

# **STBG-URBAN APPLICATION**

## **Project Information Sheet**

- 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<sup>th</sup> 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<sup>th</sup> 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)
- $\boxtimes$  Intersection Improvement
- □ Other Congestion Mitigation Improvement

#### Secondary Project Type

- □ Safety Improvement Traffic Signal Upgrade
- Safety Improvement Other
- □ Pavement Upgrade
- □ Multi-modal Improvement



#### Safety Application – Address high accident locations or prevent serious accidents at unsafe locations.

#### Primary Project Type

- □ Safety Improvement Traffic Signal Upgrade
- □ Safety Improvement Other

#### Secondary Project Type

- □ Pavement Upgrade
- □ Multi-modal Improvement

#### Pavement Rehabilitation/Reconstruction Application

#### Primary Project Type

- Sealcoat
- □ Overlay
- □ Reconstruction

#### Secondary Project Type

□ Safety Improvement – Traffic Signal Upgrade

- □ Safety Improvement Other
- □ Multi-modal Improvement

#### **Transportation Plan/Study Application**

Primary Project Type 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...



• 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* <u>https://www.bmpo.org/s/STBG-U-Application-Data-and-Worksheets-x4jz.xlsx</u>

#### 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?

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

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

3)	3) Projected build v/c ratio*:					
	Location:	Transportation system v/c ratios*:				
4)		No-build v/c ratio:		Build v/c ratio:		
5)		No-build v/c ratio:		Build v/c ratio:		
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?

#### 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?

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

#### 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:

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

#### 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?

#### 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-x4jz.xlsx

What is the total estimated cost of the project?	
Is the project cost consistent with STBG-Urban	und availability and limitations?
What is the estimated cost per mile?	
Is the project coordinated with other funding so	urces? If so, explain.

What potential environmental impacts may require remediation?

#### ATTACHMENTS:

- □ ITD FORM 2435
- $\hfill\square$  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
- $\hfill\square$  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.

Attach a Vicinity Map showing the extent of the project limits.
Attach an ITD 1150, Project Cost Summary Sheet.
Signature of an appropriate local official is the only kind recognized.

Note: In Applying for a Federal-Aid Project, You are Agreeing to Follow all of the Federal Requirements Which Can Add Substantial Time and Costs to the Development of the Project.

Sponsor (City, County, High City, of Ammon	way District, State/Federa	al Agency)			Date 1/5/24
City of Aminon Design Title (Name of Street	lor Dord)	E A Douto	Number	ningt Longth	Bridge Length
Intersection Improvem	003980 /	015880 1	SOO'	N/A	
Project Limits (Local Landma SegCode 003980 MP ( SegCode 015880 MP	arks at Each End of the P 9.38 to 9.56 10.92 to 11.01	roject)			
Character of Proposed	Work (Mark Appropri	ate Items)			
⊠ Excavation	Bicycle Facilitie	es 🛛 Uti	lities	Sidewalk 🛛	
🛛 Drainage	🛛 Traffic Control	🛛 Lar	ndscaping	🗌 Seal Coat	
🛛 Base	Bridge(s)	🗌 Gu	Guardrail X Roundabout		
🛛 Bit. Surface	🖾 Curb & Gutter	🛛 Lig	hting		
Estimated Costs (Attack	n ITD 1150, Project Co	st Summary Sheet)			
Preliminary Engin	eering (ITD 1150, Line	e 1} <u>\$ 245000</u>			
Right-of-Way (ITD	1150, Line 2}	\$ 80000			
Construction (ITD	1150, Line 18}	\$ 1128000			
Preliminary Engineerin	g By: 🔲 Sponsor F	Forces 🛛 Consul	tant		
Checklist (Provide Name	s. Locations, and Tvo	e of Facilities)			
Railroad Crossing		admined			
Within 2 miles of an Air	port				
Parks (City, County, Stat	e or Federal}				
Environmentally Sensit	ive Areas				
Federal Lands (Indian, I	3LM, etc.)				
Historical Sites					1
Schools					
Other					
Additional Right-of-Way	, I V Required: 🗌 Non	e 🛛 Min or (1-3 Pa	arcels) 🗌 Exter	sive (4 or More Parc	cels)
Will any Person or Bus	iness be Displaced:	🗌 Yes 🛛 No	Possibly		
Standards	Existing	Proposed	Standards	Existing	Proposed
Number of Lanes	2	5	Roadway Width (Shoulder to Shou	Ider} Varies ft	Varies ft
Pavement Type HMA		НМА	Right-of-Way Wi	dth Varies ft	Varies ft
Sponsor's Signature	U-	• 	Title	ty Adm.	inistrato-
Additional Information	n to be Furnished b	y the District	-		
Functional Classificatio	n Min Art/Maj Col	Terrain Type	Flat	20 ADT/I	VHC







