

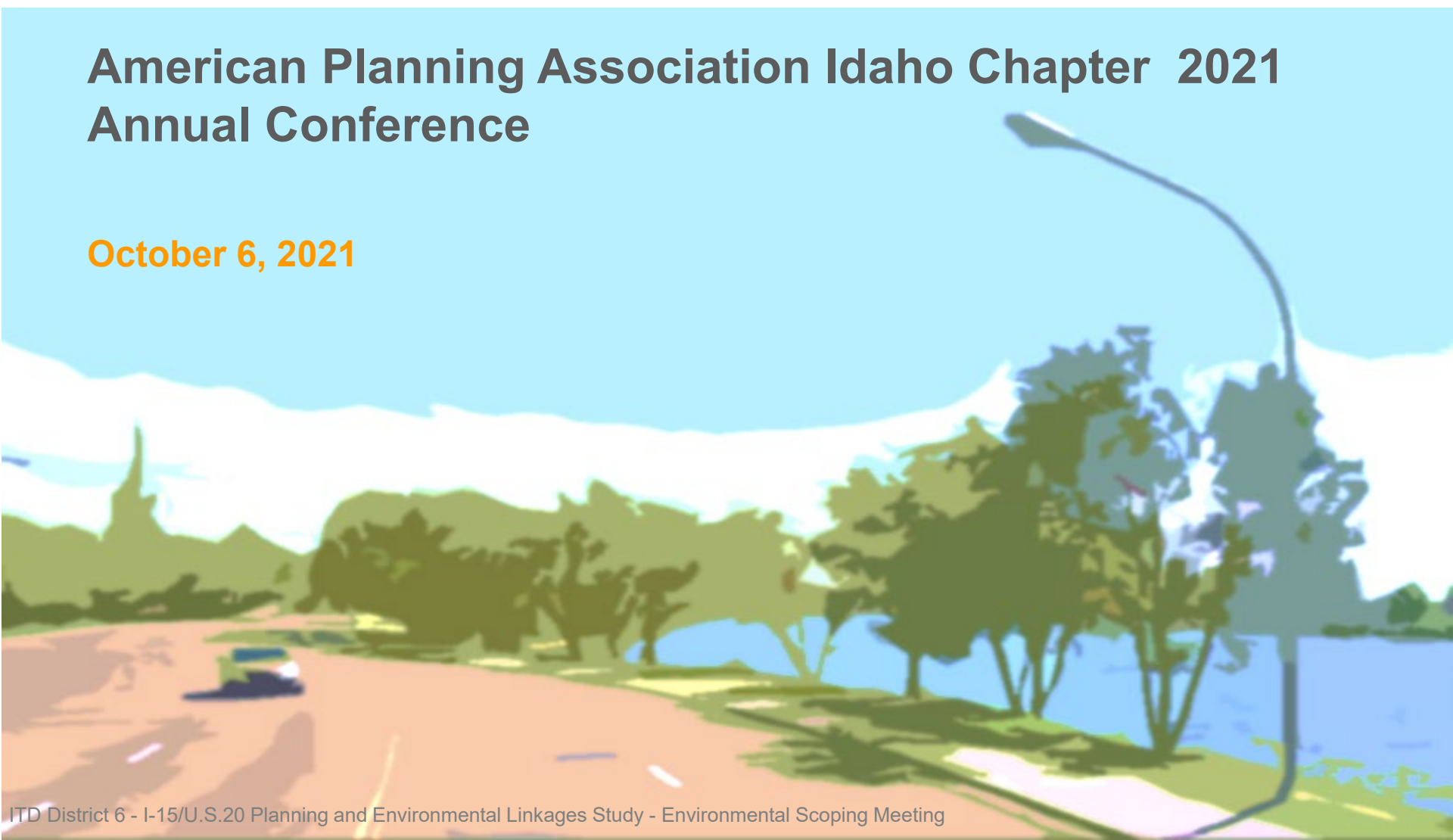


YOUR Safety ●●●▶ YOUR Mobility ●●●▶ YOUR Economic Opportunity

PLANNING AND ENVIRONMENTAL LINKAGES STUDY FOR THE I-15 / US-20 CONNECTOR

American Planning Association Idaho Chapter 2021
Annual Conference

October 6, 2021



Presenters

- Karen Hiatt, PE – Idaho Transportation Department District 6 Engineering Manager, Rigby, ID
- Jason Longsdorf, AICP – HDR Transportation Practice Group Leader, Denver, CO
- Cameron Waite, PE, PTOE – HDR Transportation Practice Group Leader, Boise, ID

01 What is a PEL?

05 I-15 / US 20 Connector
PEL Example

02 How Does PEL Differ from NEPA?

03 Is a PEL the right tool?

04 ITD Future PEL Efforts

01 What is a PEL?

PEL Study

Any type of transportation planning study conducted at the corridor or subarea level, ***to link planning information directly or by reference into NEPA, with FHWA involvement.***

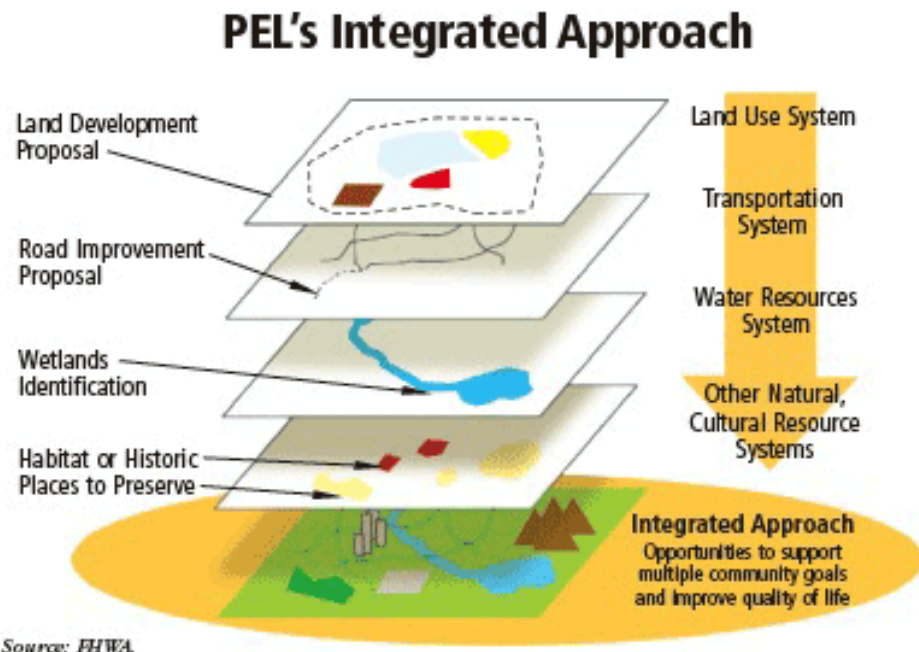
PEL studies identify:

- Transportation Issues and Priorities
- Environmental Concerns
- Stakeholder and Public Concerns



How are PELs different than feasibility or corridor studies?

