



US 31 North
PLANNING AND ENVIRONMENT LINKAGES (PEL)
STUDY REPORT
FINAL

Revision 1 – October 2025

Prepared By



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(Addendum #1)

Minor edits were made to the report in October 2025. The edits include the following:

- Table and Figure cross-reference hyperlinks were corrected in various locations throughout the document.
- A minor text edit was made to add the word “and” to the second sentence of Section 1.4.
- Addendum 1 for RASPI #3 was added as Appendix K. The addendum documents outreach efforts and comments received through August 1, 2025. References to this document were added to pages 19, 35, and 43.

1. INTRODUCTION

1.1. BACKGROUND AND STUDY OBJECTIVES

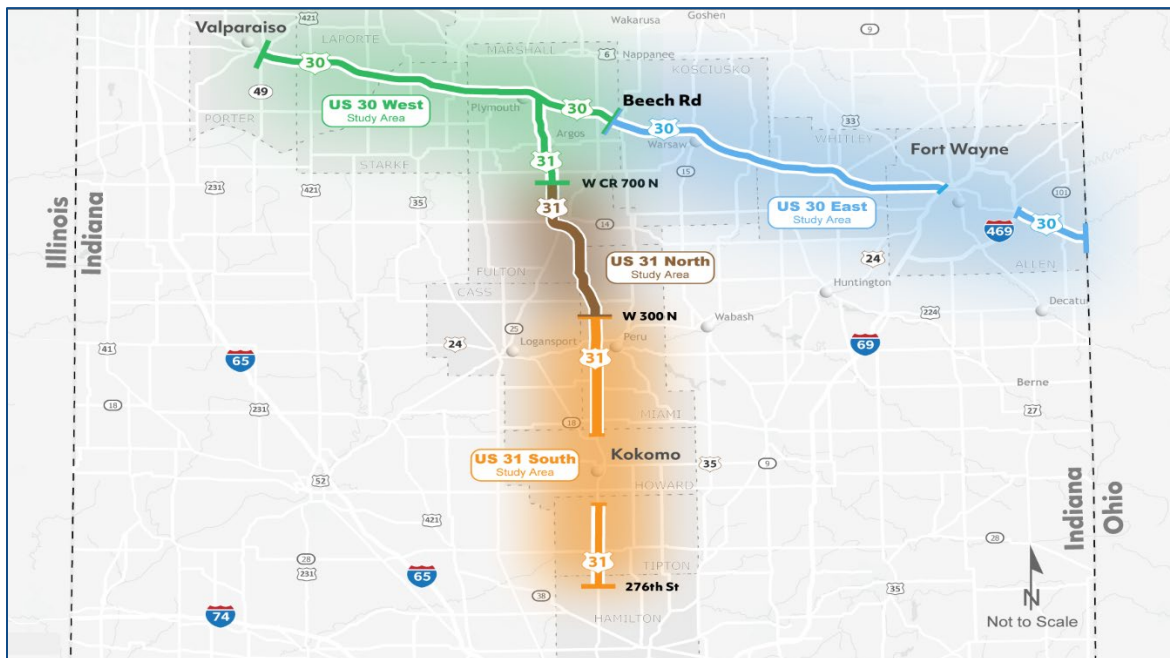
ProPEL is an Indiana Department of Transportation (INDOT) initiative for transportation planning using collaborative Planning and Environment Linkages (PEL) studies to consider environmental, community, and economic goals early in the planning process. ProPEL studies use collaboration, data-driven analysis, and public engagement to help shape the future of transportation infrastructure.

The ProPEL US 30 and 31 studies span 180 miles across 12 counties. The overall study area, which was established as a direct result of stakeholder input, includes¹:

- US 30 from Valparaiso to the Indiana/Ohio state line (excluding the I-69/I-469 section around the north side of Fort Wayne).
- US 31 between Hamilton County and US 30 (excluding the US 31 Kokomo bypass).

Within the overall study limits, INDOT designated four smaller study areas for conducting individual PEL studies (see Figure 1). This approach enabled each of the study teams to more closely consider community needs and goals. The limits of the four study areas were defined to optimize engagement by keeping communities that associate with each other in the same study area. The four PEL studies were closely coordinated to make sure that potential solutions were integrated and work together across study area boundaries.

Figure 1 – ProPEL US 30 and US 31 Study Areas



¹ The US 31 Kokomo bypass and the portions of I-69/I-469 around the north side of Fort Wayne were excluded from the overall study limits because they are currently freeway facilities. Therefore, the long-term vision of those portions of US 30 and US 31 has been decided.

Figure 2 – ProPEL US 31 North Study Corridor



The ProPEL US 30 and US 31 studies were intended to help guide transportation investments over the next twenty years, creating transportation facilities that meet the needs of all users. Planning products from the PEL studies will inform subsequent project-specific environmental reviews conducted in accordance with the National Environmental Policy Act (NEPA).

A goal of the ProPEL US 30 and US 31 studies is to identify a reasonable range of alternatives for the study area. The studies included several objectives to achieve this goal:

- Engage the public, study stakeholders, and resource agencies throughout the study.
- Identify community goals for the study area.
- Identify transportation needs within the study area.
- Develop the purpose and need for improvements in the study area.
- Identify and develop alternatives that meet the identified needs and consider community goals.
- Evaluate alternatives and eliminate unreasonable alternatives.
- Carry forward a smaller number of alternatives for further consideration in future planning and/or project development, including NEPA environmental reviews.
- Document the study process.

This PEL Study Report is prepared for the ProPEL US 31 North study.

1.2. PROPEL US 31 NORTH STUDY AREA

The ProPEL US 31 North study area is approximately 27 miles long, extending from County Road (CR) 300 North, just south of the Eel River in Miami County, to CR 700 North, just south of the Fulton/Marshall County line, as shown in Figure 2. Land use within the study area is predominantly agricultural with residential and commercial properties, including those supporting agricultural uses, and community facilities interspersed throughout. Rochester is the county seat of Fulton County and is located directly adjacent to US 31 along the ProPEL US 31 North study corridor.

1.3. INDOT STUDY TEAM

The ProPEL US 31 North study team included subject matter experts from several different INDOT groups, including Major Projects, Traffic Engineering, Environmental Services, and Technical Planning.

1.4. FHWA COORDINATION

The ProPEL US 31 North study team coordinated with the Federal Highway Administration (FHWA) on a regular basis throughout the study. Coordination included monthly meetings with FHWA to discuss study progress, recap activities, discuss technical approaches, and address any potential questions or concerns identified by FHWA. FHWA also reviewed and commented on the following technical reports developed during the study:

- *ProPEL US 31 North Final Environmental Constraints Report*
- *ProPEL US 31 North Final Purpose and Need Report*
- *ProPEL US 31 North Final Universe of Alternatives (Level 1) Screening Report*
- *ProPEL US 31 North Final Level 2 Screening Report*
- *ProPEL US 31 North Final Level 3 Screening Report*

1.5. PEL STUDY PROCESS FRAMEWORK

The ProPEL US 31 North study included four distinct steps, which are identified below along with a summary of work tasks included in each step:

- 1. Vision & Scoping / Data Collection**
 - Identify stakeholders and develop a plan to engage them in the study.
 - Review corridor history and study area context.
 - Identify baseline environmental conditions.
 - Identify baseline transportation conditions.
- 2. Purpose and Need Statement & Study Area Goals**
 - Identify the transportation needs.
 - Identify community goals.
- 3. Alternatives Development and Evaluation**
 - Develop performance measures and screening criteria to evaluate alternatives.
 - Develop a range of alternatives.
 - Evaluate alternatives in terms of ability to meet purpose and need and practicality (Level 1 screening).
 - Develop and evaluate intersection alternatives in terms of ability to meet purpose and need, benefits, costs, and impacts (Level 2 screening).
 - Develop and evaluate Improvement Packages in terms of benefits, costs, and impacts (Level 3 screening).
 - Document the evaluation process described above.
- 4. PEL Study Documentation**
 - Prepare and distribute the study report to document the process.



1.6. PLANNING CONTEXT

1.6.1. PEL PROCESS AUTHORITY

The ProPEL US 31 study was conducted in accordance with the regulations found at 23 CFR Part 450 (i.e., the Statewide and Metropolitan Planning Regulations). The ProPEL US 31 North study process was intentionally structured to meet these requirements. See Table 1 for further information regarding the requirements and where they are addressed in the PEL study report.

Table 1 – PEL Study Requirements and Relevant PEL Study Sections

Requirement	Addressed by PEL Study?	How addressed?	Where to find further information?
1. Involvement of interested state, local, tribal, and federal agencies	YES	<ul style="list-style-type: none"> Resource agency and tribal coordination meetings held at multiple points during study. Draft technical reports distributed via email for agency and tribal review in advance of coordination meetings. 	<ul style="list-style-type: none"> Section 1.6.4 Section 2.6 Section 3.5 Section 4.2 Section 4.3 Section 4.4 Section 5
2. Public review	YES	<ul style="list-style-type: none"> Draft technical reports, including purpose & need and alternatives screening reports published for public review and comment. Extensive public involvement and stakeholder coordination efforts throughout study to keep study stakeholders informed and to discuss their relevant questions and concerns. 	<ul style="list-style-type: none"> Section 2.6 Section 3.5 Section 4.2 Section 4.3 Section 4.4 Section 5

Requirement	Addressed by PEL Study?	How addressed?	Where to find further information?
3. Reasonable opportunity to comment during the development of the planning study	YES	<ul style="list-style-type: none"> A robust public involvement program was implemented during the study. These efforts included eblasts, social media platforms, Community Office Hours events, attendance at local community fairs and festivals, Stakeholder Advisory Committee (SAC) meetings, individual stakeholder meetings, as well as in-person and virtual public meetings. A minimum 30-day comment period was provided on all draft technical reports published for public review and comment. Draft technical reports published in electronic and hard copy format. Hard copies were placed at public venues within or near the study area during the public comment periods. Individual responses to public comments were provided as part of the alternatives development and screening reports. 	<ul style="list-style-type: none"> Section 2.6 Section 5
4. Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document (future step)	YES	<ul style="list-style-type: none"> All planning analyses and relevant decisions published in multiple technical reports and included in PEL study appendices as supporting documentation. These reports were available on the study website, as well as at multiple locations within or near the study area. 	<ul style="list-style-type: none"> Section 2 Section 4 Section 5 Section 6
5. Review of the FHWA	YES	<ul style="list-style-type: none"> Regular coordination meetings held with FHWA during the duration of the study. Draft technical reports provided to FHWA for review and comment (see Section 1.4). Updates made to the technical reports to address FHWA review comments, including responses to all FHWA comments. 	<ul style="list-style-type: none"> Section 1.4 Section 5.2

ProPEL US 31 North relied on information and data from current and previous planning efforts with the intention of integrating any future projects resulting from the study into the statewide transportation planning process.

1.6.2. STUDY AREA PLANNING CONTEXT

As one of the first steps in the study, the study team collected and reviewed previously completed land use plans and transportation plans that related to the study area (see Table 2). The purpose of this effort was to:

- Establish a planning context for the corridor.
- Provide background for creating a public and stakeholder outreach process.
- Support the development of the study area purpose and need statement.
- Inform the development of study area goals.
- Assist with the early phases of the alternatives development and evaluation.

Table 2 – Previously Completed Studies Reviewed by the ProPEL US 31 North Study Team

Study Name	Potentially Relevant Information			
	Corridor History & Background	Purpose & Need Info	Potential Alternatives Info	Environmental Info
1. INDOT Long Range Transportation Plan: 2018-2045 Future Transportation Needs Report (2019)	X	X	X	
2. Indiana Department of Transportation Statewide Transportation Improvement Program (STIP) 2022-2026	X	X	X	
3. Indiana Governor’s Public Health Commission Report (2022)	X	X		
4. Abbreviated Engineer’s Report for US 31 Access Control Project in Marshall and Fulton Counties (2022)		X	X	X
5. Engineers Report for US 31 at Southway Intersection Improvements in Fulton County (2020)		X	X	X
6. Final Engineers Report for US 31 Intersection Improvements in Miami County, IN (2020)		X	X	X
7. Indiana Multimodal Freight Plan Update 2018	X	X	X	
8. Fulton County Comprehensive Plan (2022)	X	X	X	X
9. Miami County Comprehensive Plan (2015)	X	X	X	X
10. Fulton County Transportation Study: US 31 Limited Access Highway (2015)	X	X	X	X
11. US-31 Corridor from SR 38 in Hamilton County to US-30 in Marshall County (2018)	X	X	X	X
12. North Central Indiana Planning Council (NCIRPC): Regional Economic Development Plan (2017)	X	X		
13. North Central Indiana – Regional Development (READI) Plan (2021)	X			
14. US 31 Corridor Economic Impact Analysis (2015)	X	X		
15. US 31: Indy to South Bend Tolling Feasibility Study (1999)	X	X	X	X
16. US 31: Indianapolis to South Bend MIS (1998)	X	X	X	X
17. US 31 Coalition Incident Report (2021)	X	X		
18. City of Rochester Park and Recreation Master Plan (2008-2012)	X		X	X

1.6.3. REGIONAL AND STATEWIDE TRANSPORTATION PLANS

Regional Transportation Plans

The US 31 ProPEL North study area does not fall within any metropolitan planning organization (MPO) jurisdiction and there are no other regional transportation planning entities within the study area.

