



**I-15/US-20  
Connector**

# **PLANNING AND ENVIRONMENTAL LINKAGES (PEL) STUDY REPORT**

December 2020





# I-15/US-20 Connector

## Planning and Environmental Linkages (PEL) Study Report

Prepared for:



Prepared by:



December 2020



I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Idaho Division**  
December 29, 2020

3050 Lakeharbor Lane, Suite 126  
Boise, Idaho 83703  
208.334.9180 - P  
208.334.1691 - F  
Idaho.FHWA@dot.gov

In Reply Refer To:  
HDA-ID

Mr. Brian W. Ness, Director  
Idaho Transportation Department  
P. O. Box 7129  
Boise, ID 83707

ATTN: Jason Minzghor, District Engineer

Subject: KN 20065, I-15, US-20 Connector Study

Dear Mr. Ness:

This letter is to acknowledge the receipt of the I-15/US-20 Connector Planning and Environmental Linkages (PEL) study and the associated PEL Questionnaire on November 10, 2020. The PEL effort was undertaken by the Idaho Transportation Department (ITD) in cooperation with Bonneville County and the Bonneville Metropolitan Planning Organization (BMPO). The Idaho Division commends ITD for embracing this collaborative approach to consider long-range transportation improvements in the study area.

This planning study for potential improvements to six interchanges on I-15 and US-20 in Idaho Falls, Idaho, was undertaken in a manner consistent with the Federal Highway Administration (FHWA) PEL guidance. Through this process, the evaluation and findings of the PEL study may be applied to subsequent National Environmental Policy Act (NEPA) process and documentation. These streamlining efforts likely will result in time and cost savings on future NEPA studies conducted within the study area.

The completed PEL Questionnaire submitted to FHWA on November 10, 2020 provides a good summary of the work completed in the PEL study and the information that will be needed once projects enter the NEPA process. As individual projects are initiated and funding becomes available, it will be necessary for FHWA to meet with ITD, Bonneville County, and the BMPO on a project-by-project basis to determine the scope of the NEPA study, including the level of study required, purpose and need, logical termini, and the extent to which this PEL study can be used to supplement or replace certain milestones in the NEPA process.



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**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

Should you have any questions please feel free to contact Lisa Applebee, Operations Engineer, at [lisa.applebee@dot.gov](mailto:lisa.applebee@dot.gov) or 208-334-9180 ext. 112.

Sincerely,

**PETER J  
HARTMAN**

Digitally signed by  
PETER J HARTMAN  
Date: 2020.12.29  
09:51:29 -07'00'

Peter J. Hartman  
Idaho Division Administrator

cc: John A. Perry, FHWA  
Brent Inghram, FHWA  
Lisa Applebee, FHWA  
Dan McElhinney, ITD  
Karen Hiatt, ITD  
Ryan Day, ITD





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

**PUBLIC WORKS DEPARTMENT**

Chris D. Canfield, P.E. | Assistant Public Works Director

Office (208) 612-8259

Fax (208) 612-8570

May 1, 2020

Ryan Day, Project Manager  
Idaho Transportation Department  
206 North Yellowstone  
Rigby, ID 83442

**RE: Letter of Support - I-15/US-20 Connector Project**

Dear Mr. Day,

The Idaho Transportation Department (ITD) is working with the City of Idaho Falls and Bonneville County to study ways to improve I-15 and US-20 to better serve Idaho Falls and the growing region.

The City of Idaho Falls, in partnership with ITD, has long supported improvements in the area. The Idaho Falls community and region is rapidly growing, and the current infrastructure cannot accommodate travel demands of increasing local growth and regional tourism. The I-15/US-20 Connector Project will accommodate growth in the community, provide pedestrian and bicycle mobility in the area, reduce congestion, and address unsafe travel conditions.

The City of Idaho Falls has been involved with the I-15/US-20 Connector Project Planning and Environmental Linkages (PEL) study process as described below.

The City of Idaho Falls attended at the following PEL meetings:

- December 6, 2017 Visioning
- January 16, 2018: Environmental Advisory Committee meeting
- May 9, 2018: Public Meeting #1 / Community Kickoff
- June 20, 2018: Community Working Group #2
- July 24, 2018 Level 1 Screening Meeting
- September 5, 2018: Public Meeting #2 / Open House
- April 9-10, 2019 Level 3 Screening Meeting
- May 16, 2019: Public Meeting #3 / Open House
- July 9, 2019: Environmental Advisory Committee meeting
- March 11-12, 2020: Level 3 Screening Meeting





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

The City of Idaho Falls employees who have participated in the PEL process to date are:

Contact Person	Title	Phone	E-Mail
<b>Chris Canfield, P.E.</b>	Assistant Public Works Director	(208) 612-8259	ccanfield@idahofallsidaho.gov
<b>Chris Frederickson, P.E.</b>	Public Works Director	(208) 612-8256	pwd@idahofallsidaho.gov
<b>Kent Fugal, P.E.</b>	City Engineer	(208) 612-8258	kfugal@idahofallsidaho.gov
<b>Kerry Beutler</b>	Assistant Planning Director	(208) 612-8278	kbeutler@idahofallsidaho.gov

We support advancing the two recommended alternatives that were determined to move forward to NEPA. Alternative E3 would reconstruct the I-15 and US-20 interchange near Olympia Street, provide free flow ramps connecting northbound I-15 to eastbound US-20 and westbound US-20 to southbound I-15 and maintain US-20 access to downtown Idaho Falls via improved interchanges at Fremont and Science Center Drive. Alternative H would reconstruct the I-15 and US-20 interchange somewhere between Iona Rd. and Pevero Dr., provide free flow ramps connecting northbound I-15 to eastbound US-20 and westbound US-20 to southbound I-15, provide a split diamond interchange connecting I-15 exits 118 and 119, and convert US-20 to a local street between Grandview (Exit 119) and St. Leon/15<sup>th</sup> East (Exit 311).

As the project moves into the NEPA phase, we are committed to providing continued support and participation in the process.

Issues that will need to be considered in NEPA or subsequent project development steps include:

- Final Alignment that allows for property development in the future as necessary.
- Connectivity to Downtown Idaho Falls during and after construction.
- Performance of the preferred solution beyond the design year to meet the needs of the future travelling demands.

We look forward to working closely with the ITD on the continued progress of the I-15/US-20 Connector Project.

Sincerely,

Chris Canfield, P.E.  
*Assistant Public Works Director*



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**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

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## BONNEVILLE COUNTY COMMISSIONERS

ROGER S. CHRISTENSEN, CHAIRMAN, DISTRICT #1  
DAVE RADFORD, DISTRICT #2  
BRYON REED, DISTRICT #3

Cheryl Matthiesen, Admin. Asst.  
Ruby Strong, Admin. Sec.

605 NORTH CAPITAL AVE., SUITE 102  
IDAHO FALLS, ID 83402  
PHONE: (208) 529-1360  
FAX: (208) 524-7932  
Email: [commsec@co-bonneville.id.us](mailto:commsec@co-bonneville.id.us)  
Website: [www.co-bonneville.id.us](http://www.co-bonneville.id.us)

May 20, 2020

Ryan Day, Project Manager  
Idaho Transportation Department  
206 North Yellowstone  
Rigby, ID 83442

**RE: Letter of Support - I-15/US-20 Connector Project**

Dear Mr. Day,

The Idaho Transportation Department (ITD) is working with the City of Idaho Falls and Bonneville County to study ways to improve I-15 and US-20 to better serve Idaho Falls and the growing region.

The Bonneville County in partnership with ITD, has long supported improvements in the area. The Idaho Falls community and region is rapidly growing, and the current infrastructure cannot accommodate travel demands of increasing local growth and regional tourism. The I-15/US-20 Connector Project will accommodate growth in the community, provide pedestrian and bicycle mobility in the area, reduce congestion, and address unsafe travel conditions.

Bonneville County has been involved with the I-15/US-20 Connector Project Planning and Environmental Linkages (PEL) study process as described below.

Bonneville County has provided input at the following PEL meetings:

- December 6, 2017 Visioning
- January 16, 2018: Environmental Advisory Committee meeting
- January 31, 2018: Community Working Group #1
- May 9, 2018: Public Meeting #1 / Community Kickoff
- June 20, 2018: Community Working Group #2
- July 24, 2018 Level 1 Screening Meeting
- August 23, 2018: Community Working Group #3



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I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

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- September 5, 2018: Public Meeting #2 / Open House
- November 8, 2018: 81st Street Neighborhood Meeting
- April 9-10, 2019 Level 3 Screening Meeting
- April 29, 2019: Community Working Group #4
- May 16, 2019: Public Meeting #3 / Open House
- June 10, 2019: Alternative H Neighborhood Meeting
- June 26, 2019 US Army Corps of Engineers Meeting (Boise, ID)
- July 9, 2019: Environmental Advisory Committee meeting
- February 28, 2020: Community Working Group #5
- March 11, 2020: Environmental Advisory Committee meeting
- March 11-12, 2020: Level 3 Screening Meeting

The Bonneville County employees who have participated in the PEL process to date are:

Contact Person	Title	Phone	E-Mail
<b>Lance Bates</b>	Public Works Director	529-1290	lbates@co.bonneville.id.us
<b>Bryon Reed</b>	Commissioner	529-1350	breed@co.bonneville.id.us

After participating in the three levels of screening, we found the PEL process helpful in the alternatives decision-making process, and we support advancing the two recommended alternatives that were determined to move forward to NEPA. Alternative E3 would reconstruct the I-15 and US 20 interchange near Olympia Street, provide free flow ramps connecting northbound I-15 to eastbound US 20 and westbound US 20 to southbound I-15 and maintain US-20 access to downtown Idaho Falls via improved interchanges at Fremont and Science Center Drive. Alternative H would reconstruct the I-15 and US 20 interchange somewhere between Iona Rd. and Pevero Dr., provide free flow ramps connecting northbound I-15 to eastbound US 20 and westbound US 20 to southbound I-15, provide a split diamond interchange connecting I-15 exits 118 and 119, and convert US-20 to a local street between Grandview (Exit 119) and St. Leon/15<sup>th</sup> East (Exit 311).

As the project moves into the NEPA phase, we are committed to providing continued support and participation in the process. Our anticipated participation in NEPA process will likely include





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

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participation in meetings, provide matching funding, review technical materials relative to impact assessment and mitigation, etc.

Issues that will need to be considered in NEPA or subsequent project development steps include:

Ongoing communication on the continued operation of Hatch Pit

We look forward to working closely with the ITD on the continued progress of the I-15/US-20 Connector Project.

Sincerely,

DocuSigned by:  
BONNEVILLE COUNTY COMMISSIONERS  
*Roger Christensen* 5/20/2020

5200450CAA36488  
Roger S. Christensen, Chairman/Commissioner

DocuSigned by:  
*Bryon Reed* 5/20/2020  
5200450CAA36488  
Bryon L. Reed, Commissioner





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December 2020

May 22, 2020

Ryan Day, Project Manager  
Idaho Transportation Department  
206 North Yellowstone  
Rigby, ID 83442

**RE: Letter of Support - I-15/US-20 Connector Project**

Dear Mr. Day,

The Idaho Transportation Department (ITD) is working with the City of Idaho Falls and Bonneville County to study ways to improve I-15 and US-20 to better serve Idaho Falls and the growing region.

The Bonneville Metropolitan Planning Organization (BMPO), in partnership with ITD, has long supported improvements in the area. The Idaho Falls community and region is rapidly growing, and the current infrastructure cannot accommodate travel demands of increasing local growth and regional tourism. The I-15/US-20 Connector Project will accommodate growth in the community, provide pedestrian and bicycle mobility in the area, reduce congestion, and address unsafe travel conditions.

BMPO has been involved with the I-15/US-20 Connector Project Planning and Environmental Linkages (PEL) study process as described below.

The BMPO provided our input at the following PEL meetings:

- December 6, 2017 Visioning
- January 16, 2018: Environmental Advisory Committee meeting
- January 31, 2018: Community Working Group #1
- February 2, 2018: Sensitivity Analysis Preliminary Results
- May 9, 2018: Public Meeting #1 / Community Kickoff
- June 20, 2018: Community Working Group #2
- July 24, 2018 Level 1 Screening Meeting
- August 23, 2018: Community Working Group #3
- September 5, 2018: Public Meeting #2 / Open House
- February 5-6, 2019: Alternatives Risk Workshop
- April 9-10, 2019 Level 3 Screening Meeting
- April 29, 2019: Community Working Group #4
- May 16, 2019: Public Meeting #3 / Open House





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

- July 9, 2019: Environmental Advisory Committee meeting
- December 9-11, 2019: CRAVE Workshop
- February 28, 2020: Community Working Group #5
- March 11, 2020: Environmental Advisory Committee meeting
- March 11-12, 2020: Level 3 Screening Meeting

The BMPO employees who have participated in the PEL process to date are:

Contact Person	Title	Phone	E-Mail
Darrell West	BMPO Director	(208) 612-8539	dwest@bmpo.org
DaNiel Jose	Transportation Planner	(208) 612-8509	djose@bmpo.org

After participating in the three levels of screening, we found the PEL process helpful in the alternatives decision-making process, and we support advancing the two recommended alternatives that were determined to move forward to NEPA. Alternative E3 would reconstruct the I-15 and US 20 interchange near Olympia Street, provide free flow ramps connecting northbound I-15 to eastbound US 20 and westbound US 20 to southbound I-15 and maintain US-20 access to downtown Idaho Falls via improved interchanges at Fremont and Science Center Drive. Alternative H would reconstruct the I-15 and US 20 interchange somewhere between Iona Rd. and Pevero Dr., provide free flow ramps connecting northbound I-15 to eastbound US 20 and westbound US 20 to southbound I-15, provide a split diamond interchange connecting I-15 exits 118 and 119, and convert US-20 to a local street between Grandview (Exit 119) and St. Leon/15<sup>th</sup> East (Exit 311).

As the project moves into the NEPA phase, we are committed to providing continued support and participation in the process. Our anticipated participation in NEPA process should include attendance at public meetings.

Issues that will need to be considered in NEPA or subsequent project developments steps include:

- Improved access and safety related to the multi-modal transportation network.
- Appropriate protection of the environment and public health.
- Economic growth as it relates to the efficient movement of freight and goods.
- Enhanced regional travel patterns to improve the function of the transportation network.

We look forward to working closely with the ITD on the continued progress of the I-15/US-20 Connector Project.

Sincerely,

Darrell M. West  
BMPO Director





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020



**United States Department of the Interior**

IDAHO FISH AND WILDLIFE OFFICE

Eastern Idaho Field Office  
4425 Burley Dr., Suite A  
Chubbuck, Idaho 83202  
Telephone (208) 237-6975  
<http://IdahoES.fws.gov>



Ryan Day, Project Manager  
Idaho Transportation Department  
206 North Yellowstone Highway  
Rigby, Idaho 83442

Subject: Letter of Support Planning and Environmental Linkages I-15/U.S.-20 Connector Project

Dear Mr. Day:

The Idaho Transportation Department (ITD) is working with the City of Idaho Falls and Bonneville County to study ways to improve I-15 and U.S.-20 to better serve Idaho Falls and the growing region. The Fish and Wildlife Service (Service), in partnership with ITD, has long supported public safety. The I-15/U.S.-20 Connector Project will accommodate growth in the community, provide pedestrian and bicycle mobility in the area, reduce congestion, and address unsafe travel conditions. The Service has been engaged with the I-15/U.S.-20 Connector Project Planning and Environmental Linkages (PEL) study process as described below.

The Service provided our input at the following PEL meetings:

- July 9, 2019 –Environmental Advisory Committee Meeting
- March 11, 2020 –Environmental Advisory Committee Meeting

The Service employee who has participated in the PEL process to date is:

Evan Ohr Fish and Wildlife Biologist (208) 237-6975 ext. 115 [Evan\\_ohr@fws.gov](mailto:Evan_ohr@fws.gov)

Through our participation, we found the PEL process helpful in the alternatives decision making process. As the project moves into the NEPA phase, we are committed to provide continued support and participation in the process. We look forward to working closely with ITD on the continued progress of the I-15/U.S.-20 Connector Project.

Sincerely,

*Sandra M Fisher*

For Christopher Swanson  
Acting State Supervisor

cc: HDR, (J. Longsdorf, S. Borders)

INTERIOR REGION 9  
COLUMBIA-PACIFIC NORTHWEST

IDAHO, MONTANA\*, OREGON\*, WASHINGTON

\*PARTIAL

INTERIOR REGION 12  
PACIFIC ISLANDS

AMERICAN SAMOA, GUAM, HAWAII, NORTHERN  
MARIANA ISLANDS





# Contents

	Page No.
<b>Executive Summary</b> .....	<b>1</b>
Project Purpose .....	1
Project Needs .....	1
Community and Public Involvement .....	2
Agency Coordination .....	2
Land Use and Transportation .....	2
Environmental Resources .....	3
Development of Alternatives .....	3
Recommended Alternatives .....	4
PEL Study Process and Next Steps .....	4
<b>1.0 Introduction and Overview</b> .....	<b>6</b>
1.1 Background .....	6
1.2 Study Area .....	6
1.2.1 Travel Patterns and Uses .....	8
1.3 Regional and Long-Range Planning .....	8
1.4 Study Process .....	10
1.5 Purpose and Need .....	11
1.5.1 Project Purpose .....	11
1.5.2 Project Needs .....	11
1.5.3 Additional Goals .....	12
<b>2.0 Land Use and Transportation Analysis</b> .....	<b>14</b>
2.1 Land Use .....	14
2.1.1 Existing Conditions .....	14
2.1.2 Planned Conditions .....	14
2.1.3 Airport Influence on Future Land Use .....	16
2.2 Traffic Patterns and Operations .....	18
2.2.1 Traffic Origin/Destination Study .....	18
2.2.2 Existing Traffic Operations .....	18
2.3 Traffic Forecasts .....	20
2.3.1 Planning Year .....	20
2.3.2 Travel Demand Model .....	21
2.3.3 Forecast Travel Demand Volumes .....	21
2.4 Transit .....	22
2.5 Bicycle and Pedestrian Facilities .....	23
2.6 Safety .....	25
2.6.1 Pedestrian and Bicycle Crashes .....	27
<b>3.0 Alternatives Evaluation</b> .....	<b>29</b>
3.1 Process .....	29
3.2 Level One Evaluation .....	31
3.2.1 Universe of Alternatives .....	31
3.2.2 Level One Criteria .....	31



3.2.3	Level One Process .....	32
3.2.4	Level One Results .....	32
3.3	Level Two Evaluation .....	36
3.3.1	Qualitative Risk Workshop.....	37
3.3.2	Level Two Alternatives.....	37
3.3.3	Level Two Criteria.....	38
3.3.4	Level Two Screening Meeting.....	39
3.3.5	Level Two Results .....	39
3.4	Level Three Evaluation.....	44
3.4.1	CRAVE Workshop .....	44
3.4.2	Operational Analysis.....	45
3.4.3	Level Three Criteria .....	54
3.4.4	Level Three Screening Meeting .....	56
3.4.5	Level Three Results.....	56
3.5	Recommended Alternatives Based on Level Three Evaluation.....	58
3.5.1	No Build Alternative .....	58
3.5.2	Alternative E3 .....	59
3.5.3	Alternative H2.....	61
<b>4.0</b>	<b>Environmental Resources .....</b>	<b>63</b>
4.1	Environmental Scan .....	64
4.2	Resources Reviewed.....	64
4.3	Human and Physical Environment.....	65
4.3.1	Environmental Justice and Socioeconomics .....	65
4.3.2	Air Quality.....	66
4.3.3	Farmland, Soils, and Geology.....	66
4.3.4	Traffic Noise .....	67
4.3.5	Hazardous Materials.....	67
4.3.6	Idaho Falls Regional Airport.....	68
4.4	Natural Environment.....	70
4.4.1	Wetlands and Waters .....	70
4.4.2	Water Resources.....	71
4.4.3	Biological Resources .....	72
4.5	Cultural Resources .....	73
4.5.1	Existing Conditions .....	73
4.5.2	Potential Impacts and Mitigation .....	75
4.5.3	Next Steps.....	75
4.6	Public Lands.....	75
4.6.1	Section 4(f) Resources .....	75
4.6.2	Section 6(f) Resources .....	76
4.7	Hydraulics and Stormwater.....	77
4.8	Cumulative Impacts .....	77
<b>5.0</b>	<b>Community and Public Involvement and Agency Coordination .....</b>	<b>78</b>
5.1	Community Stakeholders.....	78
5.1.1	Visioning Workshop .....	78
5.1.2	Alternatives Screening Meetings.....	79





5.1.3 Community Working Group Meetings .....	80
5.2 Public Involvement .....	82
5.2.1 Public Meetings .....	82
5.2.2 Neighborhood Meetings.....	84
5.2.3 Additional Outreach .....	84
5.3 Agency Coordination .....	85
5.3.1 Environmental Resources Committee.....	85
5.3.2 Tribal Coordination .....	86
5.3.3 Idaho Falls Regional Airport.....	86
5.3.4 Updates to Elected Officials and Local Transportation Organizations .....	87
<b>6.0 Next Steps.....</b>	<b>88</b>
6.1 Planning Products and Analyses from PEL Study to be Used in Future NEPA .....	88
6.2 Future NEPA Process .....	89
6.3 Action Plan .....	90
6.3.1 Interim Project .....	90
6.4 Summary.....	92
<b>7.0 References.....</b>	<b>93</b>

## Appendices

- Appendix A. FHWA Planning and Environmental Linkages Questionnaire
- Appendix B. Data Collection, Existing Conditions, Forecast No Build Conditions Memo
- Appendix C. Methods and Assumptions for Forecasting Traffic Volumes
- Appendix D. Alternatives Evaluation Matrix with Questions for Levels One, Two, and Three
- Appendix E. I-15/US-20 Safety and Mobility Improvements Study Level One Alternative Screening Summary
- Appendix F. I-15/US-20 Safety and Mobility Improvements Study Level Two Alternative Screening Summary
- Appendix G. I-15/US-20 Connector Cost Risk Assessment and Value Engineering Report
- Appendix H. I-15/US-20 Safety and Mobility Improvements Study Level Three Alternative Screening Summary
- Appendix I. PEL Level 3 2045 Updated Alternatives Operational Analysis Technical Memo
- Appendix J. I-15/US-20 Safety and Mobility Improvements Study – Environmental Scan
- Appendix K. Aquatic Resources and Ute Ladies’-tresses Surveys Memoranda
- Appendix L. I-15/US-20 Safety and Mobility Study – Drainage and Flood Control
- Appendix M. I-15/US-20 Safety and Mobility Study – Historic Architecture Screening
- Appendix N. Community and Public Involvement
- Appendix O. Agency Coordination





## Figures

Figure 1.	PEL Study Area.....	1
Figure 2.	Recommended Alternatives .....	5
Figure 3.	PEL Study Area.....	7
Figure 4.	Interchanges Analyzed in the PEL Study.....	8
Figure 5.	Future Land Use Map.....	15
Figure 6.	Airport Overlay Zone .....	17
Figure 7.	Existing (2017) Weekday Traffic Volumes and Daily LOS .....	19
Figure 8.	2045 No Build Alternative Weekday Travel Demand Forecasts and Daily LOS ..	22
Figure 9.	Existing Bicycle and Pedestrian Facilities on Major Facilities .....	24
Figure 10.	Planned Bicycle and Pedestrian Facilities .....	25
Figure 11.	High Crash Rate and Bicycle and Pedestrian Crash Locations .....	26
Figure 12.	Evaluation Criteria.....	29
Figure 13.	Alternatives Evaluation Process .....	30
Figure 14.	2045 No Build Alternative Forecasted Operations .....	49
Figure 15.	2045 Alternative C3 Forecasted Operations.....	50
Figure 16.	2045 Alternative E3 Forecasted Operations .....	52
Figure 17.	2045 Alternative H2 Forecast Operations.....	53
Figure 18.	Alternative E3.....	60
Figure 19.	Alternative H2.....	62
Figure 20.	Environmental Study Area.....	63
Figure 21.	Aerial View of the Existing I-15 Northbound Off-Ramp Connection to US-20 ....	91
Figure 22.	Plan View of Interim Project .....	92

## Tables

Table 1.	Existing (2017) AM & PM Peak Hour Intersection Analysis Results.....	20
Table 2.	Level One Screening Criteria Questions.....	31
Table 3.	Level One Concept Alternatives and Screening Results.....	32
Table 4.	Level Two Screening Criteria Questions.....	38
Table 5.	Level Two Alternatives and Screening Results.....	40
Table 6.	Intersection Analysis Results.....	47
Table 7.	Merge/Diverge Analysis Results.....	48
Table 8.	Level Three Screening Criteria Questions .....	54
Table 9.	Level Three Alternatives and Screening Results .....	57
Table 10.	Historic Resources Located in or Adjacent to the Environmental Study Area ....	73





## Acronyms and Abbreviations

AIP	Airport Improvement Program
AWDT	average weekday daily traffic
BMPO	Bonneville Metropolitan Planning Organization
C/D	collector/distributor
CRAVE	cost risk assessment and value engineering
CWG	Community Working Group
EICAP	Eastern Idaho Community Action Partnership
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
GIS	Geographic Information System
HSM	Highway Safety Manual
I-15	Interstate 15
IDEQ	Idaho Department of Environmental Quality
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
iPAC	Information, Planning & Consultation System
ITD	Idaho Transportation Department
LOS	level of service
NEPA	National Environmental Policy Act
NHD	National Hydrography Dataset
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
O/D	origin/destination
PEL	Planning and Environmental Linkages
RPZ	runway protection zone
SPUI	single-point urban interchange
TRPTA	Targhee Regional Public Transportation Authority
US-20	United States Highway 20
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service



## EXECUTIVE SUMMARY

The Idaho Transportation Department (ITD), the City of Idaho Falls, Bonneville County, and the Bonneville Metropolitan Planning Organization (BMPO) conducted a Planning and Environmental Linkages (PEL) study for potential improvements to six interchanges on Interstate-15 (I-15) and United States Highway 20 (US 20) in Idaho Falls, Idaho. A PEL study identifies transportation issues and environmental concerns that are addressed in the National Environmental Policy Act (NEPA) environmental review process; and it sets the vision for improvements to be fully evaluated in a subsequent NEPA study.

The I-15/US-20 Connector PEL Study is an important preliminary step in redesigning the corridor to provide safe and reliable travel for the next 25 years and beyond, as the I-15 and US-20 interchanges are not expected to provide adequate safety, mobility, and economic opportunity in the city, county, and region given the anticipated future growth. The PEL study provides a long-term vision and implementation plan for I-15 and US-20 in Idaho Falls.

The PEL study area is located in Idaho Falls and Bonneville County, Idaho. Figure 1 displays the study area, which includes the six interchanges that were specified for analysis in the study.

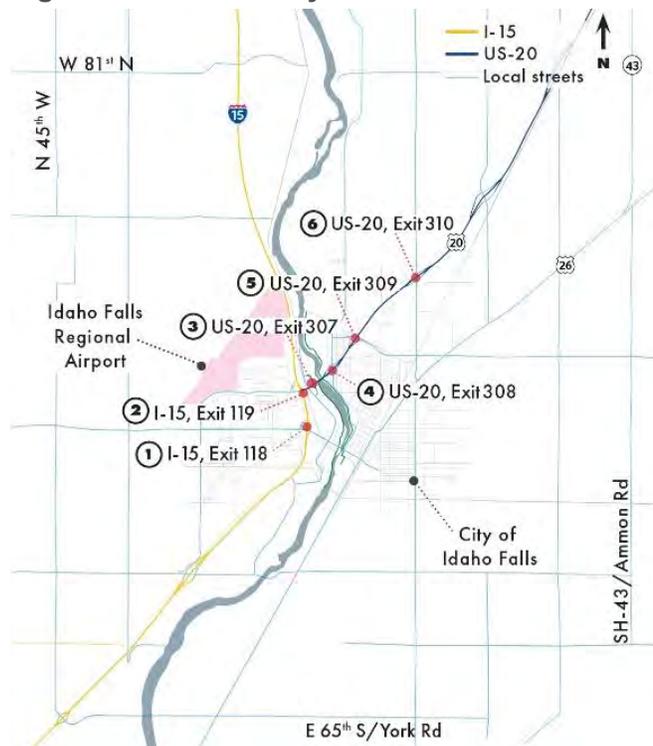
### Project Purpose

The purpose of the PEL study is to identify and analyze improvements to address safety, congestion, mobility, and travel time reliability for efficient movement of people, goods, and services on I-15 and US-20 in or near Idaho Falls and Bonneville County.

