Final Environmental Impact Statement

and Section 4(f) Evaluation

Volume I

Russell Street / South 3rd Street - Missoula

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RUSSELL STREET / SOUTH 3RD STREET
STPU-M 8105(8)
Control No. 4128

Missoula County, Montana

FINAL ENVIRONMENTAL IMPACT STATEMENT AND FINAL SECTION 4(F) EVALUATION

Submitted Pursuant to 42 U.S.C. 4332(c), 49U.S.C. 303, 23 CFR 774, Sections 2-3-104 & 75-1-201, M.C.A., 23 CFR 771.123, and Executive Orders 11990, 11988, and 12898

By the

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MONTANA DEPARTMENT OF TRANSPORTATION
and
CITY OF MISSOULA
and
Cooperating Agencies
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
Montana Fish, Wildlife & Parks

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Abstract: The proposed action is the reconstruction of Russell Street from West Broadway Street to Mount Avenue/South 14th Street, and South 3rd Street from Reserve Street to Russell Street to address current and projected safety and operational needs. The Preferred Alternative would have four travel lanes and a center turn lane/median on Russell Street, and two travel lanes and a center turn lane/median on South 3rd Street. Major intersections on Russell Street and South 3rd Street would be controlled with signals.

This Final Environmental Impact Statement has been issued to address concerns or preferences identified by the public and regulatory agencies during the comment period on the Draft Environmental Impact Statement.

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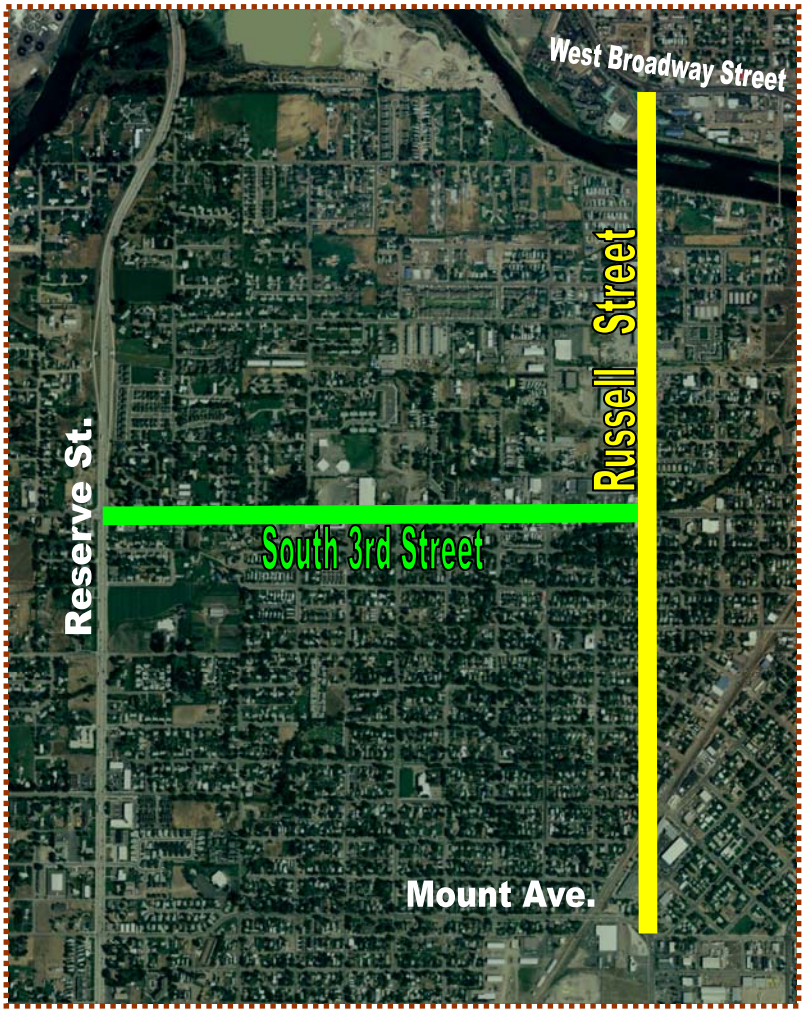
EXECUTIVE SUMMARY

The proposed project includes the reconstruction of approximately 1.5 miles of Russell Street from the intersection at West Broadway Street south to Mount Avenue/South 14th Street, and reconstruction of approximately one mile of South 3rd Street from Reserve Street east to Russell Street.

Russell Street currently varies in width from two to four lanes including turn lanes at some intersections, and includes a two-lane bridge over the Clark Fork River. And South 3rd Street currently varies in width but generally includes one travel lane in each direction and turn lanes at some intersections.



Proposed Action

The City of Missoula, in cooperation with the Montana Department of Transportation and the Federal Highway Administration, initiated a study to evaluate alternatives to address the current and projected safety and mobility concerns on Russell Street and South 3rd Street. The proposed project includes vehicular capacity improvements, accommodation of alternative transportation modes, transit pullouts, sidewalks, grade-separated trail crossings, curb & gutter, boulevards, bicycle lanes, and stormwater drainage. Signalization of key intersections, as well as the potential for construction of roundabout traffic control, were both evaluated during the project development process.

Purpose of the Proposed Action

Given the physical location and functional designations of the Russell Street and South 3rd Street routes, the high traffic volumes, crash history, and multi-modal use of the corridors, the purpose of this proposed project is to provide substantive safety and mobility improvements for all modes of travel in the Russell Street and South 3rd Street corridors.

Need for the Proposed Action

In these two corridors, a lack of future system capacity and lack of sidewalk continuity are two substantive deficiencies affecting mobility for both motorized and non-motorized users and that point to a need for improvements. If these two issues can be addressed, additional benefits can also be gained in the following areas: vehicular, pedestrian, and bicycle safety; trail connectivity; improved transit service; and upgrades to an aging bridge structure.

