Alternatives Evaluation Process Memo

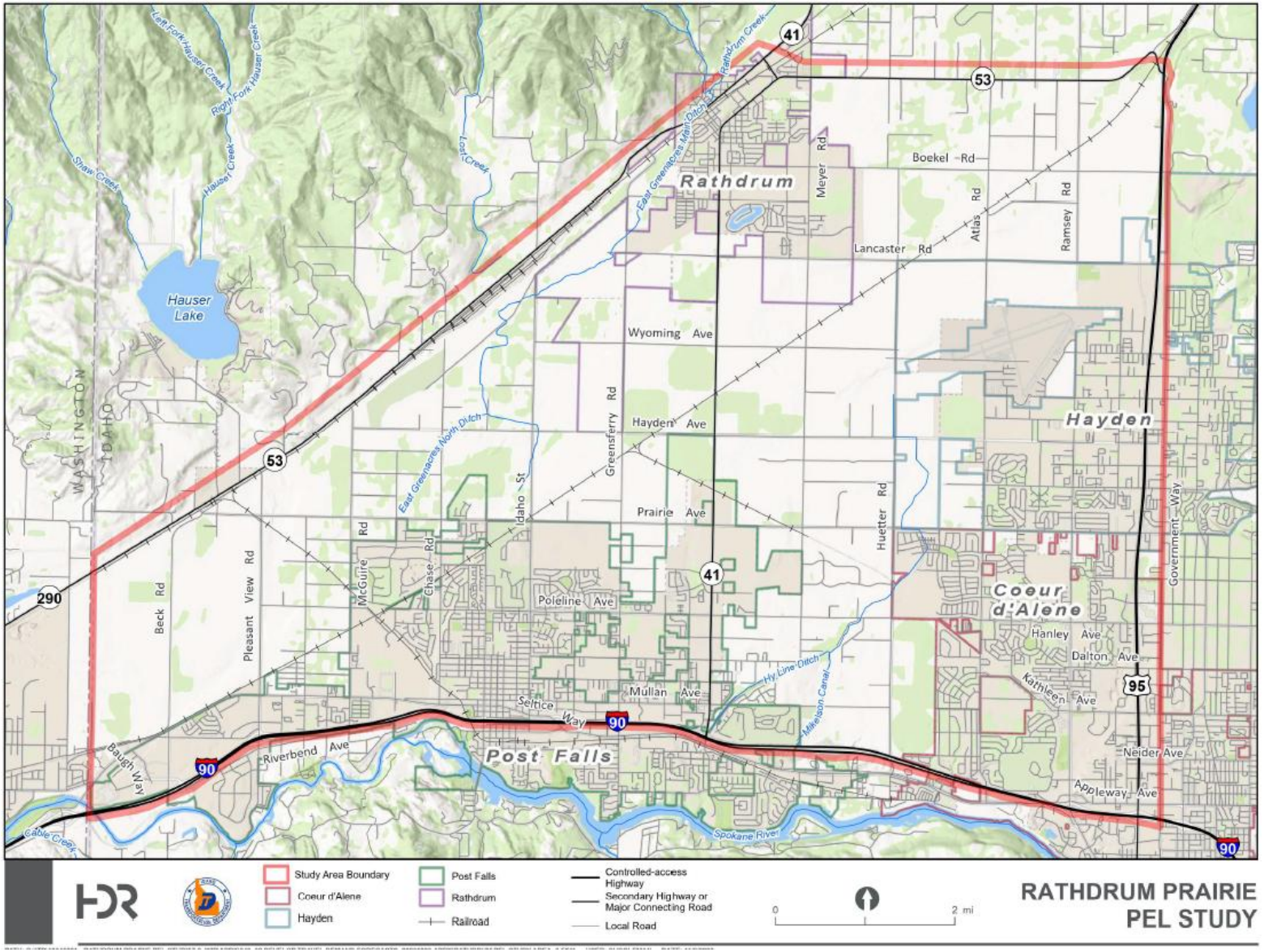
Date:	Thursday, July 31, 2025
Project:	Rathdrum Prairie Area Transportation Study
To:	Sajonara Tipuric, FHWA Idaho Division
From:	Carrie Ann Hewitt, ITD District 1 Jerry Wilson, ITD District 1 Mike Hartz, ITD District 1
Subject:	Rathdrum Prairie Area Transportation Study Concepts and Alternatives Evaluation Process Methodology Memo

1 Introduction

Kootenai County and the cities of Coeur d'Alene, Hayden, Rathdrum, and Post Falls, Idaho, have experienced substantial growth over the past 20+ years. While improvements have been made to the transportation network, roadways in the area continue to experience substantial congestion due to increased traffic associated with development.

