rail lines themselves will improve the movement of freight goods through our rail system and the roadway resurfacing and stormwater improvements will increase reliability for our roadway system. Improvements to the drainage conditions will drastically improve motorist travel time reliability by minimizing the risk of crashes and delays due to roadway flooding and ice.

2.B. Describe how the project will meet the goals of the [Denver Mobility Action Plan](#).

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision. Once built, the project will help address the goals of Mayor Hancock's Mobility Action Plan by providing safe, convenient, and reliable facilities to RTD's Alameda Station to help increase the number of commuters biking, walking, or taking

transit to work. Building facilities that encourage bicycle and pedestrian trips and strong connections to transit stations can also help reduce Denver's carbon emissions levels.

The project will also improve the safety conditions at Santa Fe Drive and Cherokee Street by reducing crossing distances and improving traffic signal coordination in the corridor.

2.C. If applicable, describe how the project will **increase multimodal person-trip capacity and access** as described in the [\*Denver Strategic Transportation Plan \(2008\)\*](#).

The engineering design of **Connect Alameda** will provide Denver with the the final multimodal design of the corridor. The project's ultimate vision calls for shared-used paths on both sides of the underpass, reconstruction of underpass walls, reconstruction of rail lines bridges, construction of new rail lines, roadway resurfacing, drainage improvements, overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive. The multimodal improvements will help serve the expected increase in person-trip demand without increasing the roadway footprint and will expand the multimodal connectivity of our transportation network by increasing the city's bicycle and pedestrian network and building safe and comfortable facilities for people of all ages and abilities.

## TRANSPORTATION SAFETY AND SECURITY

3A. Describe how the project will **improve transportation safety and security as defined in the *Adopted 2020-2023 TIP Policy***:

Safety of all users is crucial component of a true multimodal transportation network. **Connect Alameda's** ultimate vision improves the interactions between pedestrians and bicyclist with vehicular traffic by constructing a wide sidewalk on the south side of the corridor, drastically improve the north shared-use path to exceed current bicycle design standards, reducing crossing distances on Santa Fe Drive and Cherokee Street, and building a bicycle and pedestrian overpass over Alameda Avenue to provide a grade-separated connection to RTD's Alameda Station and all the future transit oriented development.

For motorists, **Connect Alameda's** ultimate vision improves the safety of the corridor by conducting geometric upgrades to the roadway and rail lines. The project reconstructs the underpass walls and rail line bridges, constructs new rail lines for RTD, BNSF, and Union Pacific, resurfaces the roadway and reduces the cross slope, and provides drainage improvements. The next step towards achieving this vision is to complete construction drawings to 100% and conduct impact studies to identify potential hazards and design constraints that may potentially affect proposed construction activities and operations.

3B. Describe how the project will meet the goals of [\*Denver's Vision Zero Action Plan\*](#).

The engineering design of **Connect Alameda** will provide Denver with the the final multimodal design of the corridor. Once built, **Connect Alameda** will help meet Denver's Vision Zero goals by building safe streets for everyone. The additional pedestrian connection on the south side of the corridor, the expansion of the existing one on the north, the pedestrian overpass connecting to RTD's Alameda Station, the resurfacing of the roadway and reduction of the roadway cross slope all lead to a safe street system where each type of street user have their designated facilities in order to provide greater comfort and reliability.

Alameda Avenue is also a High Injury Network (HIN) road and the neighborhoods surrounding the project area (Baker, Valverde, and Athmar) are highlighted as Communities of Concern (CoC). The project area has seen 361 total crashes, with 12 percent (44) leading to injuries. One of the action items in Denver's Vision Zero plan is



investment in HIN and within CoC projects. **Connect Alameda**'s ultimate design implements geometric intersection treatments with proven safety benefits, builds the pedestrian network identified in Denver Moves: Pedestrians & Trails, and encourage safe speeds through implementation of engineering countermeasures. All items that are needed in HIN within CoCs.

