

80/94 FlexRoad: INDOT's First PEL Study



PARSONS

ROAD SCHOOL 2022



ROAD SCHOOL 2022



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What is PEL?

Planning and Environment Linkages

It's a federally recognized, pro-active first Step of a larger process and approach



It's the
Blending of
Planning
and NEPA



It brings more
voices into the
planning
process



It captures the
value of the
investment
within
the planning
process



The PEL Approach

is...

Is Not...

Simple to Set up

Public & Stakeholder Engagement

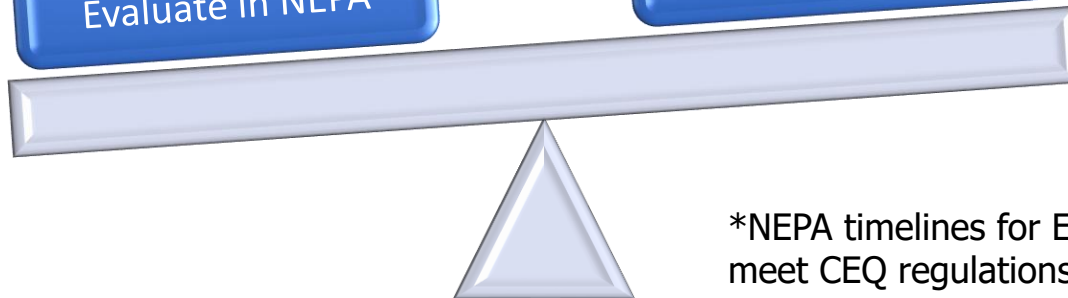
NEPA Equivalent that Reduces Rework

Fewer Alternatives to Evaluate in NEPA

A NEPA Replacement

Identifying the Preferred Alternative

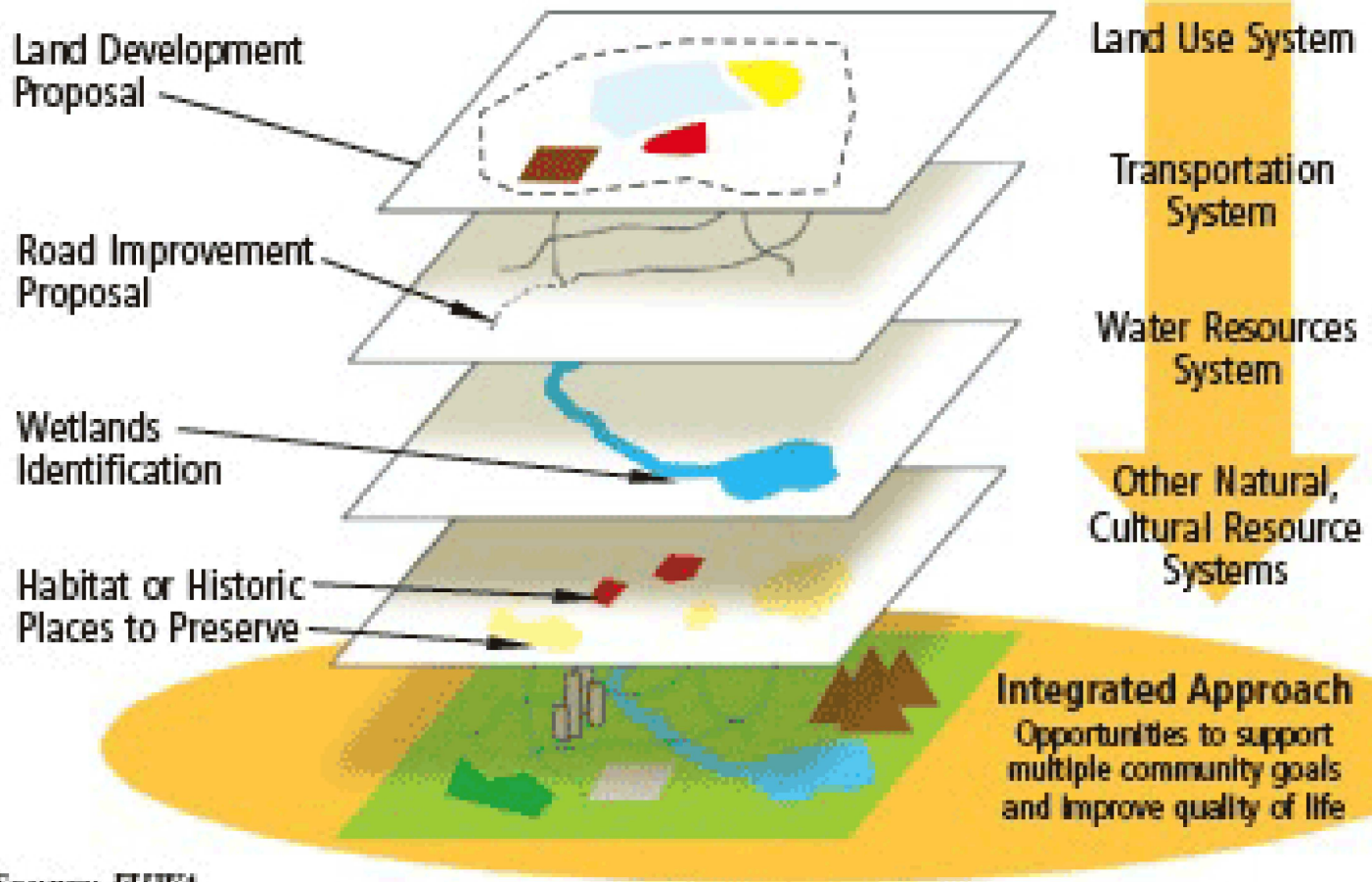
Extra Requirement



*NEPA timelines for EAs and EISs can be reduced to meet CEQ regulations.



PEL's Integrated Approach





Other Benefits

- Agencies are informed and involved early to resolve differences and minimize conflicts with resource agencies
- Environmental analyses are conducted early to identify and weed out potential fatal flaws or issues (e.g. hazard mitigation...not resolvable)
- Enhanced public and stakeholder understanding of the project development process and more involvement
- Faster project development process and few issues on the back-end

Blending Planning and NEPA

Traditional Process



PEL Process



- Logical Termini
- Design Year
- P&N
- Screening of Alternatives

**Establish NEPA Foundation
Head start on NEPA clock**

PEL Origins

(Psst: It's not new)

2005

