

MEETING SUMMARY

Date: April 29, 2021
Time: 9:30 AM – 10:00 AM CST
Meeting: 80/94 FlexRoad Resource Agency Committee (RAC) Meeting #1 Summary
Location: Microsoft Teams

Name	Organization	Email
Amber Thomas	INDOT	athomas2@indot.in.gov
Adam Parkhouse	INDOT	aparkhouse@indot.in.gov
Laura Hilden	INDOT	lhilden@indot.in.gov
Jim Poturalski	INDOT	jpoturalski@indot.in.gov
Kari Carmany-George	FHWA	k.carmanygeorge@dot.gov
Robert Dirks	FHWA	Robert.dirks@dot.gov
Bruno Pigott	IDEM	info@idem.in.gov
Jay Turner	IDEM	jturner2@idem.in.gov
Beth McCord	Indiana DNR	bmccord@dnr.in.gov
Brad Hayes	Illinois DNR	Bradley.hayes@illinois.gov
Todd Ravesloot	NPS	Todd_ravesloot@nps.gov
Jose Rodriguez	CMAP	jrodriguez@cmapp.illinois.gov
Joe Exl	NIRPC	jexl@nirpc.org
Rita Baker	Illinois HPA	Rita.e.baker@illinois.gov
CJ Wallace	Illinois HPA	Carol.wallace@illinois.gov
Dan Prevost	Parsons	daniel.prevost@parsons.com
Junell O'Donnell	Parsons	junell.odonnell@parsons.com
Joseph Brahm	Parsons	joseph.brahm@parsons.com
Alex Lee	Parsons	alexander.lee@parsons.com
Keaton Veldkamp	Parsons	keaton.veldkamp@parsons.com

Meeting Summary

Welcome and introductions – Amber Thomas, INDOT Project Manager, introduced herself and welcomed everyone. Dan Prevost, Parsons Environmental and Public Involvement Lead, facilitated self-introductions of all attendees.

Junell O'Donnell, Parsons Project Manager gave an overview of the project setting and schedule.

- This is a tight corridor, with complicated ramp geometry; the study is not looking to expand the roadway

- One of the first Planning and Environment Linkages (PEL) Studies and Traffic Systems Management & Operations (TSMO) projects in Indiana
- The PEL Study and evaluation of TSMO strategies will largely be completed in 2021. NEPA and final design would occur in 2022-2023 with construction currently planned for 2024.

Dan Prevost explained the role of the RAC and who are included in the group.

- There is also a Community Advisory Committee that is meeting too and explained its role
- The PEL process brings stakeholders into the earliest phase of the planning process and streamlines the overall project development process.
- Needs for the project are recurring congestion and the number of crashes in the corridor
- Proposed project limits (termini) are from IL 394 in Illinois to I-65 in Indiana

Joseph Brahm, Parsons TSMO Manager explained what is TSMO.

- Overview of common TSMO strategies
- Series of interviews with INDOT/IDOT personnel, intent is to learn about the corridor and develop a series of strategies that could be carried forward

Dan Prevost explained the schedule and environmental investigations.

- Public involvement will be in three phases during the PEL process; will meet with the RAC during each phase, public meetings during the 2nd and 3rd phases.
- Environmental investigations have begun, including Red Flag Investigation, noise barrier inventory and identification of Environmental Justice populations.

Questions

Dan Prevost opened the presentation up for questions regarding the project.

Question: CJ Wallace - IL Historic Preservation Agency, asked if the distribution list, presentation maps with the potential Area of Potential Effects (APE), etc will be emailed for early comments with the RAC group. She appreciated the early notification of the project.

Answer: Dan Prevost explained that the Section 106 process, including definition of the APE and consulting party engagement, will not formally start until the NEPA process is initiated (after the PEL Study). During PEL the Red Flag Investigation will identify previously documented sites and the team would welcome any initial concerns that the SHPO has.

Comment: Brad Hayes - Illinois Department of Natural Resources, stated that the Wampum Lake Woods Forest Preserve is highly protected; that area might not be adjacent to the corridor but close. Wanted to bring that to our attention.

Question: Joe Exl - Northwestern Indiana Regional Planning Commission, stated that we should look at the drainage and flooding events along the corridor, especially in the lanes along the edge.

Answer: Junell O'Donnell indicated that the civil engineering team is paying close attention to drainage and flooding due to the potential to utilize the shoulders where most drainage structures are located.

Question: Kari Carmany-George - FHWA Indiana Division asked exactly how the PEL study will be incorporated into the NEPA process. Will the purpose and need (P&N) and alternatives analysis be referenced or used to inform the NEPA process or is the plan to adopt those into the NEPA process?

- Are the P&N and the alternatives more to inform the NEPA process, or adopt what is found during PEL into NEPA?

Answer: Dan Prevost explained that the PEL process allows for flexibility in terms of what is carried forward into the NEPA process, but that based on the current plan, the team anticipates carrying the draft purpose & need statement and the alternatives screening work completed during the PEL process into NEPA.

Dan Prevost thanked everyone for participating and shared contact information for Amber, Junell, and himself should attendees have questions or comments.

The above summary represents our recollection of the pertinent discussion points, decisions, and action items from the meeting. Please contact the preparer, Alex Lee, at alexander.lee@parsons.com, within three days from your receipt of this document if you wish to make any additions or corrections. If revisions are made, the updated summary will be re-sent to all the attendants. Otherwise, this summary shall stand as the official record of the meeting.



I-80/I-94 TSMO Study

Resource Agency Committee
(RAC) Meeting
April 29, 2021



1

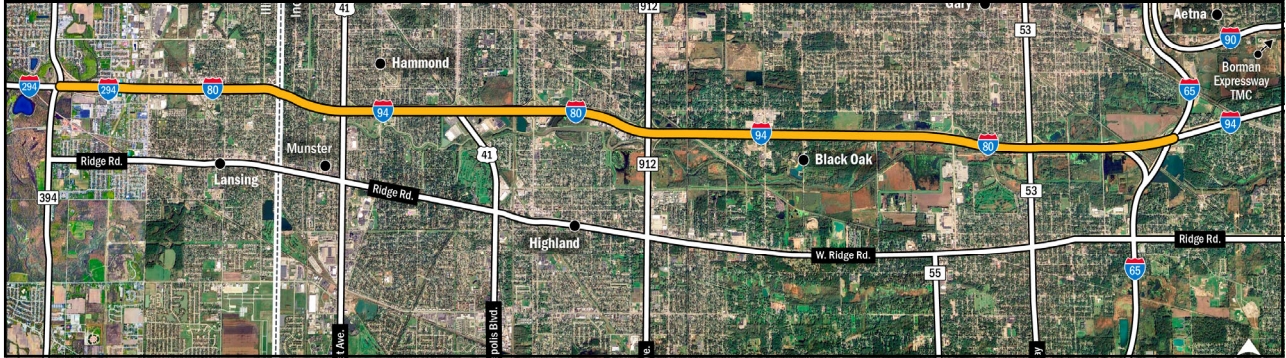
Welcome

- Introduction of Project Team
- Group Introductions



2

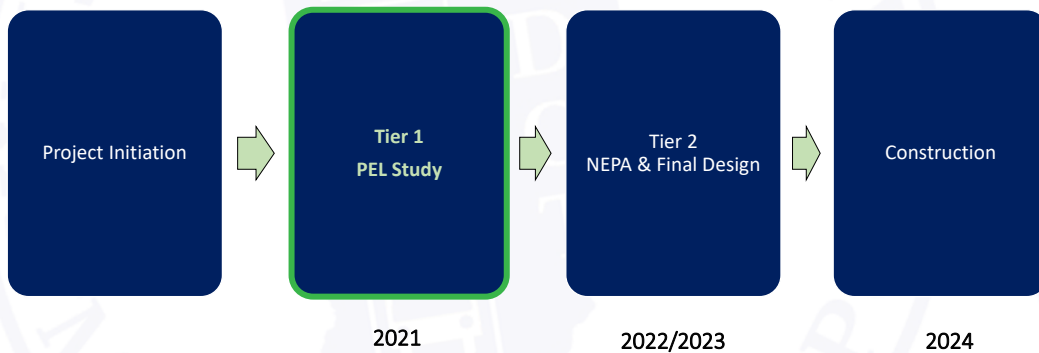
Project Location – I-80/94 - Indiana / Illinois



3

Study Scope/Schedule

Indiana's First Transportation System Management and Operations (TSMO) Study



4

Role of the Resource Agency Committee (RAC)

- Agency engagement at earliest phase of the process
- Provide input on data collection, analysis methodologies and impact assessment
- Provide feedback on potential impacts and avoidance opportunities
- Facilitate collaborative problem solving, discussion of specific issues



5

Other Project Stakeholders

- Indiana and Illinois Departments of Transportation
- Federal Highway Administration, Indiana and Illinois Divisions
- Northwest Indiana Regional Planning Commission and Chicago Metropolitan Agency for Planning
- Elected & Local officials
- Transit
- Businesses
- Emergency services
- Schools
- Religious Institutions
- Community Organizations
- Residents



6

What is Planning and Environment Linkages (PEL)

PEL is a study process that is used to identify transportation issues, along with environmental concerns, in a corridor. PEL studies can be used to make planning decisions and for planning analysis.

Benefits of PEL Studies:

- Enables agencies to be more effective players in the transportation decision-making process
- Improves efficiencies by minimizing potential duplication of planning and NEPA processes
- With coordination with resource agencies and the public, transportation agencies are able to design transportation programs and projects that serve the community's transportation needs more effectively



NextLevel
INDIANA

7

PEL and NEPA



PEL Process

- Develop Purpose & Need
- Identify environmental resources and issues
- Alternative development and screening
- Scope/funding uncertain

NEPA Process

- Finalize Purpose & Need
- Detailed environmental surveys
- Assess environmental impacts
- Satisfy all regulatory requirements (Section 106, Section 7, etc.)
- Determine scope and funding

NextLevel
INDIANA

8

Reasons for the Project (Needs)

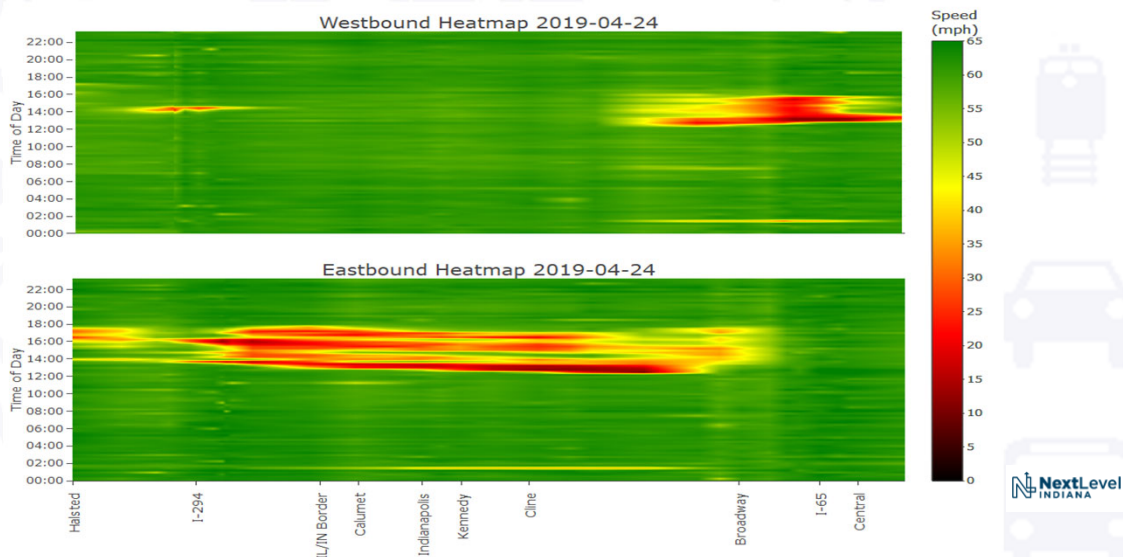
- Congestion – recurring peak hour/weekend congestion
 - Improve traffic operations
 - Ease the ability to carry out maintenance of the facility
- Safety – 4,075 crashes occurred between 2017 and 2019. The primary types are rear end and same direction sideswipe approximately 75%.
 - Capacity, merging, and weaving movements likely contribute to the safety issues
 - Approximately 38% of collisions involve trucks; whereas truck form 20-25% of the traffic stream



9

Congestion

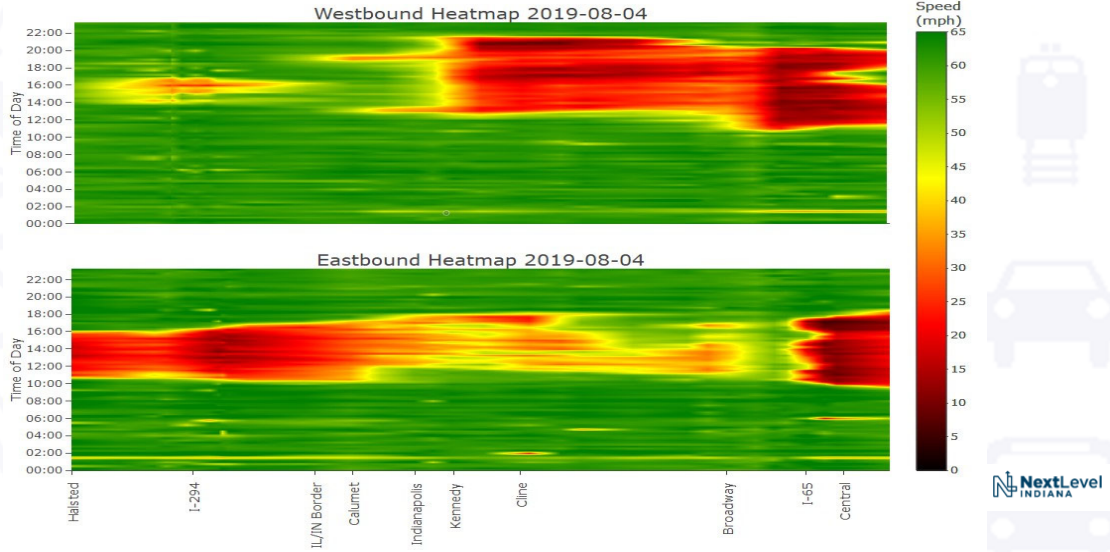
Average Travel Speeds – Wednesday April 24, 2019



10

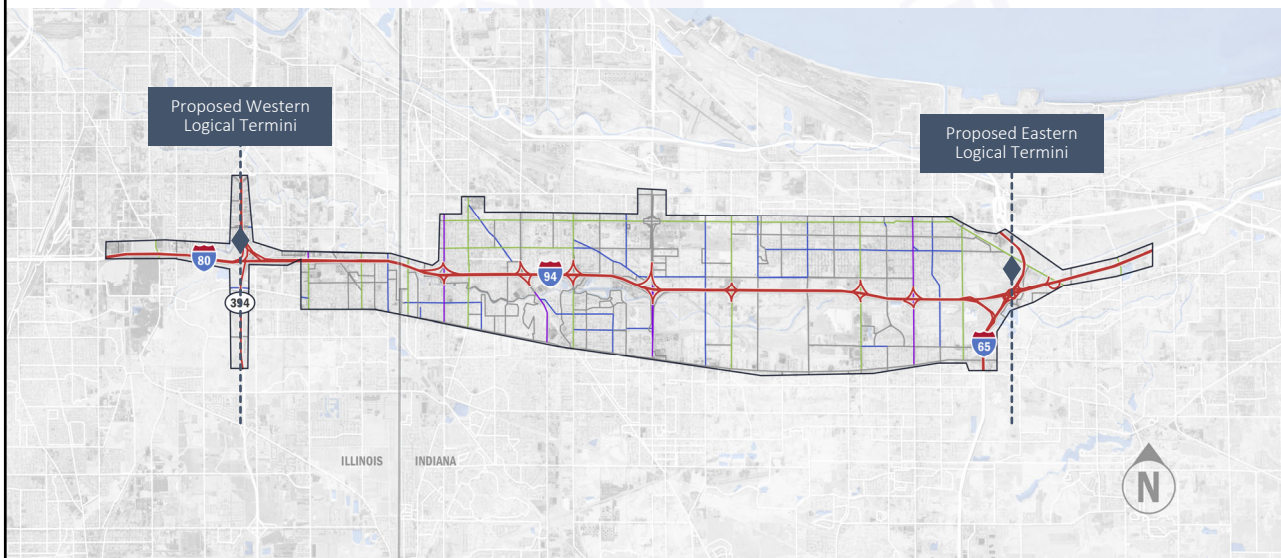
Congestion

Average Travel Speeds – Sunday August 8, 2019



11

Proposed Logical Termini



12

What is TSMO

Transportation Systems Management and Operations (TSMO) is a set of strategies that focus on operational improvements that can maintain the performance of the existing transportation system.

