Part 1 Base Information

1. Project Title	**Nine Mile Pedestrian and Bicycle Bridge**
2. Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate*	Pedestrian/bicycle bridge traversing US 83 (Parker Road) approximately 500 feet west of I-225
3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City of Aurora
4. Project Contact Person, Title, Phone Number, and Email Verify email address—no "n" in last name?	Mac Callison, Transportation Planning Supervisor, 303-739-7256, Mcalliso@auroragov.com
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?	☐ DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FCRTP)	
	☒ Local plan:	Aurora Places, 2018 (page 64) Nine Mile Rail and Bus Station Bicycle and Pedestrian Bridge FY 2017 TIGER Application, 2017 Arapahoe County Bicycle and Pedestrian Master Plan, 2017 (page 63) The Point at Nine Mile Station at Nine Mile Rail and Bus Station Master Plan Nine Mile Rail and Bus Station Area Plan, 2012 (pages: 6, 12-14, 20, 25-26) Bicycle and Pedestrian Master Plan, 2012 (page 34)
	☐ Other(s):	
	Provide link to document/s and referenced page number if possible, or provide documentation with submittal	

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

- ☐ Rapid Transit Capacity (2040 FCRTP)
- ☒ Transit Other: supporting first and last mile connections to transit station
- ☒ Bicycle Facility
- ☒ Pedestrian Facility
- ☒ Safety Improvements
- ☐ Roadway Capacity or Managed Lanes (2040 FCRTP)
- ☐ Roadway Operational

Grade Separation
- ☐ Roadway
- ☐ Railway
- ☒ Bicycle
- ☒ Pedestrian

- ☐ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☒ Design
- ☐ Transportation Technology Components

☐ Transportation Technology Components
☐ Other:

8. **Problem Statement** What specific Metro Vision-related subregional problem/issue will the transportation project address?

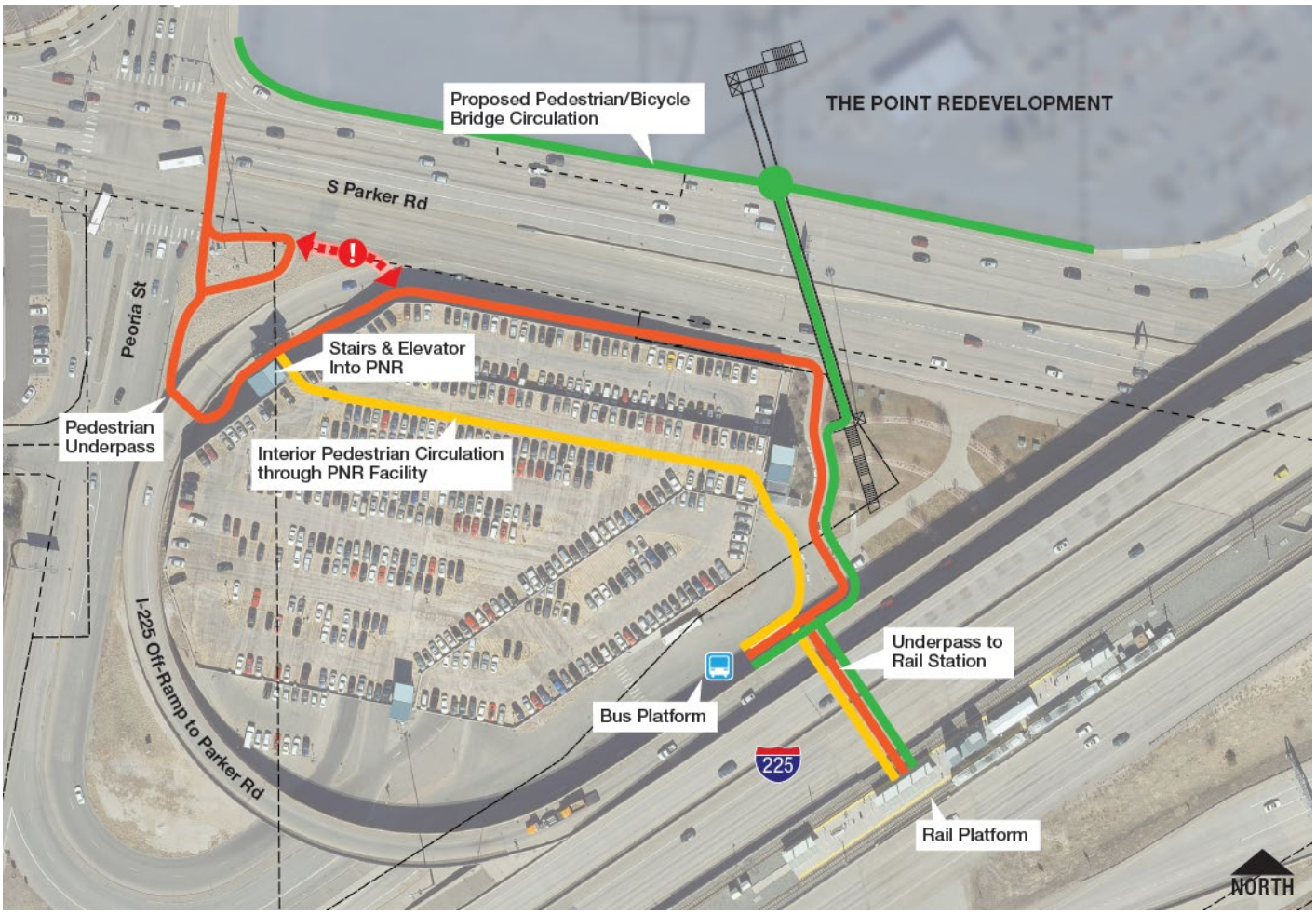
Metro Vision identifies limited options for individuals without a car and automobile dependence as being major challenges throughout the region. It also establishes performance targets for non-single occupant vehicle (SOV) mode share to increase from 25 percent to 35 percent by 2040. The Nine Mile Bus and Rail Station and the surrounding transportation network exemplify the challenges that individuals without a car or cannot drive experience when they try to access alternative modes. The significant physical barrier created by the ten-lane high-speed and high-volume state highway 83 (Parker Road), that separates the Nine Mile Bus and Rail Station, a major regional transit hub serving two rail lines and ten bus routes, from the adjacent residential and commercial areas is a major problem. Specific challenges at this location include:

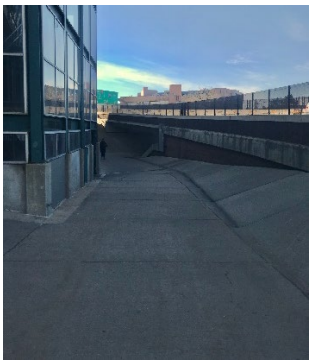
- An indirect and circuitous pedestrian and bicycle route to access the rail and bus platforms, the Cherry Creek Regional Trail and Cherry Creek State Park.
    - The currently recommended pedestrian and bike path to the bus and rail platforms is through the RTD Park-n-Ride (PNR). This route conflicts with vehicular circulation through the PNR structure.
    - The alternative pedestrian and bike path to the bus and rail platforms is along the sidewalk on the north side of the PNR structure directly adjacent to Parker Road very high-volume and high-speed traffic.
- High-traffic volumes, multiple crossings, and long pedestrian and bike crossing distances make pedestrian and bicycle crossings of Parker Road challenging and indirect.
- Wayfinding signs were installed through a previous TIP grant. However, due to the limitations of physical layout of the area, it is nearly impossible to find a clear and direct route with the least vehicular conflict.
- The indirect, circuitous, and unclear access options to the Nine Mile Bus and Rail Station inspire people to cross instead at-grade at the location of the proposed pedestrian bridge. Parker Road is a 10-lane cross section at this location, with a jersey barrier between eastbound and westbound traffic and an average daily traffic (ADT) volume over 60,000. Even with the deterrence of the high-speeds, high-traffic volumes, and jersey barrier, pedestrians regularly choose to cross at this non-designated location rather than walk out of direction to one of the designated crossings at Peoria or east of Interstate 225 (I-225).
    - This non-designated path across Parker Road is 1,300 feet and takes approximately 6.9 minutes to get to the Bus and Rail Station, whereas the path using the crosswalk at Parker/Peoria Street is 1,550 feet and takes approximately 8.4 minutes, including an average wait of one minute at the signal.

The graphic on the next page visually depicts pedestrian and bicycle travel options, both of which are uncomfortable and inconvenient. Refer to the light and dark orange paths depicted on the graphic. First, pedestrians must cross Parker Road, an eight thru lane cross-section and circle around the pedestrian/bicycle underpass of the I-225 off ramp. Next, pedestrians/cyclists must choose one of two options:

1. Enter the stairwell or elevator into the PNR structure and travel through the PNR to get to the station (see southern light orange line); or

2. Walk adjacent to the PNR structure and high-speed traffic on Parker Road (see darker orange line).





The images show the pedestrian and bicyclist environment along the path to the Nine Mile Bus and Rail Station. **Left:** Standing at the southeast corner of Parker Road/Peoria Street, looking south at the underpass of the I-225 ramp. **Middle:** Standing next to the PNR stairs and elevator on the northeast corner of the PNR structure, looking southwest into the underpass of the I-225 ramp. **Right**: Standing on the south side of Parker Road next to the PNR structure, looking east toward I-225.

