Mobility Enhancements for Regional Growth & Equity (MERGE) Project

Multimodal Project Discretionary Grant Opportunity (MPDG)
Grant Application
May 2024

MERGE Project Highlights:

- To date, the project has received multiple "Highly Recommended" and "Medium-High" ratings from previous RAISE and MPDG pursuits.
- The 35th & 47th Avenue crossings in the project are used heavily by students and families walking, rolling, and biking.
- The 35th & 47th Avenue interchanges would realize immediate safety benefits by reducing approximately 40% of the crashes through the elimination of signals at the at-grade section.
- Given the asset lives of major elements of the project, approximately \$6M in discounted residual value benefits will be delivered.
- The 2050 population forecast for the state is 7.48M, with 6.3M along the Front Range (Greeley's region), or 85% of the total population.
- The project will increase travel time reliability for freight movement through the City of Greeley.
- Construction will result in the creation of 1,000 job years.
- A reduction of 40% of air pollutants is expected as a result of the project.
- GHG emission reductions will result in a benefit of \$6,957,000 for a 7% discount rate over 20-years.
- School bus service is not provided within 3 miles of high schools or 2 miles of middle schools in the district, making walkability and the public transit heavily used by students.
- The entire micro-transit fleet will be 100% powered through solar arrays located at the mobility hub.
- The project is expected to have an Individual Categorical Exclusion (ICE).



Project Description



The City of Greeley, Colorado submitted a grant application as part of the FY2022 & FY2023 MPDG Notice of Funding Opportunity. The project qualified for MPDG grant funding but was not selected for funding. The feedback received during the debrief process has been addressed in this grant application. The meeting minutes from both meetings are in **Appendix A** for ease of review as well as addressed throughout the application narrative.

Project Description

The City of Greeley is the county seat of Weld County. From 2010 to 2020, the population of Weld County grew

To date, the MERGE project has received "Highly Recommended" and 2 "Medium-High" ratings from recent USDOT Federal Funding pursuits with RAISE and MPDG.

30.1 percent making it the fastest-growing metro area in Colorado and the fourth fastest-growing metro area in the country. Of the population increase, 96 percent were people of color specifically residing in City of Greeley. The median age in the City of Greeley is 31.5 years old, which is significantly lower than the national average of 38 years old. The University of Northern Colorado and the Aims Community College further add to the youthful culture in City of Greeley and have a combined enrollment of over 22,000 students. It is essential for a city with a growing, diverse, and young population to facilitate infrastructure and mobility enhancements to meet the needs of its residents not only today but also in the future. This is a pivotal situation in the City of Greeley, Colorado today.

The proposed Mobility Enhancements for Regional Growth and Equity (MERGE) project is a public transit-oriented project that includes construction of a regional new mobility hub between two grade-separated interchanges at 35th Avenue and 47th Avenue. The mobility hub allows for critical regional/local connectivity as well as safe pedestrian and micro-mobility friendly connection between the north and south sides of the City of Greeley. The MERGE project thus incorporates multiple transportation components to meet the needs of a fast-growing, diverse, and young community. The project removes the separation US Highway 34 creates between the north and south portions of the City of Greeley. Recent growth in surrounding communities, including the City of Greeley, has caused an increase in traffic. The City of Greeley is dedicated to removing mobility barriers, ensuring equity and accessibility for all, reducing greenhouse gas emissions, and looking to the future needs of the community and the North Front Range Metropolitan Planning Organization (NFRMPO).

The City of Greeley previously submitted the <u>35th Ave Interchange Reconstruction</u> project as part of the 2021 RAISE grant NOFO. **While the City was not awarded funding, the project was "Highly Recommended"**. The City of Greeley subsequently submitted the <u>MERGE</u> project, which included both the highly recommended 35th Ave Interchange project, the 47th Ave Interchange project and a Mobility Hub for the Multimodal Project Discretionary Grant Opportunity (MPDG) funds in both FY 22 and FY23. While funding was not awarded to the MERGE project for either pursuit, the project was awarded a Medium-High rating both years with continued improvement overall each year.