- TSMO helps agencies provide flexible solutions that can adapt to changing traffic conditions

Benefits to TSMO can include:

- Optimize efficiency of the existing roadway
- Smoother and more reliable traffic flow
- Improved safety
- Less wasted fuel and cleaner air
- More efficient use of resources (funding and facilities)

NextLevel
INDIANA

13

Potential TSMO strategies

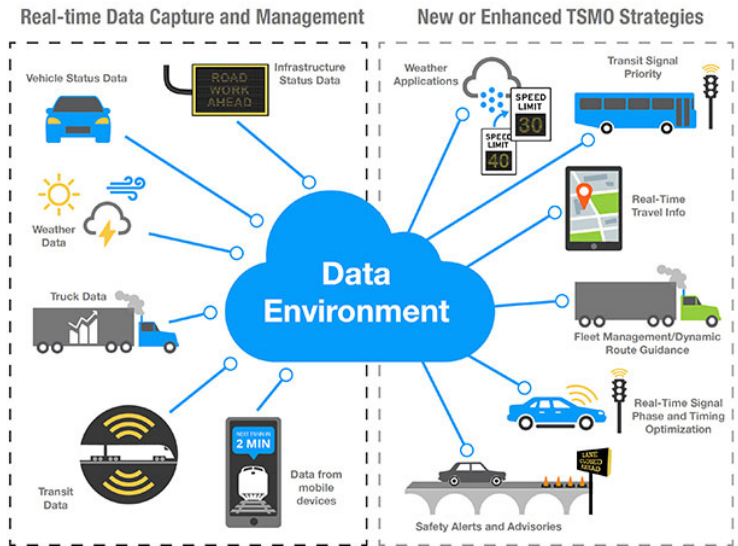
- Reviewing all reasonably applicable TSMO strategies
- Performing interviews with operations, traffic and maintenance staff
 - Ensure we understand all the regional issues, priorities and considerations
 - Mostly through these interviews
- TSMO Strategy highlights from initial interviews
 - Hard Shoulder Running (HSR)
 - Variable Speed Limits (VSL)
 - Queue warning
 - Ramp metering
 - Lane control
 - Managed/special purpose lanes
 - Many other ITS or operational strategies / Improvements
 - Changeable lane assignment
 - Freeway/arterial Integrated Corridor Management (ICM)



14

Integrated Set of Strategies

- TSMO typically deployed as set of strategies
- Integration can happen on multiple levels:
 - System
 - Operational
 - Institutional
 - Technical



Source: U.S. Department of Transportation.

15

Schedule

TASK	2020			2021												2022	
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	
Corridor Evaluation & Data Collection	█																
Model Data & Develop Base Model	█																
Purpose and Need			█	█	█	█	█	█	█	█							
Environmental Baseline Data Collection			█	█	█	█											
Build Long List of Alternatives			█	█	█	█											
Initial Review with Project Team							★										
Modeling & Analysis of Short List							█	█	█	█	█	█	█				
Develop & Analyze Likely Alternatives							█	█	█	█	█	█	█	█			
Con Ops – Coord. and Development							█	█	█	█	█	█	█	█			
Environmental Impact Evaluation								█	█	█	█	█	█				
Cost/Benefit Analysis									█	█	█	█	█				
Alternatives Safety Analysis									█	█	█	█	█				
Public Outreach						█			█	█	█	█	█				
PEL Study Report													█	█	★		
Final Alternatives Report with Recommendations															█	★	
Begin Tier 2 - Continue NEPA & Identification of Most Viable Alternative															█		

★ Milestone

16

Public Involvement Phases

	Phase Description
Spring 2021 Study Introduction/ Scoping	Collect information from the public, agencies and other stakeholders regarding: <ul style="list-style-type: none"> • transportation issues in the corridor (e.g., recurring congestion, safety concerns, etc.) • proposed study limits, and • assessment of impacts that may result from the alternatives.
Summer 2021 Purpose and Need/Alternatives Development	Collect feedback on: <ul style="list-style-type: none"> • draft purpose and need • long list of alternatives.
Summer/Fall 2021 Alternatives Screening/PEL Study	Provide stakeholders with: <ul style="list-style-type: none"> • results of the alternatives screening process and impact evaluations • overview of the findings and outcomes of the PEL Study.

17

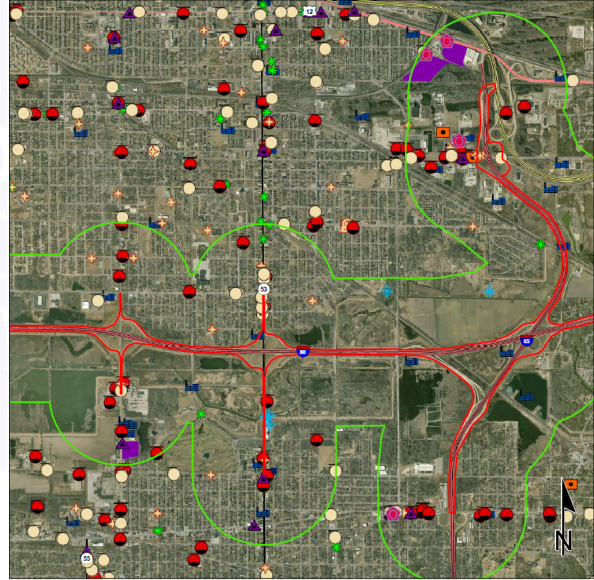
Environmental Analysis during PEL

- Red Flag Investigation/Environmental Survey Request
 - Limited potential for impacts outside of right-of-way
 - Wetland/Stream/Floodplain impacts unlikely
- Noise Barrier Inventory/Qualitative Evaluation
- Environmental Justice Analysis
- Public Involvement including Community Advisory Committee and Resource Agency Committee
- PEL Study Report

18

Red Flag Investigation

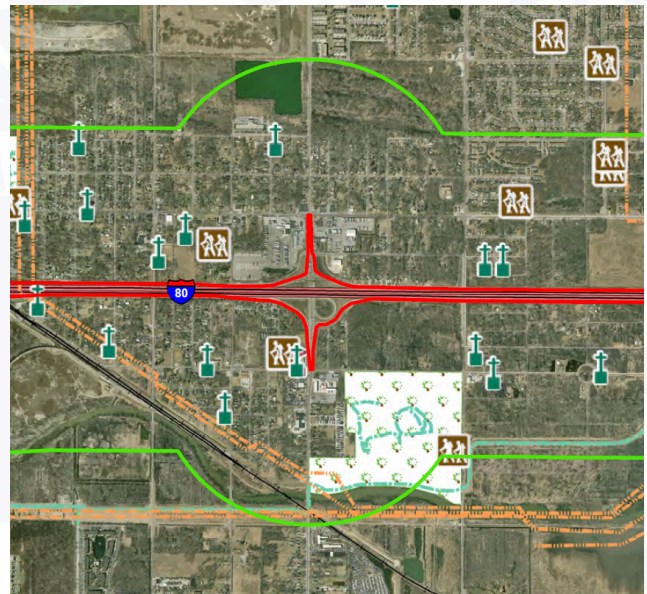
- Religious Facilities
- Airports
- Cemeteries
- Schools
- Recreational Facilities
- Pipelines
- Railroads
- Trails
- Wetlands/Streams/Floodplains
- Contaminated Materials Sites



19

Red Flag Investigation – How It's Used

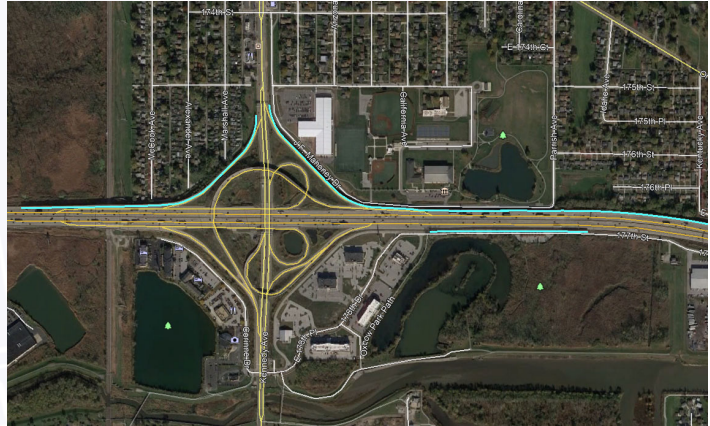
- Avoid or reduce impacts to sensitive resources
- Reduce risk to the States
- Identify stakeholders



20

Noise Barrier Inventory

- Data collection
 - INDOT and IDOT records
 - Windshield survey
- FHWA views dynamic shoulder lanes as added capacity – requires noise impact evaluation
- Qualitative only during PEL phase



21

Environmental Justice

- Executive Order 12898: Directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations
- Identify EJ Populations – in process
- Assess potential impacts



22

Your Input

- Corridor Needs
- Project Limits/Logical Termini
- Sensitive resources in the area
- Any undocumented resources or contaminated materials sites
- Groups/neighborhoods that should be targeted for additional outreach
- Planned facilities



23

Coming Soon: A New INDOT Brand

FLEXROAD

24

Questions & Discussion

INDOT Project Manager
Amber Thomas, PMP
AThomas2@indot.IN.gov
219-344-0046

Parsons Project Manager
Junell O'Donnell, DBIA
Junnell.ODonnell@parsons.com
219-307-1512

Parsons Environmental Lead
Dan Prevost, AICP CTP
Daniel.Prevost@parsons.com
513-552-7013



25

Thank You

Project Website: [Under development](#)

INDOT Next Level Customer Service

855-INDOT4U (855-463-6848)

www.indot4u.com

indot@indot.in.gov



855-463-6848

Please mention "80/90 FlexRoad Study" in your comments.



26

Division of Historic Preservation & Archaeology 402 W. Washington Street, W274 Indianapolis, IN 46204-2739
Phone 317-232-1646 Fax 317-232-0693 dhpa@dnr.IN.gov



May 25, 2021

Dan Prevost
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46204

Federal Agency: Federal Highway Administration

Re: Resource agency committee meeting presentation for proposed the I-80/I-94 FlexRoad Study
(Des. No. TBD; DHPA No. 27444)

Dear Mr. Prevost:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer has reviewed the Resource Agency Committee (RAC) meeting materials received on April 29, 2021, for the above indicated project in Lake County, Indiana and Cook County, Illinois.

Thank you for notifying our office of the proposed project. We appreciate the information on the Federal Highway Administration' approach to project. We understand that the Transportation System Management and Operations (TSMO) and Planning and Environmental Linkages (PEL) studies are being utilized in Indiana for the first time. We have no specific comments regarding the project or meeting presentation. As you probably realize, our comments during this project will be offered largely from a Section 106 or an Indiana state historic preservation and archaeology law perspective. We look forward to reviewing more information regarding historic resources as the project progresses.

The Indiana SHPO staff archaeological review for this project is Beth McCord, and the structures reviewer is Chad Slider. However, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In all future correspondence regarding I-80/I90 FlexRoad project in Lake County, Indiana and Cook County, Illinois (Des. No. TBD), please refer to DHPA No. 27444.

Very truly yours,

A handwritten signature in black ink, appearing to read "Beth K. McCord".

Beth K. McCord
Deputy State Historic Preservation Officer

BKM:CWS:cws

emc: Kari Carmany-George, FHWA
Anuradha Kumar, INDOT

Shaun Miller, INDOT
Susan Branigin, INDOT
Dan Prevost, Parsons
Christie Stanifer, IDNR, Division of Fish and Wildlife
Beth K. McCord, IDNR-DHPA
Chad Slider, IDNR-DHPA

MEETING SUMMARY

Date: August 11, 2021
Time: 11:00 AM EST
Meeting: 80/94 FlexRoad Resource Agency Meeting (RAC) #2
Location: Microsoft Teams

Attendees:

Name	Organization	Email
Kari Carmany-George	FHWA	k.carmanygeorge@dot.gov
Robert Dirks	FHWA	Robert.Dirks@dot.gov
Ashley Taylor	Indiana DNR-DFW	AsTaylor1@dnr.in.gov
Matt Buffington	Indiana DNR-DFW	mbuffington@dnr.in.gov
Kyle Armstrong	IDOT	kyle.armstrong@illinois.gov
Terrance Heffron	IDOT	terrance.heffron@illinois.gov
Bradley Hayes	Illinois DNR	bradley.hayes@illinois.gov
Jeff Kruchten	Illinois SHPO	Jeffrey.kruchten@illinois.gov
Rita Baker	Illinois SHPO	rita.e.baker@illinois.gov
Adam Parkhouse	INDOT	aparkhouse@indot.in.gov
Brandon Miller	INDOT	bramiller@indot.in.gov
Laura Hilden	INDOT	lhilden@indot.in.gov
Sandra Bowman	INDOT	sbowman@indot.in.gov
Charles Bradsky	NIRPC	cbradsky@nirpc.org
Mar Gordish	City of Hammond Engineering Department	gordishm@gohammond.com
Alex Lee	Parsons	Alexander.Lee@parsons.com
Dan Prevost	Parsons	Daniel.Prevost@parsons.com
Joseph Brahm	Parsons	Joseph.Brahm@parsons.com
Junell O'Donnell	Parsons	Junell.ODonnell@parsons.com
Keaton Veldkamp	Parsons	Keaton.Veldkamp@parsons.com
Virginia Laszewski	USEPA	laszewski.virginia@epa.gov

Meeting Summary

Dan Prevost, Parsons Environmental and Public Involvement Lead, facilitated self-introductions for those in attendance and re-introduced the project.

Dan Prevost began the presentation by discussing the project's termini and explaining the Planning and Environmental Linkage (PEL) study process as it relates to the 80/94 FlexRoad project.

- The PEL Study is expected to be completed in early 2022 with NEPA starting after that. Depending on the alternatives that come out of the PEL and NEPA processes, the construction could occur in 2023/2024.

Dan Prevost discussed current traffic and travel time conditions within the corridor.

- Average travel time for westbound PM peak period is 19.3 minutes, but many trips take much longer due to delays and congestion.
- Single incidents can have far reaching delays.
- The 2040 eastbound PM delays are +16 minutes compared to +10 minutes currently

Upcoming traffic analysis:

- Weekday and weekend conditions
- Lane-by-lane evaluation
- Various “packages” of strategies
- Effects on local street network
- Simulate incidents to observe response

FlexRoad – A new approach at INDOT

- First project within the FlexRoad brand
- The intent is for the FlexRoad brand to be utilized on future similar projects within Indiana

Dan Prevost discussed what is Transportation Systems Management and Operations (TSMO)

- The technical team started with a high level assessment that included stakeholder outreach, gathering information, and a short list of potential strategies
- Dan Prevost explained the potential TSMO strategies being evaluated by the project team.
 - Dynamic shoulder lanes/hard shoulder running, variable speed limits, ramp metering, and behind the scenes strategies to improve incident management

Dan Prevost explained how people can get involved with the project by attending public meetings, various committees, interacting with social media/the project website (www.indianaflexroad.com), and signing up for email updates.

July/August Public Outreach

- Three public meetings (two in-person, one virtual), one community advisory committee (CAC) meeting, website/social media, and INDOT GovDelivery Listserv
- The project website has over 200 unique users and 35 comments on the interactive map

Environmental Analysis Update: Data collection phase continues

- Red Flag Investigation (RFI)
- Noise Barriers – inventory of current barriers, and evaluate additional or replacements
- Environmental Justice (EJ) – direct impacts to those adjacent and operational impacts
 - Team is using data from Streetlight learn about origins and destinations, including how many trips start/finish in areas identified as EJ populations.

Fall Public/Agency Meetings (tentatively mid-October)

- Full Purpose and Need coming
- TSMO “packages” – performance and cost of the various packages
- Results of the alternative analysis
- Environmental impacts

Dan Prevost showed the project website (www.indianaflexroad.com) and the interactive mapping tool.

Dan Prevost thanked everyone for attending the meeting and participating in the RAC.

Questions/Comments

Virginia Laszewski: What sort of feedback are you getting from the public regarding the project?

- Dan Prevost: We have not sorted through all the responses quite yet. There was talk about continued corridor maintenance at the public meetings.
- Junell O'Donnell: Some local residents have suggested other entities that the project team should coordinate with, i.e., trucking agencies. Other residents have talked more broadly about historic handling of the Borman and specific concerns about safety issues and noise walls.

Virginia Laszewski: In terms of the map you showed with EJ communities, has the project team gone into the communities to bring them into the project planning process?

- Dan Prevost: We have been coordinating with the CAC members, the NAACP, Hammond Hispanic Community Committee, and others, to help spread the word about the project and gather feedback. If anyone within the RAC has specific suggestions or comments regarding EJ, please reach out. The project team translated the public meeting materials into Spanish to increase accessibility to local residents.

Virginia Laszewski: Could you please email copies of the presentation and the meeting minutes afterwards?

- Dan Prevost: this RAC presentation and meeting summary will be emailed to all committee members after its conclusion.

The above summary represents our recollection of the pertinent discussion points, decisions, and action items from the meeting. Please contact the preparer, Keaton Veldkamp, at Keaton.Veldkamp@parsons.com, within three days from your receipt of this document if you wish to make any additions or corrections. If revisions are made, the updated summary will be re-sent to all the attendants. Otherwise, this summary shall stand as the official record of the meeting.

FLEXROAD
LESS STOP. MORE GO.

