1.0 | Project Summary Information

1.1 Project Name (35 letters max) American Fork Main Street & State Street (US-89) Intersection reconfiguration.

1.2 Project Type Road - Reconstruction

1.3 Limits (descriptions should be identifiable. i.e: intersections, place names, landmarks, 35 characters max) Intersection at American Fork Main Street and State Street.

1.4 Project Description (summary of project) The project will re-align Main Street to connect to State Street at a 90 degree angle. 200 East will also be re-aligned to connect to Main Street before the intersection at State Street. This will make it so that there will only be one street connecting to US-89 and not two streets 80 feet apart. A signal will also be included at the intersection.

1.5 Sponsor (jurisdiction, agency name) American Fork City / UDOT

1.6 Contact Information

  Project Manager Andy Spencer
  Office Phone (801) 763-3060
  Cell Phone Click here to enter text.
  Fax (801) 763-3005
  Email ASpencer@afcity.net

1.7 Cost Estimate

  Total Project Cost $2,884,000
  PE Cost $114,000
  ROW Cost $750,000
  Construction Cost $1,481,000
  Funds already available to project $0
  Soft Match proposed for project $0

1.8 Regional Significance

  Is project in MPO transportation plan? Yes
  Is project on a corridor on the Utah State Functional Class Map? Yes
1.9 Air Quality Benefit (summarize CM/AQ Report, NA for non-CM/AQ eligible projects)

NA
2.0 | Project Scope

Enter NA for answers to questions not applicable to your project.

2.1 Describe purpose and need of project.
The skew of the intersections at Main Street and 200 East make it difficult for vehicles turning to see vehicles on US-89. The intersection is unsafe for pedestrians as well due to there not being sidewalk along State street in this area. The project will also decrease the delay for vehicles turning onto US-89 from Main Street and 200 East, which currently operates at a Level of Service (LOS) F.

2.2 Describe existing service/conditions
The existing condition has two intersection (Main Street and 200 East) on State Street in American Fork. The distance between these two intersections in approximatley 80 feet. Currently the sidewalk on the north side of State Street does not continue between these intersection. Pedestrians have to follow the sidewalk along 200 East and cross Main Street.

2.3 Highway Project Information

<table>
<thead>
<tr>
<th>SR# or FA#</th>
<th>US-89</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Beginning Mile Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>347.652</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>End Mile Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>347.964</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.312</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing number of Travel Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two through lanes in each direction on State Street.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Width of facility.</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Street = 80 feet, Main Street = 68 feet.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facility surface type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
</tr>
</tbody>
</table>

2.4 Transit / Pedestrian Facility Project Information

<table>
<thead>
<tr>
<th>Route#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
What is the expected use of the facility or program?
NA

What services are provided in the operating of this project?
NA

2.5 Describe any equipment to be purchased (buses, ITS, etc.).
NA

2.6 Describe how project is consistent with local plans.
Project is part of American Fork City Plans.

2.7 Describe how project is consistent with Utah County ITS plan.
NA

2.8 If phased or segmented, describe how the phase has logical termini and what will future phases consist of.
NA

2.9 Is project being coordinated with or constructed with a larger project?
No

2.10 Describe how project will alleviate congestion on this or other facilities.
The project will alleviate congestion on Main Street by adding a signal. Currently the level of service for vehicles turning left onto State Street is LOS F. The signal will increase the level of service for the intersection to LOS C. The project will alleviate congestion on adjacent streets connecting to State Street due to more vehicles being able to use the Main Street intersection.

2.11 Describe any traffic improvements. (i.e. lanes, signal coordination, ITS, turn lanes, bus pullouts, etc.)
A signal will be added to the intersection at this location and will be coordinated with other signals on State Street.

2.12 Describe any safety improvements for vehicular and pedestrian traffic. (i.e. raised median, channelization of turn movements, barriers, parkway strips, etc.)
Pedestrian access ramps will be constructed at the intersection with the traffic signal. This will allow for safe crossing of Main Street and State Street.

2.13 How are complete streets addressed with this project? (plan for pedestrians, bikes, transit, trails, ITS)
The project will add sidewalk and pedestrian access ramps to the State Street and American Fork Main Street intersection.
2.14 Describe traffic control changes at intersections. (include info to warrant changes)
A signal will be placed with the project.

2.15 What right-of-way is already secured?
None.

2.16 What additional right-of-way is needed?
Additional right-of-way will be required for the project.

2.17 Describe utility work to be performed and indicate who will do the work.
There are many utilities in State Street. The preference would be to protect these utilities in place, but there will likely be utility relocations.

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

2.19 Facility Design

<table>
<thead>
<tr>
<th></th>
<th>Current Conditions</th>
<th>Design Year 2030</th>
<th>Design Year w/o Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Traffic</td>
<td>31,220</td>
<td>33,000</td>
<td>33,000</td>
</tr>
<tr>
<td>Level of Service</td>
<td>LOS F</td>
<td>LOS C</td>
<td>LOS F</td>
</tr>
<tr>
<td>Functional Class</td>
<td>Urban Principal Arterial</td>
<td>Urban Principal Arterial</td>
<td>Urban Principal Arterial</td>
</tr>
<tr>
<td>Design Speed</td>
<td>35 mph</td>
<td>35 mph</td>
<td>35 mph</td>
</tr>
<tr>
<td>*Accident Rate</td>
<td>0.6 Accidents per 1 million vehicles</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Transit Ridership</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ped/Trail Usage</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Park and Ride Usage</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</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? The intersection re-alignment will alleviate congestion on Main Street and 200 East.

b) Reduces congestion by reducing the number of vehicles.
NA

c) Reduces the need for additional highway lanes for peak hour capacity.
NA

d) Increases the efficiency of transportation system through traffic management measures. By adding a signal the intersection will function more efficiently.

e) Adds turning movements to relieve a congested intersection.
NA

f) Design year number of users. Users include the average AADT for highways and users per day for transit, trails, and other projects. Unknown

g) 2020 V/C data (computed by MPO staff)
NA

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

a) Benefits multiple transportation systems (transit and highway, pedestrian and transit). The project will benefit both pedestrians and vehicles. By re-aligning, adding a signal, and combining the Main Street and 200 South intersections on State Street vehicles will be able to operate the intersection safer and more efficiently. Adding sidewalk and pedestrian access ramps will allow pedestrians to cross the intersection safer than they currently can today.

b) Promotes alternative transportation solution to SOV use.
NA
c) Creates or improves linkages between transportation modes.  
NA

d) Reduces physical, psychological, or economic barriers to carpool, bike, walk, or transit use.  
The project will make it safer for pedestrians and bicyclists. Currently bikes and peds have a hard time safely crossing the intersections due to skewed angles, two intersections 80 feet apart, and no signalization. With the project these inefficiencies will be corrected.

e) Provides incentives to carpool, bike, walk, or transit use.  
This project will make it safer for pedestrians and bicyclists, thus increasing the likelihood that they will use the facility.

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

a) Provides cost effective emission reductions (amount of reduction justifies cost).  
NA

b) Helps efforts to attain and maintain national air quality standards.  
NA

c) Minimizes environmental impacts or reduces existing impacts (e.g. air/water/noise pollution).  
NA

d) Enhances the natural, cultural, or historic environment.  
NA

e) Mitigates invasive impacts to existing neighborhoods/commercial areas (minimal relocations).  
The project will have minimal construction impacts to existing neighborhoods and commercial areas.

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

a) Corrects/improves a verified or potential safety or accident problem.  
The project will improve the safety of the intersection. At the existing intersection it is difficult for vehicles turning from Main Street or 200 East to see vehicles traveling on US-89. By re-aligning the intersection and adding a signal, safety will be increased and accidents reduced.

b) Improves information/communications for traffic operations and emergency responders.  
The signal may be equipped with preemption for emergency vehicles. This would allow emergency vehicles to get through the intersection quickly in case of an emergency.

c) Reduces severity of crashes.  
By re-aligning and adding a signal to the intersection, the severity of crashes will be reduced.
d) Enhances safe movement of pedestrian, bicycle traffic. The project will make it safer for pedestrians and bicyclists by adding a signal.

e) Provides an intermodal safety improvement (e.g. separation of vehicles-trains, vehicles-pedestrian).
NA

3.5 Other Considerations (15 points)

Explain if the project...

a) Effectively distributes funding throughout the MPO area.
NA

b) Phases project in a manner that the MPO can use limited funds efficiently.
NA

c) Cost effectiveness is appropriate for the amount of improvement made.
Yes

d) Benefits transportation users from adjacent municipalities. US-89 connects many of the communities in Utah County. By making the intersection safer, vehicles traveling from adjacent communities will benefit.

Yes, the project is supported by American Fork City.
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.

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): NA
Average distance of trips reduced: NA
Emission reduction per average weekday: NA

b) Idling Time
Average idling time per vehicle reduced: The idling time of vehicles on Main Street and 200 East turning onto US-89 will be reduced during peak hours.
Number of vehicles with reduced idling time: NA
Emission reduction per average weekday: NA

C) Vehicle Speed
Average change in vehicle speed (speed before and after): NA
Number of vehicles affected: NA
Emission reduction per average workday: NA
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.
NA
5.0 | Project Cost Estimate
To develop 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 $114,000
b) Environmental Work $40,000
c) Construction $1,481,000
d) UDOT Review (project cost <$500k = $5k, >500K = $10k) $10,000
e) Construction Engineering $143,000
f) Subtotal $2,465,000
g) Inflated Cost Factor (inflate to year of construction) 1.22%
h) Total Cost $2,884,000
i) Non-MPO Funds Available to Project $250,000
j) MPO Federal Funds Request (includes 6.77% local match) $2,634,000

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 Thursday 24 April 2014 at 6pm.

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

Shawn Eliot, AICP
586 East 800 North, Orem, UT 84097
p.801/229-3841  f.801/229-3801
email  seliot@mountainland.org
PROJECT NAME: State Street (US-89) / Main Street / 200 East Intersection Re-Alignment in AF

Cost Estimate - Concept Level

Prepared By: Region 3 Design  Date: 4/24/2014

Proposed Project Scope: Re-align the intersection of State Street (US-89) / American Fork Main Street and 200 East

<table>
<thead>
<tr>
<th>Construction Items</th>
<th>Cost 2014</th>
<th>Cost 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Information Services</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Roadway and Drainage</td>
<td>$709,911</td>
<td>$709,911</td>
</tr>
<tr>
<td>Traffic and Safety</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Structures</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Environmental Mitigation</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>ITS</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,054,911</strong></td>
<td><strong>$1,054,911</strong></td>
</tr>
<tr>
<td>Items not Estimated (15%)</td>
<td>$158,237</td>
<td>$158,237</td>
</tr>
<tr>
<td><strong>Construction Subtotal</strong></td>
<td><strong>$1,213,148</strong></td>
<td><strong>$1,213,148</strong></td>
</tr>
<tr>
<td>P.E. Cost</td>
<td>P.E. Subtotal $101,452</td>
<td>P.E. Subtotal 10%</td>
</tr>
<tr>
<td>C.E. Cost</td>
<td>C.E. Subtotal $126,815</td>
<td>C.E. Subtotal 10%</td>
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<tr>
<td>Right of Way</td>
<td>Right of Way Subtotal $750,000</td>
<td>Right of Way Subtotal</td>
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<tr>
<td>Utilities</td>
<td>Utilities Subtotal $100,000</td>
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<tr>
<td>Incentives</td>
<td>Incentives Subtotal $55,000</td>
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<tr>
<td>Miscellaneous</td>
<td>Miscellaneous Subtotal $0</td>
<td>Miscellaneous Subtotal</td>
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<tr>
<td><strong>Cost Estimate (OPM screen 505)</strong></td>
<td><strong>2014</strong></td>
<td><strong>2018</strong></td>
</tr>
<tr>
<td>P.E.</td>
<td>$101,000</td>
<td>$114,000</td>
</tr>
<tr>
<td>Right of Way</td>
<td>$750,000</td>
<td>$812,000</td>
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<td>Utilities</td>
<td>$100,000</td>
<td>$122,000</td>
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<td>Construction</td>
<td>$1,213,000</td>
<td>$1,481,000</td>
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<td>Incentives</td>
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<tr>
<td>Aesthetics</td>
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<td>0.75%</td>
</tr>
<tr>
<td>Change Order Contingency</td>
<td>9.00%</td>
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<tr>
<td>UDOT Oversight</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$2,465,000</strong></td>
<td><strong>$2,884,000</strong></td>
</tr>
</tbody>
</table>

PROPOSED COMMISSION REQUEST TOTAL $2,465,000 TOTAL $2,884,000

Project Assumptions/Risks

1
2
3
4
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10
11
12
13
14
April 5, 2012

Sean Eliot
Mountainland Association of Governments
586 East 800 North
Orem, UT 84097

Dear Mr. Eliot:

American Fork City would like to officially acknowledge our support for the Main Street US-89 proposal jointly put forth by the Utah Department of Transportation and American Fork City. This proposal will place a signal at the intersection of 200 East and Main Street which will allow for increased traffic flow and safety enhancement. American Fork City sees this as a great benefit to our community, residents, and for the traveling public at large. Therefore, we pledge our support and any assistance we may provide with this project.

Sincerely,

James H. Hadfield, Mayor
American Fork City