This project will address the critical pedestrian and bicycle access issues discussed in this section. These issues are associated with the Nine Mile Rail and Bus Station and greater transit network as recommended in the 2012 *Nine Mile Station Area Plan*, which can help to further *Metro Vision's* goals toward increasing non-SOV mode share.

9. Define the **scope** and **specific elements** of the project.

The city of Aurora is seeking funds to design and construct a pedestrian and bicycle bridge that will span Colorado State Highway 83 (Parker Road) approximately 500 feet west of I-225. The bridge will provide a safe and convenient connection between the RTD Nine Mile Rail and Bus Station, adjacent residential and business developments and a large urban renewal area and redevelopment site (The Point at Nine Mile Station) on the north side of Parker Road, an area *Metro Vision* has identified as an emerging Urban Center.

Specific elements of the project include:

- **Bridge** – The two-span bridge will be approximately 320 feet long. It will be an enclosed and covered 10-foot wide path with pedestrian lighting and security cameras in key locations to ensure full visibility.
- **Bridge Access** – The project includes stairs and two glass-enclosed elevators on both sides of the bridge, providing redundancy in Americans with Disabilities Act (ADA) access. The stairs and elevator will be well lit, and stairs will have bicycle wheel troughs for ease of use by cyclists.
- **Additional Amenities** – Landscaping will be installed at the north landing, which is part of The Point at Nine Mile Station Master Development site. Emergency Telephones (ETEL) with blue lights will be provided at both ends of the bridge in well-lit and easily accessible locations.
- **Traffic Control during Construction** – All traffic control during construction will be done per CDOT's traffic control policy. Most of the construction is anticipated to be completed without impacting travel operations along Parker Road and with minimal impacts to adjacent private property owner accessibility.

This pedestrian and bicycle bridge will facilitate improved connectivity in the area and reduce the risk of pedestrian and vehicular crashes occurring via the at-grade crossings as noted in the problem statement.

10. What is the status of the proposed project?

The 2012 *Nine Mile Station Area Plan* recommended the bridge to support redevelopment potential in the area. Since then, The Point at Nine Mile Station has continued to progress their redevelopment plans and construction activity, which will result in 550 new dwelling units and 400,000 square feet of new mixed-use commercial space. The redevelopment project also has designed a landing point for the pedestrian and bicycle bridge on the north side of Parker Road.

In 2017, the city compiled a USDOT TIGER Grant application package request to help fund the final design and construction of the bridge but was not selected for award. This work included a detailed cost estimate and conceptual design for the bridge. The bridge continues to be a top priority for the city.

11. 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

1. Total Project Cost		**$7,400,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$4,366,000**	**59%** of total project cost

3. Outside Funding Partners ***(other than DRCOG Subregional Share funds)*** List each funding partner and contribution amount.	**$$ Contribution Amount**	**% of Contribution to Overall Total Project Cost**
City of Aurora	$3,034,000	41%
	$	
	$	
	$	
	$	
	$	
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$3,034,000**	

Funding Breakdown (year by year)*

**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.*

	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**Total**
Federal Funds	$	$2,075,000	$2,291,000	$	**$4,366,000**
State Funds	$	$	$	$	**$0**
Local Funds	$1,110,000	$1,075,000	$849,000	$	**$3,034,000**
Total Funding	$1,110,000	$3,150,000	$3,140,000	$0	**$7,400,000**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	Design, ENV	Design, ENV ROW, and CON	CON	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. ☒

Part 2 Evaluation Criteria, Questions, and Scoring

A. Subregional significance of proposed project

WEIGHT **40%**

*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 your subregion?

This location "represents one of the most significant transportation nodes in the metropolitan region" (*Nine Mile Rail and Bus Station Area Plan*, 2012). On an average day, over 150,000 vehicles pass the site on I-225 and approximately 60,000 vehicles drive by on Parker Road (2017 DRCOG Traffic Counts). The area is also adjacent to a unique recreational and open space amenity, the 4,200-acre Cherry Creek State Park and regional trail system, which attracts 1.5 million visitors annually. Nearly 7,000 people board or arrive at the Nine Mile Rail (6,591) and Bus (450) Station daily. This station ranks as the sixth busiest rail station in the RTD system based on 2017 estimated station ridership and the PNR is regularly at full capacity. Adjacent parcels are also in the midst of being redeveloped, bringing additional people to the area and placing additional strain on the already busy transportation network.

The 2012 *Nine Mile Rail and Bus Station Area Plan* identifies the high vehicular speeds (45 MPH posted speed limit) and traffic volumes as posing a formidable barrier to safe pedestrian and bike crossing of Parker Road. These speeds and traffic volumes are major deterrents for pedestrians and cyclists to access the Nine Mile Rail and Bus Station. Due to the wide road width of Parker Road and necessary intersection operational challenges with so many traffic lanes, the plan recommended that pedestrian and bicycle traffic be routed to a pedestrian and bicycle bridge to provide a safe crossing over Parker Road.