Development of Alternatives

Initial project alternatives for Russell Street and South 3rd Street were developed based on forecast travel demand and congestion levels, bike/pedestrian corridor travel and crossing safety, issues raised in the public involvement process, and efforts to avoid known physical constraints within the corridors. Throughout the public involvement process, participants expressed a desire that improvements in the Russell Street and South 3rd Street corridors include bicycle facilities, sidewalks, bus turnouts, curbs and gutters for stormwater management, river trail system access to the roadway, illumination, landscaping, and pedestrian crossing facilities. The inclusion or exclusion of these elements will determine the width and functionality of the facilities, and define the overall feel of the corridors.

Description of Alternatives

The following summary tables outline the major features of the No Build and the five Build alternatives for Russell Street, and the four Build alternatives for South 3rd Street that were analyzed as part of this environmental review. Chapter 2 provides illustrations of the preliminary design for all Build Alternatives.

Russell Street Alternatives:

	Alt. 1 (No Build)	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 5 (refined)
Number of Vehicular Lanes:						
Mount to South 8th	2	2	2+	4+	4+	4+
South 8th to South 5th	2	2+	2+	4+	4+	4+
South 5th to South 3rd	4	4	4	4+	4+	4+
South 3rd to the bridge	2+	2+	2+	4+	4+	4+
The bridge to W. Broadway	2	4	4	4+	4+	4+
Intersection Control:						
Signals	✓			✓		
Roundabouts		✓	✓		✓	✓*
Design Elements:						
Sidewalks		✓	✓	✓	✓	✓
Bike lanes		✓	✓	✓	✓	✓
Boulevards		✓	✓	✓	✓	✓
Curb/Gutter		✓	✓	✓	✓	✓
Lighting		✓	✓	✓	✓	✓
Bus Pullouts		✓	✓	✓	✓	✓

South 3rd Street Alternatives:

	Alt. A (No Build)	Alt. B	Alt. C	Alt. D	Alt. E
Number of Vehicular Lanes:					
Reserve St. to Russell St.	2	2	2+	3+	2+
Intersection Control:					
Signals	✓			✓	✓
Roundabouts		✓	✓		
Design Elements:					
Sidewalks		✓	✓	✓	✓
Bike lanes		✓	✓	✓	✓
Boulevards		✓	✓	✓	✓
Curb/Gutter		✓	✓	✓	✓
Lighting		✓	✓	✓	✓
Bus Pullouts		✓	✓	✓	✓

Notes: 2+ denotes a two-lane section with a center turn lane/raised median
3+ denotes a three-lane section (two lanes westbound, one lane eastbound) with a center turn lane/raised median
4+ denotes a four-lane section with a center turn lane/raised median
✓* denotes a modified roundabout design to minimize impacts to protected resources

Summary Evaluation

The No Build condition under Alternative 1 on Russell Street and Alternative A on South 3rd Street would include routine maintenance, but no reconstruction, widening or improvement in multi-modal mobility. As such, there would be no right-of-way acquisition, no physical impact to existing residential and business properties, and a relatively minor cost compared to the Build Alternatives. The primary difference in impacts and costs between the Build Alternatives is outlined below:

Russell Street:

Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 5 (refined)
• 9 Homes • 13 Commercial Buildings • 9 4(f) Properties • 4.34 acres new right-of-way • $48.3 million	• 9 Homes • 13 Commercial Buildings • 9 4(f) Properties • 4.87 acres new right-of-way • $48.8 million	• 11 Homes • 10 Commercial Buildings • 6 4(f) Properties • 4.59 acres new right-of-way • $45.0 million	• 18 Homes • 13 Commercial Buildings • 10 4(f) Properties • 5.65 acres new right-of-way • $52.6 million	• 10 Homes • 11 Commercial Buildings • 8 4(f) Properties • 4.38 acres new right-of-way • $46.5 million

South 3rd Street:

Alt. B	Alt. C	Alt. D	Alt. E
• 1 Home • 4 Commercial Buildings • 2.38 acres of new right-of-way • $12.2 million	• 1 Home • 4 Commercial Buildings • 2.77 acres of new right-of-way • $12.7 million	• 0 Homes • 3 Commercial Buildings • 3.62 acres of new right-of-way • $12.5 million	• 0 Homes • 3 Commercial Buildings • 2.63 acres of new right-of-way • $11.4 million

Notes:

Section 4(f) properties, including historic as well as park and recreational resources, are included based on any "use" of the property as defined in Section 4.14 of this FEIS.

Planning level cost estimates are in 2009 dollars with an assumption for phased construction. If the project were constructed in phases, it would be possible to construct the segment from West Broadway Street to approximately South 3rd Street at a cost of approximately $25.0 million in the year 2012. The project sponsor will continue to seek funding and prioritize Surface Transportation Program-Urban (STPU) funds for subsequent phases and accumulate those funds over the next several years to ensure funding of the project.

Utility relocations are estimated at $1.1 million on Russell Street, and $700,000 on South 3rd Street for each alternative. Right-of-way estimates are also planning-level and dependent upon final right-of-way negotiations.

Based on the operational analysis and the impacts and costs summarized above, the following decisions were made regarding the elimination and further evaluation of alternatives:

Russell Street Alternatives	Status	Rationale
1 – No Build	Retained	Must retain for comparison.
2 – 2/2+/4 lanes w/ Roundabouts	*Eliminated*	Does not meet Purpose and Need.
3 – 2+/4 lanes w/ Roundabouts	*Eliminated*	Does not meet Purpose and Need.
4 – 4+ lanes w/ Signals	**Selected as Preferred Alternative**	Meets Purpose and Need, and has least impact and cost.
5 – 4+ lanes w/ Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but has Adverse Effect on protected historic properties.
5* - 4+ lanes w/ Modified Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but has Adverse Effect on protected historic property.
South 3rd Street Alternatives		
A – No Build	Retained	Must retain for comparison.
B – 2 lanes w/ Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but provides operational improvements for least amount of time.
C – 2+ lanes w/ Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but provides operational improvements for a limited period of time.
D – 3+ lanes w/ Signals	Retained for Detailed Analysis	Meets Purpose and Need, but has larger impact with minimal gain in operational efficiency as compared to E.
E – 2+ lanes w/ Signals	**Selected as the Preferred Alternative**	Meets Purpose and Need, has least cost, least impact, and provides operational improvements for greatest period of time as compared to the roundabout alternatives.