## C. Consistency & Contributions to Transportation-focused Metro Vision and Denver Plans, Goals, and Objectives

WEIGHT

**30%**

Provide **qualitative and quantitative** responses (derived from Part 3 of the application) to the following items on how the proposed project contributes to Transportation-focused Objectives (in bold) in the adopted Metro Vision plan. Refer to the expanded Metro Vision Objective by clicking on links. In addition, provide information related to the consistency with Denver goals, objectives, plans, and priorities.

[MV objective 2](#)

**Contain urban development in locations designated for urban growth and services.**

1. Will this project help focus and facilitate future growth in locations where urban-level infrastructure already exists or areas where plans for infrastructure and service expansion are in place?

☒ Yes ☐ No

Describe, including supporting quantitative analysis

**Connect Alameda** project area lies within Denver's Urban Growth Boundary/Area. The project's construction drawings will design infrastructure improvements on Alameda Avenue between Santa Fe Drive and Cherokee and RTD's Alameda Station and Bayaud Avenue. Once completed, **Connect Alameda** will increase the capacity of our transportation network by adding and improving pedestrian and bicycle facilities to a much-needed area and increase the reliability and safety of our roadway, transit, and freight network. The combination of these benefits leads to the growth of the region's urban footprint to better use of regional resources for infrastructure, reduced regional vehicle travel and conservation of open land.

[MV objective 3](#)

**Increase housing and employment in urban centers.**

- 2.A. Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations?

☒ Yes ☐ No

Describe, including supporting quantitative analysis

**Connect Alameda** is located within a half-mile of the Alameda RTD light rail station, but the existing uncomfortable multimodal connections along Alameda Avenue present an uncomfortable barrier to accessing the Alameda RTD light rail station from neighborhoods to the west. This project will build upon previous multimodal investments by better facilitating direct, safe, and comfortable east-west bicycle and pedestrian connections from the Alameda light rail station to Athmar, Valverde, neighborhoods to the east, and the Platte River Trail. It will also open up comfortable and direct bicycle access from the Platte River Trail to points east of the overpass including the Baker and Cherry Creek neighborhoods and the numerous destinations on Broadway (shops and restaurants).

Similarly, the overpass from RTD Alameda station to Bayaud will provide a direct north-south bicycle and pedestrian connection from the station to the neighborhood of Baker and community destinations such as Dailey Park.

**2.B.** How does this project focus or serve desired growth in areas identified on the Places map (Chapter 5, p. 126) in the [Blueprint Denver \(Public Review Draft August 6, 2018\)](#)?

**Connect Alameda** serves the “South Broadway at I-25” Regional Urban Center, envisioned by Blueprint Denver. As defined by Blueprint Denver, within this Regional Urban Center “people riding bicycles have access to regional centers with high ease of use bicycle facilities.” **Connect Alameda** aligns with this vision by providing east-west and north-south high ease of use bicycle facility (shared use path) connections within the Regional Urban Center and to/from surrounding neighborhoods. The project will construct a wide sidewalk on the south side of the corridor, drastically improve the north shared-use path to create a high east of use bicycle facility, reducing crossing distances on Santa Fe Drive and Cherokee Street, and building an bicycle and pedestrian overpass over Alameda Avenue to provide a grade-separated connection to RTD’s Alameda Station and all the future transit oriented development.

[MV objective 4](#)

**Improve or expand the region’s multimodal transportation system, services, and connections.**

**3.A.** Will this project help increase mobility choices within and beyond your subregion for people, goods, or services?

☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision. That vision will increase the mobility choices by adding and improving off-street bicycle and pedestrian facilities. A 2016 Transportation Research Board national study of 3,000 people in 50 major U.S. cities found that the “interested but concerned” group of cyclists strongly preferred separation in the form of a path or trail over a major street with a striped bike lane<sup>1</sup>.

In addition, the **Connect Alameda**’s construction documents will design the reconstruction of the underpass walls and rail lines bridges, plus the construction of new rail lines for RTD, Union Pacific, and BNSF. These improvements will lead to a more efficient movement of people, freight, goods, and packages that is extremely important to Colorado and the Denver region’s economy. The project supports the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.