In partnership with the Federal Highway Administration (FHWA) and Kootenai Metropolitan Planning Organization (KMPO), the Idaho Transportation Department (ITD) is conducting the Rathdrum Prairie Area Transportation Study (Study) for the area northwest of the City of Coeur d'Alene. ITD anticipates incorporating recommendations made as part of the Rathdrum Prairie Area Transportation Study into future project development efforts, including National Environmental Policy Act (NEPA) documentation, per Title 23 of the United States Code, Part 168 The study process is evaluating the highway and local roadway system within the Rathdrum Prairie area to determine deficiencies, define a purpose and need for future corridors and/or enhancements, and move the top priority projects into design and eventually construction. The study is using previous planning efforts, as applicable. The study area includes State Highway 53 (SH-53) to the north, Government Way to the east, Interstate 90 (I-90) to the south, and the Idaho and Washington state border to the west (Figure 1).

Figure 1. Study Area



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2 Purpose of the Memo

This memo presents the Level 1, 2, and 3 development and evaluation process methodology for the Rathdrum Prairie Area Transportation Study. The alternatives development and evaluation process includes developing evaluation criteria based on the Purpose and Need and goals for the project, developing a range of reasonable and feasible concepts, and evaluating alternatives through a multi-tiered screening process to be considered during subsequent NEPA documentation

3 Purpose and Need

ITD's *PEL Procedures* document states, "The goal in drafting the purpose statement is to define as specifically as possible the fundamental reasons why the project is being proposed, expressed as a desired transportation outcome," and "The purpose and need should focus on transportation-related needs, emphasizing the needs related to the transportation system and/or infrastructure."[1] The purpose and need for this study was developed based on an assessment of the existing and future transportation system, as well as input from the public and stakeholders. FHWA concurred with the purpose and need in May 2024. For the full purpose and need statement, please see the Purpose and Need Memo (May 6, 2024).

3.1 Purpose

The purpose of the transportation recommendations is to improve safety, mobility, as well as system reliability and resiliency for the current and future movement of both people and goods as northern Kootenai County and the Rathdrum Prairie continue to see rapid growth and development.

3.2 Needs

The needs are the key problems and the causes of those problems that ITD and KMPO seek to address with transportation improvements within the study area (Figure 1).

1. Address vehicular safety concerns within high-crash corridors and intersections.
2. Address existing and future transportation system capacity constraints caused by growth.
3. Provide opportunities to increase safety, mobility, and connections for bicycles, pedestrians, and transit users.

4 Stakeholder and Public Engagement

ITD has engaged with stakeholders, resource agencies, and the general public through the initial study milestones to understand existing conditions, identify the community's values and vision for transportation, develop the purpose and need, and other criteria to screen alternatives. The following sections summarize those engagement activities and how input was incorporated into the screening process.

[1] Idaho Transportation Department (ITD). 2024. *Planning and Environmental Linkages (PEL) Procedures*. https://itd.idaho.gov/wp-content/uploads/2024/05/ENV_PEL_Procedures.pdf.

4.1 Stakeholder Engagement

Stakeholder engagement activities included interviews, workshops, and Community Working Group (CWG) meetings to gather input on the study needs, alternatives, and decisions at the key milestones shown in **Table 1**.

Table 1. Key Milestones for Stakeholder Engagement

Key Milestones	Schedule	Status
Stakeholder Interviews	September-November 2023	Gathered input regarding existing conditions, potential purpose and need elements, and input for initial high-level alternatives development.
Visioning Workshop	October 19, 2023	The focus was to discuss existing conditions, purpose and need, and high-level alternatives development input as well set up a vision for what the stakeholders would like to see across the study area. Preparation for Public Open House and Online Meeting #1.
Purpose and Need Statement, Goals, and Objectives	CWG Meeting #1 December 11, 2023 KCATT Meeting April 23, 2024	Reviewed and gathered input on visioning work, purpose and need, and Level 1 concepts development.
Level 1 Concepts and Screening Results	CWG Meeting #2 June 11, 2024	The focus was to share and gather feedback on the preliminary Level 1 screening results. This was in preparation for the Public Open House and Online Meeting # 2.
Level 2 Alternatives and Preliminary Screening Results	CWG Meeting #3 October 23, 2024	The focus was to share and gather feedback on the Level 2 alternatives and preliminary screening results to present to the public at Public Open House and Online Meeting # 3.
Level 2 Alternatives and Updated Screening Results	CWG Meeting #4 Scheduled for August 26, 2025	The focus will be to share and gather feedback on the updated criteria and screening results to present to the public at Public Open House and Online Meeting # 4. .
Level 3 Scenarios, Screening Results	CWG Meeting #5 Scheduled for January 2026	The focus will be to share and gather feedback on Level 3 screening results to present to the public at Public Open House and Online Meeting # 5.
Draft Recommendations	CWG Meeting # 6 Scheduled for March 2026	The focus will be to share and gather feedback on draft recommendations.
Final Recommendations Draft Report	CWG Meeting # 7 Scheduled for May 2026	Share final recommendations.
Final Recommendations Final Report	Study Completion Scheduled for July 2026	Agency support letter anticipated

Stakeholder input significantly shaped the concept and alternatives development and screening process. The stakeholder interviews helped the team understand the transportation issues the community faces and how the stakeholders see them best being addressed. A summary of the

interviews conducted, and the prevailing themes discussed are presented in the *Key Stakeholder Interview Summary December 2023*.