### Project Needs

Multimodal connections and capacity improvements to I-15 and US-20, as well as potential new roadway linkages, are needed to:

Figure 1. PEL Study Area





- Address unsafe travel conditions on I-15 and US-20.
- Reduce congestion at the I-15/US-20 interchange, particularly for traffic exiting US-20 towards southbound I-15 at the on-ramp, and for northbound traffic on I-15 exiting at US-20 eastbound exchange, which both operate at a current level of service (LOS) D.
- Provide pedestrian and bicycle mobility within the I-15 and US-20 corridors.
- Address future travel demand forecasts to accommodate increasing local growth and regional tourism.

## Community and Public Involvement

ITD conducted a robust program to involve the community and the general public in the PEL study process. A visioning workshop with local agency stakeholders was held at the outset of the study. A Community Working Group (CWG) of stakeholders representing different perspectives and interests met six times as an advisory body. Project alternatives were reviewed and screened by an analysis group of stakeholders. Three in-person public meetings each had between 100 and 350 attendees. The fourth public meeting, conducted online, had more than 1,000 unique users and received over 300 comments. To supplement meetings and events, email updates were sent to stakeholders and a web page (<http://i15us20connector.com/>) was maintained.

## Agency Coordination

Local, state, and federal agencies were important participants in the PEL study process. The core project team responsible for the day-to-day project direction, management, and production included ITD, City of Idaho Falls, Bonneville County, the BMPO, and the consultant. The analysis team charged with evaluating and screening the alternatives included everyone on the project team plus FHWA. An Environmental Resources Committee was established to allow the project team to discuss PEL study processes, as well as anticipated NEPA requirements, with ITD local and headquarters environmental staff, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, State Historic Preservation Office, Idaho Department of Fish and Game, and Idaho Department of Environmental Quality. In addition to those agency teams that met regularly throughout the process, the project team also engaged Idaho Falls Power, Idaho Falls Regional Airport, Targhee Regional Public Transportation Authority, and the Shoshone-Bannock Tribe at different times during the process to share project updates and solicit input based on those entities' specific interests.

## Land Use and Transportation

Future land use plans of the City of Idaho Falls and Bonneville County were reviewed to inform the development of potential improvement alternatives. The BMPO provided projections of population and employment for the 2040 planning horizon year. Population in the region -





103,000 persons in 2014 - is expected to grow to up to 167,000 in 2040. These forecasts were extrapolated to 2045 for the travel demand model to estimate traffic conditions for the comparison of alternatives. Under the No Build scenario, traffic conditions in 2045 are projected to be notably worse than conditions in 2017.

Crash data in the study area for the period of 2011-2016 was analyzed to identify hot spots and locations of safety concerns. During that time period, 59 crashes occurred on I-15, 87 crashes occurred along US-20, 56 crashes occurred on the interchange on- and off-ramps, and 178 crashes occurred at the six PEL study intersections.

An inventory of existing and planned bicycle and pedestrian facilities was prepared. Existing bicycle and pedestrian facilities include the Idaho Falls Riverwalk, a pedestrian and bicycle facility that travels along the Snake River within Idaho Falls. BMPO plans for bicycle and pedestrian facility improvements, connections, and extensions were reviewed and identified for inclusion in alternative improvements.

## Environmental Resources

The PEL study process identified potential environmental issues of concern to inform the alternatives development and screening process and to reference during the subsequent NEPA study. The environmental resources included the human and physical environment, the natural environment, cultural resources, public lands, as well as operational considerations. The PEL study process analyzed potential impacts and mitigation issues of the alternatives recommended to move into a NEPA study, and next steps for each resource through the NEPA process. The Recommended Alternatives have impacts to historic properties, wetlands, parks, floodplains, residential areas that may be designated as environmental justice, noise, the airport runway protection zone (RPZ), and potentially endangered species.

## Development of Alternatives

Alternatives were developed in an iterative process. As a first step, screening criteria based on the Purpose and Need and project goals were defined, and related evaluation measures were identified.

Three steps of screening took place. At each level of screening, each alternative was reviewed and ranked against the screening criteria that became more detailed and quantitative through the process. In Level One, 14 concept alternatives were identified. Level Two evaluated 10 alternatives, and Level Three assessed 4 alternatives. The end result of the screening process was that two build alternatives were recommended for analysis in a subsequent NEPA process along with the No Build Alternative.



## Recommended Alternatives

Two alternatives, along with a No Build Alternative for comparison purposes, are recommended for further analysis in a NEPA process. Figure 2 displays the alternatives.

## PEL Study Process and Next Steps

As required in 23 USC 168 and 23 CFR 450.212, this PEL study process identified the following planning products and analyses to be incorporated into a subsequent NEPA process or processes:

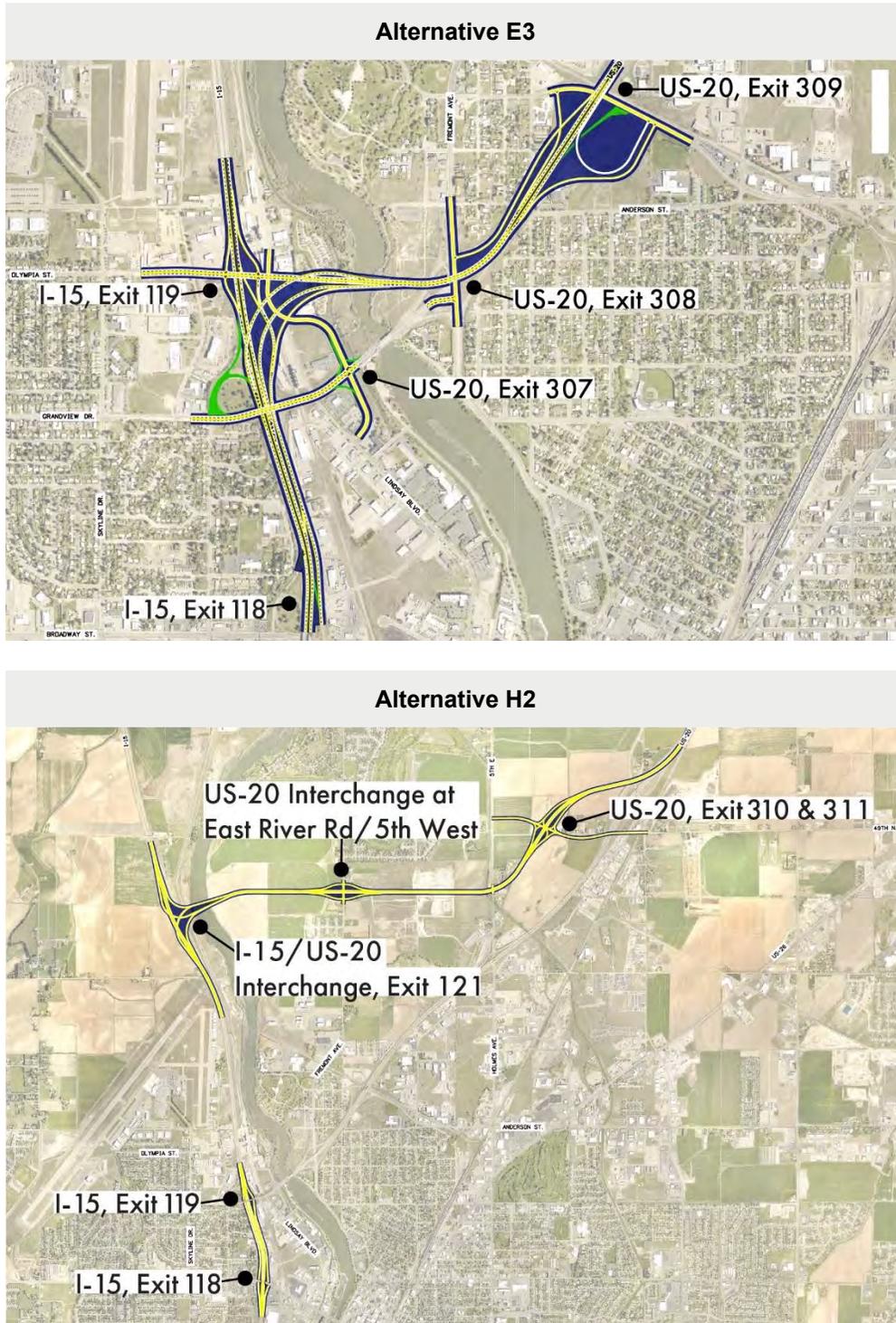
- Purpose and Need
- Land use and transportation analysis
- Alternatives development
- Screening of alternatives
- Recommended alternatives
- Environmental resources identification
- Input from public and agency involvement program
- Action plan with next steps to complete the identified improvements.

The Federal Highway Administration has been involved throughout this PEL study process and agrees that the planning products and analyses are appropriate to be adopted into a subsequent NEPA process or processes.

Next steps are documented in Chapter 6.0.



**Figure 2. Recommended Alternatives**





## 1.0 INTRODUCTION AND OVERVIEW

### 1.1 Background

The Idaho Transportation Department (ITD), the City of Idaho Falls, Bonneville County, and the Bonneville Metropolitan Planning Organization (BMPO) worked together to plan for the future by studying potential improvements to the Interstate-15 (I-15) and US-20 interchanges.

Constructed in the 1950s and 60s, the I-15 and US-20 interchanges in Idaho Falls are not expected to provide adequate safety, mobility, and economic opportunity in the city, county, and region given the anticipated future growth.

ITD conducted a Planning and Environmental Linkages (PEL) study, which is an important preliminary step in redesigning the corridor to provide safe and reliable travel for the planning year of 2045.

The study, called the I-15/US-20 Connector PEL Study, provides a long-term vision and implementation plan for I-15 and US-20 in Idaho Falls. The study was prepared in accordance with Federal Highway Administration (FHWA) guidance. The FHWA PEL questionnaire for the study is included in Appendix A. The vision will enable ITD, the City of Idaho Falls, and

Bonneville County to plan, build, and manage the corridor's future improvements and development, while addressing immediate maintenance needs. This report documents the process for completing this study—development of a Purpose and Need statement; alternatives development, refinement, and analysis; environmental resources identification, including impacts and mitigation (if necessary); agency coordination and public involvement; and an action plan with next steps to complete the identified improvements.

### 1.2 Study Area

The study area is located in Idaho Falls and Bonneville County, Idaho. It extends along I-15 and US-20 from I-15 Exit 113 at 66th South and York Road to north of US-20 Exit 313 at 25th East.

### What is a PEL Study?

A Planning and Environment Linkages (PEL) study is a relatively new type of planning study that identifies issues and concerns that are addressed in the National Environmental Policy Act (NEPA) environmental review process. The PEL study process identifies transportation issues and environmental concerns in a corridor, or in a specific location. PEL studies can lead to timely permit decisions, better project delivery, and mutually beneficial outcomes because the study data can be incorporated by reference into the NEPA process. Potential benefits of using the PEL study process include:

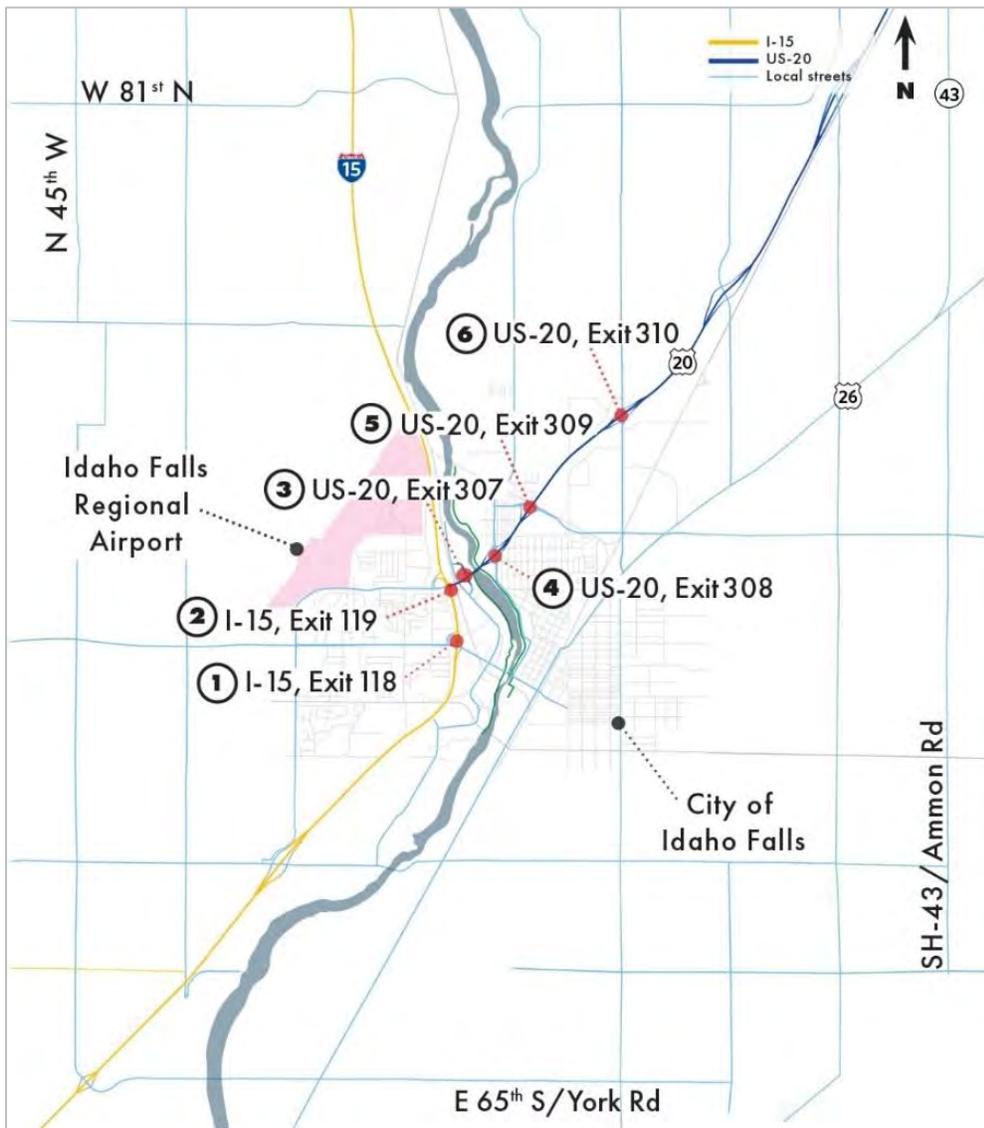
- Improved sharing of information
- Elimination of duplicative efforts in planning and NEPA processes
- Improved communication and stronger relationships with stakeholders and agencies
- Early identification of potential impacts
- Better environmental outcomes

At completion, a PEL study links planning to environmental issues and results in planning products and analyses that can be carried forward into the NEPA process.

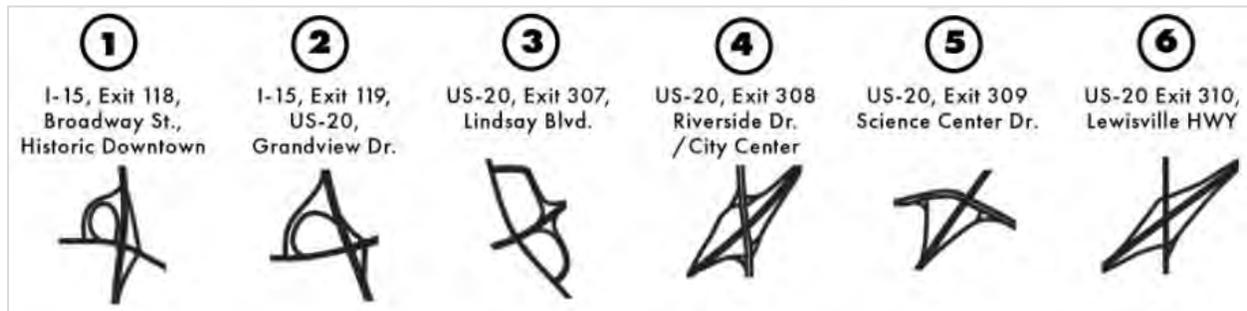


Within the study area, I-15 is a four-lane interstate with two grade-separated interchanges at Exits 118 and 119. US-20 is on a co-signed shared alignment with I-15 from Exit 118 to Exit 119 and then becomes a separate limited-access four-lane expressway from Exit 119 continuing northeast with four grade-separated interchanges within the project limits. The study area is primarily urban with a mix of commercial, industrial, and residential neighborhood land uses. Figure 3 displays the study area, which includes the entire area assessed for impacts from the proposed improvements. Six interchanges were specified for analysis. Figure 4 illustrates the existing configurations of the six interchanges.

**Figure 3. PEL Study Area**



**Figure 4. Interchanges Analyzed in the PEL Study**



As the investigation of alternatives at these six interchanges evolved, the project team looked at alternatives that included new alignments for the two corridors and identified locations for new interchanges and roadways – mostly north of the existing alignments. As those new alignments arose, the study team assessed the resources in the area and the benefits and impacts in those areas from the potential improvements.

### 1.2.1 Travel Patterns and Uses

I-15 and US-20 serve a variety of users and travelers. The majority of the traffic traveling north on I-15 exits the freeway at Exit 119 onto US-20 to reach Yellowstone and Grand Teton National Parks and Brigham Young University-Idaho. Freight haulers use I-15 and US-20 to deliver goods throughout the region. Local access is important to activity centers in the study area, such as Idaho National Laboratory, University Place, and Idaho Falls Regional Airport. Local access is also important for residential and commercial activity in downtown Idaho Falls and throughout Bonneville County.

## 1.3 Regional and Long-Range Planning

Previous and ongoing studies, planning efforts, and economic assessments within the study area have helped set the stage for this PEL study and frame its planning context. Their identified goals, issues, and needs helped confirm the needs for this study and were appropriately incorporated into the PEL study’s analyses. The studies that informed the PEL study are listed and described below.

- *2040 Long Range Transportation Plan*, BMPO (BMPO, 2016) – Identified existing and future multimodal transportation deficiencies, problems, and needs of the area and prioritized projects to best address them, taking into account available and potential funding resources. The PEL study area is within the BMPO jurisdiction.
- *Idaho Transportation Department Statewide Freight Strategic Plan*, Idaho Transportation Department (ITD, 2017) – Provided guidance to improve Idaho’s freight system mobility for industries to transport goods safely to market efficiently. I-15 and US-20 are considered to



provide crucial links to destinations within Idaho and national destinations, and were discussed in the Strategic Plan as important highway infrastructure for Idaho.

- *Transportation System Alternatives Study*, BMPO, (BMPO, 2011) – Examined the short-, medium- and long-term transportation investments needed to meet the area’s vision for economic development and quality of life and to explore alternative ways to address those needs. The PEL study area is within the BMPO jurisdiction, and the I-15/US-20 interchange was included as part of the study.
- *Idaho Falls Arterial Loop: Economic Assessment*, Idaho Transportation Department, (ITD, 2014) – Identified the economic impacts of the Idaho Falls Arterial Loop Project. This study included a strategic assessment of economic development opportunities associated with the improvements, with quantitative modeling analysis of the overall regional impact of the Arterial Loop Project. The PEL study area falls within the Super Arterial Loop Assessment area, and the assessment is applicable to the PEL.
- *BMPO Bicycle and Pedestrian Plan*, BMPO (BMPO, 2008) – Provided the framework necessary for developing the physical facilities, such as bikeways and pedestrian walks, as well as education and encouragement programs that will increase social awareness of non-motorized travel and provide the essential elements for success. The PEL study area is within the BMPO jurisdiction.
- *Policy Statements: City of Idaho Falls Comprehensive Plan*, City of Idaho Falls (City of Idaho Falls, 2013) – Provided guidance to the future of Idaho Falls to coordinate planning decisions. Intended to provide Idaho Falls with the guidance to plan for the city’s future while having an efficient roadway system of boulevards that moves cross-city traffic quickly from one quadrant to another. The PEL study area is within the City of Idaho Falls city limits.
- *City of Idaho Falls City Core Master Plan and Implementation Strategy*, City of Idaho Falls (City of Idaho Falls, 2019) – Created a coordinated vision and implementation strategy for central Idaho Falls. The PEL study area is within the City of Idaho Falls city limits.
- *Idaho Public Transportation Plan*, Idaho Transportation Department (ITD, 2018a) – Provided a framework for creating an integrated public transportation system that meets the mobility needs of Idahoans. The Plan identifies programs and projects in line with the ITD’s mission of Your Safety, Your Mobility, Your Economic Opportunity.
- *Public Transit-Human Service Plan* (BMPO and TRPTA, 2017) – A blueprint for future discussions and efforts in the region to improve mobility. The plan’s focus was coordination of public transit services and human services transportation. Since the study was completed, the Targhee Regional Public Transportation Authority (TRPTA) was dissolved.
- *Connecting Our Community: A Plan for Connecting the Idaho Falls Area Through Walking and Biking* (City of Idaho Falls and BMPO, 2014) – Outlined a network of bicycle, pedestrian, and trails needs for the City of Idaho Falls. The plan provides recommendations for several



facilities and intersection improvements within the PEL study area, which the planning team used to inform the criteria and the screening during alternatives analysis.

## 1.4 Study Process

The purpose of the PEL study was to develop a vision for long-range transportation improvements and an implementation plan for those elements that could be further developed in the near future. The alternatives development and screening steps of the PEL study process included the technical work that was informed by the public involvement process through the Community Working Group (CWG) and public meetings.

- Project visioning.
  - *The vision was developed by community stakeholders (December 2017).*
- Data collection and technical analysis of land use, transportation, and environmental resources.
  - *Existing conditions and traffic study results were presented at Public Meeting #1 (May 2018) and to the CWG (June 2018).*
- Development of the Purpose and Needs and project goals that will serve as a framework for project-specific purpose and need statements as they proceed into the NEPA process.
  - *The draft Purpose and Need was presented to the CWG (January 2018). The Purpose and Needs and project goals were presented at Public Meeting #2 (September 2018).*
- Development and screening of Level One concept alternatives.
  - *Level One concept alternatives were reviewed by the CWG (August 2018) and presented at Public Meeting #2 (September 2018).*
- Development and screening of Level Two alternatives, providing more detailed design and evaluation than Level One. This step also included a qualitative risk workshop.
  - *Level Two alternatives were reviewed by the CWG (April 2019) and presented at Public Meeting #3 (May 2019).*
- Development and screening of Level Three Alternatives, providing more detailed design and evaluation than Level Two. This step also included a cost risk assessment and value engineering (CRAVE) workshop and an updated analysis of traffic operations.
  - *Level Three alternatives after the CRAVE workshop were reviewed by the CWG (February 2020).*
- Determination of the two Recommended Alternatives and the No Build Alternative to advance to the NEPA process.





- *The Recommended Alternatives were presented to the CWG (July 2020) and presented at Public Meeting #4 (August 2020). Both meetings were held online due to the COVID 19 pandemic.*
- Report preparation.

## 1.5 Purpose and Need

The Purpose and Needs were developed so that the broadest range of possible solutions could be considered. Therefore, it was not overly specific in its terminology or description of acute problems to be resolved. Detailed engineering and operational site-specific geometric deficiencies were not discussed. These issues will be evaluated in detail along with other specific needs in a future NEPA study. However, as the PEL study progressed, the initial needs were refined based on public input, screening results, and data collection.

### What is a Project Purpose and Need?

A Purpose and Need defines the direct transportation-related needs within the study area. It identifies the core issues to be addressed and defines the extent of the deficiencies. The Purpose and Need provides the framework for the development of the alternative improvements, leading to the study's recommendations.

#### 1.5.1 Project Purpose

The purpose of the PEL study is to identify and analyze improvements to address safety, congestion, mobility, and travel time reliability for efficient movement of people, goods, and services on I-15 and US-20 in or near Bonneville County and Idaho Falls.

#### 1.5.2 Project Needs

Multimodal connections and capacity improvements to I-15 and US-20, as well as potential new roadway linkages, are needed to:

- Address unsafe travel conditions on I-15 and US-20.
  - Traffic backs up at exit ramps.
  - Substandard lane change / merge space between exits.
  - Interchanges spaced too closely together.
- Reduce congestion at the I-15/US-20 interchange, particularly for traffic exiting US-20 towards southbound I-15 at the on-ramp, and for northbound traffic on I-15 exiting at US-20 eastbound exchange, which both operate at a current level of service (LOS) D. LOS A through F are measures of the amount of delay drivers experience at intersections and on roadway segments. LOS A represents the least delay and F represents the worst delay. LOS D was used for the 2018 analysis as the acceptable threshold for future operational and capacity analysis to compare how the proposed alternatives are estimated to operate.





- High volumes of freight traffic.
- High volumes of peak hour local commuter traffic.
- Limited crossings of railroad and river funnel traffic to the I-15/US-20 corridor.
- Provide pedestrian and bicycle mobility within the I-15 and US-20 corridors.
  - Built and natural barriers limit safe connectivity to adjacent facilities, the river, and adjacent multiuse trails.
  - According to the *BMPO Bicycle and Pedestrian Plan* (BMPO, 2008), the corridor’s “existing facilities are either inadequate, deficient, or associated with various problems.”
- Address future travel demand forecasts.
- Current infrastructure will not accommodate travel demands of increasing local growth and regional tourism.
  - Current infrastructure is projected to operate at LOS E or F at the I-15 Exit 119 interchange that accesses US-20 by the year 2045, which will not appropriately provide for future growth as identified in adopted local (city, county, and metropolitan planning organization) land use and comprehensive plans.

Technical information demonstrating these transportation needs is in Chapter 2.0 of this document.

### 1.5.3 Additional Goals

In addition to the specific needs, a number of goals were identified that further aided the definition and evaluation of the alternatives considered. These criteria address the broader context of the study area and reflect topics important to the study’s stakeholders and the public, and issues important to ITD and other agencies regarding implementation. The identified goals are:

- Provide transportation facilities that improve access to local schools, recreation facilities, and commercial areas that support local land use plans while also reducing the negative impacts of the existing infrastructure on those community resources.
- In addition to improvements to pedestrian and bicycle facilities in the corridor, seek to provide connections to the surrounding multimodal network.
- Provide improvements that serve all types of travelers, including local commuters, freight, and regional tourism.
- Consider new infrastructure impacts to local roads through coordination with the City of Idaho Falls and Bonneville County.





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

- In addition to identification and mitigation of any direct environmental impacts of the proposed improvements, seek to provide additional opportunities for the project to enhance local environmental resources.



## 2.0 LAND USE AND TRANSPORTATION ANALYSIS

### 2.1 Land Use

#### 2.1.1 Existing Conditions

The study area includes land in Idaho Falls and Bonneville County. Currently the land uses along the I-15 corridor within the study area are primarily commercial, industrial, and employment centers near Exits 118 and 119. There are some existing low- and medium-density residential neighborhoods west of I-15, including the Temple View neighborhood and elementary school. The Idaho Falls Regional Airport is located west and north of Exit 119. North of the commercial and industrial areas at Exit 119, the land use along I-15 through the study area is primarily agricultural.

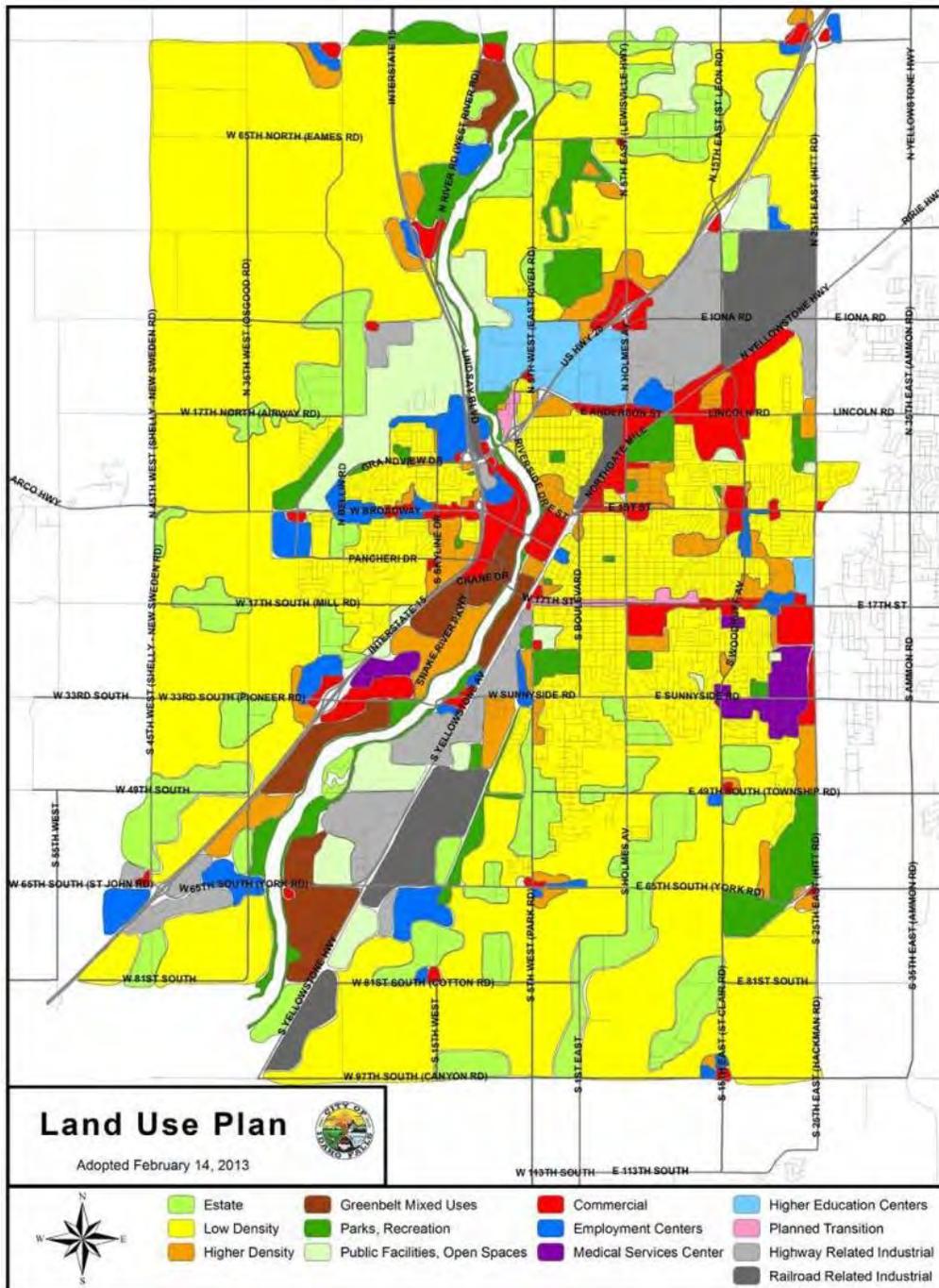
The land use between I-15 and the Snake River is commercial, with several hotels and restaurants along Utah Avenue and Lindsay Boulevard. East of the Snake River along US-20 there are several residential neighborhoods on both sides of US-20 with Freeman Park north of US-20 and adjacent to the Snake River. North of Science Center Drive are several higher education centers administered by Idaho National Laboratory and several universities. Further east along US-20, the land uses are primarily industrial and agricultural. Between I-15 and US-20 north of Iona Road there are several residential neighborhoods, the Sage Lakes Golf Course, and the Hatch Pit Solid Waste Disposal operated by Bonneville County.

