

# Part 1

# Base Information

1. Project Title	<b>Interstate 270 Corridor Environmental Assessment &amp; Vasquez Boulevard Construction</b>
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	Interstate 270 from approximately Interstate 25 to Interstate 70 and Vasquez Boulevard (U.S. 85) from 52 <sup>nd</sup> Avenue to E. 64 <sup>th</sup> Avenue. See Attachments 1.1 and 1.2 for a map of the geographic area.
3. Project Sponsor ( <i>entity that will construct/ complete and be financially responsible for the project</i> )	City of Commerce City
4. Project Contact Person, Title, Phone Number, and Email	Michelle Halstead, Director of External Affairs   Interim Director of Public Works, 303-289-3719, mhalstead@c3gov.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?	<input checked="" type="checkbox"/> <a href="#">DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)</a>
	<input checked="" type="checkbox"/> Local plan: Imagine Adams County Transportation Plan, 2012 Commerce City Transportation Plan, 2010
	<input checked="" type="checkbox"/> Other(s): North Metropolitan Industrial Area Connectivity Study Vasquez Boulevard Planning and Environmental Linkage Study CDOT 10-Year Development Program 2040 Colorado Statewide Transportation Plan See Attachment 1.3 for links to planning documents and referenced page numbers
	<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 checked="" type="checkbox"/> Rapid Transit Capacity (2040 FC RTP)<br><input type="checkbox"/> Transit Other:<br><input checked="" type="checkbox"/> Bicycle Facility<br><input checked="" type="checkbox"/> Pedestrian Facility<br><input checked="" type="checkbox"/> Safety Improvements<br><input checked="" type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP)<br><input checked="" type="checkbox"/> Roadway Operational | <b>Grade Separation</b><br><input type="checkbox"/> Roadway<br><input type="checkbox"/> Railway<br><input type="checkbox"/> Bicycle<br><input type="checkbox"/> Pedestrian<br><input checked="" type="checkbox"/> Roadway Pavement Reconstruction/Rehab<br><input checked="" type="checkbox"/> Bridge Replace/Reconstruct/Rehab<br><input checked="" type="checkbox"/> Study<br><input checked="" type="checkbox"/> Design<br><input type="checkbox"/> Other: |
|---|---|

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

The project will address ongoing congestion, safety and operational concerns along the I-270 Corridor and Vasquez Boulevard that prevent DRCOG from fully realizing a connected multimodal region and vibrant regional economy.

9. Define the **scope** and **specific elements** of the project.  
 The Interstate 270 Corridor Environmental Assessment & Vasquez Boulevard Construction Project will complete the following scope and specific elements concurrently:
- Complete a National Environmental Policy Act process consistent with CDOT’s environmental assessment template and complete preliminary design to address the functionally obsolete and congested 5.4-mile Interstate 270 corridor.
  - Design, obtain environmental approval, and construct near-term operational improvements such as those identified in the Vasquez & I-270 Planning and Environmental Linkage study.

10. What is the status of the proposed project?  
 Initial planning and funding stages; CDOT is currently completing a system-level traffic analysis of I-270.

11. Would a smaller federal 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.*

Complete environmental, design and construction of near-term operational improvements at Vasquez Boulevard/I-270 interchange. Total Cost: \$11.25 million

Complete Environmental Assessment and preliminary design for Interstate 270. Total cost: \$5.3 million.

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>	<b>\$16,550,000</b>	
<b>2. Total amount of DRCOG Regional Share Funding Request</b> <i>(no greater than \$20 million and not to exceed 50% of the total project cost)</i>	<b>\$6,000,000</b>	<b>36%</b> of total project cost
<b>3. Outside Funding Partners</b> <i>(other than DRCOG Regional Share funds)</i> List each funding partner and contribution amount.	<b>\$\$</b> <b>Contribution Amount</b>	<b>% of Contribution</b> <b>to Overall Total</b> <b>Project Cost</b>
Adams County	\$2,000,000	12%
City of Commerce City	\$2,000,000	12%
Colorado Department of Transportation	\$5,750,000	35%
Denver Subregional Forum	\$800,000	5%
	\$	0%
See Attachment 1.4 for letters of funding commitment and support	\$	0%
<b>Total amount of funding provided by other funding partners</b> <i>(private, local, state, Subregion, or federal)</i>	<b>\$10,550,000</b>	

