## STBG-URBAN APPLICATION

## Project Information Sheet

1. Project Name and Location (in addition, attach at the end of this information sheet a location map that includes project dimensions and if applicable logical termini): Intersection Improvement: 17th and Crowley Rd (45th E)

- Project Description (provide ample information regarding the details of the project): The project will improve safety and congestion at the intersection of $17^{\text {th }}$ Street and Crowley Road in the City of Ammon. This project will install a 4-way multi-lane roundabout, replacing the current 3-way single-lane mini roundabout. The new fourth leg will provide access to a future commercial development to the east of this intersection. Crowley Road and $17^{\text {th }}$ Street, west of the project, are assumed to be widened to 5 -lanes at the time of this improvement. This project will also include ADA crossings on all legs to connect in with future pedestrian facilities. Right of way will need to be acquired on the northwest corner, and it is anticipated that there may be utility relocations or minor adjustments. Total project cost is expected to be around $\$ 1,453,000$.
- Jurisdiction: City of Ammon
- Contact name: Tracy Bono, City Engineer

Phone: 208-612-4028
Email: tbono@cityofammon.us

- Project Type (select primary project type(s) and then check all other types of applicable improvements associated with the project):


## Roadway/Intersection Congestion Mitigation Application

## Primary Project Type

Roadway Expansion (width and/or length)Intersection ImprovementOther Congestion Mitigation Improvement
## Secondary Project Type

Safety Improvement - Traffic Signal UpgradeSafety Improvement - OtherPavement UpgradeMulti-modal ImprovementBONNEVILLE
METROPOLITAN
PLANNING
ORGANIZATION

Safety Application - Address high accident locations or prevent serious accidents at unsafe locations.
Primary Project TypeSafety Improvement - Traffic Signal UpgradeSafety Improvement - Other

## Secondary Project Type

Pavement UpgradeMulti-modal Improvement
## Pavement Rehabilitation/Reconstruction Application

Primary Project TypeSealcoatOverlayReconstruction

Secondary Project TypeSafety Improvement - Traffic Signal UpgradeSafety Improvement - OtherMulti-modal Improvement

Transportation Plan/Study Application
Primary Project Type
$\square$ Transportation Plan/Study

## Attach the appropriate application related to the "Primary Project Type."

- Current BMPO Long Range Transportation Plan (LRTP) Primary Project Verification

It is required that the primary project be identified by name or reference in the LRTP: This project is not mentioned specifically in the LRTP. However, page 94 of the LRTP in appendix $F$ references the widening of 17th and 45th E to 5 lanes in this area. Widening this roundabout to a full size multi-lane roundabout will allow for the future widening of these roads.

## Continue to next page...

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－Verify that the project is located in the current BMPO 2020 Urban Area

－Note all applicants／project sponsors are required to attend the March BMPO Policy Board meeting．

# Roadway/Intersection Congestion Mitigation Project Application 

This project requires the completion of ITD form 2435. Please use STBG-U Application Data and Worksheets > 2435 https://www.bmpo.org/s/STBG-U-Application-Data-and-Worksheets-x4iz.x|sx

## A) Roadway/Intersection Congestion Relief (0-40 points)

When answering questions consider how well the project provides immediate and long-term congestion relief at a roadway, intersection, or the network as a whole.

Using STBG-U Application Data and Worksheets > Capacity Worksheet answer the following: https://www.bmpo.org/s/STBG-U-Application-Data-and-Worksheets-x4jz.xlsx

How congested is the roadway segment or intersection currently and projected to be in the future?
The current intersection is reaching capacity with a V/C ratio nearing 1.00. The intersection will exceed capacity in the design year without the project.

1) Current v/c ratio: 0.88
2) Projected no-build v/c ratio: 1.42

To what degree is the project expected to improve capacity, not only on the roadway itself but elsewhere in the transportation system?