Current land uses and zoning are presented in GIS mapping provided by the City of Idaho Falls at <https://ifgis.maps.arcgis.com/apps/webappviewer/index.html?id=28cb01d723f944b8bf58b8042d18df23> and Bonneville County at <https://bonneville.maps.arcgis.com/apps/webappviewer/index.html?id=5becf60e9ba2405dbc5f2206974ad720>.

#### 2.1.2 Planned Conditions

The City of Idaho Falls, in conjunction with Bonneville County and the BMPO, has planned for future land use throughout the study area, which is included in their area of impact in *Policy Statements: City of Idaho Falls Comprehensive Plan* (City of Idaho Falls, 2013). The future land use map from that plan is presented in Figure 5. Along I-15 and US-20 in the study area, the proposed land uses expand existing residential, commercial, industrial and employee centers, as well as the higher education centers along Science Center Drive. The City of Idaho Falls is currently updating its Comprehensive Plan, including the Land Use Map, which is anticipated to be complete by the end of 2021.

Figure 5. Future Land Use Map



Source: Policy Statements: City of Idaho Falls Comprehensive Plan (December 2013)



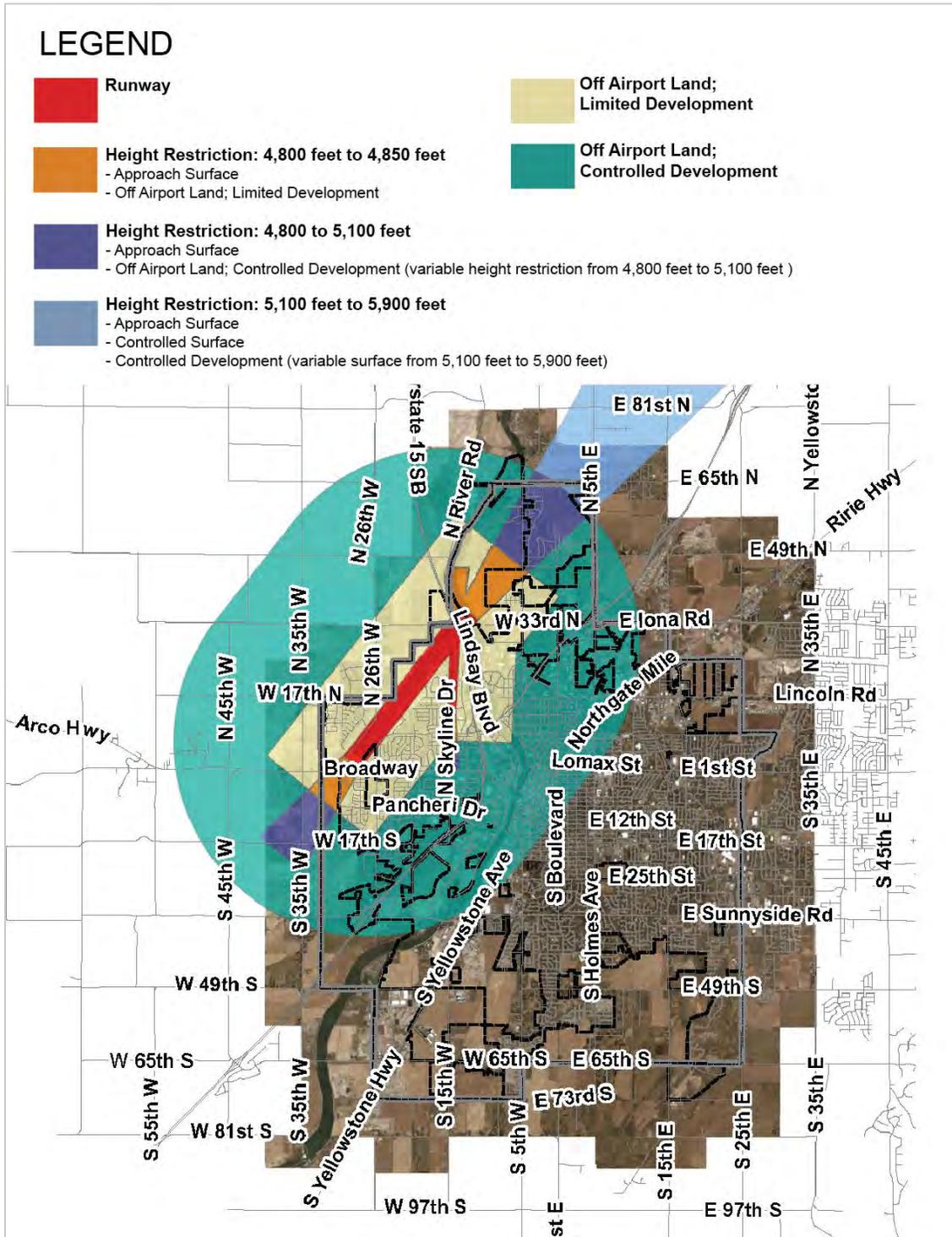
### 2.1.3 Airport Influence on Future Land Use

The Idaho Falls Regional Airport and the Federal Aviation Administration (FAA) held several meetings in 2018 and 2019 with the City of Idaho Falls, Bonneville County, and other stakeholders to discuss the compatibility of land uses adjacent to the airport and in the RPZ. These meetings and guidance have led to some changes in the future land use. The current zoning maps do not show the airport overlay zone presented in Figure 6. This overlay zone and the restrictions associated with it place additional restrictions on the allowed land uses in the area from previously planned residential to more commercial or industrial land uses. The Idaho Falls Regional Airport is working with the FAA and the most affected property owners in the orange approach zone to identify acceptable land uses.

In addition, the airport owns land that several potential alternatives would cross, including two of the Recommended Alternatives. As the airport receives federal Airport Improvement Program (AIP) funds from the FAA, the FAA would have to approve a Land Release to allow the airport to either dispose of or give right-of-way on these parcels because of the grant assurances that come with each grant.



**Figure 6. Airport Overlay Zone**



Source: City of Idaho Falls (August 2020)



## 2.2 Traffic Patterns and Operations

Details about traffic data collected, existing conditions (2017), and the analysis of the existing interstate, highways, roadways, interchanges, and intersections are found in the *Data Collection, Existing Conditions, & Forecast No Build Conditions Report* (HDR, 2018a) (Appendix B). The concept of level of service (LOS) correlates numerical traffic operational data to subjective descriptions of traffic performance. LOS is defined as the system of six designated ranges, from “A” (best) to “F” (worst), used to evaluate performance. LOS D was used for the 2018 analysis as the acceptable threshold for the future operational and capacity analysis to compare how the proposed alternatives are estimated to operate.

### 2.2.1 Traffic Origin/Destination Study

The project team (ITD, City of Idaho Falls, Bonneville County, the BMPO, and consultants) worked with Blynscy, a firm that analyzes data of connected devices, to better understand travel habits in aggregate. Bluetooth data recorders were placed at key locations throughout the study area from August through September 2017 to identify origin and destination (O/D) travel data and trends. The data collected identified some of the most preferred routes for local drivers. Typical traffic travel times on I-15 and US-20 were developed for use in calibrating the existing conditions traffic model Vissim (a “traffic in cities” simulation model). This data and analysis revealed two very important patterns:

- Regardless of distance or roadway type, drivers will in almost all cases choose the path of least delay.
- The data collected showed “local” and “regional” trips that impact the transportation system through Idaho Falls are generally split with 60% local trips and 40% regional trips. Local trips were defined as those trips that originate or end within Idaho Falls, while regional trips are those that travel through Idaho Falls without stopping.

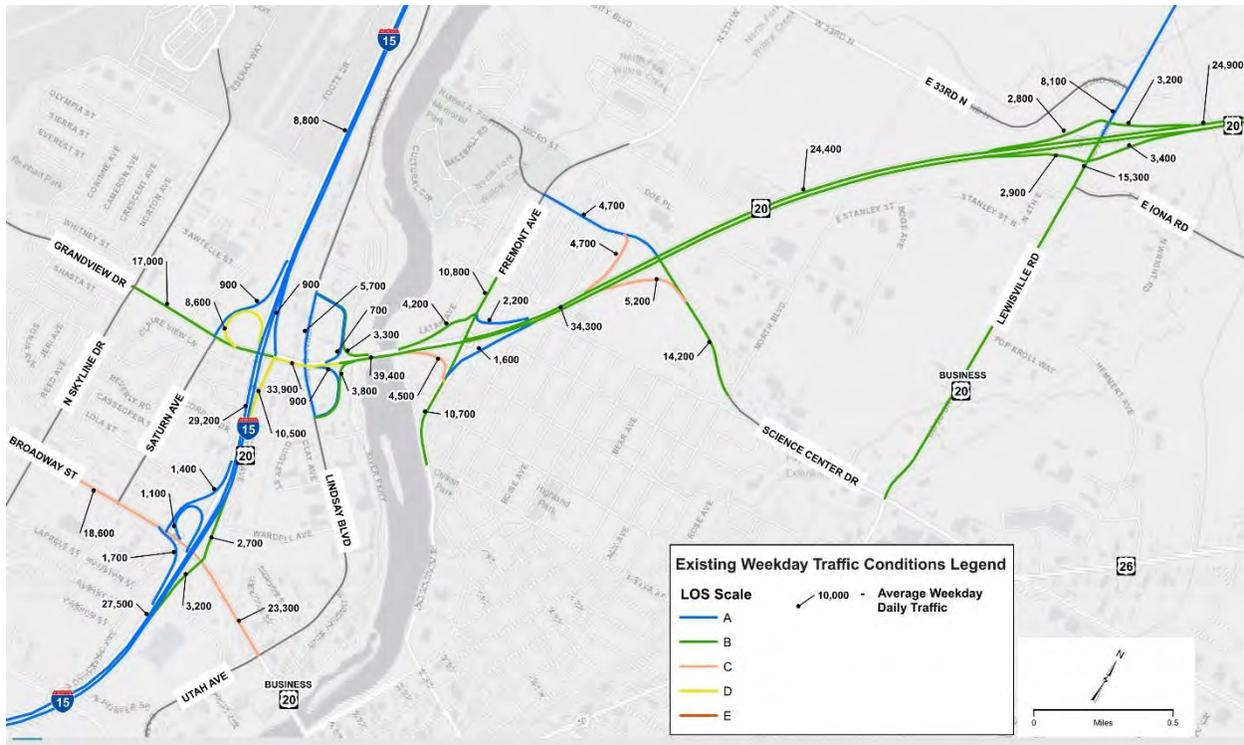
### 2.2.2 Existing Traffic Operations

#### 2.2.2.1. Roadway Segments

Existing (2017) weekday traffic volumes and roadway segment daily LOS are presented in Figure 7. The most congested locations on a typical weekday include Broadway Street, the I-15 Exit 119 northbound off-ramp, and the off-ramps at US-20 Exit 308 (Riverside Drive) and Exit 309 (Science Center). The segments of US-20 east of I-15 also become congested due to high demand and close ramp and intersection spacing. During rush hour and big events, traffic from the northbound off-ramp at Exit 119 can back up onto the mainline, sometimes beyond the Exit 118 interchange, causing congestion, delay, and safety concerns.



**Figure 7. Existing (2017) Weekday Traffic Volumes and Daily LOS**



### 2.2.2.2. Intersections

During the 2017 weekday AM peak hour, all intersections within the study area, apart from one, were estimated to operate at an intersection average LOS C or better, as presented in Table 1. The Lindsay Boulevard and Exit 307 westbound ramp terminal intersection is estimated to operate at LOS E. The turning movements from the off-ramp experience substantial delay waiting for acceptable gaps to enter the traffic lanes on Lindsay Boulevard and are estimated to operate at LOS F. All merging and diverging segments on I-15 and US-20 are estimated to operate at LOS C or better.

During the 2017 weekday PM peak hour, traffic conditions are worse than the AM peak hour. Most of the intersections within the study area were estimated to operate at an intersection average of LOS D or better, as presented in Table 1. However, individual movements at several intersections were estimated to operate at LOS D or worse and are identified in Table 1.

As Grandview Drive transitions to become US-20 at the Exit 119 northbound ramps, all eastbound movements are estimated to operate at LOS F. The Exit 119 intersection on Grandview becomes a bottleneck, causing congestion east and west on Grandview Drive and



US-20 and disrupting the operations at adjacent intersections and ramps. All merging and diverging segments on I-15 and US-20 are estimated to operate at LOS B or better.

**Table 1. Existing (2017) AM & PM Peak Hour Intersection Analysis Results**

Roadway	Intersection	AM Peak Hour LOS (Worst Performing Movement LOS)	PM Peak Hour LOS (Worst Performing Movement LOS)
Broadway Street	Skyline Drive	C (SBT – C)	D (SBT – F)
	Saturn Avenue	A (SBL – D)	B (NBL – D)
	Exit 118 Southbound Ramps	B (EBT – B)	A (SBL – D)
	Exit 118 Northbound Ramps	B (NBL – C)	B (EBL – D)
	Utah Avenue	B (SBT – D)	D (NBL – E)
Grandview Drive	Skyline Drive	B (NBT – C)	D (EBT – E)
	Saturn Avenue/Exit 119 Southbound Ramps	A (NBT – C)	C (SBL – F)
	Exit 119 Northbound Ramps	C (EBL – D)	D (EBT – F)
Lindsay Boulevard	Exit 307 Westbound Ramps	E (WBL – F)	A (WBL – C)
	Exit 307 Eastbound Ramps	A (WBL – B)	A (WBT – C)
Fremont Avenue	Exit 308 Westbound Ramps	A (WBL – C)	A (WBL – B)
	Exit 308 Eastbound Ramps	A (EBL – B)	A (EBL – B)
Science Center Drive	Fremont Avenue	A (EBT – B)	A (NBL – B)
	Exit 309 Westbound Ramps	A (WBL – A)	A (WBL – B)
	Exit 309 Eastbound Ramps	A (NBL – B)	A (NBL – B)
	North Boulevard	A (SBL – D)	B (EBL – E)
Lewisville Highway	33rd North	A (EBL – B)	A (EBL – B)
	Exit 310 Westbound Ramps	B (WBL – B)	B (WBL – B)
	Exit 310 Eastbound Ramps	A (EBL – B)	A (EBL – B)
	Iona Road	A (WBL – B)	A (WBL – B)

*SBT = southbound through; SBL = southbound left EBT = eastbound through, EBL = eastbound left NBT = northbound through, NBL = northbound left, WBL = westbound left*

## 2.3 Traffic Forecasts

### 2.3.1 Planning Year

The planning year of 2045 was agreed upon through discussions with ITD environmental staff and representatives from ITD District 6, ITD Headquarters, FHWA, the BMPO, and the City of Idaho Falls. This planning year was selected to provide a large enough design window of opportunity for the PEL and NEPA processes and the proposed phased approach to developing improvements.



### 2.3.2 Travel Demand Model

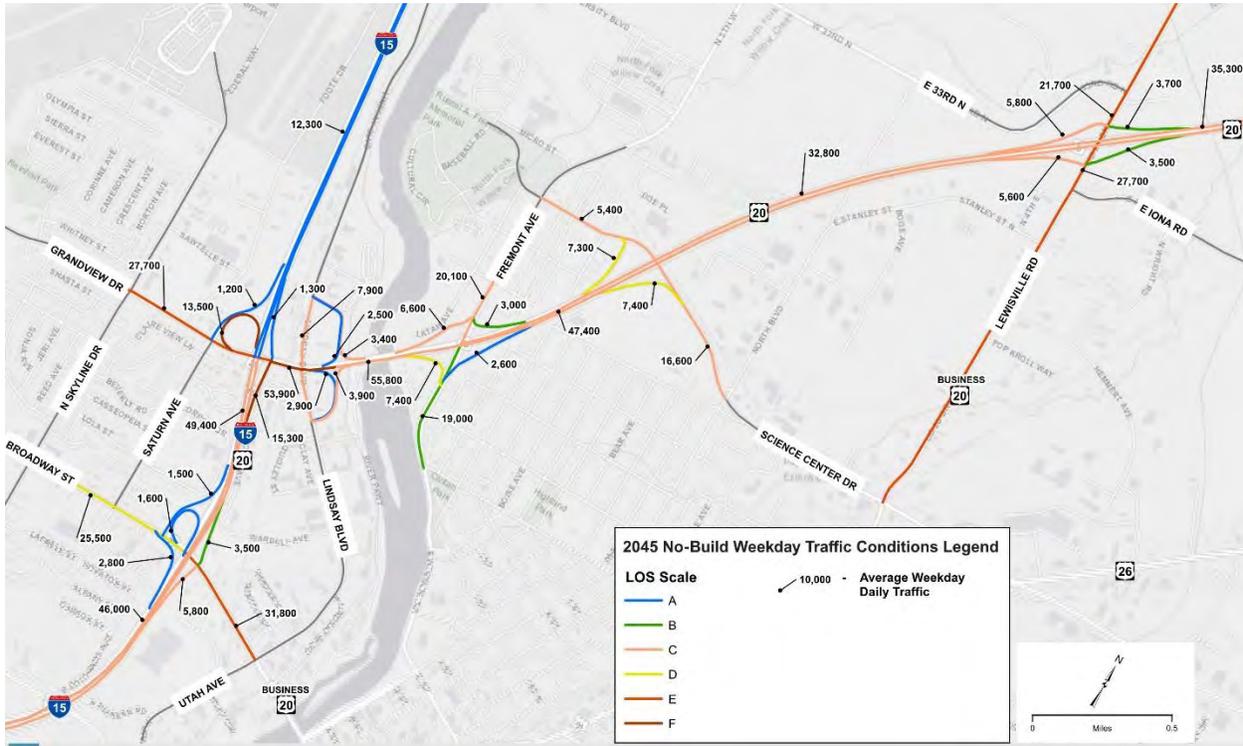
The BMPO maintains a travel demand model with a 2014 “base” year model run that has been developed, calibrated, and updated using current traffic count data. The BMPO has also developed 2025 and 2040 forecasts with the socioeconomic land use data and infrastructure assumptions for future growth and programmed transportation improvement projects from the member land use and transportation agencies. Population in the region - 103,000 persons in 2014 - is expected to grow to as much as 167,000 in 2040. Regional employment is forecast to grow from 62,500 in 2014 to between 79,200 to 96,200 in 2040.

Socioeconomic data for other years (2017 and 2045) was estimated by straight line interpolation/extrapolation of the data included with the model.

### 2.3.3 Forecast Travel Demand Volumes

The 2045 travel demand volumes for the No Build Alternative and build alternatives were developed using modified versions of the BMPO TransCAD<sup>®</sup> model (a travel demand modeling software) with minimal changes to the transportation network for the No Build Alternative. Details of the methodology used to develop forecast travel demand volumes are presented in the *Methods and Assumptions for Forecasting Traffic Volumes* memo (HDR, 2017) (Appendix C). The resulting travel demand forecasts for the 2045 No Build condition are presented in Figure 8 as the average weekday daily traffic (AWDT), along with the estimated roadway segment LOS.

**Figure 8. 2045 No Build Alternative Weekday Travel Demand Forecasts and Daily LOS**



In 2045, traffic conditions are projected to be notably worse than conditions in 2017. The most congested locations estimated on a typical weekday under 2045 No Build conditions are centered on the I-15 Exit 119 area, including US-20 between I-15 and Exit 307 (Lindsay Boulevard), Grandview Drive west of I-15, the Exit 119 southbound on-ramp, and the Exit 119 northbound off-ramp. Also showing high volume and poor LOS in 2045 are Broadway Street and several ramps at Exit 308 (Riverside Drive), Exit 309 (Science Center Drive), and Exit 310 (Lewisville Highway).

## 2.4 Transit

The TRPTA has provided about 23,000 rides a year to people in the Bonneville County metropolitan area. It also has provided transportation to customers in the City of Rexburg and Teton County. However, due to financial issues with rising costs and shrinking funding, TRPTA dissolved its services in 2019. The City of Idaho Falls plans to give \$140,000 to TRPTA in 2021 to seek matching state and federal grants and reestablish bus service in Idaho Falls.

The Eastern Idaho Community Action Partnership (EICAP) provides rides for people needing access to medical care through contracts with several transportation companies.



TRPTA and the BMPO prepared the *Public Transit-Human Service Plan* (BMPO, TRPTA, 2017) as a blueprint for future discussions and efforts in the region to improve mobility. Key priorities include supporting capital projects to meet mobility needs, expanding transit services, and advocating for funding to support transit and human service transportation.

## 2.5 Bicycle and Pedestrian Facilities

The existing bicycle and pedestrian network on major facilities in the study area is shown in Figure 9.

Broadway Street has sidewalks on both sides of the roadway and marked pedestrian crosswalks at both Exit 118 ramp terminal intersections, and at the intersections of Skyline Drive, Saturn Avenue, and Utah Avenue. Pedestrian and bicycle facilities on Broadway Street continue east and allow access to the Idaho Falls Riverwalk.

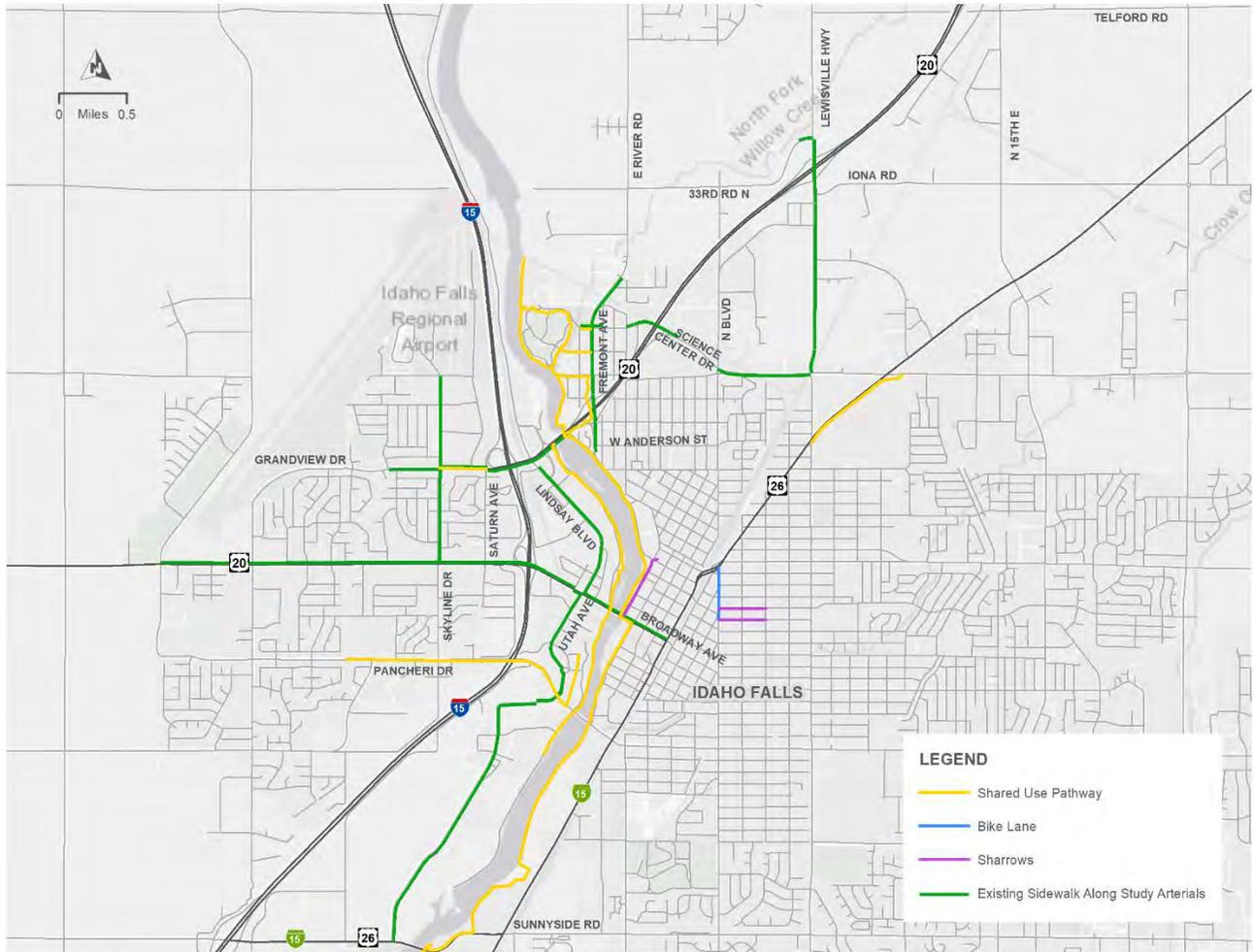
Grandview Drive has a detached sidewalk on the north side of the road from Skyline Drive to Foote Drive and attached sidewalk to the Exit 119 southbound off-ramp. There is an attached shared-use pathway on the south side from Skyline Drive to Saturn Avenue. A narrow sidewalk continues east over I-15 and along US-20 over the railroad and Lindsay Boulevard bridges and then widens over the river bridge before connecting with the Idaho Falls Riverwalk. The only pedestrian crosswalks along Grandview Drive for pedestrians to cross the roadway are found at the Skyline Drive intersection.

The Idaho Falls Riverwalk is a pedestrian and bicycle facility that follows along the Snake River within Idaho Falls. The Riverwalk is located on the west side of Fremont Avenue under US-20 at Exit 308. It should be noted that it is subject to closure seasonally and occasionally due to certain river flow levels so it does not provide connectivity year round on the west side of Fremont under US-20. There is also a detached sidewalk along the east side of Fremont Avenue through the interchange to the Higham intersection.