### 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 2018.

	FY 2020	FY 2021	FY 2022	FY 2023	Total
<b>Federal Funds</b>	\$0	\$3,000,000	\$2,000,000	\$1,000,000	<b>\$6,000,000</b>
<b>State Funds</b>	\$ 5,750,000	\$0	\$0	\$0	<b>\$5,750,000</b>
<b>Local Funds</b>	\$1,100,000	\$1,100,000	\$1,300,000	\$1,300,000	<b>\$4,800,000</b>
<b>Total Funding</b>	\$6,850,000	\$4,100,000	\$3,300,000	\$2,300,000	<b>\$16,550,000</b>
<b>4. Phase to be Initiated</b> <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Study	Design	ROW	CON	

**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. Regional significance of proposed project

WEIGHT **40%**

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

**1. Why is this project regionally important?**

Interstate 270 (I-270) is a critical component of the region's transportation network and the only Colorado interstate that has not benefitted from comprehensive planning and implementation efforts in the last decade. I-270 serves as the inner beltway, providing a direct connection to Colorado's only north/south (I-25) and east/west (I-70) interstates (See Attachment 1.1). The 5.4-mile corridor plays a critical role in public safety operations, serving as the region's evacuation and hazardous material route. Today, 84,120 individuals live or work within 1-mile of the corridor; a number that is expected to grow 20 percent by 2040 (See Part 3).

I-270 is a corridor of commerce, where hundreds of companies representing the region's key industry clusters of energy, advanced manufacturing, and logistics locate. I-270 also provides direct connections to Colorado's federal laboratory facilities, bioscience, and research universities along U.S. 36 and I-225 (See Attachment 1.5). The Vasquez Boulevard (U.S. 85)/I-270 interchange serves as a direct connection for the transfer of rural commodities to the urban core. Vasquez Boulevard also serves as the entry point for a future Bus Rapid Transit regional connection from Denver to the City of Brighton (See Attachment 1.2).

Built in the 1960s, the majority of structures, pavement, and drainage within the project area is in poor condition and reaching the end of its useful service life. Roadway and interchange designs are functionally obsolete - most notably the Vasquez Boulevard interchange. Initial construction created access barriers for adjacent vulnerable populations and industrial/residential conflicts that remain today. Moreover, I-270 experiences a three-hour congestion window - nearly three times that of any interstate in the region. Together, this results in fatal accident rates within the project area that are higher than the state average. With truck traffic representing 11% (I-270) and 15% (Vasquez Boulevard) of daily travel volumes, a 59% increase in travel demand by 2035, and four hours of daily congestion-related delay anticipated in 2040, the region can ill afford inaction (See Part 3, Attachment 1.8 and 1.10).

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

The I-270 Corridor Environmental Assessment and Vasquez Boulevard Construction Project crosses Commerce City and the City & County of Denver. Improved freight and commuter movements benefit numerous municipalities along U.S. 85 (Commerce City, City & County of Denver, Brighton) and U.S. 36 (Westminster, Broomfield, Louisville, Superior, and Boulder). Construction of near-term multimodal improvements on Vasquez Boulevard directly benefit Denver and Commerce City, providing new pedestrian and bicycle connections as well as improved freight movement for the businesses adjacent to the corridor. Congestion reduction also has a positive impact on greenhouse gas emissions, which improves air quality for Commerce City and Denver residents as well as the region (See Attachment 1.1 and 1.2).

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

As the region's inner beltway and rural to urban connection, the I-270 Corridor Environmental Assessment and Vasquez Boulevard Construction Project benefits the subregions of Adams, Boulder, and Denver. Origin and destination data indicates the majority of daily trips within I-270 are vehicles passing through the corridor to reach destinations on U.S. 36, Interstate 70, or Vasquez Boulevard (See Attachment 1.11). Improved freight and commuter movements benefit residents and businesses within these subregions by reducing congestion-related delay and enhancing connectivity.

