# Surface Transportation Block Grant Program – Urban (STBG-U)
# Project Application and Ranking Process - Roadway Reconstruct/Expansion

**Due: February 3, 2021**

| |
|---|
| Project Name, Location and Brief Description: **17th Reconstruction, This project will be a complete reconstruction of 17th St. from Ammon Rd. to Crowley Rd. The existing street will be widened to a 5 lane roadway along the entire stretch. This project will also add curb, gutter, and sidewalk along the entire stretch and replace the canal culvert on 17th to match the new roadway width.** |

Attachment 2435 Form

## A) Congestion Relief and System Operations (0-25 points)

*When assigning points consider how well the project provides immediate and long term congestion relief at an intersection, roadway or the network as a whole.*

| |
|---|
| How congested is the intersection or roadway segment currently and projected to be in the future?<br>**The Current v/c ratio is at 0.88, which indicates that this roadway has major congestion. Existing parcels of land along the south side of 17st Street and locations further east will continue to grow and 17th Street will see a steady growth rate for the next few years.** |

| |
|---|
| 1) Current v/c ratio: **0.88 (2019)** |
| 2) Projected no-build v/c ratio: **1.48 (2040)** |

| |
|---|
| To what degree is the project expected to improve capacity, not only on the roadway itself but elsewhere in the transportation system?<br>**Construction of this project will result in reducing the initial roadway level from Major Congestion to Uncongested and the roadway will only experience minor congestion in the 2040 design year. Other East/West routes, including 1st Street and Sunnyside Road, have this same 2-lane configuration. Construction of this project may pull some of the demand from those routes to 17th Street.** |

| |
|---|
| 3) Projected build v/c ratio*: **0.36** |

| Location: | Transportation system v/c ratios*: | |
|---|---|---|
| 4) **Ammon Road to 45th** | No-build v/c ratio: **0.88 (2019)** | Build v/c ratio: **0.36 (2019)** |
| 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. Contact BMPC

'Capacity Worksheet

## B) Safety (0-25 points)

*When assigning points consider how well the project addresses high accident locations by including safety improvements to mediate the primary causes of crashes.*

| |
|---|
| What location(s) exist within the projects scope that are considered to have a high degree of accidents? Why are they deemed to be critical accident locations that need attention? **Crash data on this section of 17th is very limited. There are only a couple locations on this stretch that have repeat crashes and those are the intersections with Ross and Ridgewood. These crashes do not have a common cause, some are due to rear-ends and others are due to slick road conditions or are left-turn related. There are several crashes at Ridgewood that are left-turn related, however these occurred prior to the installation of a turn lane at the intersection.** |

Accident Location and Rates:

| | | | |
|---|---|---|---|
| 1) | | | |
| Crash: | Severity: | Density: | Overall: |
| 2) | | | |
| Crash: | Severity: | Density: | Overall: |
| 3) | | | |
| Crash: | Severity: | Density: | Overall: |

'Accident Worksheet

| |
|---|
| What are the primary causes of accidents and contributing circumstances from crash reports? **The only common cause of crashes on this portion of 17th is vehicles attempting to make left turns off of 17th. However, most left-turn related crashes occurred before the installation of center turn lanes at the locations where these crashes occurred.** |

Identify project design elements/counter measures implemented to address primary causes of accidents. Include related crash reduction factor:

| Crash reduction counter measures: | Crash reduction factor: |
|---|---|
| 1) | |
| 2) | |
| 3) | |

## C) System Preservation (0-20 points)

*When assigning points consider how well the project preserves or enhances the transportation system.*

What is the current pavement condition? **Current pavement conditions on this portion of 17th include mild rutting and failing patches.**

Pavement surface rating: **6**

Pavement Rating System (for more information regarding surface rating)

What traffic control devices, if any, will be added or upgraded? **The intersection at Ross will be updated to a roundabout.**

