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FHWA Update 2018 Michigan Bridge Conference March 21, 2018

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Compliance Assessment Program

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Observation 2: 2017 CAP Findings

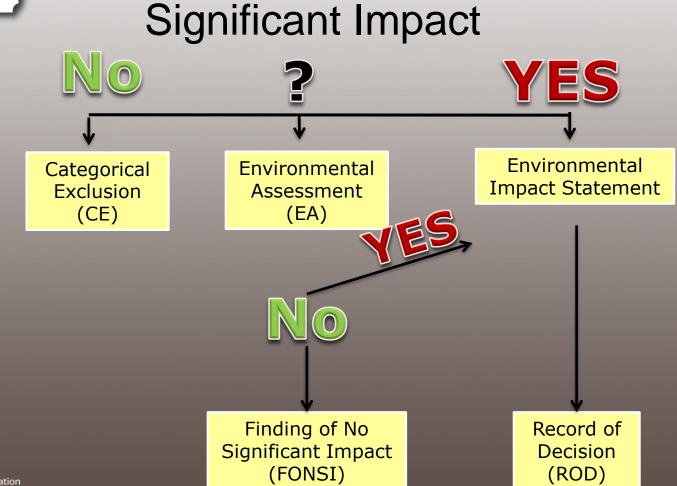
FHWA identified the following compliance issues on Local Agency Projects

- Lack of NEPA Quality Assurance as required by 23 CFR 771.117(g)(1) (3 projects),
- Lack of verification the NEPA classification was accurate prior to construction project authorization as required by 23 CFR 771.129(c) (32 projects).
- MDOT not ensuring that Local Agencies were using the most recent Program Application that included certifications for Railroads and Utilities (4 projects)

NEPA Classification

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NEPA: What is it?

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NEPA - is a process to evaluate the impact of alternates on the environment and aid in selecting a preferred alternative. It is NOT to justify a preselected project.

National Environmental Policy Act of 1969

- All projects receiving federal dollars (or approval) must be reviewed for environmental impacts.
 - Social
 - Environmental
 - Economic

Key Points to Address

- Development of the "Purpose and Need"
 - The "Purpose" defines the transportation problem to be solved and outlines goals and objectives to address for a successful solution to the problem.
 - The "Need" provides data to support the problem statement (the Purpose).
- The P & N Statement is intended to clarify the expected outcome of public expenditure and to justify that expenditure – What are you trying to accomplish and why you think it is necessary.
- Identification of the range of alternatives do not limit the alternatives to be evaluated based on perceived restrictions – do the 30,00 ft assessment.
- Engineering considerations: Condition Safety Operations



Limits of Assessment

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For ensuring meaningful evaluation of alternatives the limits:

- Need to connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Need to have independent utility or significance will it be a reasonable expenditure even if no additional transportation improvements in the area are made
- Should not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in the area.



I-94 at Sprinkle and Cork Roads

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I-94 at Sprinkle and Cork Roads

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Alternates Evaluated

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	Priority	Alt 1	Alt 2	Alt 3 (Preferred)	Alt 4	Alt 5	Alt 6	Alt 7
LOS	1	4	2		NA	3	NA	5
Geometrics	2	4	3	1	NA	2	NA	5
Cost	3	\$25,948,000	\$26,328,000	\$31,274,000	NA	\$26,808,000	NA	\$23,860,000
Social/ Environmental	3	2	3	5	NA	4	NA	1
Impacts	,	2	,	,		-		-
ROW	4	2.318	3.356	0.792	NA	2.433	NA	0.088
Constructability	4	1	2	4	NA	3	NA	5
Non-Motorized Mobility	4	3	4	5	NA	2	NA	1
Future Maintenance	4	2	1	3	NA	4	NA	5



I-94 at Sprinkle Road

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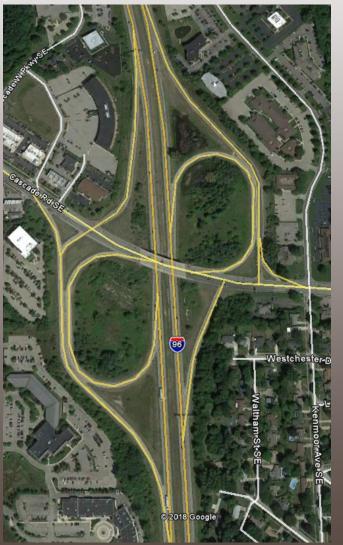
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STATISTICS. 1 11111 Image @ 2018 DigitalGlobe @ 2018 Google 02010 GO(1197 ft