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

The project will construct near-term safety and operational improvements on Vasquez Boulevard, which alone will greatly reduce congestion and improve freight movements on mainline I-270 as well as provide pedestrian and bicycle access on the arterial. The near-term improvements, combined with a long-term corridor solution identified in the Environmental Assessment will improve a vital regional transportation link, completing the multimodal regional connection, improving economic vitality, and achieving the outcomes of MetroVision.

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 completed project will eliminate immediate congestion, safety and operational issues along Vasquez Boulevard, which will restore reliable and safe travel for the region’s logistics sector and residents in need of multimodal travel options (See Attachment 1.11). The potential for managed lanes along I-270 provides a resilient way to manage increased travel volumes while providing reliable travel times.

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

Near-term construction improvements include bicycle and pedestrian connections from the Vasquez Boulevard and 60th Avenue intersection to the Sand Creek Regional Greenway. The project also will confirm needed right-of-way for future regional bus rapid transit stops along Vasquez Boulevard and Highway 2 (See Attachment 1.11). This will improve connections for the 1,044 daily transit users and 1,016 daily pedestrians within the project area (See Part 3). The I-270 Corridor Environmental Assessment will identify opportunities to leverage the existing regional trail, enhance multimodal connections, as well as expand the successful Flatiron Flyer service to Denver International Airport and the Peoria/Smith transit station.

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

This project builds on existing CDOT and local agency studies completed or underway within the corridor. This project will be jointly funded by CDOT, Adams County, Commerce City and Denver, who will commit significant local funds to advance the decision document and near-term construction improvements. The Boulder subregion and U.S. 36 Mayors & Commissioner's Coalition politically recognize the benefit an improved I-270 and Vasquez interchange provides (See Attachment 1.4).

## B. DRCOG Board-approved Metro Vision TIP Focus Areas

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).

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

The one-quarter mile area around the project area has a minority population of 70 percent; 20 percent of the population lives in poverty. This is double (34 percent and 10 percent, respectively) the state average. Seven Environmental Justice (EJ) traffic analysis zones are located in the project area, one of which is “minority-concentrated,” two are “low-income concentrated;” four are both “low-income and minority-concentrated (See Part 3).

The project area has long-standing historical and disparity challenges within severely depressed census tracts, including lack of public amenities (e.g. schools and large parks), image issues, and conflicts between industrial and residential uses. When I-270 was constructed it caused drainage and road alignment issues that remain challenges and limited connectivity to trails for vulnerable residents east and south of I-270. For example,

residents from Globeville, Elyria and Swansea rely on the commercial area at Vasquez Boulevard/60th Avenue to obtain food, goods and services given the lack of service availability closer to home, accessing this area by traversing challenging and unsafe natural and man-made barriers (See Attachment 1.6).

Providing reasonable travel options such as reliable travel times, convenient public transportation, and safe pedestrian facilities to individuals who do not own vehicles is a critical factor to ensure individuals have access to jobs and the ability to participate in the same quality of life as the general population. Improving the efficiency of freight travel in the project area - which far exceeds the average 2% mode split - will improve air quality for the adjacent populations. Travel demand is expected to increase 59 percent by 2035; congestion would worsen to four hours per day without a solution. Long-term corridor improvements and near-term construction improvements at Vasquez Boulevard can enhance existing, proposed and new multimodal routes as well as an opportunity to correct many of the problems caused by the original interstate construction (See Attachment 1.11).

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

I-270 is a critical regional asset that serves as a direct connection between I-25 and I-70. The corridor also is an official hazardous material route for the region. Typically, roadway travel is flexible and fast until there is congestion, at which time it becomes less reliable. I-270 has a congestion window spanning three hours - nearly three times that of any interstate in the region - which severely inhibits reliability. I-270 sees daily traffic volumes of 103,000 vehicles per day (vpd) west of the Vasquez Boulevard interchange and approximately 91,000 vpd east of the interchange, while Vasquez Boulevard see daily traffic volumes of approximately 70,100 vpd. Truck traffic represents approximately 11 percent (I-270) and 15 percent (Vasquez Boulevard) of daily volumes. Travel demand is projected to increase 59 percent by 2035 (See Part 3, Attachment 1.10).

