Public Open House Presentation

Christopher L. Waidner, P.E.

Thursday, March 13, 2025

US 31 Corridor Projects in Marshall & Fulton Counties

Project Team

INDOT Laporte District

- Adam Parkhouse
- Michael Grylewicz
- Alan Holderread

VS Engineering

- Chris Waidner
- Tim Hollandsworth
- Ginny Munroe

Invited Special Guests

• ProPEL Team





Agenda

US 31 Corridor Overview

- ProPEL #US30West and #US31North Transportation Study Areas
- History

US 31 @ SR10, SR 110, CR 700, & Access Control

- Overview
- Environmental Document
- Decision Criteria Updates
- US 31 @ SR 10 Preliminary Preferred Alternative
- US 31 @ SR 110 Preliminary Preferred Alternative
- CR 700
- Access Control

Next Steps

- Public Involvement Fuels Plan Improvement
- Feedback



Project Alignment



US 31 Corridor projects in Marshall & Fulton

Updated Modification Schedule

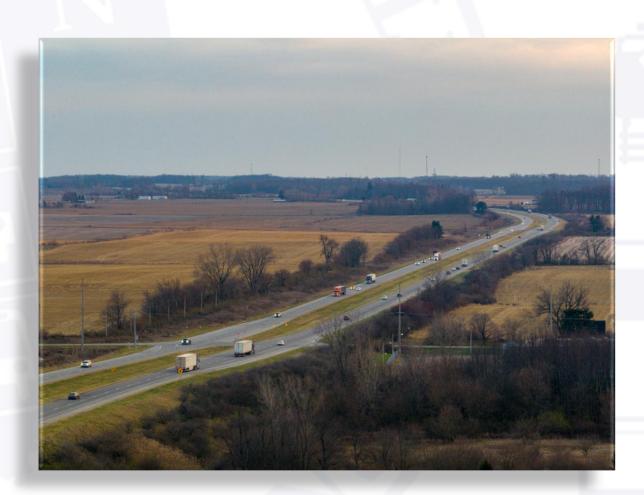
All three intersections and access control are listed in construction of sequence:

2028

- US 31 @ SR 10
- US 31 @ CR 700

2030

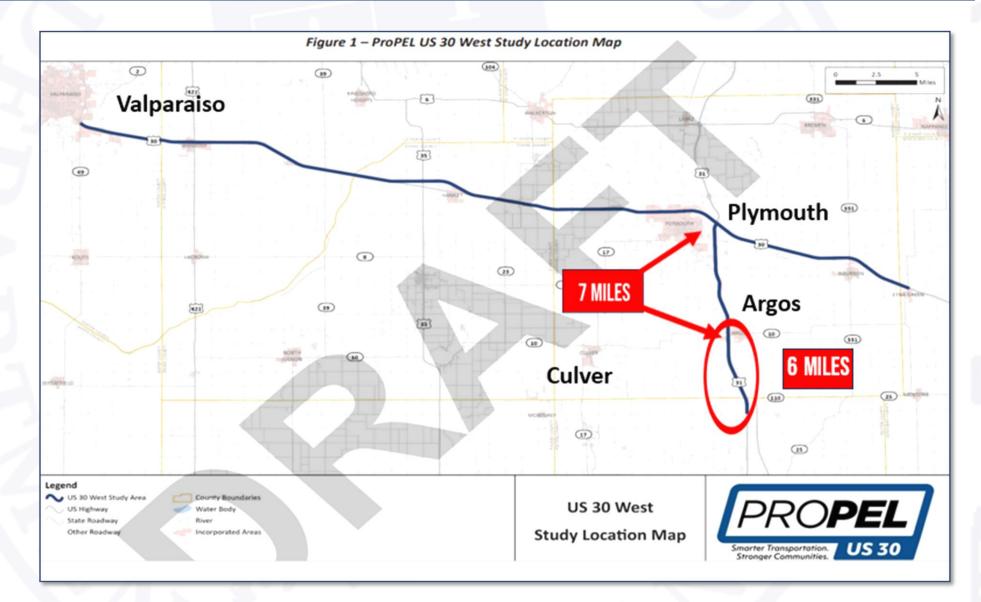
- US 31 @ SR 110
- Access Control



Corridor Overview



US 31 Corridor projects in Marshall & Fulton



Coordination With ProPEL

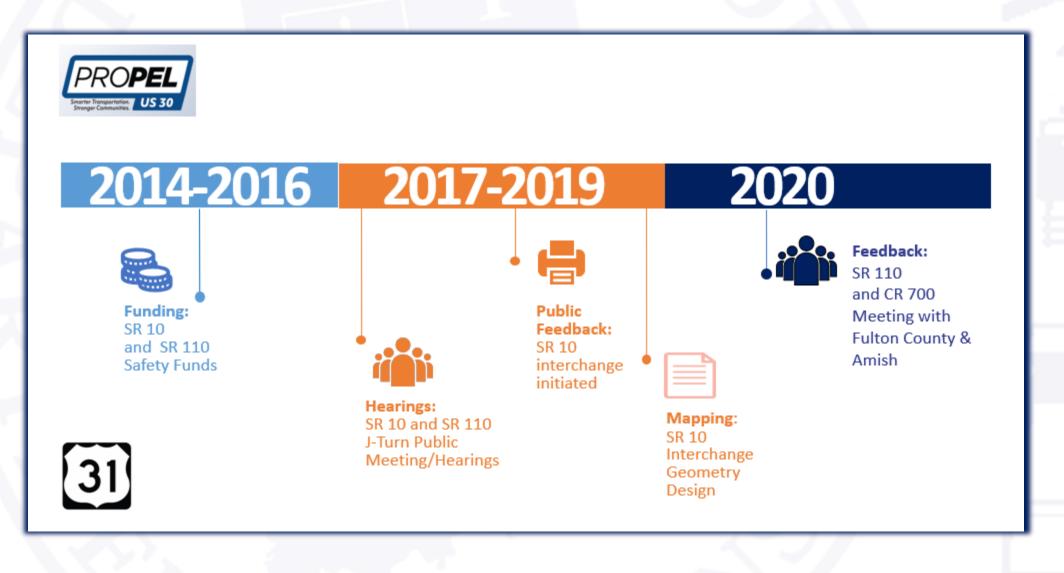


Residents and business owners in Marshall and Fulton counties reinforced the need for interchange improvements by **providing feedback** at INDOT-driven Public Information Meetings and twice-a-month Community Office Hours.