Note: * Alternative 5 was refined to include alignment shifts and modifications to the proposed roundabouts in an attempt to avoid and minimize impacts to protected resources.

Identification of the Preferred Alternatives

Based on the fact that Alternative 4 satisfies the purpose and need to provide substantive safety and mobility improvements for all modes of travel within the corridor, has fewer Section 4(f) impacts, and less overall impact as compared to Alternative 5 and the refined Alternative 5, the four-lane roadway improvement with a center turn lane/raised median, and signalized intersections proposed under **Alternative 4 for Russell Street is identified as the Preferred Alternative.**

Alternative 5 (refined) was vigorously explored as the locally preferred alternative due in large part to community preference for roundabout intersection control and the expressed desire for a roadway improvement project like Stephens Avenue. During detailed analysis, it became apparent that Alternative 5 (even through refinement) would impose an impact on protected historic properties within the corridor that could be avoided with other alternatives. Due to unavoidable impacts to the historic properties at South 5th Street, Alternative 5 has been advanced for detailed consideration but ultimately not identified as the preferred alternative due to impacts to historic resources. However, the City of Missoula remains committed to providing the necessary roadway safety and capacity improvements while providing a facility that is aesthetically pleasing and enhances the existing characteristics of the surrounding area.

Alternative C was identified as the Preliminary Preferred Alternative on South 3rd Street in the Draft Environmental Impact Statement. Subsequent traffic analyses conducted for South 3rd Street in 2010 indicate that the proposed roundabouts fail to provide sufficient capacity by the design year of 2035. (See *South 3rd Street Traffic Update Memo* in Appendix G.) The *Traffic Update Memo* revealed that Alternatives D and E provide substantive improvement in the intersection Level of Service as compared to the roundabout alternatives. This analysis also confirmed that Alternatives D and E on South 3rd Street continue to satisfy the Purpose and Need as well as the general Goals and Objectives established for the project. As compared to Alternative D, Alternative E also minimizes right-of-way impacts and has the least cost as compared to other Build alternatives, and provides improved safety as compared to the No Build condition. For these reasons, **Alternative E has been identified as the Preferred Alternative on South 3rd Street.**

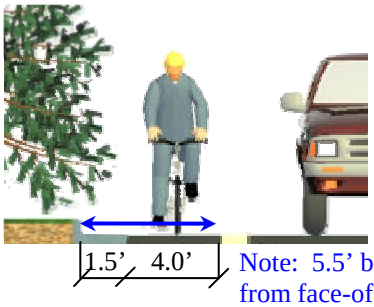
Specific Design Elements of the Preferred Alternatives

The nine design features recommended by the Advisory Committee would be fully incorporated into each of the Build Alternatives, as appropriate. The common design features are:

- The existing **Russell Street Bridge** would be removed and replaced in the same general location with four lanes over the Clark Fork River to provide adequate capacity for projected traffic volumes and necessary hydraulic capacity.

- **Bicycle lanes** would be included to improve multi-modal transportation in the corridors. Bicycle lanes measuring approximately 5.5 feet wide measured from the face of the curb would be constructed on both sides of Russell Street and South 3rd Street. The proposed bicycle lanes would be delineated from motorized traffic by a solid white painted stripe and would be clearly marked as bicycle lanes.

Typical Bike Lane Cross Section



Note: 5.5' bicycle lane is measured from face-of-curb to the travel lane

All graphics in this document are conceptual and not intended to reflect final design details. Measurements are approximate until final design.

- **Sidewalks** measuring approximately 5.0 feet wide would be constructed along both sides of Russell Street and South 3rd Street.

- **Grade separated pedestrian/bicycle crossings** would be provided for the Milwaukee Corridor Trail, Bitterroot Branch, Shady Grove, and River Front Trail systems as they cross Russell Street.

- **Curb and gutter** as well as drywells/sumps would be included to improve stormwater management.

- **Street lighting** would be included to improve aesthetics and safety.

- **Landscaped boulevards** would be constructed on both sides of Russell Street and South 3rd Street between the curb and sidewalk, as well as medians in both corridors, to improve aesthetics.

- **Bus pullouts** would be incorporated into the final design along Russell Street north of South 3rd Street, and along South 3rd Street from Russell Street to Reserve

Street. The transit system currently does not serve Russell Street south of South 5th Street, so no pullouts are planned for that portion of the corridor.

- On-street parking within the City right-of-way is currently prohibited along Russell Street and South 3rd Streets. **Parking restrictions would be maintained** in these corridors.

Russell Street –Preferred Alternative:

The Preferred Alternative on Russell Street (Alternative 4) consists of two southbound and two northbound travel lanes, with raised medians and center turn lanes, and the use of signal control at key intersections.

As with all other Build alternatives, the Preferred Alternative on Russell Street includes the following alignment and access modifications:

- Longstaff Street would be restricted to a right-in and right-out only connection with Russell Street.
- Lawrence Street would be realigned to a right-angle intersection with Russell Street with left turn storage on Russell Street.
- Access to Russell Street from Harlem Street and Kern Street on the east side of Russell Street would be restricted to a right-in and right-out only connection.
- Addison Street would be realigned to a right-angle intersection with Russell Street opposite from South 8th Street. Knowles Street would be shifted slightly to the north to match with South 11th Street on the west.
- River Road would generally remain in its current configuration with minor intersection modifications and a restricted right-in and right-out connection with Russell Street. In addition, right-of-way would be purchased for the construction of a new link between River Road and Idaho Street that would become part of the River Road connection to Russell Street via Wyoming Street. The connection would include a newly constructed section of road running north-south adjacent to the western boundary of Mobile City Trailer Park between existing River Road and Idaho Street. It would also include reconstructed sections of Idaho Street between the new road along the western border of the Mobile City Trailer Park and Catlin Street; Catlin Street between Idaho Street and Wyoming Street; and Wyoming Street between Catlin Street and Russell Street.

South 3rd Street –Preferred Alternative:

The Preferred Alternative on South 3rd Street (Alternative E) includes two travel lanes (one in each direction), signal control at select intersections, and the use of raised landscaped medians as appropriate.