**3.B.** If applicable, describe how this project is consistent with Denver’s specific alternative mode and/or project priorities contained in one or more of **Denver’s modal plans linked below or small area plans** (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps Studies, etc.). See Denvergov website: denvergov.org search bar and specific plan links below:

**NOTE: The application does not need to address numerous plans. Provide documentation for the most applicable or relevant document(s) or plan(s).**

Examples are listed below:

- Denver Moves: Transit  
<https://www.denvergov.org/content/denvergov/en/denveright/transit.html>
- Denver Moves: Pedestrian and Trails  
<https://www.denvergov.org/content/denvergov/en/denveright/pedestrians-trails.html>
- Denver Moves: Bicycles  
[https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL\\_Denver\\_Moves.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL_Denver_Moves.pdf)

<sup>1</sup> Dill, J., and McNeil, N. Revisiting the Four Types of Cyclists: Findings from a national survey. Transportation Research Board, Washington, D.C., 2016.

- Transit Oriented Development (TOD) Strategic Plan  
[https://www.denvergov.org/content/dam/denvergov/Portals/193/documents/TOD\\_Plan/TOD\\_Strategic\\_Plan\\_FINAL.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/193/documents/TOD_Plan/TOD_Strategic_Plan_FINAL.pdf)
- Small area plans (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps studies, etc.)

**Picture 4.3 Primary Bicycle Circulation Concept**

Figure 4 - Alameda Station Area Plan

**Improve air quality and reduce greenhouse gas emissions.**

☒ Yes    ☐ No

**Connect Alameda** engineering design sets the stage for the construction of the project’s ultimate vision. That vision includes a new sidewalk on the south side of the corridor, drastic enhancements to the north shared-use path that exceed current design standards, reduction of crossing distances on Santa Fe Drive and Cherokee Street, construction of a new bicycle and pedestrian overpass at Alameda Avenue, reconstruction the underpass walls and rail lines bridges, construction of new rail lines, roadway resurfacing, and drainage improvements.

<sup>2</sup> 2 City of Calgary. Accessed via: <http://usa.streetsblog.org/wp-content/uploads/sites/5/2016/04/calgary-fast-facts.jpg>

Improving freight corridors also help reduce greenhouse gas emissions. Railroads are the most environmentally sound way to move freight over land. On average, trains are four times more fuel efficient than trucks. They also reduce highway gridlock, lower greenhouse gas emissions, and reduce emissions of particulate matter and nitrogen oxides. Moving freight by rail instead of truck lowers greenhouse gas emissions by 75 percent<sup>4</sup>. Reconstructing the underpass walls and rail lines bridges and the construction of new rail lines under **Connect Alameda**'s ultimate engineering design will create safer conditions for freight operations and greater efficiency.

**4.B.** If applicable, describe how this project is consistent with, or helps implement, Denver's [80x50 Climate Action Plan](#), which set the City's target to **reduce greenhouse gas emissions to 80% below 2005 levels by 2050**, and/or Denver's [2020 Sustainability Goals](#).

The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision. That vision will increase the mobility choices by adding and improving off-street bicycle and pedestrian facilities and providing stronger, convenient, and safer connections to RTD's Alameda Station and transit-oriented development. Expanding safe biking and walking infrastructure is a strategy of Denver's 80x50 Climate Action Plan.

**4.C.** If applicable, describe if this project contains **water quality and green infrastructure** consistent with project types and focus areas identified in **Denver's [Green Infrastructure Implementation Strategy](#)**:

Reducing the adverse impacts of stormwater runoff to our river, streams, lakes, and gulches through green infrastructure interventions is a priority for the City and County of Denver. The **Connect Alameda** project team is aware of the stormwater and drainage issues in the project area. As such, water quality and green infrastructure elements will be considered as part of the engineering design of **Connect Alameda**.