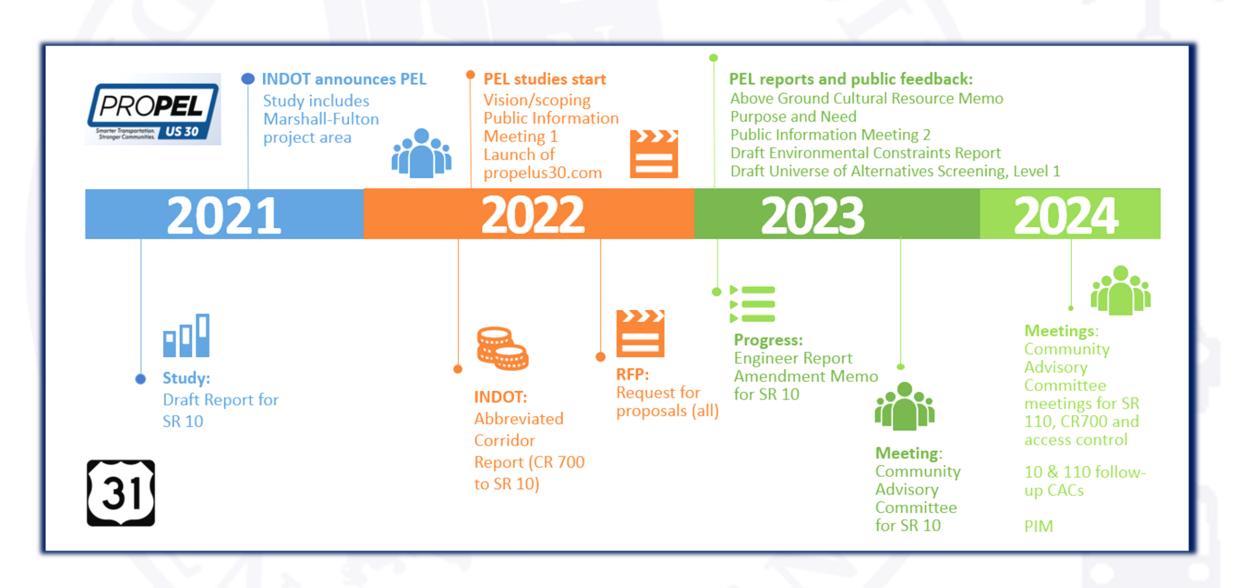
History





History





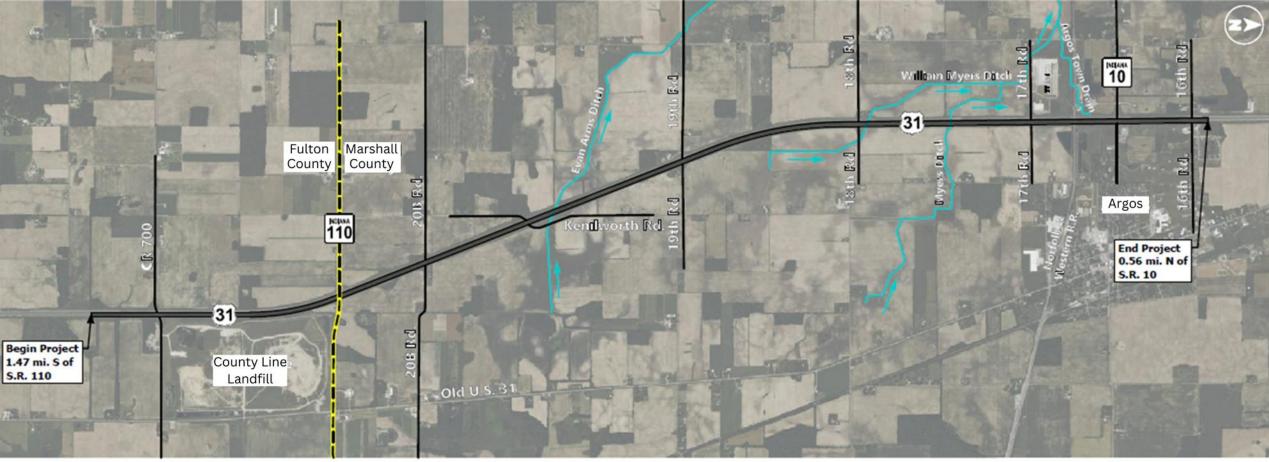
History



PROPEL Branter Transportation. Bronger Communities. US 30	Progress: Environmental Constraints Report FIN Existing Transportation Conditions Re Purpose & Need Report FINAL Universe of Alternatives (Level 1) Scre FINAL	oort ening Report	Progress: Level 2 Screening Report FINAL Meetings: Community Office Hours	Progress: Draft Level 3 Screening Report Meetings: PIM (two) and Community Office Hours
Progress: Submi Draft Engineers Report SR 10 for INDOT & FHWA Review	it Progress: Revise Public Involvement Plan	Progress: Draft Purpose and Need Report – INDOT Approved (Currently in FHWA Review)	Progress: Submit Draft Engineers Report SR 110 & CR 700 for INDOT& FHWA Review	Meetings: Community Advisory Committee meetings for SR 10 & CR700

Corridor Overview







County Line:



Project Alignment

US 31 Corridor projects in Marshall & Fulton

What is Access Control?

A set of techniques that increases capacity of major roads, manages congestion and reduces crashes. This includes:

- Increasing spacing between signals and interchanges
- Road approach location, spacing, and design
- Land use policies that limit right-of-way access to highways



Project Alignment



US 31 Corridor projects in Marshall & Fulton

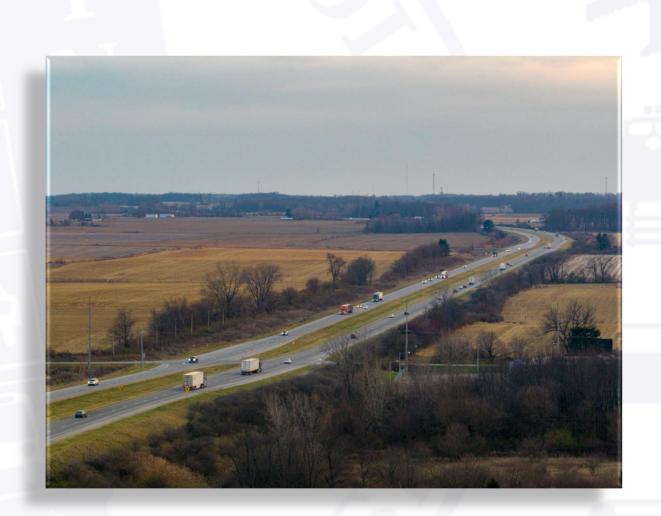
Project Scope

Current

• 9 crossing points

Proposed

- 2 interchanges
- 1 bridge over US 31
- Evaluating other 6 crossings



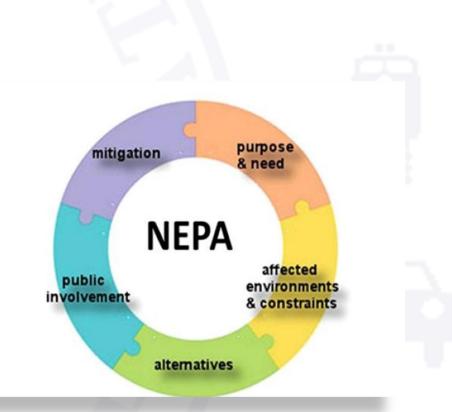
Environmental Document

THE PARTY OF TRAINING

National Environmental Policy Act (NEPA) Requires INDOT to analyze and evaluate the impacts of a proposed project to the natural and socio-economic environments

NEPA is a decision-making process

- Purpose and Need
- Alternatives Screening
- Preferred Alternative



Environmental Document



US 31 Corridor projects in Marshall & Fulton

Impacts are analyzed, evaluated and described in an environmental document

What are the impacts this project might have on the community?