- ✓ They are adopted by FHWA
- ✓ They can focus or streamline future NEPA projects
- ✓ Provides endorsed framework to coordinate technical work such as travel demand, purpose and need development, public outreach and more



02

**How does a PEL differ
from NEPA?**

Trigger

Any transportation planning study conducted at the corridor or subarea level to link information directly or by reference into NEPA. Must have a federal nexus to be a PEL, and then will include involvement by FHWA.

PEL studies can be helpful when:

- Project funding not yet identified
- Problem not well defined
- Solutions to problem not identified

▪ PEL studies do not:

- Guarantee federal funding for a project
- Reduce the level of NEPA analysis required
- Change the class of NEPA action



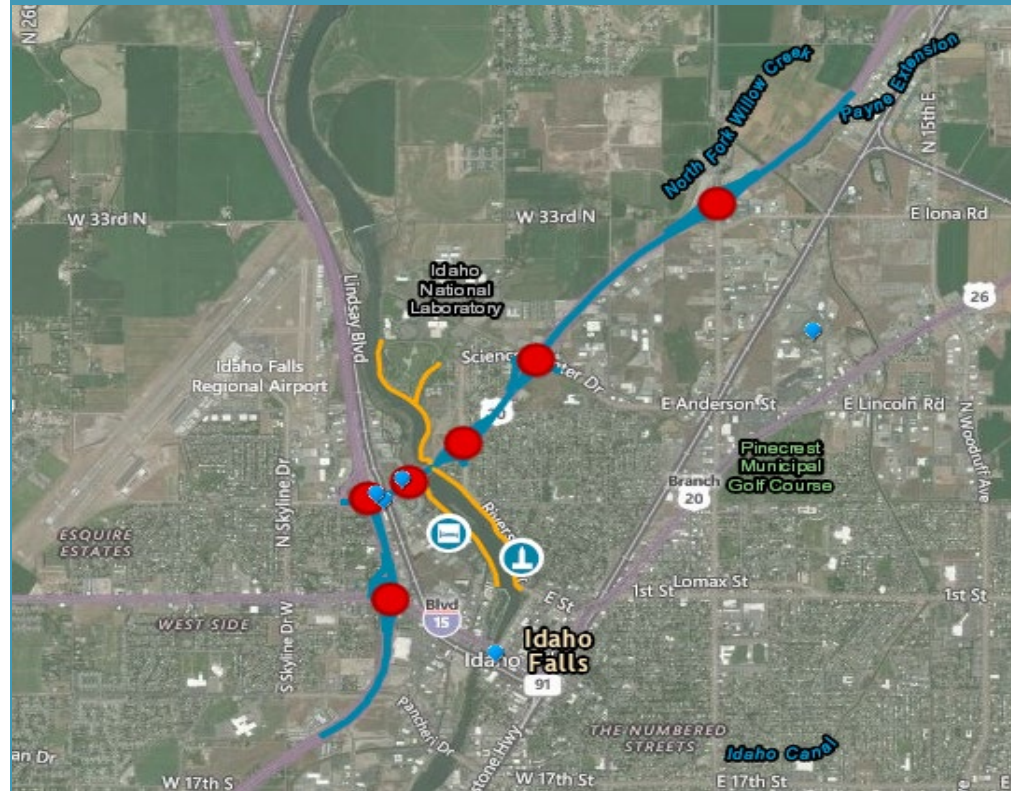
Study Area

■ PEL Projects

- Can cover broad study areas or long corridors to help define a consistent vision.

■ NEPA Projects

- May be smaller than previous PEL limits
- Logical termini of the project must be fully defined
- Must provide independent utility and align with the purpose and need of the project.



Case Study: US 85 Douglas County PEL

Douglas County, CO

Successes

- ✓ Aligned long term needs with near term improvements
- ✓ Implementation plan
- ✓ Identified options for different land use

Lessons Learned

- ✓ FHWA does not want too much detail
- ✓ Be prepared to accelerate



PEL allowed County to narrow to 2 alternatives which allows flexibility to respond to land use



Purpose and Need

- PEL Projects

- Identifies broader problems that need to be solved, such as safety concerns, traffic congestion, or infrastructure deficiencies.

- NEPA Projects

- P&N must identify a specific needs the project aims to address
- extent or logical termini of the project



Criteria

- The complexity of the evaluation process depends on the complexity of the study. Examples of criteria for review include:
 - **Safety**
 - *PEL – Reduces conflict points*
 - *NEPA – Detailed CMF analysis*
 - **Roadway Capacity**
 - *PEL – Total Capacity*
 - *NEPA - Intersection LOS during peak hours*
 - **Multimodal transportation options**
 - *PEL – High, Medium, or Low level of opportunities to improve bicycle, pedestrian, and transit options*
 - *NEPA – Assess “Level of Traffic Stress” for bike/ped facilities. Capacity and travel time for transit*
 - **Environmental Resources**
 - *PEL – Alignment avoids know resources*
 - *NEPA – Detailed analyses and resource agency concurrence*



Alternatives Analysis

- PEL study may
 - Set evaluation criteria categories
 - Develop alternatives
 - Follow NEPA-like alternatives evaluation
 - Document the results and recommendations
- Alternatives evaluation focused on corridor vision and fatal flaw analysis.
- The PEL study can recommend one or more alternatives, and eliminate unreasonable alternatives.
- NEPA makes final determination regarding preferred alternative.

WADSWORTH BOULEVARD WIDENING TRANSITION FROM PEL TO NEPA SUMMARY REPORT

Prepared for:



Prepared by:



1670 Broadway Ave.
Suite 3400
Denver, CO 80202

June 1, 2017
FINAL

Case Study: Wadsworth Blvd. PEL

Wheat Ridge, CO

Successes

- ✓ Developed public support
- ✓ Identified x-section
- ✓ Secured funding

Lessons Learned

- ✓ Engage key agency staff early
- ✓ Clarify agency criteria
- ✓ Develop conservative cost estimates
- ✓ Identify key environmental resources



*PEL process defined cross section
for 75 impacted properties*

Environmental

- Focus is on those resources that are most likely to impact alternative selection, often:
 - Transportation operations
 - Natural resource impacts
- PEL analyses are valid for 5 years, but need to be revisited if there are changes in:
 - Assumptions
 - Conditions
 - Regulatory requirements
- PEL analysis may allow agencies to proactively determine and act on avoidance, minimization, or mitigation strategies.



