Federal Highway Administration, USDOT

Work Zone Safety and Mobility Final Rule

Updates to 23 CFR Section 630, Subpart J

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Agenda

- Why update the work zone rule
- Alignment with FHWA goals
- Overview of the final rule
- Influence on project delivery
- Next steps

Why update the WZ Rule

- Legislative requirement
  - *Congress required the FHWA to review current work zone problems and update the regulation to:*

> *"Better reflect current needs for improved safety and to minimize disruptions to traffic during the construction of highway projects"*

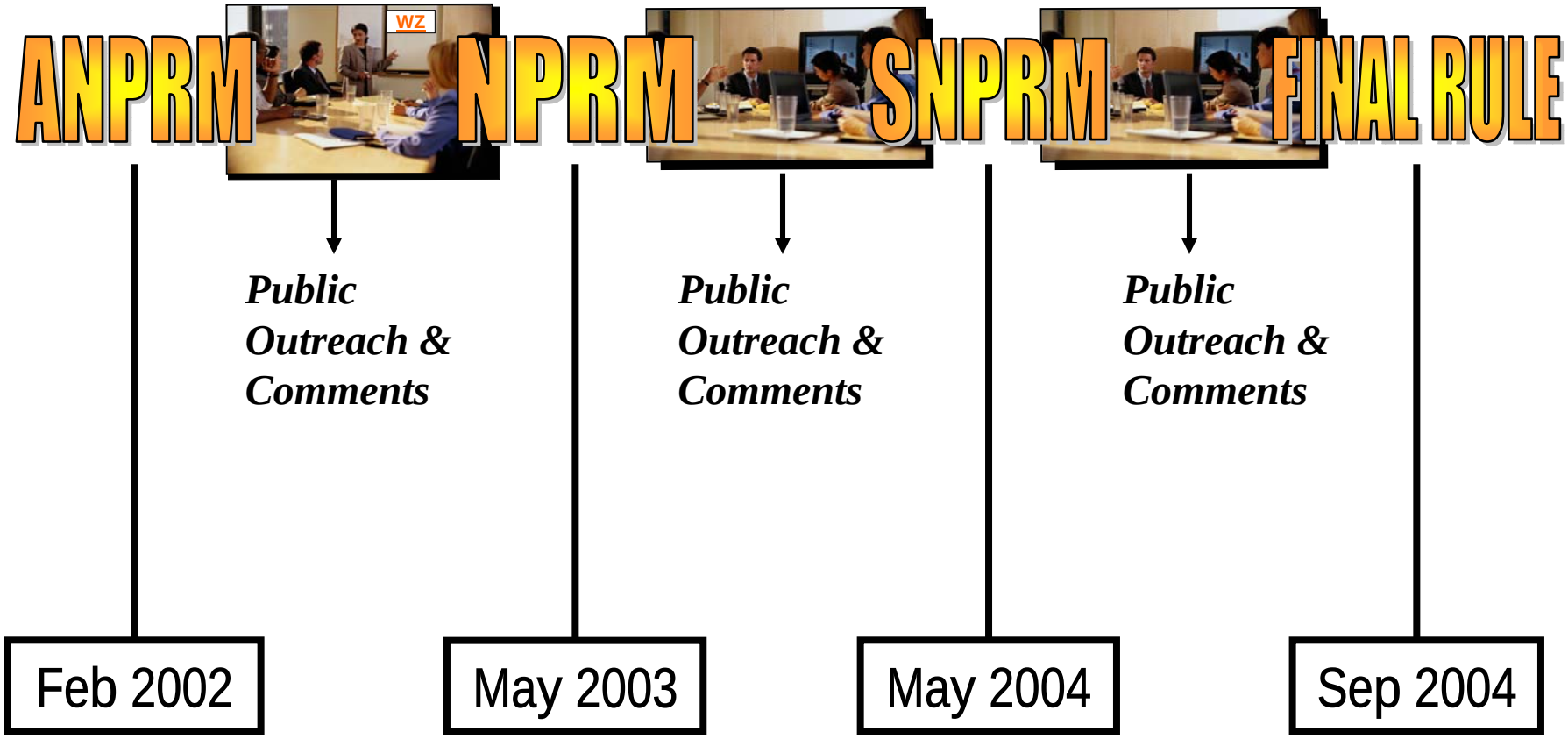
- So, we were told to update the regulation, but ……
- We also believe that it makes good sense to update it

Why update the WZ Rule

Influencing Factors:

- Our highways are approaching middle age
  - *More construction and repair is needed, which means more work zones*
- Growing traffic volumes and congestion
  - *Vehicle travel up, but very little growth in road miles*
- Work zone safety is still an issue
  - *Over 40,000 injuries and 1028 fatalities in 2003*
- More work is done under traffic
  - *Compressed contractor schedules*
  - *Increasing night work*
- Travelers are not happy with work zones
  - *Unexpected road conditions and inconsistency cause traveler frustration*