- How can impacts be avoided?
- Mitigation for impacts?
- Requires INDOT to analyze and evaluate the impacts of a proposed project to the natural and socio-economic environments

Draft environmental document will be released for Public Comment

Purpose and Need



Purpose

The purpose of the project is to maintain reasonable access to the local highway system while reducing conflict points on US 31

Need

Projects are needed at these locations because of safety concerns with the at-grade intersections

Overview



SR 107 designs under consideration

SR 110
4 designs under consideration

CR 700 3 designs under consideration

Access Control 4 packages under consideration





US 31 Corridor projects in Marshall & Fulton

US 31 at SR 10

First Community Advisory Committee (CAC) in Marshall County was held at Argos High School December 14, 2023





US 31 Corridor projects in Marshall & Fulton

US 31 at SR 110, US 31 at CR 700 and Access Control

Second Community Advisory Committee (CAC) in Marshall County was held at Argos High School June 27, 2024





US 31 Corridor projects in Marshall & Fulton

US 31 at SR 110, US 31 at CR 700 and Access Control

Third Community Advisory Committee (CAC) in Fulton County was held at Fulton County Public Library December 12, 2024





US 31 Corridor projects in Marshall & Fulton

US 31 at SR 110, US 31 at CR 700 and Access Control

Fourth Community Advisory Committee (CAC) in Fulton County was held at Fulton County Public Library February 20, 2025



Ranking By Criteria



- Construction Cost
- Maintenance Cost Bridge, Pavement
- Land Impacts Parcel Impacted, Total Costs, Total Takes, Parks Impacted, Commercial Impacts
- Environmental Impacts Wetland Impacts
- RR Impacts
- Safety Crossing Conflict Points, Merging/Diverging Conflict Points, Pedestrian Multi-Use Path/Vehicle Conflict Points, Overturning*, Pedestrian Sidewalk/Vehicle Conflict Points*
- Stakeholder Score

US 31 CORRIDOR PROJECTS IN MARSHALL & FULTON	
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Nome:	Address:
Email:	
Phone:	

Please rank the following criteria from highest priority (1) to lowest priority (13):

Commercial Impacted	
Construction Costs	
Crossing Conflict Points	
Life-Cycle Cost (Bridge)	
Life Cycle Cost (Povement)	
Merging/Drverging Conflict Points	
Park Impacted	

Pedestrian/Vehicle Conflict Points
Railroad Bridges Impacted
Right of Way Parcels Impacted
Right of Way Total Costs
Right of Way Total Takes
Wetland Impacts

Provide your comment here:

Would you like a response to your comment (please choose one)?

No Response Required

Emoil Response

*Please email the completed form to tspalding@c2strategic.com or mail to: Tom Spalaing, Project Team, c/o C2 Strategic Communications, 9000 Keystone Crassing, Suite 502, Indianapolis, IN, 46240

Safety Comments

55% of Comments are about Safety

Paraphrased Comments:

- Minimizing conflict points is of utmost concern.
- Very concerned to provide safety for students, buses and staff.
- I have rated the above criteria prioritizing the enhancement of public safety.
- As this is primarily a safety project, addressing the conflict points seems the most important to me.
- Safety of our children, Amish, and farmers is top priority.



Right of Way Impact Comments

US 31 Corridor projects

in Marshall & Fulton

27% of Comments about Right of Way Impacts

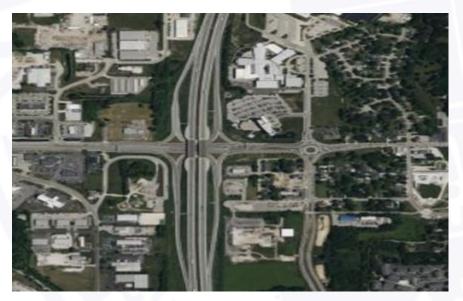
Paraphrased Comments:

- Which ever is best for keeping the commercial property. Park conflict is also another issue.
- With access to South Bend, commercial growth is expected and should minimize commercial impacts.
- The Parks cannot be impacted.

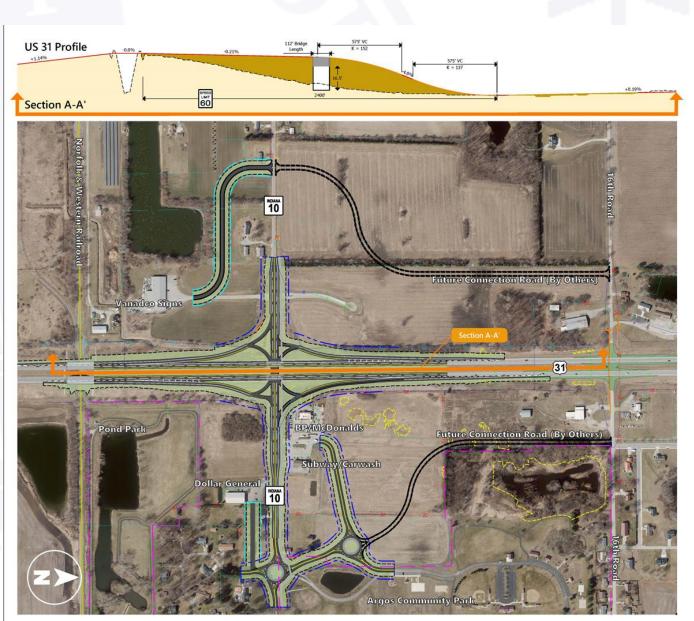


Improvement Alternative #1

Single Point Urban Interchange (SPUI)



US 31 @ West Main Street (Westfield, IN)



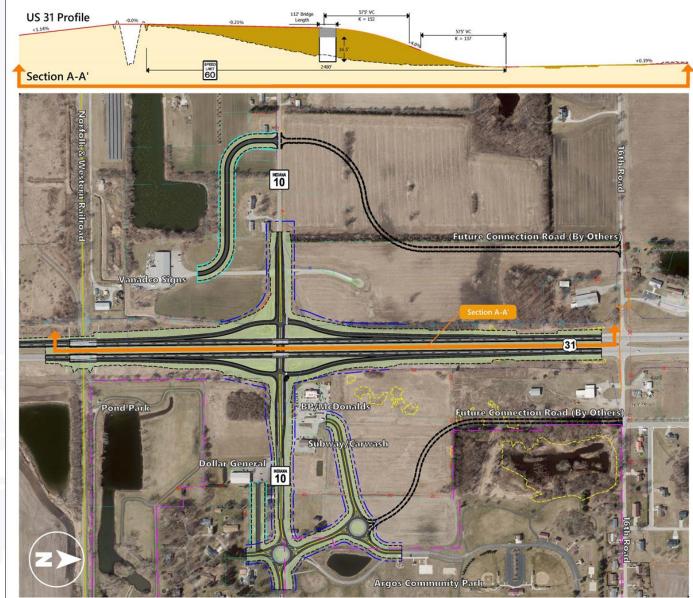


Improvement Alternative #1A

Stop Controlled Tight Diamond Interchange



US 31 @ SR 4 (Lakeville, IN)