I-80/94 BORMAN EXPRESSWAY

Resource Agency Committee Meeting #2

August 11, 2021 Dan Prevost, Parsons

1

AGENDA

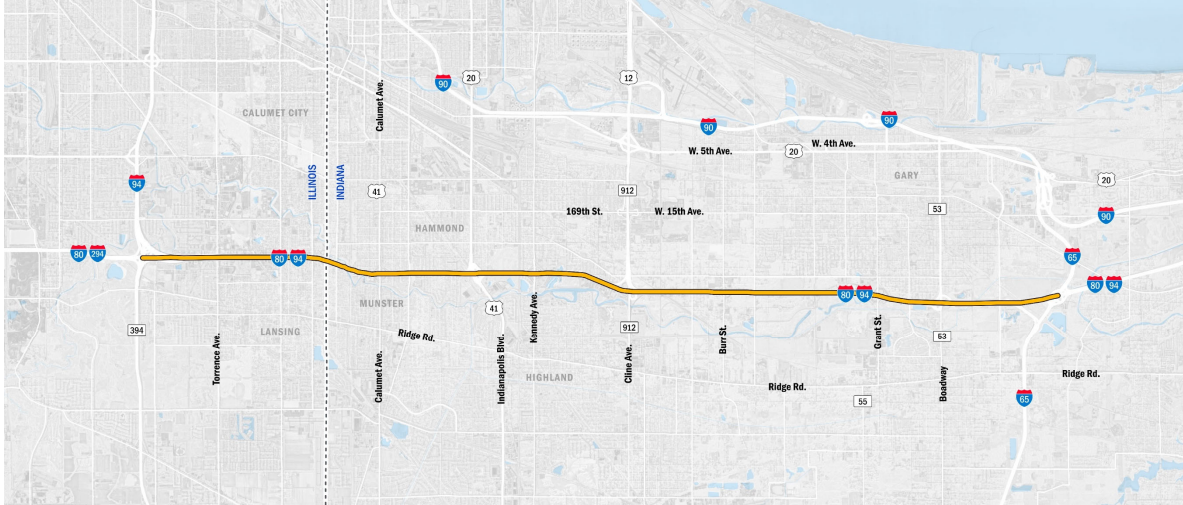
- Purpose & Need
- TSMO Strategies
- Public Outreach
- Environmental Analysis Update

FLEXROAD LESS STOP. MORE GO. © 2021 INDOT

2

The Borman Expressway

IL 394 to I-65



3

Study Process and Schedule

Planning & Environment Linkages (PEL) Process



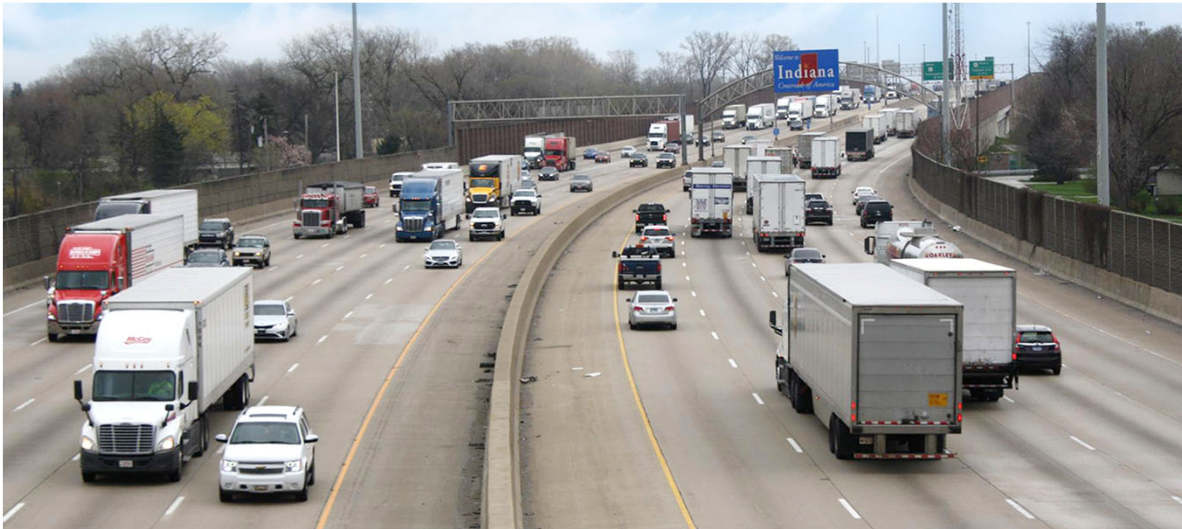
PEL products that will be carried into NEPA:

- Draft Purpose and Need
- High Level Environmental Evaluation
- Agency Coordination
- Public Outreach
- Alternatives Screening

	2021	2022	2023/2024
Corridor Planning Screen and Package Strategies	[Blue bar spanning 2021 and early 2022]		
Environmental Analysis Preliminary/Final Design		[Light blue bar spanning mid-2022]	
Implementation/Construction			[Orange bar spanning 2023 and 2024]

4

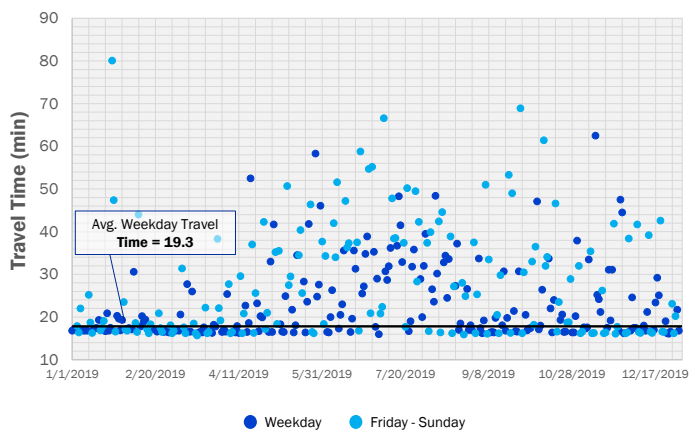
The Borman Expressway



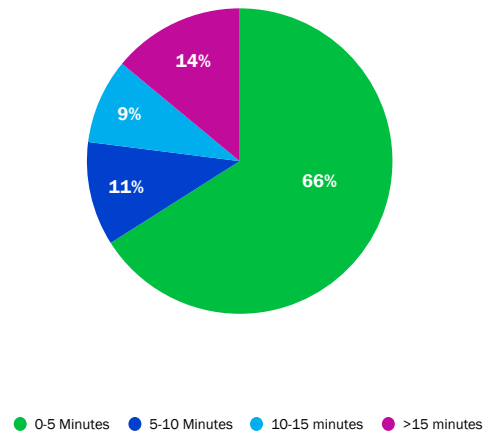
5

Current Conditions Traffic – Corridor Travel Times

Travel Times – Westbound – PM Peak Period

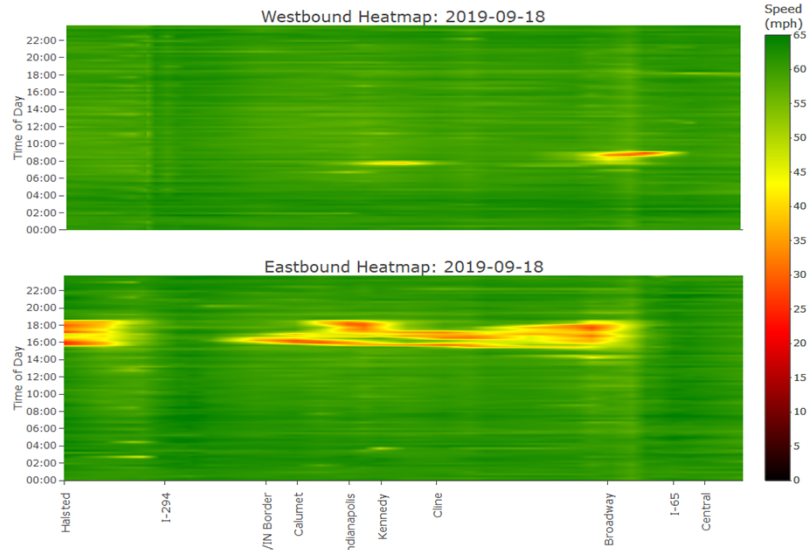


Delay for Weekdays



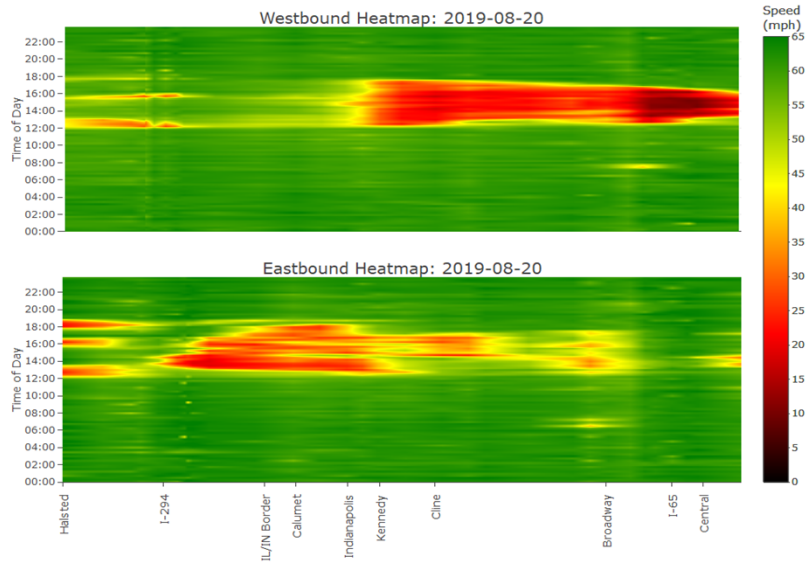
6

Current Conditions
Traffic – Typical Weekday



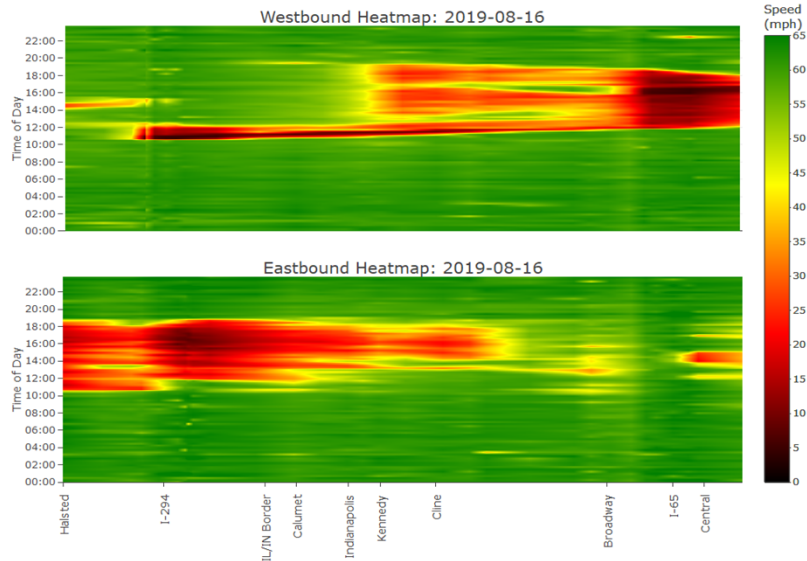
7

Current Conditions
Traffic – Weekday Incident



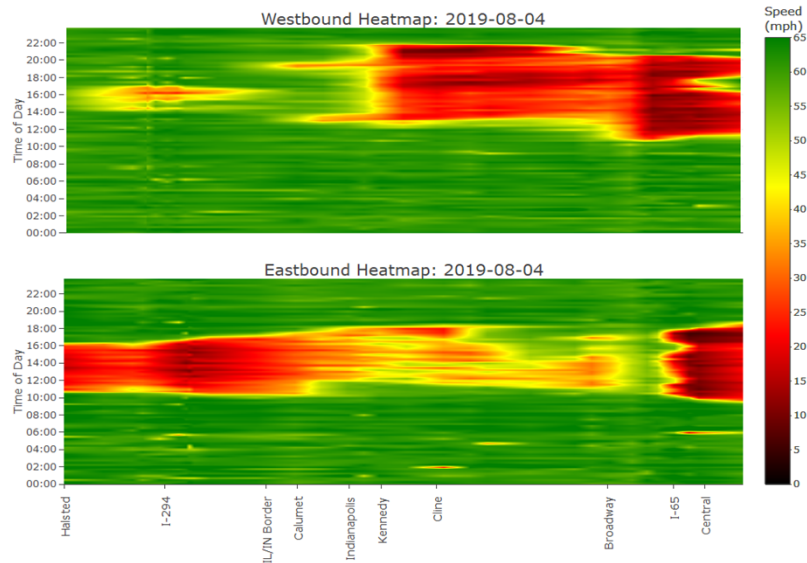
8

Current Conditions
Traffic – Typical Friday



9

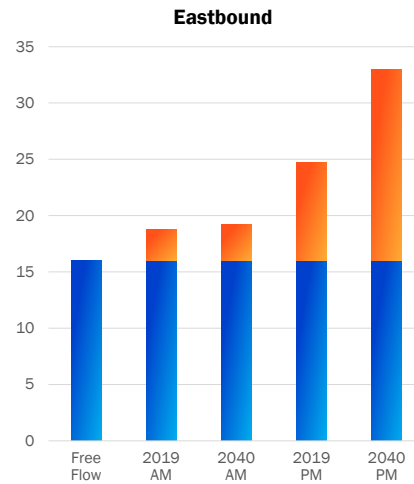
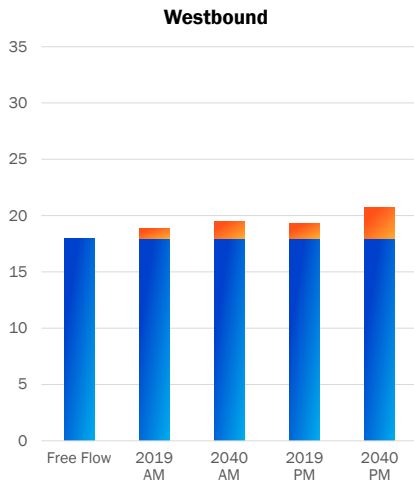
Current Conditions
Traffic – Typical Sunday



10

Current Conditions

Traffic – Corridor Travel Times & Delay



11

Upcoming Traffic Analysis

Evaluation of TSMO Strategies

- Weekday and weekend conditions
- Lane-by-lane evaluation
- Various “packages” of strategies
- Effects on local street network
- Simulate incidents (e.g., crashes) to observe response

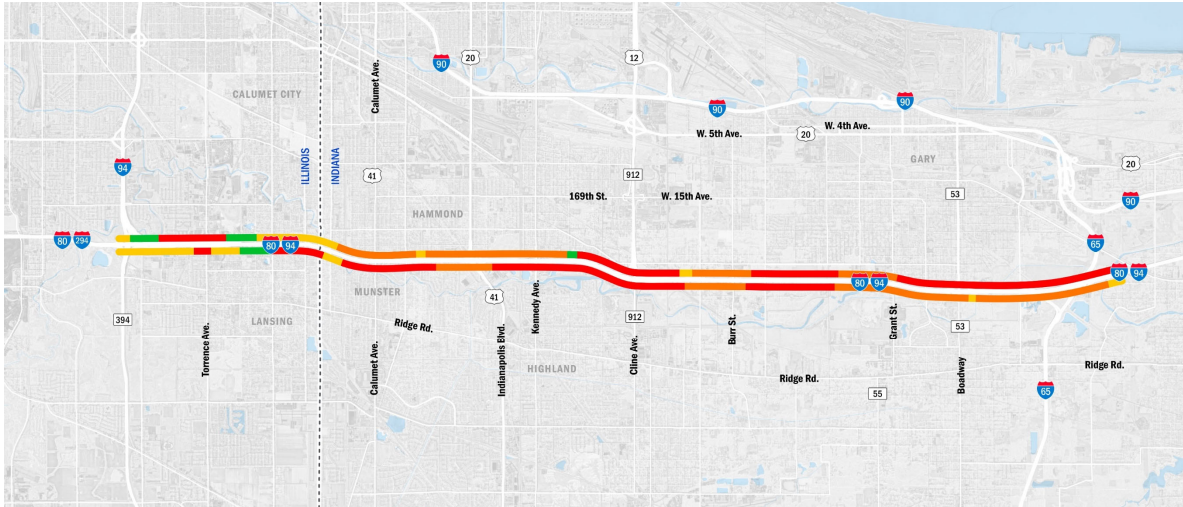


12

Current Conditions

Safety

- Crash Frequency Below Statewide Average
- Crash Frequency not High, but High Severity Location
- Crash Frequency Above Statewide Average
- High Crash Frequency Location



13

Preliminary Purpose and Need

- Congestion
 - Peak periods, including weekends
 - Minimize impact of incidents
- Safety
 - Reduce crash rates in the corridor



QUESTION #1

What do you think are the biggest problems in the corridor?

- What?
- Where?
- When?

Ways to Comment:

- Comment Form
- Map Board
- Website

14

FlexRoad

A New Approach at INDOT

- Strategic Approach
- Congested Urban Corridors
- First Comprehensive TSMO Study

FLEXROAD > LESS STOP,
MORE GO

15

What is TSMO?