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

The site is within the city of Aurora but is only 700 feet east of Denver city/county limits. By providing a safe and convenient access to the Nine Mile Transit Station for pedestrians and bicyclists, this project not only benefits Denver and Aurora residents but also various municipalities along the R and H lines and the 10 bus routes (35, 83, 121, 130, 131, 133, 135, 139, 483, AT) serving the Nine Mile Station. They include Greenwood Village, Centennial, Lone Tree, Unincorporated Arapahoe and Douglas counties, and the city and county of Denver.

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

The site is within the city of Aurora/Arapahoe County but is only 700 feet east of Denver city/county limits. As indicated in the previous questions, Parker Road and the Nine Mile Rail and Bus Station facilitate regional travel patterns; therefore, this improvement would benefit the greater region. Specifically, by providing safe and convenient access to the Nine Mile Transit Station for pedestrians and bicyclists, this project benefits other subregions along the R and H lines and the 10 bus routes serving Nine Mile Bus and Rail Station, including Douglas County, Adams County, and Denver County subregions.

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

The proposed project will help to reduce reliance on automobile dominance and increase mobility options for individuals without cars or cannot drive by facilitating safer and more direct pedestrian and bicycle travel to and from the Nine Mile Rail and Bus Station, Cherry Creek Regional Trail and Cherry Creek State Park.

The project will address the problems identified in Part 1, #8 as follows:

1. A clear, direct and safer pedestrian and bicycle access will be provided for The Point at Nine Mile Station future residents and existing neighborhoods north of Parker Road to cross Parker Road to access the Nine Mile Bus and Rail Station, Cherry Creek State Park, and the Cherry Creek Regional Trail. The bridge will be visible from all directions ensuring that individuals biking and walking in the area will see the bridge and

know how to access the station and Cherry Creek Park amenities safely and conveniently. Refer to the artist renderings of the pedestrian bridge provided below.

2. The project will reduce the pedestrian/bicycle and vehicular conflict along Parker Road, currently a 60,000 ADT roadway, which will increase to over 70,000 by 2040. Reducing the conflict that occurs with the at-grade crossings will increase safety for all users.

    - Estimates prepared for the city's USDOT TIGER Grant application in 2017 calculated that the pedestrian and bicycle bridge will **mitigate more than 25 projected bicycle and pedestrian crashes** over the next 20 years, including **22 injury crashes and 2 fatal crashes**.

3. The bridge supports urban level development in an existing urbanized area, one that is identified as an emerging urban center by DRCOG.

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?

The pedestrian and bicycle bridge will create a safe and direct connection to the Nine Mile Rail and Bus Station, which connects to the R and H rail lines and 10 bus routes that provide connections to the greater region; thereby eliminating a livability barrier that exists for residents who rely on buses and light rail to reach major regional employment, shopping, services, education, healthcare, and recreational areas. This improvement to the pedestrian and bicycle network is essential for the redevelopment activities associated with The Point at Nine Mile Station and for future prosperity in the overall area.

The city has historically supported redevelopment and transformation surrounding the Nine Mile Rail and Bus Station and the Nine Mile Urban Center with the completion of the *Nine Mile Rail and Bus Station Area Plan* (2012) and the *Nine Mile Station Urban Renewal Plan* (2015). This pedestrian and bicycle bridge is the next logical step in furthering these endeavors. This project provides foundational elements of promoting economic competitiveness for this redevelopment area by expanding the pedestrian and bicycle network across the major barrier that Parker Road's high traffic volumes and wide cross-section create, which limits connectivity to the Nine Mile Bus and Rail Station. Parker Road is an eight-lane road at the Parker Road/Peoria Street intersection and 10-lane road at the location of the bridge.

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

The proposed pedestrian and bicycle bridge is located in an emerging Urban Center and will connect and expand the pedestrian and bicycle network in an area currently dominated by high-speed vehicular travel. Specifically, the pedestrian and bicycle bridge will link a redevelopment site and surrounding existing residential neighborhoods north of Parker Road to the regional bus and rail network and the Cherry Creek Regional Trail and Cherry Creek State Park south of Parker Road.

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

Adjacent property owners are providing in-kind support for the project by providing property for the landings on the north and south sides of S Parker Road. Specifically, The Point development will provide the landing point on the north side of Parker Road. CDOT/RTD will provide additional property will serve as the south side landing area.