Agency Involvement

- PELs do not make any legally binding agreements with agencies.
- PEL's are an opportunity to gain information about agency concerns, input on mitigation strategies, and a head start on agency coordination in NEPA.



“The PEL approach enables agencies to be more effective players in the transportation decision-making process through its focus on building interagency relationships. By encouraging resource and regulatory agencies to get involved in the early stages of planning, agencies have an opportunity to help shape transportation projects.”

FHWA Environmental Review
Toolkit PEL web page:
[http://www.environment.fhwa
a.dot.gov/integ/index.asp](http://www.environment.fhwa.dot.gov/integ/index.asp)

Level of Design

- For PEL, design detail should be kept to a high level. Detailed design is not recommended

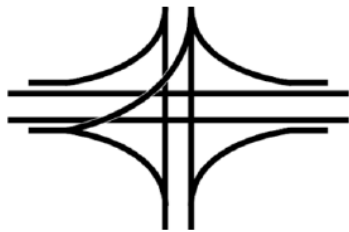


Figure 3-9. Directional Ramp

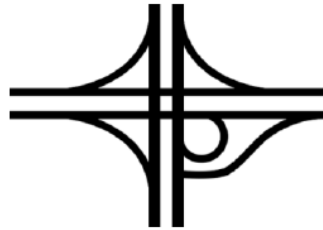


Figure 3-10. Partial Clover

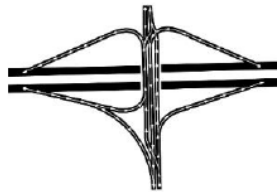
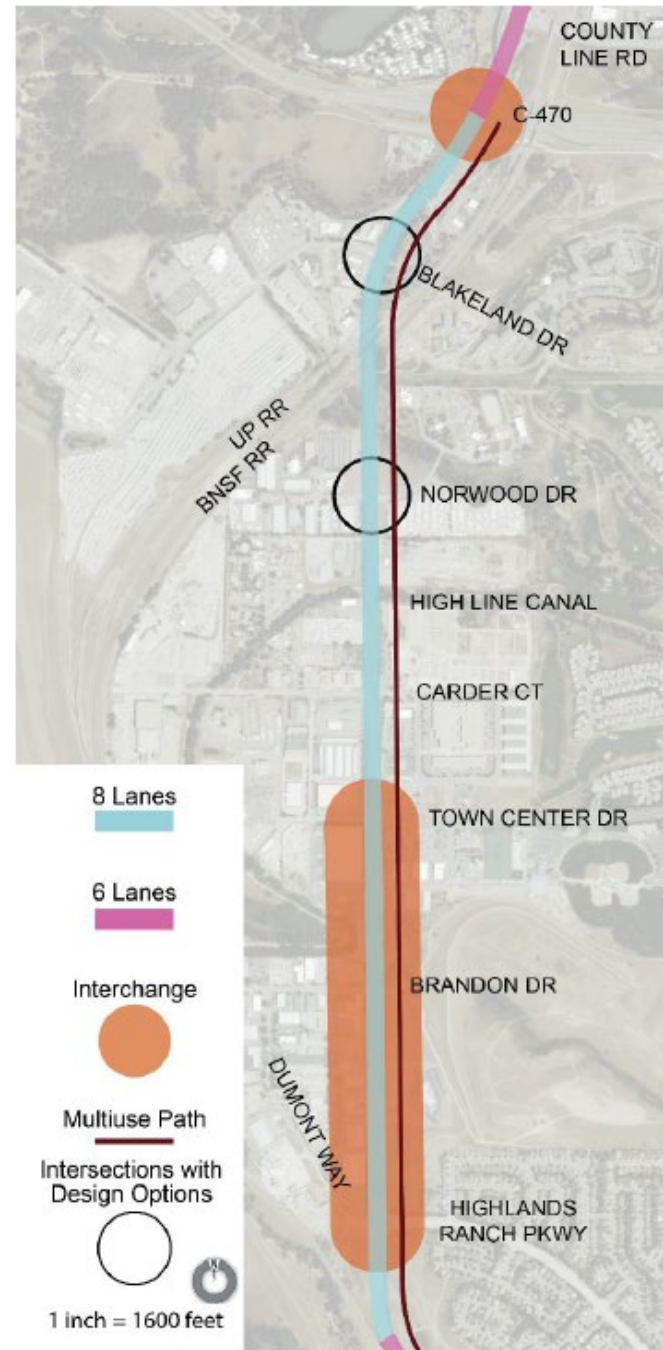


Figure 3-11. Continuous Flow



Public Involvement

- PEL's do not require specific public involvement actions
- Provide opportunities to develop relationships and early public support for projects
- EA and EIS processes require certain public involvement steps.



What carries forward to NEPA from a PEL?

- Purpose and Need statement
- Environmental and transportation data
- Public and resource agency input
- Alternatives considered and recommended
- PEL documentation by reference



03 Is a PEL the right tool?

Shorten and simplify NEPA



Develop consistent project/corridor vision



Develop agency buy-in and build stakeholder relationships



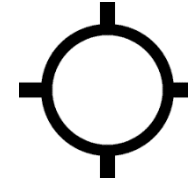
Identify major environmental concerns



Eliminate alternatives that are unmanageable

Set project budget and establish framework for requesting funding

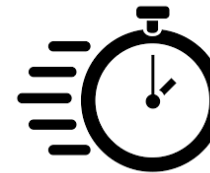
Define project location and goals



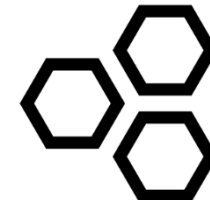
Set project footprint or cross section



Develop possible implementation plan and phasing



Identify discrete project elements for further study or NEPA evaluation



04 ITD Future PEL Efforts

ITD's future PEL efforts Statewide

- ITD District 1 - Huetter Corridor
- ITD District 2 - Moscow Alternate Route
- ITD District 2 - Moscow North
- ITD District 2 - SH-8 Moscow to Troy
- ITD District 4 - Snake River Crossing
- ITD District 6 - US-20 Ashton to SH-87 Jct.