The Visioning Workshop, involving many of the same local agencies and stakeholders that were interviewed, addressed key questions to guide the study's purpose and need, screening criteria, and improvement concepts. Discussions focused on problem identification, short-, mid-, and long-term transportation improvements, preservation needs, success metrics, and consequences of inaction. Additionally, preserving "community identity" was a topic of discussion with ITD coordinating with local municipalities to align with comprehensive and long-term land use planning. Details of attendees, discussions, and outcomes are found in the *Visioning Workshop Summary January 2024*.

The CWG role was to give input to the study team on purpose and need, concepts, alternatives, screening criteria, and screening results before presenting project information to the public. They also serve as advisors to ITD and ambassadors to take information back to their groups during the study process. The following are key topics discussed and incorporated into the study from each CWG meeting. Details are found in the *Community Working Group Meetings Overview December 2024.*

- CWG Meeting # 1:
    - Simplify the study process for the public and CWG
    - Local funding needs and current funding structure inadequacies
    - Educate the public on the project development process
    - ITD and local municipality coordination for compatibility with local planning
    - Include "transit" in multimodal needs and understand plans and issues
    - Be open to new traffic models and "smart" transportation ideas while following accepted processes. Request considered but not adopted; study area includes regional roadway facilities needing congestion and safety improvements.
    - Continue identifying impacts and benefits to US-95.
- CWG meeting # 2:
    - Refine diagonal concepts to create east-west/north-south solutions across the prairie.
    - Redraw concepts to better align with US-95/SH-53 interchange.
    - Prefer Pleasant View over Beck for an access-controlled highway.
    - Improving US-2 near Sandpoint is outside the study limits and will be considered separately.
    - A hybrid express lane concept included based on Utah's SR-92 example.
    - Include "Alternate US-95 Alignment" in the Huetter Bypass concept name.
    - Consider future growth and opportunities in the criteria for goals and objectives.
    - ITD identified projects suitable for local consideration during Level 1 screening.
- CWG meeting # 3:

- Adjust alternatives to reduce impact to the area north of Rathdrum that has topography and wetland impacts. The loop around Rathdrum may be too impactful.
- Adjust alternatives to avoid airport conflicts
- Add a Pleasant View Road access-controlled corridor connection for Alternatives J, L, M and N.
- Consider a "Meyer Rd bypass/extension" with other alternatives.

4.2 Public Engagement

Public engagement activities included presentation of study purpose, need, process, concepts, alternative, screening criteria, and preliminary recommendations. The public engagement activities are shown in **Table 2**.

Table 2. Public Engagement Activities

Public engagement Point	Outreach Tactics	Input Gathered
Public Meeting #1 **Held in Post Falls** **In-person November 1, 2023** **Online open** **November 2 – 16, 2023** **Details found in *Public Meeting #1 Summary January 2024***	In-person Open House Online Open House Marketing: ○ Project Website ○ News Release ○ Print Ads ○ Social Media ○ Project Emails ○ Direct Mail Postcards	Content: ○ About the Project ○ Study Process ○ Study Timeline ○ Draft Purpose and Needs ○ Existing and Future Conditions Input Considerations: ○ Language edits to Purpose and Needs for clarification and public understanding ○ Greatest needs across the study area ○ Protect the prairie and way of life ○ Need more transportation options to get around ○ Improve existing roads before building new ones
Public Meetings - Round #2 **Held in Rathdrum and Hayden** **In-person June 25 & 26, 2024** **Online open** **June 27 – July 19, 2024** **Details found in *Public Meeting #2 Summary September 2024***	In-person Open Houses (2 locations Online Open House Marketing: ○ Project Website ○ News Release ○ Print Ads ○ Social Media ○ Project Emails ○ Direct Mail Postcards	Content: ○ About the Project ○ Study Process ○ Study Timeline ○ Purpose, Needs, and Goals ○ Existing and Future Conditions ○ Alternatives Evaluation Process ○ Level 1 Concepts ○ Draft Level 1 Screening Recommendations Input Considerations: ○ Need more east-west concept options ○ Do not box in alternatives, allow for expansion ○ Identify benefits to local communities ○ Avoid impacts to neighborhoods
Public Meetings - Round #3	In-person Open Houses (2 locations Online Open House	Content: ○ About the Project ○ Study Process