This will prepare the corridor for future widening to 4 lanes (possibly 5 lanes) and will improve north to south traffic on all of Crowley Road between US-26 and Sunnyside Road.

| 3) Projected build v/c ratio*: (2 lane round about) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Location: | Transportation system v/c ratios*: |  |  |  |
| 4) | 17th | No-build v/c ratio: | 1.42 | Build v/c ratio: | 0.42 |
| 5) | Crowley | No-build v/c ratio: | 1.26 | Build v/c ratio: | 0.64 |
| 6) |  | No-build v/c ratio: |  | Build v/c ratio: |  |
| 7) |  | No-build v/c ratio: |  | Build v/c ratio: |  |
| 8) |  | No-build v/c ratio: |  | Build v/c ratio: |  |

*may require additional model runs to determine traffic projections under build conditions.

## B) Safety (0-15 points)

When answering questions consider if the congestion mitigation project includes safety improvements that may benefit both motorists and other users of the transportation system.

What safety improvements are being coordinated with the pavement of the roadway? Why are the improvements deemed important?
This project will install pedestrian crossings on all legs of the intersection where there currently are none. There is a previous A-injury crash at this location that was caused by a bike/pedestrian crossing the street near this intersection. Many of the other crashes at this current mini roundabout seem to be from lack of visibilty and not seeing the roundabout. This project will update signage and lighting at this intersection.

## C) Pavement Rehabilitation (0-15 points)

When answering questions consider if the congestion mitigation project includes pavement enhancements that helps preserve the roadway network.

Using - STBG-U Application Data and Worksheets > Pavement Rating System answer the following: https://www.bmpo.org/s/STBG-U-Application-Data-and-Worksheets-x4jz.xlsx

What number would you assign as the pavement surface rating?

## 8

Explain the current pavement condition as it relates to the rating?

## $\sim 4$ vr old pavement. no cracks or ravelina

## D) Multi-modal and Accessibility (0-10 points)

When answering questions consider if the congestion mitigation project includes multi-modal facilities for improved accessibility, connectivity and safety.

Identify plan or study, other than the LRTP, that recognizes the multi-modal project or need:
This project is not indicated in a plan other than the LRTP

What bicycle and pedestrian improvements, if any, are included in the project and why are the improvements deemed important?

There would be crosswalks added on all legs of the roundabout. Additionally, the new fourth leg of this roundabout is going into a future commercial/high density housing project. This development is required to install a walking path along the east side of 45th $E$ and the new crossings would integrate with that future pathway.

## E) Support Economic Vitality (0-10 points)

When answering questions consider if the project improves access to housing, jobs, recreation and other areas of economic importance thus promoting a transportation system that enhances the movement of people and goods.

Does the project apply strategies that improves traffic flow and access to areas that are economically vital to the area? If so, how?

This intersection is along one of the main routes Ammon and Bonneville county residents east of 45th E use to get to school, work, shopping, and services. This makes keeping this intersection functioning efficiently very important. Additionally, this new leg of the intersection will give access to the future commercial project just to the east of this roundabout.

## F) Project Feasibility (0-10 points)

When answering questions consider if the project is good fit for federal funds based on cost and potential environmental impacts.

Using - STBG-U Application Data and Worksheets >1150 answer the following: https://www.bmpo.org/s/STBG-U-Application-Data-and-Worksheets-x4iz.x|sx

What is the total estimated cost of the project?
$\$ 1,453,000$
Is the project cost consistent with STBG-Urban fund availability and limitations?
yes
What is the estimated cost per mile? $\$ 5,189,000$
Is the project coordinated with other funding sources? If so, explain.
There are no additional funding sources.

What potential environmental impacts may require remediation?
Environmental impacts are not expected.

## ATTACHMENTS:

■ ITD FORM 2435
■ PROJECT LOCATION MAP
■ PRELIMINARY DESIGN AND/OR TYPICAL SECTION

- CAPACITY WORKSHEET

■ ACCIDENT WORKSHEET (if applicable)
■ DOCUMENTATION FROM RELEVANT PLANS, ORDINANCES OR POLICIES RELATED TO THE PROJECT (at a minimum the project should be identified by project, need or reference in the current BMPO LRTP. If multi-modal improvements are included additional documentation is needed)
■ ITD FORM 1150
■ OPTIONAL MATERIAL THAT IS DEEMED IMPORTANT FOR THE PROPER EVALUATION OF THE PROJECT

## Please Complete Additional Supplementary Documents

Surface Transportation Block Grant Program - Urban (STBG-U)
Rating Worksheet - Roadway/Intersection Congestion Mitigation
https://www.bmpo.org/s/STBG-U-Roadway-Scoring-Sheet-hsds.xlsx

Double click on form to complete
ITD 2435 (Rev.01-09)

## Local Federal-Aid Project Request

## Instructions

1. Under Character of Proposed Work, mark appropriate boxes when work includes Bridge Approaches in addition to a Bridge.
2. Attach a Vicinity Map showing the extent of the project limits.
3. Attach an ITD 1150, Project Cost Summary Sheet.
4. Signature of an appropriate local official is the only kind recognized.

Note: In Applying for a F ederal-Aid Project, You are Agre eing to Follow all of the Fe deral Requirements Which Can Add Substantial Time and Costs to the Development of the Project


| Standards | Existing | Proposed | Standards | Exisfing | Proposed |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Number of Lanes | 2 | 5 | Roadway Width <br> (Shoulder to Shoulder) | Varies ft | Varies ft |
| Pavement Type | HMA | HMA | Right-of-Way Width | Varies ft | Varies ft |



Additiona/Information to be Furnished by the District

| Functional Classification Min Art/Maj Col | Terrain Type Flat | 20 | ADT/DHV |
| :--- | :--- | :--- | :--- | :--- |




| Roadway | 17th and Crowley |
| :--- | :---: |
| Segment | Intersection |
| Current/Model Year | 2019 |
| Functional Classification | Minor Arterial |
| Number of Current/Future Lanes | 2 |
| Capacity Threshold | 20501 |
| Current/Projected Traffic Volume | 13217 |
| V/C Ratio | 0.64 |

## Basic Intersection Crash Performance

## Location: 17th and Crowley

Years: 2018-2022

| Input Analysis Period (in years) | 5 | Historical Crash Data - WebCARS Office of Highway Safety Crash Analysis Reporting System | Crash | Severity |
| :---: | :---: | :---: | :---: | :---: |
| Input \# Fatal Crashes at Intersection (Not \# of Persons) | 0 |  | 18C492085 | C Injury |
| Input \# of 'A' Severity Crashes at Intersection | 2 |  | $20 \mathrm{C557079}$ | A Injury |
| Input \# of 'B' Severity Crashes at Intersection | 2 |  | $20 \mathrm{C561065}$ | B Injury |
| Input \# of 'C' Severity Crashes at Intersection | 1 |  | $20 \mathrm{C543721}$ | A Injury |
| Input \# of Property Damage Crashes at Intersection | 5 |  | $20 C 544056$ | PDO |
| Input Average \# of Vehicles Entering Intersection Daily* | 12650 | Refer to Traffic Counts Worksheet | 21 C 569037 | PDO |
|  |  |  | 21 C 566917 | PDO |
| *Average number of vehicles entering intersection can be cal | lated b | Ts for all of the intersection | 21 C 82314 | PDO |
| legs, and then dividing that by 2 . This assumes that direction | split of | for the average day is 50/50 | 21C587356 | PDO |
|  |  |  | $22 \mathrm{C617369}$ | B Injury |

Intersection Crash Rate (average 0.65) $=$
Intersection Severity Rate (average 1.00) = Intersection Crash Density (average 5.00) =

| 0.43 | per million entering vehicles |
| :--- | :--- |
| 0.91 |  |
| 2.00 | crashes per year |

Crash Rate Score
Severity Rate Score
Crash Density Score
Overall Rate (average 1.33)

| 1 |
| :---: |
| 2 |
| 0 |
| $\mathbf{1 . 0 0}$ |

## Appendix F - Planned Projects 2035-2050* Adjustments to TransCAD Build Model Networks

- 1st Street, 25th East (Hitt) to 45th East (Crowley) - widen to 5 lanes (note Ammon to $45^{\text {th }} \mathrm{E}$ will be widened to 3 es and then eventually to 5 lanes)
- 15th East (St. Leon), US-20 to US-26 - widen to 5 lanes and signals at US-20 IC ramps
- 17th Street, Ammon to $45^{\text {th }}$ East (Crowley) iden to 5 lanes
- 25 th East (Hitt), US-20 to US-26 - widen to 5 lanes
- 25 th East (Hitt), $1 / 2$ mile north to $49^{\text {th }}$ South
- 49th South (Township), $5^{\text {th }}$ West to $25^{\text {th }}$ East (Hitt) - widen to 5 lanes and add signals at 5th East (Holmes) and 15th East (St. Clair)
- 45th East (Crowley), US-26 to Sunnyside - widen to 5 lanes and add signal at Sunnyside and mini-roundabout at 21 st Street
- Ammon Road, US-26 to $17^{\text {th }}$ Street - widen to 5 lanes and add roundabout at Iona
- Ammon Road, Sunnyside to $49^{\text {th }}$ South (Township) - widen to 5 lanes and add mini-roundabout at Township
- Lincoln Road, Ammon to $45^{\text {th }}$ East (Crowley) - widen to 5 lanes
- Sunnyside Road, Ammon to $45^{\text {th }}$ East (Crowley) - widen 5 lanes and add a roundabout at Crowley

Note: I-15/US-20 realignment was not added to the model at this time. It is anticipated that the impacts will be substantial and addressed in an upcoming LRTP amendment.
*Projects may be completed before 2035. However, because there currently are no identifiable funding sources for the projects, they were included in the 2050 model.

Round Estimates to Nearest \$1,000

| Key Number | Project Number |  | Date |
| :--- | :--- | :--- | :--- |
| Location <br> City of Ammon: Intersection of 17th and Crowley Rd |  |  |  |
| Segment Code | Begin Mile Post | District |  |
| $003980 / 015880$ | $9.38 / 10.92$ | $9.56 / 11.01$ | 6 |


|  | Previous ITD 1150 | Initial or Revise To |
| :---: | :---: | :---: |
| 1a. Preliminary Engineering (PE) | \$20,000 |  |
| 1b. Preliminary Engineering by Consultant (PEC) | \$225,000 |  |
| 2. Right-of-Way Number of Parcels 3 Number of Relocations 0 | \$80,000 |  |
| 3. Utility Adjustments: Work Materials By State By Others |  |  |
| 4. Earthwork | \$120,000 |  |
| 5. Drainage and Minor Structures | \$64,000 |  |
| 6. Pavement and Base | \$276,000 |  |
| 7. Railroad Crossing: <br> Grade/Separation Structure $\qquad$ <br> At-Grade Signals Yes No |  |  |
| 8. Bridges/Grade Separation Structures: |  |  |
| New Structure Length/Width | \$0.00 |  |
| Location |  |  |
| Repair/Widening/Rehabilitation Length/Width | \$0.00 |  |
| Location |  |  |
| 9. Traffic Items (Delineators, Signing, Channelization, Lighting, and Signals) | \$105,000 |  |
| 10. Temporary Traffic Control (Sign, Pavement Markings, Flagging, and Traffic Separation) | \$45,000 |  |
| 11. Detours | \$1,200 |  |
| 12. Landscaping | \$45,000 |  |
| 13. Mitigation Measures | \$10,000 |  |
| 14. Other Items (Roadside Development, Guardrail, Fencing, Sidewalks, Curb and | \$187,000 |  |
| 15. Cost of Constructions (Items 3 through 14) | \$853,000 | \$0 |
| 16. Mobilization $15 \%$ of Item 15 | \$128,000 | \$0 |
| 17. Construction Engineer and Contingencies $15 \%$ of Items 15 and 16 | \$147,000 | \$0 |
| 18. Total Construction Cost (15+16+17) | \$1,128,000 |  |
| 19. Total Project Cost ( $1+2+18)$ | \$1,453,000 |  |
| 20. Project Cost Per Mile | \$5,189,000 | \$1,000 |
| Prepared By: |  |  |
| Kelly Hoopes |  |  |

## Existing Conditions