#### [MV objective 7b](#)

#### **Connect people to natural resource or recreational areas.**

**5.A.** Will this project help complete missing links in the regional trail and greenways network or improve other multimodal connections that increase accessibility to our region's open space assets?

☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

**Connect Alameda** will significantly increase access to recreational opportunities along the Platte River Trail and the nearly 110 miles of multi-use trail in the Denver region. Currently, there is no formalized bicycle connection between the Trail and the neighborhoods and destinations to the east of the South Platte River/Interstate 25. This project would bridge this gap by providing a safe and comfortable connection to this legacy pathway from the east by adding a sidewalk to the south side of Alameda Ave and significantly improving the sidewalk for shared use on the north side of Alameda Ave (between Santa Fe Dr and Cherokee St) and repairing drainage to improve aesthetics and comfort levels under the overpass.

**5.B.** If applicable, describe how your project meets the goals, objectives and priorities of the Denver Department of Parks and Recreation's [Game Plan for a Healthy City \(Public review draft 2018\)](#).

**Connect Alameda**'s ultimate vision calls for reconstruction of underpass walls, reconstruction of rail lines bridges, construction of new rail lines, roadway resurfacing, drainage improvements, overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive. This project will connect Alameda station, Athmar, Valverde, neighborhoods to the east to Platte River Trail, one of the Denver's legacy pathways. Because of the infrastructure improvements, residents and visitors will have increased opportunities to experience and connect to nature along the Trail/River and will enhance this treasured recreational asset of the region.

<sup>4</sup> Association of American Railroads. Accessed via: <https://www.aar.org/wp-content/uploads/2018/07/AAR-Environmental-Benefits-Movig-Freight-by-Rail.pdf>



**Connect Alameda** will also promote equitable access for underserved communities to parks and recreation amenities. The multimodal investments included in the project ensures that traditionally underserved populations west of the Platte River (Athmar Park and Valverde) can more safely access the recreational opportunities presented by the Platte River Trail and the rest of multi-use path network.

Through the **Connect Alameda** project, the City has broadened its system investments and services with allied individuals, agencies, and organizations. Through the visioning planning effort we established strong, non-financial partnerships with RTD and CDOT. The engineering design will continue those partnerships in order to build a project that incorporates CDOT's I-25 PEL planning efforts while anticipating RTD, Union Pacific, and BNSF current and future growth needs.

[MV objective 10](#)

**Increase access to amenities that support healthy, active choices.**

6. Will this project expand opportunities for residents to lead healthy and active lifestyles?

☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

Extensive research has proven that those with greater access to physical health opportunities tend to exhibit improved health outcomes. From an equity standpoint, health disparities are exaggerated when looking at health indicators across minority and income groups (for example, children in low-income households are more likely to suffer from asthma and obesity).

Well-planned multimodal infrastructure promotes walking, bicycling, and more convenient access to recreational opportunities/green space. **Connect Alameda** will allow greater opportunity for residents of surrounding neighborhoods to partake in physical activity and recreational opportunities provided by the Platte River Trail. As shown in the 2014 Health of Denver Report (authored by *Be Healthy Denver*), the neighborhoods of Valverde, Barnum, and Westwood (just west of **Connect Alameda**) show some of the highest poverty percentages in the City (greater than 31%), and exhibit a number of health related issues such as increased likelihood of food insecurity and the highest prevalence of childhood asthma-related ER visits. The project will support the alleviation of these disparities by constructing shared-used paths on both sides of the underpass, further encouraging active transportation in and around communities, and to/from the RTD light rail station, Platte River Trail, and destinations along Broadway.

[MV objective 13](#)

**Improve access to opportunity.**

7.A. Will this project help reduce critical health, education, income, and opportunity disparities by promoting reliable transportation connections to key destinations and other amenities?

☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

Integrating health, well-being and equity considerations into the transportation design process is a policy priority of Mayor Hancock. The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision for an area in need of connectivity to jobs, education, and health care facilities. Median household incomes in Baker, Valverde, and Athmar Park neighborhoods is lower than Denver's median income and they have a higher percent of renter occupied households. Average educational attainment is lower in Valverde and Athmar than the rest of Denver and all three neighborhoods are identified as vulnerable neighborhoods for gentrification.