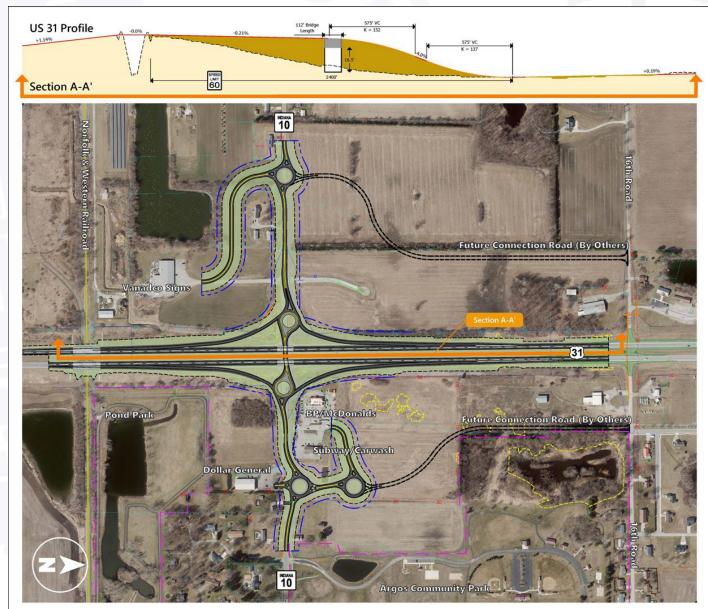


Improvement Alternative #1B

Tear Drop Tight Diamond Interchange



US 20 @ SR 2 (La Porte County, IN)



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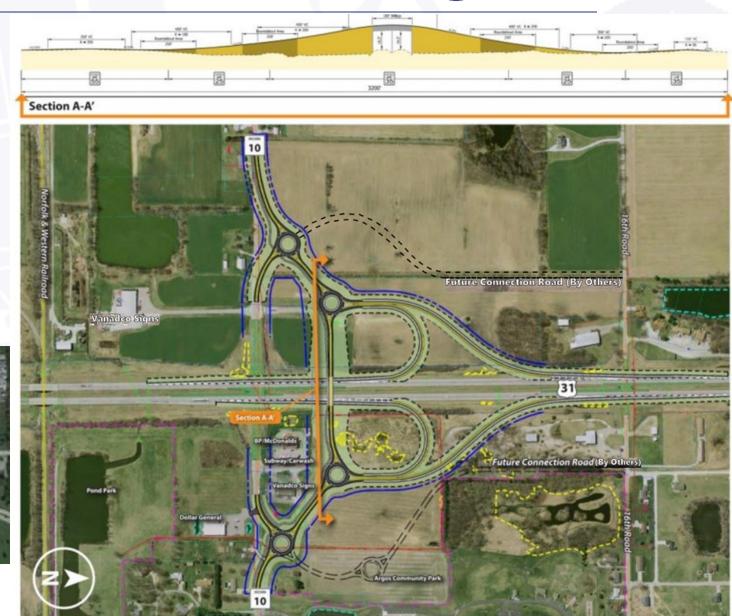
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #2

Partial Cloverleaf Interchange (PARCLO-AB) North



US 31 at Brick Road (South Bend, IN)



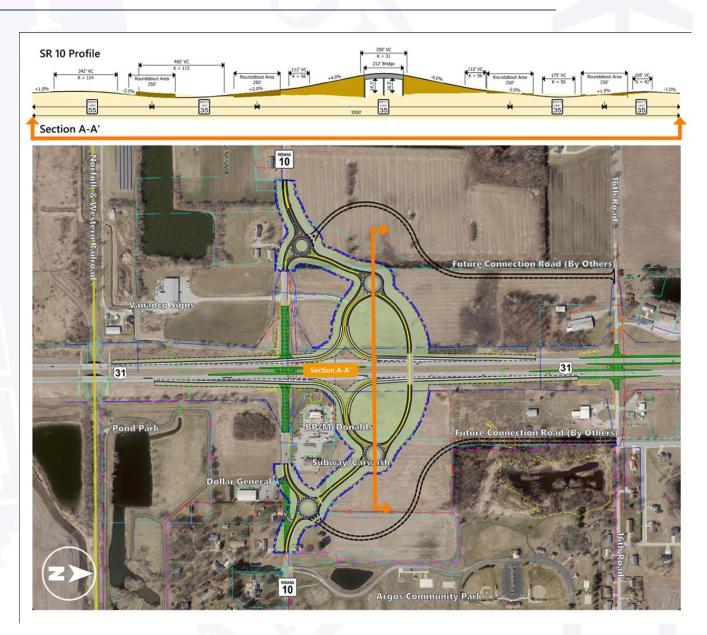


Preliminary Preferred: Alternative #3

Partial Cloverleaf Interchange (PARCLO-AB) South



US 31 at Brick Road (South Bend, IN)





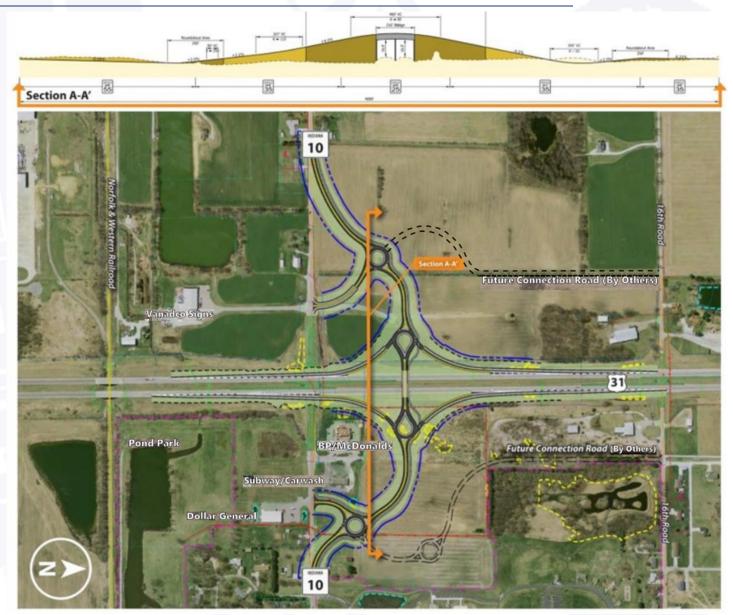
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #4

Tear Drop Interchange



US 20 @ SR 2 (La Porte County, IN)