05 I-15 /US 20 Connector PEL



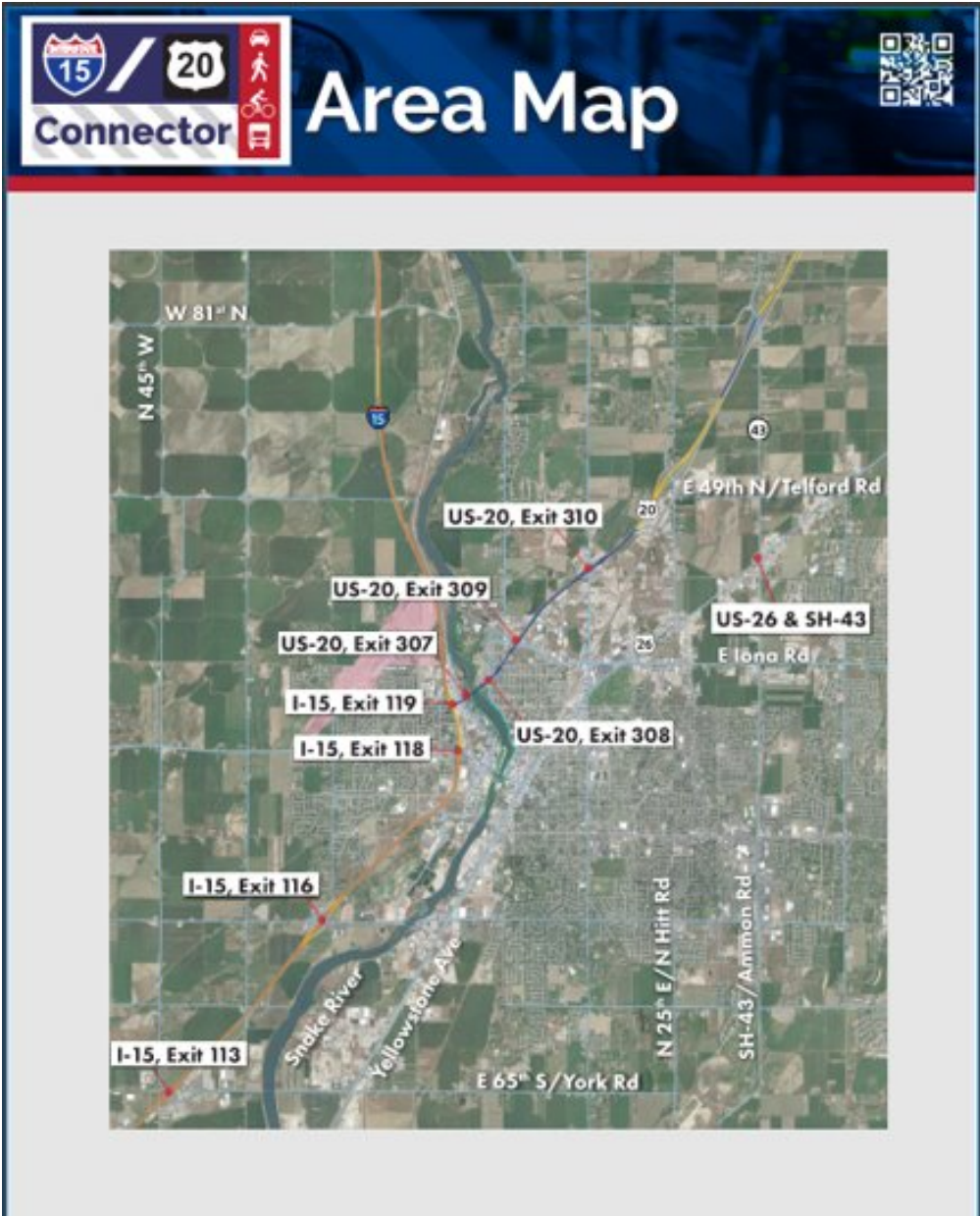
Study Video



PROJECT OVERVIEW



Study Area



PROJECT OVERVIEW



Project Purpose & Need

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.

Project Needs

1. Address unsafe travel conditions on I-15 and US-20
2. Reduce congestion at the I-15/US-20 interchange, particularly for traffic exiting US-20 towards southbound I-15 at the onramp, and for northbound traffic on I-15 exiting at US- 20 eastbound exchange.
3. Provide pedestrian and bicycle mobility within the I-15 and US-20 corridors
4. Address future travel demand forecasts