Trail Connections:

The Preferred Alternative also includes three trail connections on Russell Street described as follows:

Bitterroot Branch Trail Connection
The Bitterroot Branch Trail Crossing would be constructed as an undercrossing* under Russell Street. The undercrossing* would be constructed in approximately the same location as the existing trail crossing. The existing trail alignment would be modified to connect to the undercrossing structure.

Milwaukee Corridor Trail Connection
The Milwaukee Corridor Trail Crossing would be constructed as an undercrossing* under Russell Street. The undercrossing* would be constructed in approximately the same location as where the existing trail terminates on the east side of Russell Street. The existing trail alignment would be modified to connect to the undercrossing structure.

Shady Grove (River Trail System) Trail Connection
Reconstruction of the Russell Street Bridge would include extension of the Shady Grove Trail westward under the north end of the bridge and construction of connections to the sidewalks on both sides of Russell Street. An undercrossing* would also be provided under the south end of the bridge to accommodate future extension of the River Trail System to be completed by others.

> *Note: *During early scoping and project development, it was determined that pedestrian/bicycle under crossings would be preferable to an overpass structure, or to an at-grade crossing. If during final design, it appears that geotechnical conditions, or underground utilities would prohibit construction of the intended under-crossings, these crossings could be redesigned as an overpass. It would not be desirable, and it is not intended that these trail crossings would be left as at-grade crossings if the corridor is reconstructed.*

Impact and Mitigation Commitment Summary

No Build Alternatives

While the physical impacts would be limited under the No Build Alternative, this condition would result in worsening congestion and increasing difficulty of residential and business access for all modes of travel, as well as a hindrance on the operation of emergency response vehicles, including fire, police, and medical aid.

Build Alternatives

The following tables provide a summary of the expected impacts and proposed mitigation measures for the various alternatives.

Russell Street

Resource	Impacts	Mitigation Commitments
Land Use		
	No impacts on land use are expected from any of the Build Alternatives.	No mitigation required.
Farmlands		
	No farmlands are located within project corridor.	No mitigation required.
Social Impacts		
Access	Alternatives 2, 3, 4, 5, and 5-Refined provide substantial improvement in multi-modal access through the use of additional travel lanes, bike lanes, and sidewalks throughout..	No mitigation required; however, the City and Montana Department of Transportation will meet with police, fire, and emergency service providers to coordinate access concerns for the construction phase.
Property Impacts	All Build Alternatives require additional Right-of-Way in order to accommodate the widening of Russell Street. Alternatives 2 and 3 require nine homes be acquired including four Section 4(f) properties. Alternative 4 requires 11 homes to be acquired including two Section 4(f) properties. Alternative 5 requires 18 homes be acquired including six Section 4(f) properties. Alternative 5-Refined requires 10 homes be acquired including four Section 4(f) properties.	Fair market value will be paid for properties to be acquired. Displaced residents will be relocated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Environmental Justice	Properties potentially protected under Environmental Justice will not be disproportionately impacted as a result of the Build Alternatives.	No mitigation required.
Economic Impacts		
Business Advancement	Alternatives 2, 3, 4, 5, and 5-Refined provide substantial improvement to business advancement opportunities because of the implementation of traffic controls and subsequent access improvements.	No mitigation required.
Property Impacts	All Build Alternatives require additional Right-of-Way in order to accommodate the widening of Russell Street. Alternatives 2, 3, and 5 require 13 commercial buildings be acquired. Alternative 4 requires 10 commercial buildings be acquired. Alternative 5-Refined requires 11 commercial buildings be acquired.	Fair market value will be paid for properties to be acquired. Displaced businesses will be compensated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Russell Street - Continued

Parks and Recreation		
	The Build alternatives would impact passive green space (Kern Park and Hart Park) owned by the City of Missoula. Recreation opportunities within the project area would be mostly beneficial, though short-term impacts under the Build alternatives would include: -Access restrictions to parks, trails, and the Clark Fork River during construction -Traffic congestion in areas of active construction -Dust, exhaust, and airborne debris in areas of active construction	Mitigation of the loss of green space will include additional landscaping and green space along Russell Street between Mount Avenue/South 14th Street and South 3rd Street. Trail impacts would be mitigated by providing three new grade separated crossings in the corridor.
Pedestrian and Bicycle		
	All Build Alternatives include five and one-half foot wide bike lanes and five foot wide sidewalks are part of the design amenities in the Preferred Alternative. Three grade separated trail crossings are also included.	Bicycle and pedestrian access will be improved within the project corridor, therefore, no mitigation is necessary for the proposed project.
Air Quality		
	Regional analysis shows that the Preferred Alternative would not have a detrimental effect on regional air quality.	No mitigation is required.
Noise		
	The noise impact criterion is predicted to be exceeded at 13 out of 56 receptor locations in the forecast year for the Build Alternatives. Of the 13 impacted receptor locations, 11 are the same receptors that will also be impacted by the No Build Alternative in the forecast year and seven are being impacted by the No Build Alternative under current conditions. An additional 12 receptor locations (representing 13 single-family residences) may also be removed due to right-of-way acquisition for the proposed project.	No feasible or reasonable noise mitigation was identified for existing receptors. To minimize traffic noise impacts at planned or proposed developments within the project area, noise-compatible land uses and /or noise mitigation measures will need to be incorporated into future development.