Transportation Systems Management and Operations

- TSMO is a set of strategies that focus on operational improvement
- Get the most out of the existing transportation facilities.
- Real-Time Monitoring and Response
- Flexibility: Demand-Responsive Roadways



16

TSMO in 80/94 Corridor

High Level Assessment

Stakeholder Outreach

- DOT operations teams
- DOT maintenance staff
- DOT traffic engineering
- State Police
- Incident responders

Information Gathered

- Operational policies and procedures
- Existing systems
- Existing roadway conditions
- Traffic and incident data

Short Listed Strategies

- Dynamic Shoulder Lanes
- Lane Control
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- “Behind the Scenes” strategies

17

Dynamic Shoulder Lane/Hard Shoulder Running

- Temporary use of shoulders
- Location
 - Inside shoulder
 - Outside shoulder
- Use Conditions
 - Peak periods
 - Demand response
 - Incident response
- Considerations
 - Physical obstructions (e.g., bridges)
 - Shoulder debris/snow
 - Drainage



18

Variable Speed Limits

- Temporary reduction in speed limit
 - Congestion
 - Incidents
 - Work Zones
 - Weather
- Speed harmonization
- Dynamic monitoring and adjustment
- Advance signing and gantry spacing



19

Queue Warning

- Avoid secondary incidents
- Real-time monitoring of speeds
- Detect issues
- Dynamic Message Signs (DMS)



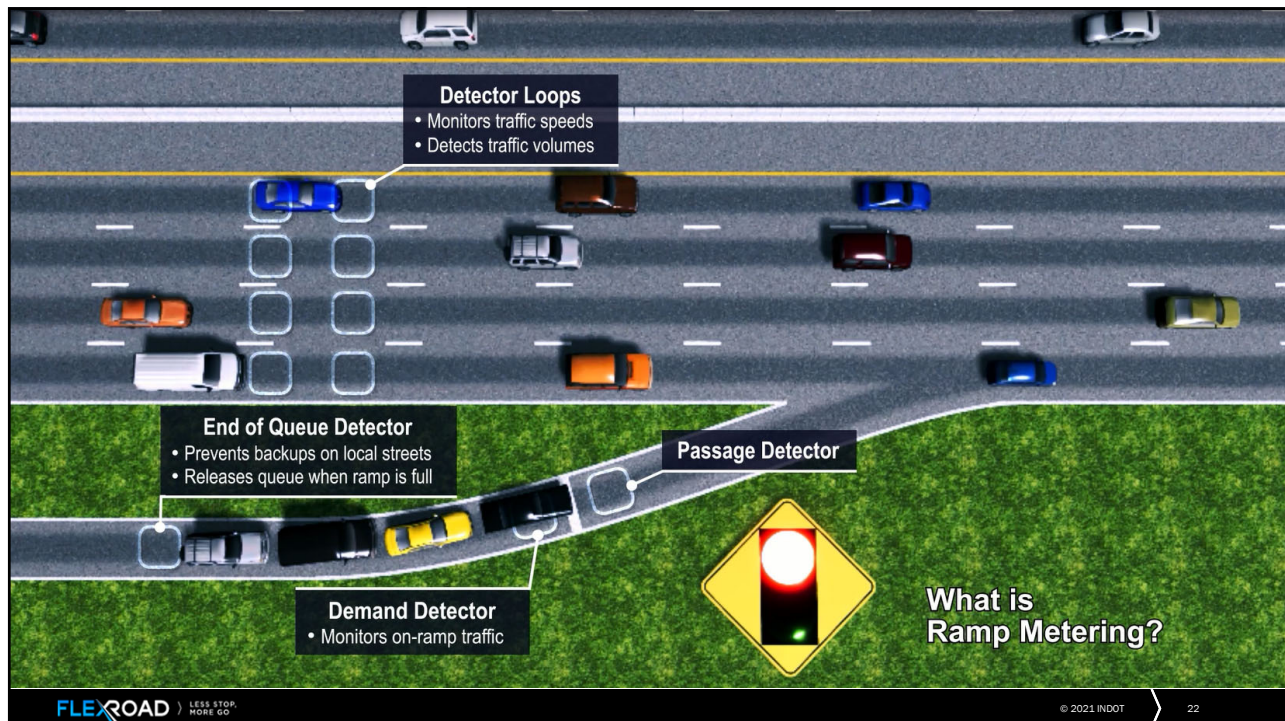
20

Ramp Metering

- Control rate of flow of entering vehicles
- Sensors monitor traffic on both highway and ramps
 - Trigger metering system
 - Select appropriate flow rate
 - Prevent impacts to local streets
- Single lane and multiple lane



21



22

Behind the Scenes Strategies

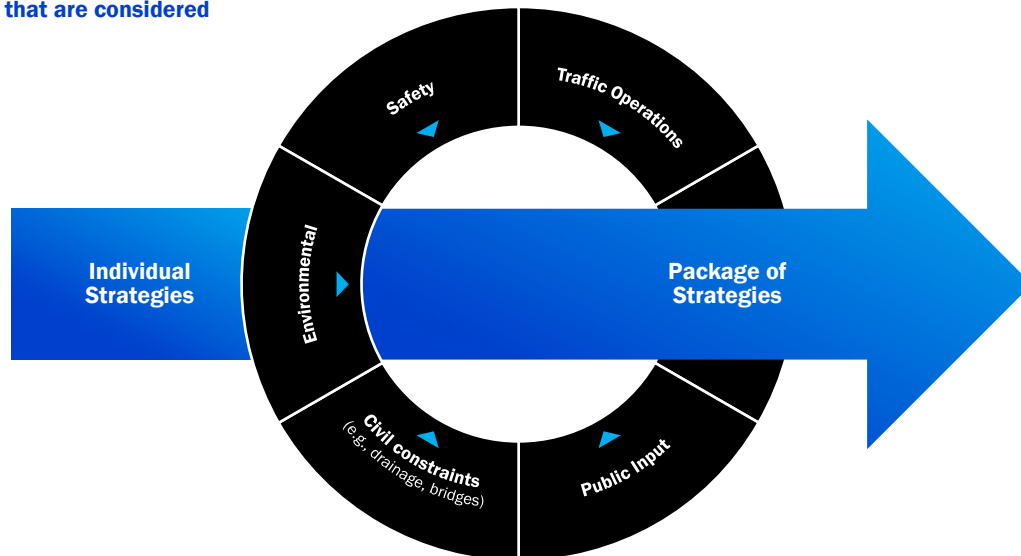
- Improved incident management
 - Incident detection
 - Automated responses
 - Improved coordination between agencies
 - Quick Clearance



23

Identifying an Integrated Solution

Factors that are considered



24

Initial Strategies Summary

- Dynamic Shoulder Lanes/Hard Shoulder Running
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- Behind the Scenes Strategies



QUESTION #2

What do you like/dislike about the strategies?

Are there other strategies that you think we should be considering?

Ways to Comment:

- Comment Form
- Website

25

How Can You Get Involved

Your Feedback Makes the Study Better

- Learn
 - Public Meetings
 - Project Website: www.indianaflexroad.com
- Provide Feedback
 - Purpose and Need
 - Strategies
- Stay Up To Date
 - Sign up for email updates
- Share With Others
 - Friends, neighbors, organizations



26

80/94 FlexRoad Outreach Program

Continued Engagement Throughout the Study

- Public Meetings
- Website/Social Media
- Community Advisory Committee
- Resource Agency Committee
- Transportation Organizations



QUESTION #3

What groups or organizations should we be reaching out to?

How can we spread the word effectively?

Ways to Comment:

- Comment Form
- Website
- Email

27

July/August Public Outreach

- Public Meetings
 - In-Person: July 28 – Gary, IN
 - In-Person: July 29 – Hammond, IN
 - Virtual: August 3 – WebEx
- Community Advisory Committee
 - July 28 – Hammond, IN
- Website/Social Media
- INDOT GovDelivery Listserv

Comment Deadline: September 3, 2021



Public Meetings:

- 30+ attendees
- Comment Forms
- Discussion

Website:

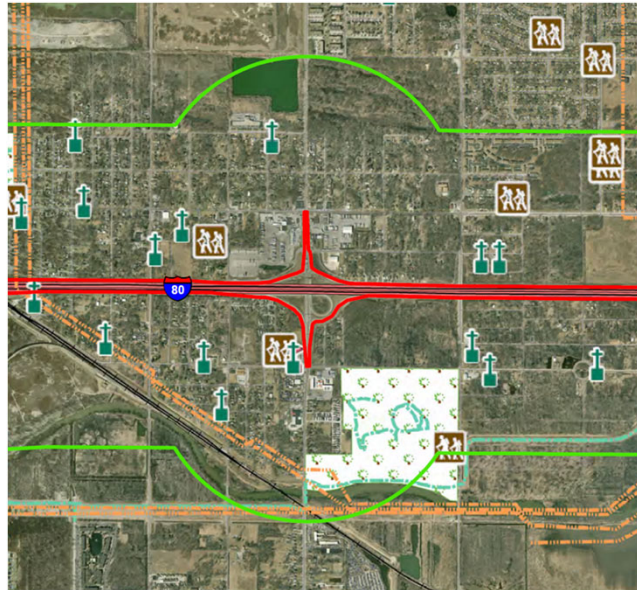
- Over 200 unique users
- 35 map comments

28

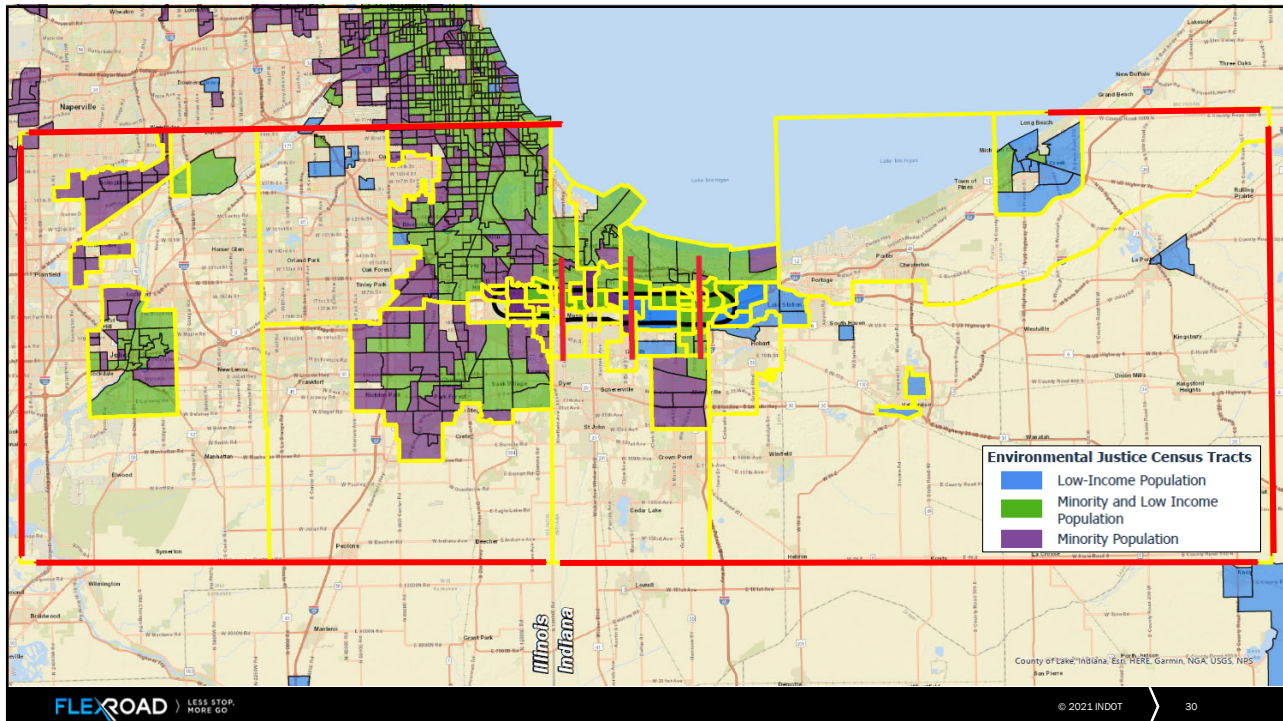
Environmental Analysis Update

Data Collection Phase Continues

- Red Flag Environmental Resources
 - Indiana
 - Illinois
- Noise Barriers
- Environmental Justice



29



30

Fall Public/Agency Meetings

Mid-October (Tentative)

- Full Purpose and Need
- TSMO “Packages”
- Results of Alternatives Analysis
- Environmental Impacts

31

THANK YOU



www.indianaflexroad.com

Reminder: submit comments by September 3, 2021

FLEXROAD
LESS STOP. MORE GO.



32

32

FLEXROAD
LESS STOP. MORE GO.

I-80/94 BORMAN EXPRESSWAY

Resource Agency Committee Meeting #2

August 11, 2021 Dan Prevost, Parsons

1

AGENDA

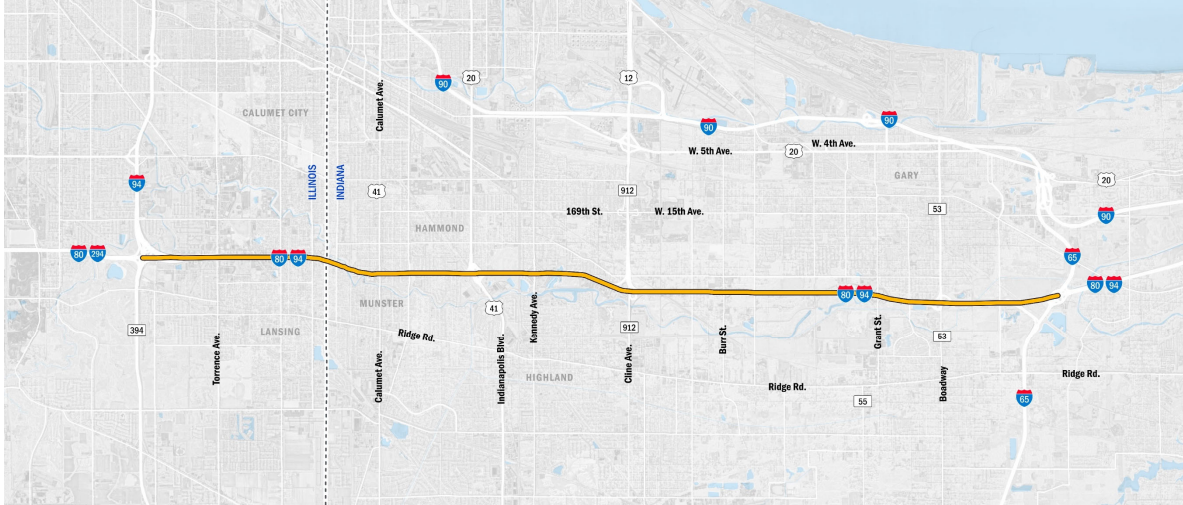
- Purpose & Need
- TSMO Strategies
- Public Outreach
- Environmental Analysis Update

FLEXROAD LESS STOP. MORE GO. © 2021 INDOT

2

The Borman Expressway

IL 394 to I-65



3

Study Process and Schedule

Planning & Environment Linkages (PEL) Process



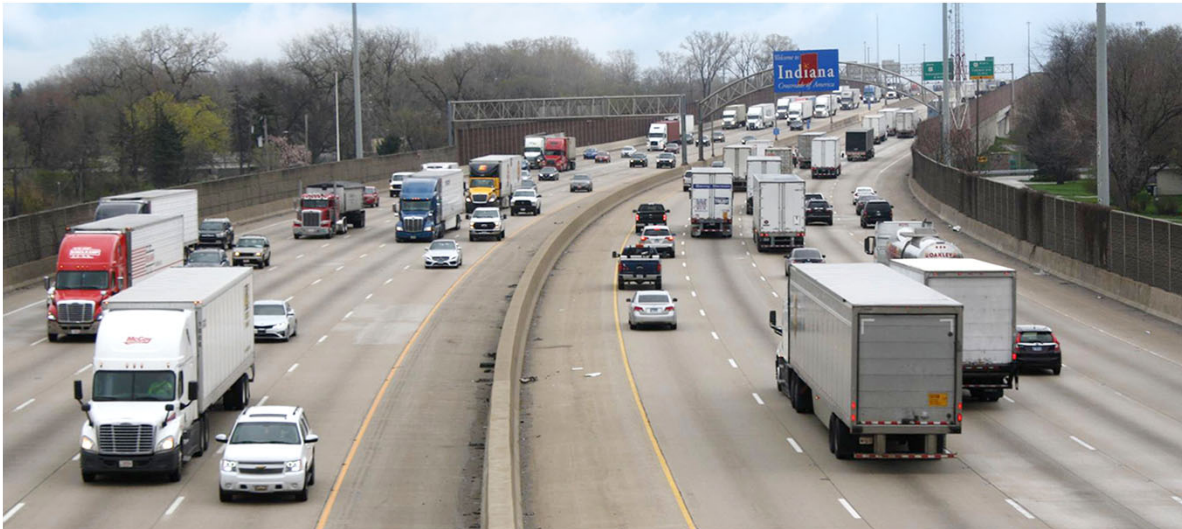
PEL products that will be carried into NEPA:

- Draft Purpose and Need
- High Level Environmental Evaluation
- Agency Coordination
- Public Outreach
- Alternatives Screening

	2021	2022	2023/2024
Corridor Planning Screen and Package Strategies	[Blue bar spanning 2021 and 2022]		
Environmental Analysis Preliminary/Final Design		[Light blue bar spanning 2022 and 2023]	
Implementation/Construction			[Orange bar spanning 2023 and 2024]