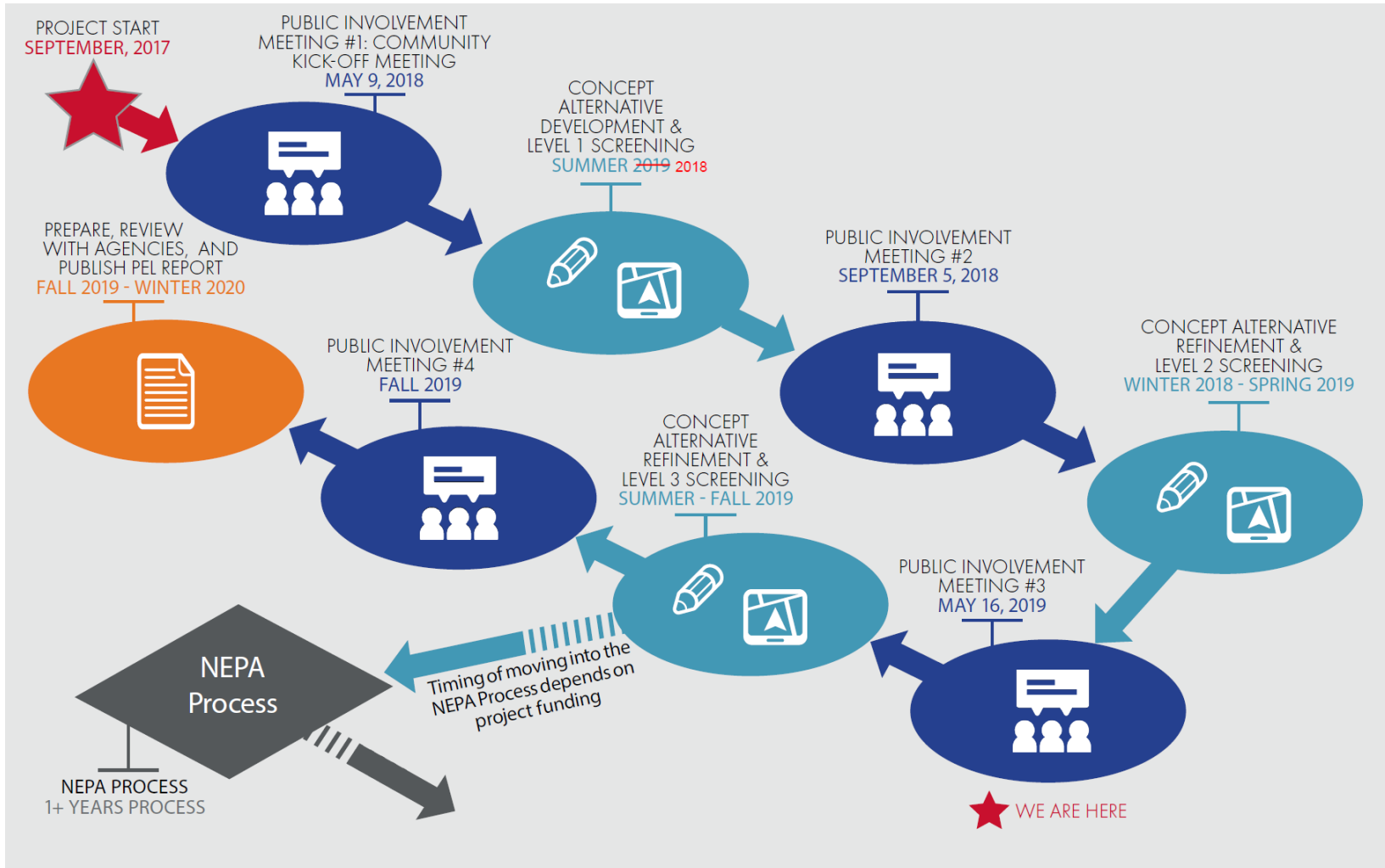
Project Purpose & Need

Additional Goals

- 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 additional connections to the surrounding multi-modal network.
- Provide improvements that serve all types of travelers including local commuters, freight, and regional tourism.
- Consider new infrastructures impacts to local roads through coordination with Idaho Falls and Bonneville County.
- 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.



Outreach and Coordination





Additional Outreach and Coordination

Ongoing coordination with the City, County, BMPO, Airport and other public events

Agency and CWG Meeting Examples:

December 2017 - Community Working Group Visioning Exercise

January 2018 – Environmental Advisory Committee Scoping

June & August 2018 – Community Working Group Meeting

April 2019 – Community Working Group Meeting

July 2019 – Environmental Advisory Committee Coordination Mtg



Level 1 Alternatives Evaluation Summary

- Level One Screening reviewed 14 alternatives developed during the “universe of alternatives brainstorming”
- Input from Community Working Group Meeting #3 was used in developing an additional Level Two alternative (US-20 one way couplet)
- Of the 14 Level One alternatives, 9 action alternatives were recommended to advance to Level Two analysis.
 - 1 No Action
 - 4 on alignment
 - 5 new alignment
- The Level One alternatives and the results from the screening were presented to the public at a public meeting on September 5, 2018.

Level 1 Screening Criteria



- **Safety**

- *Does the alternative improve bike, pedestrian, and vehicle safety on I-15 and US-20 including the interchange on and off-ramps?*

- **Congestion**

- *Does the alternative reduce congestion on I-15 and US-20?*

- **Local Bicycle, Pedestrian 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?*



Level 1 Screening Criteria

- **Environmental**
 - *Does the alternative meet the purpose and need of the project?*
- **Economic, Demographics, and Market Impacts**
 - *Does the alternative enhance or improve economic, demographic, and market conditions in accordance with City, County, and MPO land use and comprehensive plan objectives and goals?*
- **Costs / 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?*



Level 1 Alternatives Development

On Alignment

- I.A Split Access for Interchange 118/119 (Not Recommended)
- I.B Free Flow for Interchange 118/119 (Advanced)
- I.C Free Flow for Interchange 118/119 & Fremont (Advanced)
- I.D Increase Capacity (Not Recommended)



Level 1 Alternatives Development

Off alignment

II.A Anderson Street Connector (Advanced)

Anderson Street Connector Fremont/Science Center mod. (Advanced)

Anderson Street Connector couplet modified by CWG (Advanced)

II.B 33rd/Iona Rd. Connector (Not Recommended)

II.C 49th/Telford Rd Connector (Advanced)

49th/Telford Rd Connector – modified (Advanced)

II.D 49th N/Telford Rd. Extension (Advanced)

II.E 65th N/Telford Rd Extension (Not Recommended)

II.F 73rd Street N (Not Recommended)

II.G 81st Street N (Not Recommended)



Level 2 Alternatives Screening Summary

- Four alternatives are recommended to move forward
- The recommended alternatives represent a range of alignments with different impacts and benefits all of which can achieve the purpose and need:
 - On Alignment
 - Off alignment near Anderson
 - North alignment near 49th
- Alternatives not advanced typically had combinations of impacts such as:
 - Multiple river crossings
 - Combination of 4(f), Section 106 and EJ impacts
 - Complicated construction challenges
 - Diminishing returns on capturing through travel



Level 2 Screening Criteria

▪ 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 and Vehicle Connectivity

- *Does the alternative enhance or improve bicycle, pedestrian, transit and vehicle connectivity throughout the I-15/US-20 project area?*



Level 2 Screening Criteria

- **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 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?*
- **Public Support**
 - *Does the alternative create any controversial issues?*



Level 2 Screening Criteria

- **Economic, Demographics, and Market Impacts**
 - *Not addressed in Level 2*
- **Costs / 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?*



Level 2 Alternatives Development

1. Alternative B – Free Flow Interchange 118/119 (I.B)
2. Alternative C - Free Flow interchange with Fremont/Science Center mod (Advanced)
3. Alternative D – 33rd Avenue Connector
4. Alternative E – Anderson St Connector (Advanced)
5. Alternative E.1 - Anderson St Connector with north end mod.(emerged during analysis) (Advanced)
6. Alternative F – 33rd Avenue and US 20 couplet
7. Alternative G – 49th / Telford Road Connector
8. Alternative H - 49th / Telford Road Connector with US 26 connect (Advanced)
9. Alternative I – 49th connector with west side extension
10. Alternative J – Wide northern interchange (emerged during analysis)
11. Alternative K – 81st Street Connector



Level 3 Screening Criteria

- **Safety**
 - *How well do ramp signals operate?*
 - *Does the alternative provide adequate weave distance?*
 - *Does the alternative provide standard 12-foot lane widths?*
 - *Does the design option provide adequate distance between ramps?*
 - *Does the alternative reduce the number of predicted crashes?*
- **Congestion**
 - *What is the capacity of I-15/US-20 in the alternative?*
 - *Does the alternative reduce end-to-end travel times through the corridor?*
 - *How does the alternative affect freight traffic?*
 - *Is there an alternative or redundant crossing provided in the alternative?*
 - *Does the alternative affect traffic volumes on parallel facilities?*