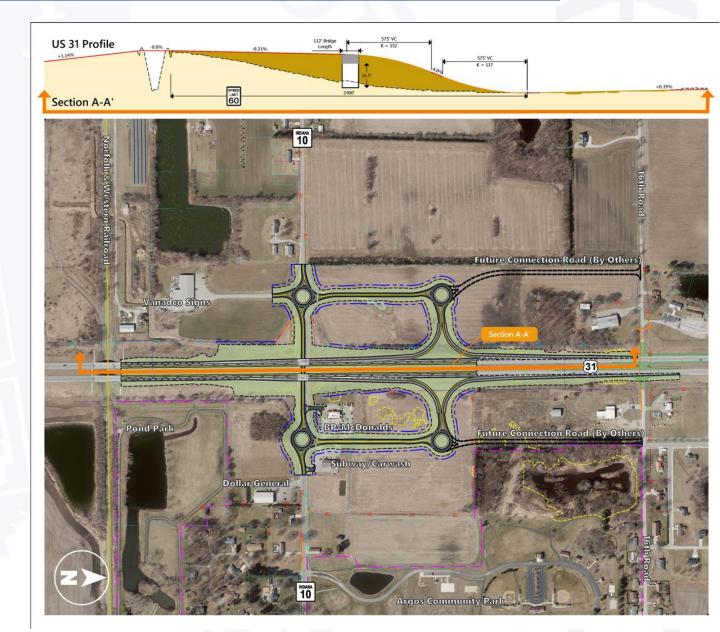
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #5

Tight Diamond Interchange with Access Roads



I-30 at Brick Street (Fort Worth, TX)







Evaluation Matrix Distribution

Criteria	Distribution
Construction Cost	35%
Maintenance Cost	6%
Land Impacts	20%
Environmental Impacts	2%
RR Impacts	2%
Safety	25%
Stakeholder	10%

US 31 @ SR 10 Evaluation Matrix



CAC criteria used to score/rank alternatives

				Alternative																				
			_	1			1A	1A		1B			2			3			4			5		
	Criteria	Weight	Weight	SPUI Tight Diamon	d		Stop-Controll Diamond	ed Tight	t T	eardrop Tight [Diamond		Parclo AB - Noi	th		Parclo AB - Sou	ith		Teardrop			Tight Diamon Access Roads		
Construction Cost	Construction Cost	35	35	\$31,252,633	0.0	0	\$31,252,633	0.0	0	\$31,252,633	0.0	0	\$22,898,699	24.8	25	\$19,450,899	35.0	35	\$23,383,355	23.3	23	\$25,268,194	17.7	18
R/W Parcels Impacted		2		16	0.2		16	0.2		16	0.2		17	0.0		15	0.4		14	0.6		7	2.0	
R/W Total Takes		3		3	0.0		3	0.0		3	0.0		1	2.0		0	3.0		0	3.0		0	3.0	
R/W Total Cost	Land Impacts	5	20	\$1,459,070	2.6	8	\$1,459,070	2.6	8	\$1,459,070	2.6	8	\$2,183,510	0.0	7	\$1,199,690	3.5	14	\$1,191,560	3.5	15	\$763,750	5.0	19
Commercial Impacted (ac)		5		5.81	5.0		5.81	5.0		5.81	5.0		29.83	0.0		17.88	2.5		15.21	3.0		12.22	3.7	
Park Impacted (ac)		5		2.27	0.0		2.27	0.0		2.27	0.0		0	5.0		0	5.0		0	5.0		0	5.0	
Wetland Impacts (ac)	Environmental Impacts	2	2	0.25	0.3	0	0.25	0.3	0	0.28	0.0	0	0.09	1.9	2	0.08	2.0	2	0.09	1.9	2	0.11	1.7	2
Railroad Bridges Impacted	RR Impacts	2	2	2	0.0	0	2	0.0	0	2	0.0	0	0	2.0	2	0	2.0	2	0	2.0	2	0	2.0	2
Crossing Conflict Points		5		4	1.7		6	0.0		0	5.0		0	5.0		0	5.0		0	5.0		0	5.0	
Merging/Diverging Conflict		5		18	3.1		16	3.8		12	5.0		28	0.0		28	0.0		24	1.3		18	3.1	
Ped Multi-Use Path/Vehicle	Safety	5	25	6	6 0.0 15	15	4	1.7 1	15	4	1.7	22	6	0.0	10	0	5.0 15	15	2	3.3	15	4	1.7	20
Pedestrian		5		0	5.0		0	5.0		0	5.0		0	5.0		2	0.0		2	0.0		0	5.0	
Overturning		5		1.00	5.0		1.00	5.0		1.00	5.0		0.85	0.0		1.00	5.0		1.00	5.0		1.00	5.0	
Life-Cycle Cost (Pavement)	Maintonance Cost	3	6	\$11,147,593	0.0	0	\$11,147,593	0.0	0	\$11,147,593	0.0	0	\$8,000,025	1.6		\$7,246,951	1.9	2	\$9,846,149	0.6	2	\$5,083,377	3.0	6
Life-Cycle Cost (Bridge)	Maintenance Cost	3	\$3,592,075 0	0.0	0	\$3,592,075 0.0	0.0	0	\$3,592,075	0.0	0	\$2,694,263	2.8	7 4	\$3,125,237 1.5	\$3,179,109	1.3] _ [\$2,634,215	3.0				
Stakeholder Score	Stakeholder	10	10	37.4	0.0	0	37.6	0.0	0	55.8	4.3	4	50.6	3.1	3	64.4	6.4	6	62.8	6.0	6	79.7	10.0	10
	Total	100	100			22.8		23	3.5			33.8			53.2			78.1			64.9			75.



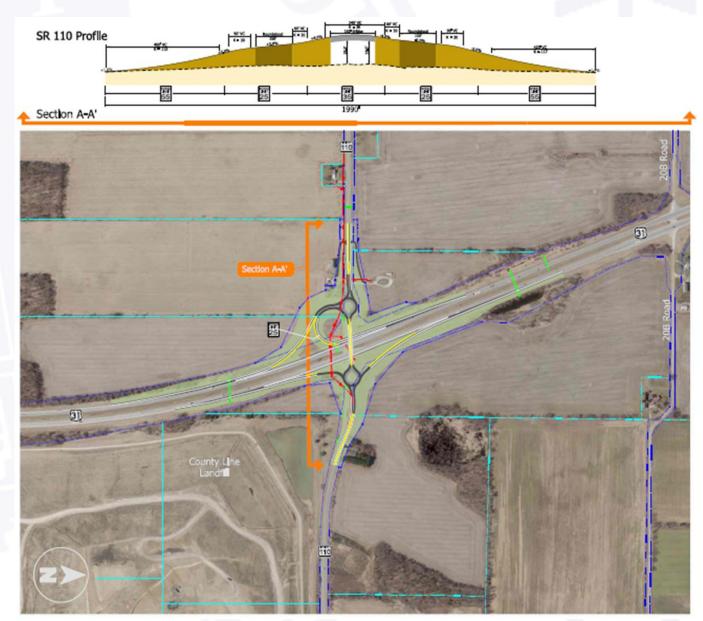
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #1

Partial Cloverleaf Interchange SW [Parclo]



US 31 @ SR 28 (Tipton, IN)