Russell Street - Continued

Water Quality		
Surface/Stormwater	An increase in the area of the roadway surface would lead to more runoff which could possibly be contaminated by pollutants associated with the operation of a motor vehicle.	Direct impacts and indirect effects to water resources and water quality of the area will be minimized or avoided using Best Management Practices, in coordination with the Environmental Protection Agency during final design. Management of surface runoff may include a dry well system which may be subject to additional requirements. The final designs will comply with provisions of the Montana Department of Environmental Quality's impaired water body designation and total maximum daily loads for the Clark Fork River and the Missoula Valley Water Quality Ordinance for protection of the Missoula Valley Aquifer. Construction mitigation will include development of revegetation plan, erosion control plan, stormwater pollution prevention plan, and coordination of water quality permits with the appropriate regulatory agencies.
Groundwater	Surface runoff from all Build Alternatives could percolate through the alluvial materials and into the Missoula Valley Aquifer.	
Wetlands		
	No wetlands were defined within the project corridor.	No mitigation required.
Water Body and Wildlife Habitat		
	In association with the Russell Street Bridge replacement included in all Build Alternatives, some temporary impacts would be anticipated during construction activities. Long-term impacts resulting from all Build Alternatives would include the permanent loss of some of the riparian vegetation used as habitat by small animals as well as soil exposure to long-term colonization by noxious weeds. The irrigation ditch on the west side of the mobile home park off of River Road will need to be piped as a result of all Build Alternatives and additional connections on River Road. The ditch is owned by Orchard Homes Ditch Company.	Mitigation in the Russell Street corridor includes raptor-proofing or power lines, preservation and restoration of riparian vegetation, erosion and sediment control, revegetation of areas disturbed by construction, and tree planting.
Floodplains		
	There are two locations in the project area where project work as a result of the Build Alternatives may infringe on the 100-year floodplain. The first is the Russell Street Bridge and its abutments, particularly the east side of Russell Street near the south abutment. The second is the south edge of West Broadway Street west of the intersection with Russell Street.	The proposed Russell Street Bridge will increase the hydraulic opening associated with the structure. Additionally, the Shady Grove Trail undercrossing of the bridge will be designed above the 2-year flood elevation. The final design process will include hydraulic and floodplain analysis in order to ensure compliance with Federal Emergency Management Agency regulations.

Russell Street - Continued

Threatened or Endangered Species		
	Because of the Russell Street Bridge replacement included in all Build Alternatives, bull trout and designated critical habitat are likely to be adversely affected by the proposed project.	Best Management Practices would be applied to reduce the amount of sediment entering the Clark Fork River. Formal consultation with the US Fish and Wildlife Service has also concluded with a Biological Opinion for this project which outlines additional mitigation measures, including directions on the use of coffer dams, bridge removal techniques, restrictions on the use of work bridges, and a monitoring plan for bridge demolition and removal.
Historic and Cultural Resources		
	In addition to crossing the Bitterroot Branch of the Northern Pacific Railroad under each Build Alternative, the following Section 4(f) "use" would occur under each alternative: No Build – none Alt. 2 – five historic residences Alt. 3 – five historic residences Alt. 4 (Preferred) – two historic residences Alt. 5 – six historic residences Alt. 5 Refined – four historic residences	A Historic American Building Survey would be conducted, an oral history of the Russell Street Neighborhood would be recorded, and large format photographs of the Russell Street Corridor would be taken before, during, and after construction.
Hazardous Materials		
	All Build Alternatives could affect the many sites along Russell Street that have the potential for hazardous materials concerns including asbestos, lead paint, and petroleum hydrocarbon contamination to soil and groundwater. The Russell Street Bridge could also be potentially hazardous as all bridges built during that time were painted with lead-based paint.	During the design and right-of-way phases of the proposed project, possible contamination sites would be investigated for the presence of hazardous materials. All buildings to be acquired within the project corridor would also be inspected for asbestos and lead contamination. A lead paint abatement plan for the Russell Street Bridge would need to be developed.
Visual Resources		
	Many of the design features in the Build Alternatives would improve the aesthetic quality of the corridor. Even though the road surface is wider under Alternatives 4, 5, and 5- Refined than Alternatives 2 and 3, placement of landscaping features within raised medians and landscaped boulevards would soften views from the road as well as providing a buffer zone between traffic and pedestrians. The removal of existing vegetation in the corridor may be necessary including some large diameter trees.	Due to the overall positive impacts on visual resources, no mitigation is required.

South 3rd Street

Resource	Impacts	Mitigation Commitments
Land Use		
	No impacts under Alternatives B, C, D, or E.	No mitigation required.
Farmlands		
	No farmlands are located within project corridor.	No mitigation required.
Social Impacts		
Access	Alternatives B, C, D, and E result in substantial improvement in multi-modal access through the use of addition of travel lanes, bike lanes, and sidewalks throughout.	No mitigation required; however, the City and Montana Department of Transportation will meet with police, fire, and emergency service providers to coordinate access concerns for the construction phase.
Property Impacts	Alternatives B, C, D, and E require additional Right-of-Way would be required in order to accommodate the widening of South 3rd Street. Alternatives B and C require one home to be acquired. No homes would be acquired under Alternatives D and E.	Fair market value will be paid for properties to be acquired in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Environmental Justice	Properties potentially protected under Environmental Justice will not be disproportionately impacted as a result of the Build Alternatives.	No mitigation required.
Economic Impacts		
Business Advancement	Alternatives B, C, D, and E result in substantial improvement to business advancement opportunities because of the implementation of traffic controls and subsequent access improvements.	No mitigation required.
Property Impacts	Alternatives B, C, D, and E require additional Right-of-Way would be required in order to accommodate the widening of South 3rd Street. Alternatives B and C require four commercial buildings to be acquired. Three commercial buildings would need to be acquired under Alternatives D and E.	Fair market value will be paid for properties to be acquired. Displaced businesses will be compensated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Parks and Recreation		
	No impacts to Parks and Recreation are predicted under any of the Build Alternatives.	No mitigation required.
Pedestrian and Bicycle		
	Five and one-half foot wide bike lanes and five foot wide sidewalks are part of the design amenities included in Alternatives B, C, D, and E.	Bicycle and pedestrian access will be improved within the project corridor; therefore, no mitigation is necessary for the proposed project.