Level 3 Screening Criteria

- **Local Bicycle, Pedestrian and Vehicle Connectivity**
 - *Does the alternative support current and future bicycle connection needs in the Study area?*
 - *Does the alternative support current and future pedestrian connection needs across I-15 and US-20?*
 - *Does the alternative support current and future transit connection needs across I-15 and US-20?*
 - *Does the alternative support current and future local vehicle connection needs across I-15/US-20?*
 - *Does the alternative improve connections/transfers to surrounding multi-modal network?*
- **Future Travel Demand**
 - *Does the alternative address 2045 peak hour congestion?*
 - *Does the alternative operate at a 2045 LOS consistent with existing BMPO planning documents (LOS A-D is acceptable)?*
 - *Does the alternative provide flexibility to accommodate increases in volume beyond the planning year?*



Level 3 Screening Criteria

- **Environmental**
 - *What environmental impacts have been identified?*
 - *Are necessary mitigations for any environmental impacts likely to limit design flexibility or affect the overall schedule and cost?*
 - *What enhancements would the alternative provide?*
- **Public Support**
 - *What are the obvious public concerns the project will have to address?*
- **Economic, Demographics, and Market Impacts**
 - *Not addressed in Level 2*
- **Cost / Constructability**
 - *Would phased improvements include throwaway improvements?*
- **Access**
 - *Is the improved access to local resources beneficial to the intent/use of the local resource?*
 - *Does the alternative reduce access to local resources?*



Level 3: Alternatives Development & Screening

No Action

On Alignment

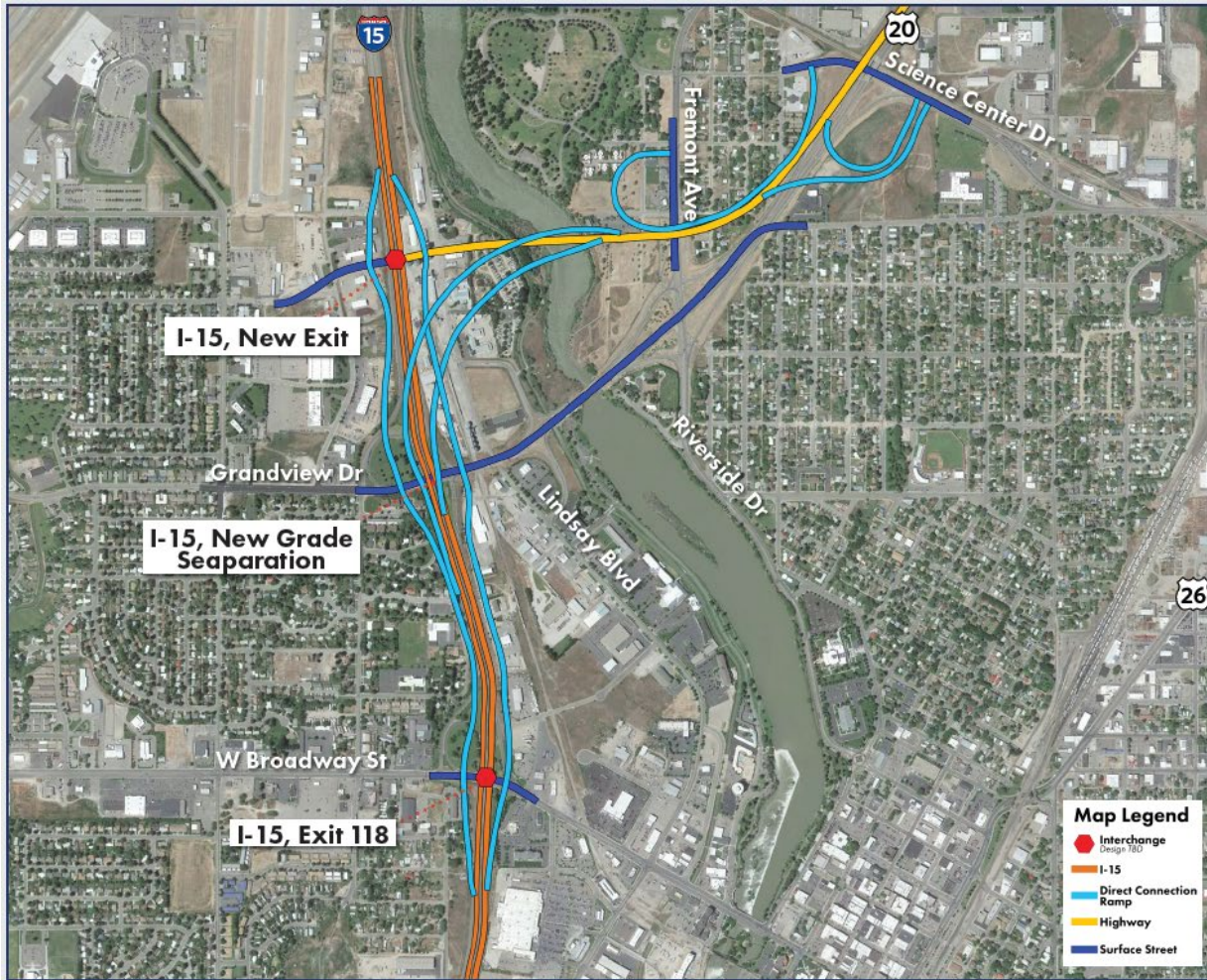
1. Alternative C - Free Flow interchange with Fremont/Science Center mod (Advanced)

Off Alignment

1. Alternative E – Anderson St Connector (Advanced)
2. Alternative E.1 - Anderson St Connector with north end mod.(Advanced)

North Alignment

1. Alternative H - 49th / Telford Road Connector with US 26 connect (Advanced)



Features & Benefits

- Removes weaving concerns between I-15, Exits 118 and 119, by connecting them with direct access ramps and realigning US-20 to the north
- Moves regional traffic from I-15 through direct access ramps that lead to/from US-20
- Provides direct access from I-15 via a new interchange near the Idaho Falls Airport

Challenges

- There are impacts to industrial areas near the airport, residential areas, Freeman Park, and a church
- May not resolve the congestion issues on I-15 due to the proximity to Exit 119 at Grandview Drive from the new airport interchange