**Connect Alameda's** vision includes building a new sidewalk on the south side of the avenue, drastic enhancements to the north shared-use path that exceeds current design standards, reduction of crossing distances on Santa Fe Drive and Cherokee Street, construction of a new bicycle and pedestrian overpass at Alameda Avenue, reconstruction the underpass walls and rail lines bridges, construction of new rail lines, and

roadway resurfacing, drainage improvements. The Valverde, Athmar, and Baker neighborhoods need and deserve the investment in creating safe mobility options for individuals of all ages and abilities.

## Areas Vulnerable to Gentrification

UPDATE: Based on 2015 Demographic Data

Source: American Community Survey

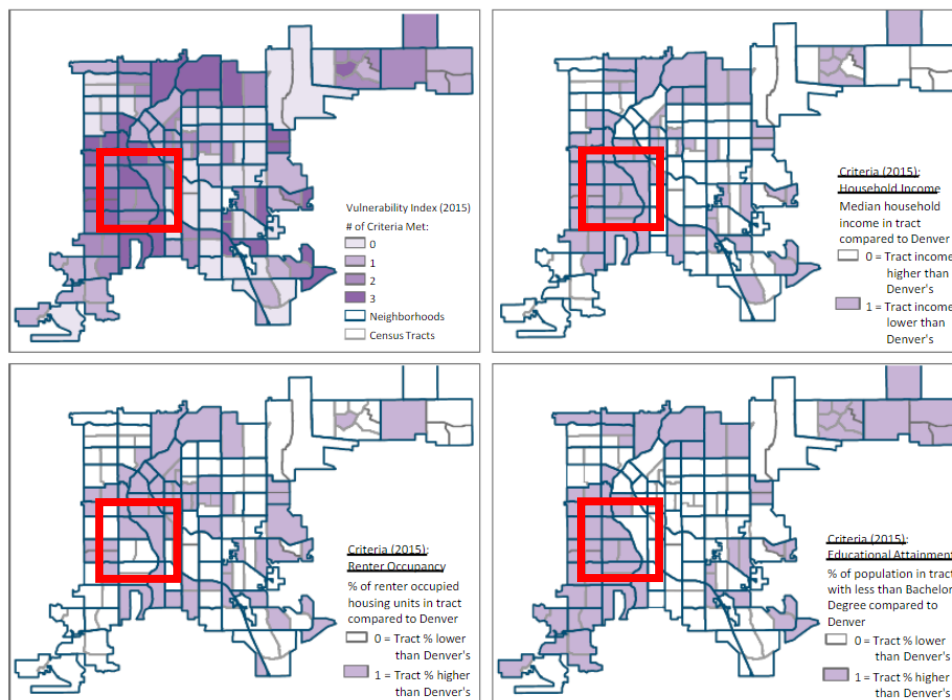
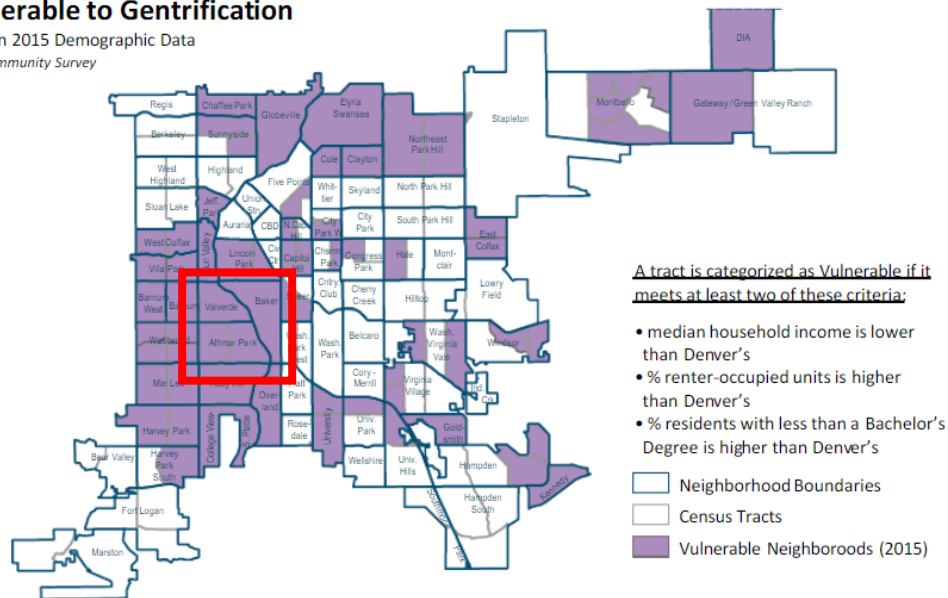