4

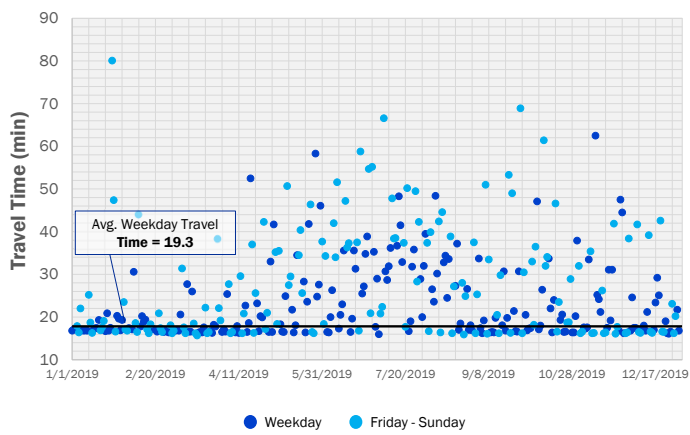
The Borman Expressway



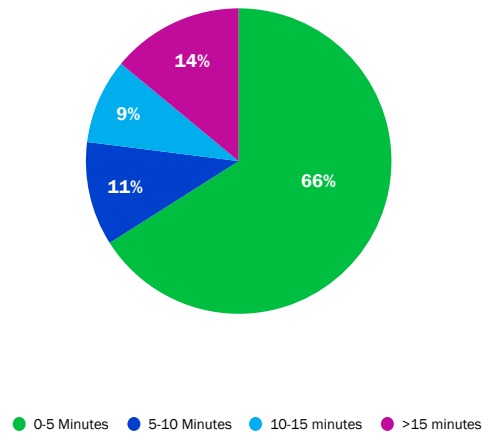
5

Current Conditions Traffic – Corridor Travel Times

Travel Times – Westbound – PM Peak Period

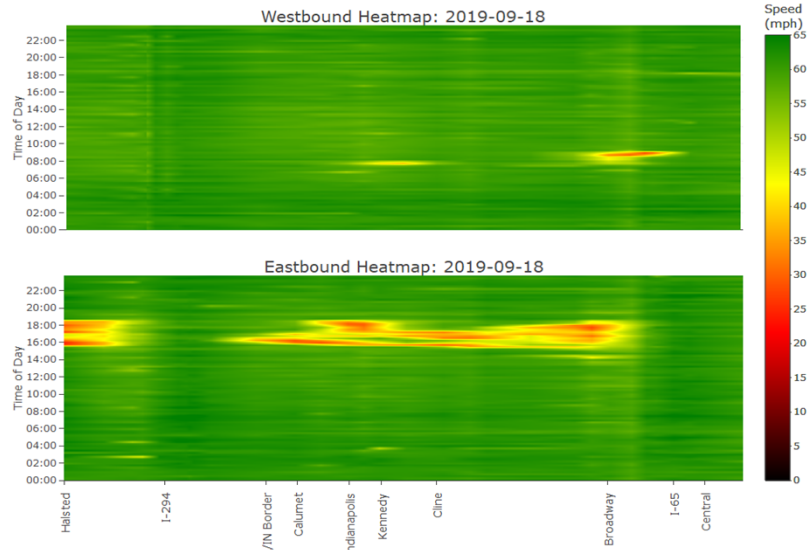


Delay for Weekdays



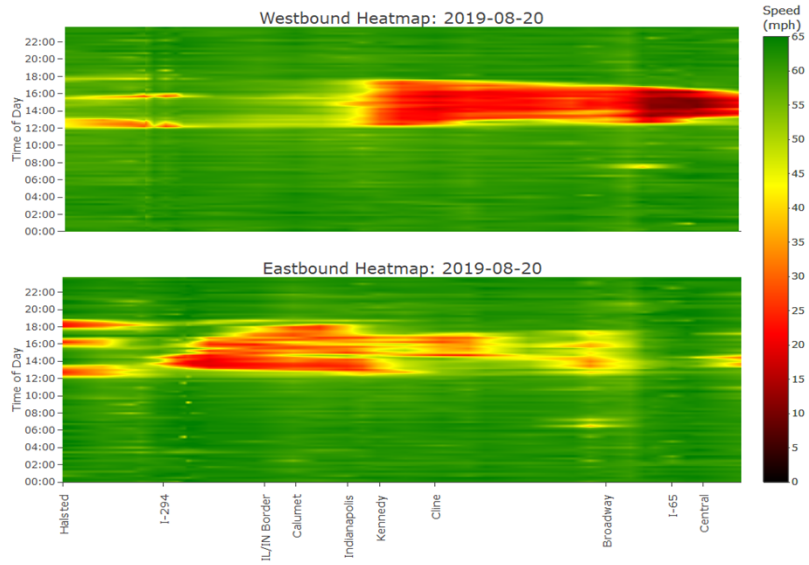
6

Current Conditions
Traffic – Typical Weekday



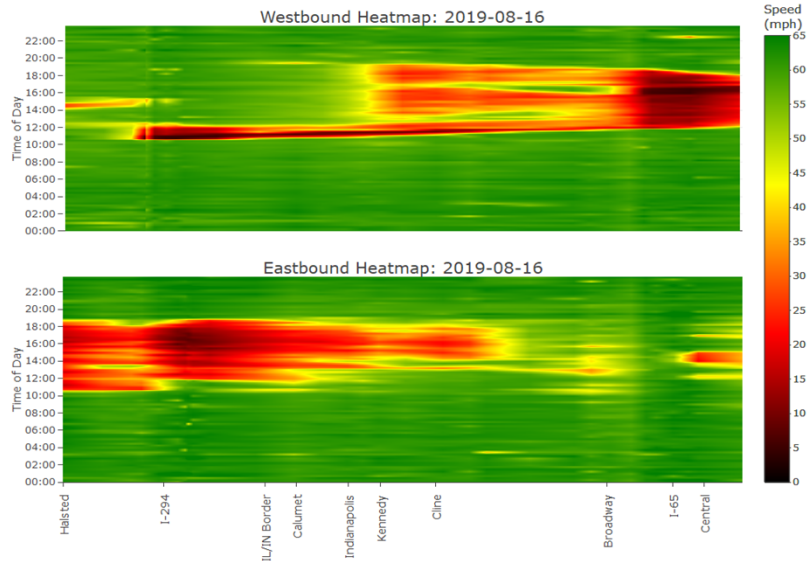
7

Current Conditions
Traffic – Weekday Incident



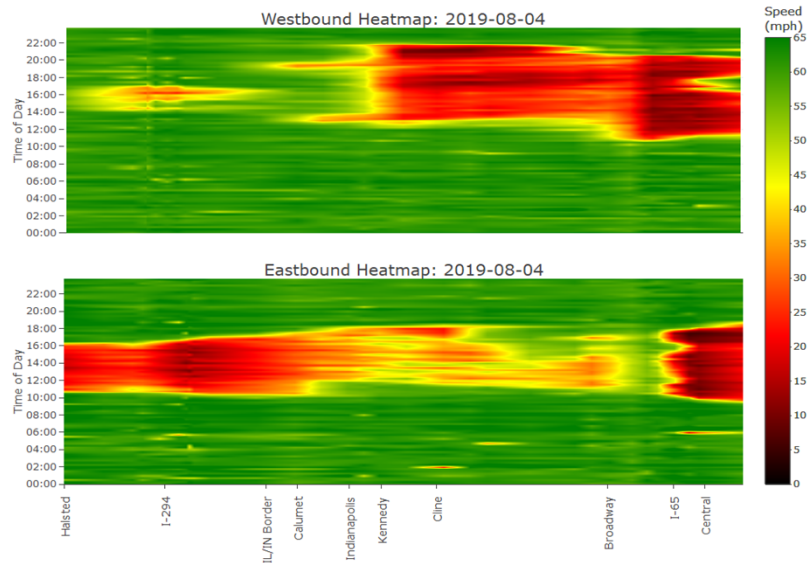
8

Current Conditions
Traffic – Typical Friday



9

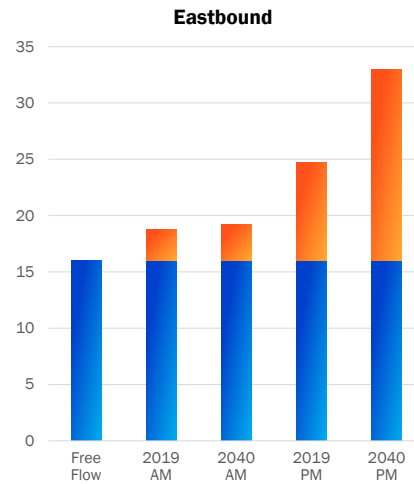
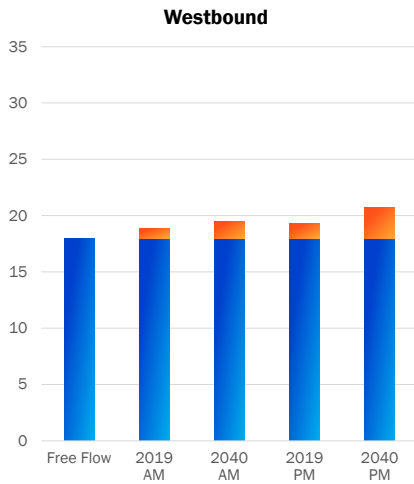
Current Conditions
Traffic – Typical Sunday



10

Current Conditions

Traffic – Corridor Travel Times & Delay



11

Upcoming Traffic Analysis

Evaluation of TSMO Strategies

- Weekday and weekend conditions
- Lane-by-lane evaluation
- Various “packages” of strategies
- Effects on local street network
- Simulate incidents (e.g., crashes) to observe response

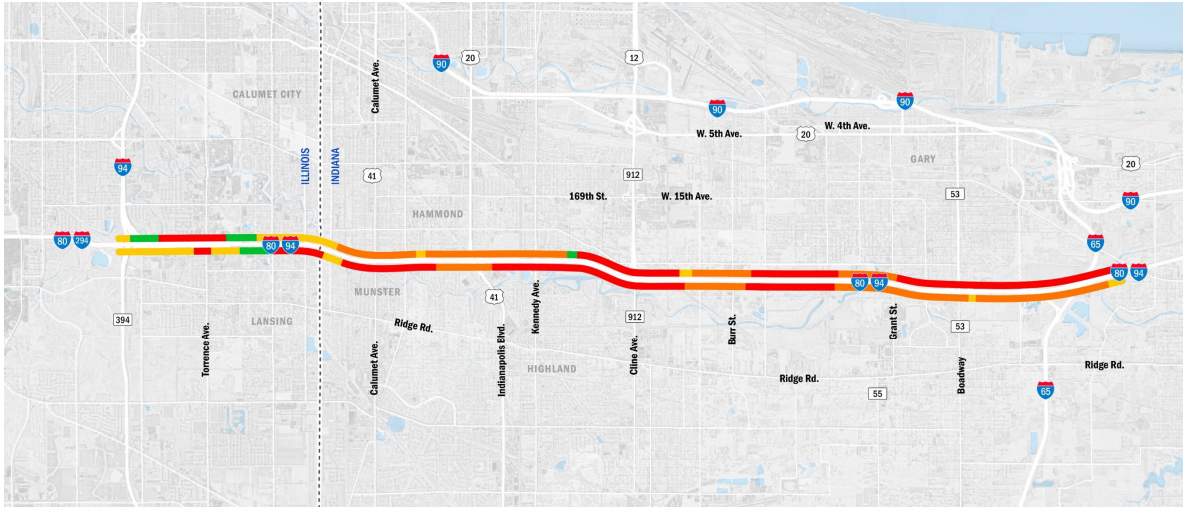


12

Current Conditions

Safety

- Crash Frequency Below Statewide Average
- Crash Frequency not High, but High Severity Location
- Crash Frequency Above Statewide Average
- High Crash Frequency Location



13

Preliminary Purpose and Need

- Congestion
 - Peak periods, including weekends
 - Minimize impact of incidents
- Safety
 - Reduce crash rates in the corridor



QUESTION #1

What do you think are the biggest problems in the corridor?

- What?
- Where?
- When?

Ways to Comment:

- Comment Form
- Map Board
- Website

14

FlexRoad

A New Approach at INDOT

- Strategic Approach
- Congested Urban Corridors
- First Comprehensive TSMO Study

FLEXROAD > LESS STOP,
MORE GO

15

What is TSMO?

Transportation Systems Management and Operations

- TSMO is a set of strategies that focus on operational improvement
- Get the most out of the existing transportation facilities.
- Real-Time Monitoring and Response
- Flexibility: Demand-Responsive Roadways



16

TSMO in 80/94 Corridor

High Level Assessment

Stakeholder Outreach

- DOT operations teams
- DOT maintenance staff
- DOT traffic engineering
- State Police
- Incident responders

Information Gathered

- Operational policies and procedures
- Existing systems
- Existing roadway conditions
- Traffic and incident data

Short Listed Strategies

- Dynamic Shoulder Lanes
- Lane Control
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- “Behind the Scenes” strategies

17

Dynamic Shoulder Lane/Hard Shoulder Running

- Temporary use of shoulders
- Location
 - Inside shoulder
 - Outside shoulder
- Use Conditions
 - Peak periods
 - Demand response
 - Incident response
- Considerations
 - Physical obstructions (e.g., bridges)
 - Shoulder debris/snow
 - Drainage



18

Variable Speed Limits

- Temporary reduction in speed limit
 - Congestion
 - Incidents
 - Work Zones
 - Weather
- Speed harmonization
- Dynamic monitoring and adjustment
- Advance signing and gantry spacing



19

Queue Warning

- Avoid secondary incidents
- Real-time monitoring of speeds
- Detect issues
- Dynamic Message Signs (DMS)



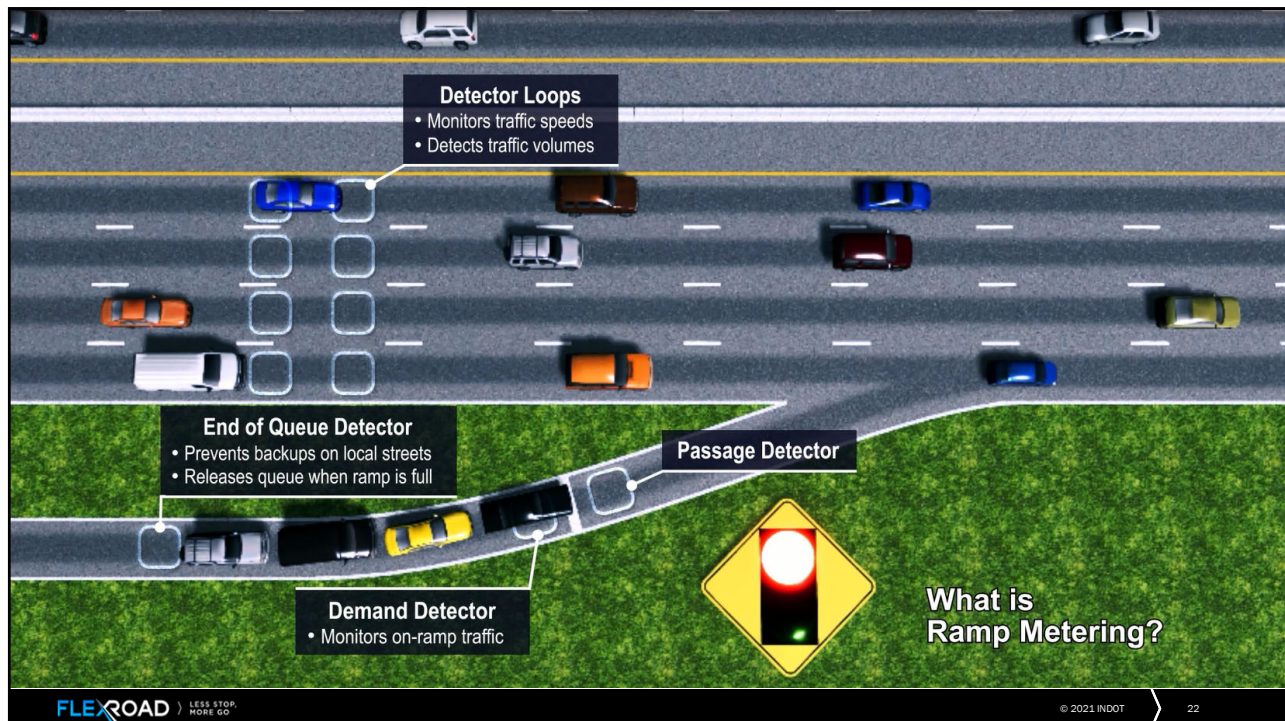
20

Ramp Metering

- Control rate of flow of entering vehicles
- Sensors monitor traffic on both highway and ramps
 - Trigger metering system
 - Select appropriate flow rate
 - Prevent impacts to local streets
- Single lane and multiple lane



21



22

Behind the Scenes Strategies

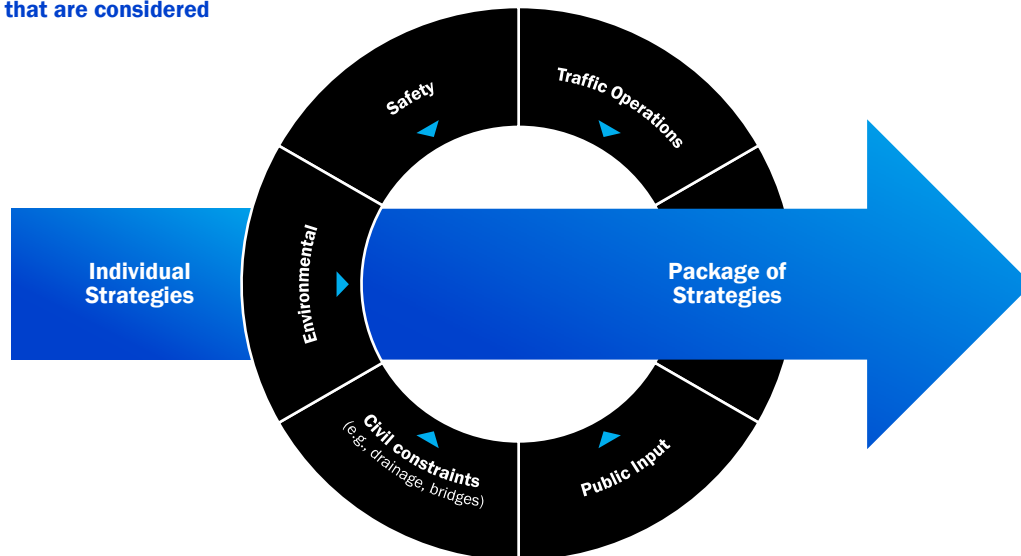
- Improved incident management
 - Incident detection
 - Automated responses
 - Improved coordination between agencies
 - Quick Clearance



23

Identifying an Integrated Solution

Factors that are considered



24

Initial Strategies Summary

- Dynamic Shoulder Lanes/Hard Shoulder Running
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- Behind the Scenes Strategies



QUESTION #2

What do you like/dislike about the strategies?