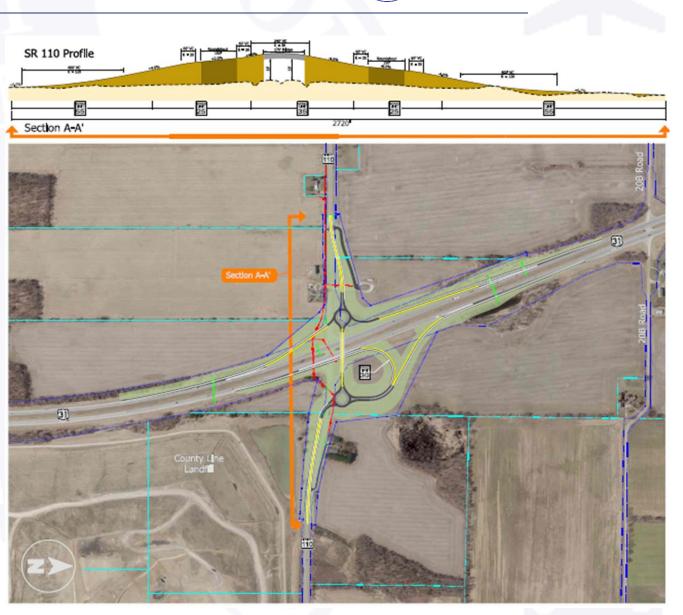
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #2

Partial Cloverleaf Interchange NE [Parclo]



US 31 @ SR 28 (Tipton, IN)



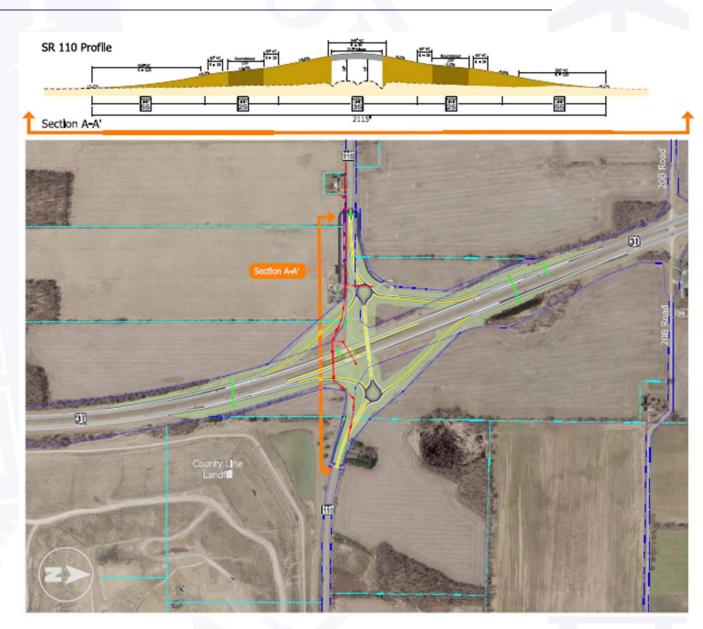


Preliminary Preferred: Alternative #3

Standard Diamond Interchange (Dogbone)



SR 49 at Vale Road (Valparaiso, IN)





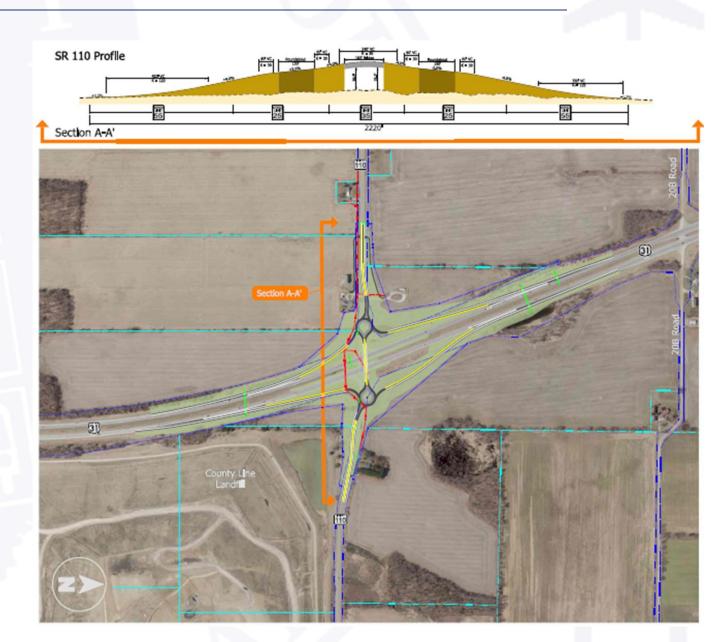
US 31 Corridor projects in Marshall & Fulton

Improvement Alternative #4

Tight Diamond Interchange (Dogbone)



US 20 @ SR 2 (La Porte County, IN)



US 31 @ SR 110 Evaluation Matrix Distribution

Criteria	Distribution		
Land Impacts	37%		
Construction Cost	35%		
Safety	18%		
Maintenance Cost	8%		
Environmental Impacts	2%		



US 31 @ SR 110 Evaluation Matrix



US 31 Corridor projects in Marshall & Fulton

CAC criteria used to score/rank alternatives

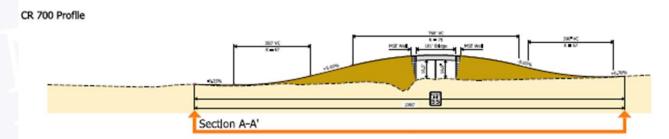
		Alternative							
		2		3		4		5	
Criteria	Weight	Standard Dian Interchang		Tight Diamond Inte	erchange	Parclo Interchan	ge (NE)	Parclo Interchang	e (SW)*
Construction Cost***	35	\$15,790,000	33.7	\$16,770,000	26.6	\$20,430,000	0	\$15,610,000	35
R/W Parcels Impacted	2	9	0	9	0	9	0	8	0.7
R/W Relocation	10	0	10	0	10	0	10	1	0
Total R/W Acres	15	14.55	5.3	12.10	9.8	17.41	0	9.29	15
R/W Total Cost**	5	\$161,000	3.9	\$134,000	4.6	\$192,000	3	\$303,000	0
Landfill Impacted	5	0.14 Acres	4.5	0.63 Acres	2.7	1.36 Acres	0	0.00 Acres	5
Wetland Impacts	2	0.23 Acres	1	0.45 Acres	0	0.45 Acres	0	0.00 Acres	2
Conflict Analysis	10	12	10	12	10	16	0	16	0
Overturning Analysis	8	1.0	8	1.0	8	0.925	0	0.925	0
Life-Cycle Cost (Pavement)***	4	\$11,070,000	3.4	\$11,870,000	2.6	\$14,680,000	0	\$10,390,000	4
Life-Cycle Cost (Bridge)***	4	\$3,630,000	4	\$3,660,000	3.8	\$4,160,000	0.9	\$4,310,000	0
Total	100		83.8		78.1		13.9		61.7

US 31 at CR 700

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US 31 Corridor projects in Marshall & Fulton