In 2040, the project area will serve as a conduit for nearly 420,000 vehicle trips per day. I-270 will see a truck modal split of nearly 17 percent daily truck, accommodating more than 10,000 trucks per day. Vasquez Boulevard and other side streets could see a modal split of up to 33 percent. For comparison, a typical roadway modal split is about two percent trucks. Traffic models predict congestion will worsen to four hours by the year 2035. Roadway travel reliability in the project area impacts person vehicle, buses, truck safety, local street network and efficiency (See Part 3, Attachment 1.10).

The project will advance near term improvements on Vasquez Boulevard, which alone will improve travel reliability. Identifying a long-term solution for the I-270 Corridor - which will consider the use of managed lanes - will allow reliable trip times, balancing increased travel demand in a sustainable manner (See Attachment 1.11). Without additional capacity, this future demand will exacerbate the current levels of congestion and place more of a burden on the local street network because of diversion.

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

Built in the 1960s, I-270 is a 5.3-mile, controlled-access interstate highway with two through lanes in each direction separated by a depressed median. The 50-year-old highway has many design deficiencies and is generally in poor condition. Within the corridor, there are three system interchanges (I-70, I-76, an I-25/U.S. 36) and three service interchanges (Quebec Street, U.S. 85/Vasquez Boulevard, and York Street). Many of the interchanges in the corridor are missing ramps, which requires traffic to take a more circuitous route to access the interstate.

The most notable is the Vasquez Boulevard/I-270 interchange, which is recognized by DRCOG as one of 18 regional bottlenecks due to the high percentage of truck traffic, seven on- and off-ramps within 900 feet, substandard interchange configuration, sharp interchange ramp curves that slow merging traffic, and a high number of vehicle weaving movements. Just improving the Vasquez & I-270 interchange would enhance the operational performance and safety of both mainline I-270 and the interchange/arterial roadway itself. A recently completed PEL identified 10 near-term improvements that could improve traffic in the interim (See Attachments 1.8, 1.11).

A total of 12 structures are in the corridor; nine are rated as good while three structures are related as fair/poor. The majority of the structures between I-70 and I-76 are functionally obsolete and nearing the end of their useful life. 75% of the I-270 corridor has an asphalt surface, the majority of which is severely cracked and worn. The remaining 25% has a concrete surface in fairly good condition. A 1,000-foot segment of the interstate was built over a municipal solid waste landfill and is seeing secondary compression settlement. In some areas, the settlements ranch from 16.5 to 33 inches, resulting in in undulating distress areas with “roller coaster” type sections (See Attachment 1.8).

A total of 1,283 crashes occurred within the project area over a five-year period The predominant crash type were property-damage only (94%), primarily occurring during the congested peak periods. Injury accidents represented five percent of crash types while fatalities accounted for 1-percent of all crashes. (See Part 3).

A free-flowing, reliable I-270 would provide a separate regional route so incident responders have non congested options. The interstate serves as a critical evacuation route for the state as well as a hazardous material route.

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

WEIGHT **20%**

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

Right-of-way throughout the I-270 corridor varies, but is generally 300-foot wide. The 2035 Regional Transportation Plan generally assumed the existing right-of-way is adequate to accommodate widening by utilizing the depressed median area.

The project will facilitate development within the Denver region’s Urban Growth Boundary/Area and allow the corridor to realize its tremendous potential:

- Fifty-two percent of the I-270 corridor is located in the oldest part of Commerce City, which contains the greatest concentration of original industry and residences within the community. Commerce City's heaviest industrial activities and most-recognized businesses and largest employers are located in the I-270 Corridor and Vasquez Boulevard interchange. Much of the housing in this area was built before the construction of I-270, and subsequently has been, or is being zoned for industrial use. Local land use plans have been amended to reduce the patchwork of land uses and zoning to improve cohesiveness of neighborhoods and industrial districts, including improving appearance from both I-270 and Vasquez Boulevard.
- In the Adams County portion of the corridor (32 percent), land use also is predominantly industrial. Within the corridor, businesses work with non-governmental partners to implement economic development directly related to job creation or preservation, or to promote nonprofit or governmentally funded community development projects.
- In the City and County of Denver portion of the corridor (16 percent), land use starts to transition from industrial to a mix of housing, commercial activity centers and employment centers. This area of Denver was the former Stapleton International Airport and is now being redeveloped. At build-out, the Stapleton area is expected to have between 30,000 and 35,000 jobs. I-270 is a critical connection to and from the Stapleton area (See Attachment 1.9).

[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*

Despite known issues and a lack of prior public investment, the entire project area continues to be a core economic driver and significant employment center providing more than 60,000 jobs within the Denver Metro Area. Key regional industry sectors (Wholesale Trade, Manufacturing, Transport and Warehousing, Construction) make up nearly 65 percent of the total jobs in the area; the Metro North Chamber of Commerce notes these companies heavily rely on inter-and intrastate corridor travel. Based on DRCOG Workforce Commuting Patterns, 88 percent of Commerce City's 67,437 workers commute to their jobs from outside of the community, many of which rely on I-270 and Vasquez Boulevard. More than 1,000 daily transit boardings occur within the Vasquez Boulevard area today; additional regional Bus Rapid Transit Service and improved connections to the N-Line will enhance those distinct connections (Part 3).

Several residential and commercial areas are being developed in close proximity to the I-270 corridor, with access provided by the Vasquez Boulevard and Quebec Street interchanges:

- Victory Crossing is a mixed-use urban renewal development consisting of commercial, retail, and entertainment uses surrounding Dick's Sporting Goods Park and the Rocky Mountain Arsenal National Wildlife Refuge. To date, the site has seen more than \$100,000,000 of private investment and nearly 1 million visitors annually.
- The 65-acre mixed use urban renewal redevelopment of the former Mile High Greyhound Park is approximately one-mile from the I-270/Vasquez Boulevard interchange. At full build out, the site may potentially create 1,454 permanent employees generating more than \$65,400,000 in annual revenue.
- The 4,700-acre Northfield Stapleton redevelopment is less than a mile from the interstate includes a 1.2 million square foot lifestyle retail center and 1,500 affordable units. At build-out, the Stapleton area is expected to have between 30,000 and 35,000 jobs (See Attachments 1.9 and 1.11).

[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 the region for people, goods, or services?

Yes  No

Describe, *including supporting quantitative analysis*

The I-270 corridor has a congestion window spanning three hours, nearly three times that of any interstate in the region. Traffic models predict congestion will worsen to four hours by the year 2035. These assumptions do not take into consideration construction-related traffic associated with the Central 70 Project. I-270 sees daily traffic volumes of 103,000 vehicles per day (vpd) west of the Vasquez Boulevard interchange and approximately 91,000 vpd east of the interchange, while Vasquez Boulevard see daily traffic volumes of approximately 70,100 vpd. Truck traffic represents approximately 11 percent (I-270) and 15 percent (Vasquez Boulevard) of daily volumes. Travel demand is projected to increase 59 percent by 2035 (Part 3).

In 2040, the project will produce nearly 420,000 vehicle trips per day. I-270 will see a truck modal split of nearly 17 percent daily truck, accommodating more than 10,000 trucks per day. Vasquez Boulevard and other side streets could see a modal split of up to 33 percent. For comparison, a typical roadway modal split is about two percent trucks. Traffic models predict congestion will worsen to four hours by the year 2035. Roadway travel reliability in the project area impacts person vehicle, buses, truck safety, local street network and efficiency (See Part 3, Attachment 1.10).

The project will advance near term improvements on Vasquez Boulevard, which alone will improve regional travel reliability. Identifying a long-term solution for the I-270 Corridor - which will consider the use of managed lanes - will allow reliable trip times across the region, balancing increased travel demand in a sustainable manner. Without additional capacity, this future demand will exacerbate the current levels of congestion and place more of a burden on the local street network because of diversion (See Attachment 1.11).

[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

The Denver region is designated as an ozone non-attainment area; the transportation sector is the second largest contributor to greenhouse gas emissions in Colorado, accounting for 28 percent of Colorado's gross emissions. Given the current three hour congestion window and percentage of truck trips, reducing congestion and idling times will have a significant environmental benefit. The potential for managed lanes, connections to regional bus rapid transit service and improved bicycle connections help reduce future oil consumption and greenhouse gas emissions (See Attachment 1.11).

[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 award-winning Sand Creek Regional Greenway runs parallel to I-270; the project will address connections to this regional trail network for residents east of the interstate. The recreational South Platte River Trail travels under I-76 and I-270 and connects to Sand Creek. Dedicated and safe pedestrian/bicycle connections also will improve the safety of vulnerable populations in accessing shopping centers at 60th Avenue and Vasquez Boulevard (See Attachment 1.7).

[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

Near-term construction improvements will provide connections to the Sand Creek Regional Greenway, and eliminate existing pedestrian/bicycle access barriers. These connections will expand opportunities for residents to lead healthy and active lifestyles with access to the regional and local trail network as well as the newly renovated Eagle Pointe Recreation Center (See Attachment 1.7).

[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

The one-quarter mile area around the project area has a minority population of 70 percent; 20 percent of the population lives in poverty. This is double (34 percent and 10 percent, respectively) the state average. Seven Environmental Justice (EJ) traffic analysis zones are located in the project area, one of which is "minority-concentrated," two are "low-income concentrated," four are both "low-income and minority-concentrated."

There are several key destinations and other amenities within the project area (See Attachment 1.9) that are currently difficult to reach through man- and natural-made barriers (See Attachment 1.6).

Providing reasonable travel options such as reliable travel times, convenient public transportation, and safe pedestrian facilities to individuals who do not own vehicles is a critical factor to ensure individuals have access to jobs and the ability to participate in the same quality of life as the general population. Improving the efficiency of freight travel in the project area - which far exceeds the average two percent mode split - will improve air quality for the adjacent populations. Travel demand is expected to increase 59 percent by 2035; congestion would worsen to four hours per day without a solution (See Attachment 1.10). Long-term corridor improvements and near-term construction improvements at Vasquez Boulevard can enhance existing, proposed and new multimodal routes as well as an opportunity to correct many of the problems caused by the original interstate construction (See Attachment 1.6).

[MV objective 14](#) **Improve the region’s competitive position.**

8. Will this project help support and contribute to the growth of the region’s economic health and vitality?  Yes  No

Describe, *including supporting quantitative analysis*

Improving I-270 and Vasquez Boulevard is critical because it is a vital commercial and commuter connection for Adams County, Commerce City, and the City & County of Denver. The project area serves hundreds of businesses within the immediate service area of the highway. Most are within the energy, advanced manufacturing, logistics and distribution industry sectors - key economic drivers for the State of Colorado and nation (See Attachments 1.5 and 1.9).

Fifty-two percent of the I-270 corridor is located in the oldest part of Commerce City, which contains the greatest concentration of original industry and residences within the community. The City's heaviest industrial activities and most-recognized businesses are located in the corridor and heavily rely on inter and intrastate corridor travel. In the Adams County portion of the corridor (32 percent), land use also is predominantly industrial. In the City and County of Denver portion of the corridor (16 percent), land use starts to transition from industrial to a mix of housing, commercial activity centers and employment centers.

Several urban renewal areas were established to help revitalize the area and encourage additional commercial uses. Based on DRCOG Workforce Commuting Patterns, 88 percent of the City's workforce commute to their jobs from outside of the community, many of which rely on I-270 and Vasquez Boulevard (See Attachment 1.11).

**D. Project Leveraging**

**WEIGHT 10%**

9. What percent of outside funding sources (non-DRCOG-allocated Regional Share funding) does this project have?	64%	80%+ outside funding sources ..... High 60-79% .....Medium 59% 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	1,044
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	38,501	45,619	84,120
2040	51,820	53,223	105,043

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>	0	0
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. (Example: <b>{#3 X 25%}</b> or other percent, if justified)	0	0
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) (Example: <b>{#3 X 25%}</b> or other percent, if justified)	0	0
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	0	0
7. Enter the value of <b>{#6 x 9 miles}</b> . (= 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)	0	0
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0	0
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	TBD
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	38,501	45,619	84,120
2040	51,820	53,223	105,043

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.	0	0
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)	0	0
5. = Initial number of new bicycle trips from project (#3 – #4)	0	0
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)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
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)	0	0
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
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)	1,016
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	38,501	45,619	84,120
2040	51,820	53,223	105,043

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	0	0
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)	0	0
5. = Number of new trips from project (#3 – #4)	0	0
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)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0

<b>12.</b> Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) <i>(Values other than .4 miles must be justified by sponsor)</i>	0	0
<b>8.</b> = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
<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
	<b>1.</b> Persons over age 65	
<b>2.</b> Minority persons		15,021
<b>3.</b> Low-Income households		3,627
<b>4.</b> Linguistically-challenged persons		6,125
<b>5.</b> Individuals with disabilities		6,334
<b>6.</b> Households without a motor vehicle		2,119
<b>7.</b> Children ages 6-17		11,716
<b>8.</b> Health service facilities served by project		22

## 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.*

<b>1.</b> Current ADT (average daily traffic volume) on applicable segments	264,100
<b>2.</b> 2040 ADT estimate	419,919
<b>3.</b> Current weekday vehicle hours of delay (VHD) (before project)	3

Travel Delay Calculations	Year of Opening
<b>4.</b> Enter calculated future weekday VHD (after project)	0
<b>5.</b> Enter value of <b>{#3 - #4}</b> = Reduced VHD	0
<b>6.</b> Enter value of <b>{#5 X 1.4}</b> = <b>Reduced person hours of delay</b> <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	0
<b>7.</b> <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>  TBD; doing nothing yields an additional hour of delay	0
<b>8.</b> 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	2	
Serious Injury crashes	69	
Other Injury crashes	0	
Property Damage Only crashes	1,212	
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	Poor
2. Describe current pavement issues and how the project will address them.  75% of the I-270 corridor has an asphalt surface, the majority of which is severely cracked and worn. The remaining 25% has a concrete surface in fairly good condition. A 1,000-foot segment of the interstate was built over a municipal solid waste landfill and is seeing secondary compression settlement. In some areas, the settlements range from 16.5 to 33 inches, resulting in undulating distress areas with “roller coaster” type sections. This project will identify a solution for implementation consistent with the National Environmental Policy Act.	
3. Average Daily User Volume	264,100

### Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Poor
5. Describe current condition issues and how the project will address them.  There are numerous man - and natural-made barriers for access across I-270 and Vasquez Boulevard (See Attachment 1.6) in addition to freight/vehicle/pedestrian conflicts that prohibit safe access. The near-term improvements identified in the Vasquez Boulevard PEL will address these items, providing safe passage for individuals to access commercial/retail areas as well as regional trails.	
6. Average Daily User Volume	0

## H. Bridge Improvements

1. Current bridge structural condition from CDOT

A total of 12 structures are in the corridor; nine are rated as good while three structures are related as fair/poor. The majority of the structures between I-70 and I-76 are functionally obsolete and nearing the end of their useful life.

E-17-WZ: Good

E-17-AT: Fair

E-17-ZZ: Good

E-17-CB: Good

E-17-IO: Good

E-17-IN: Good

E-17-IK: Good

E-17-IJ: Good

E-17-MU: Good

E-17-ID: Fair

E-17-IE: Fair

E-17-IC: Poor

2. Describe current condition issues and how the project will address them.

The I-270 Corridor EA will identify solutions for addressing bridge conditions consistent with the National Environmental Policy Act

3. Other functional obsolescence issues to be addressed by project

Many of the interchanges in the corridor are missing ramps, which requires traffic to take a more circuitous route to access the interstate. The most notable is at the I-270 and Vasquez Boulevard interchange. This interchange is a 1960's urban cloverleaf – except that it is missing the northbound to eastbound movement. It is recognized by DRCOG as one of 18 regional bottlenecks due to the high percentage of truck traffic, seven on- and off-ramps within 900 feet, substandard interchange configuration, sharp curves on the interchange ramps slow down merging traffic, and the high number of vehicle weaving movements. If this one interchange is improved, the changes will enhance the operational performance and safety of both the mainline and the interchange. It can also translate to improvements on other state highways and arterial streets in the vicinity.

4. Average Daily User Volume over bridge

264,100

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

1. Additional information is in Attachment 1.10

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

TBD

**2. Negative impact on vulnerable populations**

Inaction has a negative consequence by increasing travel-related congestion (4 hours/day) and perpetuating unsafe situations along the functionally obsolete project area.

**3. Other:**