Are there other strategies that you think we should be considering?

Ways to Comment:

- Comment Form
- Website

25

How Can You Get Involved

Your Feedback Makes the Study Better

- Learn
 - Public Meetings
 - Project Website: www.indianaflexroad.com
- Provide Feedback
 - Purpose and Need
 - Strategies
- Stay Up To Date
 - Sign up for email updates
- Share With Others
 - Friends, neighbors, organizations



26

80/94 FlexRoad Outreach Program

Continued Engagement Throughout the Study

- Public Meetings
- Website/Social Media
- Community Advisory Committee
- Resource Agency Committee
- Transportation Organizations



QUESTION #3

What groups or organizations should we be reaching out to?

How can we spread the word effectively?

Ways to Comment:

- Comment Form
- Website
- Email

27

July/August Public Outreach

- Public Meetings
 - In-Person: July 28 – Gary, IN
 - In-Person: July 29 – Hammond, IN
 - Virtual: August 3 – WebEx
- Community Advisory Committee
 - July 28 – Hammond, IN
- Website/Social Media
- INDOT GovDelivery Listserv

Comment Deadline: September 3, 2021



Public Meetings:

- 30+ attendees
- Comment Forms
- Discussion

Website:

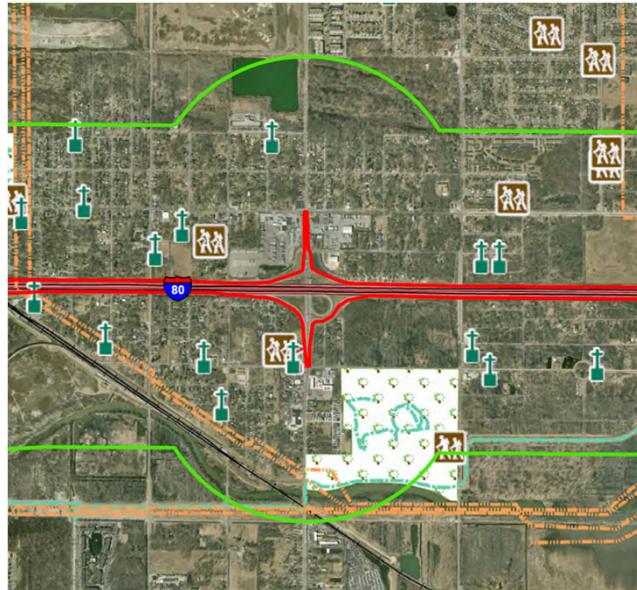
- Over 200 unique users
- 35 map comments

28

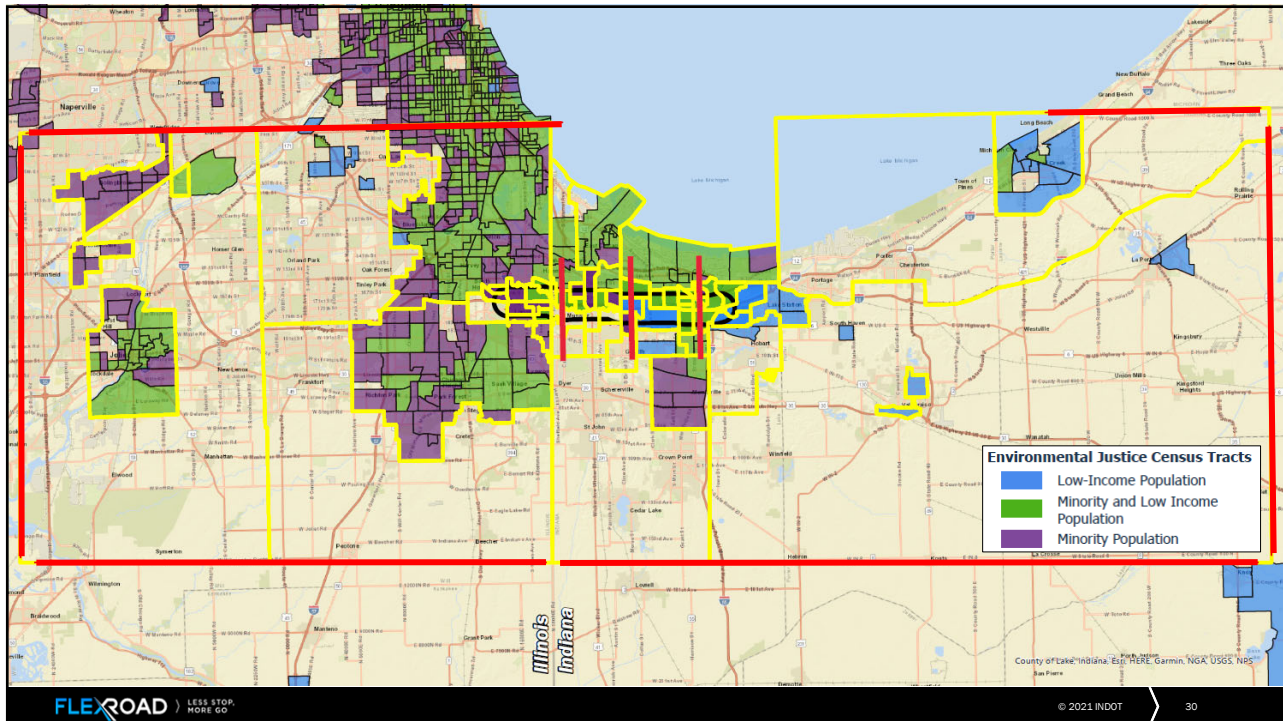
Environmental Analysis Update

Data Collection Phase Continues

- Red Flag Environmental Resources
 - Indiana
 - Illinois
- Noise Barriers
- Environmental Justice



29



30

Fall Public/Agency Meetings

Mid-October (Tentative)

- Full Purpose and Need
- TSMO “Packages”
- Results of Alternatives Analysis
- Environmental Impacts

31

THANK YOU



www.indianaflexroad.com

Reminder: submit comments by September 3, 2021

FLEXROAD
LESS STOP. MORE GO.



32

32

MEETING SUMMARY

Date: October 21, 2021
Time: 9:00 AM – 10:00 AM CST
Meeting: 80/94 FlexRoad Resource Agency Committee (RAC) Meeting #3 Summary
Location: Microsoft Teams

Name	Organization	Email
Amber Thomas	INDOT	athomas2@indot.in.gov
Ron Bales	INDOT	rbales@indot.in.gov
Laura Hilden	INDOT	lhilden@indot.in.gov
Sandra Bowman	INDOT	sbowman@indot.in.gov
Kumar Anuradha	INDOT	akumar@indot.in.gov
Susan Branigan	INDOT	sbranigan@indot.in.gov
Matt Coon	INDOT	mcoon@indot.in.gov
Brandon Miller	INDOT	bmiller@indot.in.gov
Anthony Ross	INDOT	aross3@indot.in.gov
James Turner	IDEM	jturner2@idem.in.gov
Bradley Hayes	Illinois DNR	Bradley.hayes@illinois.gov
Jose Rodriguez	CMAP	jrodriguez@cmapp.illinois.gov
Rita Baker	Illinois HPA	Rita.e.baker@illinois.gov
Carol Wallace	Illinois SHPO	Carol.wallace@illinois.gov
Kyle Armstrong	Illinois	kyle.armstrong@illinois.gov
Eric Hanson		
Erik Sandstedt	HUD	erik.r.sandstedt@hud.gov
Karstin Carmany-George	FHWA	k.carmanygeorge@dot.gov
Elizabeth McClosky	FWS	Elizabeth_mccloskey@fws.gov
Dan Prevost	Parsons	daniel.prevost@parsons.com
Junell O'Donnell	Parsons	junell.odonnell@parsons.com
Joseph Brahm	Parsons	joseph.brahm@parsons.com
Craig Moore	Parsons	craig.moore@parsons.com
Cory Grayburn	Parsons	cory.grayburn@parsons.com
Alex Lee	Parsons	alexander.lee@parsons.com
Keaton Veldkamp	Parsons	keaton.veldkamp@parsons.com
Michelle Greene	Parsons	michelle.greene@parsons.com
Caller 217-685-4917		
Caller 217-761-0082		

Meeting Summary

Welcome and introductions - Dan Prevost, Parsons Environmental and Public Involvement Lead, welcomed the members of the RAC and facilitated self-introductions.

Dan Prevost gave an overview of the meeting agenda and recapped the study area and anticipated study goals.

- The study limits are from I-294 in Illinois east to the I-65 interchange in Indiana, approximately 15 miles.
- The Illinois DOT and Indiana DOT are working together cooperatively.
- The PEL Study and evaluation of TMSO strategies will be completed in early 2022. NEPA and final design would occur in 2022 with construction planned for 2023-2024. The construction schedule will be dependent, in part, on the alternative selected.
- The project limits are based on a relatively consistent number of lanes and geometry, makes sense to study the entire area.

Dan explained the initial strategies covered: Dynamic Shoulder Lanes/Hard Shoulder Running, Variable Speed Limits, Ramp Metering, Queue Warning, Work Zone Management, and Behind the Scenes Strategies.

- Input from the public is crucial as well. The project team has been fine tuning these strategies and reviewing what other DOTs have implemented. We have been analyzing their performance, fine tuning the costs, and evaluating environmental impacts.

Dan discussed the grouping of strategies into four buckets for evaluation.

The project team has been running traffic analysis, researching experience elsewhere, evaluating engineering needs, estimating costs, and analyzing environmental impacts for the potential strategies. Dan explained how each strategy would affect travel time, average speed, travel time reliability, safety, and cost to maintain. While individual strategies could improve various aspects within the corridor, the strategies work best when paired together.

Craig Moore, Parsons Traffic Analysis Lead, covered the different groups of alternatives

- The project team studies both peak periods but has simplified it to only the PM peak period for the presentation.
- The project team looks at travel time, average speed, travel time reliability, vehicle hours traveled within the study area, safety, and cost for each potential alternative.
- Dynamic Shoulder Lane (Inside Shoulder) showed 7 minutes faster travel time and 10 mph faster average speed during peak period compared to current condition. Overall costs of \$45-90 million to implement.
- Ramp metering showed 3 minutes faster travel time and no faster average speed during peak period compared to current conditions. Cost to implement would be \$3-5 million.
 - Ramp metering would also help reduce congestion-related crashes in the ramp merge areas.
- Variable Speeds limits would result in about a minute saved in travel time and 3 mph faster speed during peak periods. Cost to implement would be \$30-35 million.
 - Variable speed limits would be used via new gantries over the roadway and would step down speed near congested areas.
- Queue Warning could result in 16% crash reduction. Primarily aimed at reducing rear-end crashes in congested areas.
- Traffic Event Management focuses on communication of information once a crash occurs.

- Examples were provided for a minor and major event and the result if traffic event management was utilized and in combination with dynamic shoulder lanes.

Craig Moore covered additional non-TSMO improvements that are under consideration.

- I-65/Broadway geometric improvements, adding an option lane to exit to I-65 southbound and modifying access at Broadway. In the PM peak, we see 3,000 cars trying to get off onto I-65.
 - The existing exit ramp is formed after the Broadway entrance ramp requiring all exiting vehicles to change lanes. This puts a lot of stress on the system prior to I-65.
 - The result is congestion starting west of Broadway, which is projected to substantially increase by 2040.
 - This change will provide three exit lanes instead of two.
 - At the Broadway interchange, we are also looking at combining the ramps to eastbound I-80/94 onto the existing loop ramp.
 - These improvements are estimated to cost \$3-5M.
- Seeing a big improvement with the geometric improvement at I-65 and Broadway.

Dan Prevost asked the group what they thought of the strategies, whether the benefits were worth the costs, and what additional factors need to be considered. He explained that the group's feedback was incorporated into the project's purpose and need and highlighted the next steps for the project. The project team will continue to gather and evaluate feedback, develop strategy packages, and then identify what packages should be carried forward into the National Environmental Policy Act (NEPA) phase of the project. A summary of the schedule and next steps moving forward was then explained. Dan asked participants to identify groups or organizations that should be included in future outreach efforts.

Dan Prevost then thanked the group for their participation and closed the meeting.

The deadline for comments during this phase of outreach is November 22, 2021.

The above summary represents our recollection of the pertinent discussion points, decisions, and action items from the meeting. Please contact the preparer, Michelle Green, at Michelle.Greene@parsons.com, within three days from your receipt of this document if you wish to make any additions or corrections. If revisions are made, the updated summary will be re-sent to all the attendants. Otherwise, this summary shall stand as the official record of the meeting.

FLEXROAD
LESS STOP. MORE GO.

I-80/94 BORMAN EXPRESSWAY

Transportation Systems Management and Operations (TSMO)

Resource Agency Committee Meeting #3

October 21, 2021 Dan Prevost, Parsons
 Craig Moore, Parsons

1

AGENDA

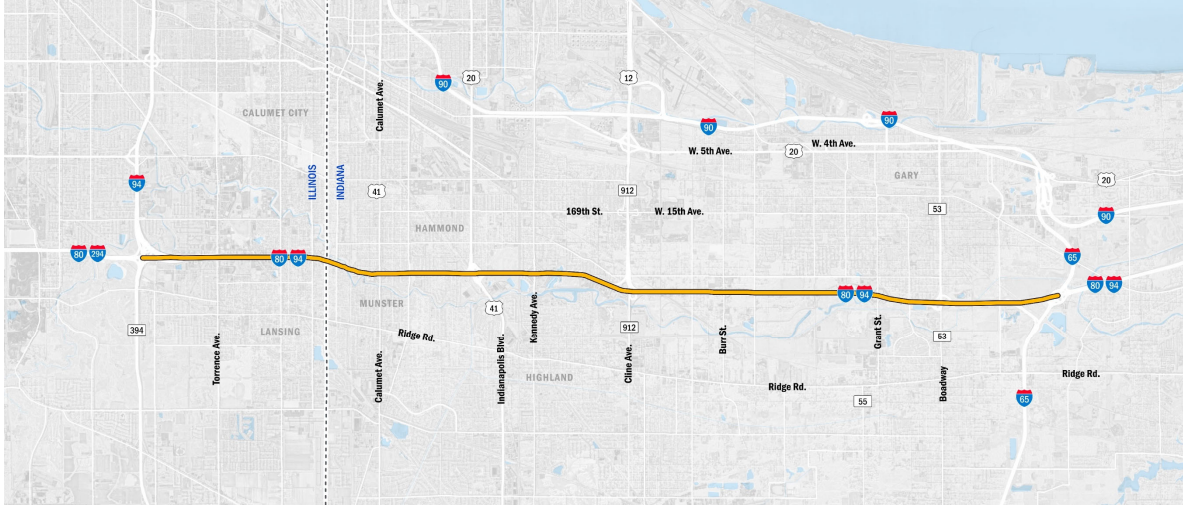
- Study Area and Goals Recap
- What is TSMO?
- TSMO Strategy Evaluation
- Environmental Analysis Update
- Next Steps