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT **25%**

*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).*

1. Describe how the project will **improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).**

Providing safe, convenient, and reliable pedestrian and bicycle connections to transit services is especially important in an area that has high concentrations of vulnerable populations, which many of them rely entirely on bike and pedestrian facilities and public transporation to meet their daily travel needs, including persons over age 65 (24 percent), minority populations (36 percent), and youth between the ages of 6 and 17 (13 percent). A full list of vulnerable populations in the project area is provided below. *Metro Vision* documented three key points related to these demographic groups:

- Most RTD paratransit users are 65 years of age or older, according to a 2013 RTD Paratransit Survey Demographic Profile, and older adult populations are growing faster than any other demographic.

- Ensuring safe and convenient connectivity is provided to the bus and rail network is especially important to encourage older adults to utilize the fixed route bus network as opposed to paratransit services, which are much more expensive to operate for transportation providers.

- Minority populations are twice as likely to use transit as a means of travel to and from work.
- An estimated 2,400 high school students use RTD routes to get to and from school. Between 2015 and 2040, that number is anticipated to double.

		Total	Percentage of total
1.	Persons over age 65	3,000	24%
2.	Minority persons	4,500	36%
3.	Low-income households	500	4%
4.	Linguistically-challenged persons	550	4%
5.	Individuals with disabilities	525	4%
6.	Households without a motor vehicle	325	3%
7.	Children ages 6–17	1,650	13%
8.	Health service facilities served by project	50	0%

This project also expands connectivity to the region's transit network via the Nine Mile Rail and Bus Station and major health services that are accessible using the light rail system; for example, the Fitzsimons Innovation Community & Anschutz Medical Campus is approximately 8 miles north using the R line and provides access to CU Anschutz Medical Campus, Childrens Hospital Colorado, University of Colorado School of Medicine, and Veterans Affairs Medical Center. Fitzsimons Innovation Community, a major redevelopment site, is also approximately 8 miles north using the R line; and Skyridge Hospital is also accessible using the south leg of the R line.

2. Describe how the project will **increase reliability of existing multimodal transportation network.**

Pedestrian counts performed in the area on a typical weekday indicate that nearly 1,000 daily pedestrians cross Parker Road. With the redevelopment of The Point at Nine Mile Station site progressing, these pedestrian numbers are anticipated to substantially increase to as many as 3,500 daily pedestrians, which is why it is important to provide a safer, more direct connection across Parker Road sooner than later.

The pedestrian and bicycle bridge will reduce the uncertainty of crossing Parker Road now and in the future and provide a safe, convenient, and direct connection to the Nine Mile Rail and Bus Station increasing the reliability of the existing multimodal transportation network. Bicycle and pedestrian hours of delay reduced is estimated at 624,820 cumulative to the year 2040. The bridge will also support safe and convenient connectivity to the Cherry Creek Regional Trail and Cherry Creek State Park.

3. Describe how the project will **improve transportation safety and security.**

The intersection of Parker Road and Peoria Street is a high-volume, high-speed arterial intersection with a history of safety problems. Pedestrians and bicyclists regularly cross Parker Road at this location, and often at undesignated locations that require traversing the 3-foot high jersey barrier, to access trails, transit, and activity centers in the area. Between July 2011 and July 2016, 121 vehicular crashes resulted in 40 injuries. Two vehicle-bicycle crashes occurred in that 6-year period, both resulting in injury. The city is aware of many more near-miss pedestrian crashes (CDOT Vision Zero Crash Database).

An improved pedestrian and bicycle path across Parker Road will greatly reduce the likelihood of future crashes in this area. Estimates prepared for the City's TIGER Grant application in 2017 estimated that the pedestrian and

bicycle bridge will **mitigate more than 25 projected bicycle and pedestrian crashes** over the next 20 years, including **22 injury crashes and 2 fatal crashes**.

C. Consistency & Contributions to Transportation-focused Metro Vision Objectives

WEIGHT **15%**

*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.*

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*

The pedestrian and bicycle bridge will invest in infrastructure supporting the existing multimodal network in an existing urban area, one that *Metro Vision* has identified as an emerging Urban Center. The project is a key element of this redevelopment project, The Point at Nine Mile Station. Current population and employment within one mile of the station is 12,500 and 9,750, respectively. With the additional population and employment planned with The Point at Nine Mile Station and other development in the area, 2040 projections for population and employment increase by 11 percent and 15 percent, respectively, to 14,100 people and 11,500 jobs within one mile of the station.

The pedestrian and bicycle bridge is a recommendation of the 2012 *Nine Mile Rail and Bus Station Area Plan*, which sought to provide the policy framework for transit-oriented uses in the Nine Mile Rail and Bus Station area, including increasing walkability, safety, and convenience for all area travelers. The area has existing high traffic volumes over 60,000 ADT on Parker Road and 150,000 ADT on I-225, with traffic volumes anticipated to grow to over 70,000 on Parker Road. Multimodal improvements, like this pedestrian and bicycle bridge, can help to encourage non-SOV travel facilitating the region's growth in a more sustainable way.