Held in Coeur d-Alene and Post falls **In-person November 13 & 14, 2024** **Online open November 15 – December 13, 2024** **Details found in *Public Meeting #3 Summary April 2025***	Marketing: ○ Project Website ○ News Release ○ Print Ads ○ Radio Ads ○ Social Media ○ Project Emails ○ Direct Mail Fliers	○ Study Timeline ○ Purpose, Needs, and Goals ○ Alternatives Evaluation Process ○ Level 2 Alternatives ○ Draft Level 2 Screening Matrix Input Considerations: ○ Avoid impacting existing neighborhoods and resources ○ A combination of alternatives may be needed to meet the regional traffic issues ○ Avoid impacts on potential cultural and/or historic sites ○ Specific comments on each alternative were received
Public Meetings - Round #4 **Locations to be determined** **In-person September 17 & 18, 2025** **Online open September 17 – October 8, 2025**	In-person Open Houses (2 locations Online Open House Marketing: ○ Project Website ○ News Release ○ Print Ads ○ Social Media ○ Project Emails ○ Direct Mail Fliers	Content: ○ About the Project ○ Study Process ○ Study Timeline ○ Purpose, Needs, and Goals ○ Alternatives Evaluation Process ○ Level 2 Alternatives ○ Updated Draft Level 2 Screening Results Input Considerations: Input gathered will be summarized and outstanding items will be documented for next steps in study process
Public Meetings - Round #5 **Locations to be determined** **Anticipated March 2026**	In-person Open Houses (2 locations Online Open House Marketing: ○ Project Website ○ News Release ○ Print Ads ○ Social Media ○ Project Emails ○ Direct Mail Fliers	Content: ○ About the Project ○ Study Process ○ Study Timeline ○ Purpose, Needs, and Goals ○ Alternatives Evaluation Process ○ Level 3 Alternatives ○ Updated Draft Level 3 Screening Results Input Considerations: Input gathered will be summarized and outstanding items will be documented for next steps in NEPA process

4.3 Agency and Tribal Coordination

4.3.1 Agency Coordination

ITD provided state and federal resource agencies with a copy of the Environmental Constraints Technical Report on January 12, 2024, and invited those agencies to an Agency Scoping Meeting on January 16, 2024, to review the Draft Purpose and Need and the Environmental Constraints Technical Report. ITD encouraged input regarding the environmental constraints through February

2, 2024. The following agencies were provided the Environmental Constraints Report and invited to the Agency Scoping Meeting:

- FHWA
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- Federal Aviation Administration
- Idaho Department of Water Resources
- Idaho Department of Environmental Quality
- Idaho Department of Lands
- Idaho Department of Fish and Game
- State Historic Preservation Office
- Idaho Department of Parks and Recreation
- Idaho Emergency Management Agency
- Panhandle Health District

Agency coordination informed the alternatives screening process in the following ways:

- Idaho State Parks and Recreation provided a list of Land and Water Conservation Fund Sites for consideration during screening.
- U.S. Environmental Protection Agency provided comments regarding water quality, aquatic resources, environmental justice, air quality, climate impacts and resiliency, ecological connectivity and wildlife corridors, as well as provided resources for study team consideration.

4.3.2 Tribal Coordination

ITD met with the Coeur d' Alene Tribe on May 1, 2025, and reviewed the background, purpose and need, and Level 2 alternatives for the study. The Tribal Historic Preservation Officer explained that the prairie has been a wide flat spot by water for millennia, so it has been inhabited for millennia. There is a lot of history and cultural significance all over the prairie. The Tribe is actively collecting stories and information and finding more all the time. New alignments will undoubtedly have large cultural impacts and widening existing alignments could as well. Some of these alternatives go through economically challenged neighborhoods and providing modes of travel other than personal vehicles is important to those neighborhoods and members of the tribe who may live there or travel through these areas. The Tribal Historic Preservation Officer would like to be kept up to date as ITD makes progress with screening alternatives. They will engage with the University of Idaho and other outside engineering advisors to help determine items and issues and anticipate an ethnographic study needing to be done as part of future NEPA efforts.

5 Level 1 Screening – Purpose and Need and Feasibility

Through each screening level, feasibility will be considered. Criteria considered for feasibility screening include constructability and engineering data and environmental considerations. Environmental data scans have been conducted during screening. Feasibility will be assessed on available environmental data at each level of screening.

- Level 1: Purpose and Need screening will be conducted for all concepts. Concepts with fatal flaws, meaning there is an impact or combination of impacts that prohibit a concept from being built or it does not meet Purpose and Need will be removed from further screening analysis and shown in screening packet and/or on public meeting material with explanation.
- Levels 2 and 3: Continuous assessment of feasibility should occur throughout screenings and be added to the criteria matrix as a column.

The criteria for screening the Level 1 concepts (general descriptions, alignments and typical sections) are based on the Purpose and Need, feasibility, and fatal flaws. The following are the Level 1 screening questions:

- Does the concept address safety concerns within high-crash roadways and intersections?
- Does the concept address existing transportation system congestion caused by growth within the corridor?
- Does the concept address future transportation system congestion caused by growth within the corridor?
- Does the concept improve existing or add new routes to increase reliability and resiliency for regional and local trips?
- Does the alternative provide opportunities to increase safety, mobility, and connections for bicycles, pedestrians, and transit users?
- Does the alternative avoid fatal flaws, including feasibility and impacts to resources, which make the concept extremely challenging to approve or construct?

Concepts were evaluated with a "yes" or "no" answer to the Level 1 criteria questions identified above. Concepts that could not receive a response of “yes” to the above questions or were not feasible were eliminated. Concepts were also categorized according to whether they would most likely be implemented as a local project by the respective community, or carried forward for alternatives analysis.