Long-Range Transportation Plan

INDOT's Long-Range Transportation Plan (LRTP) (2018-2045 Transportation Needs Report) was adopted in June 2019. This plan is not project-specific, rather it identifies priorities over the next 30 years. The LRTP identifies goals to guide improvements to Indiana's transportation system. These goals are safe and secure travel, system preservation, economic vitality, multimodal mobility, environmental responsibility, new technology, and strategic policy actions. The LRTP identifies potential improvements to US 31 from SR 38 in Hamilton County to south of Kokomo and from Kokomo north to US 30. The US 31 corridor is identified as a major corridor in the LRTP because it is critical to mobility and economic activity in Indiana.²

Statewide Transportation Improvement Program

INDOT's Statewide Transportation Improvement Program (STIP) is a planning document that lists all projects to be financed in whole or in part with federal funds as well as all state-funded projects that are regionally significant.

The STIP is used in the ProPEL US 31 North study to define the future existing roadway network. Projects listed in the STIP are expected to be completed within five years; and therefore, the study assumes they will be in place as part of the future conditions analysis.

The STIP was reviewed early in the study process. At that time, the STIP document covered fiscal years 2022 through 2026 and contained eight projects within the study corridor. The current STIP, covering fiscal years 2024 through 2028 included five projects.³ All of these projects are summarized in Table 3.

² At the time of this report, INDOT is in the process of updating its Long-Range Transportation Plan. INDOT Technical Planning, which is leading the LRTP updates, was part of the ProPEL US 31 South study team.

³ At the time of this report, a draft STIP covering fiscal years 2026–2030 has been posted online and may include additional programmed projects not reflected in this planning study.

Table 3 – Summary of STIP Projects within the ProPEL US 31 North Study Corridor

Contract No. / Des No.	Construction Funding Year	Location	Work Type
2022-2026 STIP			
43281 / 2001787	2025	US 31 at nine various locations between reference posts 177.52 + 196.15	Small structure and drain construction
41640 / 2000801	2023	US 31 over Unnamed Tributary (UNT) to Mills Ditch, located 3.82 miles north of SR 16	Small structure replacement
43902 / 2100783	2026	US 31 over UNT to Rain Creek	Small structure pipe lining
43902 / 2100819	2026	US 31 over UNT to Mill Creek, located 3.70 miles south of the SR 14 and SR 25 intersection	Small structure pipe lining
42438 / 2000612	2024	SR 14, from SR 17 to US 31	Pavement overlay
42503 / 2001025	2022	US 31 bridge over the Tippecanoe River	Bridge Deck Sealing
40602 / 1700034	2023	US 31, located 3.15 miles south of SR 110	Small structure pipe lining
43838 / 2100943	2023	US 31, located 1.60 miles south of SR 110	Small structure maintenance and repair
2024-2028 STIP			
42438 / 2000612	2026	SR 14 at Collins Ditch, located 3.57 miles east of SR 17	HMA Overlay, Preventive Maintenance
43902 / 2100819	2026	US 31 over UNT to Mill Creek, located 3.70 miles south of the SR 14 and SR 25 intersection	Small structure pipe lining
45556 / 2301620	2028	Old US 31 North, from Fulton County Bridge #50 to SR 110	HMA Overlay, Structural
45601 / 2400066	2028	SR 14, from US 31 to 1.33 miles east of SR 25	ADA Sidewalk Ramp Construction
43281 / 2001787	2025	US 31 at nine various locations between reference posts 177.52 + 196.15	Small structure and drain construction

There is currently one programmed INDOT project that is located within the US 31 North PEL study area that is advancing through project development independent of the PEL study. The project will provide a new overpass at CR 700 North (Des No. 2200484). This project is included in the INDOT 2024-2028 STIP (right-of-way [ROW] funds only) and is planned for construction in 2028. Some other previously programmed projects located within the US 31 North PEL study area were postponed pending the conclusion of the PEL study. However, due to previously identified safety concerns at CR 700 North, this project was determined to be individually important enough to continue design and development independent of the PEL study. Because this project at CR 700 North is already programmed, the PEL study did not analyze the CR 700 North intersection for potential improvements. The programmed project was considered an existing condition for the ProPEL US 31 North study. Additionally, the study will not preclude the scope of the programmed projects as they are designed and constructed.

Several programmed projects listed in the STIP address short-term infrastructure condition needs. The ProPEL US 31 North study does not include a detailed analysis of transportation asset conditions. That assessment will

take place as part of future project scoping to develop a more detailed scope of work and budget prior to identifying funding for inclusion in the STIP.

Any recommendations from the ProPEL US 31 North study that move forward into project development will be included in the STIP once INDOT identifies funding.

1.6.4. COORDINATION WITH LOCAL PLANNING AGENCIES

Regular coordination with the local transportation and planning agencies occurred throughout the PEL study. These agencies, which participated as members of the SAC, included:

- Fulton County Area Planning & Highway Departments
- Miami County Planning & Highway Departments
- Northwest Indiana Regional Planning Commission

See Section 5 for further details on the coordination completed with the SAC members.

2. PURPOSE AND NEED

2.1. INTRODUCTION

The purpose and need statement establishes “why” a study or project is being proposed and sets the foundation for alternatives development and evaluation. The statement identifies specific transportation problems (needs) to be addressed and describes the specific desired outcomes (purposes). The purpose and need statement helps determine a reasonable range of alternatives to move forward. Potential alternatives are measured against the purpose and need statement and alternatives that are determined to not meet the purpose and need are eliminated from further consideration. Additionally, goals, which are desirable, but not required, can guide the development and screening of potential alternatives alongside other factors, such as transportation performance, environmental impacts, benefits, and cost.

The information contained in this section is summarized from the following documents, which are included as appendices to the PEL study report:

- Appendix B: *ProPEL US 31 North Final Environmental Constraints Report*;
- Appendix C: *ProPEL US 31 North Final Existing Transportation Conditions Report*;
- Appendix D *ProPEL US 31 North Final Purpose and Need Report*;
- Appendix H: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #1 (RASPI #1)*; and
- Appendix I: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #2 (RASPI #2)*.

2.2. CORRIDOR VISION

The following vision⁴ was established for the US 31 corridor during development of the study area purpose and need statement:

CORRIDOR VISION

The US 31 corridor will **serve local, regional, and national** travelers by **balancing mobility and access** considerations in a way that:

- Enhances **safety** for all users,
- Provides **transportation solutions for all**, and
- Complements **local community goals and objectives**, including maintaining the character of the study area.



The corridor vision, which was collaboratively developed for both the ProPEL US 31 North and US 31 South studies, is separate from and does not take the place of the purpose and need statement.

During the Level 3 screening process, INDOT supplemented the corridor vision based on the analysis completed throughout the study. More specifically, INDOT identified a long-term vision of upgrading US 31 in the study area to a free-flow facility, which is a road without traffic signals, stop signs, or yield signs for mainline traffic. There are varying types of free-flow facilities, ranging from freeways – which have full control of access – to free-flow facilities that have no or partial control of access. US 31 in the ProPEL US 31 North study area already meets this vision and, as described in Section 4, all alternative packages maintained this condition. At the same time, the study identified the need to improve safety and mobility in the study corridor. The alternatives considered in this study would address those needs to varying levels; however, there are tradeoffs to consider and uncertainties that would impact the implementation timeline.

Tradeoffs to consider include:

- Higher costs;
- Higher community and environmental impact; and
- Potentially severe impacts to local communities and businesses due to the loss of access to/from US 31, as well as reduced mobility across it.

Uncertainties impacting the implementation timeline include:

- Policy decisions of elected officials and agency leaders;
- Statewide transportation priorities; and
- Transportation funding.

Given these tradeoffs and uncertainties, the ProPEL US 31 North study considered a range of improvements that provide INDOT with the flexibility needed to incrementally address the study area's needs through a series of improvements over time. The improvements include more immediate, lower-cost improvements, as well as higher-cost improvements that require funding beyond what is currently available.

Due to the identified uncertainties, the study concludes that implementation of these improvements on US 31 in the study area would likely extend beyond the study's planning horizon of 2045. In the interim, the study

⁴ The corridor vision was refined based on the passage of several federal and state Executive Orders (EOS) as well as one USDOT order. See **Section 3.2** for additional information.

provides INDOT with a flexible guide to incrementally upgrade US 31 in the study area to address the identified transportation needs.

2.3. TRANSPORTATION NEEDS AND STUDY PURPOSES

Figure 3 below summarizes the transportation needs and purposes identified by the study team for the ProPEL US 31 North study area.

Figure 3 – Summary of Purpose and Need for the ProPEL US 31 North Study



2.4. PERFORMANCE MEASURES

Performance measures are quantifiable criteria used to measure how well an alternative functions with respect to planning objectives. Based on the study purposes (see Section 2.3), the study team identified the performance measures shown in Figure 4 to guide the development and evaluation of alternatives during the PEL study.

Figure 4 – Performance Measures for the ProPEL US 31 North Study








PURPOSES	PERFORMANCE MEASURES
Improve roadway safety in the study corridor for all users	Reduce conflict points, particularly at intersections on US 31 with elevated crash indices Identify and evaluate the number and type of potential collision points along the study corridor with respect to exposure (i.e., the number, type, and speed of different vehicles in an intersection). Particularly prioritize reducing high-speed conflict points for angle crashes at intersections.
	Apply crash reduction measures to improve safety Identify safety countermeasures that address common crash types. Evaluate potential changes and locations where these countermeasures can create a positive impact on overall crash rates and/or severity.
	Improve multimodal safety Identify and evaluate safety countermeasures targeted to non-motorized users and special-use vehicles.
	Prioritize and consolidate access points on US 31 Address access control issues for number and spacing of access points and meet current guidance.
Meet the mobility needs of residents, businesses, and service providers in the study area	Maintain or improve east-west mobility at important crossing locations Evaluate mobility across the study corridor, including safety, access, traffic operations (delay), and traffic volumes, particularly for school and emergency services routes.
	Maintain or improve accessibility to and from US 31 along important routes Evaluate mobility to and from the study corridor, including safety, access, traffic operations (delay), and traffic volumes
Enhance the efficiency and reliability of US 31 as a regional and statewide corridor	Maintain or improve free-flow operations along US 31 Support continued free-flow conditions along US 31 and prioritize not introducing delay for through movements on US 31.

2.5. STUDY AREA GOALS

Goals represent overarching outcomes that are desirable, but not specifically required since they are not measurable with respect to identified study area needs. Goals were not the sole basis for eliminating or carrying forward a solution or alternative; they were considered alongside other factors such as transportation performance, benefits, impacts, and costs. Goals identified by the study team for the ProPEL US 31 North study area are shown in Figure 5.

Figure 5 – Summary of Goals for the ProPEL US 31 North Study

STUDY GOALS

 <p>Economic Development Provide adequate transportation infrastructure to support local economies and economic development goals</p>	 <p>Transportation for All* Provide fair solutions that consider the needs of all communities, including sensitive communities</p>	 <p>Multimodal Access & Connections Accommodate non-motorized vehicles, transit, and active modes of travel in and crossing the study corridor</p>	 <p>Corridor Character Maintain the rural fit and function of the corridor</p>	 <p>Sense of Place & Visual Character Enhance US 31 as a gateway to local communities and enhance community identity</p>	 <p>Emerging Technologies Support emerging technologies and related infrastructure</p>	 <p>Fiscal & Environmental Practicality Identify fiscally responsible improvements; avoid/minimize impacts to the human and natural environment</p>
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* This goal was refined based on the issuance of Federal Executive Orders 14154, 14148, 14173, and 14281; State Executive Orders 25-49 and 25-37; and USDOT Order 2100.7.

2.6. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

Two public information meetings were held during the Vision and Scoping phase of the study. These meetings were used to solicit input from the public regarding the fit and function of the study corridor, including location-specific concerns regarding safety and/or operations. The input collected from these meetings was used to develop the corridor vision articulated in the study area purpose and need statement.

The study team published the Draft Purpose and Need Report for public and agency review on June 5, 2023, and the public comment period extended through July 31, 2023. Additionally, the report was distributed to federal, state, and local resources agencies as well as the tribal nations for review and comment. One in-person public information meeting was held within the study area during the public comment period. A virtual public information meeting, which included the meeting materials and a recording of the presentation from the in-person meetings, was made available online at the ProPEL US 31 website the following day. A virtual resource agency and cultural resources stakeholder coordination meeting was held on August 10, 2023. Comments from resource agencies and cultural resources stakeholders were requested on or before August 24, 2023. After considering the comments received from the public and agencies, the Final Purpose and Need Report was published in December 2023 with a revision in March 2024.

Please see Section 5 for further information regarding public involvement and agency coordination efforts related to purpose and need development.

3. EXISTING ENVIRONMENT

3.1. INTRODUCTION

This section summarizes likely environmental resources within the ProPEL US 31 North study area. An environmental constraints report was prepared early in the study to identify key resources, avoid fatal flaws, and account for sensitive environmental areas during alternatives development and evaluation. To identify social, economic, and environmental constraints, data was gathered through online databases, aerial imagery, Google Maps, geographic information system (GIS) analysis, limited field reviews, and coordination with local planning agencies. Environmental resources were generally identified within a 0.5-mile buffer from the corridor centerline; exceptions to the half-mile study area included airports (buffer of 20,000 feet or 3.8 miles), demographic data (buffer of five miles); and noise sensitive areas (buffer of 500 feet from the edge of travel lanes per INDOT policy).

The information contained in this section is summarized from the *ProPEL US 31 North Final Environmental Constraints Report* (Appendix B). Additional details and mapping of environmental resources can be found in Appendix B. All resources identified in the report will be revisited during subsequent NEPA reviews for any future project(s) that may result from the ProPEL US 31 North study.

3.2. LAND USE AND SOCIOECONOMIC RESOURCES

Socioeconomic data outlines trends and projections related to population, households, and employment within the study area. This data serves as the baseline for analyzing and recommending future transportation improvements. It also includes information about current and future land use to help show where growth and development are expected.

While total population in the state of Indiana has grown and will continue to do so, total population in the study area jurisdictions has declined since 2000, a trend which is projected to continue. Between 2000 and 2020, the population of Miami and Fulton Counties declined by 1.12% and 2.20%, respectively. Looking ahead, forecasts project that Miami County will see a population decline of approximately 18.59% from 2020 to 2050, while Fulton County is expected to experience a decline of 8.55%.

Since publication of the environmental constraints report, the socioeconomic impact analysis was updated to consider the issuance of several federal and state Executive Orders (EOs), as well as one US Department of Transportation (USDOT) order, including:

- Federal EOs: EO 14154, EO 14148, EO 14173, and EO 14281;
- State EOs: EO 25-49 and EO 25-37; and
- USDOT Order 2100.7.

Land within the ProPEL US 31 North study area is predominantly used for agriculture. Areas designated as residential, industrial, or commercial in the more rural areas are isolated by agriculture and are primarily associated with supporting farming operations and services. Larger commercial uses are interspersed throughout the study area adjacent to or directly accessing US 31 and include, but are not limited to, gas stations and truck stops, car part manufacturing, car dealerships, timber/hauling and/or agricultural services, a winery/orchard, and retail shopping. Other regional facilities, such as natural preservation areas, recreation areas, trails, and community attractions, are located in both counties, as are community/institutional facilities. The portion of the corridor adjacent to the City of Rochester (from approximately CR 150 South to West Monticello Road) includes larger, more contiguous residential developments, which consist of primarily single-family homes, multi-family structures, and a mobile home park.

Community facilities in the study area include schools, places of worship, cemeteries, public services, and recreational facilities, with a higher density in and around the City of Rochester. Public services rely on US 31 for efficient transportation and accessibility, and there are several fire stations, hospitals, and law enforcement agencies serving the area. Recreational facilities include nature preserves, parks, fairgrounds, and the Nickel Plate Trail which parallels US 31 through a portion of the corridor.

3.3. NATURAL RESOURCES

Data and information on surface waters (above-ground bodies of water including streams, rivers, lakes, wetlands, reservoirs, and creeks), regulatory floodways, soil types, and habitat types and the species that live in them provide context of the natural environment within the study area.

Aquatic resources within the study area include wetlands and surface waters such as streams, rivers, ponds, and lakes. These resources are protected under Section 404 of the Clean Water Act (CWA) and Executive Order 11990, which addresses wetland protection. Under Section 404, impacts to jurisdictional waters of the United States—including wetlands and open waters—must be avoided, minimized, or mitigated to prevent a net loss of their functions and values. Additionally, non-jurisdictional waters may still require compensatory mitigation depending on project scope and funding. Detailed field surveys to map and evaluate the features listed below and other potentially unmapped streams will be required during subsequent NEPA reviews for any future project(s) that may result from the ProPEL US 31 North study.

The following summarizes the natural resources present in the study area:

- Approximately 880 acres of wetlands, including palustrine forested, scrub shrub, emergent, and ponds, were identified in the study area.

- Eighty-one stream segments are mapped within the study area. Perennial streams cross US 31 at 13 locations; the largest of these are the Eel River and Tippecanoe River.
- Approximately 520 acres of floodplains (including 21 acres of floodway) are located in the study area, primarily associated with Eel River, Tippecanoe River, and Lake Manitou.

Based on coordination with the Fulton County Management Agency and the Miami County Planning and Zoning Department, there are no Flood Hazard Mitigation Grant Program lands located within the study area.

The study area is within range of the federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*), as well as the proposed endangered tricolored bat (*Perimyotis subflavus*). The official species list generated from the US Fish & Wildlife Service's (USFWS's) IPaC tool indicated that two federally threatened mussels, rabbitsfoot (*Quadrula cylindrica cylindrica*) and round hickorynut (*Obovaria subrotunda*), and one proposed endangered mussel, salamander mussel (*Simpsonaias ambigua*), are present within the study area. One candidate species, the monarch butterfly (*Danaus plexippus*), was also identified. Since finalization of the environmental constraints report, the USFWS proposed listing the monarch butterfly as a federally threatened species.

3.4. CULTURAL RESOURCES

Federal law requires agencies to evaluate the potential impacts of their actions on cultural resources before granting approval. This legislation establishes a regulatory framework for identifying, evaluating, protecting, and managing cultural resources, which include both archaeological sites and historic properties such as buildings, structures, and other elements of the built environment.

Thirteen "Notable" and "Outstanding" resources, and one property listed on the National Register of Historic Places (NRHP) were identified within the study area. The NRHP-listed Leedy Barn is located adjacent to US 31 and is part of the Fulton County Historic Society Museum facility.

In addition to the resources identified above, available information was obtained on Centennial Farms. Centennial farms are listed by county, without specific location information. Fulton County has 52 Centennial Farms and Miami County has 86 Centennial Farms.

Numerous archaeological resource sites were identified throughout the study area; however, in accordance with 54 USC 307103 and Indiana Code 14-21-1, which provides protection for archaeological sites and burial sites, information related to such resources is not publicly disclosed in this report.

3.5. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

The study team published the *Draft Environmental Constraints Report* to the study website on in June 2023. Additionally, the report was distributed to federal, state, and local resources agencies for review and comment. A virtual resource agency and cultural resources stakeholder coordination meeting was held on August 10, 2023. Comments from resource agencies and cultural resources stakeholders were requested on or before September 29, 2023. After considering the comments received, the *Final Environmental Constraints Report* was published in November 2023.

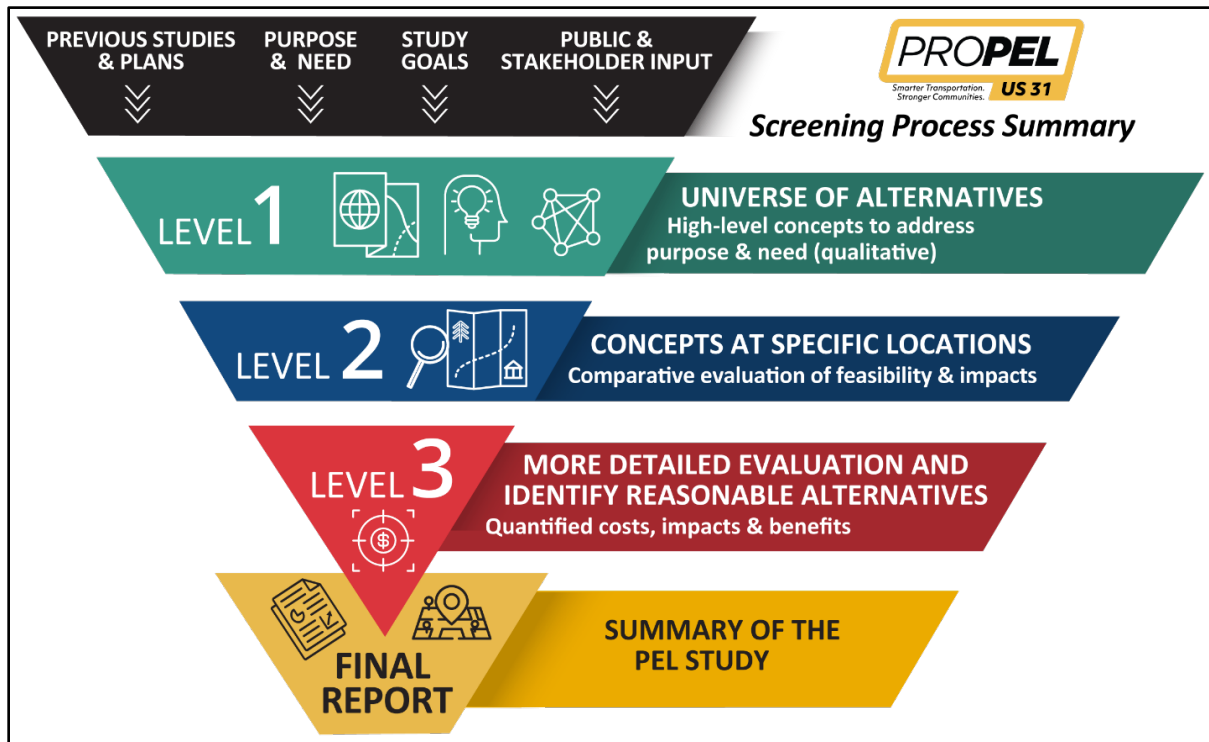
Please see Section 5 for further information regarding public involvement and agency coordination efforts related to the development of the environmental constraints report.

4. ALTERNATIVES DEVELOPMENT AND EVALUATION

4.1. INTRODUCTION

The ProPEL US 31 North study used a three-level screening process, depicted in Figure 6, to identify reasonable alternatives that address the identified transportation needs and goals of the study area.

Figure 6 – ProPEL US 31 North Alternatives Development and Screening Process



The following sub-sections summarize each screening report, including alternatives considered, evaluation process, results, as well as the associated public involvement and agency coordination completed with each screening step. The information contained in these sub-sections is summarized from the following documents, which are included as appendices to the PEL study report:

- Appendix E: *ProPEL US 31 North Final Universe of Alternatives (Level 1) Screening Report*;
- Appendix F: *ProPEL US 31 North Final Level 2 Screening Report*;
- Appendix G: *ProPEL US 31 North Final Level 3 Screening Report*;
- Appendix H: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #1*;
- Appendix I: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #2*;
- Appendix J: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #3*;
- and
- Appendix K: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #3 (Addendum #1)*.

4.2. SUMMARY OF LEVEL 1 SCREENING

The purpose of the Universe of Alternatives (Level 1) screening was to identify concepts meeting the purpose and need for the study area. Concepts that met the purpose and need were carried forward and further evaluated in the Level 2 screening process. A qualitative screening process was used to evaluate the improvement concepts contained in the Level 1 screening. This process focused on the ability of each concept to meet the purpose and need for the study area, as well as an assessment of the practicality of each concept. Concepts that did not meet one or more study area needs and/or were not practical were eliminated from further consideration and were not evaluated in the Level 2 screening process.

The Level 1 screening considered a set of 55 transportation improvement concepts for the ProPEL US 31 North study area. The concepts included:

- The No-Build Alternative;
- Ten corridor improvement concepts;
- Two off-corridor improvement concepts;
- Nine intersection improvement concepts;
- Four interchange improvement concepts;
- Ten spot improvement concepts;
- Five traffic systems management and operations (TSMO) improvement concepts;
- Eight policy considerations; and
- Six transit and non-motorized improvement concepts.

The Level 1 screening resulted in the following:

- Four Primary Concepts that met a majority of transportation needs and were carried forward to the Level 2 screening for evaluation as stand-alone alternatives.
- Thirteen Complementary Concepts that met some transportation needs but could not function as a stand-alone alternative. These concepts were carried forward to the Level 2 screening for location-specific application as part of a Primary Concept.
- Seven Design Elements that did not meet any transportation needs but were considered practical as they provided some benefit to the study area. These concepts were carried forward to the Level 2 screening for incorporation where applicable.
- The No-Build alternative met one transportation need, but it would not address the substantive safety issues identified throughout the study area. The No-Build alternative was advanced to the Level 2 screening to serve as a baseline for comparison to build alternatives.

Table 4 lists the practical concepts advanced from the Level 1 screening process.

Table 4 – ProPEL US 31 North Level 1 Screening Results

Primary Concepts (5 Concepts)	Complementary Concepts (13 Concepts)	Design Elements (7 Concepts)
No-Build Freeway (Free-Flow Facility with Full Control of Access) Cross Road Overpasses / Underpass Convert to Interchange Unsignalized Improvements	Access Management Median Safety Improvements Adjacent Intersection Improvements Add or Lengthen Turn Lanes (Left or Right) Realign Skewed Intersections Add / Extend Acceleration/Deceleration Lanes Intersection Sight Distance Improvements Ramp Terminal Intersection Improvements Roadway Lighting Roadway Drainage Improvement Warning Systems Bike / Pedestrian Facilities Non-Motorized User Accommodations	Traffic Control Visibility Upgrades Pavement Marking Improvement Roadway Signage Improvements Wildlife Crossing Gateway/Corridor Treatments Speed Management Alternative Fuel / Electric Vehicle Considerations

The *Draft Universe of Alternatives (Level 1) Screening Report* for the ProPEL US 31 North study was made available for public review on November 13, 2023, and the public comment period extended through December 22, 2023. Additionally, the report was distributed to federal, state, and local resource agencies as well as the tribal nations for review and comment. After considering the comments received from the public, agencies and the tribes, the Level 1 screening report was finalized on March 27, 2024.

For further information on the Level 1 screening, including details on methodology, screening results, as well as comments received during the public comment period and responses to them, please see the *ProPEL US 31 North Final Universe of Alternatives (Level 1) Screening Report* (Appendix E). Please see Section 5 for further information regarding public involvement and agency coordination efforts related to the Universe of Alternatives (Level 1) screening.

4.3. SUMMARY OF LEVEL 2 SCREENING

The purpose of the Level 2 screening analysis was to qualitatively evaluate location-specific improvements carried forward from the Final Universe of Alternatives (Level 1) Screening Report for reasonability and potential impacts. In Level 2, the 17 potential solutions that were identified as Primary and Complementary

Concepts were qualitatively evaluated at the primary intersections in the study area. These intersections have a larger influence on roadway operations in the study area. Therefore, the intersection alternatives considered at them influence what can be constructed upstream or downstream and set the foundation for improvements between them. Thus, the Level 2 screening identified the building blocks for the Level 3 screening.

A four-step evaluation process was applied to each of the eight primary intersections within the ProPEL US 31 North study area. This process is summarized as follows:

- **Step 1** – A decision tree assessment tool was developed to identify the scale of improvement needed at each primary intersection based on safety and operational data, as well as input from both the public and stakeholders.
- **Step 2** – An operational analysis of various concepts or intersection types was completed at each primary intersection. Concepts that were expected to produce poor operating conditions were eliminated from further consideration.
- **Step 3** – An evaluation matrix was prepared for each primary intersection to assess the following attributes for all concepts advancing from Step 2:
 - Ability to meet purpose and need.
 - Social, economic, and environmental impacts.
 - Relative cost.
- **Step 4** – Concepts advancing from Step 3 were developed into intersection alternatives by preparing conceptual designs to establish a high-level estimation of the improvement limits (i.e., a footprint). These footprints were then used to assess impacts and screen out alternatives with high impacts.

The Level 2 screening identified a range of alternatives to improve operations and safety at the eight primary intersections. These alternatives were screened qualitatively based on their ability to meet study area needs, relative cost, and social, economic, and environmental impacts. Alternatives not able to substantially meet study area needs and/or with substantial environmental impacts that could not be avoided or minimized were eliminated from further consideration.

The Level 2 screening resulted in the following:

- Three intersection improvement alternatives were carried forward to the Level 3 screening for further study: Unsignalized Intersection Improvements at seven locations; Cross Road Overpass/Underpass at five locations; and Convert to Interchange at five locations.
- A freeway concept was carried forward as a Primary Concept. A freeway is one example of a free-flow facility. There are varying types of free-flow facilities, ranging from freeways – which have full control of access⁵ – to free-flow facilities that have no or partial control of access⁶ (e.g., unsignalized arterial, expressway). The Level 2 screening report indicated the potential options for facility types in the US 31 North study area would be evaluated in the Level 3 screening.

⁵ Full control of access = Connections are provided only with select public roads through interchanges. Driveway connections (residential and commercial) are not permitted.

⁶ Partial control of access = Connections are provided with public roads via interchanges and/or at-grade intersections. The number of roadway connections and/or driveway connections (residential and commercial) may be reduced in number and/or limited to right-in/right-out movements. The number of median openings may also be reduced.

- Note: A freeway may be designated an interstate if certain conditions are met; however, not all freeways are interstates. INDOT is not including or considering applying interstate design standards along the US 31 North study corridor.
- A range of the thirteen Complementary Concepts were carried forward to the Level 3 screening at the eight Primary Intersections, including: Access Management, Median Safety Improvements, Adjacent Intersection Improvements, Add or Lengthen Turn Lanes (Left or Right), Realign Skewed Intersections, Add/Extend Acceleration/Deceleration Lanes, Intersection Sight Distance Improvements, Ramp Terminal Intersection Improvements, Roadway Lighting, Roadway Drainage Improvements, Warning Systems, Bike/Pedestrian Facilities, and Non-Motorized User Accommodations. At any given Primary Intersection, anywhere from five to nine Complementary Concepts were identified to be carried forward.
- The No-Build Alternative was advanced to the Level 3 screening to serve as a baseline for comparison.

The results of the Level 2 screening are summarized in Table 5.

The *Draft Level 2 Screening Report* was published for public comment on March 27, 2024, and the public comment period extended through April 30, 2024. Additionally, the report was distributed to federal, state, and local resource agencies as well as tribal nations for review and comment. After considering the comments received from the public, agencies, and tribes, the Level 2 screening report was finalized on November 12, 2024.

For further information on the Level 2 screening, including details on methodology, screening results, as well as comments received during the public comment period and responses to them, please see the *ProPEL US 31 North Final Level 2 Screening Report* (Appendix F). Please see Section 5 for further information regarding public involvement and agency coordination efforts related to the Level 2 screening.

Table 5 – ProPEL US 31 North Level 2 Screening Results

Level 2 Alternatives		Olson Road (Fulton County)	CR 100 North/6 th Street (Fulton County)	SR 25 Interchange (Fulton County)	Old US 31/Southway (Fulton County)	CR 150 South/Wabash Avenue (Fulton County)	CR 650 South/CR 1350 North (Fulton/Miami County)	SR 16 (Miami County)	CR 550 North/Mexico Road (Miami County)
No-Build		✓	✓	✓	✓	✓	✓	✓	✓
Primary Concepts	Reduced Conflict Intersection (RCI)	✓	✓		✓	✓	✓	✓	
	Overpass	✓	✓		✓				✓
	Overpass Paired with RCI					✓			
	Interchange	✓		(existing)		✓	✓	✓	✓
	Ramp Terminal Roundabouts			✓					
Complementary Concepts	Access Management	✓	✓		✓	✓	✓		✓
	Median Safety Improvements			✓					
	Adjacent Intersection Improvements			✓		✓			
	Add or Lengthen Turn Lanes (Left or Right)	✓	✓	✓	✓	✓	✓	✓	✓
	Realign Skewed Intersections				✓	✓			
	Add / Extend Acceleration / Deceleration Lanes	✓	✓	✓	✓	✓	✓	✓	✓
	Intersection Sight Distance Improvements				✓				
	Ramp Terminal Intersection Improvements			✓					
	Roadway Lighting	✓	✓	✓	✓	✓	✓	✓	✓
	Roadway Drainage Improvements								
	Warning Systems	✓	✓		✓	✓	✓	✓	✓
	Bike / Pedestrian Facilities		✓	✓	✓	✓			
	Non-Motorized User Accommodations	✓	✓	✓	✓	✓	✓	✓	✓

✓ = Advanced to the Level 3 screening

4.4. SUMMARY OF LEVEL 3 SCREENING

The purpose of the Level 3 screening was to develop and analyze Improvement Packages for sections of the study area. These sections, called Planning Segments, considered improvements at all study area intersections as well as the roadway sections between them. The improvements considered in the Level 3 screening were identified from the Level 2 screening, previous studies, current plans, and public and stakeholder input as well as industry guidelines and solutions for safety and operations for highways like US 31.

The Level 3 screening included both qualitative and quantitative factors to enable a relative assessment of costs, benefits, and impacts to eliminate unreasonable alternatives. It also included a detailed analysis of varied access management strategies for the Planning Segments in the study area. The purpose of this analysis was to better understand relative costs, benefits, and impacts of different access management strategies along the study corridor for all users.

As discussed in Section 1, the goal of the ProPEL US 31 North study was to identify a reasonable range of alternatives; therefore, the study does not result in a single recommended alternative. The Level 3 screening evaluated a range of Improvement Packages for each Planning Segment, including some with more access control (e.g., a freeway) and some with less access control on US 31 that would maintain public access points more in line with existing conditions. The Improvement Packages considered in the Level 3 screening represent different facility types that could be applied to the US 31 South corridor.

The Level 3 screening applied a seven-step evaluation process which is summarized as follows:

- Step 1 – Define Planning Segments.** The study corridor was divided into sections called Planning Segments. This approach helped to avoid potential negative impacts from focusing only on a single intersection without analyzing the impacts the intersection improvements could have upstream and downstream within the planning segment. Planning Segments were named based on their geographic area. The Planning Segments for the US 31 North study area are depicted in Figure 7.

Figure 7 – US 31 North Planning Segments & Primary Intersections



- **Step 2 – Define Improvement Packages.** For each planning segment, comprehensive sets of intersection improvements were combined as Improvement Packages. Multiple Improvement Packages were developed for each planning segment. The following criteria were considered when forming the Improvement Packages: Influence on adjacent intersections, interchange spacing guidelines, access management principles, and improvements at secondary intersections.
- **Step 3 – Evaluate Safety and Mobility.** The safety and mobility performance of each Improvement Package was determined through a multi-step evaluation process that considered twelve different criteria. The criteria included:
 - Total number of conflict points;
 - Number of crossing conflict points;
 - Percent reduction in crossing conflict points;
 - Estimate of crossing crashes prevented over 20-year life cycle;
 - Cost-effectiveness index;
 - Average travel time along US 31;
 - Average distance between US 31 access points;
 - Average distance between US 31 crossing points;
 - East-west mobility compared to No-Build;
 - Number and type of residential driveways;
 - Number and type of commercial driveways; and
 - Number and type of field access points.
- **Step 4 – Refine Conceptual Design and Estimate Costs.** The conceptual designs from the Level 2 screening were refined during the Level 3 screening process to:
 - Consider results of the safety and mobility analysis, as well as the overall context of each Improvement Package;
 - Detail improvements at secondary intersections;
 - Avoid and minimize adverse impacts to the human and natural environment; and
 - Minimize costs.

Planning-level construction and right-of-way acquisition costs were then estimated for each of the Improvement Packages using the refined the conceptual designs.

- **Step 5 – Evaluate Environmental Resource Impacts.** Each package was analyzed against known environmental constraints within each planning segment to determine the potential impacts.
- **Step 6 – Evaluate Study Goals.** Study area goals were considered as part of the Level 3 screening using several measures of effectiveness to comparatively evaluate Improvement Packages.
- **Step 7 – Evaluate Improvement Packages.** The different measures for safety and mobility, impacts to environmental resources, and costs were collectively considered for each Improvement Package within each planning segment. Unreasonable alternatives were eliminated from further consideration.

The results of the Level 3 screening are summarized in **Figures 8-13**.

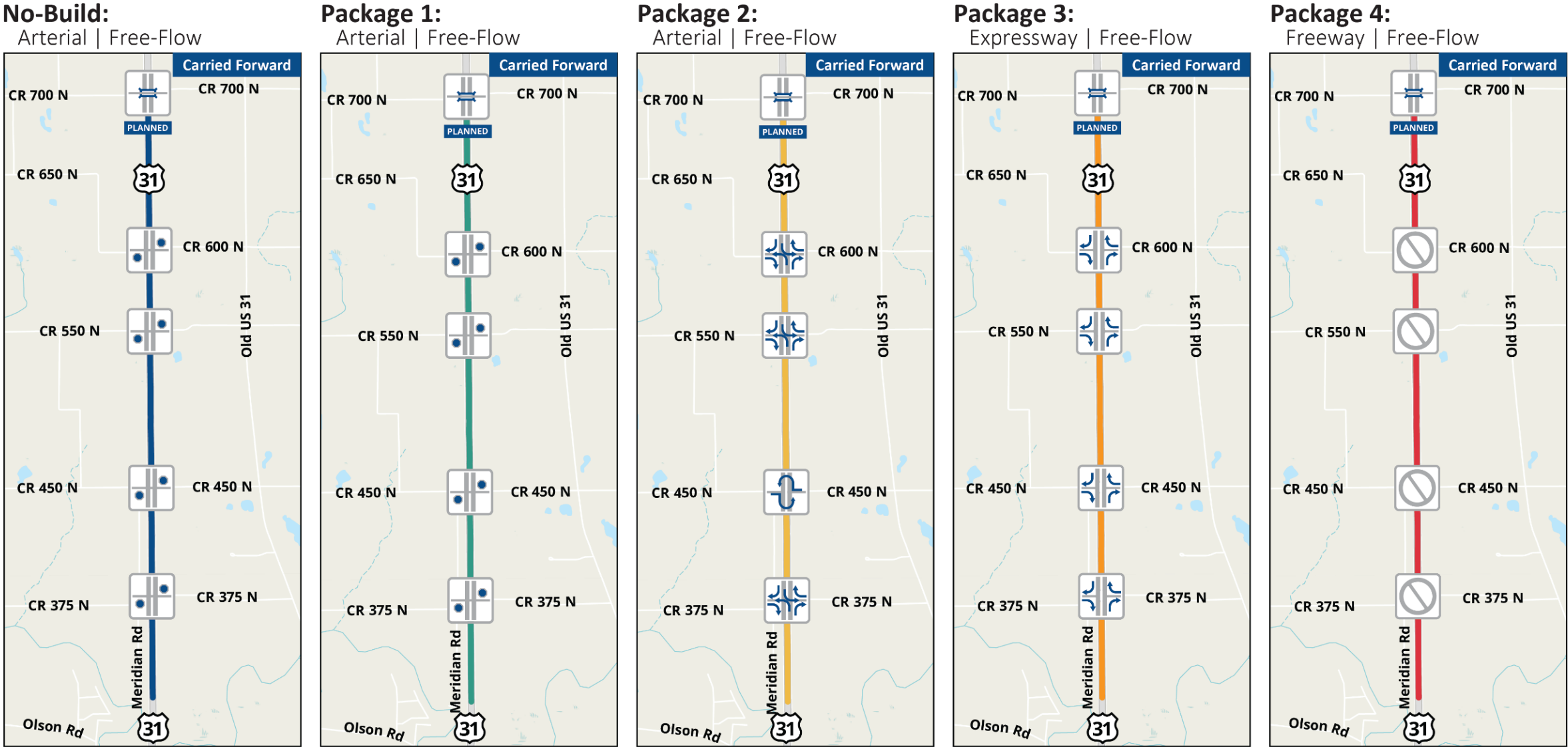
Cohesive Improvement Packages based on certain access management strategies were evaluated in the Level 3 screening to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Improvement Packages are not intended to be completely rigid and improvements from different packages could be mixed and matched in future studies.

A stated goal of the PEL process is the identification of a range of reasonable alternatives. Given the needs identified within the study area, a reasonable alternative could consist of improvements at a single intersection;

it could also consist of improvements at multiple intersections and/or the roadway sections in between them (i.e., access management). Depending on multiple factors, including statewide priorities and funding availability, improvements considered as part of this PEL study could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area.

It is possible that Improvement Packages could be mixed and matched across Planning Segments in the future. This means that access management strategies could vary throughout the study area; however, as part of that decision-making process (which may occur after this PEL study), an assessment will be completed to consider factors such as driver expectation and continuity across the Planning Segments, as well as the relationship and potential impacts upon other intersections and/or Planning Segments.

Figure 8 – Level 3 Improvement Packages – Fulton North



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

- Two-Way Stop Controlled Intersection

Reduced Conflict Intersection (Unsignalized)

Overpass

Intersection Closed

Right-In/Right-Out Intersection (RIRO)

Directional Intersection (RIRO + Left Turns from US 31)

Interchange

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

Study Recommendation: Carried Forward Eliminated

ACCESS CONTROL METHODS:

- MINIMAL ACCESS CONTROL | Driveways have full access, median openings are provided

PARTIAL ACCESS | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided

PARTIAL ACCESS | All driveways are RIRO, select median openings provided

PARTIAL ACCESS | All driveways are RIRO, no median openings

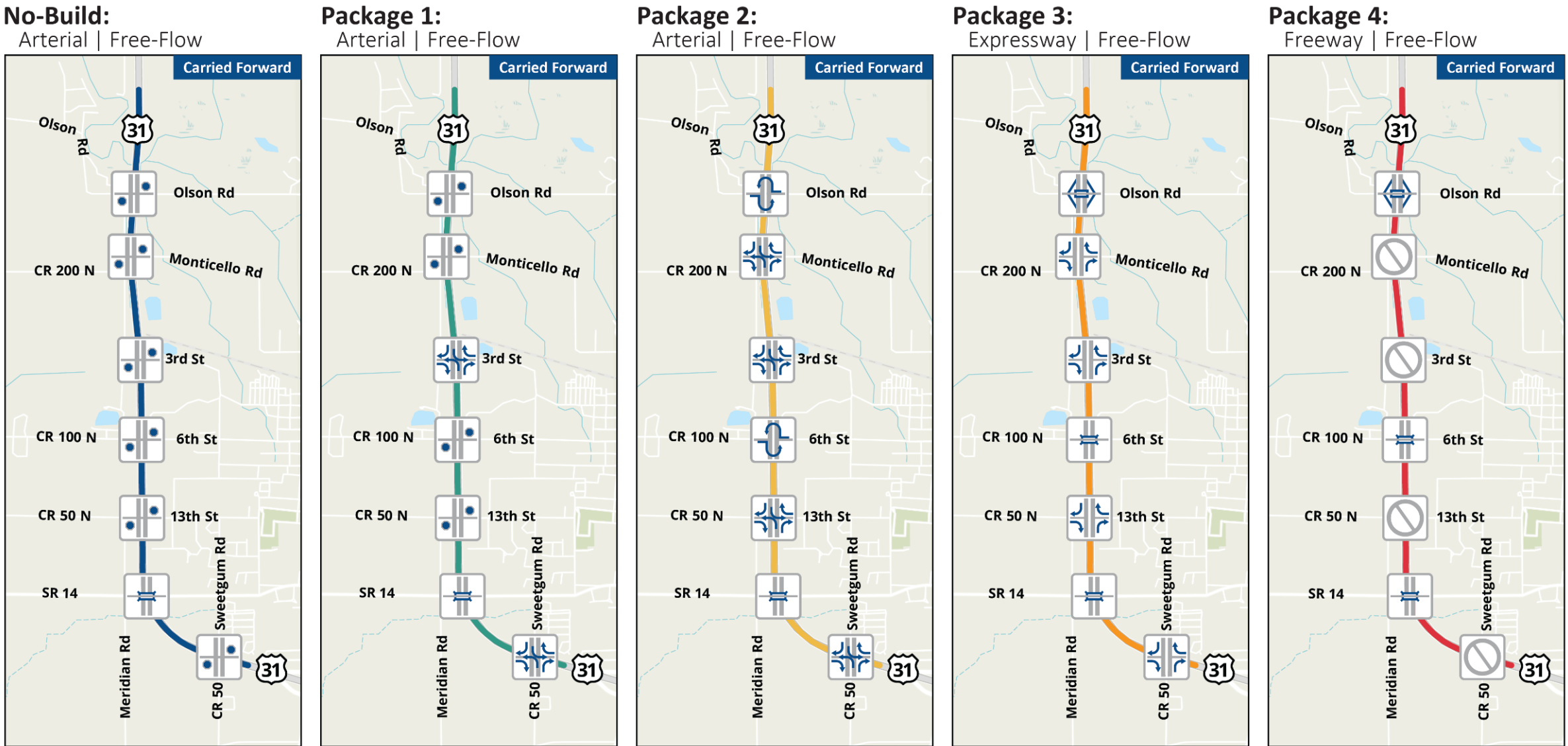
LIMITED ACCESS | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

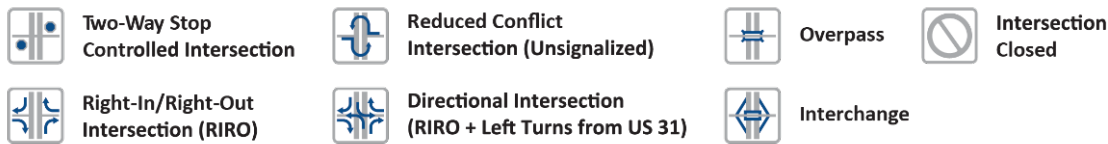


Figure 9 – Level 3 Improvement Packages – Rochester North



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:



All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

Study Recommendation: Carried Forward Eliminated

ACCESS CONTROL METHODS:

- MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- PARTIAL ACCESS** | All driveways are RIRO, no median openings
- LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

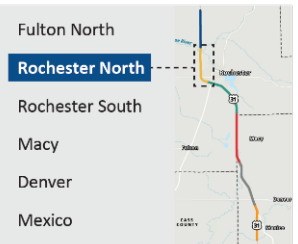
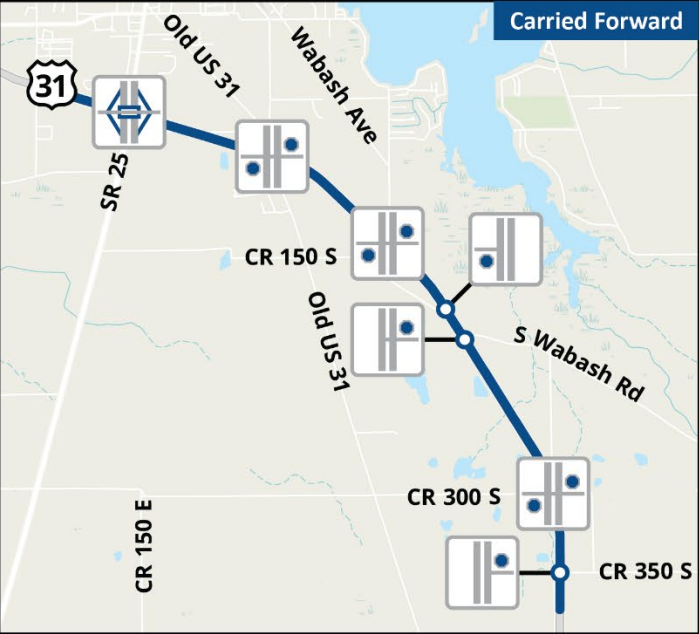
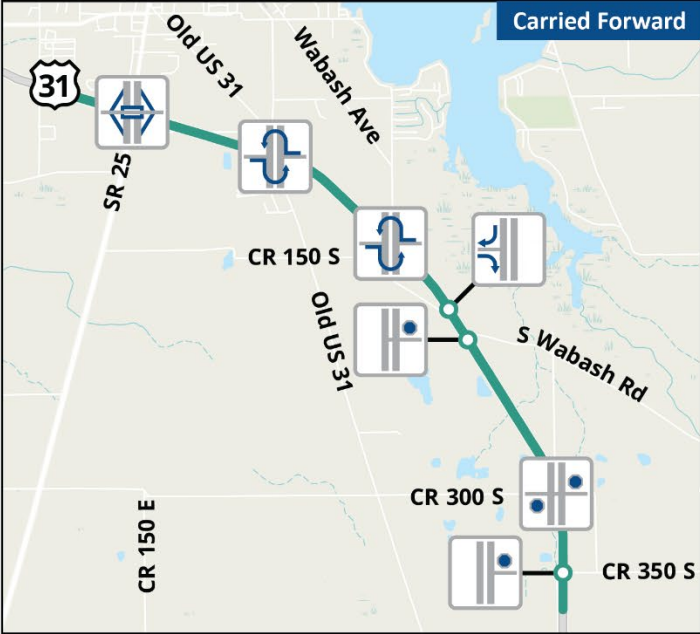


Figure 10 – Level 3 Improvement Packages – Rochester South

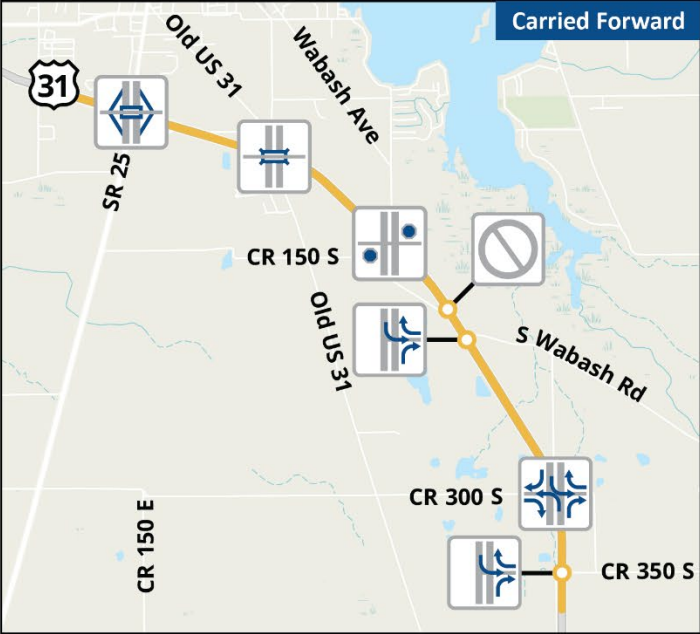
No-Build:
Arterial | Free-Flow



Package 1:
Arterial | Free-Flow



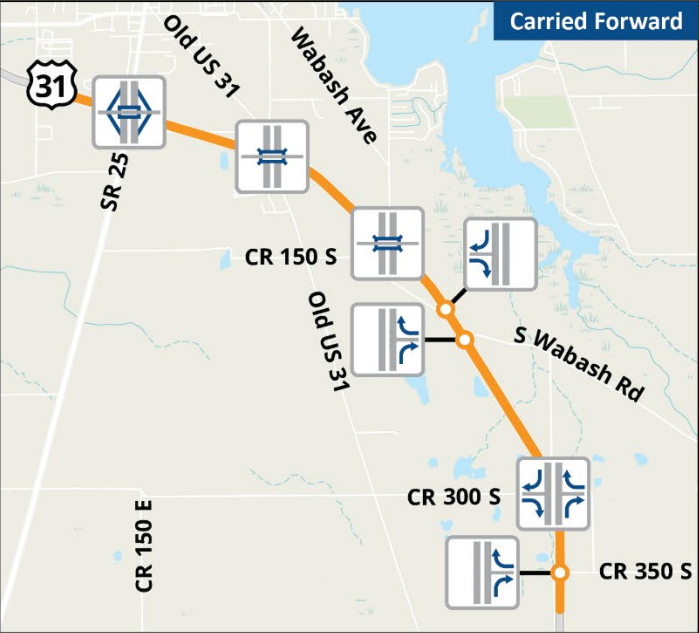
Package 2:
Arterial | Free-Flow



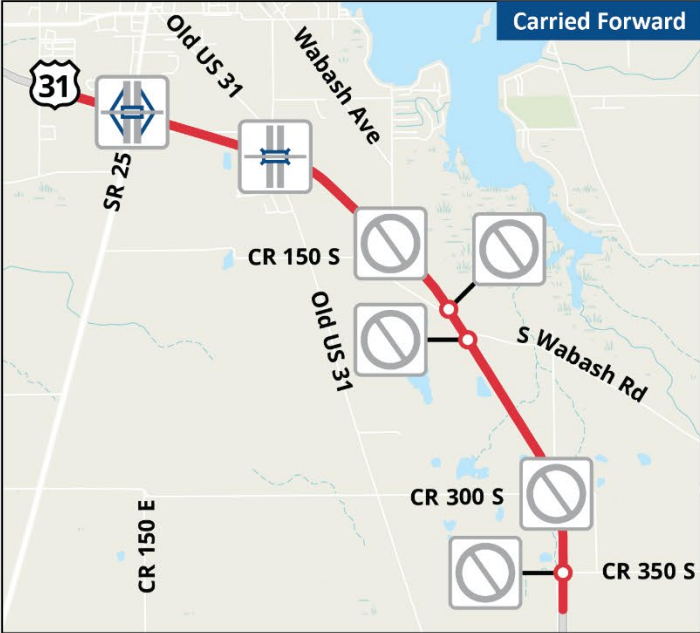
KEY MAP:



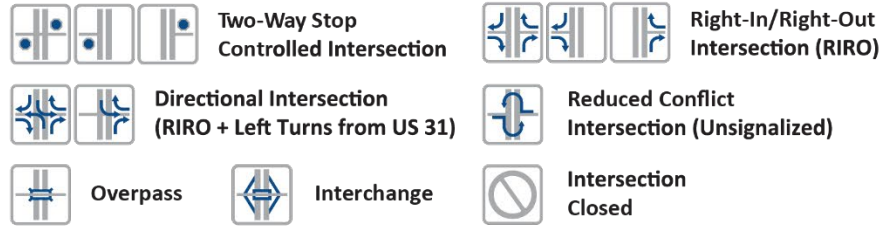
Package 3:
Expressway | Free-Flow



Package 4:
Freeway | Free-Flow



INTERSECTION TYPES:



All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

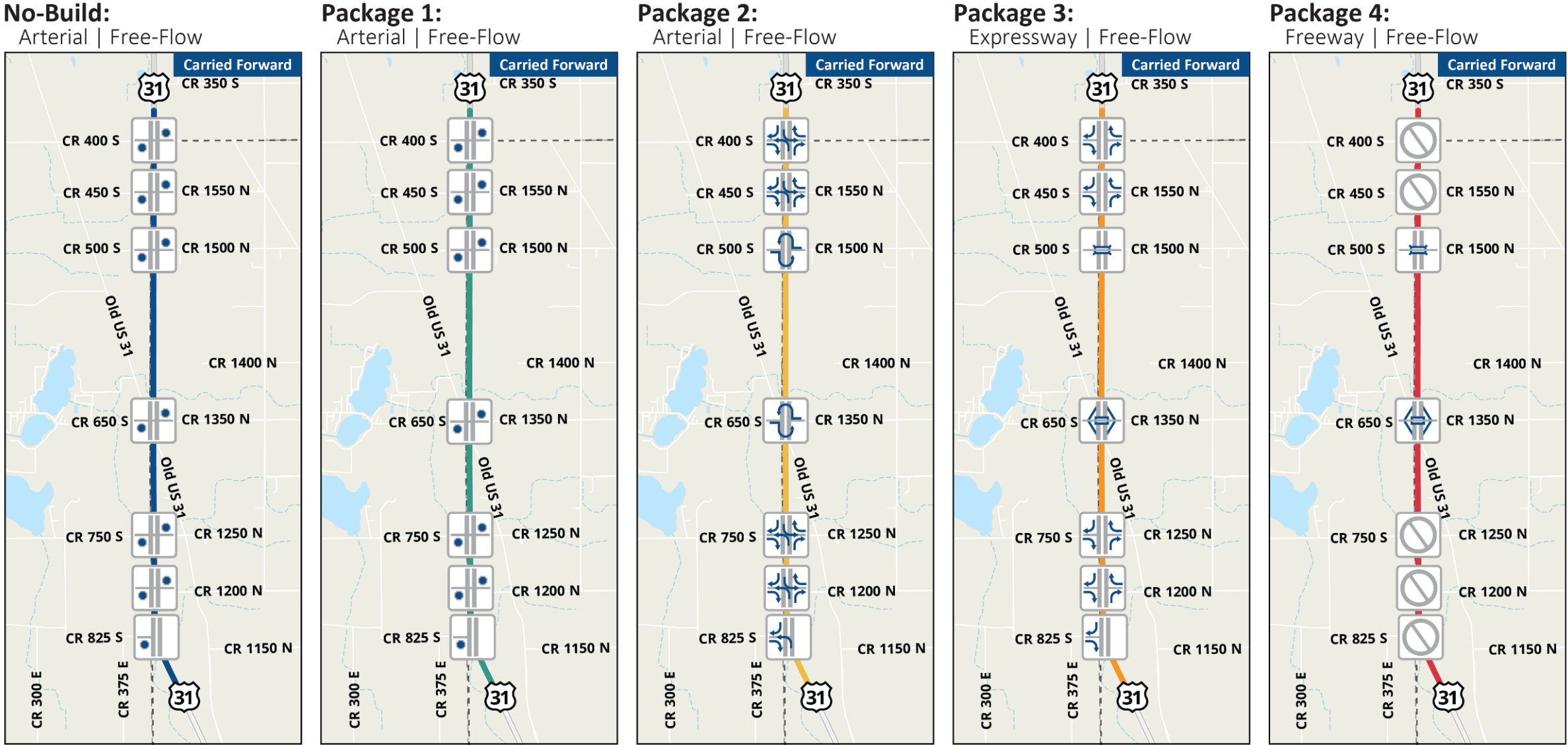
ACCESS CONTROL METHODS:

Study Recommendation: **Carried Forward** **Eliminated**

- MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- PARTIAL ACCESS** | All driveways are RIRO, no median openings
- LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

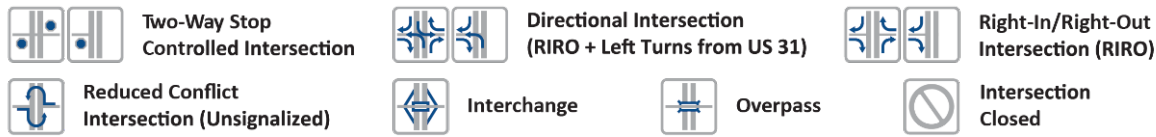
There are no private driveways to US 31 in this Planning Segment.

Figure 11 – Level 3 Improvement Packages – Macy



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:



All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

Study Recommendation: Carried Forward Eliminated

ACCESS CONTROL METHODS:

- MINIMAL ACCESS CONTROL | Driveways have full access, median openings are provided
 - PARTIAL ACCESS | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
 - PARTIAL ACCESS | All driveways are RIRO, select median openings provided
 - PARTIAL ACCESS | All driveways are RIRO, no median openings
 - LIMITED ACCESS | Full control of access (no driveway access, no at-grade intersections, no median openings)
- There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

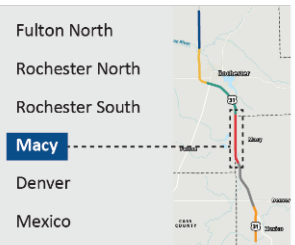
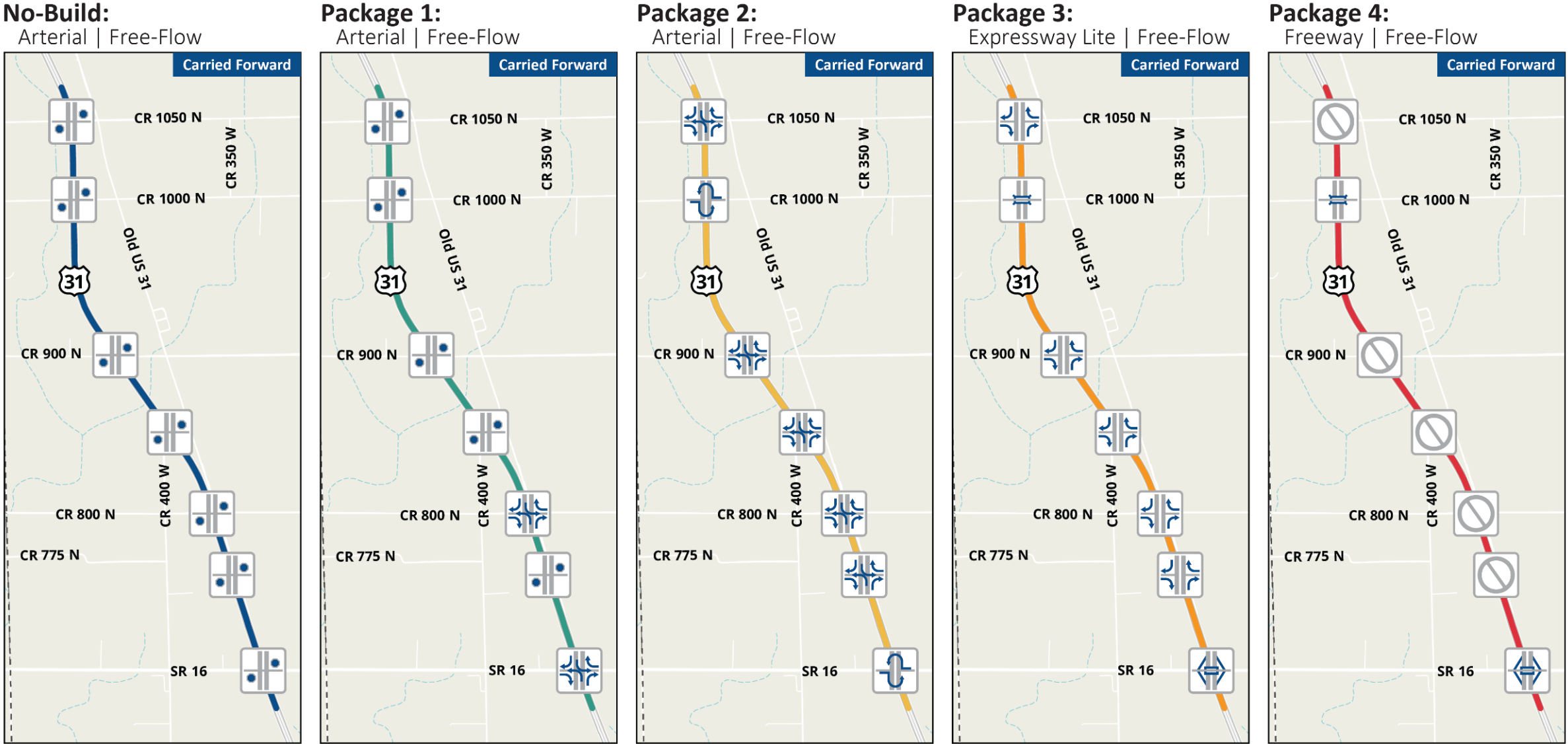


Figure 12 – Level 3 Improvement Packages – Denver



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:



All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

Study Recommendation: Carried Forward Eliminated

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, median openings provided (limited circumstances)
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

KEY MAP:

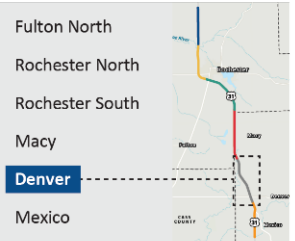
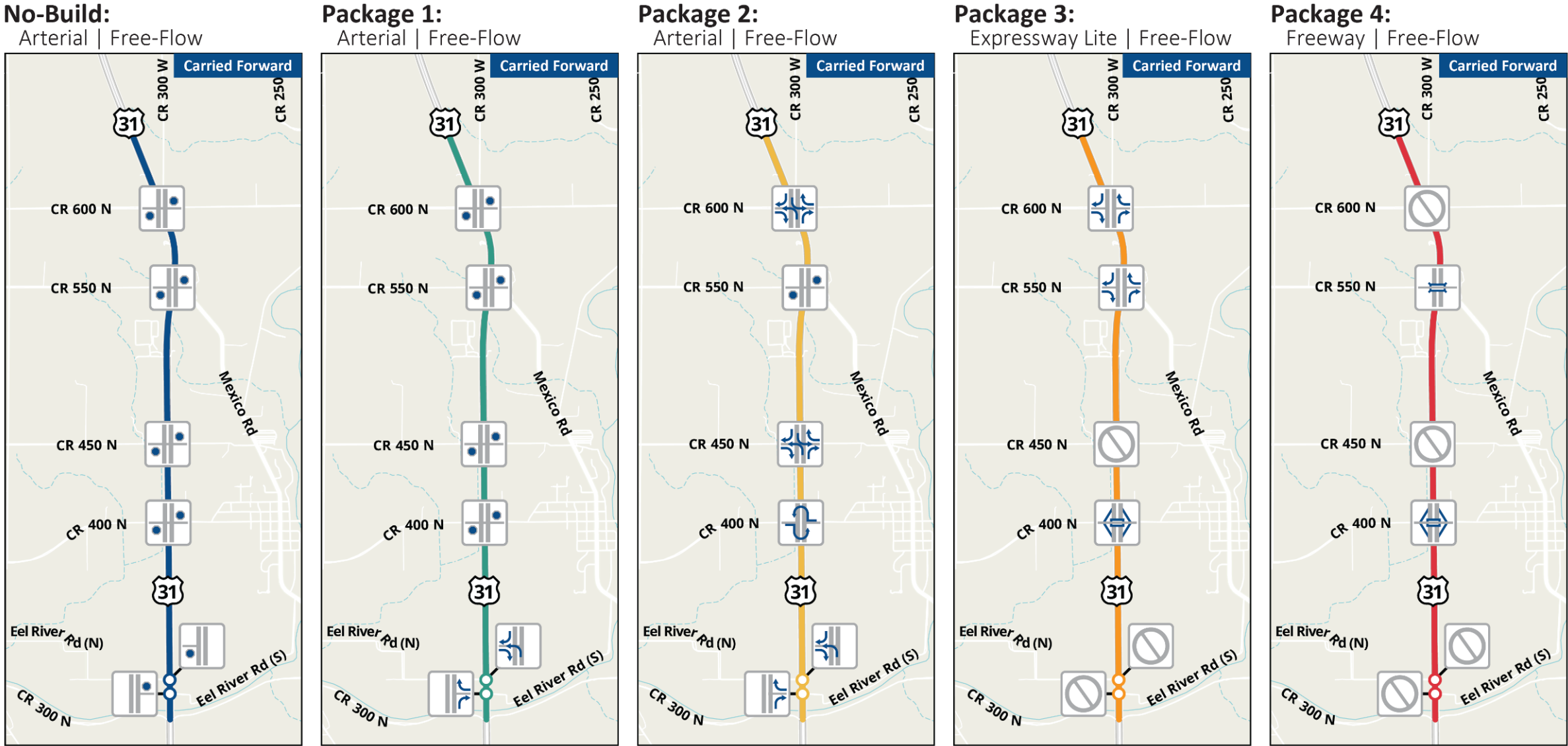


Figure 13 – Level 3 Improvement Packages – Mexico



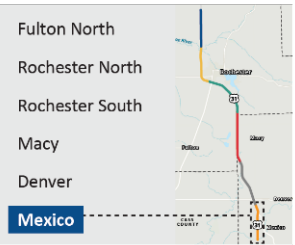
Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward Eliminated

ACCESS CONTROL METHODS:

KEY MAP:



- Two-Way Stop Controlled Intersection
- Directional Intersection (RIRO + Left Turns from US 31)
- Right-In/Right-Out Intersection (RIRO)
- Reduced Conflict Intersection (Unsignalized)
- Interchange
- Overpass
- Intersection Closed

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

- Blue line MINIMAL ACCESS CONTROL | Driveways have full access, median openings are provided
- Green line PARTIAL ACCESS | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- Orange line PARTIAL ACCESS | All driveways are RIRO, select median openings provided
- Yellow line PARTIAL ACCESS | All driveways are RIRO, median openings provided (limited circumstances)
- Red line LIMITED ACCESS | Full control of access (no driveway access, no at-grade intersections, no median openings)

The *Draft Level 3 Screening Report* was published for public review and comment on November 12, 2024, and the public comment period extended through on the study website on December 13, 2024. Additionally, the report was distributed to distributed to federal, state, and local resources agencies as well as the tribal nations for review and comment. One in-person public information meeting was held in the study area during the public comment period. A virtual resource agency and cultural resources stakeholder coordination meeting was held on December 4, 2024. After considering the comments received from the public, agencies, and tribes, the Level 3 screening report was finalized on June 23, 2025.

For further information on the Level 3 screening, including details on methodology, screening results, as well as comments received during the public comment period and responses to them, please see the *ProPEL US 31 North Final Level 3 Screening Report* (Appendix G). Please see Section 5 for further information regarding public involvement and agency coordination efforts related to the Level 3 screening.

5. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

5.1. INTRODUCTION

As an INDOT planning initiative, the ProPEL US 30 and US 31 studies are data driven and fueled by feedback. Feedback from residents, motorists, businesses, and others was vital to the success of the studies. Engagement efforts included resource agency and tribal coordination, a Stakeholder Advisory Committee, targeted stakeholder meetings, community office hours, community outreach events (such as fairs and festivals), and public information meetings. The ProPEL US 31 North study team gathered and considered feedback throughout the study process. Outreach and formal comment periods were organized around key milestones of the study, including:

- **Vision and Scoping:** The purpose of this outreach was to introduce and define the PEL study process; kick off the ProPEL US 30 and US 31 studies (all four studies); identify specific goals of the US 31 North study; discuss proposed analysis methodologies; and solicit input on the fit and function of the study corridor. Fit and function discussions included future corridor vision, specific transportation concerns, and environmental resources of concern, as well as community goals.
- **Purpose and Need:** The engagement efforts during this phase reported on insights gained during the Vision and Scoping phase; shared data gathered from engineering and technical assessments; provided an overview of the transportation issues (needs) and desired outcomes (purpose) identified for the US 31 North study area; solicited input on study goals and the draft purpose and need statement; and previewed next steps.
- **Alternatives Analysis:** This phase included three distinct alternatives analysis and screening steps:
 - **Universe of Alternatives:** The study team identified the improvement concepts that met the purpose and need for potential improvements in the study area and were considered practical in the Universe of Alternatives (Level 1) screening.
 - **Level 2 Alternatives Analysis:** In this phase, the study team identified and evaluated location-specific improvements for reasonability and potential impacts at 8 primary intersections in the study area.
 - **Level 3 Alternatives Analysis:** The study team identified and evaluated Improvement Packages for multiple sections, or Planning Segments, within the study area. Packages included

improvements at the primary intersections, the secondary intersections, and the roadway sections between them.

The information contained in these sub-sections is summarized from the following documents, which are included as appendices to the PEL study report:

- Appendix H: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #1 (RASPI #1)*;
- Appendix I: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #2 (RASPI #2)*;
- Appendix J: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #3 (RASPI #3)*; and
- Appendix K: *ProPEL US 31 North Resource Agency, Stakeholder and Public Involvement Summary #3 – Addendum #1 (RASPI #3 – Addendum #1)*.

5.2. INDOT AND FHWA COORDINATION

The ProPEL US 31 North study team coordinated with the FHWA on a regular basis throughout the study. Coordination included monthly meetings with FHWA to discuss study progress, recap activities, discuss technical approaches, and address any potential questions or concerns identified by FHWA. FHWA also reviewed and provided comments for study team consideration on the following technical reports developed during the ProPEL US 31 North study:

- Appendix B: *ProPEL US 31 North Final Environmental Constraints Report*;
- Appendix D: *ProPEL US 31 North Final Purpose and Need Report*;
- Appendix E: *ProPEL US 31 North Final Universe of Alternatives (Level 1) Screening Report*;
- Appendix F: *ProPEL US 31 North Final Level 2 Screening Report*; and
- Appendix G: *ProPEL US 31 North Final Level 3 Screening Report*.

5.3. RESOURCE AGENCY AND TRIBAL COORDINATION

As part of the Vision and Scoping phase of the study, three coordination meetings were held with resource agencies, cultural resource stakeholders, and federally recognized tribes. Meeting materials and summaries are included in Appendix H of RASPI #1.

These meetings included:

- November 30, 2022: Indiana Department of Natural Resources Division of Historic Preservation & Archaeology Coordination Meeting
- January 27, 2023: Resource Agency Meeting & Cultural Resource Stakeholder Meeting (Virtual)
- February 23, 2023: Tribal Partner Coordination Meeting (Virtual)

In July and August 2023, two coordination meetings were held with resource agencies, cultural resource stakeholders and federally recognized tribes during the Purpose and Need phase of the study. Meeting materials and summaries are included in Appendix H of RASPI #2.

These meetings included:

- July 17, 2023: Tribal Partner Coordination Meeting #2 (Virtual): Transmitted the Archaeological Resources Identification Memorandum and the Draft Purpose and Need for review and comment via email on August 30, 2023.

- August 10, 2023: Resource Agency & Cultural Resource Stakeholder Meeting (Virtual): The draft Purpose and Need and the Aboveground Cultural Resources Memorandum were transmitted for review and comment via the meeting invite sent on July 27, 2023.

During the Alternatives Analysis phase of the study, coordination with resource agencies and cultural resources stakeholders was completed via email, as well as a virtual coordination meeting held on December 5, 2024. The following summarizes these coordination efforts:

- Draft Universe of Alternatives (Level 1) Screening Report
 - Federal/State/Local Resource Agencies: Transmitted for review and comment via email on November 20, 2023. A hard copy was also mailed to the Indiana State Historic Preservation Office (SHPO).
 - Tribal Nations: Transmitted for review and comment via email on December 8, 2023.
- Draft Level 2 Screening Report:
 - Federal/State/Local Resource Agencies: Transmitted for review and comment via email on March 27, 2024. A hard copy was also mailed to the Indiana SHPO.
 - Tribal Nations: Transmitted for review and comment via email on April 2, 2024.
- Draft Level 3 Screening Report:
 - Federal/State/Local Resource Agencies & Cultural Resources Stakeholders: Transmitted for review and comment via email on November 13, 2024; Virtual coordination meeting held on December 5, 2024.
 - Tribal Nations: Transmitted for review and comment via email on December 5, 2024.

The purpose of the virtual coordination meeting on December 5, 2024, was to summarize the Level 1 and Level 2 screening steps, to introduce the Draft Level 3 Screening Reports, and to familiarize attendees with content and resources available to learn more. Email correspondence, meeting materials, and meeting summary are included in Appendix H of the RASPI #3.

5.4. STAKEHOLDER ADVISORY COMMITTEE

The study team established a Stakeholder Advisory Committee, which included representatives from local agencies, residents, community organizations, churches, social service providers, emergency service providers, businesses, and community organizations.

Virtual meetings with each occurred:

- November 15, 2022 - The purpose of this meeting was to introduce the committee to the study, discuss expected roles, and facilitate feedback from the community stakeholders. The study team also encouraged the committee members to assist in raising community awareness about the study and its feedback opportunities. Meeting materials and summaries are included in Appendix F of RASPI #1.
- May 17, 2023 - The purpose of this meeting was to report on insights gained from the public during the Vision and Scoping phase, share additional data gathered by the study teams, provide an overview of the study area issues (needs) and desired outcomes (purposes), and preview next steps. The study team also encouraged the committee members to assist in raising community awareness about the study and its feedback opportunities, and to identify sensitive communities within the study area. Meeting materials and summaries are included in Appendix F in RASPI #2.
- November 15, 2023 (Universe of Alternatives), April 11, 2024 (Level 2), and November 12, 2024 (Level 3) - The purpose of these meetings was to introduce the Draft Universe of Alternatives (Level 1), Draft Level 2, and Draft Level 3 Screening Reports and familiarize attendees with the resources available to

learn more. The study team also encouraged the committee members to ask questions and share information with colleagues and/or constituents. Meeting materials and summaries are included in Appendix F in RASPI #3.

5.5. STAKEHOLDER COORDINATION

Elected officials, the US 31 Coalition, study stakeholders (including residents, businesses, schools, and emergency service providers), and the public have been engaged along the study corridor. Outreach efforts included community office hours, public information meetings, community outreach events, resource agency coordination, and targeted stakeholder meetings.

On November 21, 2022, members of the US 30 and US 31 Coalitions received an update on the studies, discussed community and stakeholder engagement activities, provided information on next steps, and answered questions from attendees. Meeting materials and summaries are included in Appendix G in RASPI #1.

On May 18, 2023, the ProPEL US 31 study teams (US 31 North and US 31 South) met virtually with members of the US 31 Coalition to report on insights gained from the public during the Vision and Scoping phase, share additional data gathered by the study teams, provide an overview of the study area issues (needs) and desired outcomes (purposes), preview next steps, and answer any questions from attendees. Meeting materials and summaries are included in Appendix G in RASPI #2.

The ProPEL US 31 study teams (US 31 North and US 31 South) met virtually with members of the US 31 Coalition to discuss the alternatives development and screening process. They met on November 13, 2023, to review the Universe of Alternatives Screening, April 10, 2024, for the Level 2 Screening, and November 12, 2024, for the Level 3 Screening. Meeting materials and summaries are included in Appendix G of RASPI #3.

Local Elected Officials, Farm Bureaus, Local Economic Development Organizations:

In addition to Stakeholder Advisory Committee and US 31 Coalition outreach, members of the US 31 North study team coordinated and/or conducted outreach with the following stakeholder groups:

- Indiana state legislators (coordinated with all study teams)
- Local media representatives (coordinated with all study teams)
- Local elected officials
- Local emergency management agencies
- US 31 North Local Economic Development Organizations (LEDOs)
- Farm Bureau members from Fulton and Miami counties
- Miami County Economic Development Authority (coordinated with US 31 North study team)
- Fulton County Economic Development Authority (coordinated with US 31 North study team)
- Local (non-resource) agencies
- Adjacent businesses (McClain Funeral Home, Life Care Center of Rochester, Best Western, Knights Inn, etc.)
- Woodlawn Hospital

5.6. OFFICE HOURS AND COMMUNITY EVENTS

The US 31 North study team visited stakeholder communities within the study area regularly to build awareness around the study, provide an opportunity for residents and stakeholders to engage with the study team, and receive public comments related to the study and study milestones. These outreach efforts

included community office hours and participation at fairs, festivals, and other community events. During this time, study team members engaged with community members in informal, one-on-one conversations where they could ask questions, provide input, and receive regular updates at times and locations convenient for local residents. Community office hours were held at least twice per month at varying locations and times. Community members were also able to schedule an appointment with the study team.

Due to the presence of sensitive communities in the study area, additional targeted outreach included mobile home communities, apartment complexes, and the Amish/Mennonite community. Coordination targeting minority and limited English proficiency (LEP) populations identified within the study area, included coordinating with a representative that serves the Mennonite community, translating materials into Spanish, and coordinating with outreach and materials to the St. Joseph Catholic Churches in Rochester and Akron. In addition, translation services were provided, such as translating the direct mail postcard and other study information to Spanish.

The study team coordinated and staffed a total of 68 Community Office Hours events at a variety of times and locations across the corridor. In addition, the US 31 North study team coordinated participation at 11 community events, such as fairs and festivals, in Fulton and Miami counties within the study area. Community Office Hours were held three times from October to December of 2022 in 3 different locations and provided twice per month from January to December of 2023 in 4 different locations. In 2024, Community Office Hours were offered twice per month from January to December at 8 different locations.

5.7. PUBLIC INFORMATION MEETINGS

The study team held public information meeting in both in-person and virtual/on-demand formats. The in-person public information meetings took place:

- December 1, 2022, at Rochester Community High School from 5 to 7 p.m. ET (Vision and Scoping)
- June 7, 2023, at Rochester Community High School from 5 to 7 p.m. ET (Purpose and Need)
- November 18, 2024, at Rochester Community High School from 5 to 7 p.m. ET (Level 3 Screening)

The format of the meetings was an open house with a presentation from study team members. Informational boards, digital displays, and feedback opportunities were situated throughout the venues. Presentations were recorded and made available online on the ProPEL US 31 study website.

To further provide the public with the opportunity to give feedback and ask questions, virtual meeting experiences were designed to closely mimic the in-person meetings, and attendees navigated through the informational displays in the same way. The virtual experience allowed participants to interact with the feedback exercises in the same manner.

Virtual, on-demand meetings were available from December 1 until December 31, 2022 (Vision and Scoping); June 7 until July 31, 2023 (Purpose and Need); and November 18, 2024, until December 13, 2024 (Level 3 Screening).

5.8. PUBLIC COMMENTS

Vision and Scoping Phase

Public comments were received from a variety of sources. All public comments received prior to December 31, 2022, were considered as part of the first RASPI Summary report. During the first public comment period, the study team received:

- Approximately 28 comments from the in-person and virtual public information meetings
- Approximately 107 additional comments were received via the community office hours and online comment form
- 170 public comments were received during the open comment period

The study team grouped the comments by general type of concern into one of the following categories: Access Points, Regional Mobility, Safety, Redevelopment, Environmental, Bike and Pedestrian, Economic Development, and Other.

Purpose and Need Phase

All public comments received between January 1 and July 31, 2023, were considered as part of the second RASPI Summary report. During the second public comment period, outreach efforts generated:

- Approximately 100 additional comments were received via community office hours, community outreach events and the online comment form
- 107 public comments were received during the open comment period

Alternatives Analysis Phase

All public comments received from August 1, 2023, through December 13, 2024, were considered as part of third RASPI Summary report. This phase of the study included the Universe of Alternatives (Level 1) Screening, the Level 2 Screening, and the Level 3 Screening.

Public comments on the *Draft Universe of Alternatives (Level 1) Screening Report* were accepted from November 13, 2023, to December 22, 2023. During the third public comment period, outreach efforts generated 53 public comments. Individual replies were provided to all public comments received as part of the Final Universe of Alternatives (Level 1) Screening Report.

- Approximately 43 comments gathered via the online comment form
- Approximately 10 comments received during Community Office Hours

Public comments on the *Draft Level 2 Screening Report* were accepted from March 27, 2024, to April 30, 2024. During the fourth public comment period, outreach efforts generated 51 public comments. Individual replies were provided to all public comments received as part of the Final Level 2 Screening Report.

- Approximately 27 comments gathered via the online comment form
- Approximately 24 comments received during Community Office Hours

Public comments on the *Draft Level 3 Screening Report* were accepted from November 12, 2024, to December 13, 2024. Feedback exercises were integrated into the public information meetings that included planning segment stations and customized comment cards for attendees to provide specific input. During the fifth public comment period, outreach efforts generated:

- More than 5 comments were collected using customized comment cards
- Approximately 2 comments from the in-person and virtual public information meetings
- Approximately 79 additional comments were received via community office hours, community outreach events, and the online comment form
- 86 public comments were received during the open comment period

Individual replies were provided to all public comments received as part of the *Final Level 3 Screening Report*.

During the ProPEL US 31 North study, more than 696 stakeholders engaged with the study and approximately 529 public comments were received.

6. NEXT STEPS AND FUTURE CONSIDERATIONS

6.1. INTRODUCTION

Recommendations from the ProPEL US 31 North study will be evaluated for potential implementation as part of INDOT's call for projects. The call for projects is an annual process through which proposals to resolve transportation needs compete for funding. Proposals for projects can originate from cities, towns, Regional and/or Rural Planning Organizations (RPOs) and Metropolitan Planning Organizations (MPOs). As part of the process, INDOT evaluates proposals for new projects and identifies priorities based on cost-effective resolution of needs to ensure that the correct improvements are constructed at the greatest number of locations possible. The call for projects covers a five-year period, which means that a selected project typically has at least a five-year development timeline.

The following summarizes key considerations for future project teams.

6.2. ALTERNATIVES

A stated goal of the ProPEL US 31 North study is the identification of a range of reasonable alternatives. Given the needs identified within the study area, a reasonable alternative could consist of improvements at a single intersection; it could also consist of improvements at multiple intersections and/or the roadway sections in between them (i.e., access management). Depending on multiple factors, including statewide priorities and funding availability, improvements considered as part of this PEL study could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area.

The Level 3 screening, which was the final step in the alternatives development and evaluation, considered cohesive Improvement Packages based on certain access management strategies to show potential interoperability between intersections and to be able to assess potential impacts. Improvement Packages are not intended to be completely rigid, and improvements from different packages could be mixed and matched across planning segments in future studies. As a result, access management strategies could vary throughout the study area; however, as part of that decision-making process (which will occur after this PEL study), an assessment would be completed to consider factors such as driver expectation and continuity across the Planning Segments, as well as the relationship and potential impacts upon other intersections and/or Planning Segments.

As noted in the Level 2 and Level 3 screening reports, all design concepts evaluated during the ProPEL US 31 North study are considered preliminary and subject to change. Future project development studies will determine the actual configuration, right-of-way acquisition needs, and impacts to resources in the study area.

6.3. STAKEHOLDER CONCERNS

More than 500 comments were received from stakeholders over the course of this study. The study team carefully considered this feedback, and it informed the analysis and recommendations summarized in this PEL

Study Report. There were several themes in those comments that warrant further coordination and consideration as part of any future project in the study corridor, including:

- Multiple stakeholders, including residents, businesses, and the farming community, expressed concern regarding the potential for loss of access to/from/across US 31. Concerns were also expressed regarding the impacts to the local street system due to changes in access to US 31.
- Multiple concerns were expressed regarding the implementation of Reduced Conflict Intersections (RCIs) as a potential solution for the identified transportation issues. The concerns included:
 - The perceived inability of RCIs to accommodate semi-trailers and large farming equipment.
 - Vehicles required to complete a U-turn movement at the RCI will not be able to find a gap in the opposing traffic and will experience delays.
 - Vehicles required to complete a U-turn movement at the RCI will not be able to safely merge into high-speed traffic.
- The US 31 Coalition was an active and engaged study stakeholder. The US 31 Coalition was formed in 2000 to promote upgrade of the US 31 corridor from Indianapolis to South Bend, Indiana to a freeway. Throughout the study, the US 31 Coalition provided comments for consideration, including requests to further consider the economic benefits of upgrading US 31 to a freeway.
- Residents expressed concern that changes in access could negatively impact response times for emergency services.

6.4. CONSIDERATIONS FOR FUTURE PROJECT DEVELOPMENT

There are a number of considerations that were beyond the scope of this planning study and must be considered further during the development of any projects in this corridor.

- Air Quality – Prior to approval of any future NEPA document, the STIP must be updated to reflect the anticipated scope and cost of any improvements. Coordination with INDOT will occur during NEPA.
- Noise – A noise analysis will be required for any Type I projects.
- Reasonably Foreseeable Effects – The ProPEL US 31 North study considers potential impacts to the human and natural environment – specifically those effects that occur at the same time and place as the alternatives evaluated. During subsequent NEPA reviews, consideration may be warranted for impacts that have a reasonably foreseeable, close causal relationship to the alternatives evaluated.
- Section 106 – The ProPEL US 31 North study included a review of existing literature and documentation related to potential above-ground and archaeological resources within the study area. Formal determinations of National Register of Historic Places (NRHP) eligibility will occur, as needed, as part of the Section 106 process in future NEPA environmental reviews.
- Wetlands, Streams, and other Natural Resources – Field surveys and formal delineations of water resources will be required in all areas of potential disturbance to confirm the presence of any sensitive natural resources.
- Agency Coordination – As part of the NEPA process for any future projects resulting from the study, coordination with agencies will be completed to ensure that all potential impacts and procedural requirements are addressed.
- Access Management – Should improvements to US 31 increase the level of access control in the study area, future project development studies should consider whether alternative access is feasible and cost-effective for impacted properties. Additional traffic studies and analysis of impacts to the local roadway network may also be needed if future improvements proposed to restrict access to/from/across US 31.

- Design Elements – As part of the Universe of Alternatives (Level 1) screening, improvement concepts were identified as Primary Concepts, Complementary Concepts, or Design Elements. Design elements were concepts that did not meet the transportation needs of the study area, but were considered practical and provided some benefit to the study area. Although some design elements were not considered in detail as part of the PEL study, they are recommended for consideration as part of any future projects that result from the study.

6.5. ANTICIPATED PERMITTING REQUIREMENTS

The need for the following permits will be evaluated during the NEPA for any potential projects resulting from this PEL study:

- Section 404 Permit from the US Army Corps of Engineers (USACE)
- Section 401 Water Quality Certification from the Indiana Department of Environmental Management (IDEM)
- Section 10 Permit from the USACE
- Section 9 Permit from the US Coast Guard (USCG)
- Construction in a Floodway Permit from the Indiana Department of Natural Resources (IDNR)
- Construction Stormwater General Permit from IDEM
- Indiana Tall Structures Permit from INDOT
- Obstruction Evaluation/Airport Airspace Analysis from the Federal Aviation Administration (FAA)