MV objective 3	**Increase housing and employment in urban centers**.

2. 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*

The pedestrian and bicycle bridge will create a more direct multimodal connection to the Nine Mile Rail and Bus Station, Cherry Creek Regional Trail, and Cherry Creek State Park from a designated emerging Urban Center on the north side of Parker Road and the surrounding neighborhoods on the north. The bridge will help to support growth being spurred by a public-private partnership among the city of Aurora, Aurora Urban Renewal Authority (AURA), and The Point at Nine Mile Station Metropolitan District – MHK Developers. Additionally, the pedestrian and bicycle bridge is a first- and last-mile connection to the transit connections at the Nine Mile Rail and Bus Station. This area is expected to grow in population by 11 percent and employment by 15 percent between 2020 and 2040, respectively, from 12,500 to 14,100 people and 9,750 to 11,500 jobs.

On a regional scale, the bridge will also enhance connections to other regional destinations accessible via the regional bus, rail and trail networks. Key destinations include DTC, Fitzsimons Innovation Community and Anschutz Medical Campus, Downtown Denver and the Central Business District, Skyridge Hospital, Parker Road and Speer/Leetsdale Corridor, Cherry Creek, and centers along I-225.

MV objective 4	**Improve or expand the region's multimodal transportation system, services, and connections**.

3. 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 pedestrian and bicycle bridge will make choosing transit, bicycling, and walking safer, more convenient, and more comfortable for residents living in the area surrounding the Nine Mile Rail and Bus Station, which will be increasing by 11 percent between 2020 and 2040 (12,500 to 14,100 people). It will also provide commuters traveling into the area for work, goods, or services a viable option to SOV travel (employment in the area will increase by 15 percent between 2020 and 2040, 9,750 to 11,500 jobs).

Recent pedestrian counts indicate that approximately 1,000 pedestrians travel along Parker Road daily. Nearly 3,500 daily users are estimated once The Point at Nine Mile Station opens. The increased population in the area will contribute to increase transit riders at the Nine Mile Bus and Rail Station, which is estimated to be over 10,000 in 2040, and equates to a reduction of more than 5,000 daily SOV one-way trips.

MV objective 6a	**Improve air quality and reduce greenhouse gas emissions**.

4. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

Using the methodology provided in Section 3, the increased transit usage, biking, and walking that this project will help contribute to can account for an annual reduction in greenhouse gas emissions of approximately 47,905 pounds.

MV objective 7b	**Connect people to natural resource or recreational areas**.

5. 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*

The pedestrian and bicycle bridge will improve low-impact transportation access/multimodal connections to the Cherry Creek Trail, south of I-225, and to Cherry Creek State Park, which provides connections to the Westerly Creek Trail and other trails in the regional network. It is estimated that bicycle travel will increase dramatically in this area by project opening and continue to grow through 2040, from a current count of 22 daily riders to nearly 700 daily estimated with opening of project and 850 daily by 2040. This big jump is related to the added population in the area related to The Point at Nine Mile Station, which will add an estimated 1,400 residents or 550 dwelling units to the area.

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*

Investing in this pedestrian and bicycle bridge that provides safe and convenient connections to the Cherry Creek Regional Trail and Cherry Creek State Park can help contribute to healthy and active lifestyles of area residents and aligns with MV Objective 10 investment strategies. MV Objective 10 strategies recommend supporting projects that consider all roadways users (such as complete street objectives) and complete links to the regional trail network through strategic connectivity enhancements, especially in Urban Centers.

Multimodal projections in this area equate to nearly 1,000 daily cyclists and over 4,000 daily pedestrians using the area's facilities. The inclusion of the bridge also has the potential to reduce bicycle and pedestrian travel time by over 31,000 hours a year or a cumulative 625,000 hours by 2040, further encouraging healthy and active lifestyles of area residents.

As stated previously, this project is located in a designated emerging Urban Center that is anticipated to experience a 11 percent increase in population and a 15 percent increase in employment within 1 mile between 2020 and 2040 (respectively 12,500 to 14,100 population and 9,750 to 11,500 employment). These additional people accessing the area will benefit from improved pedestrian and bicycle facilities.

MV objective 13	**Improve access to opportunity**.