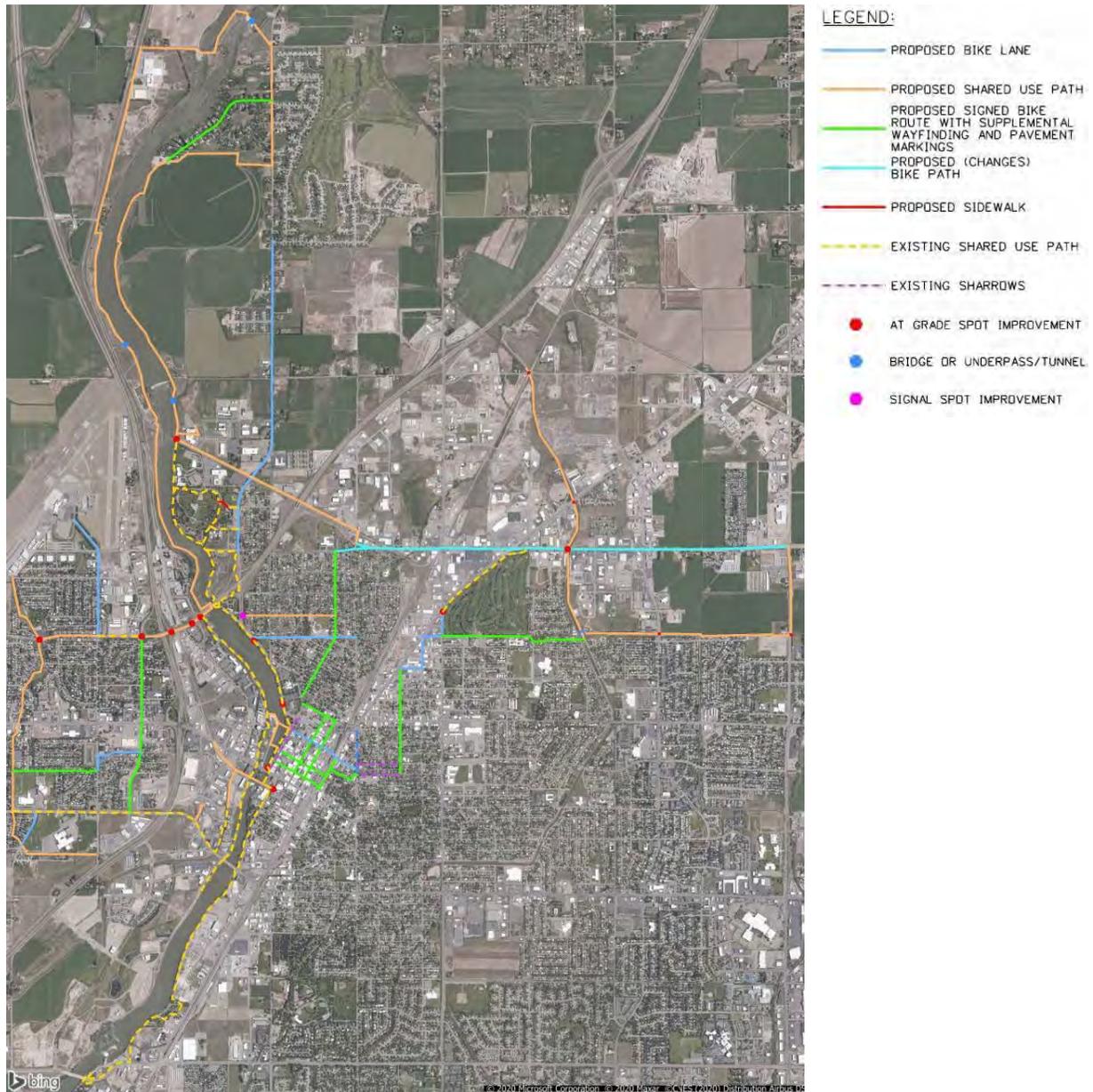
The BMPO worked with the Idaho Falls Parks and Recreation Division to develop a plan for connecting the bicycle and pedestrian facilities throughout the area. The *Connecting Our Community: A Plan for Connecting the Idaho Falls Area Through Walking and Biking* plan (City of Idaho Falls and BMPO, 2014) was considered in developing the alternatives as part of this PEL study. Planned bicycle and pedestrian facilities are presented in Figure 10. This plan has not been adopted by all of the BMPO member agencies and is subject to adjustment.



**Figure 9. Existing Bicycle and Pedestrian Facilities on Major Facilities**



**Figure 10. Planned Bicycle and Pedestrian Facilities**



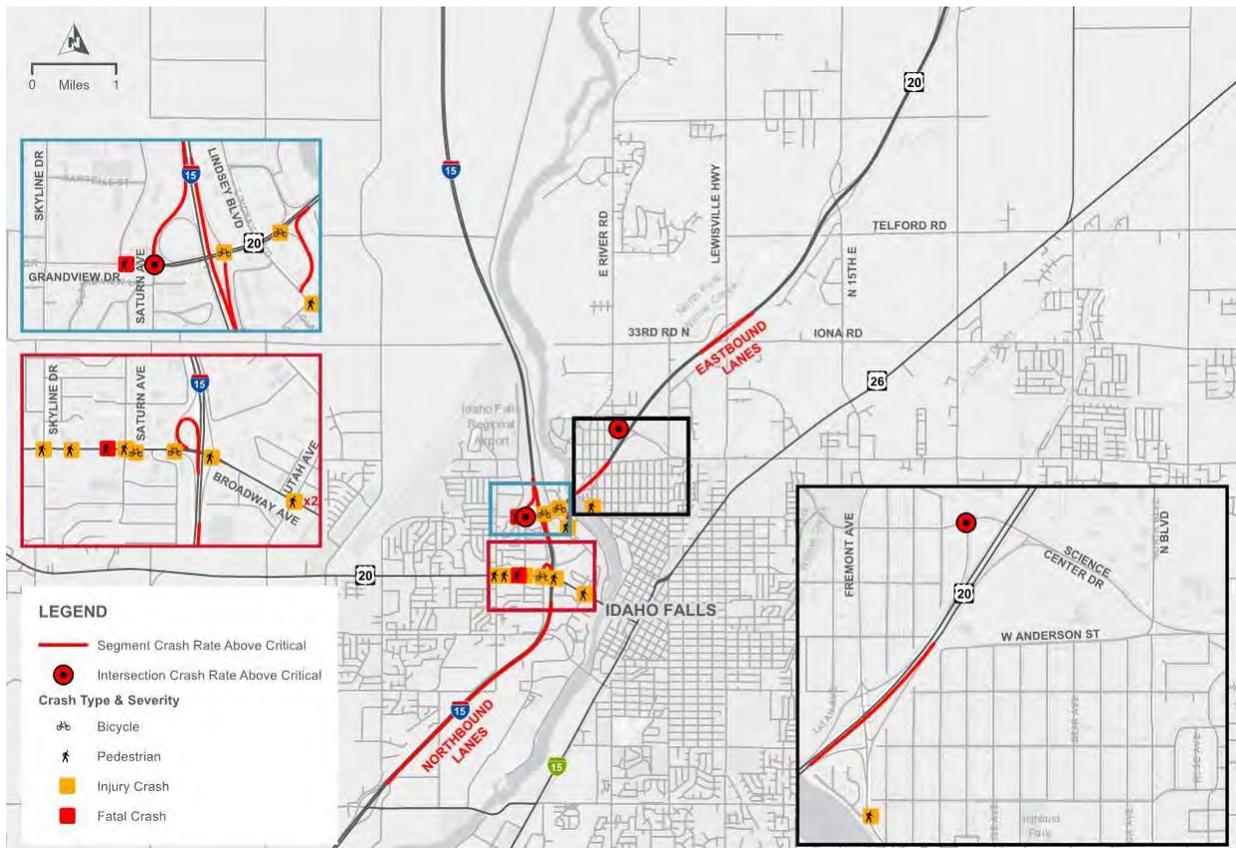
## 2.6 Safety

Vehicle crash data for the study area for the six-year period from 2011-2016 was provided by ITD. During that time period, 59 crashes occurred on I-15, 87 crashes occurred along US-20, 56 crashes occurred on the interchange on- and off-ramps, and 178 crashes occurred at the six PEL study intersections. The majority of crashes that occurred on I-15 and US-20 were fixed-

object or rear-end crashes, mainly due to following too close or traveling too fast for the conditions.

The Exit 119 northbound off-ramp had by far the most vehicle crashes of any other off-ramps in the study area with a total of 14, the majority of which were rear-end crashes. The intersections with the highest crash total were the Broadway Street and Exit 118 northbound ramps, Broadway Street and Utah Avenue, and US-20 and Exit 119 northbound ramps—each with more than 20 crashes. Crash rates at the intersections, freeway ramp exits, and roadway segments were calculated using the American Association of State Highway and Transportation Officials (AASHTO) *Highway Safety Manual* (AASHTO, 2010) Critical Rate screening method to determine the intersections with the greatest crash concerns. The average crash rate was calculated for stop-controlled intersections, interstate exit ramps, and interstate segments; and a critical crash rate or threshold value for each category was calculated. The observed crash rate at each location was then compared to the corresponding critical crash rate. Those segments and intersections with vehicle crash rates higher than their calculated critical crash rates are presented in Figure 11 along with locations of crashes that occurred between 2011 and 2018.

**Figure 11. High Crash Rate and Bicycle and Pedestrian Crash Locations**





Four freeway segments (two on I-15 and two on US-20) were found to have crash rates higher than their calculated critical crash rates. These segments were I-15 northbound south of Exit 118, I-15 northbound between the Exit 119 ramps, US-20 eastbound between the Exit 308 ramps, and US-20 eastbound between the Exit 310 ramps.

Four freeway ramps were found to have crash rates above their calculated critical crash rates—the Exit 118 southbound loop on-ramp, the Exit 119 northbound off-ramp and southbound off-ramp, and the Exit 307 eastbound on-ramp.

Two intersections within the study area were found to have crash rates higher than their calculated critical crash rates: Grandview Drive/Saturn Avenue intersection and Science Center Drive/US-20 westbound intersection.

### 2.6.1 Pedestrian and Bicycle Crashes

Figure 11 presents all pedestrian and bicycle crashes that occurred within the study area during the analysis years. Two of these crashes resulted in fatalities. A summary of these crashes is provided below.

- 2 fatal crashes
  - A pedestrian crossed Broadway Street (US-20) west of the Saturn Avenue intersection and was hit by a car in September 2016.
  - A pedestrian crossed Grandview Drive west of the Saturn Avenue intersection and was hit by a car in January 2018.
- 2 pedestrian crashes occurred on Broadway Street (US-20) west of Saturn Avenue. One resulted in fatality and is described above. The other also occurred in September 2016 and injured the pedestrian.
- 1 pedestrian crash at Grandview Drive/Skyline Drive intersection in May 2011.
- 1 pedestrian crash occurred at US-20/Saturn intersection in February 2016.
- 1 pedestrian crash occurred at US-20/Exit 118 southbound off-ramp intersection in April 2011.
- 2 pedestrian crashes occurred at the Broadway Street/Utah Avenue intersection (August 3, 2015, and November 3, 2016). Both resulted in injuries to the pedestrians. Both pedestrians were in the crosswalk and the vehicles did not yield to them.
- 1 pedestrian crash occurred at the Lindsay/Exit 307 eastbound off-ramp intersection in March 2011.
- 1 pedestrian crash occurred at the Fremont Avenue/Exit 308 eastbound off-ramp intersection in January 2011.
- 1 bicycle crash occurred at US-20/Exit 118 southbound off-ramp intersection in June 2013.





I-15/US-20 Connector  
**Planning and Environmental Linkages (PEL) Study Report**  
December 2020

- 1 bicycle crash occurred at Grandview Drive/Exit 119 northbound off-ramp intersection in June 2012.
- 1 bicycle crash occurred at Lindsay/Exit 307 eastbound off-ramp intersection in November 2013.

### 3.0 ALTERNATIVES EVALUATION

#### 3.1 Process

ITD and the consultant team developed draft screening criteria based on the Purpose and Need and project goals and then identified relevant evaluation measures. To make sure that the needs and concerns of the stakeholders and broader community were considered in the alternatives development and evaluation process, the screening criteria were reviewed and modified through a workshop with the following agency participants:

- FHWA
- City of Idaho Falls
- Bonneville County
- BMPO

Criteria were developed based on the Purpose and Need and project goals and were vetted through continuous public and agency involvement (Figure 12). The criteria were related to:

- Safety
- Congestion
- Access
- Local Bicycle, Pedestrian, Transit, and Vehicle Connectivity
- Future Travel Demand
- Environmental
- Public Support (Level Two and Level Three)
- Economics, Demographic, and Market Impacts (Level One and Level Three)
- Cost/Constructability

Figure 12. Evaluation Criteria

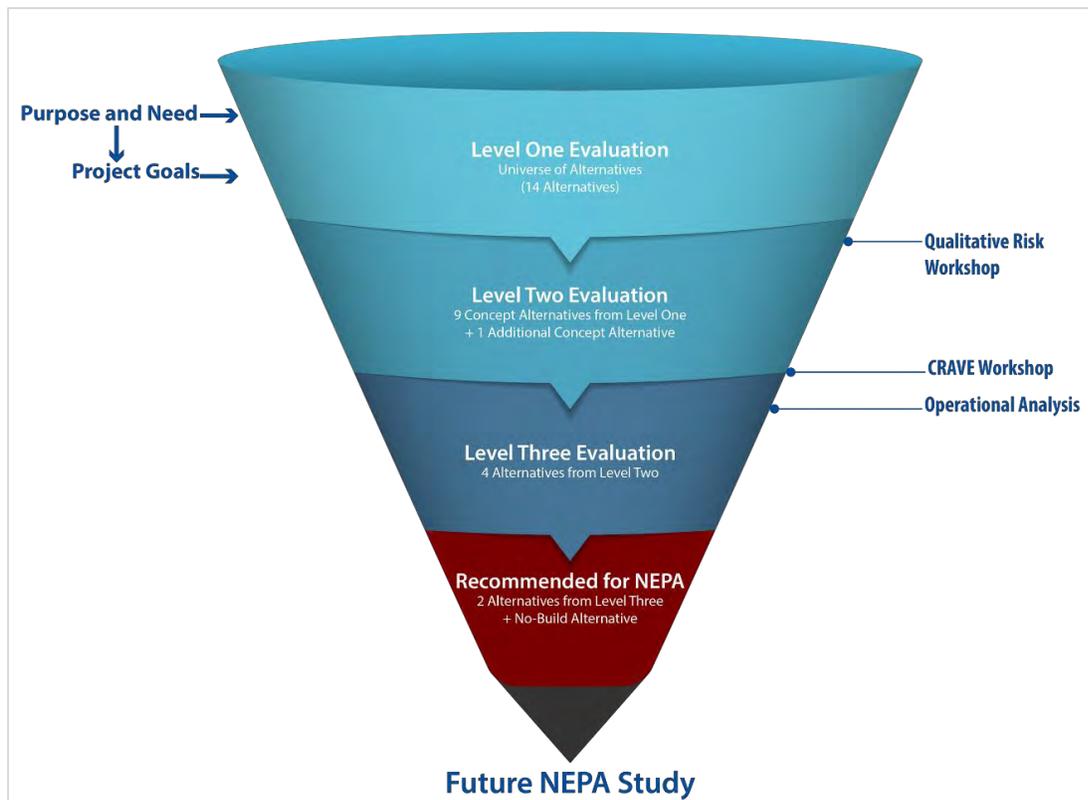


Three steps of alternatives development and screening took place. At each level of screening, each alternative was reviewed and ranked against screening questions developed for each criterion that became more detailed and quantitative through the process. The evaluation matrix with the questions is included in Appendix D. The criteria and questions used at each level of screening are included in their respective sections below.

An analysis team of ITD, FHWA, City of Idaho Falls, Bonneville County, and the BMPO conducted the alternatives screening. Meeting packets were distributed prior to the screening meetings. The analysis team filled in the evaluation matrix, and the results were compiled with rankings into a final matrix. The matrix for each level of screening identified each alternative with a description of each alternative and provided the results of the technical analysis done to inform the screening. Based on discussions at screening meetings and comments received, the analysis team identified ideas and considerations for each alternative in the next level of screening.

After each round of screening, the evaluation results were vetted through the CWG (described in Section 5.1.3) and at public meetings to provide additional commentary and refinement to the results of the process. The alternatives evaluation process is illustrated in Figure 13.

**Figure 13. Alternatives Evaluation Process**





## 3.2 Level One Evaluation

The goal of the Level One evaluation was to determine if an alternative met the purpose and need and goals of the project. Full documentation of the Level One Analysis is included in the *I-15/US-20 Safety and Mobility Study Level One Alternative Screening Summary* report (HDR, 2019a) (Appendix E). Below is a summary.

### 3.2.1 Universe of Alternatives

Eighteen individuals representing ITD, City of Idaho Falls, Bonneville County, the BMPO, and consultant team members participated in a “universe of alternatives brainstorming meeting” on June 7 and 8, 2018, where 13 build alternatives were developed to be compared against a No Build Alternative that could determine their potential to meet the Purpose and Needs and goals of the project. The analysis team sketched alternatives over aerials that would address safety and capacity concerns with improved roadway geometry; interchange spacing; and accommodation for pedestrians, bicycles, and transit. Options included improvements on the existing centerline, as well as new alignments. The 13 build alternatives were categorized as either “on-alignment” (on existing centerline) or “off alignment” (on new alignments), and each was given a unique name.

All alternatives would allow for improvements to the bicycle and pedestrian facilities, but no specifics were developed at Level One. For the off-alignment alternatives related to US-20, the abandoned portion of the existing US-20 alignment would be converted to a local roadway. The major elements of each Level One concept alternative are described in Table 3 (page 32).

### 3.2.2 Level One Criteria

The questions for each of the Level One screening criteria are shown in Table 2. Answers to the questions were characterized as Better/Good/Fair/Negative.

**Table 2. Level One Screening Criteria Questions**

Needs/Goals/ Objectives	Level One Evaluation Questions
Safety	Does the alternative improve bike, pedestrian and vehicle safety on I-15 and US-20, including the interchange on or off-ramps?
Congestion	Does the alternative reduce congestion on I-15 and US-20?
Local Bicycle, Pedestrian, Transit and Vehicle Connectivity	Does the alternative enhance or improve bicycle, pedestrian, transit and vehicle connectivity throughout the I-15/US-20 study area?
Future Travel Demand	Does the alternative improve travel time reliability on I-15 and US-20 in the study area?
Environmental	Does the alternative meet the purpose and need of the project?
Economics, Demographics and Market Impacts	Does the alternative enhance or improve economic, demographic and market condition in accordance with city, county and MPO land use and comprehensive plan objectives and goals?



**Table 2. Level One Screening Criteria Questions**

Needs/Goals/ Objectives	Level One Evaluation Questions
Cost/ Constructability	Does the alternative provide options for phased improvements?
Access	Does the alternative improve access to local resources including schools, recreational facilities, and commercial areas?

### 3.2.3 Level One Process

After the alternatives development brainstorming meeting, the team was provided the Purpose and Need and project goals, sketch concept alternative maps, alternative descriptions, and the evaluation criteria matrix that were reviewed via a conference call. The analysis team was asked to fill in the evaluation matrix prior to the Level One Screening meeting. The same group reconvened on July 24, 2018, with the addition of a representative from FHWA, to review the results of their independent evaluations, compile the results of the evaluations, and to determine an overall scoring for each alternative relative to the evaluation criteria.

### 3.2.4 Level One Results

Of the 13 build alternatives considered, 5 of them were not advanced. Note that Alternatives II.A. and II.C. had additional options that are not illustrated. A summary of the screening is shown in Table 3, including the reasons the alternative was not advanced.

*In the thumbnails, green lines depict new direct connections between I-15 and US-20, blue lines show new roadways, pink lines depict potential new local street connectors, purple lines show use of an existing roadway, and brown lines portray conversion of an existing highway to local use.*

**Table 3. Level One Concept Alternatives and Screening Results**

Alternative		
<p><b>No Build</b>            This alternative does not include any improvements to the I-15 or US-20 corridors in the study area but does include some other roadway improvements that may influence travel patterns in the study area (see Section 3.5.1).</p>		

**Table 3. Level One Concept Alternatives and Screening Results**

Alternative		
<p><b>I.A. Split Access for Interchange 118/119</b>            (on alignment)            Ramp modifications at Exits 118 and 119 become one single split interchange with grade-separated Texas turnaround and new adjacent collector-distributor (CD) roads that provide access to the local roadway network via at-grade intersections.</p>		<p>Not Advanced (as a stand alone alternative)</p> <p><i>Inability to eliminate LOS and congestion issues</i></p>
<p><b>I.B Free Flow for Interchange 118/119 - Ramp Modifications</b>            (on alignment)</p> <ul style="list-style-type: none"> <li>• One-way CD roads would be built adjacent to I-15 and US-20 without stop-controlled intersections for Exit 118 and 119.</li> <li>• Exit 307 Lindsay Boulevard would be removed to streamline traffic flow headed to/from US-20.</li> </ul>		<p><b>Advanced</b>  <b>Renamed to B</b>  <i>Shows potential to achieve project Purpose and Needs</i></p>
<p><b>I.C Free Flow for interchange 118/119 &amp; Fremont- Ramp Modifications</b>            (on alignment)</p> <ul style="list-style-type: none"> <li>• Free flow movements would be built for interchange 118/119 &amp; Fremont.</li> <li>• One-way (CD) roads connect I-15 and US-20 traffic without stop control intersections for Exit 118, Exit 119, and Fremont interchange.</li> <li>• Close Lindsay Boulevard/US-20 connection.</li> </ul>		<p><b>Advanced</b>  <b>Renamed to C</b>  <i>Shows potential to achieve project Purpose and needs.</i></p>

**Table 3. Level One Concept Alternatives and Screening Results**

Alternative		
<p><b>I.D Capacity Enhancements</b> (on alignment)</p> <ul style="list-style-type: none"> <li>• Add new ramps at Science Center Drive, converting it to a full interchange.</li> <li>• Convert interchange 118 &amp; 119 to high-capacity interchange.</li> <li>• Remove Lindsay Boulevard and Fremont Avenue exits.</li> </ul>		<p>Not Advanced  <i>Eliminated local access on both Lindsay and Fremont.</i></p>
<p><b>II.A Anderson Street Connector – original</b> (off alignment)</p> <ul style="list-style-type: none"> <li>• Move system-to-system interchange north of existing Exit 119 (just south of the International Way alignment).</li> <li>• Create a new US-20 alignment heading east on the Anderson Street alignment to rejoin the existing alignment.</li> <li>• Design for Broadway Street and Grandview Drive would be same as Alternative I.A.</li> <li>• Ramps to be added to the Science Center interchange.</li> </ul> <p><b>II.A Anderson Street Connector – modified</b> (off alignment)            Same features as Alternative II.A with the addition of a connection to the street network west of I-15 via the new interchange.</p>		<p><b>Advanced</b>  <b>Renamed to E.2</b>  <i>Shows potential to achieve project Purpose and Needs.</i></p> <p>The modified option for II.A. included a full interchange with a connection to the street network west of I-15.</p> <p><b>Advanced</b>  <b>Renamed to E.1</b>  <i>Shows potential to achieve project Purpose and Needs.</i></p> <p>The modified option for II.A. included a full interchange with a connection to the street network west of I-15.</p>
<p><b>II.B. 33rd/Iona Road Connector</b> (off alignment)</p> <ul style="list-style-type: none"> <li>• New roadway to become the new US-20, existing US-20 between Lindsay Boulevard</li> </ul>		<p>Not Advanced</p> <p><i>Requires multiple new elevated structures in the runway protection zone.</i></p> <p><i>Complications with proximity of new structures near the Porter Canal Diversion Structure.</i></p>

**Table 3. Level One Concept Alternatives and Screening Results**

Alternative		
<p>and Fremont Avenue interchange to be converted to a local roadway.</p> <ul style="list-style-type: none"> <li>• System interchange to be included towards north end of the airport.</li> <li>• Existing divided US-20 connection just south of existing Lewisville Highway interchange to be removed.</li> <li>• Grade-separated interchange planned at new intersection of new US-20 and River Road, including new ramps.</li> </ul>		
<p><b>II.C 49th/Telford Road Connector</b>            (off alignment)</p> <ul style="list-style-type: none"> <li>• New roadway at approximately 49th North/Telford Road to become the new US-20, existing US-20 between Lindsay Boulevard and Fremont Avenue interchange to be converted to local roadway.</li> <li>• System-to-system interchange for new US-20/I-15.</li> </ul> <p><b>II.C. 49th/Telford Road Connector - Modified</b>            (off alignment)            Same improvements as Alternative II.C with a roadway extension from US-20 east to US-26.</p>		<p><b>Advanced Renamed to G</b></p> <p><i>Shows potential to achieve project Purpose and Needs.</i></p> <p>The modified option for II.C. included an extension of US-20 east to US 26.</p> <p><b>Advanced Renamed to G</b></p> <p><i>Shows potential to achieve project Purpose and Needs.</i></p> <p>The modified option for II.C. included an extension of US-20 east to US 26.</p>
<b>Bypass Concepts</b>		
<p><b>II.D High-Capacity Bypass Route near 45th West to 49th Street North</b></p> <ul style="list-style-type: none"> <li>• Same improvements as Alternative II.C with an extension of US-20 west of I-15 turning south at 45th West and continuing south to the meet the existing US-20 alignment.</li> <li>• System-to-system interchange at new US-20 and I-15.</li> </ul>		<p><b>Advanced Renamed to H</b></p> <p><i>Shows potential to achieve project Purpose and Needs.</i></p>
<p><b>II.E High-Capacity Bypass Route near 65th N/Telford Road Extension</b></p> <ul style="list-style-type: none"> <li>• New US-20 alignment starting west of Idaho Falls and heading north on 45th West connecting with 65th North, then heading east to connect with I-15 and continuing east</li> </ul>		<p>Not Advanced</p> <p><i>Substantial cultural concerns on the new east west alignment and includes questionable engineering feasibility as well as more substantial river impacts.</i></p>

**Table 3. Level One Concept Alternatives and Screening Results**

Alternative		
to reconnect with the existing US-20 alignment. <ul style="list-style-type: none"> <li>System-to-system interchange at new US-20 and I-15.</li> </ul>		
<b>II.F High-Capacity Bypass Route near 73rd Street with Extension to 45th West and East to US-26</b> <ul style="list-style-type: none"> <li>New US-20 alignment starting west of Idaho Falls heading north on 45th West, connecting with 73rd North, then heading east to connect with I-15 and continuing east to reconnect with the existing US-20 alignment.</li> <li>System-to-system interchange at new US-20 and I-15.</li> </ul>		Not Advanced <i>Questionable engineering feasibility as well as more substantial river impacts.</i>
<b>II.G High-Capacity Route near Ririe Outlet north of 81st Street North</b> <ul style="list-style-type: none"> <li>New US-20 alignment starting west of Idaho Falls heading north on 45th West, connecting north of 81st North, then heading east to connect with I-15 and continuing east to reconnect with the existing US-20 alignment.</li> <li>System-to-system interchange at new US-20 and I-15.</li> </ul>		<b>Advanced Renamed K</b>  <i>Does not address Purpose and Needs as a standalone alternative.</i>

### 3.3 Level Two Evaluation

The goal of the Level Two evaluation was to determine how well an alternative met the Purpose and Needs and goals of the project. Full documentation of the Level Two evaluation is included in the *I-15/US-20 Safety and Mobility Study Level Two Alternative Screening Summary* report (HDR, 2019b) (Appendix F). Below is a summary.

Over the course of six months, the project team advanced the level of design for each alternative. The elements that were advanced included:

- A coarse geometric layout to meet established design criteria.
- Travel demand modeling for traffic forecasting to inform the number of lanes and size of intersections.
- Connectivity options for pedestrian/bicycle facilities and local streets.
- Review of potential environmental resource impacts (detailed in Section 4.0 Environmental Resources).



- Location and number of bridges.
- Consistency with land use planning and zoning.
- Benefit cost analysis based on a rough construction costs relative to travel and safety benefits.

### 3.3.1 Qualitative Risk Workshop

After the Level One Screening, a Qualitative Risk Workshop was held with 17 individuals in February 2019 representing ITD, FHWA, City of Idaho Falls, Bonneville County, the BMPO, and the consultant team. The purpose of the workshop was to identify possible risks for each of the 10 build alternatives in the following areas:

- Design
- Environmental and hydraulics
- Right-of-way
- Construction
- Railroad
- Structures and geotechnical
- Partnership and stakeholders

The findings of the workshop were documented in a draft Risk Management Plan which was later incorporated into the final report that documented the cost risk assessment and value engineering (CRAVE) analysis completed in December 2019. The CRAVE workshop is described in Section 3.4.1; the *I-15/US-20 Connector Cost Risk Assessment and Value Engineering Report* (HDR, 2019c) is included as Appendix G. The risk management plan assessed several risks that could either jeopardize the viability of an alternative or create cost, schedule, or agency approval challenges.

### 3.3.2 Level Two Alternatives

Input from CWG Meeting #3 was used to develop a new alternative (US-20 one-way couplet) that was added to the 9 Level One concept build alternatives to be considered in Level Two, for a total of 10 build alternatives. These 10 build alternatives were renamed with letters and were evaluated along with the No Build Alternative.

Most Level Two alternatives are similar to their Level One versions but were advanced in the level of detail of design. As in Level One, all alternatives would allow for improvements to the bicycle and pedestrian facilities. Refinements were also made based on community input given at the public meeting. Level Two alternatives are described in Table 5 (page 40).





### 3.3.3 Level Two Criteria

Level Two screening criteria were the same as those for Level One, with the addition of Public Support. The Economics, Demographics, and Market Impacts criterion was not addressed in Level Two because there was no new additional information since the Level One evaluation. The questions for each of the Level Two screening criteria are shown in Table 4. The answers to the questions for the Level Two screening criteria were characterized as Better/Good/Neutral/Fair/Worse, but included qualitative discussions.