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

2007

“Vital Few” goal to reduce median EIS time to 3 years

2008

FHWA PEL Program Initiation

2016

“Final Rule”: 23 CFR 450.212





GENERAL CHALLENGES WITH PEL

- **Lack of training and exposure.**
- **Getting everyone onboard**
- **When should you do PEL? How early is early?**
- **It is a study, NOT a project!**
- **The process is not firm in Indiana. We are still learning.**
- **Considering upfront resources. Attention is needed for early coordination.**
- **Documentation of planning actions in a form that can be utilized in a NEPA document may seem like too much!**



INDOT's approach to PEL

Peer Exchange

PEL Implementation Plan

National Highway Institute Course



INDOT's approach to PEL

- PEL Committee
 - Technical Planning and Programming
 - Environmental Services
 - Traffic Engineering
- PEL Project Evaluation
- Definition of Study Goals, Scope, and Outcomes



Project evaluation criteria



Large geographic scale and/or regionally significant proposal could result in multiple programmable projects with independent utility and logical termini



Known or anticipated public controversy about scope, need, purpose, and/or potential alternatives



Complex community impacts or complex environmental constraints



Need and purpose is unclear, unstable, or requires additional definition



Too many possible alternatives for an efficient NEPA process



High cost and/or construction funding not programmed



Even with a lot of initial work, NEPA process will not meet EA (1 year) or EIS (2 year) time limits