The following terminology and the respective definitions are recommended when conducting the Screening Level 1 analysis:

- **Eliminated=** Does not meet purpose and need, has a fatal flaw, and/or is considered unreasonable (with notes provided on reasons why the alternative is considered unreasonable).
- **Retained or Carried Forward =** Carried forward for further evaluation in Level 2 screening.
- **Retained as an Element or Eliminated as a Stand-Alone =** Does not fully meet purpose and need but will be evaluated as a packaged element of larger-scale alternative.

6 Level 2 Screening – Comparative Analysis

During Level 2, the concepts carried forward from the Level 1 screening will be further developed into alternatives (footprint, conceptual roadway design, number of lanes, intersection and interchange locations). The criteria for Level 2 are based on quantitative and qualitative analyses to understand each alternative’s comparative benefits and impacts. The Level 2 screening focuses on

ITD access and corridors. **Table 3** lists the Level 2 screening criteria and the measures of effectiveness.

The assessment of the Level 2 alternatives involves three steps of consideration, documenting which alternatives would be carried forward or not recommended, within the Level 2 screening. Level 2 alternatives may be determined as not recommended at any of the three steps, based on screening outcomes. Alternatives carried forward through all three screening steps during the Level 2 screening will be carried forward to the Level 3 screening.

Level 2, Step 1: The first step is to consider the criteria based on the purpose and need for the study that are listed under "Performance" (Safety, Congestion, Travel Time, Travel Efficiency, Network Redundancy, and Multimodal Considerations) in **Table 3**. The study area is a sub area of Kootenai County that includes multiple ITD highways and local major arterial corridors. The origins and destinations analysis identified east-west and north-south oriented travel patterns and corresponding poor performing highway and arterial routes. The study team anticipates that there may be the need to implement more than one alternative to address the poor performing areas across the study area and serve the multiple traffic patterns. To accommodate these travel patterns, the Level 2 alternatives will be classified into two categories with additional notes stating which key corridors are benefited: (1) improves north-south travel and (2) improves east-west travel. Key corridors included in the evaluation are the following:

- North – South Travel
    - Government Way
    - US-95
    - Ramsey Road
    - Huetter Road
    - SH-41
    - Greensferry Road
    - Pleasant View Road
- East – West Travel
    - I-90
    - Poleline Avenue/Hanley Avenue
    - Prairie Avenue
    - SH-53

Alternatives that perform poorly against the system-wide criteria but show promise in addressing needs in the above categories, may be carried forward for consideration in a Level 3 scenario, if it is believed they could improve system-wide results for a scenario when paired with another alternative. These alternative pairings would be further evaluated in Level 3 while developing the Level 3 scenarios.

Level 2, Step 2: The second step is to consider the magnitude of impacts to the following resources: community impacts, local and regional planning, natural and human (social and built) environments. Alternatives with similar performance, but different levels of impacts are screened to understand the tradeoffs between performance and impacts relative to other alternatives within their assigned category.

Level 2, Step 3: The third step is to consider how difficult the alternatives would be to implement based on temporary construction impacts and project cost relative to the other alternatives within their assigned category.

Table 3. Level 2 Screening Criteria and Effectiveness Measures

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
Performance								
Safety	Need to address conflicts at intersections	Intersection cross product density	Quantitative: Intersection cross product density (cross product sum per mile)	Highest Potential for Crashes at Intersections (10,000,000 or more)	Higher Potential for Crashes at Intersections (9,999,999 to 5,000,000)	Medium Potential for Crashes at Intersections (4,999,999 to 1,000,000)	Lower Potential for Crashes at Intersections (999,999 to 500,000)	Lowest Potential for Crashes at Intersections (Under 500,000)
	Need to address conflicts at driveways	Driveway density with volume	Quantitative: Driveway density with volume (sum of AADTs at driveways per mile)	Highest Potential for Crashes at Driveways (10,000 or more)	Higher Potential for Crashes at Driveways (9,999 to 5,000)	Medium Potential for Crashes at Driveways (4,999 to 1,000)	Lower Potential for Crashes at Driveways (999 to 1)	Lowest Potential for Crashes at Driveways (No driveway conflicts)
Congestion	Ability to address congestion throughout the study area	Volume to capacity (V/C) ratio	Quantitative: Number of segments on key corridors exceeding 0.9 V/C across both AM and PM peak hours.	Number of segments exceeding 0.9 V/C is greater than or equal to that of the No-Build condition.	Less than 25% reduction from No-Build in number of segments with V/C exceeding 0.9	26-50% reduction from No-Build in number of segments with V/C exceeding 0.9	51-75% reduction from No-Build in number of segments with V/C exceeding 0.9	76-100% reduction from No-Build in number of segments with V/C exceeding 0.9
Travel Time	Ability to improve travel times along key corridors	Travel Time Savings	Quantitative: Average travel time savings from No-Build weighted by the average corridor volume.	Travel time savings are the same or worse than the No-Build condition.	Travel time savings between 0-3,000 vehicle-minutes.	Travel time savings between 3,000-6,000 vehicle-minutes.	Travel time savings between 6,000-9,000 vehicle-minutes.	Travel time savings more than 9,000 vehicle-minutes.