**Table 4. Level Two Screening Criteria Questions**

Needs/Goals/Objectives	Level Two Evaluation Questions
Safety	Does the alternative reduce backups on the exit ramps?
	Does the alternative provide the opportunity to address geometric deficiencies on I-15, US-20 and interchange ramps, including substandard lane width, acceleration, deceleration, and weaving distance between exits?
	Does the alternative address substandard interchange spacing on I-15 and US-20?
	Are changes in access (closures or relocations) expected to reduce crashes?
Congestion	Does the alternative increase the capacity of I-15 and US-20?
	Does the alternative separate regional through trips and local destination trips?
	Does the alternative improve freight movement?
	Does the alternative provide improved, alternative, or additional crossings of railroad and river?
Local Bicycle, Pedestrian, Transit and Vehicle Connectivity	Does the alternative enhance or improve bicycle, pedestrian, transit and vehicle connectivity throughout the I-15/US-20 project area?
Future Travel Demand	Does the alternative provide capacity improvements to address projected population and tourism growth?
	Does the alternative provide LOS improvements to adequately address future growth as identified in adopted City, County, and MPO land use and comprehensive plans? *(Acceptable LOS per the BMPO Long Range Transportation Plan = LOS A-D)
Environmental	Will the environmental impacts require additional agency approvals or permits?
	Does the alternative create any problematic or unmitigatable impacts to environmental resources?
	Does the alternative provide enhancement to local environmental resources?
Economics, Demographics and Market Impacts	Not addressed in Level Two, no new additional information.

**Table 4. Level Two Screening Criteria Questions**

Needs/Goals/ Objectives	Level Two Evaluation Questions
Public Support	Does the alternative create any controversial issues?
Cost/ Constructability	Does the project provide logical and sequential phasing?
	Does the Alternative provide a reasonable cost/benefit?
Access	How well does the alternative improve access to local resources including schools, recreational facilities, and commercial areas?

### 3.3.4 Level Two Screening Meeting

The following were provided to the analysis team for their review prior to the Level Two screening meeting:

- Draft Purpose and Needs and project goals.
- Level Two concept alternative maps.
- Descriptions of the alternatives.
- Evaluation criteria matrix and evaluation questions with the results of the technical analysis done to inform the screening.
- Risk workshop summary.

The Level Two screening meeting held on April 9, 2019, included 18 individuals representing ITD, the BMPO, City of Idaho Falls, Bonneville County, FHWA, and the consultant team.

### 3.3.5 Level Two Results

Of the 10 build alternatives evaluated, 7 were not advanced because they did not address the project needs related to travel demand, connectivity options for pedestrians and bicycles, and/or had a poor benefit cost ratio. They also typically had combinations of impacts such as:

- Multiple river crossings.
- Combination of Section 4(f) of the U.S. Department of Transportation Act of 1966, Section 106 of the National Historic Preservation Act, and environmental justice impacts.
- Complicated construction challenges.
- Diminishing returns on capturing through travel.

Alternatives C, E1, E2, and H were recommended to advance to Level Three evaluation with the No Build Alternative. Alternatives E1 and E2 were very similar but had different options for ramp connections to local streets.

Participants at the CWG Meeting #4, held on April 29, 2019, reviewed and discussed the results of the evaluation that were also presented at an open house meeting on May 16, 2019.

Level Two screening results are summarized in Table 5 with the specific reasons each alternative was not advanced.

*Note that yellow lines in the thumbnails are at-grade facilities and the blue/green lines are grade-separated facilities.*

**Table 5. Level Two Alternatives and Screening Results**

Alternative		
<p><b>No Build</b>            This alternative does not include any improvements to the I-15 or US-20 corridors in the study area but does include some other roadway improvements that may influence travel patterns in the study area (see Section 3.5.1)</p>		
<p><b>B: 118/119 Split interchange with US-20 Direct Connect with modified Fremont interchange (similar to I.B)</b></p> <ul style="list-style-type: none"> <li>• One-way CD roads would be built adjacent to I-15 and US-20 without stop-controlled intersections for Exit 118 and 119.</li> <li>• Exit 307 Lindsay Boulevard would be removed to streamline traffic flow headed to/from US-20.</li> <li>• A new local connection would be constructed over the Snake River to connect Higham Street to Lindsay Boulevard.</li> </ul>		<p>Not Advanced  <i>Has similar impact to C, but less mobility benefit than Alternative C because of fewer improvements to the Fremont interchange.</i></p>
<p><b>C: 118/119 Split interchange with US-20 Direct Connect with new Fremont interchange</b>            Similar to Alternative B with the addition of a new interchange at Fremont Avenue.</p>		<p><b>Advanced</b>  <i>Has the potential to meet Purpose and Needs and performs better than similar Level Two alternatives.</i></p>

**Table 5. Level Two Alternatives and Screening Results**

Alternative		
<p><b>D: US-20 Re-alignment with system interchange at I-15 south of Freeman Park: Improvements to 118/119 (similar to II.A original)</b></p> <ul style="list-style-type: none"> <li>• Move system-to-system interchange about 3/4 mile north of the existing Exit 119.</li> <li>• Create a new US-20 alignment just north of Presto Street heading east to rejoin the existing alignment at a reconstructed Science Center Drive interchange.</li> <li>• Design for Broadway Street and Grandview Drive interchanges would be the same as Alternative I.A.</li> <li>• The existing US-20 alignment from I-15 to Science Center Drive would become a local street with an intersection at Science Center Drive east of the new interchange.</li> </ul>		<p>Not Advanced  <i>Substantial impact on the neighborhood and Section 4(f) resources (Freeman Park) as the alignment goes directly through middle of both. Similar travel benefits to Alternative E, but far more severe impacts to the neighborhood and park.</i></p>
<p><b>E: US-20 Realignment north of Exit 119 (similar to Level One II.A alternatives)</b></p> <p>E.1 – Anderson Street Connector with North End Modification (emerged during screening)</p> <ul style="list-style-type: none"> <li>• Includes a connection to the local street network to connect Fremont Avenue/5th West north of the new US 20 alignment.</li> <li>• Provides a new local road network to connect to Lewisville Highway.</li> </ul> <p>E.2 – Anderson Street Connector (original)</p> <ul style="list-style-type: none"> <li>• Provides a full interchange at Science Center Drive.</li> <li>• Similar features as Alternative II.A (modified) with the addition flyovers to connect northbound I-15 to eastbound US-20 and westbound US-20 to southbound I-15.</li> </ul>		<p><b>Advanced</b>  <i>Has the potential to meet Purpose and Needs and performs better than similar Level Two alternatives.</i></p> <p><b>Advanced</b>  <i>Has the potential to meet Purpose and Need and performs better than similar Level Two alternatives.</i></p>

**Table 5. Level Two Alternatives and Screening Results**

Alternative		
<p><b>F: US-20 One-way Couplet with improvements to 118/119 near 33rd</b>            (Arose during the CWG review of Level 1 Alternatives)</p> <ul style="list-style-type: none"> <li>Includes Alternative B improvements between Exit 118 and Exit 119.</li> <li>US-20 becomes a couplet.</li> <li>Eastbound US-20 traffic runs on new lanes east of I-15 without any connection to Grandview Drive, Fremont Avenue, or Science Center Drive and reconnecting to the existing alignment north of Science Center Drive.</li> <li>Westbound US-20 departs the existing alignment and heads west north of Presto Street and splits onto two separate structures over the river – one joining northbound I-15 and the other on a separate US-20 facility with options to exit at 118 or continue south on I-15.</li> </ul>		<p>Not Advanced  <i>Has a substantial impact on the neighborhood and Freeman Park as the alignment goes directly through middle of both. Eliminates direct access to both Lindsay Boulevard and Riverside Drive (important access points into downtown).</i></p>
<p><b>G: US-20 Realignment with a system interchange at I-15 near 49th St.</b></p> <ul style="list-style-type: none"> <li>New roadway at approximately 49th North/Telford Road to become the new US-20, existing US-20 between Lindsay Boulevard and Fremont Avenue interchange to be converted to local roadway.</li> <li>US-20/I-15 system-to-system direct access flyover ramps to span the river, railroad, and I-15.</li> <li>Includes Alternative B improvements between Exit 118 and Exit 119.</li> <li>Existing US-20 alignment becomes a local road between I-15 and Iona Road.</li> </ul>		<p>Not Advanced  <i>Similar impacts to Alternative H, but does not provide future east-west connectivity to US 26.</i>   <i>(In Level 2, Alternative H was recommended because it included an extension to US-26. Though this adds additional highway connectivity, it was not an element of the Purpose and Needs. In consultation between ITD and FHWA, it was determined that the Level Three process should instead consider and enhance Alternative G, which was ultimately renamed H2.)</i></p>
<p><b>H: US-20 Realignment with a system interchange at I-15 near 49th St. and extension to US 26</b>            Same improvements as Alternative G with a roadway extension from US-20 east to US-26.</p>		<p><b>Advanced</b>  <i>Similar impacts to Alternative G, but includes future east-west connectivity to US-26.</i></p>

**Table 5. Level Two Alternatives and Screening Results**

Alternative		
<p><b>I: High Capacity Bypass Route near 45th West to 19th Street North</b></p> <p>Similar improvements as Alternative H with a full US-20/I-15 interchange east of the existing I-15 alignment and continuation of US-20 west to approximately 45th West and then south with interchanges at Broadway Street and Sunnyside Road and I-15 near Exit 113.</p>		<p>Not Advanced</p> <p><i>Similar to Alternative H, but has a much more substantial footprint and environmental impact without providing additional traffic diversion.</i></p>
<p><b>J: Relocate I-15 west</b></p> <ul style="list-style-type: none"> <li>• New I-15 alignment between Broadway Street and W 65th North.</li> <li>• I-15 and US-20 share an improved segment of US-20 from the Snake River to Science Center Drive.</li> <li>• At Science Center Drive, the alignment turns north with a system-to-system interchange south of Iona Road where US 20 moves east to rejoin its current alignment and I-15 arcs west to rejoin the current alignment near 65th North.</li> </ul>		<p>Not Advanced</p> <p><i>Does not provide adequate connectivity for local traffic and eliminates local access on both Lindsay Boulevard and Fremont Avenue.</i></p>
<p><b>K: High Capacity Route near Ririe Outlet north of 81st Street North</b></p> <ul style="list-style-type: none"> <li>• New bypass starting at Exit 113 starting west of Idaho Falls heading north on 45th West, with US 20 at Broadway Street and continuing north to 81st North, then heading east to connect with a new US-20/I-15 interchange and continuing east to reconnect with the existing US-20 alignment.</li> <li>• Includes Alternative B improvements between Exit 118 and Exit 119.</li> </ul>		<p>Not Advanced</p> <p><i>Does not provide adequate connectivity for local traffic, and the alignment has substantial environmental impacts</i></p>

### 3.4 Level Three Evaluation

After the Level Two screening, the project team worked on further investigating and detailing each alternative. The goal of the Level Three evaluation was to determine how well an alternative met the Purpose and Need and goals of the project in comparison to the other remaining alternatives. Full documentation of the Level Three evaluation is included in the *I-15/US-20 Safety and Mobility Study Level Three Alternative Screening Summary* report (HDR, 2020a) (Appendix H). During the Level Three process the project team:

- Refined the geometrical layouts, structure locations, local roads and pedestrian/bicycle connectivity, and environmental impacts to known resources for each alternative.
- Held a cost risk assessment and value engineering (CRAVE) workshop (Section 3.4.1).
- Completed micro-simulation modeling for the operational analysis for both the planning year 2045 and an estimated construction year 2027 for the three alternatives that were under consideration after the CRAVE workshop. The analysis identified areas of delay and informed adjustments to lane configurations in the geometric layouts. Preliminary TREDIS™ input data was also prepared based on modeling results. The results are described in Section 3.4.2.
- Reviewed and modified Level Three evaluation screening questions, specifically regarding access.
- Held an Environmental Resources Committee meeting on March 11, 2020, with the environmental resource agencies.
- Completed benefit cost analysis based on a high-level construction cost relative to the benefits each alternative provides. Supplemented environmental information with field studies to collect information on wetland locations along the Snake River and potential cultural resource sites.
- Supplemented environmental information with field studies to collect information on wetland locations along the Snake River and potential cultural resource sites.

#### 3.4.1 CRAVE Workshop

A CRAVE workshop held December 9-12, 2019, was attended by 23 individuals representing ITD, the BMPO, City of Idaho Falls, Bonneville County, FHWA, and the consultant team. The primary objectives of the CRAVE study were to:

- Verify or improve upon project concepts.





- Identify high-risk areas in delivering the project.
- Improve the value of the alternatives through innovative measures that improve the performance while reducing project costs.
- Perform a cost risk assessment on both the baseline alternatives and the value engineering recommendations.

The CRAVE study team generated over 80 ideas, which were presented and evaluated against the project baseline (Level Two alternatives). Based on the analysis, the CRAVE study team recommended modifications to the Level Two alternatives, which resulted in refined Alternative C and Alternative H and a combination of Alternatives E.1 and E.2. The alternatives were renamed Alternatives C3, E3, and H2 and were evaluated in the Level Three screening. The CRAVE Report is included as Appendix G.

Following the CRAVE workshop, the project team reviewed the improved alternatives and updated the alignment geometry and impacts to prepare them for the Level Three evaluation. The project team also updated the operational analysis (micro-simulation modeling) for the planning year 2045 based on the CRAVE-improved alternatives.

The CWG Meeting #5, held on February 27, 2020, reviewed the alternatives that had been updated based on the CRAVE workshop.

### 3.4.2 Operational Analysis

The 2045 travel demand volumes for the No Build Alternative and build alternatives were developed using modified versions of the BMPO TransCAD<sup>®</sup> model with minimal changes to the transportation network for the No Build Alternative, and representations of the respective build alternatives in the coded model networks. Details of the methodology used to develop forecast travel demand volumes are presented in the *Methods and Assumptions for Forecasting Traffic Volumes* memo (HDR, 2017) (Appendix C).

The project team performed an operational analysis on the alternatives that were modified as part of the CRAVE study from the Level Two results. The operational analysis modeled Alternative C3, Alternative E3, Alternative H2, and the No Build Alternative with planning year 2045 travel demand forecasts, identified operational measurements and capacity, and estimated travel times for each. This analysis was completed at a high level with the understanding that some individual intersection, interchange, and/or ramp designs may be further refined in future phases and may require additional modeling. The *PEL Level 3 2045 Updated Alternatives Operational Analysis Technical Memo* (HDR, 2020b) is included as Appendix I. A summary of the memo follows.

Vissim traffic microsimulation software was used to model and analyze study area highways, roadways, interchanges, and intersections under forecast conditions. The *Highway Capacity*





*Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis* (HCM) (Transportation Research Board, 2016) analysis methods were used to estimate LOS for the intersection and merge/diverge locations. As the alternatives were analyzed, the existing lane configuration and intersection control of local streets were maintained unless specifically modified by the alternative improvements. To identify intersection and highway segment capacity deficiencies and improvement needs, the project team identified those facilities that operated at LOS E or F. LOS D was used for the analysis as the acceptable threshold for operations for the future operational and capacity analysis for comparing how the alternatives are estimated to operate. Normally LOS D or better is acceptable for peak hour operations in urban/suburban areas.

Table 6 and Table 7 summarize the results of the 2045 operational analysis for each alternative. Table 6 presents the results of the analysis for the intersections. Table 7 presents the results of the analysis for the merge and diverge ramps. A discussion of the analysis results for each alternative follows the tables.

**Table 6. Intersection Analysis Results**

Intersection	No-Build		Alt. C3		Alt. E3		Alt. H2	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Broadway St - US-20 / Skyline Dr	73.2	E	71.4	E	88.8	F	72.7	E
Broadway St - US-20 / Saturn Ave	58.4	E	25.7	C	59.6	E	53.6	D
Broadway St - US-20 / Exit 118 SB Ramp	27.3	C	25.7	C	25.8	C	45.1	D
Broadway St - US-20 / Exit 118 NB Ramp	34.1	C	26.0	C	25.5	C	42.1	D
Broadway St / Utah Ave	112.0	F	55.1	E	58.7	E	52.3	D
Grandview Dr / Skyline Dr	96.3	F	23.1	C	17.2	B	52.9	D
Grandview Dr / Saturn Ave	NA	NA	1.4	A	1.0	A	5.9	A
Grandview Dr / Exit 119 SB Ramp	45.8	E	4.6	A	NA	NA	21.9	C
Grandview Dr / Exit 119 NB Ramp	60.6	E	11.2	B	NA	NA	49.0	D
Lindsay Blvd / Exit 307 WB Ramp	92.4	F	NA	NA	NA	NA	17.9	C
Lindsay Blvd / Exit 307 EB Ramp	8.6	A	NA	NA	NA	NA	5.7	A
Grandview Dr / Lindsay Blvd	NA	NA	10.4	B	8.6	A	NA	NA
Fremont Ave / Exit 308 WB Ramp	2.9	A	NA	NA	NA	NA	NA	NA
Fremont Ave / Exit 308 EB Ramp	4.6	A	NA	NA	NA	NA	NA	NA
Fremont Ave / Exit 309 WB Ramp	NA	NA	27.5	C	6.2	A	NA	NA
Fremont Ave / Grandview Dr	NA	NA	14.8	B	16.1	B	29.7	C
Science Center Dr / Fremont Ave	11.7	B	18.8	B	25.5	C	11.7	B
Science Center Dr / Exit 309 WB Ramp	20.5	C	15.7	C	28.2	D	42.7	D
Science Center Dr / Exit 309 EB Ramp	4.1	A	3.1	A	2.9	A		
Science Center Dr / North Blvd	14.7	B	15.6	B	15.6	B	15.1	B
Lewisville Rd / 33rd North	48.7	E	4.4	A	25.6	D	2.5	A
Lewisville Rd / Exit 310 WB Ramp	15.9	B	15.0	B	31.4	C	27.4	C
Lewisville Rd / Exit 310 EB Ramp	15.6	C	35.2	E	49.9	E		
Lewisville Rd / Iona Road	26.1	C	46.2	D	66.8	E	13.5	B
N 15th E / Exit 311 WB Ramp	4.2	A	6.4	A	4.5	A	NA	NA
N 15th E / Exit 311 EB Ramp	2.8	A	5.5	A	3.7	A	NA	NA
N 15th E / Haroldsen Dr	2.1	A	1.8	A	2.2	A	2.3	A
N 15th E / Telford Rd	3.3	A	3.5	A	3.6	A	25.3	C
Olympia St / I-15 SB Ramp	NA	NA	NA	NA	6.2	A	NA	NA
Olympia St / I-15 NB Ramp	NA	NA	NA	NA	8.5	A	NA	NA
Telford Rd / US-20	NA	NA	NA	NA	NA	NA	5.3	A
Telford Rd / Grandview Dr	NA	NA	NA	NA	NA	NA	20.4	C
E River Rd / US-20 WB	NA	NA	NA	NA	NA	NA	43.4	D
E River Rd / US-20 EB	NA	NA	NA	NA	NA	NA	42.4	D

LOS A = BLUE, LOS B = GREEN, LOS D = ORANGE, LOS E = RED, and LOS F = BLACK



**Table 7. Merge/Diverge Analysis Results**

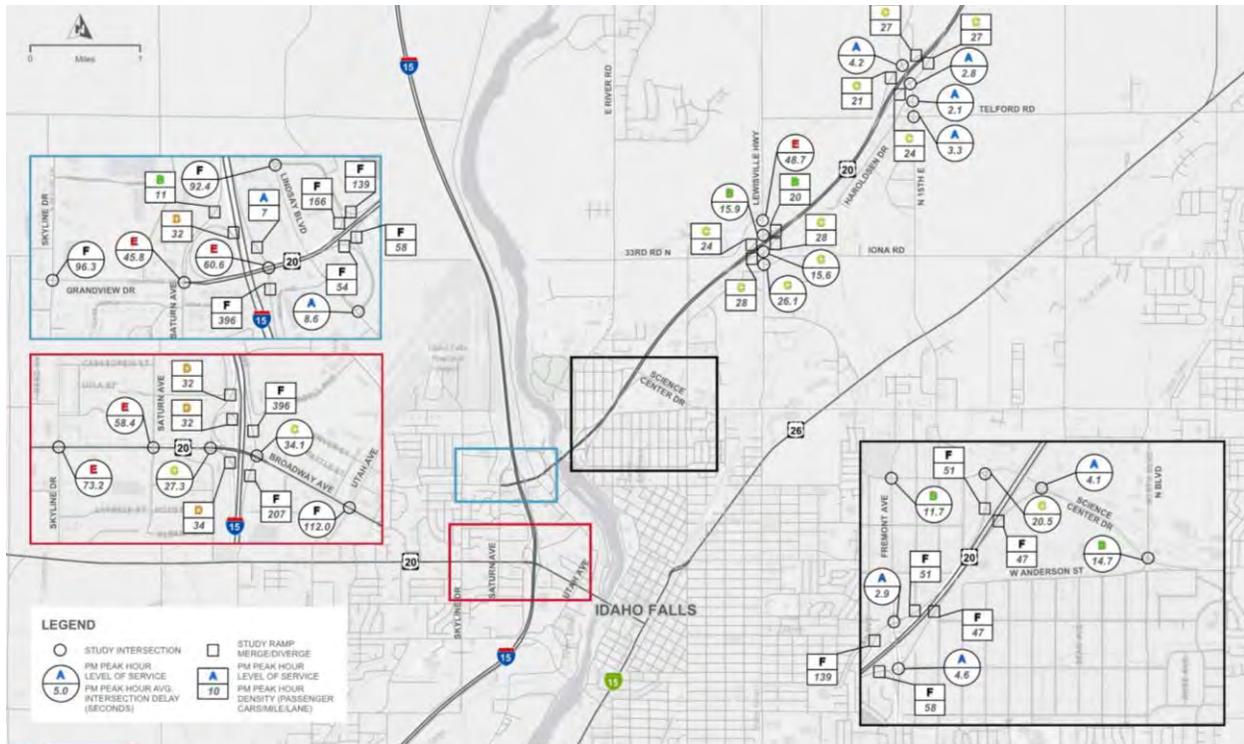
Ramp	No-Build		Alt. C3		Alt. E3		Alt. H2	
	Density	LOS	Density	LOS	Density	LOS	Density	LOS
Exit 118 NB Off Ramp	207	F	41	E	38	E	34	D
Exit 118 EB Broadway St SB On Ramp	34	D	36	E	36	E	34	D
Exit 118 WB Broadway St SB On Ramp	32	D			34	D		
Exit 118 NB On Ramp	396	F	39	E	NA	NA	NA	NA
Exit 119 NB Off Ramp			NA	NA	NA	NA	NA	NA
Exit 118 SB Off Ramp	32	D	36	E	NA	NA	NA	NA
Exit 119 SB On Ramp			NA	NA	NA	NA	NA	NA
Exit 119 NB On Ramp	7	A	9	A	NA	NA	35	D
Exit 119 SB Off Ramp	11	B	10	A	NA	NA	32	D
Exit 307 EB Off Ramp	54	F	NA	NA	NA	NA	39	E
Exit 307 WB On Ramp	166	F	NA	NA	NA	NA	270	F
Exit 307 EB On Ramp	58	F	NA	NA	NA	NA	43	E
Exit 308 EB Off Ramp			NA	NA	NA	NA	NA	NA
Exit 307 WB Off Ramp	139	F	NA	NA	NA	NA	155	F
Exit 308 WB On Ramp			35	E	NA	NA	NA	NA
Exit 308 EB On Ramp	47	F	38	E	NA	NA	NA	NA
Exit 309 EB Off Ramp			38	E	50	F	NA	NA
Exit 308 WB Off Ramp	51	F	26	C	26	C	NA	NA
Exit 309 WB On Ramp			NA	NA	39	E	NA	NA
Exit 309 EB On Ramp	NA	NA	NA	NA	33	D	NA	NA
Exit 310 EB Off Ramp	28	C	41	E	50	F	NA	NA
Exit 310 WB On Ramp	24	C	28	D	27	C	NA	NA
Exit 310 EB On Ramp	28	C	33	D	34	D	NA	NA
Exit 310 WB Off Ramp	20	B	22	C	21	C	NA	NA
Exit 311 WB On Ramp	21	C	23	C	22	C	NA	NA
Exit 311 EB Off Ramp	25	C	30	D	30	D	NA	NA
Exit 311 EB On Ramp	27	C	31	D	32	D	NA	NA
Exit 311 WB Off Ramp	27	C	21	C	20	B	NA	NA
Direct Ramp NB I-15 Off Ramp	NA	NA	25	C	25	C	33	D
Direct Ramp SB I-15 On Ramp	NA	NA	28	D	37	E	32	D
Direct Ramp NB I-15 On Ramp	NA	NA	7	A	7	A	7	A
Direct Ramp SB I-15 Off Ramp	NA	NA	NA	NA	NA	NA	11	B
Direct Ramp EB US-20 On Ramp	NA	NA	39	E	NA	NA	29	D
Direct Ramp WB US-20 Off Ramp	NA	NA	NA	NA	NA	NA	21	C
Olympia St SB I-15 On Ramp	NA	NA	NA	NA	13	B	NA	NA
Olympia St SB I-15 Off Ramp	NA	NA	NA	NA	11	B	NA	NA
Olympia St NB I-15 On Ramp	NA	NA	NA	NA	8	A	NA	NA
Olympia St NB I-15 Off Ramp	NA	NA	NA	NA	29	D	NA	NA
E River Rd EB US 20 Off Ramp	NA	NA	NA	NA	NA	NA	28	C
E River Rd WB US 20 On Ramp	NA	NA	NA	NA	NA	NA	21	C
E River Rd WB US 20 Off Ramp	NA	NA	NA	NA	NA	NA	21	C
E River Rd EB US 20 On Ramp	NA	NA	NA	NA	NA	NA	28	C
Telford Rd EB US 20 Off Ramp	NA	NA	NA	NA	NA	NA	28	C
Telford Rd WB US 20 On Ramp	NA	NA	NA	NA	NA	NA	19	B
Telford Rd EB US 20 On Ramp	NA	NA	NA	NA	NA	NA	28	C
Telford Rd WB US 20 Off Ramp	NA	NA	NA	NA	NA	NA	19	B

LOS A = BLUE, LOS B = GREEN, LOS D = ORANGE, LOS E = RED, and LOS F = BLACK

### 3.4.2.1. No Build Alternative

Intersection and ramp merge/diverge operational analysis results for the 2045 No Build Alternative are presented in Figure 14. During the forecast 2045 PM peak hour, 16 of the 24 intersections analyzed are estimated to operate at an intersection average LOS D or better.

**Figure 14. 2045 No Build Alternative Forecasted Operations**



Substantial queues are estimated to build along Broadway Street, Grandview Drive, US-20, and the I-15 off-ramps to Exits 118 and 119 from these poor performing intersections that will impact adjacent intersection and roadway capacity and access.

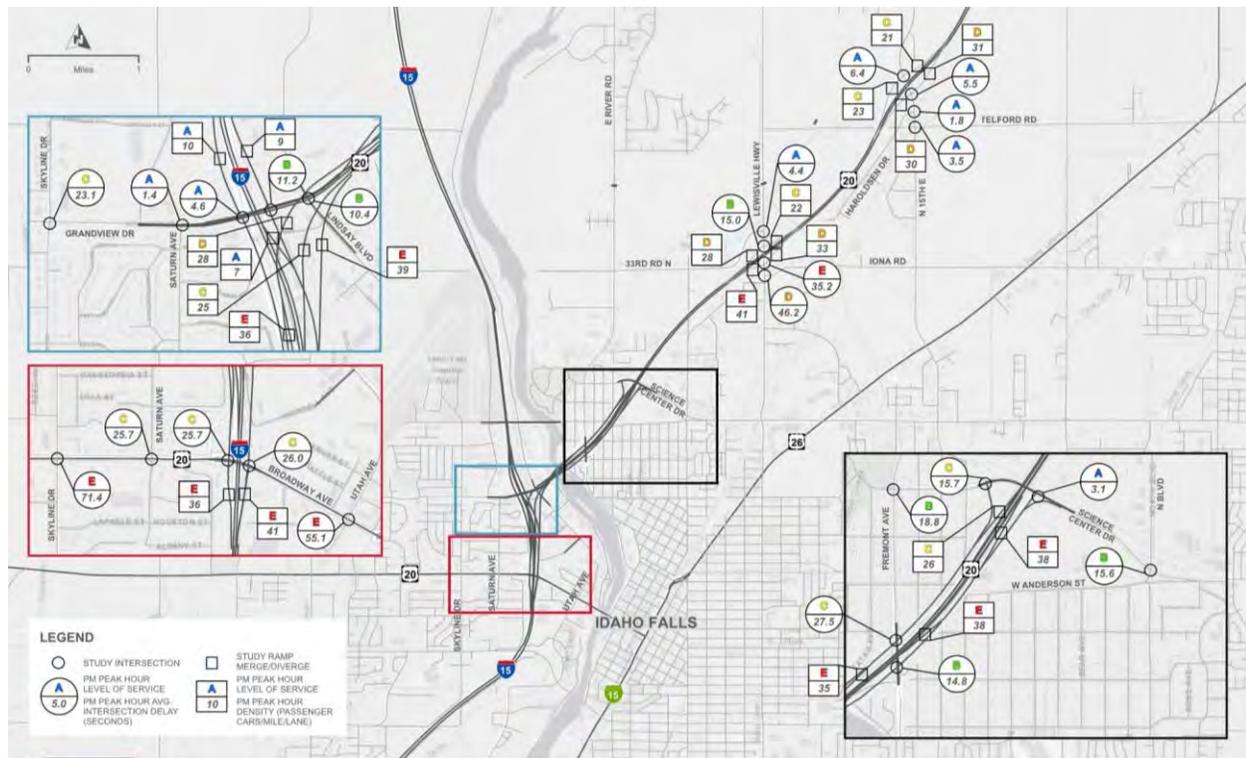
Analysis results indicate several merging and diverging segments on I-15 and US-20 are estimated to operate at LOS F. At Exit 118, the northbound off-ramp and on-ramp both fail with substantial densities of queued vehicles. The Exit 119 northbound off-ramp also fails with more demand than the intersection at Grandview Drive/US-20 can handle, so the queue spills back onto the I-15 mainline and the Exit 118 northbound on-ramp. This also impacts the Exit 118 northbound off-ramp, as do the substantial queues at the Broadway Street and Utah Avenue intersection, which back up to the Exit 118 northbound ramp terminal intersection and keep vehicles from being able to turn right from the off-ramp to Broadway Street. All of the on- and off-ramps at US-20 Exits 307, 308, and 309 are estimated to operate at LOS F. These ramp

merges and diverges fail due to substantial back up queues on US-20 from the Exit 119 intersections, inadequate weaving distances, and short acceleration lengths.