**Capacity Worksheet for Roadway Segments** 

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) Input # Fatal Crashes at Intersection (Not # of Persons) Input # of 'A' Severity Crashes at Intersection Input # of 'B' Severity Crashes at Intersection Input # of 'C' Severity Crashes at Intersection Input # of Property Damage Crashes at Intersection Input Average # of Vehicles Entering Intersection Daily\* 1265

		Crash	Severity
	Historical Crash Data - WebCARS Office of Highway Safety Crash Analysis Reporting System	18C492085	C Injury
		20C557079	A Injury
		20C561065	B Injury
		20C543721	A Injury
		20C544056	PDO
0	Refer to Traffic Counts Worksheet	21C569037	PDO
		21C566917	PDO
by adding A	ADTs for all of the intersection	21C582314	PDO

21C587356

22C617369

PDO

**B** Injury

\*Average number of vehicles entering intersection can be calculated by adding ADTs for all of the intersection legs, and then dividing that by 2. This assumes that directional split of the roadway for the average day is 50/50

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	ĺ
2	
0	
1.00	

5

0

2

2

1

5

# 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<sup>th</sup> 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<sup>th</sup> East (Crowley) iden to 5 lanes
- 25th East (Hitt), US-20 to US-26 widen to 5 lanes
- 25th East (Hitt), <sup>1</sup>/<sub>2</sub> mile north to 49<sup>th</sup> South
- 49th South (Township), 5<sup>th</sup> West to 25<sup>th</sup> 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 21st Street
- Ammon Road, US-26 to 17<sup>th</sup> Street widen to 5 lanes and add roundabout at Iona
- Ammon Road, Sunnyside to 49<sup>th</sup> South (Township) widen to 5 lanes and add mini-roundabout at Township
- Lincoln Road, Ammon to 45<sup>th</sup> East (Crowley) widen to 5 lanes
- Sunnyside Road, Ammon to 45<sup>th</sup> 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	ct Number	Date				
Location					District	
City of Ammon: Intersection of 17th and Crowley Rd					6	
Segment Code Begin Mile Post End Mile Post				Length in Miles		
003980 / 015880	9.38 / 10.92		9.56 / 11.01	0.28		
				Previous ITD 1	150 Initial or Revise To	
1a. Preliminary Engin	eering (PE)			\$20,000		
1b. Preliminary Engin	eering by Consultant (PEC	C)		\$225,000		
2. Right-of-Way Num	ber of Parcels 3	Number c	of Relocations 0	\$80,000		
3. Utility Adjustments	s: Work Materials	By Sta	te By Others			
4. Earthwork				\$120,000		
5. Drainage and Min	or Structures			\$64,000		
6. Pavement and Ba	se			\$276,000		
7. Railroad Crossing	:					
Grade/Separation	Structure					
At-Grade Signals	Yes No					
8. Bridges/Grade Se	paration Structures:					
New Structure Length/Width			\$0.00			
Location	J				•	
Densir/Widening/Dehskilitation Longth/Width				00.02		
	rrenabilitation Length	\$0.00				
9. Traffic Items (Delir	neators, Signing, Channeliz	zation, Li	ghting, and Signals)	\$105,000		
10. Temporary Traffic	Control (Sign, Pavement M	/arkings,	Flagging, and Traffic	¢ 45 000		
				\$45,000		
11. Detours				\$1,200		
12. Landscaping				\$45,000		
13. Mitigation Measure	es Iside Development, Guardi	rail Fond	ing Sidewalks Curb	\$10,000		
and		rail, r enc	ing, Sidewarks, Curb	\$187,000		
15. Cost of Constructi	ons (Items 3 through 14)			\$853,000	\$0	
16. Mobilization 15 %	% of Item 15			\$128,000	\$0	
17. Construction Engir	neer 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 Hoo	Prepared By: Kelly Hoopes					

## **Existing Conditions**