7. 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*

Investing in this pedestrian and bicycle bridge aligns with the following MV Objective 13 strategies:

1. Prioritize an investment that will contribute to mobility enhancements for employment and service centers.
    - This area is a designated emerging Urban Center, with nearly 10,000 jobs currently and a projected 14,100 jobs by 2040.
2. Improve personal mobility, housing and employment access, as well as independence and well-being, especially for those with mobility obstacles or impairments.
    - The bridge will be a fully accessible pedestrian crossing that avoids the high-speed and traffic volumes along Parker Road. Two elevators are provided on both sides of the bridge, in addition to lighting and security cameras to ensure the safety of users.
    - The Point at Nine Mile Station includes 100 mixed-income units that will be limited to households qualifying as low-income; 4 percent of the area's population currently qualifies as a low-income household.
3. Ensure that traditionally underserved populations receive at least a proportionate share of transportation benefits and are not disproportionately affected by transportation investments relative to the entire regional population.
    - *Metro Vision RTP* has identified the area as having concentrations of minority and low-income populations, populations that are twice as likely to take transit to work compared to the majority of the population. Recent census data identifies this area as having 36 percent, or 4,500 minority persons, and approximately 4 percent or 500 low-income individuals within one mile of the project.
    - This area also has high percentages of youth between the ages of 6 and 17 (1,650 people or 13 percent) and seniors (3,000 people or 24 percent) compared to the total area's population within one mile of the project.

MV objective 14	**Improve the region'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*

This area is slated to grow by 11 percent in population and 15 percent in employment between 2020 and 2040. That equates to 1,650 more people and 1,800 new jobs in the area. Providing safe and convenient pedestrian and

bicycle connections to the regional bus, rail and trail networks will support the region's economic health and vitality. This is particularly important in this emerging Urban Center that is planned to increase commercial and office space by 400,000 square feet.		
D. Project Leveraging		**WEIGHT 20%**
9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	41%	41%+ outside funding sources ..... High 31-40% .....Medium 30% and below .....Low

Part 3	**Project Data Worksheet – Calculations and Estimates** *(Complete all subsections applicable to the project)*

A. Transit Use

1. Current ridership weekday boardings	6,591 – Rail 450 - Bus
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	12,422	9,753	**22,175**
2040	14,073*	11,524*	**25,597**
	*Accounts for additional housing units and commercial/office planned in The Point at Nine Mile Station development that are not currently incorporated into the regional land use projections 2040 Population - Addition of 550 DUs X Average Household size of 2.58 = 1,419 additional population beyond the existing 2040 projection 2040 Employment – Addition of 140,000 SF of retail and 250,000 SF of Office space planned with The Point (not included in the existing 2040 projections), using DRCOG employment/SF numbers of 1/500 SF for Retail and 1/300 SF for Office; this adds 1,113 jobs beyond the 2040 projection		

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)* *Provide supporting documentation as part of application submittal*	7,294	10,941
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)*	1,823	2,735
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)*	1,823	2,735
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	**3,648**	**5,471**
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)*	32,832	49,239
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	**31,190**	**46,777**
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	22
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	12,422	9,753	**22,175**
2040	13,841	10,411	**24,252**

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.	684	848
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: **{#3 X 50%}** *or other percent, if justified)*	342	424
5. = Initial number of new bicycle trips from project (#3 – #4)	342	424
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: **{#5 X 30%}** *(or other percent, if justified)*	102	127
7. = Number of SOV trips reduced per day (#5 - #6)	240	297
8. Enter the value of **{#7 x 2 miles}**. (= the VMT reduced per day) *(Values other than 2 miles must be justified by sponsor)*	480	594
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	456	564

10. If values would be distinctly greater for weekends, describe the magnitude of difference:

Based on bicycle counts performed on 12/10, 12/13, and 12/15 of 2018, Saturdays had approximately 16 percent more cyclists than weekdays. This could account for an additional 68 daily cyclists on weekend days.

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)	989
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	12,422	9,753	**22,175**
2040	13,841	10,411	**24,252**

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	3,424	4,245

4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: **{#3 X 50%}** *or other percent, if justified)*	1,712	2,122
5. = Number of new trips from project (#3 – #4)	1,712	2,123
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: **{#5 X 30%}** *or other percent, if justified)*	513	636
7. = Number of SOV trips reduced per day (#5 - #6)	1,199	1,487
12. Enter the value of **{#7 x .4 miles}**. (**= the VMT reduced per day**) *(Values other than .4 miles must be justified by sponsor)*	479	594
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	455	564
9. If values would be distinctly greater for weekends, describe the magnitude of difference: Values are not expected to be greater for weekend days.		
10. If different values other than the suggested are used, please explain here:		

D. Vulnerable Populations

	Vulnerable Populations	Population within 1 mile
Use Current Census Data	**1.** Persons over age 65	3,000
	2. Minority persons	4,500
	3. Low-income households	500
	4. Linguistically-challenged persons	550
	5. Individuals with disabilities	525
	6. Households without a motor vehicle	325
	7. Children ages 6–17	1,650
	8. Health service facilities served by project	50

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	61,000 (current)
2. 2040 ADT estimate	72,700
3. Current weekday vehicle hours of delay (VHD) (before project)	
4. 2040 bicycle and pedestrian hours of delay reduced	31,241 annual savings 624,820 cumulative by 2040
See methodology for bicycle and pedestrian delay provided in Section VII Estimation Methodology.	