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
Travel Efficiency	Ability to improve travel efficiency within the study area	Vehicle-miles traveled (VMT) for the network	Quantitative: Change in VMT from the No-Build across both AM and PM peak hours.	VMT increases by more than 7,500.	VMT increases by 2,500-7,500.	Change in VMT is between 2,500 decrease and 2,500 increase.	VMT decreases by 2,500-7,500.	VMT decreases by more than 7,500.
		Vehicle-hours traveled (VHT) for the network	Quantitative: change in VHT from the No-Build across both AM and PM peak hours.	VHT is greater than or equal to No-Build condition.	VHT decreases by less than 2,500.	VHT decreases 2,500-5,000.	VHT decreases by 5,000-7,500.	VHT decreases by more than 7,500.
Network Redundancy	Ability to address congestion during a major incident	V/C ratio during detour event	Quantitative: Number of segments on key corridors exceeding 0.9 V/C across both AM and PM peak hours. (total across all 4 incident scenarios).	Number of segments exceeding 0.9 V/C is greater than or equal to that of the No-Build condition.	Less than 25% reduction from No-Build in number of segments with V/C exceeding 0.9	26-50% reduction from No-Build in number of segments with V/C exceeding 0.9	51-75% reduction from No-Build in number of segments with V/C exceeding 0.9	76-100% reduction from No-Build in number of segments with V/C exceeding 0.9
Multimodal Considerations	Ability to increase safety, mobility, and connections for bicycle and pedestrian users	Qualitative Consideration of integrating existing and planned bicycle and pedestrian facilities	Qualitative: Assess how improvements can benefit or impact existing or future use of bicycle and pedestrian facilities.	No new dedicated bike/ped infrastructure and safety concerns	Minimal enhancements and connectivity is unchanged	Includes improvements on most of the existing route, including space for bicycles.	Includes improvements to the new route, including space for bicycles.	Creates separated multimodal facilities with improvements to safety

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
	Ability to increase safety mobility and connections for transit users	Volume to capacity (V/C) ratio	Quantitative: Number of segments on key corridors exceeding 0.9 V/C across both AM and PM peak hours.	Number of segments exceeding 0.9 V/C is greater than or equal to that of the No-Build condition.	Less than 25% reduction from No-Build in number of segments with V/C exceeding 0.9	26-50% reduction from No-Build in number of segments with V/C exceeding 0.9	51-75% reduction from No-Build in number of segments with V/C exceeding 0.9	76-100% reduction from No-Build in number of segments with V/C exceeding 0.9
Impacts and Benefits								
Community Impacts and Local and Regional Planning	Estimated requirements for right-of-way acquisition	Number of properties impacts	Quantitative: Alternative footprint overlayed with parcel data.	400 or more properties impacted	399-200 properties impacted	199-100 properties impacted	99-50 properties impacted	49-0 properties impacted
	Estimated requirements for right-of-way acquisition	Number of acres impacted	Quantitative: Alternative footprint overlayed with parcel data.	600 or more acres impacted	599-300 acres impacted	299-100 acres impacted	99-10 acres impacted	Less than 10 acres
	Estimated residential right-of-way requirements	Acres of residential zoned areas	Quantitative: Based on acres of potentially impacted residential areas.	100 or more acres	99-50 acres	49-30 acres	29-5 acres	Less than 5 acres
	Estimated commercial right-of-way requirements	Acres of commercial zoned areas	Quantitative: Based on acres of potentially impacted commercial areas.	75 or more acres	74-50 acres	49-30 acres	29-5 acres	Less than 5 acres

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
	Use of existing highway or roadway corridors	Amount and existing corridors utilized	Qualitative: assessment based on how much of existing ITD corridors and other corridors are utilized using the evaluation scale.	Requires a new corridor with minimal use of existing corridor	Less than half uses existing corridor	More than half uses existing corridor	Primary utilizes existing ITD but requires notable ROW	Primarily utilizes existing ITD corridor
	How does the alternative effect local access?	Qualitative, based on adding more or less local access overall.	Qualitative: Assessment based on an increase, no change, or decrease in access using existing conditions as a baseline.	Notably less access than existing conditions.	N/A	No change or minimal change in access than existing conditions.	N/A	New access points or existing access enhanced over existing conditions.
	Does the alternative divide or further divide existing communities?	Qualitative, based on location of alternatives within existing communities.	Qualitative: Assessment based on existing community barriers with consideration of proposed alternatives using the evaluation scale.	Increases divide for length of alignment	Increases divide for part of alignment	No change	Reduces divide for part of alignment	Reduces divide for length of alignment

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
	Compatibility with local and regional planning efforts	Qualitative based on compatibility assessment provided to local governments	Qualitative: Assessment based on coordination with local jurisdictions and them agreeing with a Low, Medium, or High rating for each alternative or equivalent feedback.	At least two communities with municipal boundaries intersecting with alternative rated it as low or had concerns.	N/A	Less than two communities intersected by project rated as high or low.	N/A	At least two communities with municipal boundaries intersecting with alternative rated as high or favorite, or are already planning for the alternative, and none with intersecting boundaries rated as low.
Environmental Resources	Potential impacts to the natural environment	Impervious Surface	Qualitative: Estimated approximate area of new impervious surface.	150 acres or more	149-100 acres	99-75 acres	74-50 acres	Less than 50 acres
		Floodplains	Qualitative: Impacts from alternative footprint overlays with resource spatial data.	10 acres or more	9-5 acres	4.9-1 acres	Less than 1 acre	No Floodplain Impacts
		Wetlands and Waters of the U.S.	Qualitative: Impacts from alternative footprint overlays with resource spatial data.	3 acres or more	2.99-0.51 acres	0.5-0.11 acre	Less than 0.10 acre	No Wetland Impacts

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
Social and Built Environment	Potential impacts on the social and built environment.	Community Resources and Parks and Recreation (Desktop analysis)	Qualitative: Impacts from alternative footprint overlays and proximity (approximately 50 feet) with desktop resource spatial data.	10 properties or more	9 to 5 properties	4 to 2 properties	1 property	No Anticipated Impact to Community Resources, Parks and Recreation.
		Hazardous Materials	Quantitative: Number of hazardous materials sites intersected by footprint.	20-16 sites	15-12 sites	11-8 sites	7-4 sites	3-0 sites
		Cultural Resources	Quantitative: Number of historic properties intersected by footprint.	Over 20	19-10	9-5	4-1	No Anticipated Impacts on Cultural Sites
		Noise Receptors	Quantitative: Residential land use properties within 500 ft of alternative.	Over 1,500	1,499-1,000	999-750	749-500	Less than 500
Implementation	Conceptual construction costs	Magnitude of Cost in comparison to other alternatives, including assumptions for structures and ROW	Quantitative: Based conceptual construction costs.	Greater than $1,000,000,000	$999,999,999 to $750,000,000	$749,999,999 to $500,000,000	$499,999,999 to $250,000,000	Less than $250,000,000

Category	Evaluation Criteria	Performance Measure	Data Source/ Methodology	Comparative Evaluation Scale				
				Worst (1)	Poor/Negative (2)	Neutral/Medium (3)	Better/Good (4)	Best (5)
	Ability to proceed with phased implementation, reducing the number of $100 million packages for alternative	Quantitative: number of $100,000,000 packages	Quantitative: Based on the number of construction packages.	10 packages	9-8 Packages	7-6 Packages	5-4 Packages	3 Packages
	Ability to proceed with phased implementation, minimizing impacts	Qualitative: Impacts to the traveling public during construction	Qualitative: Based on impacts to traveling public on existing facilities during construction.	Most Severe impacts to traveling public, lane closures and detours for most of alignment	More impacts to traveling public, lane closures and detours for portions of the work	Maintain existing number of through lanes in each direction during construction, minor closures	Mostly constructed outside of existing travel lanes, lower impact to traveling public than other alternatives	Majority of alternative constructed outside of existing travel lanes, lowest impact to traveling public

The following terminology and the respective definitions are recommended when conducting the Screening Level 2 analysis:

- **Eliminated =** Does not meet purpose and need, has a fatal flaw, and/or is considered unreasonable (with notes provided on reasons).
- **Carried Forward =** Considered reasonable and feasible and may be considered for further evaluation in this study or subsequent NEPA and project development.
- **Recommended =** Considered reasonable and feasible and recommended for consideration as the Preferred Alternative during subsequent NEPA and project development**.**
- **Not Recommended =** While alternative meets purpose and need, it will not be evaluated further in this study due to comparatively negligible benefits and higher impacts than other alternatives but may be studied further with subsequent NEPA and project development**.**
- **Retained as an Element =** Does not fully meet purpose and need but will be evaluated as a packaged element of larger-scale alternative.

Due to the unique nature of this study, “Retained as an Element” will be used in the Level 2 screening analysis. Level 2 is screening alternatives for specific corridors across the study area that may not fully meet the purpose and need for the entire study area but serve that corridor well. Designating those alternatives as “Retained as an Element” in Level 2 will allow them to be combined into systemwide combinations (alternatives) in Level 3 that better meet the screening criteria.

7 Level 3 Screening – Scenario Analysis

During Level 3, the alternatives carried forward from Level 2 screening will be further developed into scenarios that will include additional detail, as needed, and may include system-wide combinations of alternatives, as applicable.

7.1 Level 3A – Confirming Level 3 Alternatives and Scenarios

Alternatives carried forward from Screening Level 2 may be combined based on their compatibility to benefit north-south and east-west traffic patterns to form scenarios. The initial list of scenarios will be modeled at a high level to understand compatibility, with the greatest compatibility and potential for system-wide improvements moving to Level 3B for the scenario analysis. This initial step will be performed using similar metrics and level of detail used in the Level 2 analysis to understand the relative benefits and impacts of each scenario. Note: Stand-alone alternatives from Level 2 may be analyzed in Level 3B if the system-wide improvements are better or relatively comparable to other Level 3B scenarios.

7.2 Level 3B – Scenario Analysis

The criteria for the Level 3B analysis are based on quantitative and qualitative analyses to understand each scenario’s benefits and impacts, and to inform recommendations for individual projects or the phasing and priority of multiple projects with independent utility. The Level 3B screening addresses both system-wide and local benefits and impacts. **Table 4** lists the Level 3B screening criteria and the measures of effectiveness. Note: An evaluation scale has not been established as the Level 3B scenarios will not be developed until completion of the Level 2

Screening and Level 3A step to confirm the scenarios. Similar to the Level 2 screening process, the assessment of the Level 3B scenarios involves three steps of consideration, documenting which scenarios would be eliminated, carried forward, recommended, or not recommended, within the Level 3B screening. Scenarios may be determined as not recommended at any of the three steps, based on screening outcomes. Scenarios that are carried forward or recommended through all three Level 3B screening steps will be evaluated into subsequent NEPA processes and project development steps. They will be discussed further within the "Implementation Plan" section of the Rathdrum Prairie Area Transportation Study.

Level 3B, Step 1: The first step is to consider the criteria based on the purpose and need for the study that are listed under "Performance" (Safety, Congestion, Travel Time, and Multimodal Considerations) for each scenario.

Level 3B, Step 2: The second step is to consider the magnitude of impacts to the following resources: community impacts, local and regional planning, natural and human (social and built) environments. Scenarios with similar performance, but different levels of impacts are screened to understand the tradeoffs between performance and impacts relative to each other.

Level 3B, Step 3: The third step is to consider how difficult the scenarios would be to implement based on temporary construction impacts, cost relative to the other scenarios, and if multiple projects within the scenario would have independent utility to allow for implementation over time, as funding is available.

Table 4. Level 3B Screening Criteria and Measures of Effectiveness

Category	Criteria	Measure of Effectiveness	Comparative Evaluation Scale
Performance			
Safety	Ability to reduce segment-related crashes	Predicted crashes	Similar to Level 2, comparative evaluation scale shows alternatives that perform worst, poor/negative, neutral/medium, better/good, best; based on results of analysis of Level 3B scenarios using performance-based measures of effectiveness.
	Ability to reduce severity of crashes	Predicted crash frequency by severity and societal crash costs over the life of the alternative	
Congestion	Ability to address congestion on key corridors*	Level of service (LOS) and queuing at key intersections	
Travel Time	Ability to reduce travel time on key corridors*	Travel time on route and change in travel time from No Build alternative	
Multimodal Consideration	Ability to increase safety, mobility, and connections for bike/pedestrian users	List bike/pedestrian benefits and impacts.	
	Ability to increase safety mobility and connections for transit users	LOS and queuing at key intersections	
Impacts and Benefits			
Community Impacts	General access changes that would impact existing properties and land uses	Qualitative description of location and change in access. Less access is an impact. Additional access is a benefit.	Similar to Level 2, comparative evaluation scale showing alternatives that perform worst,

Category	Criteria	Measure of Effectiveness	Comparative Evaluation Scale
	Number of properties impacted – Total	Number of properties	poor/negative, neutral/medium, better/good, best; based on results of analysis of Level 3B scenarios using impacts-and-benefits-based measures of effectiveness.
	Acres impacted – Total	Number of acres	
	Estimated Displacements – Total	Number of estimated displacements	
	Number of properties impacted – Residential	Number of properties (High, Medium, Low)	
	Acres impacted – Residential	Number of acres	
	Estimated Displacements – Residential	Number of estimated displacements	
	Number of properties impacted – Commercial	Number of properties	
	Acres impacted – Commercial	Number of acres	
	Estimated Displacements – Commercial	Number of estimated displacements	
Environmental Resources	Impervious Surface	Estimate of new impervious surface and ability to address within proposed right-of-way	
	Floodplain Impacts	Acres and approval/mitigation likely required	
	Wetlands and Waters of the U.S.	Acres and permit required	
Social and Built Environment	Community Resources and Parks and Recreation	List sites, note if Section 4(f) and/or 6(f) and estimated magnitude of impact	
	Hazardous Materials	List sites needing additional consideration	
	Cultural Resources	List sites with potential for adverse effect	
	Noise Receptors	Number of existing residential properties within 500 feet of scenario	
Implementation	Conceptual construction costs	Magnitude of Cost	
	Ability to proceed with phased implementation, reducing temporary impacts	Qualitative description	

* Key corridors are listed in Section 6.

The following terminology and the respective definitions are recommended when conducting the Screening Level 3 analysis:

- **Eliminated =** Does not meet purpose and need, has a fatal flaw, and/or is considered unreasonable (with notes provided on reasons).
- **Carried Forward =** Considered reasonable and feasible and may be considered for further evaluation in this study or subsequent NEPA and project development.

- **Recommended =** Considered reasonable and feasible and recommended for consideration as the Preferred Alternative during subsequent NEPA and project development**.**
- **Not Recommended =** While alternative meets purpose and need, it will not be evaluated further in this study due to comparatively negligible benefits and higher impacts than other alternatives but may be studied further with subsequent NEPA and project development**.**