What bridges in poor condition, if any, will be replaced (deck, superstructure, and/or substructure or culvert) as part of this project? What bridges in fair or poor condition, if any, will be rehabilitated as part of this project? **The canal culvert will need to be replaced to widen the roadway section.**

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

*When scoring points consider if the project includes multi-modal facilities for improved accessibility, connectivity and safety.*

Plan or study that identifies multi-modal project or need:

What bicycle and pedestrian improvements, if any, are included in the project? **This project will add sidewalks along the length of the project. The addition of sidewalks here will create connectivity between the neighborhoods on this section of 17th to the businesses farther north on 17th.**

What public transportation improvements, if any, are included in the project? **There are no public transportation improvements included in this project.**

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

*When scoring points consider if the project improves access to housing, jobs, recreation and other areas of economic importance.*

What corridor preservation techniques, if any, were implemented in relation to the project? **Upgrades to this roadway will accommodate future growth and give Bonneville County and Ammon residents living to the east of the project area easy access to businesses in Ammon and Idaho Falls.**

Does the project extend an existing roadway or address a gap in the roadway network? **This project will not extend an existing roadway or address a gap in the network.**

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

*When scoring points consider if the project is good fit for federal funds based on cost and impacts.*

Attachment 1150 Form

What is the total estimated cost of the project? **$7,019,000**

What is the estimated cost per mile? **$7,019,000**

Is the project coordinated with other funding sources? **No**

What potential environmental impacts may require remediation?

## *Roadway Reconstruct/Expansion Application Requirements and Criteria*

### A) Congestion Relief and System Operations

**Project types:** adding travel lanes, traffic signals, roundabouts, additional turning lanes, medians, turning restrictions, etc.

**Current v/c ratio** – to what extent is a roadway segment or intersection currently congested? Typically a higher ratio assumes a higher point value be assigned to this category.

**Projected no-build v/c ratio** – to what extent is a roadway segment or intersection projected (20-25 years) to be congested if project is not implemented? Typically a higher ratio assumes a higher point value be assigned to this category.

**Projected build v/c ratio** – to what extent does congestion improve on a roadway segment or intersection when compared to the no build congestion? Typically a greater decrease between the no-build and build ratios assumes a higher point value be assigned to this category.

**Transportation system v/c ratios** – to what extent does congestion improve on other arterial and collector roadway segments? It should be noted that a roadway segment with added capacity may experience a negligible decrease in v/c ratio. This can be explained, in part, by shifting travel patterns as the added capacity may attract trips from other congested roadways or trips might be attracted because of a transportation network improvement such as a new interchange. This category helps identify if a project provides system wide congestion relief. Typically a greater decrease between the no-build and build ratios on the affected roadway segments assumes a higher point value be assigned to this category.

**General congestion measures for v/c ratios:**

< .60 Uncongested
.60 to .74 Minor Congestion
.75 to .84 Moderate Congestion
.85 to .99 Major Congestion
1.00 > Failure

**Data Needs:**

https://static1.squarespace.com/static/5f4818ef31f0ff53d986ae65/t/5f909fe001f962385e5ebd7f/16
https://www.bmpo.org/traffic-counts

### B) Safety

**Project types:** roundabouts, access management techniques, improved traffic signal indication, rumble strips, enhanced delineation, etc.

**Accident rates and density -** Typically higher rates and density when considered with proven project safety improvements assumes a higher point value be assigned to this category.

- **Crash rate** - compares the number of crashes with the number of vehicles at a location.
- **Severity rate** - identifies the severity of the crashes at the location.
- **Crash density** - identifies the average number of crashes that occur at a location per year.
- **Overall rate** - is the composite of all factors being considered.

**Average rates and density based on arterial and collector streets where traffic volumes have been collected:**

Crash rate: 0.65

Severity rate: 1.00
Crash density: 5.00
Overall rate: 1.33

**Crash reduction counter measure and crash reduction factor** - using your experience, area knowledge, and the FHWA Crash Reduction Factor Toolkits or Crash Modification Factors (CMF) Clearinghouse select counter measures and reduction factors for the project areas.