### 3.4.2.2. Alternative C3

Intersection and ramp merge/diverge operational analysis results for the 2045 Alternative C3 are presented in Figure 15. During the 2045 forecast PM peak hour, 21 out of the 24 intersections analyzed are estimated to operate at an intersection average LOS D or better, and all but four intersections are estimated to operate similarly to or better than in the No Build Alternative. Broadway Street with Skyline Drive and Utah Avenue, and the Exit 310 eastbound ramp terminal are the only intersections estimated to operate worse than LOS D at LOS E.

**Figure 15. 2045 Alternative C3 Forecasted Operations**



The intersection of Grandview Drive with Skyline Drive has much less delay than the No Build Alternative (23.1 seconds versus 96.3 seconds) while operating at LOS C. The intersection of Fremont Avenue and the I-15 southbound direct on-ramp/Exit 309 off-ramp operates worse than the No Build Alternative because this intersection serves substantial traffic accessing I-15 from westbound US-20. The intersection of Lewisville Road and the Exit 311 eastbound ramp operates worse in Alternative C3 compared to the No Build Alternative because the upstream bottleneck at Exit 119 is removed and more vehicles are able to reach this intersection.



The majority of Alternative C3 merging and diverging segments on I-15 and US-20 are estimated to operate at LOS D or better. The improved ramps at I-15 Exits 118 and 119 operate better than in the No Build Alternative, US-20 Exit 307 is removed, and Exit 308 is modified. The Alternative C3 improvements allow more eastbound US-20 traffic to reach the interchanges east of the Snake River crossing. The Exit 308 on-ramps to eastbound and westbound US-20, the Exit 309 eastbound off-ramps and westbound on-ramps, and the Exit 310 eastbound off-ramp are all estimated to operate at LOS E. This is caused by the increase in traffic reaching and using these interchanges, which cannot reach them in the No Build Alternative because of upstream bottlenecks. The direct ramp from I-15 northbound to US-20 eastbound is estimated to operate at LOS E for both the off-ramp from I-15 and the on-ramp to US-20.

The new direct ramps from Exit 118 to US-20 are estimated to operate at LOS E. The LOS E for the direct ramp connections to I-15 is due to the high volumes entering and exiting I-15, combined with the Exit 118 southern ramp volumes, increasing the volumes using the direct ramps above any other alternative.

### **3.4.2.3. Alternative E3**

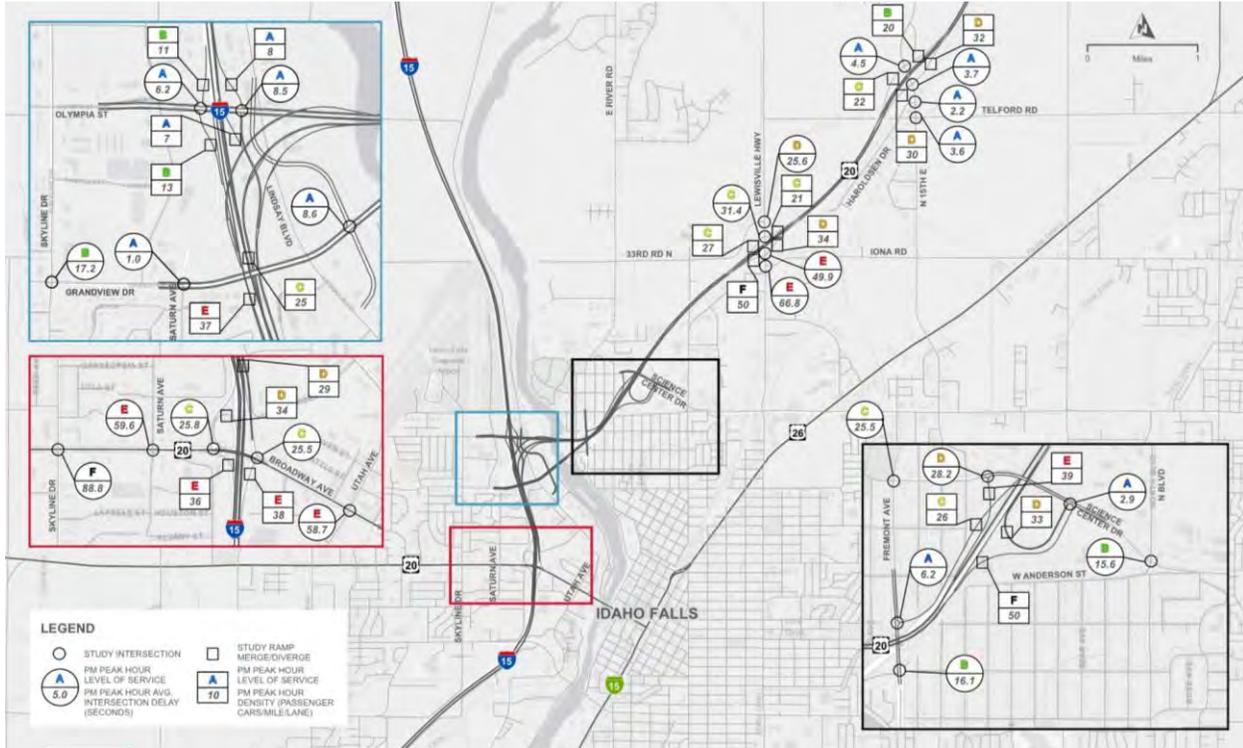
Intersection and ramp merge/diverge operational analysis results for the 2045 Alternative E3 are presented in Figure 16. During the forecast PM peak hour, 19 out of the 24 intersections analyzed are estimated to operate at an intersection average LOS D or better. The intersections of Broadway Street with Skyline Drive, Lewisville Road with the Exit 310 eastbound ramp terminal, and Lewisville Road with Iona Road are estimated to operate at LOS F, LOS E, and LOS E, respectively, performing substantially worse than the No Build Alternative. The Lewisville Road intersections operate poorly due to more vehicle volume being able to get downstream on US-20 eastbound. The at-grade signalized intersections of Lindsay Boulevard and Fremont Avenue with the old US-20 alignment operate adequately at LOS A and LOS B, respectively, although the latter is worse than the ramp terminal intersection LOS at the interchange under No Build Alternative conditions. Intersections that are predicted to see substantial improvements with the alternative are Broadway Street with Saturn Avenue and Utah Avenue, Grandview Drive with Skyline Drive and the Exit 119 ramp terminals, and Lewisville Road and 33rd North. The new intersections on the new US-20/Olympia Street alignment at the north end of the split diamond interchange are estimated to operate well, both at LOS A.

Most of the Alternative E3 merge and diverge segments on I-15 and US-20 are estimated to operate at LOS D or better. The modified configuration of the I-15 exits removes Exit 119 and includes ramps north of Exit 118 to I-15 that directly tie into realigned US-20 west of Fremont Avenue. The northbound direct ramp between I-15 and US-20 is estimated to operate at LOS C, and the southbound direct ramp at LOS E in the PM peak hour. The westbound US-20 weave from the Exit 309 on-ramp to the off-ramp to southbound I-15 operates at LOS F. The



eastbound US-20 off-ramp to Exit 310 operates at LOS F because more traffic can get downstream on US-20 than in the No-Build Alternative.

**Figure 16. 2045 Alternative E3 Forecasted Operations**



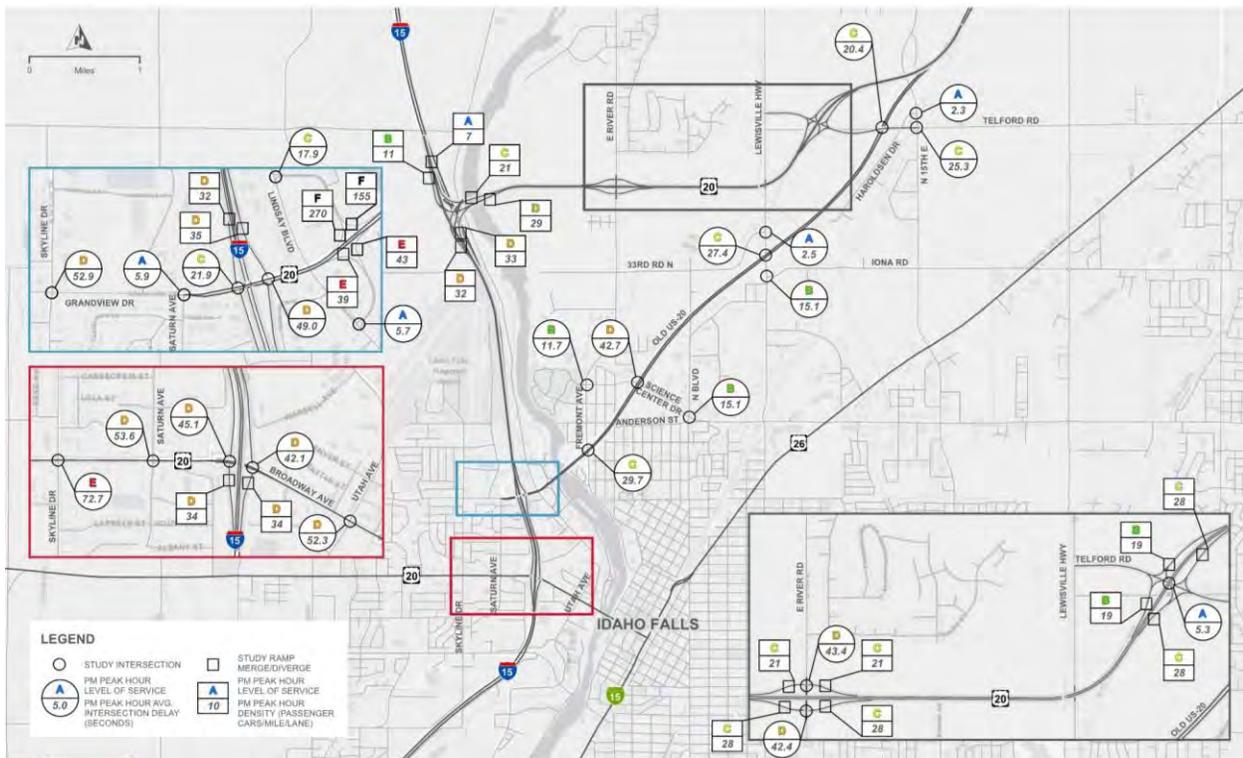
The total vehicles estimated to be able to cross the Snake River under Alternative E3 PM peak hour conditions is 3,813 eastbound and 3,129 westbound for a total of 6,942, which is a 36% increase over the No Build Alternative. The available Snake River crossing points in the analyzed system include the existing Johns Hole Bridge and the realigned US-20 Bridge, which the direct ramps tie into.

### 3.4.2.4. Alternative H2

Intersection and ramp merge/diverge operational analysis results for the 2045 Alternative H2 are presented in Figure 17. During the forecast PM peak hour, 23 out of the 24 intersections analyzed are estimated to operate at an intersection average LOS D or better, and all but the Exit 118 ramp terminal intersections are estimated to operate similarly to or better than in the No Build Alternative. There are no intersections estimated to operate at LOS F. The intersection of Broadway Street with Skyline Drive is estimated to operate at LOS E. This alternative shifts demand away from the Lewisville Highway interchange, and the intersections along this road operate well.

Most of the Alternative H2 merge and diverge segments on I-15 and US-20 are estimated to operate at LOS D or better. The ramps serving the split diamond configuration of the I-15 Exit 118 and Exit 119 operate well with reduced demand because of the realigned US-20 mainline and better spacing between on- and off-ramps. The Exit 307 interchange is assumed to remain, and the ramps are estimated to operate at LOS E and F. While this is better than the No Build Alternative, there are similar issues with queue backups and the close spacing of the ramps to the split diamond intersections with Grandview Drive, causing congestion and queue backups through the Exit 307 ramps. The direct ramps between I-15 and US-20 are estimated to operate adequately in the PM peak hour.

**Figure 17. 2045 Alternative H2 Forecast Operations**



### 3.4.2.5. Conclusions

The operational analysis was used to identify improvements that could be included with each alternative and evaluate which should be carried forward into a NEPA analysis.

The primary results of this operational analysis show that each of the Level Three build alternatives (C3, E3, H2) perform better than the No-Build Alternative. All of the alternatives are estimated to perform similarly under 2045 travel demand. Some specific intersections and merge/diverge locations are estimated to operate better or worse depending on each alternative's connections and configurations.



### 3.4.3 Level Three Criteria

All screening criteria were addressed in Level Three and the questions are shown in Table 8. The answers to the questions for the Level Three screening criteria were characterized as both qualitative and quantitative discussions.

**Table 8. Level Three Screening Criteria Questions**

Needs/Goals/ Objectives	Level Three Evaluation Questions	Level Three Responses
Safety	How well do ramp signals operate?	Ramp signal LOS
	Does the alternative provide adequate weave distance?	Weave distance provided between consecutive ramps
	Does the alternative provide standard 12-foot lane widths?	Number of corridor lane-miles that are narrower than 12 feet
	Does the design option provide adequate distance between ramps?	Distance between ramps?
	Does the alternative reduce merges and diverges?	Number of predicted crashes based on AASHTO <i>Highway Safety Manual</i> analysis
Congestion	What is the capacity of I-15/US-20 in the alternative?	Number of vehicles able to be moved through the corridor in the peak period
	Does the alternative reduce end-to-end travel times through the corridor?	End-to-end travel time in the corridor
	How does the alternative affect freight traffic?	Number of out of direction movements and subsequent delay for high volume freight routes
	Is there an alternative or redundant crossing provided in the alternative?	Number of lanes that cross the railroad and river
	Does the alternative affect traffic volumes on parallel facilities?	Projected volumes and LOS on parallel facilities
Local Bicycle, Pedestrian, Transit and Vehicle Connectivity	Does the alternative support current and future bicycle connection needs in the study area?	Number of bicycle crossings and length of new trails provided
	Does the alternative support current and future pedestrian connection needs across I-15 and US-20?	Number of pedestrian crossings and length of new sidewalk or multiuse trails that meet BMPO current bike/pedestrian plan standards
	Does the alternative support current and future transit connection needs across I-15 and US-20?	List connections supported
	Does the alternative support current and future local vehicle connection needs across I-15/US-20?	List connections supported
	Does the alternative improve connections/transfers to surrounding multi-modal network?	List connections supported



**Table 8. Level Three Screening Criteria Questions**

Needs/Goals/ Objectives	Level Three Evaluation Questions	Level Three Responses
Future Travel Demand	Does the alternative address 2045 peak hour congestion?	2045 peak hour congestion rates
	Does the alternative operate at a 2045 LOS consistent with existing BMPO planning documents (LOS A-D is acceptable)?	Average level of service
	Does the alternative provide flexibility to accommodate increases in volume beyond the planning year?	Yes/No
Environmental	What environmental impacts have been identified?	Define environmental impacts
	Are necessary mitigations for any environmental impacts likely to limit design flexibility or affect the overall schedule and cost?	Identify required agency approvals and permits (especially for Section 404, Section 106 of the National Historic Preservation Act, Section 4(f), Section 6(f) of the Land and Water Conservation Act
	What enhancements would the alternative provide?	Identify enhancements
Economics, Demographics and Market Impacts	Qualitatively, what economic and demographic impacts can be anticipated with the alternative in the short-term (through construction) and the long-term (beyond 5 years)?	Define impacts
Public Support	What are the obvious public concerns the project will have to address?	Identify public perception/support issues.
Cost/ Constructability	Would phased improvements include throwaway improvements?	Identify improvements might be thrown away at a later phase of design
	Would the alternative redirect traffic to other local roads?	Identify impacts to alternative local roads
	What is the Benefit Cost Ratio of the alternative?	Identify Benefit Cost Ratio
Access	Is the improved access to local resources beneficial to the intent/use of the local resource?	Describe the change to the access and the likely impact on the resource
	Does the alternative reduce access to local resources?	Describe how the access is reduced and the likely impact on the resource

### 3.4.4 Level Three Screening Meeting

The following were provided to the analysis team for their review prior to the Level Three screening meeting.

- Purpose and Need, and Project Goals.
- Level Three Screening Questions and Evaluation Matrix.
- Evaluation Summary Matrices with the results of the technical analysis done to inform the screening.
- 2045 Updated Alternatives Operational Analysis Technical Memo (Appendix I).
- The CRAVE Executive Summary (included in Appendix G).
- Level Three Concept Alternative Exhibits.

Twenty individuals representing ITD, the BMPO, City of Idaho Falls, Bonneville County, FHWA, and the consultant team participated in the Level Three screening meeting March 11 and 12, 2020.



The three alternatives included in the screening were build Alternatives C3, E3, and H2, and the No Build Alternative. Alternative descriptions are shown in Table 9.

### 3.4.5 Level Three Results

Of the three build alternatives evaluated Alternatives E3 and H2 were recommended to advance to NEPA with the No Build Alternative. Alternative C3 was not advanced because of:

- More challenging constructability because major improvements would have to be constructed on the existing alignment.
- Worse traffic operations than the other build alternatives due to complex weaving movements.
- Does not address the operational issues as well as the other build alternatives. The direct ramps from Exit 118 to US-20 are estimated to operate at LOS E due to the high volumes entering and exiting I-15 combined with the Exit 118 southern ramp volumes and are higher than the other build alternatives.
- Reduced ability of drivers to maneuver through the proposed system with several non-intuitive weaving movements.

**Table 9. Level Three Alternatives and Screening Results**

Alternative		
<p><b>C3 – Free Flow interchange with Fremont/ Science Center Modification</b>            (modification of C developed during CRAVE workshop)</p> <ul style="list-style-type: none"> <li>• On-alignment near the existing I-15/US-20 location</li> <li>• Direct ramp connections from I-15 south of Exit 118 to US-20.</li> <li>• New crossing to the north at Higham Street for local street connectivity.</li> <li>• Opportunities to develop pedestrian and bicycle connections between I-15 and US-20.</li> <li>• Separates the local and through traffic between Exit 118 through the City Center/Riverside Exit 308A.</li> </ul>		<p>Not Advanced</p>
<p><b>E3 – US-20 realignment north of Exit 119</b>            (combined E.1 and E.2, developed during CRAVE workshop)</p> <ul style="list-style-type: none"> <li>• Relocation of existing Exit 119 approximately 2,000 feet north of current location.</li> <li>• US-20 is realigned to the north.</li> <li>• The new I-15/US-20 Olympia Drive exit is north of the existing Exit 119 at Grandview.</li> <li>• Converts current US-20 between Grandview</li> </ul>		<p>Advanced</p>

**Table 9. Level Three Alternatives and Screening Results**

Alternative		
Drive and Fremont Avenue to a local street. <ul style="list-style-type: none"> <li>• US-20 location results in a shorter new Snake River bridge crossing.</li> <li>• Moves regional traffic from I-15 through direct access ramps that lead to/from US-20</li> </ul>		
<p><b>H2 – 49th/Telford Road Connector</b>            (modification of H1 developed during CRAVE workshop)</p> <ul style="list-style-type: none"> <li>• On-alignment improvements between Exit 118 and 119 and a new US-20 alignment two miles north of Exit 119</li> <li>• Moves the east/west portion of the new US-20 alignment farther south than previous Alternative H.</li> <li>• Converts current US-20 between Grandview Drive and the Lewisville Highway to a local street.</li> <li>• Realigns US-20 and connection to I-15 first, followed by an interchange at Exits 118 and 119, depicted as a split diamond interchange.</li> </ul>		<p><b>Advanced</b></p>

### 3.5 Recommended Alternatives Based on Level Three Evaluation

#### 3.5.1 No Build Alternative

This alternative assumed the 2045 travel demand forecast volumes travel on the existing transportation network with no changes to the I-15 or US-20 access or interchange configurations. It includes the following locally programmed improvement projects that are expected to be completed whether the I-15/US-20 Connector project is completed or not:



- Widen the Old Butte Road from Broadway Street to Pancheri Drive connection to five lanes.
- Widen 600 feet of 5th West/River Road from where the existing five-lane section ends to University Boulevard to five lanes.
- Widen Hitt Road from Sunnyside Road to 49th South to five lanes.
- Widen 65th South from Yellowstone Highway to Hitt Road to five lanes.
- Widen Holmes Avenue from Sunnyside Road to 65th South to five lanes.
- Widen 1st Street from Ammon Road to 45th East to five lanes.
- Widen Street Leon Road from Lincoln Road to US-20 to five lanes.
- Widen 25th East from Lincoln Road to US-26 to five lanes.

### 3.5.2 Alternative E3

This alternative reduces weaving concerns between I-15 Exits 118 and 119 by separating regional traffic not exiting in Idaho Falls with direct ramp connections from I-15 north of Exit 118 to a new US-20 alignment in line with the existing Olympia Street. This realignment goes over Fremont Avenue and then matches into the existing US-20 alignment just to the east. The direct ramps go over Grandview Drive, one railroad crossing, Lindsay Boulevard, US-20, and the Snake River before merging into the US-20 alignment west of Fremont Avenue.

Exit 118 on I-15 largely remains the same, except for the northbound on-ramp, which is realigned into a direct ramp connecting to US-20 and new northbound I-15 collector-distributor road to the new Olympia Street interchange and northbound I-15. The existing Exit 119 is totally removed from I-15, and no access is provided from Grandview Drive. The new north ramp from Exit 118 connects to a new interchange, shown as a diamond interchange, at the realigned US-20 and the new Olympia Street interchange. Exit 307 has been removed and rebuilt into an at-grade, signalized intersection between Grandview Drive and Lindsay Boulevard. Exit 308 is also rebuilt as an at-grade, T-intersection on the old US-20 alignment where Grandview Drive is terminated upon intersecting Fremont Avenue. Two new ramps are provided along US-20 for the Exit 309 interchange to provide full access. The new eastbound loop on-ramp connects to Science Center Drive east of US-20, and the westbound off-ramp diverges from US-20 south of Science Center Drive and connects to Fremont Avenue. Portions of Broadway Street, Grandview Drive, US-20, Lindsay Boulevard, Fremont Avenue, and Science Center Drive are rebuilt with the proposed improvements. Broadway Street is widened from five to seven lanes between the Exit 118 northbound ramp intersection and Utah Avenue.

Alternative E3 includes the following pedestrian and bicycle facility improvements:

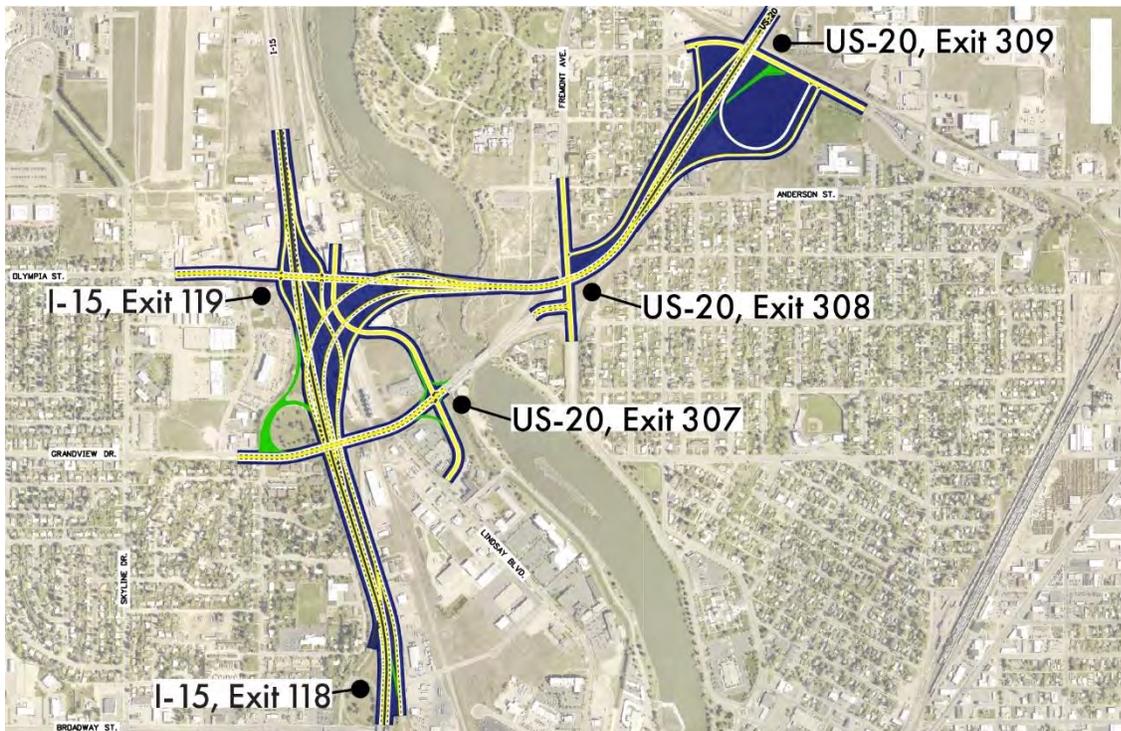
- Skyline Drive Bike Lanes: Facility near Skyline Drive intersection and improved Olympia Street intersection.



- Saturn Avenue Signed Bike Route: At-grade spot improvement at Saturn Avenue. and Grandview Drive with other alternative improvements along Grandview Drive.
- West Snake River Shared Use Path: Facility under improved Grandview Drive and realigned US-20.
- East Snake River Shared Use Path: Removing facility crossing over existing Exit 308 westbound on-ramp, as well as consolidating crossing over existing eastbound off-ramp/proposed Grandview Drive.
- Science Center Drive Shared Use Path: Implemented along with alternative improvements along Science Center Drive and Exit 309.
- Iona Road Shared Use Path: Connects Iona Road and shared-used path to improved Fremont Avenue with alternative improvements.
- Fremont Avenue Bike Lanes: Portion of facility with alternative improvements to Fremont Avenue.
- Improve/add sidewalks along Grandview Drive, Lindsey Boulevard, Fremont Avenue, and Science Center Boulevard with alternative improvements.

Alternative E3 is shown in Figure 18.

**Figure 18. Alternative E3**





### 3.5.3 Alternative H2

This alternative realigns US-20 to the north near 49th North before crossing the Snake River and accessing I-15 at an interchange with direct ramps for movements. I-15 is realigned north of the airport to allow the interchange to be installed on the west side of the Snake River so only two US-20 bridges are needed over the river. The Exit 311 interchange and Exit 310 are combined and shown as a single-point urban interchange (SPUI) along the new alignment at Telford Road, and the Lewisville Highway becomes an overpass over the highway. Telford Road is extended and realigned to connect through the new interchange to the Lewisville Highway. The realigned US-20 goes over Lewisville Highway and connects to East River Road with a new interchange, shown as a diamond interchange. Exits 118 and 119 on I-15 are depicted as a split diamond interchange, and Exit 307 on the old US-20 is maintained for Lindsay Boulevard access. The split diamond interchange is a potential option to address concerns with the existing interchanges, and was assumed for the operational analysis performed with the 2045 Alternative H2 travel demand forecasts. The old US-20 alignment becomes a local road with at grade intersections with Fremont Avenue, Science Center Drive, Lewisville Highway, and Telford Road. Broadway Street is widened from five to seven lanes between the Exit 118 northbound ramp intersection and Utah Avenue.