I-96 at Cascade Rd, SE

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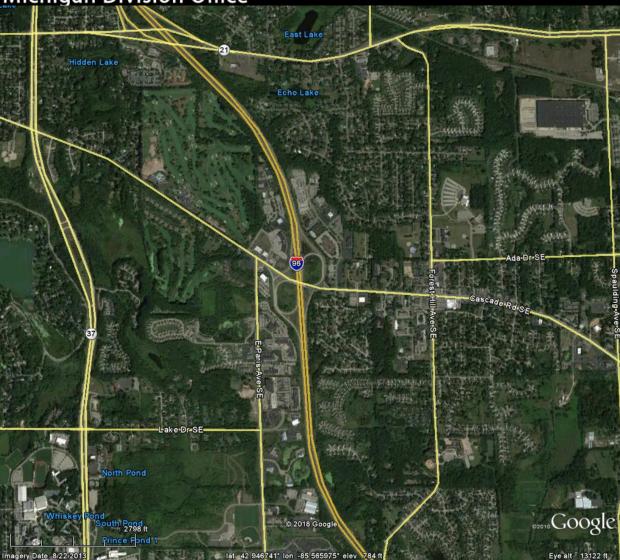
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I-96 at Cascade Rd, SE

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I-96 at Cascade Rd. SE

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2nd DDI in Michigan

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Ralph Pauly, PE

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Presentation Outline

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- Discretionary Funding Opportunities
 - Transportation Investment Generating Economic Recovery (TIGER)
 - Accelerated Innovation Deployment (AID)
- Critical Findings
 - National Bridge Inspection Standards
 - Michigan Specific Procedures



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- Transportation Investment Generating Economic Recovery (TIGER)
 - Goals
 - Improve access to reliable, safe and affordable transportation for communities in rural areas.
 - Improve infrastructure condition.
 - Address public health and safety
 - Promote regional connectivity
 - Facilitate economic growth or competitiveness



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- Transportation Investment Generating Economic Recovery (TIGER)
 - Eligible Projects
 - Road or bridge projects eligible under title 23, United States Code
 - Public transportation projects eligible under chapter 53 of title 49, United States Code
 - Passenger and freight rail transportation projects
 - Intermodal projects



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- Transportation Investment Generating Economic Recovery (TIGER)
 - Recent Projects
 - Stadium Boulevard Bridge Replacements in Ann Arbor
 - Relieved Congestion
 - Improved Connectivity





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- Transportation Investment Generating Economic Recovery (TIGER)
 - Recent Projects
 - Link Detroit Multi-Modal Enhancement
 - Multi-Modal Infrastructure Improvement
 - Improved Connectivity





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Accelerated Innovation Deployment (AID)

- Goals
 - Significantly accelerate the adoption of innovative technologies by the surface transportation community
 - Construct longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges
 - Improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability
 - Develop and deploy new tools, techniques, and practices to accelerate the adoption of innovation in all aspects of highway transportation



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• Accelerated Innovation Deployment

- Eligible Projects
 - Any project eligible for assistance under title 23, United States Code that includes an innovation proven in a real world highway transportation application, though not routinely used by the applicant or the sub-recipient.

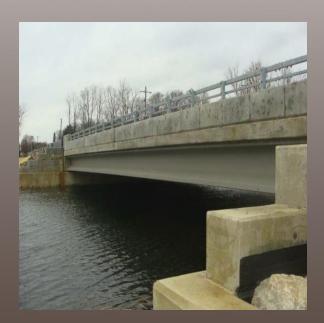


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Accelerated Innovation Deployment (AID)

- Recent Projects
 - M-86 over Prairie Creek Bridge Replacement
 - Carbon Fiber Composite Cable





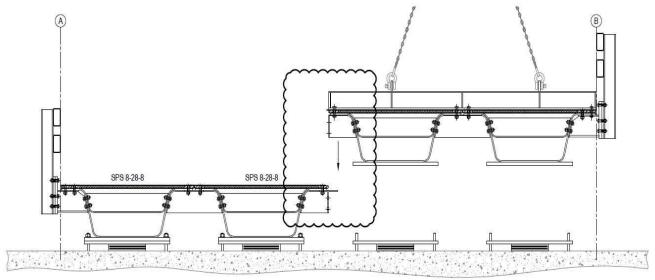
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Accelerated Innovation Deployment (AID)

- Recent Projects
 - County Road 7 (Muskingum County Ohio)
 - SPS Panels on Break-Formed Steel Tub Girders



Critical Findings

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National Bridge Inspection Standards CFR §650.305 Definition

A structural or safety related deficiency that requires immediate follow-up inspection or action.





Critical Findings

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National Bridge Inspection Standards CFR §650.313 Critical Findings

Establish a statewide procedure to assure that critical findings are addressed in a timely manner.





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Critical Findings

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Michigan Specific Procedure

- Take action within a reasonable time, and document action taken.
- Report critical findings to the State Bridge Inspection Program Manager.
- Provide closeout information to State Bridge Inspection Program Manager to closeout critical finding.





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Questions

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Bridge Removal Studies

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Bridges studied for removal (no replacement)

- I-69 at J Drive South
- I-75 at Janes and Wadsworth Roads
- Trowbridge Court over GTWRR



Right-of-Way

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23 CFR § 710.403 Management

 – e) The Federal share of net income from the sale or lease of excess real property shall be used by the STD for activities eligible for funding under title 23 of the United States Code. Where project income derived from the sale or lease of excess property is used for subsequent title 23 projects, use of the income does not create a Federal aid project.



PBPD

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Performance Based Project Development

- Not Practical Design Practical design is design centric
- We have done Practical Design for many years –it's called Design Exceptions