**Data Needs:**
Historical Crash Data - WebCARS Office of Highway Safety Crash Analysis Reporting System
https://www.bmpo.org/traffic-counts

## C) System Preservation

**Project types:** pavement seal coats and overlays, traffic signal improvements (e.g. display, controllers and detection), improved traffic signage, bridge repair, etc.
**Pavement condition rating system** - Typically roadways with a lower pavement surface rating assumes a higher point value be assigned to this category.

**Pavement Surface Ratings:**

| *Surface rating* | *Visible distress** | *General condition/ treatment measures* |
|---|---|---|
| **10 Excellent** | None. | New construction. |
| **9 Excellent** | None. | Recent overlay. Like new. |
| **8 Very Good** | No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40′ or greater). All cracks sealed or tight (open less than ¼"). | Recent sealcoat or new cold mix. Little or no maintenance required. |
| **7 Good** | Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open ¼") due to reflection or paving joints. Transverse cracks (open ¼") spaced 10′ or more apart, little or slight crack raveling. No patching or very few patches in excellent condition. | First signs of aging. Maintain with routine crack filling. |
| **6 Good** | Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open ¼"–½"), some spaced less than 10′. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition. | Shows signs of aging. Sound structural condition. Could extend life with sealcoat. |
| **5 Fair** | Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open ½") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition. | Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2") |
| **4 Fair** | Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (½" deep or less). | Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more). |

| | | |
|---|---|---|
| **3**<br>**Poor** | Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes. | Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay. |
| **2**<br>**Very Poor** | Alligator cracking (over 25% of surface).<br>Severe distortions (over 2" deep)<br>Extensive patching in poor condition.<br>Potholes. | Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective. |
| **1**<br>**Failed** | Severe distress with extensive loss of surface integrity. | Failed. Needs total reconstruction. |

Source: Pavement Surface Evaluation and Rating (PASER) Asphalt Roads Manual

**Traffic control devices** - a project that replaces or upgrades traffic control devices which improves the operation of an intersection or roadway typically assumes a higher point value be assigned to this
**Bridges** - in order to qualify for bridge funds the project needs to fall into one of three categories. *Replacement:* Bridge is in poor condition (deck, superstructure, and/or substructure, or culvert. *Rehabilitation:* Bridge is in poor or fair condition. *Preserve:* Bridge is in fair or good condition.

## D) Multi-modal and Accessibility

**Project types:** pedestrian crossing treatments (e.g. grade separation, beacons and signage), bicycle lanes, shared use paths, bus stop improvements (e.g. bus pullouts, curb cuts and ramps near shelters), etc.
**Multi-modal plan or study -** in order to receive points the project or need must be identified in an approved planning document.
**Bicycle and pedestrian improvements** - projects that are located near schools or parks, extend or tie together existing facilities, and create a safer condition for bicyclists and pedestrians typically assumes a higher point value be assigned to this category.
**Public transportation improvements** - projects that improve accessibility and safety related to existing public transportation services typically assumes a higher point value be assigned to this category.

## E) Support Economic Vitality

**Corridor preservation techniques*** - typically assumes a higher point value be assigned to this category when corridor preservation techniques such as land acquisition (e.g. purchase of easements, full title purchase), landowner agreements (e.g. annexation agreements, development agreements), land use regulations (e.g. development exactions, setback ordinances), access management consistent with current BMPA Access Management Plan and Roadway Master Plan (e.g. limiting curb cuts, reverse lot frontage) or other relevant techniques have been implemented.

## F) Project Feasibility

**Costs** - the most recent project cost estimate from the ITD 1150 form will be considered under this criterion. Typically lower cost projects per mile assumes a higher point value be assigned to this category.
**Funding sources** - projects that can be constructed in conjunction with another project or that utilizes additional funding sources typically assumes a higher point value be assigned to this category.
**Environmental impacts** - projects that are perceived to have a limited number of environmental impacts and therefore may experience lower costs and less delays, typically assumes that a higher point value be assigned to this category.