Figure 5 - Gentrification Analysis Vulnerability Index 2015

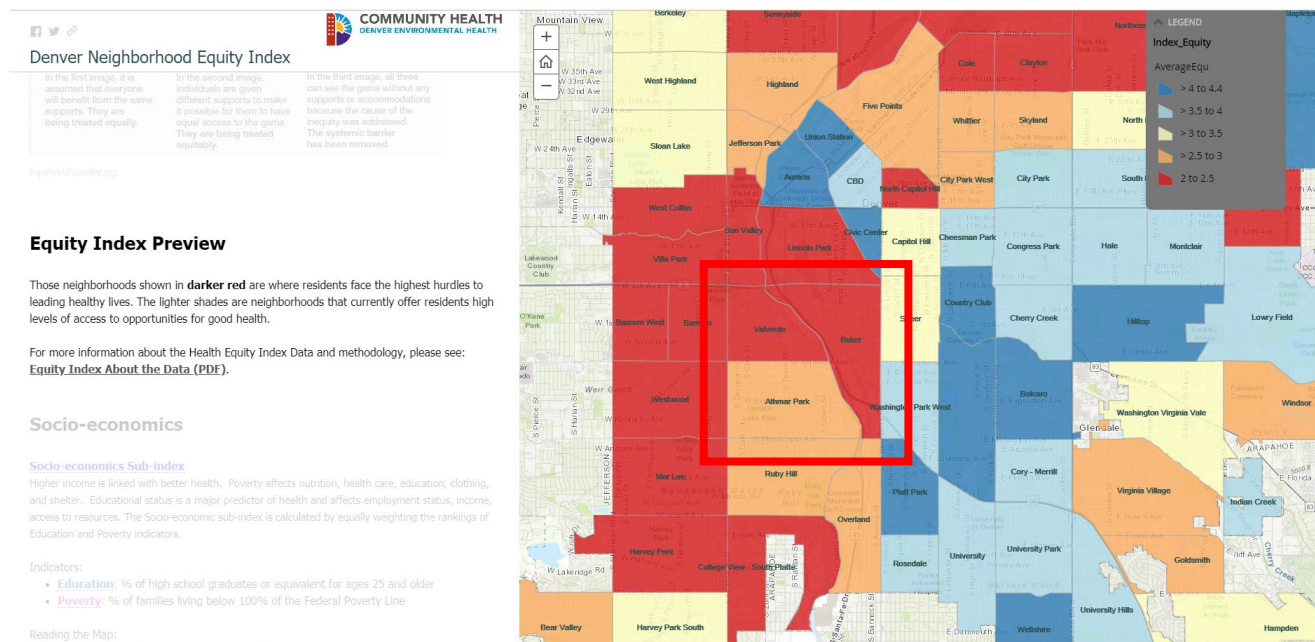
**7.B.** Describe how your project addresses the neighborhood inequities related to transportation as depicted and mapped in the **Denver Neighborhood Equity Index** which was produced by the Denver Department of Public Health and Environment, which helps to inform decision makers about where city investment and resources are needed most for those living in Denver’s underserved neighborhoods?