South 3rd Street - Continued

Air Quality		
	Regional analysis shows that the Preferred Alternative would not have a detrimental effect on regional air quality.	No mitigation required.
Noise		
	The noise impact criterion is predicted to be exceeded at 21 out of 44 receptor locations in the forecast year for the Preferred Alternative. Of the 21 impacted receptor locations, 17 are the same receptors that will also be impacted by the No Build Alternative in the forecast year and six are being impacted by the No Build Alternative under current conditions. An additional four receptors may also be removed due to right-of-way acquisition for the project.	There is an opportunity for a sound barrier between Garfield and Catlin Streets. This barrier would impact access to the first row of mobile homes along the south-side of South 3rd Street. A final decision of the installation of the abatement measure will be made during the final design process.
Water Quality		
	An increase in the area of the roadway surface under Alternatives B, C, D, and E would lead to more runoff which could possibly be contaminated by pollutants associated with the operation of a motor vehicle. This could percolate through the alluvial materials and into the Missoula Valley Aquifer.	Direct impacts and indirect effects to water resources and water quality of the area will be minimized or avoided using Best Management Practices, in coordination with the Environmental Protection Agency. Management of surface runoff may include a dry well system which may be subject to additional requirements. The final designs will comply with provisions of the Montana Department of Environmental Quality's impaired water body designation and total maximum daily loads for the Clark Fork River and the Missoula Valley Water Quality Ordinance for protection of the Missoula Valley Aquifer. Construction mitigation will include development of revegetation plan, erosion control plan, stormwater pollution prevention plan, and coordination of water quality permits with the appropriate regulatory agencies.
Wetlands		
	No wetlands were defined within the project corridor.	No mitigation required.
Water Body and Wildlife Habitat		
	No impacts under Alternatives B, C, D, or E.	No mitigation required.
Floodplains		
	No impacts under Alternatives B, C, D, or E.	No mitigation required.

South 3rd Street - Continued

Threatened or Endangered Species		
	No impacts under Alternatives B, C, D, or E.	No mitigation required
Historic and Cultural Resources		
	No Section 4(f) "use" under Alternatives B, C, D, or E.	No mitigation required.
Hazardous Materials		
	Alternatives B, C, D, and E all affect several sites along the project have the potential for hazardous materials concerns including asbestos, lead paint, and petroleum hydrocarbon contamination to soil and ground water.	During the design and right-of-way phases of the proposed project, possible contamination sites will be investigated for contamination. All buildings to be acquired within the project corridor will also be inspected for asbestos and lead contamination.
Visual Resources		
	Many of the design features in Alternatives B, C, D, and E would improve the aesthetic quality of the corridor. Even though the road surface may be wider under Alternatives B, C, D, and E, placement of landscaping features within raised medians and landscaped boulevards would soften views from the road. The removal of existing vegetation in the corridor may be necessary including some large diameter trees.	No mitigation required.

Construction Phasing

The Metropolitan Planning Organization (MPO) receives approximately $2.0 million dollars per year that can be accumulated under the anticipated annual allocations, and would have to seek additional funding to cover the remaining costs beyond regular funding sources. Based on currently available funds, reconstruction of Russell and South 3rd Streets as proposed in this Environmental Impact Statement would likely be phased over time. Construction projects would be programmed and completed as funds become available over the next several years.

Prior to finalizing a Record of Decision, the entire project would need to be included in the fiscally constrained portion of the conforming Long Range Transportation Plan and, in addition, include in the approved Transportation Improvement Program at least one subsequent phase, which includes final design, right-of-way, utility relocation or construction.

During the public comment period on the Draft Environmental Impact Statement, concerns were raised that during the development of the separate project phases, changes in the character of the corridor from infill development, redevelopment, or transportation demand management strategies included in the Long Range Transportation Plan, could affect the traffic forecasts used to establish the Purpose and Need for the project. Following the completion of this National Environmental Policy Act / Montana Environmental Policy Act document, appropriate state and federal rules and regulations will guide the future consideration and development (as deemed appropriate) of any re-evaluations to this document. The consideration of when to prepare a re-evaluation will be based on requirements at 40 CFR 1502.9(c), 23 CFR 771.129, and ARM 18.2.247 which include provisions for considering the emergence of significant new circumstances or information that has bearing on the proposed action or its impacts on environmental considerations. Conditions possibly meriting re-evaluation will be reviewed prior to construction of the separate project phases in accordance with federal guidelines as noted above, and, if necessary, a re-evaluation of the Environmental Impact Statement would be conducted to determine if the document remains valid for the proposed project (pursuant to the state and federal regulations cited above). If no substantial changes have occurred, the project would proceed under the approved decision document.

Funding

Through the Missoula area metropolitan transportation planning process, Russell Street has been prioritized as the number one priority for federal and state funds provided through the Surface Transportation Program-Urban funding program. Additional federal, state, and local funding prioritized through the metropolitan transportation planning process includes Congestion Mitigation and Air Quality funding, Bridge funding, Enhancement funding, and local funds. Also, a congressionally directed earmark was provided for this project through the most recent federal transportation funding bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act –A Legacy for Users.

The total cost of the preferred alternatives for Russell Street and South 3rd Street in year of expenditure dollars is approximately $56 million. The city recently amended their Long Range Transportation Plan (LRTP), in order to provide local funding for the estimated $11.5 million needed for the construction of South 3rd Street. As a result, the city's current Transportation Improvement Plan (TIP, FFY 2011-2015) and amended 2008 LRTP include a combination of available and planned revenue sources, which collectively provide fiscal constraint for the construction of the preferred alternatives for both Russell Street and South 3rd Street projects. The project sponsor will continue to seek funding and prioritize Surface Transportation Program-Urban (STPU) funds for subsequent phases and accumulate those funds over the next several years to ensure funding of the project.

Missoula Federal Fiscal Year 2011-2015 Transportation Improvement Program

Project	**Amount Reserved**
1st Phase	
South 3rd Street (Reserve to Russell)	$2,000,000 (Local funding)
Russell Street (South 3rd Street to West Broadway Street)	$17,795,800 (Surface Transportation Program-Urban)
Milwaukee Trail West	$550,000 (Surface Transportation Program - Enhancement)
Russell Street Bridge	$5,542,400 (Bridge)
Russell Street	$6,275,500 (Earmark)

2008 Missoula Long Range Transportation Plan

2nd Phase	**Amount/Source identified**
South 3rd Street (Reserve to Russell)	$9,500,000 (Local funding- 2008 LRTP amendment #2)
Russell Street (Mount Avenue to South 3rd Street)	$7,000,000 (Future Earmark - City) $6,600,000 (Local funding) Surface Transportation Program - Urban funds Accrue annual allocations @ 1,829,439/yr starting in 2015 to complete project.