**Data Needs:**
https://static1.squarespace.com/static/5f4818ef31f0ff53d986ae65/t/5f909fe001f962385e5ebd7f/16

*There are some ways to acquire key properties within the parameters of NEPA: obtaining a categorical exclusion for right-of-way activities; using information developed during the planning process to demonstrate NEPA compliance for right-of-way authorizations, and possibly even construction authorizations; initiating full NEPA environmental document preparation during the planning process; and using a Tiered Environmental Document approach. Alternatively, local jurisdictions can acquire key properties in the right-of-way of the planned transportation improvement, which is not prohibited by NEPA rules.

**Roadway Reconstruct/Expansion Application Deadline:**

Completed applications must be submitted electronically to bmpo@bmpo.org by 4:30 p.m. on February 3rd, 2021.

***Include attachments:***

| |
|---|
| ITD 1150 and 2435 Forms |
| Capacity Worksheets used to develop v/c ratios |
| Accident Worksheets used to develop crash, severity, density and overall rates |
| Any other maps, data, pictures, etc. that enhances the understanding of the project |

# Project Cost Summary Sheet

ITD 1150 (Rev. 06-17)
itd.idaho.gov

Round Estimates to Nearest $1,000

| Key Number | Project Number | Date |
|---|---|---|
| | 17th (Ammon Rd to 45 E) | 2/3/2021 |

| Location | District |
|---|---|
| City of Ammon and Bonneville County | 6 |

| Segment Code | Begin Mile Post | End Mile Post | Length in Miles |
|---|---|---|---|
| | 0.01 | 1.01 | 1 |

| | Previous ITD 1150 | Initial or Revise To |
|---|---|---|
| 1a. Preliminary Engineering (PE) | | $10,000 |
| 1b. Preliminary Engineering by Consultant (PEC) | | $800,000 |
| 2. Right-of-Way: Number of Parcels 16 Number of Relocations | | $125,400 |
| 3. Utility Adjustments: ☐ Work ☐ Materials ☐ By State ☐ By Others | | $50,000 |
| 4. Earthwork | | $275,000 |
| 5. Drainage and Minor Structures | | $400,000 |
| 6. Pavement and Base | | $2,358,685 |
| 7. Railroad Crossing: | | |
| Grade/Separation Structure None | | |
| At-Grade Signals ☐ Yes ☐ No | | |
| 8. Bridges/Grade Separation Structures: | | |
| ☐ New Structure Length/Width 100/8 | | $200,000.00 |
| Location Canal Box Culvert | | |
| ☐ Repair/Widening/Rehabilitation Length/Width | | |
| Location | | |
| 9. Traffic Items (Delineators, Signing, Channelization, Lighting, and Signals) | | $2,000,000 |
| 10. Temporary Traffic Control (Sign, Pavement Markings, Flagging, and Traffic Separation) | | $75,000 |
| 11. Detours | | |
| 12. Landscaping | | $200,000 |
| 13. Mitigation Measures | | $200,000 |
| 14. Other Items (Roadside Development, Guardrail, Fencing, Sidewalks, Curb and Gutter, C.S.S. Items) | | $807,000 |
| 15. Cost of Constructions (Items 3 through 14) | | $6,566,000 |
| 16. Mobilization 10 % of Item 15 | | $657,000 |
| 17. Construction Engineer and Contingencies 15 % of Items 15 and 16 | | $1,083,000 |
| 18. Total Construction Cost (15 + 16 + 17) | | $8,306,000 |
| 19. Total Project Cost ( 1 + 2 + 18) | | $9,241,000 |
| 20. Project Cost Per Mile | $1,000 | $9,241,000 |

Prepared By:

