1.0 | Project Summary Information

1.1 Project Name (35 letters max) Lehi TIGER Match - SR92 Ped Bridge

1.2 Project Type Bridge - New Construction

1.3 Limits (descriptions should be identifiable. i.e: intersections, place names, landmarks, 35 characters max) SR92 @ Rail Trail

1.4 Project Description (summary of project) The TIGER grant awarded for the Wasatch Front provides $20,000,000 to help construct many of the projects that were identified in the First/Last mile study. This is a regional effort, and was led for Utah County by MAG. Match is needed for these DOT TIGER funds. Because UTA is leading the TIGER project grant and coordination MAG, Lehi and UTA agreed that UTA should be the applicant for this match. Programing the match required for this pedestrian bridge will ensure that this specific project is done, and will also help ensure that the whole program being competed with the TIGER funds will move ahead. If this request is not funded and other matching sources cannot be found, the project would likely be removed from the TIGER program. Other projects along the Wasatch front may be able to fill the gap to use the TIGER funds; though if not enough are able to be cleared it could negatively impact the TIGER program and award. These first/last mile projects greatly increase our region’s non-motorized transportation network, and merge that network with a robust transit network for unprecedented synergy in alternative transportation. This pedestrian crossing is a major safety improvement, greatly reducing the number of pedestrians that need to cross SR92 at the Triumph Blvd. signal. It connects the silicon slopes area to the Murdock Canal Trail, and on to the Lehi FrontRunner station. It extends that network north towards Salt Lake County via the Porter Rockwell trail.

1.5 Sponsor (jurisdiction, agency name) Utah Transit Authority

1.6 Contact Information
   Project Manager Richard Miller
   Office Phone 801-236-4728
   Cell Phone 801-231-6515
1.7 Cost Estimate

**Total Project Cost** (include matches, pledged funds, etc.) $5,282,740

**MPO funding request** (include any match) $828,351 needed, no match included

- **PE Cost** Already Done
- **ROW Cost** None Anticipated
- **Construction Cost** $4,277,670
- **Soft Match proposed for project** None

1.8 Project Rank (rank this project compared to your other submittals)

1

1.9 Air Quality Benefit (summarize CM/AQ Report, NA for non-CM/AQ eligible projects)

This pedestrian bridge is a key link in the regional active transportation network, connecting the Murdock Canal Trail north to the Porter Rockwell Trail. It is within biking distance of the Lehi FrontRunner station. With this proximity to existing improvements, and the connections to the Silicon Slopes area and other Lehi work centers, this improvement will support commuting bike and walking trips in addition to any recreational value it adds. A robust trail network, especially one connected to transit infrastructure like the TIGER program is constructing, attracts more users away from their single occupancy vehicles, resulting in air quality improvements.
2.0 | Project Scope

Always enter “NA” rather than leave an answer blank...

2.1 Describe purpose and need of project.
The purpose of this project is to provide a robust regional active transportation network of trails and walkways that will attract commuters and other users away from single occupant vehicles. The specific need at this site is for a safer way for the Rail Trail to cross SR92. Most of the funding has been secured for this project with TIGER grant funds paying for $3,254,389 and UDOT state funds contributing $1,200,000. To be able to get those TIGER and UDOT funds, $828,351 is needed in funds programmed by MAG.

2.2 Describe existing service/conditions
Currently, trail users need to exit the Lehi Rail Trail and use the side walks and crosswalks along the very busy Timpanogos Highway to continue their travel. This detour is over a quarter of a mile long, and crosses nine lanes of traffic at a very high volume intersection. Though the current crossings are built to required safety standards, this crossing of such a high volume highway does compromise the safety of trail users. The number of pedestrian and bike users crossing the highway also delays traffic flows on SR92.

2.3 Highway Project Information (for non-highway projects go to 2.4)

2.3.1 State Route # or Federal Aid Route #
N/A

2.3.2 Beginning Mile Post
N/A

2.3.3 End Mile Post
N/A

2.3.4 Length of project
N/A

2.3.5 Existing and proposed number of Travel Lanes
N/A

2.3.6 Current and proposed width of facility (detail ROW, lanes, shoulders, ped/planter).
N/A

2.3.7 Facility surface type.
N/A

2.3.8 Describe how project is consistent with local or agency plans.
N/A
2.3.9 Describe how project incorporates ITS needs.
N/A