Due to the proactive steps taken by the City of Greeley, the region has completed multiple studies and is now well positioned to seek funding under recently passed IIJA to ensure the project's success. In January of 2019, a <u>Planning and Environmental Linkages (PEL) Study</u> was completed by the Colorado Department of Transportation (CDOT) for US Highway 34 between Larimer County Road 29 and Weld County Road 53 within Larimer County, Weld County, and Cities of Evans, Greeley, Loveland, Kersey, Garden City, Town of Johnstown and Town of Windsor.

The goal of the early integrated planning efforts is to improve transportation decision making while streamlining subsequent alternatives analysis during the National Environmental Policy Act (NEPA) process. While the <u>US 34 PEL study</u> covered an area much larger than the City of Greeley's Multimodal Project Discretionary Grant (MPDG) project location, the PEL includes 35th and 47th Avenue interchanges and are identified as high priority. The project is also identified as a Tier 1 project in the NFRMPO Long Range Project list and is on the <u>MPO's 2024-2027 TIP</u>.

After the completion of the PEL, the Colorado General Assembly passed an aggressive greenhouse gas reduction bill, H.B. 19-1261. This bill ensures any future projects will result in a more balanced and sustainable, and less auto-dependent, transportation system over time. The planned mobility hub meets these requirements and is a key component of the project.

Each component of the project can be constructed separately as an independent utility and is presented accordingly in this application. However, for ease of construction, schedule, budget efficiency, and less impact to the traveling public, the ideal scenario would be for all the components to be constructed together. This was discussed with FHWA/CDOT staff in a meeting to discuss the project and there was general agreement that the approach was logical. The project Concept Map, **Figure 1**, can be viewed below and on the **project website**.



Figure 1: Concept Map

The City's MERGE project will include the conversion of at-grade intersections with US 34 and 35th Avenue and US 34 and 47th Avenue into grade-separated interchanges. Both interchanges include the addition of auxiliary lanes in both directions along the regional connector. US 34 and 35th Avenue includes the construction of a tight diamond configuration with a partial cloverleaf on-ramp in the southwest quadrant of the interchange. US 34 and 47th Avenue includes the construction of a diverging diamond interchange. The project will alleviate the separation between the north and south portions of the City of Greeley. Removal of the at-grade intersections at 35th Avenue and 47th Avenue will lead to the free flow of east-west traffic through this part of the US 34 corridor thereby improving travel times, reducing congestion, and improving safety metrics (particularly the reduction of rear end crashes). US 34 and 35th Avenue have been the site of major multivehicle crashes in recent years, involving commercial vehicles, transit vehicles, and personal automobiles.

Image 1: Crash between Multiple Vehicles at US Highway 34 and 35th Avenue - MERGE Site



The MERGE project will eliminate a significant mobility barrier and safety concern for active transportation users (at-grade crossings are used heavily by students walking, rolling, and biking) which, when coupled with other multi-modal improvements, will further enhance corridor mobility. The regional bus station at the center of US 34 between interchanges will facilitate a higher level of shared commuting to Denver and the Denver International Airport via Bustang and Flex which connects to Boulder and Fort Collins (as shown in **Figure 2**). Additionally, the Greeley Evans Transit (GET) will operate a bus service with direct connectivity between the Greeley mobility hub and the transit hub in Loveland. A proposed shared-use underpass of US 34 supports regional trail connectivity in all directions and provides access to the transit station. Overall, the mobility hub supports active and sustainable transportation with modal flexibility. The combination of new grade-separated interchanges, regional and local transit service, and active transportation infrastructure will reduce the number of cars on the road leading to a reduction in emissions, vehicles operating costs, and wear and tear on state and local infrastructure (**6% reduction in AADT is expected**).