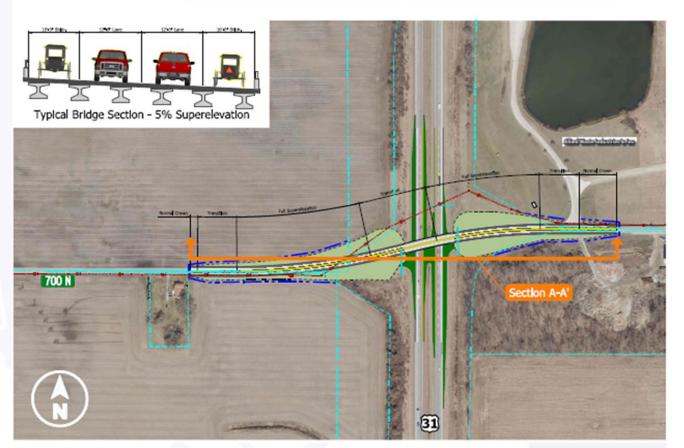
Preliminary Preferred Alternative #1



Skewed 5% super elevated bridge overpass



Example: US 31 at 6th Road (Marshall County, IN)

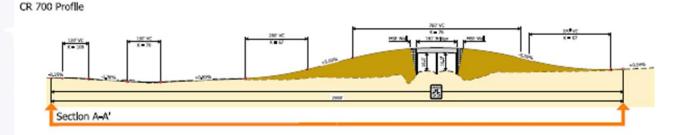


US 31 at CR 700



US 31 Corridor projects in Marshall & Fulton

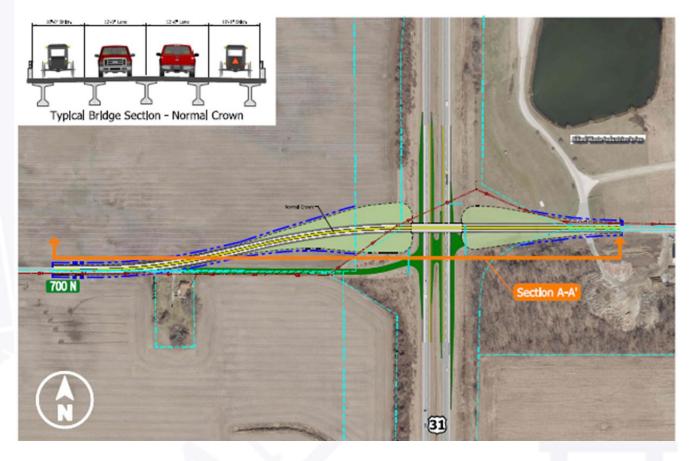
Improvement Alternative #2



Skewed 5% super elevated bridge overpass



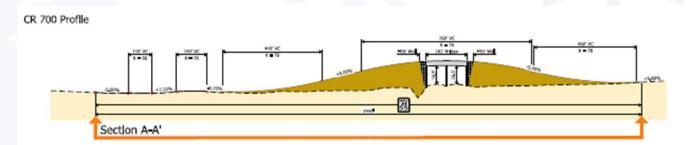
Example: US 31 at Plymouth-Goshen Tr. (Marshall County, IN)



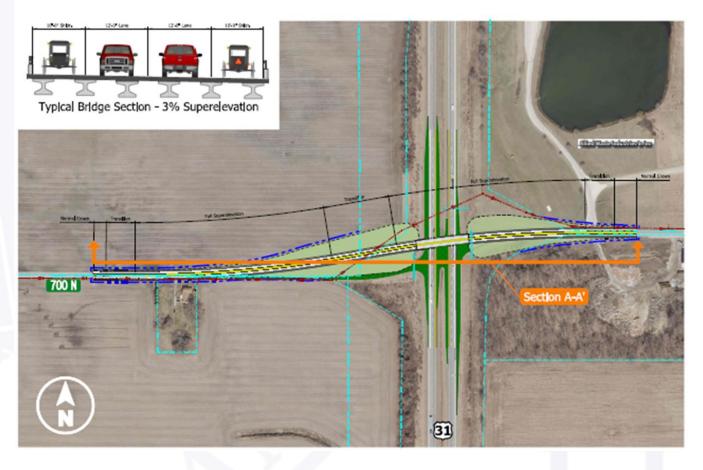
US 31 at CR 700



Improvement Alternative #3



Skewed 5% super elevated bridge overpass





Example: US 31 at 6th Rd (Marshall County, IN)

Access Control Overview



Six additional crossings being evaluated:

- 16th Rd
- 17th Rd
- 18th Rd
- 19th Rd
- Kenilworth Rd
- 20th Rd

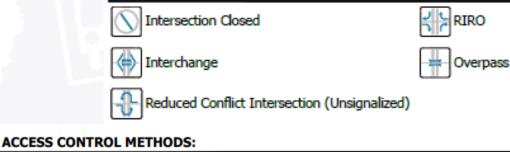


Improvement Package No Build

Arterial/Free Flow

- 16th Rd No Impact
- SR 10 No Impact
- Dewey St No Impact
- 18th Rd No Impact
- 19th Rd No Impact
- Kenilworth Rd No Impact
- 20 B Rd No Impact
- SR 110 No Impact
- CR 700 No Impact

INTERSECTION TYPES:



MINIMAL ACCESS CONTROL, driveways have full access, median openings are provided

No-Build: Arterial | Free-Flow



Improvement Package #1

Arterial/RCI & RIRO

- 16th Rd Intersection Closed
- SR 10 Interchange
- Dewey St Intersection Closed
- 18th Rd RIRO
- 19th Rd Reduced Conflict Intersection (Unsignalized)
- Kenilworth Rd RIRO
- 20 B Rd Intersection Closed
- SR 110 Interchange
- CR 700 Overpass

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N Intersection Closed

INTERSECTION TYPES:

Interchange



Reduced Conflict Intersection (Unsignalized)

RIRO

Overpass

ACCESS CONTROL METHODS:

PARTIAL ACCESS, no driveway access, at grade intersections allowed, median openings not allowed

Package 1: Arterial | RCI & RIRO



Improvement Package #2

Expressway/RCI & Closures

- 16th Rd Intersection Closed
- SR 10 Interchange
- Dewey St Intersection Closed
- 18th Rd Intersection Closed
- 19th Rd Reduced Conflict Intersection (Unsignalized)
- Kenilworth Rd Intersection Closed
- 20 B Rd Intersection Closed
- SR 110 Interchange
- CR 700 Overpass

INTERSECTION TYPES:



Interchange



ACCESS CONTROL METHODS:

PARTIAL ACCESS, no driveway access, at grade intersections allowed, median openings not allowed

RIRO

Overpass

Package 2: Expressway | RCI & Closures



Improvement Package #3

Freeway/Free Flow

- 16th Rd Intersection Closed
- SR 10 Interchange
- Dewey St Intersection Closed
- 18th Rd Intersection Closed
- 19th Rd Intersection Closed
- Kenilworth Rd Intersection Closed
- 20 B Rd Intersection Closed
- SR 110 Interchange
- CR 700 Overpass



INTERSECTION TYPES:



ACCESS CONTROL METHODS:

LIMITED ACCESS, no driveway access, crossroads are grade separated or closed; median openings not allowed