Indiana PEL Studies

FLEX
ROAD

> LESS STOP,
MORE GO

80/94 FlexRoad



Greater Northern Lafayette Connectivity Study

INDOT and Tippecanoe County Area Plan Commission

US 30/31 Corridor

- 180 miles
- Multiple PEL Studies





> LESS STOP,
> MORE GO

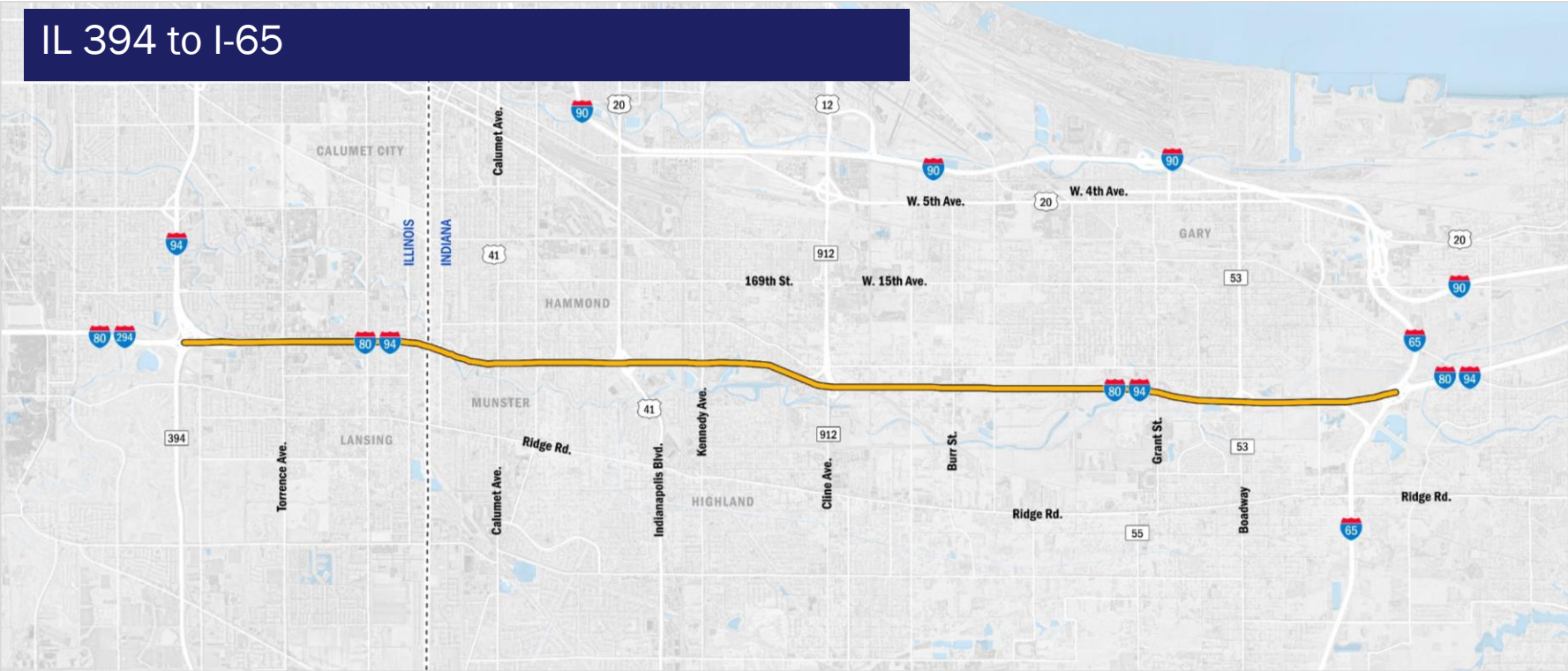
I-80/94 BORMAN EXPRESSWAY

Transportation Systems Management
and Operations (TSMO)