FLEXROAD LESS STOP. MORE GO. © 2021 INDOT

2

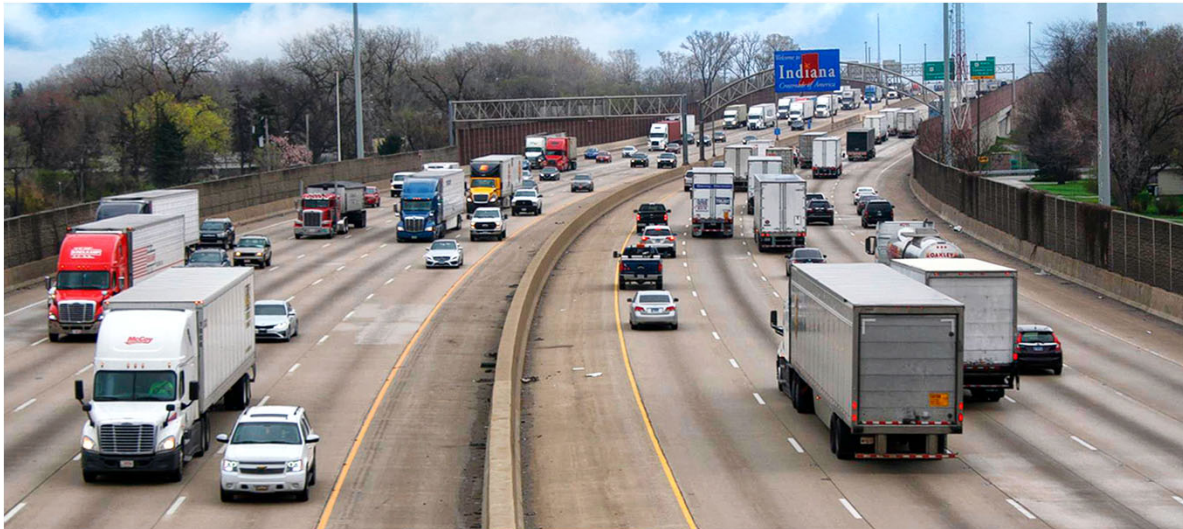
The Borman Expressway

IL 394 to I-65



3

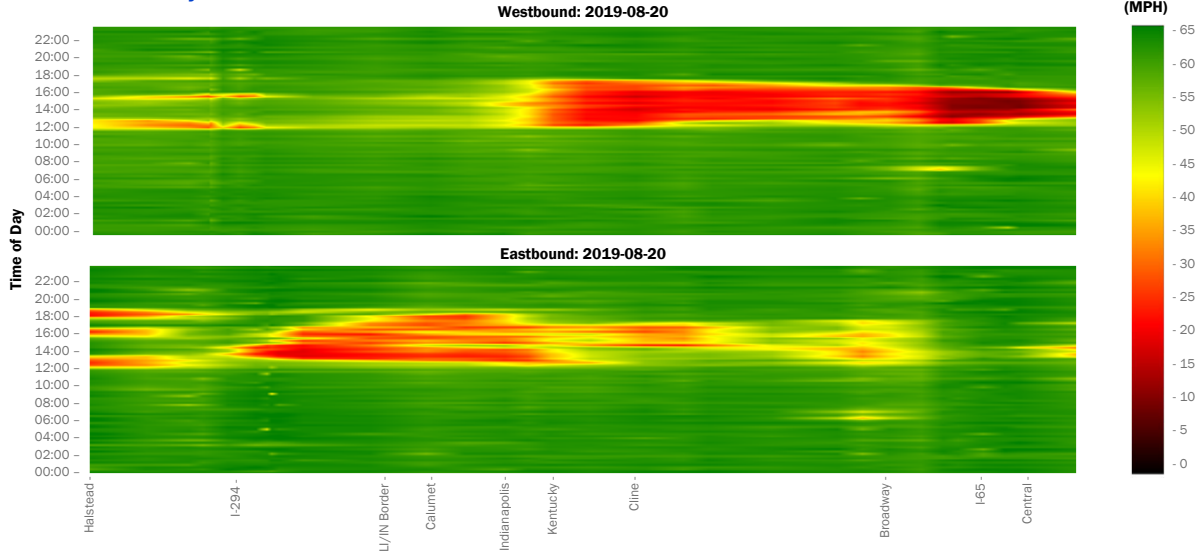
The Borman Expressway



4

Current Conditions

Traffic – Weekly Incident

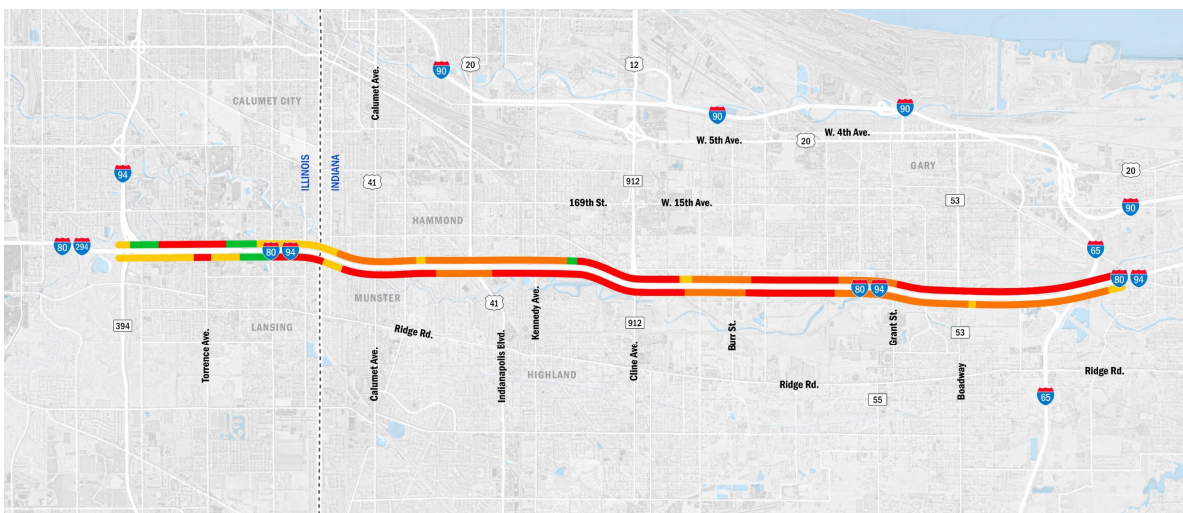


5

Current Conditions

Safety

- █ Crash Frequency Below Statewide Average
- █ High Crash Severity Locations
- █ Crash Frequency Above Statewide Average
- █ High Crash Frequency Location



6



QUESTION #1

What do you think are the biggest problems in the corridor?



What We Heard

- 100+ comments
- Problem areas and issues identified
- Issues identified:
 - Weaving motorists
 - Volume of traffic
 - Trucks in left lanes
 - Interchange specific issues
 - Continuous construction/lane closures



What We Did

- Incorporated feedback into Purpose and Need document

The full Draft Purpose and Need will be emailed to the Committee for review.

7

What is TSMO?

Transportation Systems Management and Operations

- A set of strategies that focus on operational improvement
- Get the most out of the existing transportation facilities.
- Real-Time Monitoring and Response
- Flexibility: Demand-Responsive Roadways



8

TSMO in 80/94 Corridor

High Level Assessment

Stakeholder Outreach

- DOT operations teams
- DOT maintenance staff
- DOT traffic engineering
- State Police
- Incident responders

Information Gathered

- Operational policies and procedures
- Existing systems
- Existing roadway conditions
- Traffic and incident data

Short Listed Strategies

- Dynamic Shoulder Lanes
- Lane Control
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- “Behind the Scenes” strategies

9

Strategies Overview

- Dynamic Shoulder Lanes/Hard Shoulder Running
- Variable Speed Limits
- Ramp Metering
- Queue Warning
- Work Zone Management
- Behind the Scenes Strategies



10



QUESTION #2

What do you like/dislike about the strategies? Are there other strategies that you think we should be considering?



What We Heard

- People wanted:
 - Keep trucks and cars separate
 - Greater speeding enforcement
- People liked:
 - Ramp metering
 - Dynamic shoulder lanes
 - Drainage, debris, and emergency space issues noted
 - Queue warning and work zone management



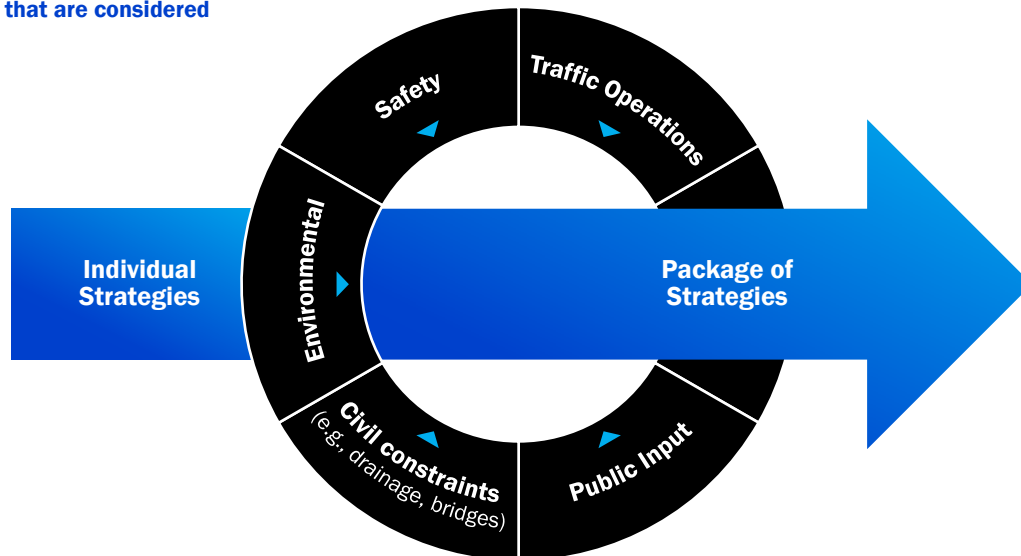
What We Did

- Continued development of TSMO strategy details
- Developed performance measures
- Analyzed shoulder issues for DSL

11

Identifying an Integrated Solution

Factors that are considered



12

TSMO Strategy Development and Evaluation

What we've been doing

Traffic Analysis

Literature Research

Engineering Evaluations - Drainage, etc.

Cost Estimation

Environmental Impact Analysis

13

Alternatives Grouping

A Blend of Approaches and Strategies

Strategies	
Traffic Operations	<ul style="list-style-type: none"> Ramp Metering Dynamic Shoulder Lanes Variable Speed Limits
Traffic Safety	<ul style="list-style-type: none"> Queue Warning System Variable Speed Limits Lane Control
Traffic Event Management	<ul style="list-style-type: none"> Computer Aided Dispatch (CAD) Integration Towing & Recovery Incentive Program Maintenance / Emergency Response CCTV Access Center to Center Interfaces CCTV Enhancements
Infrastructure Improvements	<ul style="list-style-type: none"> Guide Sign Enhancements Geometric Improvements (EB ramp to I-65)

Purpose and Need Goals and Objectives

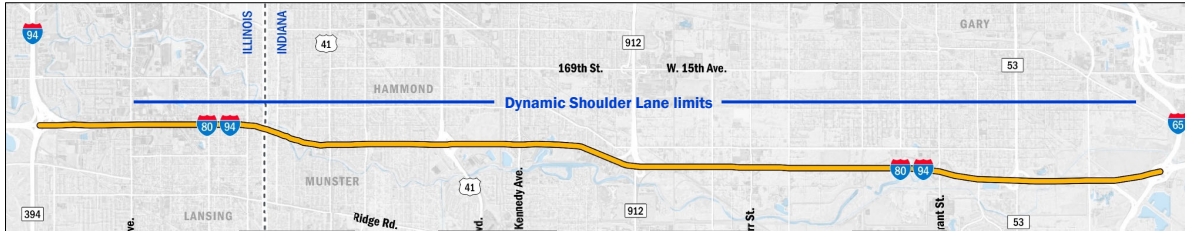
- Alleviate Congestion
- Increase Safety
- Increase Reliability
- Optimize Efficiency

14



Traffic Operations – Dynamic Shoulder Lane (Inside Shoulder)

Enables the use of shoulders as travel lanes based on congestion levels or in response to incidents



Travel Time	Average Speed	Travel Time Reliability	Study Area	Safety	Cost
7 minutes saved	10 mph faster during peak periods	25 minutes with strategy 31 minutes without strategy	9% reduction in vehicle hours traveled	Reduced congestion-related crashes	\$45-90 million

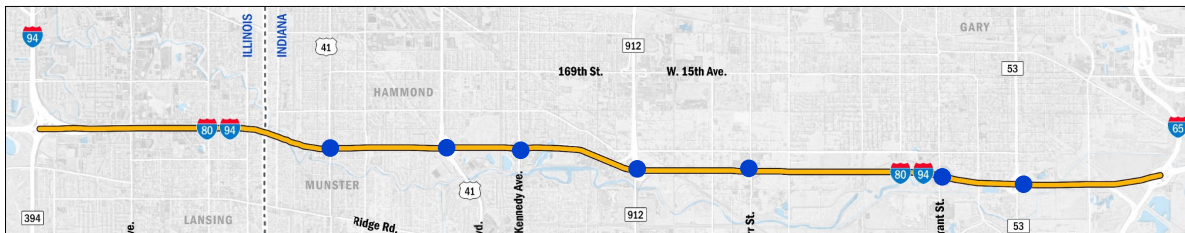
15



Traffic Operations – Ramp Metering

Controls the flow of traffic at entrance ramps to break up platoons and facilitate smooth/safe merging.

Ramp Metering Sites = ●



Travel Time	Average Speed	Travel Time Reliability	Study Area	Safety	Cost
3 minutes saved	0 mph faster during peak periods	28 minutes with strategy 31 minutes without strategy	0% change in vehicle hours traveled	Reduced congestion-related crashes; Safer merging operations	\$3-5 million

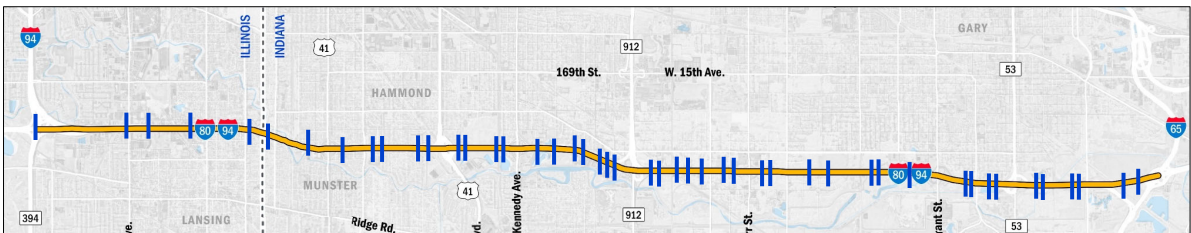
16



Traffic Operations – Variable Speed Limits

Temporarily reduces the speed limits in order to smooth traffic flow and reduce secondary accidents.

Variable Speed Limit Gantries =



Travel Time	Average Speed	Travel Time Reliability	Study Area	Safety	Cost
<1 minutes saved	3 mph faster during peak periods	31 minutes with strategy 31 minutes without strategy	5% reduction in vehicle hours traveled	Reduced congestion-related crashes	\$30-35 million

17

Traffic Operations Combinations

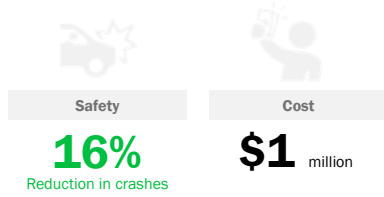
Dynamic Shoulder Lanes + Other Strategies

	Dynamic Shoulder Lanes	Dynamic Shoulder Lanes + Variable Speed Limits	Dynamic Shoulder Lanes + Ramp Metering	Dynamic Shoulder Lanes + Ramp Metering + Variable Speed Limits
Travel Time	7 minutes saved	8 minutes saved	8 minutes saved	8 minutes saved
Average Speed	10 mph faster	11 mph faster	11 mph faster	11 mph faster
Travel Time Reliability (95% Travel Time)	25 minutes	23 minutes	23 minutes	23 minutes
Study Area Vehicle Hours Traveled	9% reduction	9% reduction	8% reduction	9% reduction
Safety	++	+++	+++	++++
Cost	\$45-90 million	\$50-95 million	\$48-75 million	\$55-100 million

18

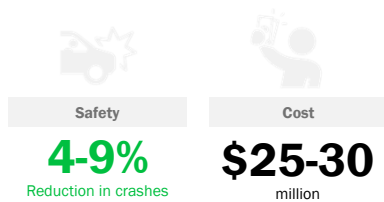
Traffic Safety – Queue Warning

Warns drivers of slowdowns ahead



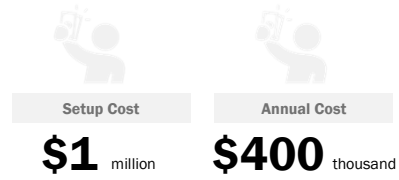
Traffic Safety – Lane Control

Controls lane usage by alerting drivers to which lanes are open



Traffic Event Management

- Computer Aided Dispatch (CAD) Integration
- Towing & Recovery Incentive Program (TRIP)
- Maintenance / Emergency Response CCTV Access
- Center to Center Interfaces
- CCTV Enhancements



Event Management Strategies

Minor Event

Example: fender bender
1 lane closed for 60 minutes
700 hours of total delay

Clear incident 5 minutes faster
100 hours of delay avoided per event (14% reduction)

Event Management Strategies + Dynamic Shoulder Lane (DSL)

Clear incident 5 minutes faster + open DSL
500 hours of delay avoided per event (71% reduction)

Major Event

Example: overturned semi-truck
2 lanes closed for 120 minutes
11,500 hours of total delay

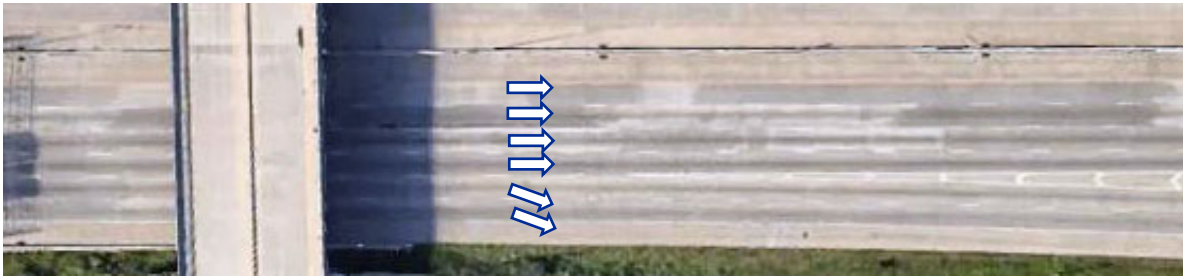
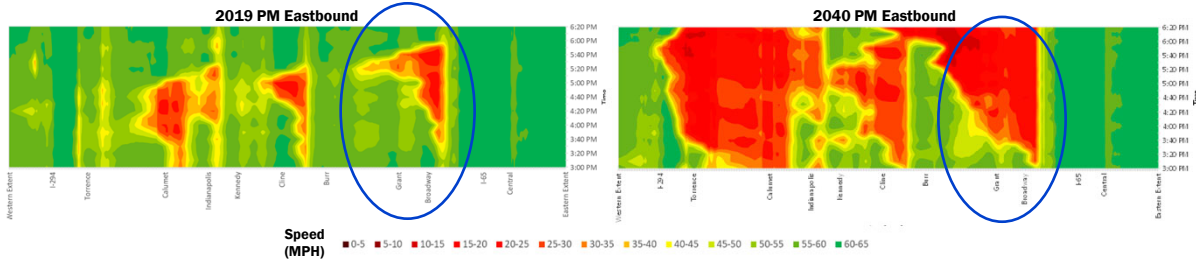
Clear incident 1 hour faster
1,900 hours of delay avoided per event (17% reduction)

