

Part 1

Base Information

1. Project Title	Inverness Drive West Separated Bikeway		
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	Clinton Street/Inverness Drive West from Fulton Street to Inverness Drive East, located in unincorporated Arapahoe County (See Attachment A)		
3. Project Sponsor (<i>entity that will construct/ complete and be financially responsible for the project</i>)	Arapahoe County		
4. Project Contact Person, Title, Phone Number, and Email	Ray Winn, Open Spaces Planner, 720-874-6551, rwinn@arapahoegov.com		
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i>	
6. What planning document(s) identifies this project?	<input type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FCRTTP)		
	<input checked="" type="checkbox"/> Local plan:	Arapahoe County Bicycle and Pedestrian Master Plan, 2017 (http://www.co.arapahoe.co.us/1594/Bicycle-and-Pedestrian-Master-Plan , pages: 37,39) Denver Regional Active Transportation Plan, 2019 (https://drcog.org/sites/default/files/resources/DRCOG_ATP.pdf , pages: 34, 35) North-South Regional Bicycle Corridors Study, 2018 (see Attachment G , pages: 63)	
		<input type="checkbox"/> Other(s):	
	<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
7. Identify the project's key elements .			
<input type="checkbox"/> Rapid Transit Capacity (2040 FCRTTP) <input type="checkbox"/> Transit Other: <input checked="" type="checkbox"/> Bicycle Facility <input type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FCRTTP) <input type="checkbox"/> Roadway Operational		Grade Separation <input type="checkbox"/> Roadway <input type="checkbox"/> Railway <input type="checkbox"/> Bicycle <input type="checkbox"/> Pedestrian <input type="checkbox"/> Roadway Pavement Reconstruction/Rehab <input type="checkbox"/> Bridge Replace/Reconstruct/Rehab <input type="checkbox"/> Study <input checked="" type="checkbox"/> Design <input type="checkbox"/> Transportation Technology Components <input type="checkbox"/> Other:	
8. Problem Statement What specific Metro Vision-related subregional problem/issue will the transportation project address?			

Metro Vision identifies the region’s high single occupant vehicle (SOV) mode share among commuters as an issue and envisions a shift in the transportation system towards providing greater mobility choices. The Inverness Business Park is a significant and growing employment center for the region yet lacks any dedicated and comfortable bicycle facilities to promote commuting via bike. By providing a high-quality bicycle facility with a direct connection to Dry Creek Station, the project will address this need and enhance the viability of commuting to the area without driving.

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

Arapahoe County is seeking funds to design and construct a sidewalk-level two-way separated bikeway along the west side of Clinton Street/Inverness Drive West from Fulton Street to Inverness Drive East (including funding for any necessary environmental and utility work). This project will bring a high-quality and low-stress bicycle facility to an area currently lacking any dedicated bicycle facilities and provide a safe and convenient bicycle connection from Dry Creek Station to Inverness Business Park, a significant employment center for the region. Specifically, the project will add a 10’ wide separated bikeway adjacent to the sidewalk with a minimum 3’ buffer between the bikeway and roadway (see **Attachment B** for existing and proposed cross sections). Where sufficient space between the existing sidewalk and roadway does not exist for the bikeway, the sidewalk will be relocated.

10. What is the status of the proposed project?

A bike facility on Inverness Drive West was first proposed in the *Arapahoe County Bicycle and Pedestrian Master Plan*, adopted in 2017. Further analysis and cross-jurisdictional discussions for the Denver South TMA’s *North South Regional Bicycle Corridors Study* led to the recommendation of a separated bikeway from Fulton Street to Inverness Drive East as one part of a pair of regional low-stress bicycling corridors parallel to I-25 from Lone Tree to Denver; the study envisions enhancing the viability of bicycling as a modal choice for commuting and utilitarian trips through implementation of these corridor recommendations. **Attachment C** shows the two bicycling corridors proposed in that study. The study recommends construction of a bi-directional, sidewalk-level separated bikeway on the west side of Clinton Street and Inverness Drive West (see **Attachment B**) but also notes the need for further study during preliminary and final design of the corridor segments.

As a follow-up project, Arapahoe County commenced a more detailed alternative analysis of three cross-section alternatives for the segment in December 2018: a sidewalk-level two-way separated bikeway on the west side of the street, a shared-use path on the west side of the street, and street-level protected bike lanes on either side of the street. Evaluation criteria considered included cyclist comfort and convenience, constructability, ROW requirements, and cost effectiveness. From this analysis, the bi-directional, sidewalk-level separated bikeway concept again emerged as the preferred alternative; conceptual design for this is underway and anticipated for completion in the spring of 2019.

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 See **Attachment D**, a planning-level cost estimate

\$5,920,000

2. Total amount of DRCOG Subregional Share Funding Request	\$3,492,800	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
Arapahoe County	\$850,000	14.4%
Inverness Metro District	\$727,200	12.2%
DSTMA/SPIMD	\$850,000	14.4%
	\$	
	\$	
Total amount of funding provided by other funding partners (private, local, state, Regional, or federal)	\$2,427,200	41%

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	\$190,943	\$2,190,943	\$1,110,914	\$	\$3,492,800
State Funds	\$	\$	\$	\$	\$0
Local Funds	\$809,066	\$809,066	\$809,068	\$	\$2,427,200
Total Funding	\$1,000,009	\$3,000,009	\$1,919,980	\$0	\$5,919,998
4. Phase to be Initiated Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other	Design	ROW	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.					
					<input type="checkbox"/>

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?

Inverness Business Park today is auto-centric and lacking safe, comfortable, and convenient bicycle facilities; for all but the most dedicated cyclist, bicycling in Inverness is currently not a viable modal choice. A separated bikeway along Inverness Drive West, with its direct access to numerous commercial & residential developments and to Dry Creek Station, would greatly expand opportunities for interested cyclists and represent a major step towards Arapahoe County's vision of a comprehensive active transportation network. This project is important to more than just the Inverness area because it would construct one of the first pieces of the regional north-south bicycle corridors proposed in the Denver South TMA's *North South Regional Bicycle Corridors Study*. During that study, six different jurisdictions and several private entities came together and collaboratively identified two preferred corridor alignments parallel to I-25 that would allow low-stress bicycling between Denver and Lone Tree. With its high traffic speeds and topographic constraints, Inverness Drive West is one of the most challenging segments of those corridors; constructing it will serve as an impetus for other study partners to implement their relatively simpler corridor segments and bring the regional vision closer to reality.

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

The project is located within unincorporated Arapahoe County but will tie into the City of Centennial on the north end. A separated bikeway on Clinton Street/Inverness Drive West would benefit users from both by providing a low-stress connection between Centennial and Inverness Business Park. As a segment of the Denver South TMA's vision for a continuous north-south bicycle corridor this project will ultimately serve as a regional connection to Lone Tree, Greenwood Village, and Denver as well. Additionally, the direct connection to Dry Creek Station and RTD's light rail system extends the beneficial reach of this project even further by making it a first/last-mile transit connection.

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

While most directly benefiting the Arapahoe County Subregion, this project will tie into the Douglas County Subregion on the south end and provide an important connection between the two. Inverness Business Park continues south of County Line Road; a separated bikeway along Inverness Drive West would provide cyclists coming from Dry Creek Station and residential developments to the north a low-stress connection to these places of employment, especially once Douglas County implements the recommendation for bike lanes on Inverness Parkway from the Denver South TMA study. This project is also a segment of one of the Future Regional Active Transportation Corridors identified in DRCOG's *Denver Regional Active Transportation Plan*, reflecting its regional significance. Additionally, the direct connection to Dry Creek Station and RTD's light rail system extends the beneficial reach of the project to multiple other subregions by making it a first/last-mile transit connection.

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 help reduce the region's dependence on SOVs for commuting by providing a low-stress bicycle connection through Inverness Business Park, a major regional employment center currently without any bike facilities.

Short trips are the most likely to be converted from driving to bicycling (according to DRCOG's *Denver Regional Active Transportation Plan*, the average length of a bicycle trip is 1.8 miles). **Attachment E** shows that approximately 30,000 trips with lengths of 3 miles or less are made in the project area today, and **Attachment F** shows that this number will grow to approximately 50,000 by 2040; few of those trips are made by bike today due to the lack of dedicated facilities, so providing a separated bikeway along Inverness Drive West will serve as a catalyst for converting many of these from vehicle trips to bicycle trips. Assuming that 5% of these short trips are converted to bike trips, average daily SOV trips in the area would be reduced by 1,150 at present-day travel demand levels and by 1,700 at 2040 travel demand levels (see Part 3B).

Serving as a first/last-mile connection to Dry Creek Station boosts the number of current SOV trips to and from the area that may be eliminated once the separated bikeway is constructed. A regression analysis performed for the Utah Transit Authority's *First/Last Mile Strategies Study* found a significant positive correlation between the provision of protected bike lanes at transit stations and increased ridership. Assuming a 5% increase in the project area's transit ridership once constructed, average daily SOV trips in the area would be further reduced by 100 at present-day travel demand levels and by 150 at 2040 travel demand levels (see Part 3A).

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?

Once completed, this project will enhance accessibility to Inverness Business Park from throughout the region. A separated bikeway, in conjunction with RTD's light rail system, will provide a safe, comfortable, and convenient commuting alternative to the automobile. Area employees will have a healthier option for getting to work and area businesses will be able to promote safe and convenient bicycle access to prospective employees.

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

This project will directly connect to RTD's light rail system via the existing pedestrian bridge to Dry Creek Station, effectively making it a first/last-mile connection to Inverness Business Park and allowing commuters to take combined bicycle/transit trips. Additionally, the separated bikeway is one segment of the Denver South TMA's north-south bicycle corridor vision that will ultimately provide bicycle connectivity to numerous east-west bicycle facilities, additional transit routes, and major regional destinations.

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

DSTMA/SPIMED has agreed to fund \$850,000 for the project as it was originally proposed in their *North South Regional Bicycle Corridors Study*. Inverness Metro District has agreed to fund \$727,000 as they believe this project will bring a tremendous amount of value to the district.

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)**.

This project will directly connect to RTD's light rail system via the existing pedestrian bridge to Dry Creek Station, effectively making it a first/last-mile connection to Inverness Business Park and allowing commuters to take combined bicycle/transit trips. Additionally, the separated bikeway is one segment of the Denver South TMA's

north-south bicycle corridor vision that will ultimately provide bicycle connectivity to numerous east-west bicycle facilities, additional transit routes, and major regional destinations.

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

When cyclists are mixed with pedestrians or automobiles at different operating speeds, all users are often required to adjust speeds and/or shift positions to avoid conflicts; this frequent maneuvering can negatively impact the reliability of moving through the corridor. The project will provide a dedicated bicycle facility in an area with none today, making for more predictable interaction between different modes. Additionally, the connection to RTD's light rail system will provide a more reliable commute time for those choosing not to drive to work.

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

By providing a dedicated bicycle facility where cyclists currently have to mix with either automobile traffic or pedestrians, the project will enhance safety for all users of the transportation system. The potential for modal conflicts is higher when modes with different operating speeds have to share a facility, so separating cyclists, motorists, and pedestrians is mutually beneficial. A physical element separating the bikeway from motorist lanes will clearly distinguish each mode's space and provide a greater sense of security for cyclists. The five-year crash history for the corridor (see Part 3F) does not include any crashes that involved bicycles, likely because cyclists do not currently feel comfortable on Inverness Drive West and so avoid it altogether.

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 project runs through Inverness Business Park, an established and still-growing employment center for the region; over 50,000 jobs are within one mile of Inverness Drive West, and that number is expected to approach 70,000 by 2040. Enhancing mobility options in the area through the introduction of a separated bikeway will benefit existing businesses looking to grow, as it may be used as a selling point for prospective employees with an interest in active transportation. Better multimodal access will also help attract new businesses and residents to the area.

[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 project will directly connect to RTD's light rail system, facilitating easier and more comfortable multimodal access to Inverness Business Park from across the region. While there are no other existing bicycle facilities in the area, the separated bikeway will be one of the first constructed segments of a pair of planned north-south bicycle corridors that will ultimately connect key destinations including Inverness, the Denver Tech Center, Park Meadows, and RidgeGate. Inverness Drive West is one of the longest and most challenging segments of these corridors, and its construction will help incite surrounding jurisdictions to build the other segments and represent a major step towards delivering the vision of regional bicycle corridors along I-25 established in both the *North South Regional Bicycle Corridors Study* and the *Denver Regional Active Transportation Plan*.

[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

One of Metro Visions stated targets is to boost the region's non-SOV commute mode share 10% by 2040; a lack of mobility choices is one reason so many drive alone to work today. By bringing a separated bikeway where currently no dedicated bicycle facilities of any kind exist, the project will introduce a new viable alternative to the motor vehicle for moving through Inverness Business Park. The light rail connection means people from throughout the region who commute to the area will benefit from increased mobility choices with this project. The expanded mobility choices brought to Inverness Business Park commuters by this project could reduce average daily SOV trips by nearly 2,000 at 2040 travel demand levels (see Part 3A and 3B).

[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

Any investment that makes it easier for people to embrace non-motorized modes will bring environmental benefits. By providing a viable and safe alternative to an automobile for accessing Inverness Business Park, the project will contribute to improved air quality and emission reductions in the region as more commuters choose to bike. A low-stress bicycle connection to Dry Creek Station will also help convince some people commuting to Inverness Business Park from more than a few miles away to use a combination of transit and biking instead of an SOV. FHWA estimates that 20% of all greenhouse gas emissions come from automobiles. According to the Federal Transit Administration, light rail produces 62% fewer greenhouse gas emissions per passenger mile than an average SOV, while bicycles produce none. Using the methodology provided in Section 3, this project will reduce average daily greenhouse gas emissions by 7,024 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

As a segment of the Denver South TMA's vision for a continuous north-south bicycle corridor this project will ultimately provide connectivity to both the Willow Creek Trail and the Cherry Creek Trail from the I-25 corridor.

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?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Describe, <i>including supporting quantitative analysis</i>			
The project will provide a low-stress bicycle facility along Clinton Street/Inverness Drive West that allows for safe and convenient active travel through the area. Commuters to Inverness Business Park who are interested in biking to work but hesitant to share a lane with high-speed automobile traffic will have a safe, comfortable, and convenient option for pursuing a more healthy and active alternative to driving to work.			
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?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Today, Inverness Business Park and the numerous employment opportunities it offers are largely inaccessible to those without an automobile or the means to afford one. The project will provide a direct first/last-mile bicycle connection from RTD's light rail system to many of the area's office complexes and allow people from zero-vehicle households, of which there were approximately 70,000 in the region in 2010, a reliable means for commuting there.			
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?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Describe, <i>including supporting quantitative analysis</i>			
The economic benefits of active transportation investments are well-documented; a study prepared for the Colorado Department of Health and Economics in 2016 reported that bicycling contributes approximately \$1.6 billion to the state's economy each year. Additionally, multimodal infrastructure that accomodates all transportation system users and provides multiple options for moving around makes a place more attractive to live and work. By adding a low-stress bicycle facility, this project will make Clinton Street/Inverness Drive West a truly multimodal corridor for employees and residents.			
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 belowLow	

Part 3

Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1. Current ridership weekday boardings	2,177
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	6,176	56,218	62,394
2040	7,753	68,065	75,818

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>	109	164
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)	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: {#3 X 25%} or other percent, if justified)	11	16
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	98	148
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)	1,470	2,220
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	1,396	2,109

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:

A regression analysis performed for the Utah Transit Authority's *First/Last Mile Strategies Study* found a significant positive correlation between the provision of protected bike lanes at transit stations and increased ridership. Based on this finding, it was estimated that providing a separated bikeway along Inverness Drive West would increase transit ridership in the area by 5%.

For #5, a value of 10% was used instead of 25% because the ratio of SOV commuters to HOV commuters in Arapahoe County is approximately 10:1 according to 2017 American Community Survey data. It is unlikely that people already commuting to Inverness via walking or biking would switch to transit after this project is completed.

For #7, a value of 15 miles was used instead of 9 miles because the only transit connections to Inverness are RTD's regional E and F light rail lines.

B. Bicycle Use

1. Current weekday bicyclists	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	6,176	56,218	62,394
2040	7,753	68,065	75,818

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.	1,500	2,250
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)	150	225
5. = Initial number of new bicycle trips from project (#3 – #4)	1,350	2,025
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)	1,145	1,720
7. = Number of SOV trips reduced per day (#5 - #6)	1,145*	1,720*
8. Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	2,290	3,440
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	2,175	3,268
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: According to DRCOG's <i>Denver Regional Active Transportation Plan</i> , the average length of a bicycle trip is 2.8 miles. To estimate new bicycle trips for #3, a short-trip modeling analysis (see Attachment X and Attachment X) was first performed to see how many trips between 0 and 3 miles occur in the area. As shown in Attachment X , the approximate short-trip demand along the project corridor is 30,000 vehicular trips using 2015 data and 45,000 using 2040 data. From there, it was assumed that 5% of these daily trips would be converted to bicycle trips once a separated bikeway is provided. For #4, a value of 10% was used instead of 50% because there are no other existing bike routes or facilities that serve Inverness Business Park; the closest facility, the Willow Creek Trail, is approximately one mile away and it is unlikely that many cyclists currently using that trail would divert to Inverness Drive West. For #5, a value of 85% was used instead of 30% because the ratio of SOV commuters to HOV and transit commuters in Arapahoe County is approximately 6:1 according to 2017 American Community Survey data. *The values for #7 were kept the same as the values for #6, rather than subtracting #6 values from #5 values; each new bike trip that replaces an SOV trip would reduce the number of SOV trips per day by one.		

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	6,176	56,218	62,394
2040	7,753	68,065	75,818

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: {#3 X 50%} 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: {#5 X 30%} or other percent, if justified)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	0	0
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
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	775
	2. Minority persons	1,754
	3. Low-Income households	287
	4. Linguistically-challenged persons	115
	5. Individuals with disabilities	226
	6. Households without a motor vehicle	78
	7. Children ages 6-17	1,175
	8. Health service facilities served by project	27

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	14,208
2. 2040 ADT estimate	20,700
3. Current weekday vehicle hours of delay (VHD) (before project)	0

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	0
5. Enter value of {#3 - #4} = Reduced VHD	0
6. 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
7. After project peak hour congested average travel time reduction per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). <i>If applicable, denote unique travel time reduction for certain types of vehicles</i>	0
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.	
9. If different values other than the suggested are used, please explain here:	

F. Traffic Crash Reduction

1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (<i>most recent 5-year period of data</i>)		
Fatal crashes	0	
Serious Injury crashes	4	
Other Injury crashes	11	
Property Damage Only crashes	83	
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	

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*).

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	Good
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0
Bicycle/Pedestrian/Other Facility	
4. Current bicycle/pedestrian/other facility condition	Poor
5. Describe current condition issues and how the project will address them. Inverness Drive West has no dedicated bicycle facilities, and the existing sidewalks are not wide enough to safely accommodate cyclists and pedestrians.	
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 <i>(identified and calculated by the sponsor)</i>	
1.	
2.	
3.	
J. Disbenefits or Negative Impacts <i>(identified and calculated by the sponsor)</i>	
1. Increase in VMT? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?

No. Conceptual design is anticipated for completion in spring 2019, but final design will need to be prepared before construction.

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.

Yes. Available right-of-way in the corridor is limited; Arapahoe County is involving Inverness Business Park in the conceptual design and will purchase additional right-of-way as needed for the bikeway.

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/transformational?

Yes. The Inverness Drive West bikeway is one segment of a longer regional low-stress bicycle corridor between Denver and Lone Tree envisioned in the Denver South TMA's *North South Bicycle Corridor Study*, and its implementation will act as an impetus for other partners in that study to design and construct their corridor segments.

5. Does the agency have capacity and expertise to manage a federal project?

- a. Explain experience, approach, etc.

Yes. Arapahoe County Public Works Department will manage the design and construction of the project and they have a vast amount of experience managing federal projects.

6. Is the project a next logical phase of a project funded in previous TIP cycles?

No

7. Of the partnerships described in Section A, Question 7, are the partnerships providing funding?

- a. Describe the partnerships and funding of such.

Yes. DSTMA/SPIMED has agreed to fund \$850,000 as this alignment comes from their *North South Regional Bicycle Corridors Study*, Inverness Metro District has agreed to fund \$727,200 as they believe this facility brings a tremendous amount of value to the district. Arapahoe County is committed to funding alternative transportation and this alignment is also in accordance with their *Arapahoe County Bicycle and Pedestrian Master Plan*.

8. Are there any other "special considerations" the committee should consider in evaluating the application?

Yes. This project marks the start of creating a new low-stress regional bicycle and pedestrian corridor that will be able to offer residents a practical multimodal option for accessing major employment centers. This facility is identified as the most challenging segment of the multimodal corridor, and its construction will incite the rest of the segments to be completed with limited resources and acquisitions. Constructing this facility first sends a clear message to residents of this metro region that multimodal transportation is a priority.