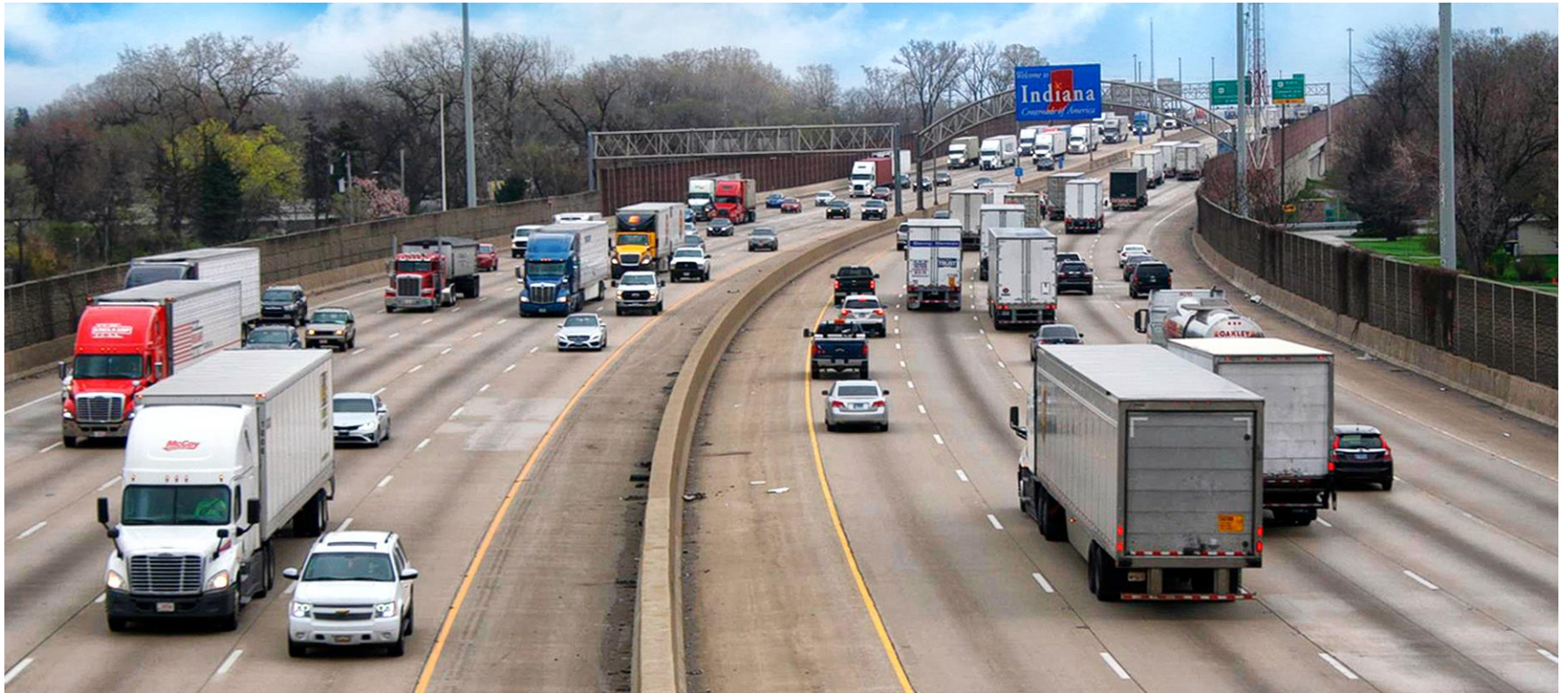


The Borman Expressway

IL 394 to I-65



The Borman Expressway



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



FLEXROAD > LESS STOP,
MORE GO

WHY PEL ON THIS PROJECT

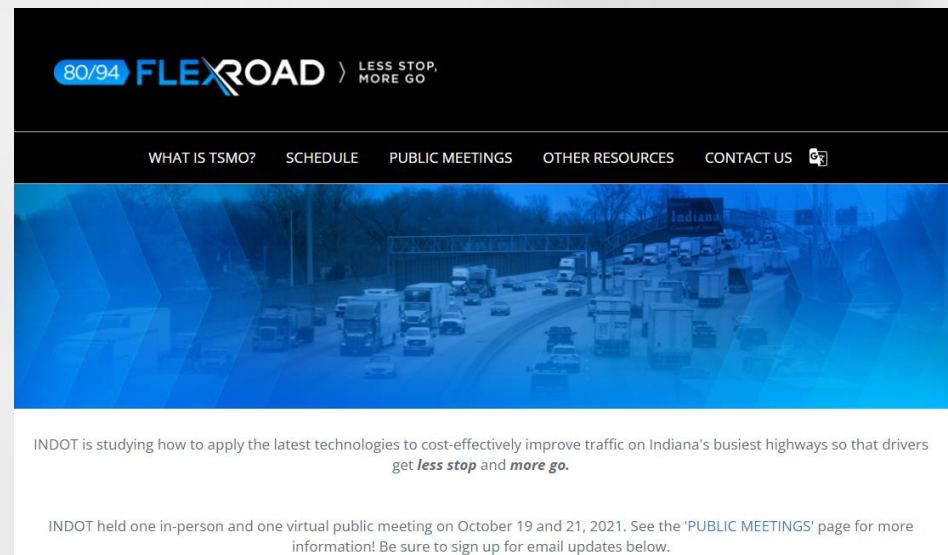
- Manageable scope for a pilot project
- Wide range of potential solutions
- Uncertain funding needs

GOALS

- Termini
- Design year
- P&N
- Screening of alternatives/
Defining NEPA alternatives

OUTREACH

- Public outreach
 - Community Advisory Committee (3)
 - Public Open Houses (2)
- Agency coordination
 - Resource Agency Committee (3)
- Website/Social



CHALLENGES

- Being first
- Public outreach in a pandemic
- Public interest in this project
- Bi-state project
- Non-traditional “Alternatives”

ALTERNATIVES

- Dozens of TSMO Strategies
- Initial High-Level Assessment
- Screened out strategies that were:
 - Not applicable
 - Not feasible
 - Didn't meet purpose and need

Integrated Corridor Management (ICM)	Connected and Autonomous Vehicle (CAV)
Transit Signal Priority	Freight Management
Transit	Tolling



Alternatives

ALTERNATIVE 1

Base Package

- Dynamic Shoulder Lanes
- Event Management
- Broadway Interchange and I 65 Interchange Modifications
- Signing Enhancements

ALTERNATIVE 2

Base Package

+

Ramp Metering

ALTERNATIVE 3

Base Package

+

Mainline Safety

- Variable Speed Limits
- Dynamic Lane Control
- Queue Warning

ALTERNATIVE 4

Base Package

+

Ramp Metering

+

Mainline Safety



> LESS STOP,
> MORE GO

MOVING FORWARD

- PEL Study Report and Questionnaire expected March 2022
- Getting ready for NEPA



What We've Learned So Far

Looks and feels like NEPA

Communication is critical

Making intentions clear

- Terminology: Study vs. project
- What's the final product?
- Materials and public notice

Future of PEL in Indiana

- Building PEL in Processes
- PEL Committee
- Capacity Limitations