Alternative H2 includes the following pedestrian and bicycle facility improvements:

- Grandview Drive Shared Use Path Extension to Snake River: Facility along Grandview Drive where split diamond interchange improvements are proposed. This includes implementing the at grade spot improvement at Grandview Drive and I-15 northbound ramps terminal.
- West Snake River Shared Use Path: Portion of facility crossing realigned US-20.
- East Snake River Shared Use Path: Portion of facility crossing realigned US-20.
- Fremont Avenue Bike Lanes: Portion of facility along River Road with proposed interchange and roadway improvements.
- Add sidewalk along River Road through proposed improvements.

Alternative H2 is shown in Figure 19.



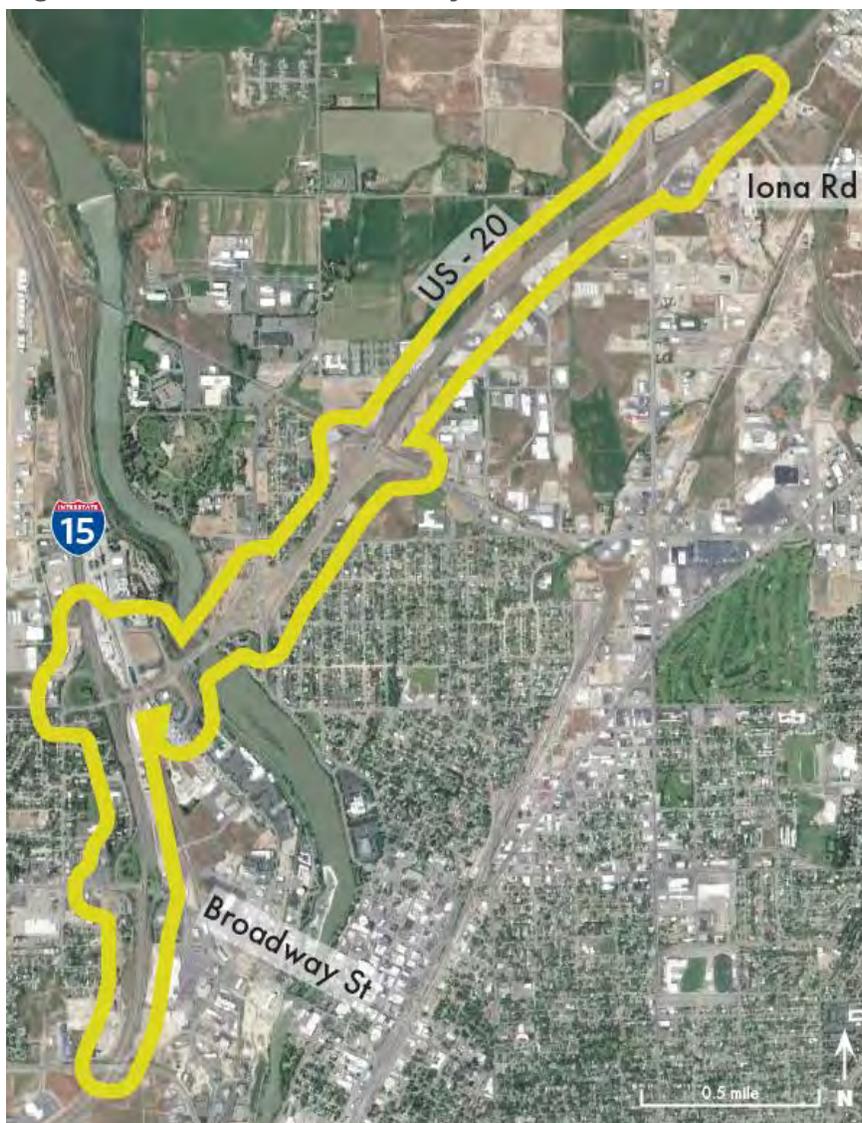
**Figure 19. Alternative H2**



## 4.0 ENVIRONMENTAL RESOURCES

This section summarizes existing conditions in the environmental study area (an approximately 500-foot buffer around the I-15 and US-20 corridors), shown in Figure 20, discusses potential impacts and mitigation issues from the alternatives recommended to move into a NEPA study, and next steps for each resource through the NEPA process. It is important to note that the impacts discussed are based on conceptual-level designs and are subject to change as designs are refined through the NEPA process. A summary of NEPA considerations by resource is included in the PEL Questionnaire included as Appendix A.

**Figure 20. Environmental Study Area**





## 4.1 Environmental Scan

ITD conducted an environmental scan of the corridor in 2018 to identify potential environmental issues of concern to be considered during alternatives development and screening and during the NEPA process. The environmental scan was prepared using desktop-level reviews. More in-depth assessments will be conducted during the NEPA process. Some environmental resources, such as wetlands and cultural resources, were further evaluated as the PEL study process progressed through the screenings. The *I-15/US-20 Safety and Mobility Improvements Study – Environmental Scan Report* (HDR, 2018b) is included as Appendix J.

## 4.2 Resources Reviewed

The scan reviewed the environmental resources, as well as operational considerations that are discussed in Section 2.0):

- Human and Physical Environment
  - Environmental Justice and Socioeconomics
  - Air Quality
  - Farmland, Soils, and Geology
  - Noise
  - Hazardous Materials
  - Airport
- Natural Environment
  - Wetlands and Waters of the U.S.
  - Water Resources
  - Biological Resources
- Cultural Resources
- Public Lands
  - Section 4(f) Resources (U.S. Department of Transportation Act of 1966)
  - Section 6(f) Resources (Land and Water Conservation Act)
- Hydraulics and Stormwater
- Cumulative Impacts





## 4.3 Human and Physical Environment

### 4.3.1 Environmental Justice and Socioeconomics

#### 4.3.1.1. Existing Conditions

Census data reviewed on a citywide and countywide basis showed that the City of Idaho Falls and Bonneville County have minority populations by percentage similar to the rest of the state of Idaho. Citywide poverty level is similar to that of the state, while countywide poverty appears to be less than state average.

Census data was also reviewed to the block data level. This data suggests that the neighborhood west of and adjacent to I-15 at the Broadway Street interchange and the neighborhood southeast of the US-20 interchange at Fremont Avenue have higher rates of poverty than the remainder of the study area. Geographic Information System (GIS) data from the census also indicates that these same neighborhoods have the highest recipient rate of food stamps in the study area. Land use records show scattered use of mobile homes in these neighborhoods, as well as in the area north of and adjacent to the US-20/Fremont Avenue interchange.

The TRPTA had four bus transit routes in Idaho Falls. The Blue Route (Transit Center to/from Aquatic Center) occurred in and around the environmental study area at the Broadway Street/I-15 interchange (TRPTA, 2017). There are no bus stops within the environmental study area; however, several bus stops occur near or adjacent to the corridor. Due to financial issues with rising costs and shrinking funding, TRPTA dissolved its services in 2019, but has plans to resume when new funding is procured.

Churches, schools, and parks are among the neighborhood amenities present in the environmental study area. Temple View Elementary School, west of I-15 near the US-20 exit, is a Title I school with a percentage of minority and low-income student enrollment that is higher than the citywide minority percentage of the population.

#### 4.3.1.2. Potential Impacts and Mitigation

Neighborhood benefits could include increased safety, a reduction in congestion, improvements to emergency service and other public services such as school bus travel times, improved pedestrian and bicycle mobility and separation of local traffic from vehicles with destinations outside of Idaho Falls.

The right-of-way requirements for the recommended alternatives may cause displacements of residents and/or businesses. Right-of-way acquisition and relocations would be conducted in accordance with the Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970.



There is the potential for negative impacts to communities that are low income due to right-of-way requirements or increases in noise.

#### **4.3.1.3. Next Steps**

An environmental justice and socioeconomic study will need to be completed as part of the NEPA process. ITD will assess whether the recommended alternatives would cause disproportionately high and adverse impacts to low-income or minority populations. Public involvement efforts and community engagement will continue through NEPA.

### **4.3.2 Air Quality**

#### **4.3.2.1. Existing Conditions, Impacts, and Mitigation**

The environmental study area is not located in an air quality area of concern, nor in a wilderness area of exceptional air quality in need of protection. Therefore, the recommended alternatives have minimal likelihood of exceeding federal air quality standards. A future project is likely to be considered one with low potential for mobile source air toxin effects.

#### **4.3.2.2. Next Steps**

ITD will coordinate with FHWA and the Idaho Department of Environmental Quality (IDEQ) to determine the level of air quality analysis, if any, that will be required for the alternatives evaluated.

### **4.3.3 Farmland, Soils, and Geology**

#### **4.3.3.1. Existing Conditions**

The Natural Resources Conservation Service (NRCS) has mapped much of the US-20 corridor northeast of the Riverside interchange as Prime Farmland if Irrigated. Some of the area is currently used for agricultural purposes. The area surrounding the I-15/US-20 interchange is classified as Prime Farmland If Drained; however, this area is developed and no agricultural use is occurring.

The Idaho State University geologic map of Bonneville County shows no geologic fault lines in the environmental study area. Much of the environmental study area is classified as quaternary alluvial deposits and quaternary surficial cover from the Snake River Plain (Idaho State University, 2002).

#### **4.3.3.2. Potential Impacts and Mitigation**

Alternative H would impact farmland. ITD will complete a conversion rating form and coordinate with NRCS on the level of impacts and mitigations that may be required should that alternative move forward. Because of its history as a construction waste landfill, the Hatch Pit will require





additional geologic investigation if portions of that property are to become part of the preferred alternative.

#### **4.3.3.3. Next Steps**

The farmland conversion impact rating form (Form AD-1006, U.S. Department of Agriculture) will need to be completed and coordination conducted with NRCS if the recommended alternative impacts farmland.

### **4.3.4 Traffic Noise**

#### **4.3.4.1. Existing Conditions**

There are sensitive noise receptors adjacent to recommended alternatives. These include churches, schools and parks, in addition to residential neighborhoods.

#### **4.3.4.2. Potential Impacts and Mitigation**

While much of the land use adjacent to the corridor is commercial in nature, there are some neighborhoods adjacent to the recommended alternatives that may experience increases in noise. These increases have not yet been evaluated to determine if they meet the threshold of a noise impact for which noise abatement should be considered. It is possible that noise abatement may need to be considered in the residential areas near the I-15/US-20 interchange, and north and south of US-20.

ITD policy states that retail, office, and other commercial or industrial enterprises and their associated parking areas are typically noise tolerant and are typically located adjacent to roadways in part because of their high visibility to passing traffic. Noise abatement is typically not provided in these areas but will be further evaluated during the NEPA process.

#### **4.3.4.3. Next Steps**

The recommended alternatives meet the criteria for Type I projects under the ITD noise policy, and a traffic noise analysis will be required during the NEPA process. Depending on the findings of the noise analysis, mitigation (i.e., noise walls or berms) may be required. The noise analysis will be conducted to meet current ITD policy.

### **4.3.5 Hazardous Materials**

#### **4.3.5.1. Existing Conditions**

The desktop review of the environmental study area revealed the following observations:

- Railroad facilities adjacent to the corridor.





- Light commercial and industrial land use adjacent to the I-15 corridor, including some automobile repair facilities.
- The Idaho National Laboratory located adjacent to the US-20 corridor.
- Current and historic agricultural use of the area, particularly north of US-20.
- The majority of the I-15 corridor has been surrounded by commercial use since at least the 1992 aerial imagery.
- There are few sites with EPA or IDEQ database listings present in the corridor. None were identified that were subject to corrective action. Underground storage tanks are present throughout the area.

Alternative H crosses through a landfill known as the Hatch Pit. The site is currently owned by Bonneville County and Idaho Falls and is used for construction and demolition materials. The consultant team conducted a public records request for the facility from IDEQ. Records for the facility date back to the mid-1970s and include several inspection records and other short documents.

#### **4.3.5.2. Potential Impacts and Mitigation**

The recommended alternatives would likely impact the railroad corridor, which may contain known or unknown spills or other sources of hazardous materials. In addition, Alternative H would impact the Hatch Pit.

#### **4.3.5.3. Next Steps**

An Initial Site Assessment for each alternative's corridor will need to be completed in accordance with the ITD Environmental Manual during the NEPA process. ITD will also coordinate closely with IDEQ and Bonneville County on potential Hatch Pit impacts and design considerations for building an alternative through that site.

### **4.3.6 Idaho Falls Regional Airport**

#### **4.3.6.1. Existing Conditions**

The Idaho Falls Regional Airport is located northwest of the Exit 119. The RPZs overlap with the existing I-15 alignment to the north and west of the airport.

#### **4.3.6.2. Potential Impacts and Mitigation**

Coordination with the Idaho Falls Regional Airport was initiated September 29, 2017, to introduce the study, to understand airport plans and constraints related to the study area, and to define the airport's involvement in the Environmental Resources Committee.





A small segment of Alternative E3 is within the RPZ for Runway 17-35 (the FAA height restrictions for RPZs are depicted in Figure 6). In an email dated August 28, 2020, responding to the project team's request for the airport property boundary to confirm right-of-way requirements for the recommended alternatives, the airport's contracted engineer provided this information:

*As the airport receives federal Airport Improvement Program (AIP) funds from the FAA, the FAA would have to approve a Land Release to allow the airport to either dispose of or give right-of-way on [their] parcels due to the grant assurances that come with each grant.*

*...the FAA has ultimate authority on approving the disposal (fee simple or ROW) of airport property and needs to be involved in the process. This approval would come from FAA Headquarters in Washington DC. Their approval constitutes a federal action which is subject to NEPA.*

As currently designed, a short segment of Alternative E3 would enter the Runway 17-35 RPZ, and Alternative H2 would cross a section of the Runway 20-2 RPZ northeast of the airport. Placing new roads in RPZs is discouraged by the FAA. There is the possibility Runway 17-35 will be closed in the future but that is yet to be determined. If it were closed, the RPZ would not be an issue but a Land Release would still be required.

Documentation related to these meetings is included in Appendix N.

#### **4.3.6.3. Next Steps**

The EIS project team should prepare for additional coordination with FAA by reviewing:

- Part VI of FAA's Compliance Manual for Airports to determine the Land Release process, [https://www.faa.gov/airports/resources/publications/orders/compliance\\_5190\\_6/](https://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/)
- FAA's current policy on land use in the RPZ. [https://www.faa.gov/airports/planning\\_capacity/media/interimLandUseRPZGuidance.pdf](https://www.faa.gov/airports/planning_capacity/media/interimLandUseRPZGuidance.pdf)

FAA should be invited to participate early in the NEPA process. The design should be refined to avoid the RPZ if possible, and the project team should make sure the FAA requirements are included as part of the screening criteria. Continual coordination with FAA throughout the project should be anticipated.





## 4.4 Natural Environment

### 4.4.1 Wetlands and Waters

#### 4.4.1.1. Existing Conditions

The project team conducted an abbreviated field investigation in 2019 after the Level Two screening to verify the presence of wetlands and other waters of the U.S. in the environmental study area listed in the National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD). In addition, field crews identified potential aquatic resources not listed in the NWI or NHD. The *I-15/US-20 Corridor Study Aquatic Resource Delineation and Preliminary Impact Assessment Memorandum* (Horrocks, 2020) documents the results of the field investigation (Appendix K).

The field investigation identified several suspected wetlands throughout the environmental study area, and the following aquatic features that may be crossed by the Recommended Alternatives:

- Armstrong Lateral
- Porter Canal
- Snake River
- Unnamed irrigation features (2)

Wetland mitigation options will be explored during the NEPA process and may include on-site mitigation or potential in-lieu fee options.

#### 4.4.1.2. Potential Impacts and Mitigation

Potential impacts may be avoided or minimized by changing abutment locations. Based on the current conceptual level of design and abbreviated field investigation for aquatic resources, it is estimated that the Recommended Alternatives may impact between 1 and 2 acres of wetlands and approximately 600 linear feet of waters of the U.S.

#### 4.4.1.3. Next Steps

A formal delineation of aquatic resources (wetlands and waters of the U.S.) will take place during the NEPA process. The wetland and waters of the U.S. impacts of the two Recommended Alternatives will be assessed and efforts will be made as alternatives are developed to avoid and minimize these impacts. The U.S. Army Corps of Engineers (USACE) will be involved to make sure all of the factors they use in their 404(b)(1) analysis are covered. They can only permit what is considered to be the Least Environmentally Damaging Practicable Alternative. Once a preferred alternative is selected in the NEPA process, a permit from the USACE and a mitigation plan would likely be required.





## 4.4.2 Water Resources

### 4.4.2.1. Existing Conditions

The *I-25/US-2- Safety and Mobility Study Drainage and Flood Control* report (Horrocks, 2018) documents the drainage and flood control conditions in the environmental study area (Appendix L). The environmental study area is located over the Eastern Snake River Plain Sole Source Aquifer (EPA, 2008). Environmental Protection Agency (EPA) review of the recommended alternatives will likely be required. Generally, these reviews are concerned with depths of excavations, particularly structural piles or injection wells that may create a conduit for hazardous materials to enter the aquifer.

The Snake River through the environmental study area is mapped as a Zone A 1-percent Annual Chance Flood Hazard. No flood elevations or floodway are mapped through the Snake River corridor in the environmental study area.

The Snake River is listed by the Idaho State Department of Lands as navigable by title and right-of-way under State jurisdiction (IDL 2017). Crossings will likely require permitting with the Idaho Department of Lands (IDL). The consultant team confirmed that the river through the environmental study area is not under the jurisdiction of the United States Coast Guard since it is not navigable past the Swan Falls Dam. That correspondence is included in Appendix O.

### 4.4.2.2. Potential Impacts and Mitigation

New and replacement bridge crossings associated with the recommended alternatives would likely impact the floodplain. Mitigation measures could include designing bridge abutments outside the floodplain if practicable. Pilings may need to be driven for bridge supports, and potential impacts to the aquifer will be assessed during the NEPA process.

### 4.4.2.3. Next Steps

The sole source aquifer checklist will need to be completed and coordination conducted with EPA to determine if impacts to the Eastern Snake River Plain Aquifer would occur.

ITD will complete hydraulic modeling to determine impacts to the floodplain. If adverse impacts occur, Executive Order 11988 Floodplain Management must be followed to avoid and/or mitigate impacts.

ITD would work with the Idaho Department of Water Resources (IDWR) and IDL on required permitting after completion of the EIS. This would be conducted through the joint application for permit process in conjunction with the USACE.





### 4.4.3 Biological Resources

#### 4.4.3.1. Existing Conditions

The threatened and endangered species review included the U.S. Fish and Wildlife Service (USFWS) official species list issued by the Information, Planning & Consultation System (IPAC) on October 24, 2017 (USFWS 2017a; Consultation Code: 01EIFW00-2018-SLI-0064). The list included one threatened species (yellow-billed cuckoo) and no endangered species under the Endangered Species Act that may occur or may be affected by the recommended alternatives. No species under the jurisdiction of National Oceanic and Atmospheric Administration (NOAA) Fisheries within the environmental study area were listed as threatened or endangered.

While not officially listed in the environmental study area, Ute ladies' tresses are a federally listed threatened species that can occur in the Snake River corridor. The project team conducted field inspections at the Warm Springs Bottom Element Occurrence population to look for Ute Ladies' tresses habitat. The visit on August 21, 2019, identified a marginally suitable habitat, but no individuals were found. A second visit on August 21, 2020, to that same area indicated that it was still not a suitable habitat and no individuals were found. Documentation of these field visits can be found in Appendix K. Discussions with USFWS indicated that, while not anticipated to be present, additional surveys for potential Ute ladies' tresses habitat may need to be conducted in areas adjacent to the river that would be disturbed by project actions.

The IPaC resource list identified several migratory birds that may occur in the environmental study area. These birds are protected by the Migratory Bird Treaty Act.

#### 4.4.3.2. Potential Impacts and Mitigation

In the environmental study area, the Snake River corridor south of US-20 is highly urbanized. It is possible the yellow-billed cuckoo could be a migrant through the area, but nesting habitat is not likely present. Feedback received during the Environmental Resources Committee meetings (Section 5.3.1) indicated that the yellow-billed cuckoo is reliant on larger (greater than 8 acres) cottonwood galleries upstream of the environmental study area. It is considered unlikely that the recommended alternatives would directly impact the yellow-billed cuckoo.

Some concern was expressed about the impact of expanding the urbanization of the river corridor (Alternative H would establish roadway corridors across the river further to the north), which could reduce habitat where the yellow-billed cuckoo could rest or feed while it passes through the area.

Ute ladies' tresses orchid occurrences may be an issue in the wetlands to be impacted by both recommended alternatives.





#### 4.4.3.3. Next Steps

ITD has conducted a survey of Ute ladies' tresses orchid and is planning one more survey to confirm the findings but is not anticipating impacts to that species. During the NEPA process, ITD will coordinate with USFWS on next steps and methodologies for identifying habitat and assessing potential impacts to listed species. This coordination would include expectations related to yellow-billed cuckoos and Ute ladies' tresses.

### 4.5 Cultural Resources

#### 4.5.1 Existing Conditions

In 2018, a file search request to the Idaho State Historical Society resulted in a previously recorded report and site information (SHPO Record Search Key Number 20351). The consultant team also reviewed historic topographic maps from the US Geological Survey and historic aerial photographs of the environmental study area.

A total of 57 cultural resources surveys have been previously completed within 0.5 mile of the linear environmental study area. Of these, 37 have been submitted by ITD and with the focus on I-15, US-20, and surrounding roads and materials sources.

Four archaeological sites have been previously recorded within 0.5 mile of the linear environmental study area. They include a prehistoric site with a burial, an historic bridge abutment and piers, an earthen irrigation canal, and a concrete box. Three of the four sites are located along the Snake River near, but not immediately adjacent, to the corridor.

A total of 40 architectural resources have been previously recorded within 0.5 mile of the linear environmental study area. These are primarily historic buildings, although they also include bridges, a ferry, farmsteads, and other buildings. Eight of the 40 resources, as summarized in Table 10, are located in or adjacent to the environmental study area. The table shows the eligibility status of those sites. Sites are eligible if they meet certain criteria related to age or association with significant historic events, but the status has not been formally designated. One of the sites is listed on the National Register of Historic Places, which means that the site has been listed as a historic resource by the National Park Service.

**Table 10. Historic Resources Located in or Adjacent to the Environmental Study Area**

Historic Sites	ISHI Number	Eligibility
Red Baron Hangar at 2381 Foote Drive	19-18043	National Register Listed
Stevens Farm at 5061 St Leon Road	19-18153	Ineligible
Old Hitt Farm at 5061 St Leon Road	19-18154	Ineligible
Haroldsen House at 5778 St Leon Road	19-18155	Eligible
Temple View Elementary School at 1500 Scorpius Drive	19-18253	Ineligible



John’s Hole IC Bridge (US-20 over I-15)	19-18271	Ineligible
John’s Hole Bridge (US-20 over Snake River)	19-18272	Ineligible
Jefferson Avenue House at 1249 Jefferson Avenue	19-18128	Ineligible

A total of 10 linear sites were previously recorded within 0.5 mile of the environmental study area—7 are canals, 1 is US-20, and 2 are railroads. Of these, eight cross the environmental study area.

- 19-18170 Idaho Canal; Eligible 12/14/2017
- 19-18182 Anderson Canal; Eligible 7/19/2012
- 19-18241 Sage Canal; Ineligible 1/12/2010
- 19-18299 Idaho Falls Canal; Ineligible 5/6/2016
- 19-18315 Great Western Canal; Eligible 5/4/2017
- 19-18251 U.S. Highway 20; Eligible 7/29/2015
- 19-18172 Union Pacific Railroad; Eligible 10/21/2017
- 19-18174 Eastern Idaho Railroad (Union Pacific Railroad); Eligible 9/13/2013

In addition, there are several linear features within the environmental study area that may be considered historic but have not yet been recorded, including the Porter Canal, the abandoned City Canal, and the Idaho Canal. The Porter Canal parallels the western bank of the Snake River, and crosses under US-20 near the Lindsay Boulevard/US-20 interchange. The abandoned City Canal crosses the environmental study area under the Science Center Drive/US-20 interchange, but no remaining evidence of the canal is present on aerial photographs of this interchange. The Idaho Canal crosses the environmental study area under US-20 east of the Lewisville Highway/US-20 interchange.

One historic district (Idaho Falls Airport Historic District) is listed in the National Register of Historic Places within 0.5 mile of the environmental study area—the Red Baron Hangar at 2381 Foote Drive in Idaho Falls.

In 2019, a historic architecture screening survey was conducted to update the completed research, in particular to review the properties within the area of possible impact that were constructed in or prior to 1980. This screening survey involved review of the County Assessor’s records and a windshield survey of sites. The screening survey described the following areas of concern:

- Antares Park neighborhood – west of I-15 and south of Grandview Drive.
- Grain elevators – adjacent to UPRR near Lindsay Boulevard
- Farmstead – near 900 E. 49th Street.
- Several linear features as discussed above plus Willow Creek
- Outlying farmsteads – N 5th W, N 5th E, N 15th E, 33rd N, 49th N





- Mountain View Lane neighborhood – west of I-15 and north of Broadway Street.
- Highland Park subdivision – north of US-20, west of Science Center Drive.
- Vissing Circle neighborhood – south of US-20 near Johns Hole Forebay Park.

The *I-15/US-20 Corridor Study – Historic Architecture Screening* report (Horrocks, 2019) is included as Appendix L. It describes the historic properties within each of the four alternatives that were under consideration after the Level Two screening.

#### 4.5.2 Potential Impacts and Mitigation

Each of the alternatives recommended to move forward could impact the properties listed above. A full survey in compliance with Section 106 of the National Historic Preservation Act will be required, and the alternative design will be refined to determine specific impacts and to evaluate avoidance or minimization of impact. The State Historic Preservation Officer will be involved as historic property surveys, historic property eligibility and historic property effects are assessed during the NEPA process.

#### 4.5.3 Next Steps

An Archaeological and Historic Survey Report and Effects Determinations will be prepared in compliance with Section 106 of the National Historic Preservation Act during the NEPA process. Mitigation will be developed for any adverse effects.

### 4.6 Public Lands

#### 4.6.1 Section 4(f) Resources

##### 4.6.1.1. Existing Conditions

In addition to historic resources discussed previously, the following community parks occur near or adjacent to the recommended alternatives and would be eligible for Section 4(f) protection. No wildlife refuges, wild and scenic rivers, or national recreation areas occur in the area.

- Antares Park (adjacent to the western edge of I-15 at the US-20 interchange).
- Idaho Falls Riverwalk (runs parallel to the Snake River and crosses under US-20).
- Sportsman’s Public Park and Marina (west bank of the Snake River south of and adjacent to US-20).
- John’s Hole Forebay Park (west bank of the Snake River south of and adjacent to US-20).
- Russ Freeman Park (approximately 1,000 feet northwest of existing US-20 and potential interchange adjustments).





#### **4.6.1.2. Potential Impacts and Mitigation**

The recommended alternatives would likely cross the Idaho Falls Riverwalk. Impacts to the trail would be temporary in nature during construction, but final accessibility to bicycle and pedestrian features, such as the Riverwalk, are expected to be improved. Potential mitigation for the temporary impacts could include trail detours during construction.

Alternative E may impact John's Hole Forebay Park and the marina area. Impacts, if any, would likely be minimal, and the park's functions would still exist. The level of potential impacts would be evaluated as design is refined during the NEPA process.

At this stage of conceptual design, it appears that the recommended alternatives would avoid direct impacts to Antares Park and Russ Freeman Park. Noise and/or visual impacts to these facilities may be possible and will be assessed in the NEPA phase.

#### **4.6.1.3. Next Steps**

A Section 4(f) use must be avoided if an alternative exists that is feasible and prudent. If it is determined that the recommended alternatives would cause a use of a Section 4(f) property, a Section 4(f) finding will be developed and mitigation options discussed with local agencies that are the officials with jurisdiction (OWJ) over the Section 4(f) properties and with FHWA.

### **4.6.2 Section 6(f) Resources**

#### **4.6.2.1. Existing Conditions**

A request for information about resources under Section 6(f) of the Land and Water Conservation Act in the environmental study area was submitted to the Idaho Department of Parks and Recreation on May 2-3, 2018, by email. Based on the review of the environmental study area conducted by Kathy Muir of the Idaho Department of Parks and Recreation, one parcel eligible for Section 6(f) designation is located within the bounds of the environmental study area. This property was identified as L&WC #16-00223 - the Johns Hole Forebay Development. It is located adjacent to US-20 at the intersection of Taylor Street and the River Parkway, bordered by the Snake River to the east, and Porter Canal to the west.