Clear incident 1 hour faster
6,100 hours of delay avoided per event (53% reduction)

21

I-65/Broadway Geometric Improvements

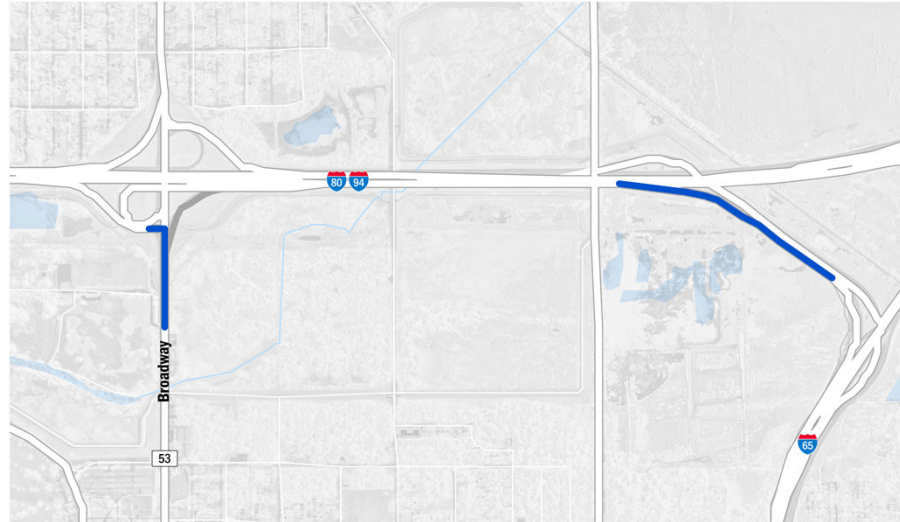
Existing Geometry



22

I-65/Broadway Geometric Improvements

Cost
\$3 million



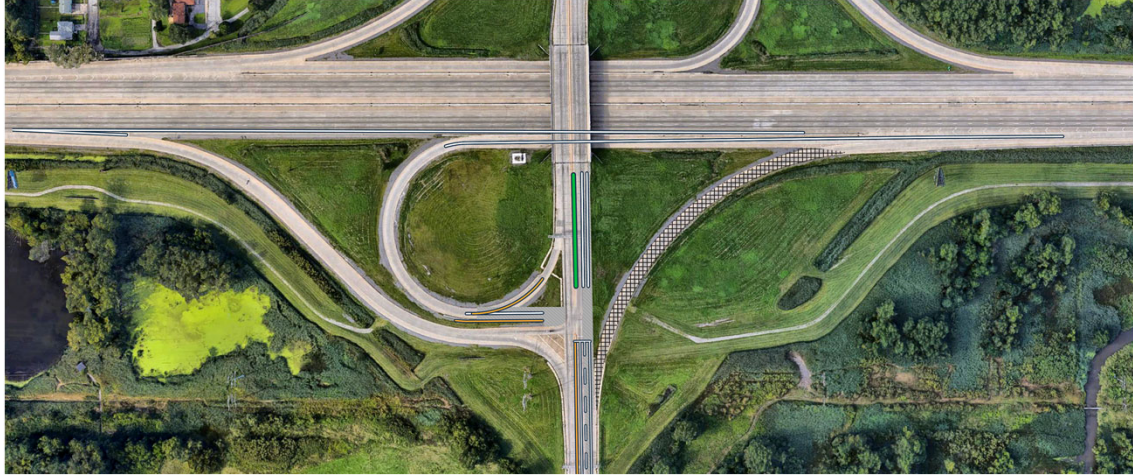
23

I-65/Broadway Geometric Improvements



24

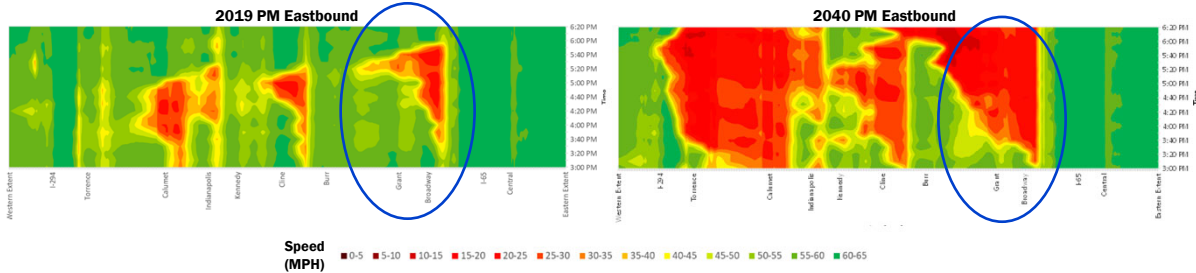
I-65/Broadway Geometric Improvements



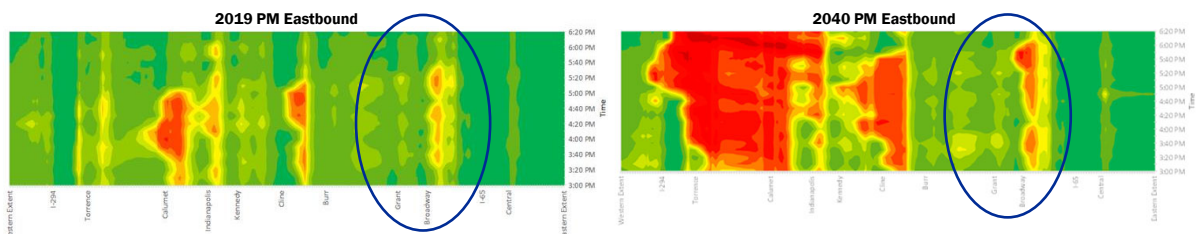
25

I-65/Broadway Geometric Improvements

Existing Geometry



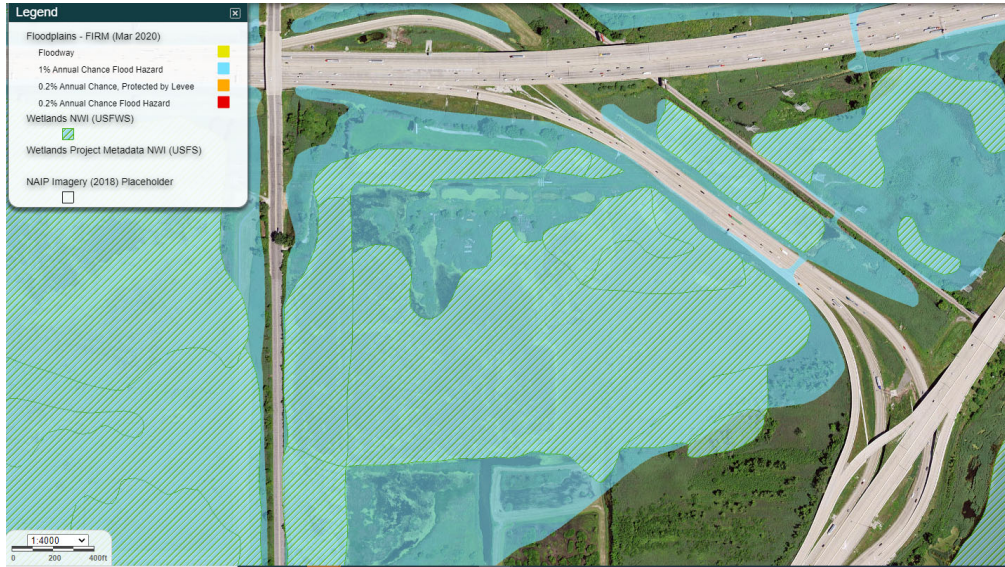
Proposed Geometry



26

I-65 Southbound Ramp Improvement

Water Resources



27

Questions for the Public

?

What do you think about the strategies /results?

?

Are the benefits worth the costs?

?

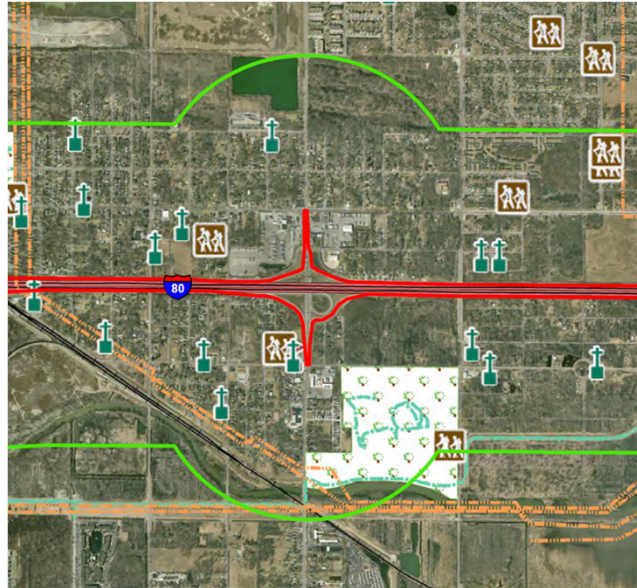
What additional factors need to be considered? Any specific concerns?

28

Environmental Analysis Update

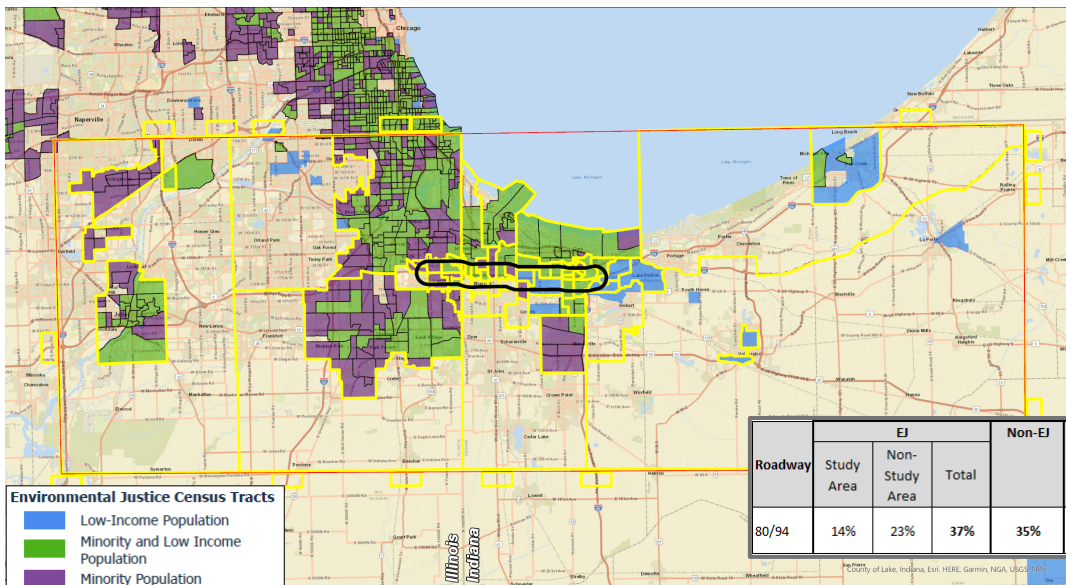
Data Collection Phase Continues

- INDOT's Red Flag Investigation completed
- Information from IDOT's Environmental Survey Request received
- EDR Report completed for the Illinois portion of the project
- Noise analysis methodology developed
- Environmental Justice populations identified



29

Environmental Justice Analysis



30

Next Steps



31

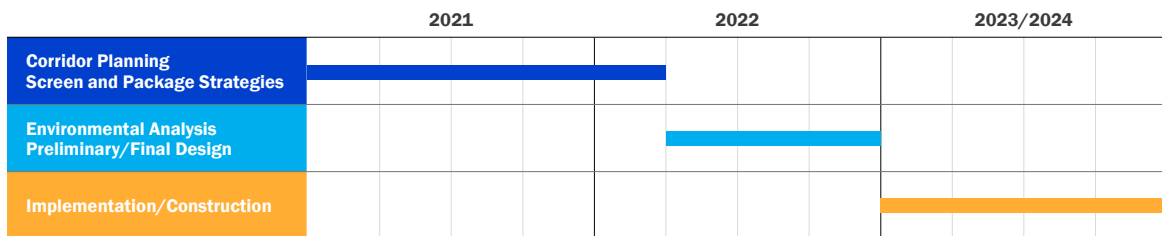
Study Process and Schedule

Planning & Environment Linkages (PEL) Process



PEL products that will be carried into NEPA:

- Draft Purpose and Need
- High Level Environmental Evaluation
- Agency Coordination
- Public Outreach
- Alternatives Screening



32



QUESTION #3

**What groups or organizations should we be reaching out to?
How can we spread the word effectively?**



What We Heard

- Truckers/trucking organizations
- Emergency services
- Local schools/Churches



What We Did

- Met with Indiana Motor Truck Association and added them to Community Advisory Committee
- Continued outreach to schools/churches for awareness
- Briefed local leaders through NIRPC
- Attended Hammond Hispanic Resource Fair October 9th

THANK YOU

indianaflexroad.com

FLEXROAD
LESS STOP. MORE GO.

Veldkamp, Keaton

From: Buffington, Matt <MBuffington@dnr.IN.gov>
Sent: Friday, October 22, 2021 10:21 AM
To: Prevost, Daniel
Subject: [EXTERNAL] RE: 80/94 FlexRoad - Resource Agency Committee (RAC) Meeting #3

Dan,
I don't have any comments based on the material sent via email. I'm not aware of many high quality resources along the corridor so I'm hoping impacts will be fairly limited. Please continue to send information and meeting invites to me as my unit participates in the process.

Matt Buffington
Environmental Supervisor
Division of Fish and Wildlife
Indiana Department of Natural Resources

E: mbuffington@dnr.in.gov
P: 317-233-4666
www.in.gov/dnr/fishwild/ [in.gov]
www.in.gov/dnr/ [in.gov]

** Please let us know about the quality of our service by taking this [brief customer survey](https://surveymonkey.com). [surveymonkey.com]*

From: Prevost, Daniel <Daniel.Prevost@parsons.com>
Sent: Thursday, October 21, 2021 6:03 PM
To: Laszewski, Virginia <laszewski.virginia@epa.gov>; ealeman@cmap.illinois.gov; rita.e.baker@illinois.gov; john.j.kim@illinois.gov; paul.m.leffler@usace.army.mil; Castillo, Melanie H <Melanie.H.Castillo@hud.gov>; ereaves@gary.gov; mutad@gohammond.com; INFO <INFO@idem.IN.gov>; Stanifer, Christie <cstanifer@dnr.IN.gov>; tthomps@indiana.edu; emerson@lakecountyin.org; Neilson, Rick - NRCS, Indianapolis, IN <rick.neilson@in.usda.gov>; Tyson Warner <twarner@nirpc.org>; McCloskey, Elizabeth <elizabeth_mccloskey@fws.gov>; Mwro_Compliance@nps.gov; drepay@littlecolumbieriverbasin.org; JRodriguez@cmap.illinois.gov; bradley.hayes@illinois.gov; Jeffrey.kruchten@illinois.gov; Carol.wallace@illinois.gov; gordishm@gohammond.com; Turner, James <JTurner2@idem.IN.gov>; Buffington, Matt <MBuffington@dnr.IN.gov>; Joe Exl <jexl@nirpc.org>; Todd_Ravesloot@nps.gov; Thomas, Amber <AThomas2@indot.IN.gov>; Armstrong, Kyle D <kyle.armstrong@illinois.gov>; ODonnell, Junell <Junell.ODonnell@parsons.com>; Lee, Alexander <Alexander.Lee@parsons.com>; Veldkamp, Keaton <keaton.veldkamp@parsons.com>; Greene, Michelle <Michelle.Greene@parsons.com>; Miller, Brandon <BraMiller1@indot.IN.gov>; Bales, Ronald <rbales@indot.IN.gov>; Bowman, Sandra A <SBowman@indot.IN.gov>; Moore, Craig <Craig.Moore@parsons.com>; Brahm, Joseph <Joseph.Brahm@parsons.com>
Cc: Erik.R.Sandstedt@hud.gov; Boszor, Brian <BBoszor@dnr.IN.gov>; Brown, Anastasia F CIV (USA) <stasi.f.brown@usace.army.mil>; Gabriel, Christine <christine_gabriel@nps.gov>; Kumar, Anuradha <akumar@indot.IN.gov>; Branigin, Susan <SBranigin@indot.IN.gov>; Ross, Anthony <ARoss3@indot.IN.gov>; daniel_plath <daniel_plath@nps.gov>; Coon, Matthew <mcoon@indot.IN.gov>; Grayburn, Cory <cory.grayburn@parsons.com>; Hilden, Laura <lhilden@indot.IN.gov>; Carmany-George, Karstin (FHWA) <k.carmanygeorge@dot.gov>
Subject: RE: 80/94 FlexRoad - Resource Agency Committee (RAC) Meeting #3

****** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ******