

TIGER III CDOT Pre-Application Form

- i. **Project Title:** I-25 Dillon / Eden Interchange in Pueblo, Colorado
- ii. **Description:** This new access to I-25 requires construction of a new bridge over I-25 at Platteville Boulevard/ Dillon Drive and new on- and off-ramps to I-25 south of that bridge. These new ramps will replace the existing ramps at the south half of the Eden Interchange which would be removed. This configuration, called a “split diamond interchange,” provides all of the movements of a typical “diamond” interchange except the freeway connections are split between two nearby roads. In this case, the connections will be from Platteville Boulevard/ Dillon Drive and Eden Road. A new one-way frontage road east of I-25 and a two-way frontage road along the west side of I-25 will connect the south half of this interchange at Platteville Boulevard/ Dillon Drive with the north half at Eden Road. The System Level Feasibility Study, the Interstate Access Request and the NEPA process have all been completed.

The interchange improvements provide more direct access for Pueblo West commuters to I-25 and improved access to a growing commercial and retail area.

iii. **Project Application Selection Criteria:**

Economic Competitiveness: Over the years, the Pueblo area has experienced varying degrees of prosperity; however, its economic performance generally lags behind that of the Nation and State of Colorado. This project would give the City a substantial economic boost. The majority of the project’s area of impact includes a tax-increment financing (TIF) zone established by the Pueblo Urban Renewal Authority (PURA). The 2009 assessed valuation of properties in this area is \$8,943,770. On the basis of financial calculations developed by PURA, the forecasted assessed valuation of the area is anticipated to grow by an additional \$24,631,233 over the next twenty years. The total assessed valuation of the area is anticipated to be \$33,575,003 by 2030.

The TIGER funding would allow the project to be constructed in one phase rather than the two planned phases. This reduces the total project cost by \$1.1 million through eliminating the need to mobilize construction crews a second time.

Job Creation and Economic Stimulus: As a rule of thumb, for every \$1 million dollar investment in construction projects, 20 jobs are created. This is a \$20 million project; therefore 400 jobs can be expected to be created during the construction phase. Admittedly, at any one time, not all of these jobs would be required. Construction is anticipated to begin mid summer 2012 with completion in 18 to 24 months. In addition, the on-site construction workers will provide immediate stimulus to the local economy as staff spends resources to acquire local goods and services.

- iv. **Total Project Cost:** \$22,600,000
- v. **Project TIGER III Request Amount:** \$11,300,000
- vi. **Project TIGER III CDOT Match Amount (source):** \$5,650,000 CDOT (RPP) and \$5,650,000 City of Pueblo.

- vii. Project Type:** Urban Interchange including new Bridge
- viii. Whether the project is requesting a TIGER II TIFIA Payment:** No
- ix. Type of jurisdiction where the project is located:** Urban, Economically Distressed Area
- x. NEPA Status of Project:** The NEPA process is complete. The Environmental Assessment was signed in January 2011 and the Finding of No Significant Impact was approved in July, 2011.

I-25 NORTH WIDENING RECONSTRUCTION: From Academy Boulevard North to Interquest



Project Description: Total length: 4.52 mile; Widening 4 to 6 lanes (Concrete Pavement): From Academy North to Interquest							
I-25 NORTH WIDENING RECONSTRUCTION				Cost(Thousand Dollar)			
Design				270			
Construction				35000			
2010 ADT: 83000				2010: PM Volume/Capacity: 1.04			
2035 ADT: 107000				2035: Non-Action: PM Volume/Capacity ratio: 1.34			
Life cycle benefit cost analysis	Vehicle Operating Cost Savings	Time & Reliability Savings	Value of Personal Time Savings	Logistics Cost Savings	Environmental Benefits	Total Cost	Benefit/Cost Ratio
I-25 North: Widening from 4 to 6 lanes; Total length: 4.52 mile	36.8	23.6	313.2	3.9	1.8	65.7	5.78

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i. **Project Title:** Powers Boulevard and Peterson Air Force Base Interchange

ii. **Short Project Description:**

The project will construct a new interchange on Powers Blvd (SH 21) at the entrance to Peterson Air Force Base at Airport Road and Stewart Avenue. The project will construct free-flow access ramps for ingress and egress movements at the west gate of Peterson AFB. The west gate from Powers Boulevard is the Base's primary access. In addition, Stewart Avenue will connect to Airport Road linking Base access to the local street system. The project will also improve access to local businesses and future land development sites.

The project does not include widening of Powers which is planned to be widening from 4 to 6 lanes within the interchange limits and from Platte Avenue, on the north side, to Fountain Boulevard, on the south. This widening can be phased with a future widening project as dictated by traffic demand. The estimate for this widening is approximately \$10 Million. Currently, the Powers Corridor has \$12 Million identified in the STIP (FY 13 and 14) which could be used for this additional widening if necessary. The project costs and funding are as follows:

Funding sources:

• Local Pikes Peak Rural Transportation Funding (Already expended on right of way preservation)	\$2.5 Million
• Public Lands Highways Discretionary Program (Currently Obligated for ROW and design)	\$2.3 Million
• With Anticipated TIGER III	\$30 Million
• Future FY 13 CDOT RPP Funds (STIP'ed)	\$2 Million
• Future FY 14 CDOT FASTER Safety Funds (State) (STIP'ed)	\$10 Million
Total	<u>\$46.8 Million</u>

iii. **Project Application Selection Criteria (which Primary Selection Criteria will the application be written for?):**

- a. Long Term Outcomes:
 - i. State of Good Repair
 - ii. Economic Competitiveness
 - iii. Livability
 - iv. Environmental Sustainability
 - v. Safety
 - vi. Cost Benefit
- b. Job Creation and Economic Stimulus

The application will be written based the primary selection criteria of Long Term Outcomes. However, Job Creation and Economic Stimulus will be mentioned.

a. Long Term Outcomes:

- i. **State of Good Repair:** *the US DOT will give priority to projects that have a significant impact on desirable long-term benefits (an emphasis on projects that minimize the life-cycle costs and improve safety).*

The Powers Corridor is a high priority asset to the Region as it is the second busiest corridor in the Pikes Peak Region. This Long term investment is committed in the regions strategic plan to upgrade Powers Boulevard to a freeway. It is expected that the maintenance commitment will continue for Powers Boulevard due to its regional and national importance to provide mobility and access to several military bases and regional facilities including Peterson AFB, the US Air Force Academy, Fort Carson, Schriever AFB, and the Colorado Springs Municipal Airport.

The Interchange at Powers and Airport will replace an existing at-grade interchange with a grade-separated interchange and life-cycle costs will be minimized to determine the most cost effective roadway surface, bridge and retaining wall structures necessary to complete the interchange.

- ii. **Economic Competitiveness:** *contribute to the economic competitiveness of US (Medium to Long Term).*

A new interchange will provide better access to adjacent property and the Peterson Air Force Base. Much of the surrounding property is undeveloped. There is interest from local development to move forward with a new development plan called the “Westgate Development at Powers” which is located on the west side of the interchange. This planned development will provide additional employment in food retail and commercial office space.

In addition, a 2006 study conducted by Peterson Air Force Base anticipates the Base will grow from the currently population of 11,000 personnel to potentially over 31,000 personnel for the build-out year of 2030. The completion of the interchange is necessary for this planned growth, as the West Gate is the primary access into Peterson AFB.

- iii. **Livability:** *improve the quality of living and working environments.*

The Interchange design will fit into the planning efforts by Peterson AFB and the surrounding land uses to provide an attractive, safe and cohesive project that meets the needs of the surrounding community. The project will provide connectivity to local trail systems and provide modern access to handicapped and disadvantaged populations. The added investment into the project will enhance the living and working environment for the surrounding community and provide a more “livable” section on Powers Boulevard by the following:

- a. enhancing the local trail system for planned and existing trails (Powers Trail and East for of Sand Creek Trails);
 - b. providing safer and more efficient access for Peterson Air Force Base employees and visitors;
 - c. facilitating more economic growth with improved access to vacant properties on the west side of the interchange by providing direct access to planned businesses and restaurants serving the local community and a growing Peterson AFB;
 - d. complimenting Peterson AFB's vision to implement a based-wide transit system that can shuttle personnel from parking lots to work location. The Interchange access improvements to the west gate will provide a more cohesive transportation network from commuter vehicle to base shuttle services.
 - e. reducing travel time along the corridor and travel time to access the AFB and surrounding businesses.
- iv. **Sustainability**: *improving energy efficiency, reducing dependence on oil, reducing green house gas emissions and benefiting the environment.*

Building the interchange would accommodate higher traffic volumes with less congestion. Localized carbon monoxide concentrations would be well below the national ambient air quality standard with total VMT based on micro scale modeling of the region. At a nearby at-grade intersection located at Powers Boulevard and Constitution Avenue, the modeled carbon monoxide concentrations for a future freeway would be 5.6 parts per million in 2025 and 6.0 ppm in 2030. These projected 8-hour average concentrations would not exceed the national health standard of 9 parts per million.

Compared with the current at-grate intersection at Peterson, the interchange would have lower emission rates, and less idling emissions. Less idling emissions and improve traffic flow will also contribute overall fuel savings compared to the current congested intersection.

In summary the a new interchange would provide the following benefits:

- Improved water quality with a new drainage system.
- Lower Greenhouse Gas Emissions with reduced congestion.
- Provide better pedestrian trail access.

- v. **Safety**: *improving the safety of U.S. transportation facilities and systems.*

A new interchange at Airport Road and Powers will significantly reduce the number and severity of accident types by replacing the existing at-grade intersection with a

full movement interchange that will meet current standards for freeway access. Results shown below from a traffic study for the Powers Environmental Assessment determined the rate of accidents during a two year period that was nearly double the expected accident rates for this type of intersection.

<u>No. of Crashes</u>	<u>Rate (per million vehicles)</u>
49	1.920

It is anticipated that the accident rate will decrease by 4 times the current accident rate based on findings of similar interchange projects on Powers where comparisons were made with an existing at-grade intersection and the post construction of a full movement interchange.

vi. **Cost Benefit:**

The Pikes Peak Area Council of Governments performed a benefit-cost analysis of widening Powers Boulevard between US 24 and Platte Avenue to determine benefit-cost for the Airport and Powers Interchange. **The results, as shown in exhibit 10 yielded a benefit-to-cost of 8.6 revealing a very high benefit to the community.**

b. Job Creation and Economic Stimulus

Additional Job Benefits

Additional retail jobs are expected by completing Powers Boulevard as a freeway according to a 2006 economic study for the Powers Environmental Assessment.

“The corridor has previously experienced growth in retail and light industrial driving the need for additional mobility and access improvements along the corridor. As a result of upgrading Powers to a freeway, it is anticipated that 6863 additional retail jobs will be created along the 11-mile Powers.” – 2006 Powers EA Economic Study.

A conservative estimate of job growth for the Interchange was determined from this study. The Peterson AFB Interchange and associated access improvements are expected to contribute approximately one-twelfth of the total retail growth or about 572 jobs. In addition, the construction of the project is expected to create another 333 jobs.

This study did not account for planned additional military personnel from a 2006 Transportation Study completed by Peterson AFB. According to that study, the Base is anticipating to grow from the currently population of 11,000 to potentially over 31,000 for the build-out year of 2030.

c. **Total Project Cost:** \$35 Million

d. **Project TIGER III Request Amount:** \$30 Million

e. Project TIGER III CDOT Match Amount (source):

CDOT has acquired additional local, and federal and State funding to prepare this project for construction. Additional source already contributed include:

- \$2.5 Million recently spent on right of way preservation (Local Pikes Peak Rural Transportation Funding).
- \$11.9 Million of Federal and State funding recently spent (7th Pot for the Powers EA and conceptual design).
- \$2.3 Million from the Public Lands Highways Discretionary Program (for additional right-of-way and design). Approximately 10% spent towards design and right of way.

f. **Project type:** Highway

g. **Whether the project is requesting a TIGER II TIFIA Payment:** NO

h. **Type of jurisdiction where the project is located (urban or rural):** Urban

i. **NEPA Status of Project:** A FONSI was completed January 2011 for the Powers Environmental Assessment. Obtaining the right-of-way for the project is nearly complete (about 85% complete). The project will be constructed using a design-build to expedite the procurement process. If successful with a TIGER grant, the project can be ready for construction with two months of receiving funding.