General information on the Neighborhood Equity Index is on the Denvergov website:

<https://www.denvergov.org/content/denvergov/en/environmental-health/community-health/health-in-all-policies.html>

See the interactive map, by opening this [link](#) in a new window. The source of each indicator is described in the map. Click on each individual link and see specific map layers; for example, in Built Environment, there is information on “Access to Parks” separately.

Valverde, Athmar Park, and Baker are highlighted as neighborhoods where residents face the highest hurdles to leading healthy lives. Alameda underpass is a physical barrier for these communities to reach the grocery stores, shops, and restaurants along Broadway, Platte River Trail, and RTD’s light rail station. The engineering design of **Connect Alameda** sets the stage for the construction of the ultimate vision for an area in need of connectivity to jobs, education, and health care facilities. The completion of this project will reinvest in established, in-need communities in Denver and increase access to opportunities for generations to come.



**MV objective 14**

**Improve the Denver Subregion’s competitive position.**

**8.** Will this project help support and contribute to the growth of the subregion’s economic health and vitality?

☒ Yes ☐ No

Describe, including supporting quantitative analysis

Multiple studies have shown (ULI's *Active Transportation and Real Estate: The Next Frontier*) that active transportation infrastructure - such as the shared-used paths on both sides of the underpass, the overpass connection to Alameda Station, and crossing improvements to Cherokee Street and Santa Fe Drive - prove beneficial for the economic health and well-being of a City. A 2011 study by the New York City Department of Transportation found that rents along New York City's Times Square pedestrian areas and bicycle lanes increased 71 percent in 2010. A San Francisco State University study found that when the city of San Francisco reduced car lanes and installed bike lanes and wider sidewalks on Valencia Street, two-thirds of merchants said the increased levels of bicycling and walking improved business.

The implementation of **Connect Alameda's** ultimate vision has the potential to greatly benefit the economic health and vitality of the "South Broadway at I-25" Regional Urban Center by enhancing bicycle and pedestrian connectivity and encouraging active transportation. This can, in turn, increase activity at the businesses, shops and restaurants in the Baker, Athmar Park, and Valverde neighborhoods and along S Broadway.

#### D. Project Leveraging

WEIGHT **10%**

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	20%	60%+ outside funding sources .....High 30-59% .....Medium 29% and below .....Low
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## Part 3

# Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

## A. Transit Use

1. Current ridership weekday boardings	3,333
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	26,920	20,944	47,864
2040	31,935	24,399	56,334

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. (Using 50% growth above year of opening for 2040 value, unless justified) <i>Provide supporting documentation as part of application submittal</i>	1,776	1,944
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. (Example: {#3 X 25%} or other percent, if justified)	444	486
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) (Example: {#3 X 25%} or other percent, if justified)	444	486
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	888	972
7. Enter the value of {#6 x 9 miles}. (= the VMT reduced per day) (Values other than the default 9 miles must be justified by sponsor; e.g., 15 miles for regional service or 6 miles for local service)	7,992	8,748
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	7,593	8,311
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

## B. Bicycle Use

1. Current weekday bicyclists	118
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	26,920	20,944	47,864
2040	31,935	24,399	56,334

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	15	114
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: <b>{#3 X 50%}</b> or other percent, if justified)	8	57
5. = Initial number of new bicycle trips from project (#3 – #4)	8	57
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> or other percent, if justified)	2	17
7. = Number of SOV trips reduced per day (#5 - #6)	5	40
8. Enter the value of <b>{#7 x 2 miles}</b> . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	11	80
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	10	76
10. If values would be distinctly greater for weekends, describe the magnitude of difference:		
11. If different values other than the suggested are used, please explain here:		

C. Pedestrian Use	
1. Current weekday pedestrians (include users of all non-pedaled devices)	2,399
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	26,920	20,944	47,864
2040	31,935	24,399	56,334

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	432	535
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: <b>{#3 X 50%}</b> or other percent, if justified)	216	268
5. = Number of new trips from project (#3 – #4)	216	268
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> or other percent, if justified)	65	80
7. = Number of SOV trips reduced per day (#5 - #6)	151	187

<b>12.</b> Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	60	75
<b>8.</b> = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	57	71
<b>9.</b> If values would be distinctly greater for weekends, describe the magnitude of difference:		
<b>10.</b> If different values other than the suggested are used, please explain here:		

## D. Vulnerable Populations

Use Current Census Data	Vulnerable Populations	Population within 1 mile
	1. Persons over age 65	2,103
	2. Minority persons	8,963
	3. Low-Income households	1,730
	4. Linguistically-challenged persons	1,109
	5. Individuals with disabilities	1,308
	6. Households without a motor vehicle	1,304
	7. Children ages 6-17	2,163
	8. Health service facilities served by project	8

## E. Travel Delay (Operational and Congestion Reduction)

Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. *DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.*

1. Current ADT (average daily traffic volume) on applicable segments	30,000
2. 2040 ADT estimate	0
3. Current weekday vehicle hours of delay (VHD) (before project)	0

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	0
5. Enter value of <b>{#3 - #4}</b> = Reduced VHD	0
6. Enter value of <b>{#5 X 1.4}</b> = <b>Reduced person hours of delay</b> (Value higher than 1.4 due to high transit ridership must be justified by sponsor)	0
7. <b>After project peak hour congested average travel time reduction</b> per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). <i>If applicable, denote unique travel time reduction for certain types of vehicles</i>	0
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.	

9. If different values other than the suggested are used, please explain here:

## F. Traffic Crash Reduction

1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians ( <i>most recent 5-year period of data</i> )		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices ( <i>e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology</i> ).
Fatal crashes	0	
Serious Injury crashes	4	
Other Injury crashes	44	
Property Damage Only crashes	361	
2. Estimated reduction in crashes <u>applicable to the project scope</u> ( <i>per the five-year period used above</i> )		
Fatal crashes reduced	0	
Serious Injury crashes reduced	0	
Other Injury crashes reduced	0	
Property Damage Only crashes reduced	0	

## G. Facility Condition

Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified.  
Applicants will rate as: Excellent, Good, Fair, or Poor

### Roadway Pavement

1. Current roadway pavement condition	Fair
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0

### Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Poor
5. Describe current condition issues and how the project will address them.  The current shared-used path on the north portion of Alameda Avenue does not currently meet Denver's design guidelines. The 7-foot path width is further reduced with the 1.5-foot concrete Jersey barrier. The underpass crumbling walls, inadequate lighting, dangerous pedestrian crossing points, poor signage, trash accumulation and high vehicle noise levels create an unfriendly, confusing, and unsafe environment for pedestrians and bicyclists.	
6. Average Daily User Volume	0

## H. Bridge Improvements

1. Current bridge structural condition from CDOT

<p>The retaining wall structures are in poor condition. While there are not universal, industry-wide condition rating metrics associated with retaining walls, these structures are the poorest rated walls in the CCD inventory. Using a CCD developed metric, the wall system rated as a 62.9. The next lowest wall rated as a 79.4.</p>	
<p>2. Describe current condition issues and how the project will address them.</p> <p>The current walls were built in 1910. Large portions of the concrete wall face have spalled (fallen off) into the roadway or sidewalk. Regular maintenance occurs to remove loose pieces. This project will replace the wall systems. In addition, there are also two existing railroad bridges that will be replaced as part of this project.</p>	
<p>3. Other functional obsolescence issues to be addressed by project</p>	
<p>4. Average Daily User Volume over bridge</p>	<p>0</p>
<p><b>I. Other Beneficial Variables</b> <i>(identified and calculated by the sponsor)</i></p>	
1.	
2.	
3.	
<p><b>J. Disbenefits or Negative Impacts</b> <i>(identified and calculated by the sponsor)</i></p>	
<p>1. Increase in VMT? <i>If yes, describe scale of expected increase</i></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>2. Negative impact on vulnerable populations</p>	
<p>3. Other:</p>	