**Other potential federal aid funding source, Surface Transportation Program - Enhancement*

Permits and Coordination Required

Prior to construction of the Russell Street and South 3rd Street reconstruction project the following permits and coordination would be required:

- Section 401 Certification of the Clean Water Act – Water Quality Certification from the Montana Department of Environmental Quality.
- Section 404 Permit of the Clean Water Act from the U.S. Army Corps of Engineers.
- Montana Pollutant Discharge Elimination Permit from the Montana Department of Environmental Quality.
- Montana Land-Use License or Easement on Navigable Water from the Montana Department of Natural Resources and Conservation.
- Floodplain encroachments must be approved by the Missoula County Floodplain Administrator.
- Montana Stream Preservation Act (SPA 124 coordination) with Montana Fish, Wildlife & Parks.
- City of Missoula MS4 Permit.
- Any necessary drywell permitting would be coordinated with the U.S. Environmental Protection Agency.

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FOREWORD

Population trends in the greater Missoula area have shown a steady increase with a projection for continued growth. In Missoula County, population growth averaged less than 0.5 percent a year during the decade from 1980 to 1990, from 1990 to 2000 the rate averaged nearly 2.0 percent per year, and from 2000-2010 the rate averaged about 1.4 percent per year.. The 2000 population of the County was close to 96,000, with just over 57,000 of those individuals residing within the City of Missoula. The 2010 population of Missoula County was nearly 110,000, with about 67,000 individuals residing within the City of Missoula. Growth outside of the County but still within the greater Missoula commuting area also continues to increase. According to a U.S. Census Bureau forecast in 2001, the population of Missoula County is expected to exceed 114,000 by the year 2015. This level of growth has led City and County officials to focus a great deal of attention on the maintenance and upgrade of much of the area's outdated and insufficient infrastructure.

In response to the roadway infrastructure needs and consistent with priorities established through the Missoula area metropolitan transportation planning process, the City of Missoula, in cooperation with the Federal Highway Administration and the Montana Department of Transportation, proposes to improve portions of Russell Street and South 3rd Street in Missoula, Montana. The project is intended to address current and projected capacity issues. The proposed Russell Street and South 3rd Street improvements are consistent with recommendations contained in the *Missoula Urban Comprehensive Plan–1998 Update*, the *1996, 1999, and 2004 Missoula Transportation Plan Updates,* and the *Missoula Non-Motorized Transportation Plan* (2002).

History and Background

Long Range Planning Process

The Missoula Office of Planning and Grants coordinated the Missoula Transportation Plan updates of 1996, 1999, and 2004 with input from the public, the Transportation Policy Coordinating Committee, and the Transportation Technical Advisory Committee. These committees consist of representatives from the City of Missoula, Missoula County, MDT, FHWA, the Missoula Urban Transportation District, the Missoula Ravalli Transportation Management Association, and other community organizations. An ad hoc Citizens Transportation Advisory Group and the public at-large also provided input into the Missoula transportation planning process. The Missoula Transportation Plan, along with the *Missoula Urban Comprehensive Plan–1998 Update*, provides the guiding principles for planning and development within the City.

As part of the metropolitan transportation planning process, a road system needs assessment was completed within the Missoula transportation planning process that included an analysis of the Russell Street corridor and the South 3rd Street corridor. The 2004 Missoula Transportation Plan Update forwarded recommendations from previous Plan Updates to widening Russell Street to five lanes and South 3rd Street to three lanes to correct roadway deficiencies. The analysis of

South 3rd Street in the Plan identified the intersections of South 3rd Street with Reserve Street and with Russell Street as high crash locations and capacity-related modifications were recommended for South 3rd Street to meet future traffic demands. Modifications to both Russell Street and South 3rd Street were recommended as Major Network Improvement Projects in the Plan.

The 2004 Transportation Plan identified the intersections of Russell Street with West Broadway Street, Wyoming Street, South 2nd Street, South 3rd Street, and Mount Avenue as locations with at least 12 crashes per year. The intersections of Russell Street with South 5th Street, and South 3rd Street with Reserve Street were identified as locations with crashes higher than expected for an urban route with these traffic volumes. In addition, the congestion levels for many intersections within the project area were determined to be higher than the desired level for a major arterial. An analysis of the projected traffic volumes indicated that the portion of Russell Street between the Mount Avenue/South 14th Street and West Broadway Street intersections would require modifications to meet future capacity-related travel demands. This is discussed in more detail in Chapter 1 of the Environmental Impact Statement, in Section 1.4.