2.3.10 If phased or segmented, describe how the phase has logical termini and what will future phases consist of.
N/A

2.3.11 Is project being coordinated with or constructed with a larger project?
N/A

2.3.12 Describe how project will alleviate congestion on this or other facilities.
N/A

2.3.13 Describe any traffic improvements. (i.e lanes, signal coordination, ITS, turn lanes, bus pullouts, etc.)
N/A

2.3.14 Describe any safety improvements for vehicular and pedestrian traffic. (i.e. raised median, channelization of turn movements, barriers, parkway strips, etc.)
N/A

2.3.15 How are complete streets addressed with this project? (plan for pedestrians, bikes, transit, trails, ITS)
N/A

2.3.16 Describe traffic control changes at intersections. (include info to warrant changes)
N/A

2.3.17 What right-of-way is already secured?
N/A

2.3.18 What additional right-of-way is needed?
N/A

2.3.19 Describe utility work to be performed and indicate who will do the work.
N/A

2.3.20 What type of environmental work will most likely be needed?
Categorical Exclusion

2.4 Non-Highway Projects (Transit / ITS / Active Transportation, Park and Ride, etc.)

2.4.1 Transit Route #
This improvement gives more homes and businesses better bike access to the
FrontRunner line one mile away on the trail. Some pedestrians will also use that connection. Also directly accessible by this bridge are stops on routes 863 between Adobe/Xactware and the Lehi Station and 807 from UVU/Pleasant Grove to the surrounding business areas and the Lehi station.

2.4.2 **Length of project**
Approx 260' bridge with 800' of trail tie in (400' on each side), and connections to the Murdock Canal Trail.

2.4.3 **What is the expected use of the facility or program?**
Lehi Rail Trail sees significant use. With the increases seen on the Murdock Canal Trail, and with the improved ease of travel this bridge will provide, usage is anticipated to be much higher than these older counts.

2.4.4 **What services are provided in the operating of this project?**
This is a capital project, no funds are requested for any operations.

2.4.5 **Describe any equipment to be purchased** (buses, ITS, etc.).
The capital improvements for the grade separated crossing only.

2.4.6 **Describe how project is consistent with local or agency plans.**
This project is on the TIP, and is in the MAG long range trail network plans. It is also consistent with Lehi’s transportation plans.

2.4.7 **Describe how project incorporates ITS needs.**
Reduces the use of the pedestrian crossing signals at the SR92/Digital Drive intersection.

2.4.8 **If phased or segmented, describe how the phase has logical termini and what will future phases consist of.**
The project is not phased, it will all be constructed at once in 2020. One could consider this a critical connecting phase for the regional trail system that has already been constructed in the area. It greatly enhances investments already made in the Lehi Rail Trail and the Murdock Canal Trail.

2.4.9 **Is project being coordinated with or constructed with a larger project?**
The placement of the trail and bridge is being planned to the extent possible to allow for future installation of TRAX light rail in the rail corridor.

2.4.10 **Describe how project will alleviate congestion on this or other facilities.**
Reducing the number of pedestrians crossing SR92 at Digital Drive will improve traffic flow and congestion on the highway.

2.4.11 **Describe any traffic improvements.** (i.e lanes, signal coordination, ITS, turn lanes, bus pullouts, etc.)
Pedestrian/Bike Bridge
2.4.12 Describe any safety improvements for transit and pedestrian traffic. (i.e. raised median, channelization of turn movements, barriers, parkway strips, bridges, etc.)

The grade seperated trail crossing will dramatically reduce the potential for vehicle and pedestrian conflicts, greatly increasing the safety of the Digital Drive intersection.

2.4.13 How are complete streets addressed with this project? (plan for pedestrians, bikes, transit, trails, ITS)

See 2.4.12 answer

2.4.14 What right-of-way is already secured?
Likely all of the needed ROW is secured, UDOT owns the SR92 ROW, which crosses the rail corridor UTA owns that the trail is in.

2.4.15 What additional right-of-way is needed?
Sliver parcels could be needed, but this is not very likely.

2.4.16 Describe utility work to be performed and indicate who will do the work.
N/A, unless the pillar in the middle of SR92 has utility conflicts, which is not likely.