K. Hoopes

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 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, Highway District, State/Federal Agency) | Date |
|---|---|
| City of Ammon | 1/29/2021 |

| Project Title (Name of Street or Road) | F.A. Route Number | Project Length | Bridge Length |
|---|---|---|---|
| 17th (35th E to 45th E) | 7406 | 1.00 | None |

Project Limits (Local Landmarks at Each End of the Project)
Ammon Road to 45th E

Character of Proposed Work (Mark Appropriate Items)

| | | | |
|---|---|---|---|
| ☒ Excavation | ☒ Bicycle Facilities | ☒ Utilities | ☒ Sidewalk |
| ☒ Drainage | ☒ Traffic Control | ☒ Landscaping | ☐ Seal Coat |
| ☒ Base | ☐ Bridge(s) | ☐ Guardrail | ☐ _____ |
| ☒ Bit. Surface | ☒ Curb & Gutter | ☒ Lighting | |

Estimated Costs (Attach ITD 1150, Project Cost Summary Sheet)

| | |
|---|---|
| Preliminary Engineering (ITD 1150, Line 1) | $ 510.000 |
| Right-of-Way (ITD 1150, Line 2) | $ 125,400 |
| Construction (ITD 1150, Line 18) | $ 8,306,000 |

Preliminary Engineering By: ☐ Sponsor Forces ☒ Consultant

Checklist (Provide Names, Locations, and Type of Facilities)

| | |
|---|---|
| Railroad Crossing | NA |
| Within 2 miles of an Airport | NA |
| Parks (City, County, State or Federal) | Near Eagle Point Park |
| Environmentally Sensitive Areas | |
| Federal Lands (Indian, BLM, etc.) | NA |
| Historical Sites | Homes along 17th Street may be eligible for historic registry |
| Schools | |
| Other | |

Additional Right-of-Way Required: ☐ None ☐ Minor (1-3 Parcels) ☒ Extensive (4 or More Parcels)

Will any Person or Business be Displaced: ☐ Yes ☐ No ☒ Possibly

| Standards | Existing | Proposed | Standards | Existing | Proposed |
|---|---|---|---|---|---|
| Number of Lanes | Vaires | 5 | Roadway Width (Shoulder to Shoulder) | Varies ft | 65 ft |
| Pavement Type | HMA | HMA | Right-of-Way Width | Varies ft | 100 ft |

| Sponsor's Signature | Title |
|---|---|
| Tracy Bow | City Engineer/Public Works Director |

**Additional Information to be Furnished by the District**

| | | | | |
|---|---|---|---|---|
| Functional Classification Minor Arterial | Terrain Type Flat | 20 19 | ADT/DHV 11,039 | |

**Right of Way**

*Bonneville County North Side*

Properties = 8
Deeded or Prescriptive = 30' from CL
Desired ROW = 50' from CL
Needed ROW = (1735'X20'=34,700 SF) = 0.80 AC
Assume $70,000/AC = $55,800

Add Curb&Gutter and Sidewalk

Canal Culvert

Add Curb&Gutter and Sidewalk

17th Street Construction
Reconstruct 5-lanes

Roundabout

Roundabout

**Right of Way**

*City of Ammon South Side*

Properties = 8
Deeded or Prescriptive = 30' from CL
Desired ROW = 50' from CL
Needed ROW = (2166'X20'=43,320 SF) = 0.99 AC
Assume $70,000/AC = $69,600

**17th Street**

| Year | | V/C | Rating |
|---|---|---|---|
| 2019 | No Build | 0.88 | .85 to .99 Major Congestion |
| | Build | 0.36 | < .60 Uncongested |
| 2025 | No Build | 1.02 | 1.00 > Failure |
| | Build | 0.41 | < .60 Uncongested |
| 2040 | No Build | 1.48 | 1.00 > Failure |
| | Build | 0.6 | .60 to .74 Minor Congestion |

N W E S

0 205 410 820 Feet

Project Location
City Boundary
World Transportation

**17th - Ammon Road to Crowley Road**

CITY OF Ammon
WHERE TOMORROW BEGINS