Travel Delay Calculations	Year of Opening
5. Enter calculated future weekday VHD (after project)	0
6. Enter value of **{#3 - #4} =** Reduced VHD	0
7. Enter value of **{#5 X 1.4}** = **Reduced person hours of delay** *(Value higher than 1.4 due to high transit ridership must be justified by sponsor)*	0
8. **After project peak hour congested average travel time reduction** per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). *If applicable, denote unique travel time reduction for certain types of vehicles*	0

9. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.

10. 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 *(most recent **5-year** period of data)*		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices *(e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).*
Fatal crashes	0	
Serious Injury crashes	40	
Other Injury crashes		
Property Damage Only crashes	81	
2. Estimated reduction in crashes applicable to the project scope *(per the five-year period used above)*		
Fatal crashes reduced	2	
Serious Injury crashes reduced	22	
Other Injury crashes reduced		
Property Damage Only crashes reduced		

Methodology for estimated reduction in accidents is provided from TIGER grant application in Section VII. Estimation Methodology.

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	Choose an item

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	Choose an item
5. Describe current condition issues and how the project will address them.	
6. Average Daily User Volume	0

H. Bridge Improvements

1. Current bridge structural condition from CDOT N/A	
2. Describe current condition issues and how the project will address them. N/A	
3. Other functional obsolescence issues to be addressed by project	
4. Average Daily User Volume over bridge	0

I. Other Beneficial Variables *(identified and calculated by the sponsor)*

1.	
2.	
3.	

J. Disbenefits or Negative Impacts *(identified and calculated by the sponsor)*

1. Increase in VMT? *If yes, describe scale of expected increase*	☐ Yes ☒ No
2. Negative impact on vulnerable populations	
3. Other:	

Part 4	**Special Considerations** *Complete all answers with a YES/NO/UNSURE, and an explanation as warranted. Part 4 is not scored but will assist in project recommendation.*

1. Is the project a construction- or implementable- ready project?
   Yes, a conceptual design and detailed cost estimate has been developed. A landing point has been identified as part of The Point at Nine Mile Station development and the City has local match funding identified to be used for the project.

2. Are there challenges with the project (right-of-way, environmental, utilities, etc.)?
   a. If yes, explain the challenge and how agency plan to address.

   NO

3. Are there other environmental or controversial issues associated with the project?
   NO

4. Does the project or program benefit more than just the sponsoring agency and considered subregionally significant/transformative?
   Yes, this project will benefit RTD by increasing access and ridership at the Nine Mile Bus and Rail Station. It will also benefit CDOT by reducing pedestrian/bicycle and vehicle conflict along Parker Road.

5. Does the agency have capacity and expertise to manage a federal project?
   a. Explain experience, approach, etc.

   YES. The Transportation Project Delivery (TPD) group within Public Works is responsible for TIP project management from design through construction as well as planning and operational studies. Several project managers have completed TIP projects in the recent past, gaining valuable experience that will be applied to the city's future TIP projects. The Parker Road/Quincy Avenue Operational Study was managed by Cindy Colip and resulted in recommended interim improvements to the network. The 23rd Avenue Bike/Ped Path at Fitzsimons Station included design and construction of a multi-use trail from Fitzsimons Light Rail Station to Ursula Street then south into the Fitzsimons campus. This project was managed through the design by Brad Richardson, and construction activities were managed by Rhaj Khanzadeh, an ex-CDOT construction management specialist. More recently, the Westerly and Toll Gate Creek Connections to Florida Station project, establishing more than 3 miles of protected, one- and two-way bicycle tracks east and west of Florida Station, has just wrapped up the design phase and is entering the construction phase. This project is being managed by Steve Gardner, with Jana Krell taking on the construction management duties. For most of the city's TIP projects, the TPD group hires private construction management and inspection firms to monitor day-to-day construction activities and handle materials testing.

6. Is the project a next logical phase of a project funded in previous TIP cycles?
   Yes. The Nine Mile Rail and Bus Station Area Plan is funded by TIP grant. The plan recommended a pedestrian and bicycle bridge over Parker Road. This project is a next logical phase of implementing the Plan recommendation.

7. Of the partnerships described in Section A, Question 7, are the partnerships providing funding?
   a. Describe the partnerships and funding of such.

   NO

8. Are there any other "special considerations" the committee should consider in evaluating the application?
   NO