Summary Matrix



	US 31 Facility Type, Traffic Conditions, and Access Control	Arterial Free Flow Minimal Access Control (60 mph)	Arterial RCI @ 19th Closure at 17th & 20B RIRO All Others (60 mph)	Expressway Lite RCI @ 19th Close All Others (60 mph)	Freeway 60 mph
	Total Conflict Points (number)	288	86	78	60
afetv	Crossing Conflict Points (number)	144	22	22	20
	% Reduction in Crossing Conflict Points to No-Build	N/A	84.7	84.7	86.1
Purpose and Need obility S	Estimate of Crossing Crashes Prevented (20 yrs)	N/A	152	152	155
	Avg Travel Time along US 31 (min) during AM/PM Peak	6.20	6.20	6.20	6.20
3	Average Distance between US 31 Access Points (miles)	0.68	1.24	2.06	3.10
<u>₹</u>	Average Distance between US 31 Crossing Points (miles)	0.68	1.55	1.55	2.06
	Average Distance between US 31 Crossing Points (miles)Change in Crossing Time (Across US 31)Res Driveways, (RIRO/Full) [close]	N/A	Increase	Increase	Greatly Increase
ĮΣ	Res Driveways, (RIRO/Full) [close]	0	0	0	0
	Comm Driveways (RIRO, Full) [close]	0	0	0	0
	Field Access Driveways (RIRO, Full) [close]	0	0	0	0
S	Estimated Construction Cost (2024 Dollars)	N/A	\$42.0M	\$43.8M	\$42.7M
Costs	Estimated Right of Way Costs (2024 Dollars)	N/A	\$1.7M	\$1.9M	\$2.0M
0	Estimated Total Package Costs (2024 Dollars)	N/A	\$43.7M	\$44.7M	\$44.7M
	Economic Development	N/A	Neutral	Neutral	Neutral
<i>(</i> 0	Equity in Transportation	N/A	Neutral	Neutral	Neutral
oals	Multi-Modal Access & Coordination	N/A	Neutral	Neutral	Neutral
5 ≥	Emerging Technologies	N/A	Neutral	Neutral	Neutral
Study Goals	Fiscal & Environmental Practicality	N/A	Neutral	Neutral	Neutral
	Corridor Character	N/A	Neutral	Diminish	Diminish
	Local Access	N/A	Slightly Diminish	Diminish	Greatly Diminish
vel 3	Screening Result	Carry Forward	Carry Forward	Carry Forward	Recommended

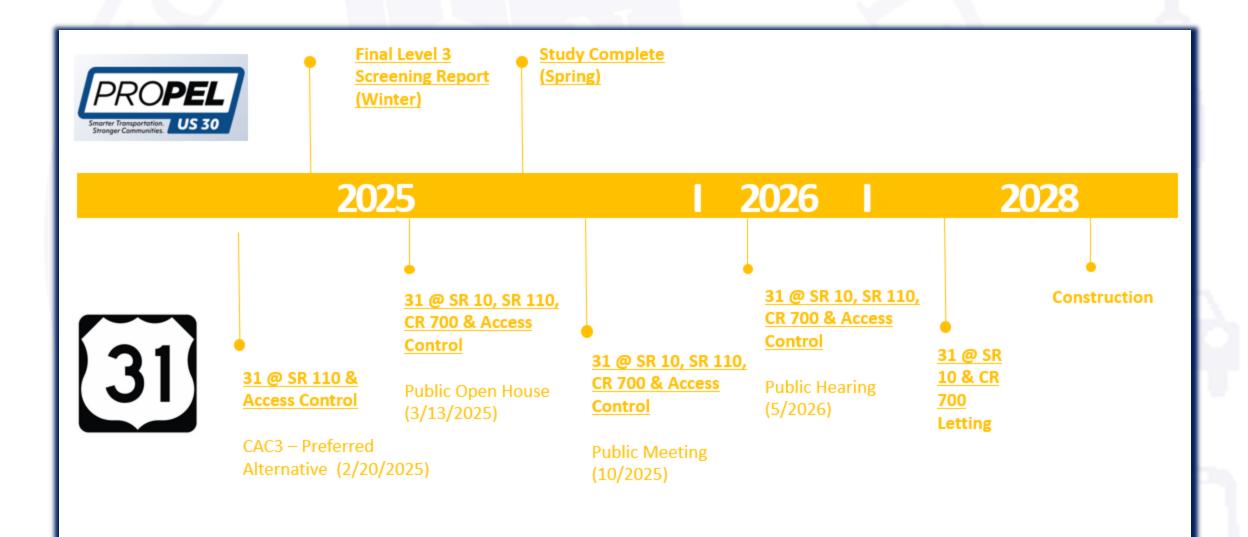
Summary Matrix



	Macoursement of Effectiveness	No-Build	Deckerte 4	Deckers 0	
	Measurement of Effectiveness US 31 Facility Type, Traffic Conditions, and Access Control	Arterial Free Flow Minimal Access Control (60 mph)	Package 1 Arterial RCI @ 19th Closure at 17th & 20B RIRO All Others (60 mph)	Package 2 Expressway Lite RCI @ 19th Close All Others (60 mph)	Package 3 Freeway 60 mph
	NWI Wetlands Impacted (acres impacted)	N/A	0.68	0.68	0.68
al Ja	Streams Impacted (Lft impacted)	N/A	0	0	0
Natural	Floodplain (acres impacted)	N/A	0	0	0
	Forested Areas (acres impacted)	N/A	<1	<1	<1
	Potential Impact to Above Ground Resources (yes/no)	N/A	No	No	No
Cultural	Potential Known Archaeological Sites (yes/no)	N/A	Νο	No	Νο
	Cemeteries (number)	N/A	0	0	0
	Residential Relocations (number)	N/A	0	0	0
	Business Relocations (number)	N/A	0	0	0
	Total New Right of Way Acquisition (acres)	N/A	33.2	33.71	33.78
Community/Socioeconomic	EJ Populations (acres)	N/A	0	0	0
ec c	EJ Populations (Potential Relocations)	N/A	0	0	0
ocic	Potential Risk of Disproportionate Impact to EJ	N/A	No	No	No
nitv/S	Farmland (acres impacted)	N/A	31.9	32.13	32.17
	Farmland Access (impacts, Yes/No)	N/A	Yes	Yes	Yes
Corr	Potential Impacts to Other Secton 4(f) Resources (yes/no)	N/A	No	No	No
	Potential Hazardous Material Sites (number)	N/A	1	1	1
	Change in GHG Emissions Compared to No-Build	N/A	No Change	Increased	Increased
	Railroad Impacts (score)	N/A	0	0	0

Projected Engagement







For the future **Public Open House, Public Information Meeting** and **Public Hearing,** inclusion-focused outreach includes postcards mailed to addresses in the US 31 Marshall-Fulton corridor; outreach to Amish and underserved communities; and project documents made publicly available.

Fueled By Feedback



- Q&A
- Handout & Comments
 - Provide written comments
 - Respond/return by Monday, March 31, 2025
 - E-mail Tom at tspalding@c2strategic.com



Fueled By Feedback



US 31 Corridor projects in Marshall & Fulton

Thank You!

For your insights and input