2.4.17 What type of environmental work will most likely be needed?
Categorical Exclusion

2.5 Facility Design

<table>
<thead>
<tr>
<th></th>
<th>Current Conditions</th>
<th>Design Year 2020</th>
<th>Design Year w/o Improvements</th>
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<tr>
<td>Average Daily Traffic</td>
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<td>Level of Service</td>
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<td>Functional Class</td>
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</tr>
<tr>
<td>Transit Ridership</td>
<td>Enter Text</td>
<td>Enter Text</td>
<td>Enter Text</td>
</tr>
<tr>
<td>Ped/Trail Usage</td>
<td>0 as the bridge is not in place.</td>
<td>65K - 111K per year based on surrounding trail usage.</td>
<td>Much less because at grade crossing is a major barrier.</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Park and Ride Usage</td>
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</tr>
</tbody>
</table>
3.0 | Project Ranking

The following categories will be used by MPO staff to score each project. The points associated with each category show what total points MPO staff can give. MPO staff’s recommendations will be made available to the MPO TAC Committee for their use in making final project selection recommendations. MPO staff ranking is a tool to aid the MPO TAC Committee in their final selection. The committee is not required to pick projects solely on MPO staff ranks. Please note, if questions pertinent to the project are not answered, zero points will be given.

3.1 Congestion Relief (25 Points)
Explain if the project...

a) Provides an alternate transportation facility that corrects an identified congested problem?
Provides a grade separated crossing of SR92, reducing the number of pedestrians and cyclists crossing the highway at Digital Drive. This helps alleviates congestion problems on the highway.

b) Reduces congestion by reducing the number of vehicles.
Improving the active transportation rail networks encourages alternative transportation use, which reduces the number of SOV’s on our road networks.

c) Reduces the need for additional highway lanes for peak hour capacity.
Improving the active transportation rail networks encourages alternative transportation use, which reduces the number of SOV’s on our road networks.

d) Increases the efficiency of transportation system through traffic management measures.
Improving the active transportation rail networks encourages alternative transportation use, which reduces the number of SOV’s on our road networks.

e) Adds turning movements to relieve a congested intersection.
N/A

3.2 Mode Choice (25 points)
Explain if the project...

a) Benefits multiple transportation systems (transit and highway, pedestrian and transit). Benefits pedestrians and cyclists by installing the pedestrian bridge. This connects more areas directly to the Murdock Canal Trail, which in turn connects with Transit at the Lehi FrontRunner station. This bridge also directly benefits vehicles on SR92 by decreasing the number of pedestrians using the Digital Drive crosswalks.

b) Promotes alternative transportation solution to SOV use.
Improving the active transportation rail networks encourages alternative transportation use, which reduces the number of SOV’s on our road networks.
c) Creates or improves linkages between transportation modes.
   See response to a. above.

d) Reduces physical, psychological, or economic barriers to carpool, bike, walk, or transit use.
   Crossing of a major highway is a barrier, both physically and psychologically, to alternative
   transportation users. This eliminates a major barrier on the regional trail network.

e) Provides incentives to carpool, bike, walk, or transit use.
   Improving the active transportation rail networks encourages alternative transportation use,
   which reduces the number of SOV's on our road networks.

3.3 Environmental Quality (15 points)
Explain if the project...

a) Provides cost effective emission reductions (air quality score).
   Improving the active transportation rail networks encourages alternative transportation use,
   which reduces the number of SOV's on our road networks.

b) Minimizes environmental impacts or reduces existing impacts (e.g. air/water/noise pollution).
   Improving the active transportation rail networks encourages alternative transportation use,
   which reduces the number of SOV's on our road networks.

c) Enhances the natural, cultural, or historic environment.
   This improvement encourages active transportation commuting and also provides recreation
   opportunities for residents and workers of the area. Both have a positive health impact on our
   culture.

d) Mitigates invasive impacts to existing neighborhoods/commercial areas (minimal relocations).
   No relocations or other impacts to existing neighborhoods result from this project.

3.4 Safety (20 points)
Explain if the project...

a) Corrects/improves a verified or potential safety or accident problem.
   Greatly reduces vehicle and pedestrian/cyclist interactions on a major highway.

b) Improves information/communications for traffic operations and emergency responders.
   N/A

c) Reduces severity of crashes.
   Pedestrian/Vehicle crashes are very severe for the pedestrians that are hit. This reduces the
   potential for those types of crashes.

d) Enhances safe movement of pedestrian, bicycle traffic.
   Greatly reduces vehicle and pedestrian/cyclist interactions on a major highway.
e) Provides an intermodal safety improvement (e.g. separation of vehicles-trains, vehicles-pedestrian).
   By installing a grade separated ped crossing on SR92