Sustained growth and economic development along the corridor have increased the need to enhance multimodal safety, eliminate barriers to jobs, reduce recurring congestion, and improve regional mobility. The MERGE project is vital to the realization of these important outcomes for the City of Greeley and NFRMPO and will bring about a continuity of mobility conditions along this key travel corridor.

The regional mobility hub with the local connection will also allow the City of Greeley to reconfigure its current local transit systems to be more responsive and provide flexible schedules and routes including a new micro-transit options and regional connections to support the needs of the traveling residents. This transformative project will provide better opportunities for lower income residents through greater accessibility to employment, health services, essential services, and recreational activities by breaking the barrier that US 34 is today and providing a grade-separated multimodal underpass.

Figure 2: Conceptual Alignment Assumptions – Loveland to Greeley



Loveland to Greeley (US 34)

Conceptual Alignment Assumptions (to be refined)

- Technology: Enhanced bus similar to Poudre Express
- Conceptual Service Plan: 30 min service plan
- Details: Express bus service between Greeley (UNC) and Loveland (Civic Center)
 - On NFRMPO 10-year plan
 - Anticipates improvement to US 34
 - Builds on knowledge from 34-Xpress
 - Connects to I-25 mobility hub
 - Assumes Kendall Parkway connection





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Project Location

MERGE is in the heart of the City of Greeley along US Highway 34. The City of Greeley is designated as a The MERGE project crossings are used heavily by students and families walking, rolling, and biking.

Rural Area with a population of 108,795 according to the 2020 Decennial Census. According to the Eligible Project Costs, the MERGE project will qualify for all categories (MEGA, INFRA, and RURAL). The project will be approximately two and half miles west of the connection with US Highway 85, a north to south highway of regional importance. US Highway 34 is a critical east-west transportation corridor for northern Colorado's fastest growing communities and an important regional connection between the region's largest population and employment centers: City of Greeley, City of Fort Collins, and City of Loveland. This project will have a benefit to a Historically Disadvantaged Communities in Greeley surrounding the MERGE project as shown in **Figure 3**.

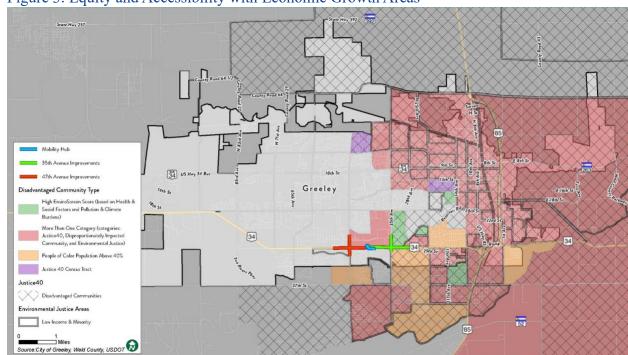


Figure 3: Equity and Accessibility with Economic Growth Areas

The location of the new mobility hub is an ideal location to provide an easy means of access to this central area of Greeley as well as local/regional connectivity. The MERGE project will provide various connections, new and existing, and fill gaps within the existing transit network. Figure 4 shows the amenities that will directly benefit from the mobility hub's location.

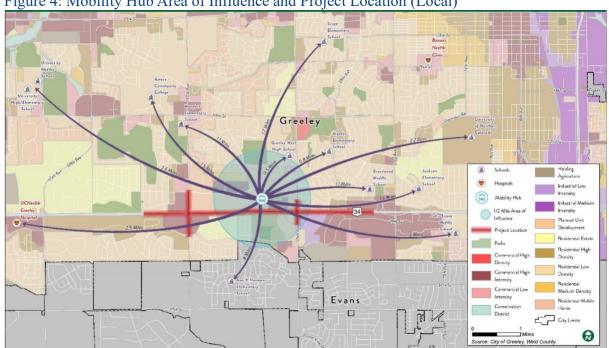


Figure 4: Mobility Hub Area of Influence and Project Location (Local)