L3 ALTERNATIVE: E

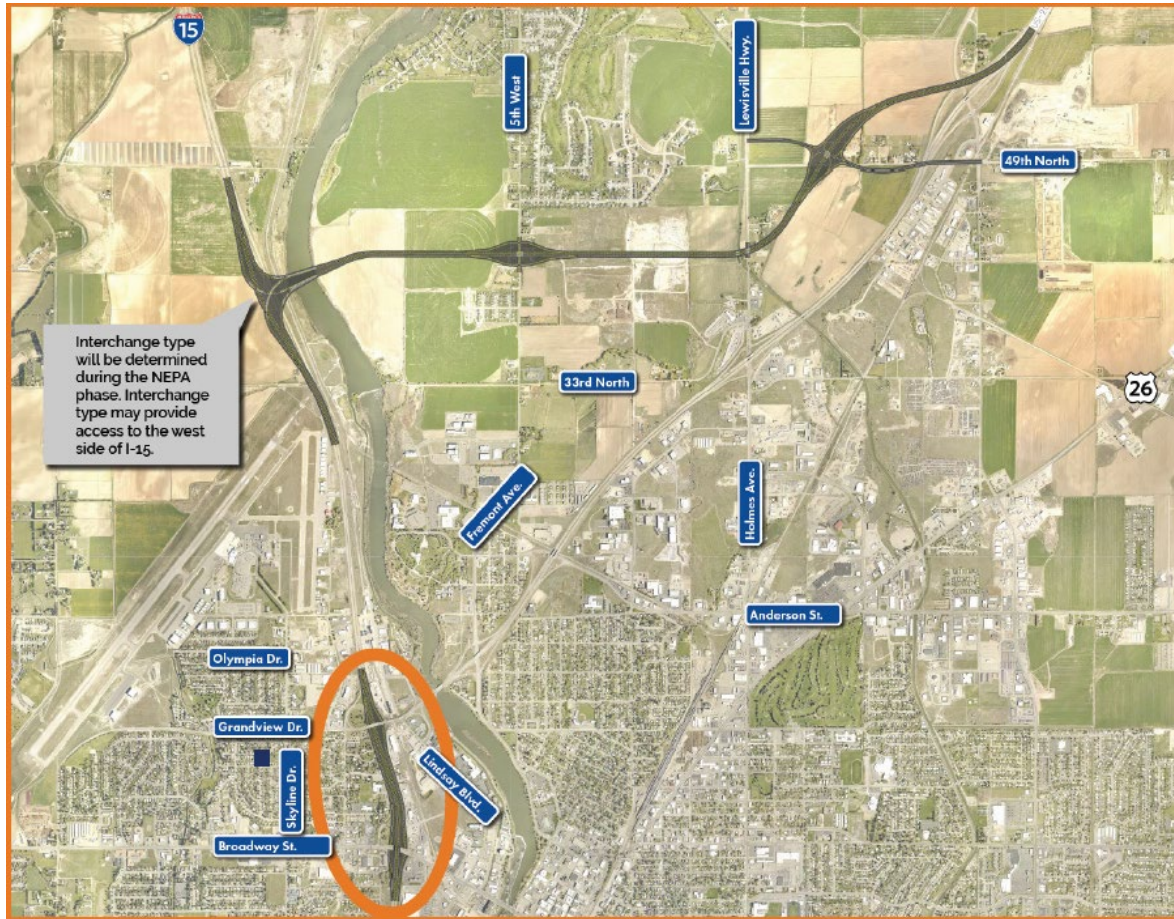


L3 ALTERNATIVE: C

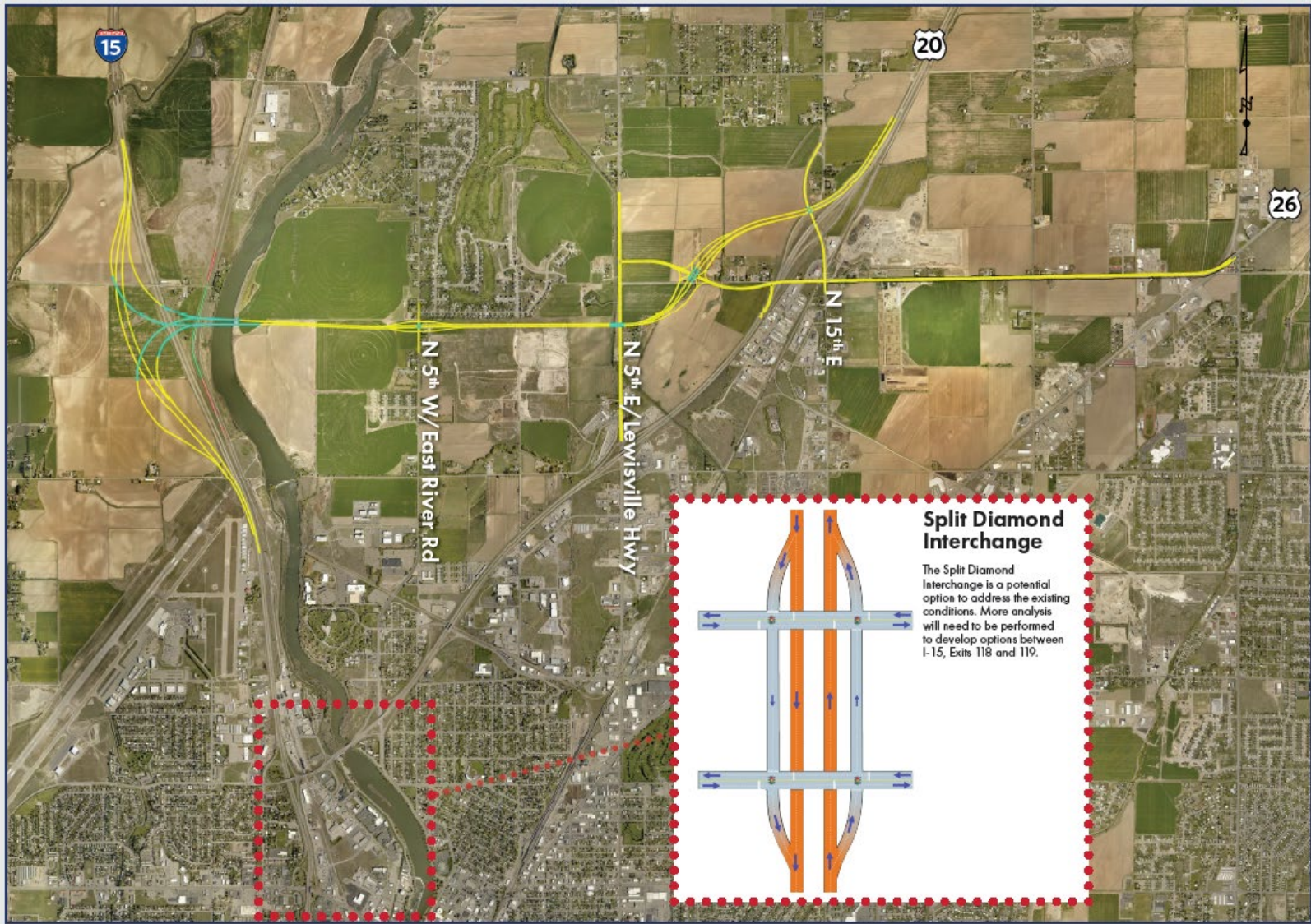


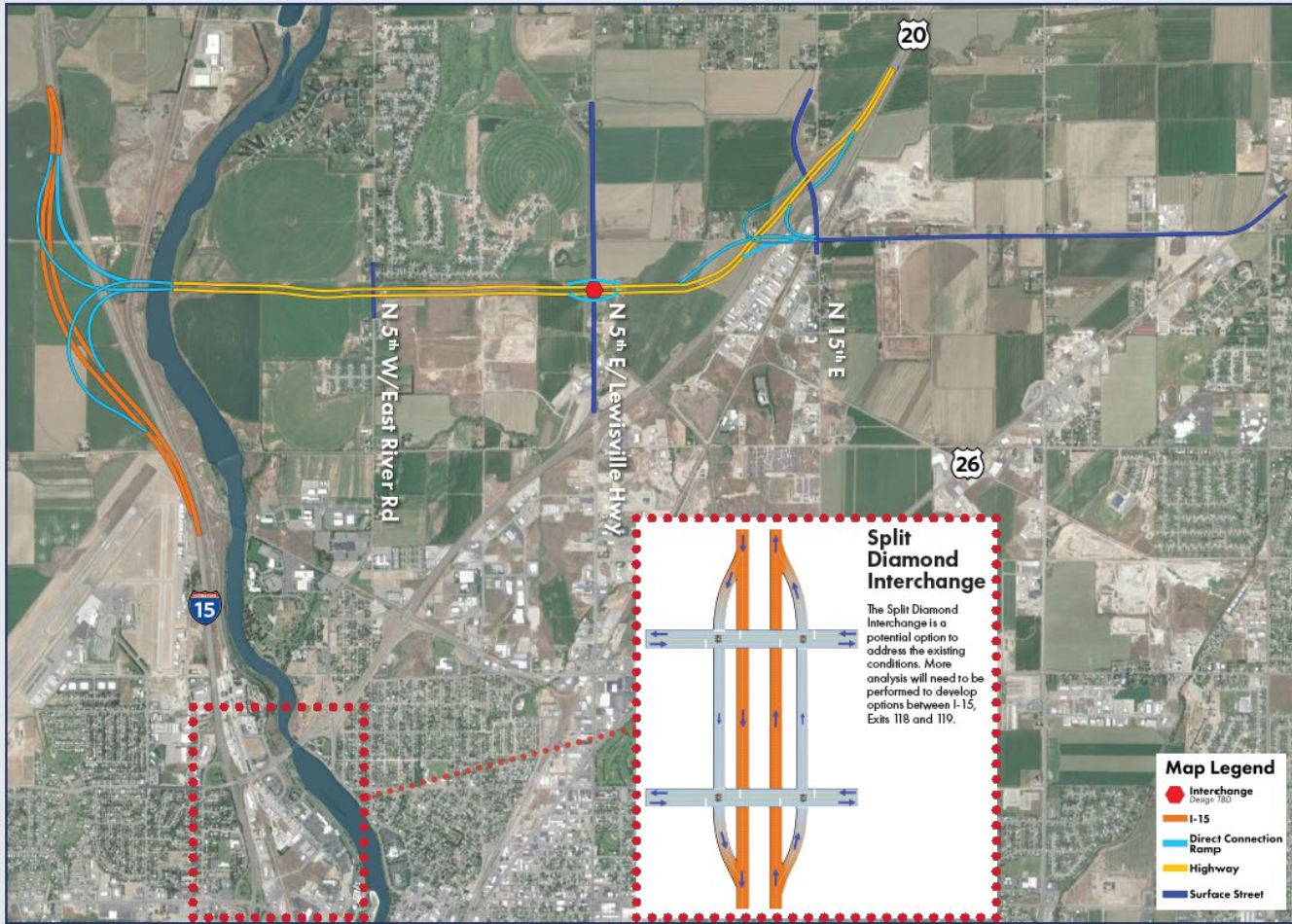
L3 ALTERNATIVE: E.1

Alternative H



L3 ALTERNATIVE: H





Split Diamond Interchange

The Split Diamond Interchange is a potential option to address the existing conditions. More analysis will need to be performed to develop options between I-15, Exits 118 and 119.

Features & Benefits

- Realigns US-20 to the north of downtown Idaho Falls, providing for a new connection to US-26, and allowing regional traffic a direct connection
- Improves the interchanges “in town,” including converting I-15, Exits 118 and 119, to a split diamond interchange to remove weaving and backup on I-15
- Converts current US-20 to a local street
- Allows for building in phases with the realigned US-20 and connection to I-15 first, followed by the split diamond interchange improvements to exits 118 and 119, and then the connection to US-26 following later when appropriate
- Potentially reduces the length and severity of delays and impacts to the traveling public during construction by mostly building off the existing roadway alignments

Challenges

- Alignment goes through a landfill which would require mitigation
- Impacts to farmland and adjacent neighborhoods



L3 ALTERNATIVE: H



Next Steps

Funded Phase 2 (2021-2022)

- Pre-NEPA Activities
 - *Confirmation of incorporation of PEL analysis and alternatives*
- NEPA Clearance
- 30% Design

Future Phase 3

- Final Design

Future Phase 4

- ROW Acquisition
- Construction



Questions?

Your Safety. Your Mobility. Your Economic Opportunity.



Home Alternatives About the Study Study Area Map Study Resources Get Involved

I-15/US-20 Connector Study

Welcome

The Idaho Transportation Department (ITD), City of Idaho Falls and Bonneville County are working together to plan for the future by studying potential improvements to the I-15 and US-20 interchanges.

ITD is completing a Planning and Environmental Linkages (PEL) which is a necessary and important preliminary step in redesigning the corridor to provide a safe and reliable commute for the next 20 years and beyond. For more on the steps in the PEL study – [click here](#).



Alternatives

The PEL team developed a broad range of alternatives at the onset of the study. Over the last two years, the team has screened out and/or refined the alternatives based on technical analysis and public input.

The PEL consisted of three levels of alternatives screening. Level Three alternatives were presented online [Link] as part of the fourth public meeting for the project in August 2020 and include:

- No Build Alternative
- [Alternative - H2](#)
- [Alternative - E3](#)