#### **4.6.2.2. Potential Impacts and Mitigation**

As discussed above, Alternative E3 may impact John's Hole Forebay Park and the marina area. Impacts, if any, would likely be minimal, and the park's functions would still exist, however, Section 6(f) of the Land and Water Conservation Act requires that if any land is needed, replacement property must be provided that is identical in value.



#### 4.6.2.3. Next Steps

The level of potential impacts will be evaluated as design is refined during the NEPA process. If land is needed, agency coordination will be required with the agency with jurisdiction and the National Park Service to identify and arrange for replacement land.

### 4.7 Hydraulics and Stormwater

ITD will evaluate hydraulics for new or replacement bridge crossings during the NEPA process. ITD will also consider stormwater controls as the designs of the alternatives are refined. Potential implications with the Snake River floodplain and Eastern Snake River Plain Aquifer will be considered as design progresses.

### 4.8 Cumulative Impacts

Cumulative impacts were not evaluated during this PEL study process. The resources subject to a cumulative impact assessment will be determined on a case-by-case basis early in the NEPA process, generally as part of early coordination or scoping. Reasonably foreseeable future projects can be derived from review of:

- The airport master plan
- BMPO planning documents
- City of Idaho Falls *Policy Statements: City of Idaho Falls Comprehensive Plan* (City of Idaho Falls, 2013)
- ITD Statewide Transportation Improvement Program (STIP) and long-range plans



## 5.0 COMMUNITY AND PUBLIC INVOLVEMENT AND AGENCY COORDINATION

ITD and the project team defined a comprehensive program to involve the community stakeholders and the general public, as well as the agency stakeholders in the PEL study process. The materials for the outreach described in this section are included in Appendix N.

The program included community involvement, public outreach, and agency coordination activities. To supplement meetings and events, ITD sent email updates to stakeholders and maintained a web page (<http://i15us20connector.com/>) that provided an overview of the study and an archive of public meeting materials.

Community and agency input was requested and received at the following key study milestones:

- Project visioning.
- Purpose and Needs and project goals.
- Screening criteria used for the three levels of screening.
- Alternatives development.
- Results of Level One, Two, and Three screenings.
- Final PEL study recommendations.

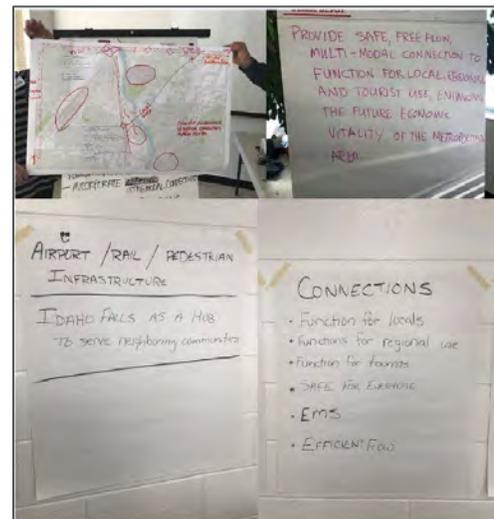
### 5.1 Community Stakeholders

#### 5.1.1 Visioning Workshop

A Visioning Workshop was held December 6, 2017, at the Skyline Activity Center where participants discussed the “big picture” goals of the study. The workshop was an important step in aligning participants for a successful and collaborative endeavor. Twenty-five attendees took part in facilitated activities to develop a vision of what the ideal corridor could look like in 20 to 25 years.

Participants included representatives from:

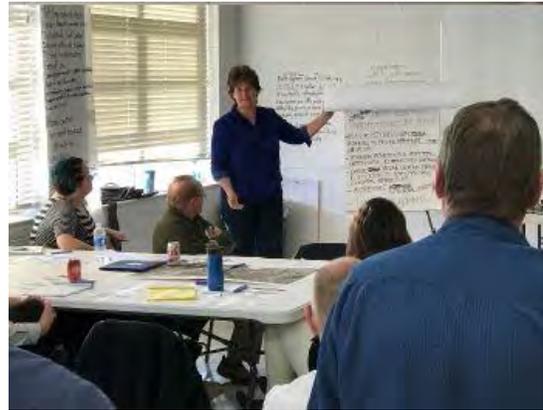
- City of Idaho Falls.
- Bonneville County.
- BMPO.
- Idaho National Laboratory.
- Eastern Idaho Regional Medical Center.
- Police and fire departments.
- Bicycle/pedestrian organization.



A summary of the Visioning Workshop is included in Appendix N.

### 5.1.2 Alternatives Screening Meetings

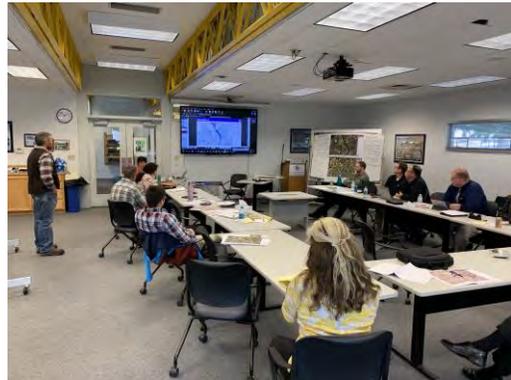
The alternatives screening process involved looking in-depth at each alternative to determine if it met the Purpose and Need of the project. Members of the analysis team in the screening meetings included representatives from ITD, FHWA, City of Idaho Falls, Bonneville County, and the BMPO. Documentation of the three levels of screening are included in Appendix D, Appendix F, and Appendix H.



- July 24, 2018: Level One Screening Meeting –14 alternatives screened
- April 9-10, 2019: Level Two Screening Meeting –10 alternatives screened
- March 11-12, 2020: Level Three Screening Meeting – 4 alternatives screened

Discussions at these meetings included:

- Determining how well the alternative performed against the screening criteria.
- Identifying concerns with each alternative and how they could be addressed.
- Investigating refinements that could improve the alternatives.
- Determining if alternatives could be improved by combining elements of one or more of the alternatives.
- Identifying elements that could be eliminated or added to alternatives.
- Determining if alternatives require major mitigation efforts.
- Discussing constructability of alternatives.





### 5.1.3 Community Working Group Meetings

A Community Working Group (CWG) of approximately 25 members was formed early in the study process. The CWG members were representatives from local governments, the metropolitan planning organization, freight and trucking industry, transit/bus services, law enforcement and emergency responders, hotels and the business community, economic development, major employers, and the Hispanic community, as well as ITD and the project team.

Members were added as alternatives were developed and screened. The group acted in an advisory capacity, meeting at key milestones to help guide the decision-making process. Their responsibilities were defined as follows:

- Be briefed on major project milestones and provide input before taking materials to the public.
- Serve as advisors to ITD for the PEL portions of the process.
- Keep appropriate staff (elected officials, planners, engineers, modelers, etc.) at the workplaces, organizations, and public groups they represent informed of project progress.
- Serve as an ambassador for the project and its outcomes in the community.

All CWG meetings, with the exception of CWG #6, were held at the Skyline Activity Center in Idaho Falls. Additional detail about the CWG meetings is included in Appendix N.

#### **CWG Meeting #1 January 31, 2018 8 participants**

The first meeting was designed to establish the group and familiarize attendees with the study and schedule. Participants were asked to serve as community ambassadors for the study and to help the project team identify issues and potential solutions. The group also weighed in on a new name and logo/brand for the project: I-15/US-20 Connector.

The CWG met six times during the PEL study process:

January 31, 2018  
June 20, 2018  
August 23, 2018  
April 29, 2019  
February 27, 2020  
July 20, 2020



**CWG Meeting #2**  
**June 20, 2018**  
**15 participants**

The focus of the meeting was to share an overview of the public comments and themes received as a result of the Community Kickoff Open House held in May 2018. Each CWG attendee was given a copy of the open house summary. Topics of discussion included the PEL study process, Purpose and Needs, and alternatives development.



CWG #2 Meeting

**CWG #3**  
**August 23, 2018**  
**16 participants**

The group was given a brief PEL refresher and then shown nine Level One alternatives in advance of the public open house scheduled for September 5, 2018. Based on discussions at this meeting, a new alternative added for consideration during Level Two (US-20 one-way couplet). The group discussed the merits and challenges of the 10 alternatives and provided ideas for making the open house successful.

**CWG #4**  
**April 29, 2019**  
**14 participants**

The CWG reviewed the Level Two alternatives and discussed the reasons three were moving forward for further analysis and others were being removed from consideration. The CWG reviewed a new format for the upcoming May 16, 2019, public meeting and discussed guided tours, videos, and other elements planned to better inform the public. A number of suggestions made by the CWG were later incorporated into the meeting process.

**CWG #5**  
**February 27,**  
**2020**  
**11 participants**

The project team updated the CWG members on activities that had occurred since the public meeting in May 2019, and showed them the Level Three refined alternatives that resulted from the CRAVE study completed in December 2019. At the time of the meeting, an open house was planned for late spring/early summer of 2020.

**CWG #6**  
**July 20, 2020**  
**15 participants**

The meeting was held virtually due to the COVID-19 pandemic. The project team showed the CWG the two Level Three alternatives that were recommended to be advanced into NEPA with the No Build Alternative, and informed the CWG that the public meeting would be held online instead of in-person to protect the health of attendees and project staff. The CWG was asked to help notify their respective communities that the meeting was moving online and to encourage public participation.

## 5.2 Public Involvement

### 5.2.1 Public Meetings

ITD hosted four public meetings using a variety of formats to help the members of the public understand the PEL study process and how they would be a part of the decision-making. Online versions of the public meetings were posted for approximately two weeks on the project website. The input gathered from the public influenced alternatives development and screening.

An online version of the meetings was available on the project website at [www.i15us20connector.com](http://www.i15us20connector.com) for the dates noted. The online version of the meeting included the same information presented at the in-person meetings in an interactive format. Notification materials urged people who could not attend the in-person meeting to learn about the study and alternatives and comment online. The public meeting summaries and materials are included in Appendix N.





**Public Meeting #1 Community Kickoff Meeting**  
**May 9, 2018, Temple Elementary School**  
**Open house format**  
**109 attendees**

**Online meeting May 9 to June 7, 2018**  
The meeting introduced the public to the PEL study process. Traffic study results were presented, and a video highlighted issues with how the I-15/US-20 corridor currently functions. Participants were asked to draw on the table maps with suggestions on how the system could be improved and to weigh in on potential off-alignment alternatives that should be considered.

**Public Meeting #2**  
**September 5, 2018, Skyline High School**  
**Open house format**  
**192 attendees, 106 comments received**  
**Online meeting September 5-19, 2019**

The Purpose and Need was presented for the first time at this meeting along with 10 concept alternatives. Project team members discussed each alternative and explained the screening criteria.

**Public Meeting #3**  
**May 16, 2019, Shilo Inn Convention Center**  
**Presentation, guided tour and open house session**  
**341 attendees, 194 comments received**  
**Online meeting May 16-June 24, 2019**

Because attendance at the public meetings grew, primarily because of increasing awareness of the project and a large range of alternatives that had a broad range of potential impacts, ITD shifted the format to give each participant more one-on-one interaction with a project team member. The meeting was split into two, two-hour sessions. Participants were given a short presentation of two videos and then joined a guide who explained each alternative in detail. An open house session at the end of the tour gave participants the opportunity to ask more questions and draw on table maps. The online meeting was originally available from May 16, 2019, to May 31, 2019. After the E 49th North Neighborhood meeting was scheduled, the online meeting was extended until June 24, 2019.

## COVID-19

In spring/summer 2020, ITD advised project teams to delay public meetings or move them online due to the coronavirus. In July 2020, Bonneville County banned any gatherings of 150 people or more.

ITD shifted to an online format for the sixth CWG meeting and the fourth public meeting. The project team created a meeting format that was user-friendly and presented alternatives in a way that was easy to comprehend without any interaction with a project team member.

One of the first comments submitted after the online meeting opened on August 6, 2020, said *“This was an excellent presentation and meeting format. It is much easier to be involved than having to meet live at a set time. Thanks.”*





#### **Public Meeting #4**

**August 6-24, 2020**

**Hosted as a virtual meeting on the project website due to COVID-19 restrictions**

**[\(http://i15us20connector.com/onlinemeeting/\)](http://i15us20connector.com/onlinemeeting/)**

**1,067 participants, 310 comments received**

The purpose of the meeting was to present the two Recommended alternatives—Alternative E3, and Alternative H2—with the No Build Alternative. The online meeting included a video of how traffic would navigate each alternative and a list of features, benefits, and challenges. This was the final public meeting for the PEL before the project moves into the NEPA process.

### **5.2.2 Neighborhood Meetings**

#### **81st North Neighborhood Meeting**

**November 2018, Fairview Elementary School Gym**

**Open house, presentation, Q & A session**

**96 attendees, six (6) comments received**

ITD hosted this neighborhood meeting at the request of residents who were concerned about an alternative on 81st North shown at the second public meeting. Many had not attended the second public meeting because they assumed ITD was only considering improvements at the six interchanges on I-15/US-20. The project team discussed the alternatives screening process and the next steps with NEPA and design. The alternative on 81st North was removed from consideration during the Level Two screening process. The materials shown at the meeting are included in Appendix N.

#### **49th North Neighborhood Meeting**

**June 10, 2019, ITD, District 6 Offices, Rigby**

**Presentation, guided tour, open house**

**116 attendees, 157 comments received**

After the May 16, 2019 public meeting, residents near the 49th North shown as part of Alternative H contacted the project team and said many people in the area had been unaware of the public meeting. They asked for a repeat of the public meeting, so ITD accommodated the request by recreating the meeting at the District 6 office on June 10, 2019. ITD developed a flyer with meeting information and neighborhood residents distributed about 500 copies. Comments received at this meeting were incorporated into the meeting summary for the May 16, 2019, public meeting (included in Appendix F).

### **5.2.3 Additional Outreach**

#### **Additional One-One-One Meetings**

The project team met with stakeholders to discuss issues throughout the project.

Communication records were kept documenting the meetings that occurred in-person and via phone.





### **Pop-Up Meetings**

Members of the project team distributed flyers at a local fun run and at a Walmart during the holiday season in 2019. The flier is included in Appendix N.

### **Videos**

The project team produced videos to enhance project understanding:

- Kickoff meeting– overview of traffic issues in the study area.
- PEL– explanation of PEL study process.
- Level Three alternatives– illustrated traffic flow through the No Build Alternative and Alternative E3 and H2.

### **Social Media**

Notification for each public meeting included posts and ads on ITD's Facebook account. Meetings were also promoted through ITD's Twitter account.

### **Mailings**

Postcards were mailed to increasing numbers of addresses as the study progressed.

- Public Meeting #1 Community Kickoff: Postcards mailed to 4,703 addresses on April 18, 2018
- Public Meeting #2: Postcards mailed to 11,158 addresses on August 20, 2018
- Public Meeting #3: Postcards mailed to 12,810 addresses on April 19, 2019
- Public Meeting #4: Postcards mailed to 13,365 addresses on July 31, 2020

### **Media**

Press releases were issued two weeks ahead of each public meeting. Releases resulted in various news stories between 2017 and 2020.

## **5.3 Agency Coordination**

### **5.3.1 Environmental Resources Committee**

The Environmental Resources Committee members included ITD and FHWA staff, representatives of USFWS, USACE, City of Idaho Falls, Bonneville County, and the BMPO. The committee provided technical input on the environmental resources reviewed for the PEL study and considerations to be aware of during the subsequent NEPA process.

The committee met over the course of the study to discuss updates on the project development process, develop the Purpose and Need, and discuss the alternatives development and screening process. Members of the Environmental Resources Committee reviewed and provided input to the Environmental Scan Technical Memo.

Documentation of the meetings below is included in Appendix O.



- January 16, 2018: Scoping meeting to review the study area and the environmental data collection expectations with the ITD environmental resource experts and other federal, state and local resource agencies.
- July 9, 2019: Field visit, review of Level Three Alternatives (C, E.1, E.2, and H), and next steps.
- March 11, 2020: Review of CRAVE analysis for the Level Three Alternatives and resulting modifications for final Level Three screening (Alternatives C3, E3, and H2), review of historic analysis and wetlands findings, and review of future coordination with USFWS and USACE.

A separate meeting was held with the USACE on June 26, 2019, to coordinate on floodplain, water resources, wetlands, and future coordination points. In September 2019, the USACE reviewed Level Two screening results and potential impacts of the alternatives to wetlands. The USACE had questions about the rationale for the screening results, and the project team provided further clarification in correspondence dated December 6, 2019. The USACE also provided scoping-level comments and guidance for a future Section 404 permitting process in its support letter for the project dated June 22, 2020.

### 5.3.2 Tribal Coordination

ITD sent a letter to the Shoshone-Bannock Tribe on February 12, 2018, informing them of the PEL study. The letter included the draft Purpose and Need statement and an overview of the study. No response was received from the Shoshone-Bannock Tribe regarding questions or concerns about the study. ITD and FHWA will continue to reach out to the Tribe during future NEPA processes.

### 5.3.3 Idaho Falls Regional Airport

Coordination with the Idaho Falls Airport was initiated September 29, 2017, to introduce the study, to understand airport plans and constraints related to the study area, and to define the airport's involvement in the Environmental Resources Committee. At a December 3, 2018, meeting, airport staff informed the project team that the FAA was requiring zoning at the airport to be changed as a condition of receiving FAA Airport Improvement Program (AIP) funds for the airport's planned improvements; and a moratorium had been placed on residential and commercial development surrounding the airport. The project team incorporated the zoning changes into the GIS mapping for the study.

Subsequently, the project team provided study information at a February 19, 2019, meeting and participated in a May 1, 2019, airport presentation to the landowners affected by the zoning changes.

In an email dated August 28, 2020, responding to the project team's request for the airport property boundary to confirm right-of-way requirements for the recommended alternatives, the





airport engineer noted, “Alternative E3 would also put a road through the Runway 17-35 Runway Protection Zone (RPZ) which is discouraged by the FAA. Here is a link to their current policy on Land Use in the RPZ -

[https://www.faa.gov/airports/planning\\_capacity/media/interimLandUseRPZGuidance.pdf](https://www.faa.gov/airports/planning_capacity/media/interimLandUseRPZGuidance.pdf). This RPZ currently has two buildings located in the RPZ which is also contrary to current FAA policy, however they were constructed before the current policy and would be allowed to remain until the leases expire. There is the possibility this runway will be closed in the future but that is yet to be determined. If it were closed, the RPZ may not be an issue but a Land Release would still be required.”

Documentation related to these meetings is included in Appendix O.

#### 5.3.4 Updates to Elected Officials and Local Transportation Organizations

Updates were also presented to the BPMO. The Technical Advisory Committee (TAC), which is comprised of planning and engineering staff from the BMPO cities, meets regularly on the second Wednesday of each month to plan and schedule projects. Elected officials representing Bonneville County and the local cities in the area, make up the BMPO Policy Board. They meet regularly on the third Wednesday of each month. Representatives of the project team briefed these entities every few months so that the elected officials and local transportation professionals had current project information. Additionally, the project team met with the County Commissioners and the Idaho Falls City Council for more in-depth previews before each public meeting. Approximately 40 updates were given between 2017 and 2020.





## 6.0 NEXT STEPS

The I-15/US-20 Connector PEL Study has been carefully completed with the intent that certain planning products and analyses would be used in future NEPA processes. This has been done by closely adhering to 9 of the 10 specific conditions listed in 23 USC 168, including: verifying the study was conducted in accordance with federal law, consulting with federal and state resource agencies and Indian tribes, consideration of multidisciplinary systems-level and corridor-wide planning efforts, inclusion of public notices and public participation, making decisions that are based on reliable and reasonably current data and scientific methodologies, documentation in sufficient detail to support the decision and results of the analysis and to meet requirements for use in the environmental process, documenting the study in a manner so it can be adopted and used in a subsequent NEPA process and approval of the study no later than 5 years prior to the date on which information is planned to be adopted in a future NEPA process. The tenth specific condition relates to actions completed during the NEPA process, so that condition has not yet been met.

The PEL study has been completed in close coordination with FHWA, who will be the lead federal agency for future NEPA review. As indicated in their endorsement letter included at the front of this document, the FHWA has reviewed the planning analyses and products and determined they have been appropriately prepared to allow their incorporation with the future NEPA process.

The FHWA PEL Questionnaire (included as Appendix A) summarizes the PEL study process and identifies the issues a future project team needs to be aware of to move forward with the NEPA process. It discusses the planning studies used to inform analysis in the PEL study, the terminology used, agency coordination conducted, public involvement, the purpose and need for the transportation improvements, range of alternatives, screening criteria and screening processes used, transportation planning assumptions and analytical methods, environmental resources in the study area and next steps needed for each one, mitigation strategies and how the documentation is to be made available during the NEPA process.

### 6.1 Planning Products and Analyses from PEL Study to be Used in Future NEPA

As required in 23 USC 168 and 23 CFR 450.212, this PEL study process identified the following planning products and analyses that were developed during the PEL study to be incorporated into a subsequent NEPA process or processes:

- Purpose and Need
- Land use and transportation analysis
- Screening of alternatives
- Identification of two recommended build alternatives





- Environmental setting
- Input from public and agency involvement program

## 6.2 Future NEPA Process

The FHWA, together with ITD, has decided that it is likely an Environmental Impact Statement (EIS) is the appropriate class of action to begin the NEPA process for the entire project. This is based on the anticipated significance of impacts associated with the two Recommended Alternatives.

The EIS will follow Title 23 CFR 771 Environmental Impact and Related Procedures and FHWA guidance. This PEL study report will be used to complete the Pre-Notice of Intent (NOI) checklist items, specifically confirming purpose and need, results of transportation analysis, alternatives eliminated, environmental setting and Recommended Alternatives.

A public and agency scoping process will be conducted during the Pre-NOI time frame. This will be done prior to determining whether and how to use the planning products and analyses described in Section 7.1. All stakeholder (public and agency) comments received during the scoping period related to planning products and analysis developed during the PEL study will be considered.

Additional tasks to be conducted during the Pre-NOI stage include:

- Confirm project Purpose and Need.
- Conduct pre-design tasks, such as surveying or mapping.
- Confirm alternatives screening from the PEL study – including the two build alternatives to be fully analyzed in the EIS and the No Build Alternative. This step should include coordinating with the airport and FAA about limitations regarding alternatives that have features in or near the RPZ and issues associated with the land release from the airport.
- Coordinate with state and federal environmental resource agencies to make sure the PEL products are sufficient to meet their needs during the NEPA process, especially if any of them are planning to use these products for their permits and any approvals occurring after the NEPA phase.
- Collect additional environmental and socioeconomic data. Section 5.3 of this report and Question 8 of the PEL Questionnaire contain information regarding which specific environmental resources need data to be confirmed or new data to be collected.
- Identify roles for local, state and federal agencies and developing the required Coordination Plans with those agencies.
- Coordinate with agencies that have approvals needed during the EIS phase. Details about these specific issues are contained in the PEL Questionnaire. At this time, since impacts are





anticipated to resources protected by the Clean Water Act, Section 106 of the National Historic Preservation Act, Section 4(f), Section 6(f) of the Land and Water Conservation Act and potentially resources protected by the Endangered Species Act, those agencies will require special coordination. In addition, the FAA and US Army Corps of Engineers may each need to issue their own NEPA document for roadway improvements affecting a RPZ or wetlands, respectively.

- Develop the two build alternatives in sufficient detail for environmental analysis to begin. This will include development of avoidance and minimization options at areas of impact to floodplains, wetlands, historic properties, endangered species, park properties and RPZs. It would also include other mitigation such as hydraulic or noise abatement, so these mitigation measures can be fully analyzed.

The Notice of Intent to prepare an EIS would then be issued, which is the official beginning of the EIS process. The EIS process consists of:

- Continuing public and agency involvement.
- Conducting environmental analysis of the two build alternatives and the No Build Alternative.
- Identifying a Preferred Alternative
- Identifying required mitigation measures.
- Preparing a Draft EIS.
- Public and agency comment period.
- Preparing a Final EIS/Record of Decision.

## 6.3 Action Plan

The project team has identified an interim project that has independent utility and can be taken through a NEPA process separately (likely a Categorical Exclusion) from the rest of the project(s).

### 6.3.1 Interim Project

#### US-20/I-15 Ramp Modifications

It became apparent during the PEL study process that it would take several years of study, permitting, design, and construction to properly address the full Purpose and Needs. Because the Exit 119 interchange connecting northbound I-15 to eastbound US-20 is a growing safety and mobility concern in the area (Figure 21), the project team and the CWG developed an idea for an interim solution. In the existing configuration, northbound I-15 traffic exiting to turn right onto US-20 must stop at the traffic signal at the top of the ramp. This traffic, combined with the eastbound Grandview Drive traffic, has overwhelmed the I-15 off-ramp connection to eastbound US-20 causing traffic queues on the exit ramp that back up onto I-15. This backing up onto I-15 is both a safety and mobility issue. The Grandview Drive eastbound through movement traffic



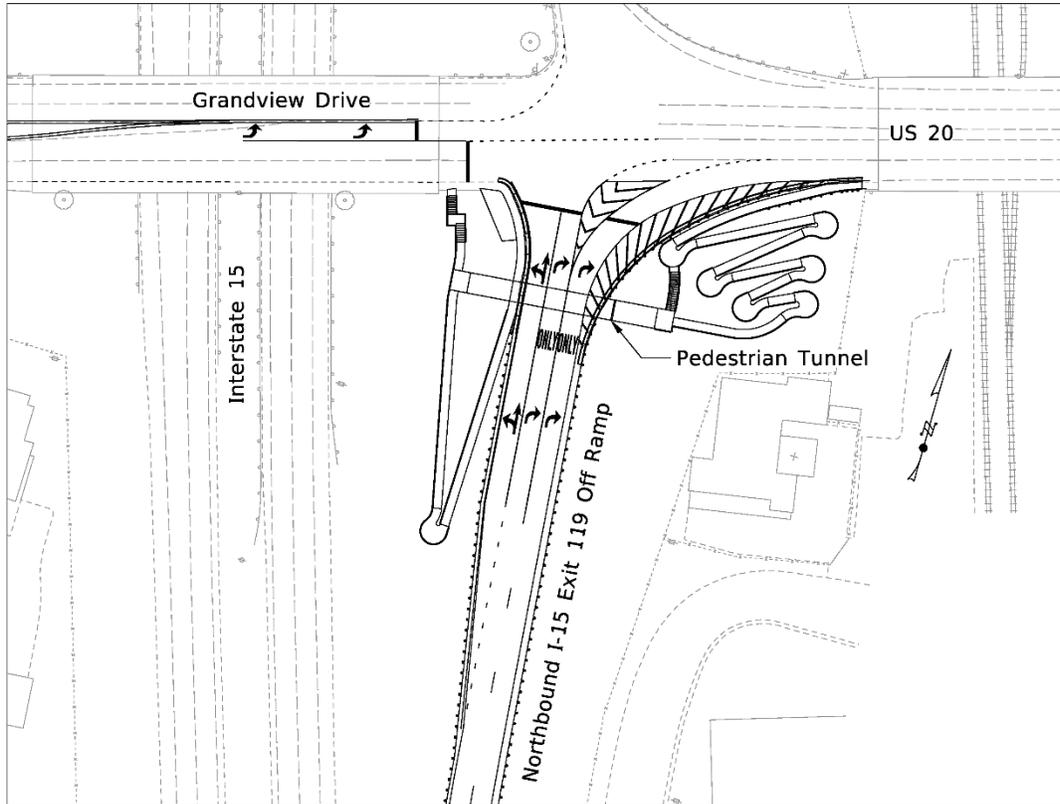
signal times were decreased to allow as much of this queue to exit the ramp as possible. However, with the continued growth, both the off-ramp and eastbound Grandview Drive are over capacity, and adjusting the signal timing is no longer a viable solution to address the delays.

**Figure 21. Aerial View of the Existing I-15 Northbound Off-Ramp Connection to US-20**



The interim project would add an additional turn lane to the off-ramp to effectively double its right-turn queue storage capacity (Figure 22). The ramp modification would reduce the I-15 northbound off-ramp queues from backing onto I-15, and it would reduce the delay times for the Grandview Drive eastbound traffic. This reduction in delay and increase in ramp storage would improve both the safety and mobility of the traffic at this intersection. Additionally, the at-grade pedestrian crossing at the off-ramp is a primary safety concern. With the addition of the turn lane the pedestrian crossing distance would increase requiring a longer crossing time. To avoid this, the interim project would include a grade-separated pedestrian underpass for pedestrians and bicyclists. Stairs and a ramp on both sides of the underpass would connect to the Grandview Drive bridge on the west and the bridge over the railroad on the west.

**Figure 22. Plan View of Interim Project**



## 6.4 Summary

Specific next steps are:

- Move forward with the independent, interim project described above, utilizing a lower-level NEPA process such as an approved Categorical Exclusion, and proceed through final design and construction.
- Concurrently move forward with an EIS for the entire project.
- Final design for additional project(s).
- Right-of-way acquisition for additional project(s).
- Construction for additional project(s).



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