3.5 Other Considerations (15 points)
Explain if the project...

a) Effectively distributes funding throughout the MPO area.
   This funding amount is a small portion that makes a lot of outside funding from TIGER and UDOT possible. It also builds on funds already expended by the MPO for the Rail Trail and Murdock Canal Trail.

b) Phases project in a manner that the MPO can use limited funds efficiently.
   The project is not phased, it will all be constructed at once in 2020. One could consider this a critical connecting phase for the regional trail system that has already been constructed in the area. It greatly enhances investments already made in the Lehi Rail Trail and the Murdock Canal Trail.

c) Additional funding above required match is pledged toward project (including any soft match).
   Only $828,351 of funding is being requested on a $5.2+ million dollar project. This investment leverages TIGER and UDOT funds pledged to the project.

d) Project sponsor ranking of project.
   1

e) Project is numbered project within the current RTP.
   128
4.0 | Air Quality Report

All projects that are eligible for CM/AQ and CM/AQ-PM2.5 funds must complete this report. These funds are eligible for projects and programs countywide. Contact Susan Hardy at Mountainland AOG if you need help completing 4.4 Quantitative Analysis below, 801/229-3842 or shardy@mountainland.org.

4.1 Eligibility
CM/AQ funds can only be used for projects and programs that a direct benefit to air quality can be demonstrated. Highway expansion, such as new single occupancy vehicle lanes, is not eligible. Turn lanes at congested intersections, transit programs, pedestrian and trail projects, signal modernization, ITS, and IM programs are typical eligible CM/AQ projects.

4.2 CM/AQ Program
The purpose of the CM/AQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) in Ozone (O₃), Carbon monoxide (CO), Particulate Matter – 10 microns (PM₁₀), and PM₂.₅ non-attainment and maintenance areas. The city of Provo is a maintenance area for CO and Utah County is a non-attainment area for PM₁₀ and PM₂.₅.

4.3 Completing this Report
All projects eligible for CM/AQ funds must complete this report. Completing this report can be quite technical, Susan Hardy, Air Quality Coordinator at Mountainland, can help with filling out this report. Contact her at 801/229-3842 or shardy@mountainland.org.

4.4 Quantitative Analyses
A quantitative assessment of how a proposed project or program is expected to reduce emissions is important to assist in selecting the most effective use of this fund. List below all travel benefits directly related to this project. Air quality benefit calculations must utilize Mobile 6. The air quality analysis should include assessing emission reductions of transit, traffic flow improvements, ITS projects and programs, ridesharing, bicycle and pedestrian improvements. Complete at least one of the sections below. If quantitative analyses cannot be done, do a qualitative assessment in 4.3.

a) Vehicle Miles Traveled
Number of Vehicle Miles Traveled reduced (VMT): We estimate based on 2017 surrounding trail usage that at least 65,000 trips will be taken across the bridge each year. At 1.5 to average bike and pedestrian trips, 180 effective seasonal days for use, and an auto occupancy rate of 1.2 per vehicle, it is estimated that use of this bridge could reduce VMT by 542 miles per day.
Average distance of trips reduced: 1.5 (see above)
Emission reduction per average weekday: Based on the above VMT reduction, the following pollutants are reduced:
- PM2.₅ - 2.99 kg/year
- CO - 957.65 kg/year
- NOx - 43.4 kg/year
- VOC - 93.84 kg/year
- PM10 - 6.47 kg/year
b) Idling Time
Average idling time per vehicle reduced: N/A
Number of vehicles with reduced idling time: N/A
Emission reduction per average weekday: N/A

C) Vehicle Speed
Average change in vehicle speed (speed before and after): N/A
Number of vehicles affected: N/A
Emission reduction per average workday: N/A