Addition of Proposed South 3rd Street Project

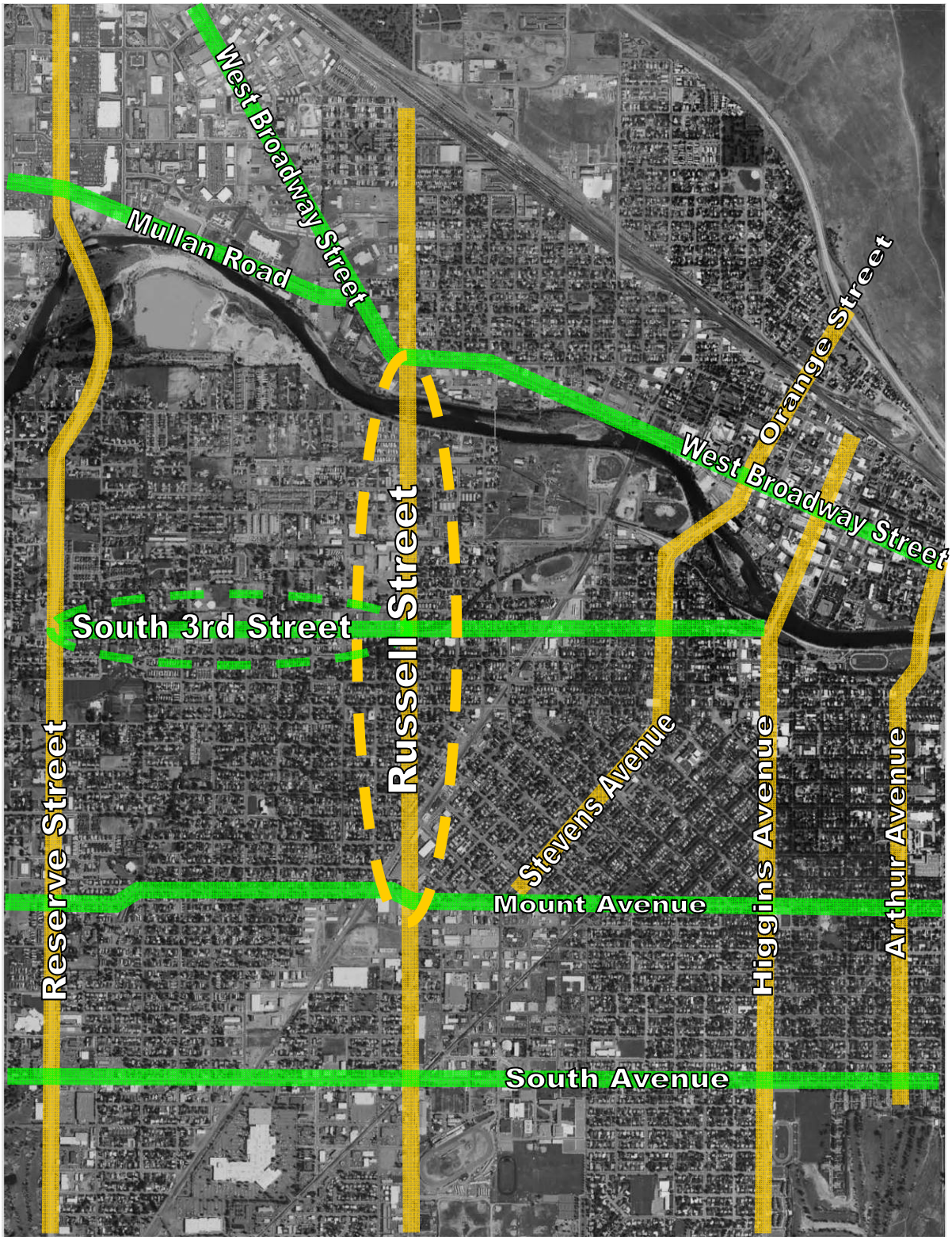
The South 3rd Street project began as a separate project in 1999. An Environmental Assessment was initiated under both the National and Montana Environmental Policy Act processes to study alternative modifications to South 3rd Street to increase capacity, correct roadway deficiencies, and improve safety. The Russell Street project was scheduled to begin the analysis phase in 2000. Because of the interconnected relationship of the two corridors, the City of Missoula, Montana Department of Transportation, and Federal Highway Administration decided to combine the two projects into one analysis and Environmental Impact Statement. Two members of the Advisory Committee from the original South 3rd Street project joined the Advisory Committee for the Russell Street and South 3rd Street project, which provided continuity between the two projects. The work that had previously been completed for South 3rd Street was incorporated into the early phases of the environmental review process.

Logical Termini

Missoula's roadway system consists of a network of major roads (arterials) that serve longer trips through the urban area and collectors and local streets that provide connections to and between arterials and direct land access. As depicted in Figure F-1, Reserve Street, Russell Street, Stevens/Orange Street, Higgins Avenue, and Arthur Avenue are the key north-south arterials in the city. South Avenue, Mount Avenue, South 3rd Street, and West Broadway Street comprise the key east-west arterials, and complete the major arterial network for the City of Missoula.

As a part of the roadway grid system, Russell Street is particularly important as a major arterial due to its location and orientation. Russell Street lies 11 blocks east of Reserve Street, the most westerly arterial, and 14 blocks west of the next continuous north-south arterial, Higgins Avenue. Russell Street provides a critical north-south link in this part of the community, and provides one of only five river crossings for vehicular traffic in the city. South 3rd Street plays a similar role in an east-west fashion as one of only four major east-west arterials in the grid system.

Figure F-1
Major Arterial Network



The lengths of these two corridors are dictated by their logical connections to other major links in this overall city street network. The proposed project on Russell Street would connect with an existing four-lane segment of Russell Street south of Mount Avenue/South 14th Street. Thus a continuous four-lane arterial would be provided for the extent of Russell Street up to its intersection with West Broadway Street.

The proposed improvements on South 3rd Street would connect between two major north-south arterials, Reserve Street and Russell Street.

These two projects thus have logical termini and have independent utility in the sense that each project could be constructed independent of the other without impacting the function or usefulness of the other corridor.

Activities since circulation of the DEIS

The Russell Street / South 3rd Street Draft Environmental Impact Statement (DEIS) was circulated for public review and comment on August 29, 2008, with a close of comment date set for October 20, 2008. During this period, members of the Missoula City Council requested an extension of the public comment period. The comment period was extended to November 4, 2008, and a Public Hearing was conducted on September 24, 2008.

Based on some of the public comment received, members of the public and Missoula City Council requested a "peer review" of the traffic analyses conducted for the Draft Environmental Impact Statement for Russell Street. Because the Missoula Area Metropolitan Planning Organization was in the process of completing an update to the Long Range Transportation Plan near the same time, the project team agreed that there would be value in updating the traffic analysis for the Final Environmental Impact Statement (FEIS). Subsequent to the completion of the analysis update for Russell Street, the analyses for South 3rd Street were also updated. Chapter 2 of this FEIS contains updated traffic information from both the *Russell Street Traffic Analysis Update* conducted in 2009, and the *South 3rd Street Traffic Update Memo*. Additionally, Appendix G contains a summary of the analyses and findings of both updates. Detailed technical memoranda, modeling output and final reports can also be obtained from the City of Missoula.

These traffic analyses updates allowed the project team to examine design options proposed by public participants. The results of the independent analyses validated some previous findings and recommendations, and allowed the project team to make modifications in the Preferred Alternatives for both Russell Street and South 3rd Street in order to extend the lifespan of the proposed safety and mobility improvements.