4.5 Qualitative Assessment
Although a quantitative analyses of air quality impacts is required whenever possible, some improvements may not lend themselves to rigorous quantitative analysis, because of the projects characteristics or because practical experience is lacking to adequately analyze the project. In these cases, a qualitative assessment based on a reason and logical examination of how the project or program will decrease emissions and contribute to attainment or maintenance of a NAAQS is appropriate.
This pedestrian bridge is a key link in the regional active transportation network, connecting the Murdock Canal Trail north to the Porter Rockwell Trail. It is within biking distance of the Lehi FrontRunner station. With this proximity to existing improvements, and the connections to the Silicon Slopes area and other Lehi work centers, this improvement will support commuting bike and walking trips in addition to any recreational value it adds. A robust trail network, especially one connected to transit infrastructure like the TIGER program is constructing, attracts more users away from their single occupancy vehicles, resulting in air quality improvements.
5.0 | Project Cost Estimate
To development a project cost estimate, please supply a detailed cost breakdown of your unit costs, inflation, equipment, right-of-way, contingency, etc. To do so, use the Concept Costs Estimate Excel form provided by UDOT (available on Mountainland.org website). Non-construction projects such as equipment purchases, operations, administration programs, studies, etc. can use other methods to show their estimated costs. All sheets or methods used should be submitted as part of the Supplemental Information accompanying the Concept Report.

5.1 Cost Summary
Summarize the information from the Costs Estimate Excel form or other method. Enter NA for items that do not apply to the project.

a) Preliminary Engineering PE is already completed, Full Design is $355,550
b) Environmental Work 0 - Already Completed
c) Construction $4,277,670
d) UDOT Review (project cost <$500k = $5k, >500K = $10k) 0 - Any review incl. in design
e) Construction Engineering $213,330
f) Subtotal (in today’s dollars) $5,282,740
g) Inflated Cost Factor (inflate to 2022) $5,282,740 - Costs above are in 2020 construction year
h) Total 2022 Cost $5,282,740 for 2020 construction year
i) Non-MPO Funds Available to Project $4,454,389
j) MPO Funding Request (includes 6.77% local match) $828,351 (DOES NOT INCLUDE ANY MATCH)

6.0 | Supplemental Information
Please submit any supporting documentation including maps, diagrams, charts, cost estimates, etc. that will allow MPO and UDOT staff and any Technical Advisory Committee to make an informed decision regarding the proposed project. Keep Supplemental Information submittals to 8 pages total.

6.1 Concept Report Submittal
In order to facilitate the distribution of the Concept Reports and any supplemental information, all Concept Reports shall be combined with any supplemental information and saved in PDF format as one document. Please note that this might create a large data file that might be too large to emailed. Plan accordingly to submit your report in electronic format (CD, DVD, Flash Drive) by the required due date. Concept Reports are due by March 8, 2018 at 6pm.

6.2 Contacts, Questions
For help with the Concept Report or questions, please contact:

Bob Allen
801/229-3813
rallen@mountainland.org
January 9, 2018

Mr. Jerry Benson, General Manager
Utah Transit Authority
669 West 200 South
Salt Lake City, UT 84101

Re: Categorical Exclusion Approval for TIGER First Last Mile Projects:
Lehi Rail Trail Pedestrian Bridge

Dear Mr. Benson:

Thank you for the environmental documentation your staff has provided for the Lehi Rail Trail Pedestrian Bridge, a component of the TIGER First Last Mile Project (TIGER Project).

This project, located within the UTA rail corridor, includes the construction of a new pedestrian bridge over State Route 92 (SR-92) 500 feet east of Digital Drive to improve safety for pedestrians crossing this busy arterial. The project will run along the eastern side of the UTA right-of-way and include a section of trail that branches off the existing trail and ramp up to the bridge deck.

The northern section of new trail will include roughly 400 feet of new 10-foot wide asphalt pathway with the southern section of new trail being about 620 feet of 10-foot wide asphalt pathway. The ramps will be built on fill slope with retaining walls. The structure will include a 14-foot wide bridge deck and a 265-foot single span steel truss bridge. The proposed structure will include a support pillar to be constructed within the SR-92 right-of-way. The Project involves asphalt paving, a support structure, pedestrian overpass bridge, retaining walls, and earth work.

After reviewing the documentation provided, the Federal Transit Administration (FTA) finds that the Lehi Rail Trail Pedestrian Bridge as proposed is a Categorical Exclusion pursuant to 23 CFR §771.118(c)(2), subject to UTA and Lehi City completing the mitigation and adhering to the best management practices as described in the documentation. In addition, UTA will work with Lehi City to obtain necessary easements. If the project scope changes, please contact us to discuss as FTA may need to reevaluate the project to determine consistency with the CE, and that there are no new or additional environmental impacts.

If you have any questions regarding this finding, please contact Kristin Kenyon at (303) 362-2391.

Sincerely,

Cindy Terwilliger
Regional Administrator

cc: UTA: Richard Miller and Buffie Chournos
Lehi City: Kim Struthers
UDOT: Angelo Papastamos