Rule-making Process



Alignment with FHWA Goals

FHWA Strategic Goals

- *Safety*
- *Mobility and Productivity*
- *Environment*
- *National Security*
- *Organizational Excellence*

FHWA Vital Few

- *Safety*
- *Environmental Streamlining*
- *Congestion*
  - *Work Zones*

- *Improve work zone safety*
  - *Safety improvement leads to congestion reduction*
- *Reduce congestion caused by work zones*
  - *Congestion reduction leads to safer work zones*

Overview of the Final Rule

Goals:

- Expand thinking beyond the actual WZ itself
  - *Corridor, network, and regional issues (e.g., alternate routes and/or modes, truck traffic, special events, etc.)*
- Expand WZ management beyond "traffic safety and control"
  - *Address mobility in addition to safety*
  - *Address current day issues of "operations and management" and "public information"*
- Advocate innovative thinking in WZ planning, design, and management
  - *Think outside of the "traffic safety and management" box*

Overview of the Final Rule

Specific Focus Areas:

- Institutionalize WZ processes, procedures, practices
- Advocate partnership, and multi-disciplinary approach
- Communicate more effectively with the public
- Advance WZ considerations throughout project delivery
- Address needs for different project types and classes
- Emphasize work zone focused training
- Emphasize performance monitoring and assessment

Provisions – In a Nutshell

Policy

State implemented policy for the systematic consideration and management of WZ impacts

Process

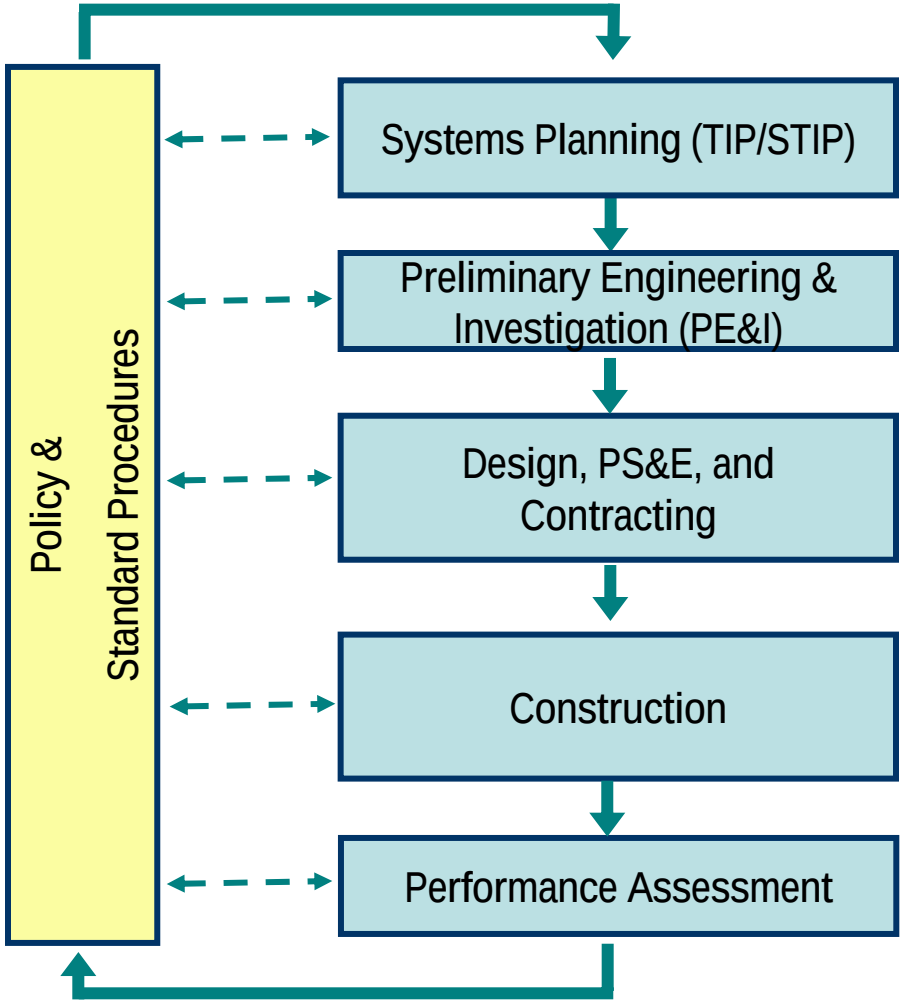
Processes and procedures to implement and sustain WZ policy

Project

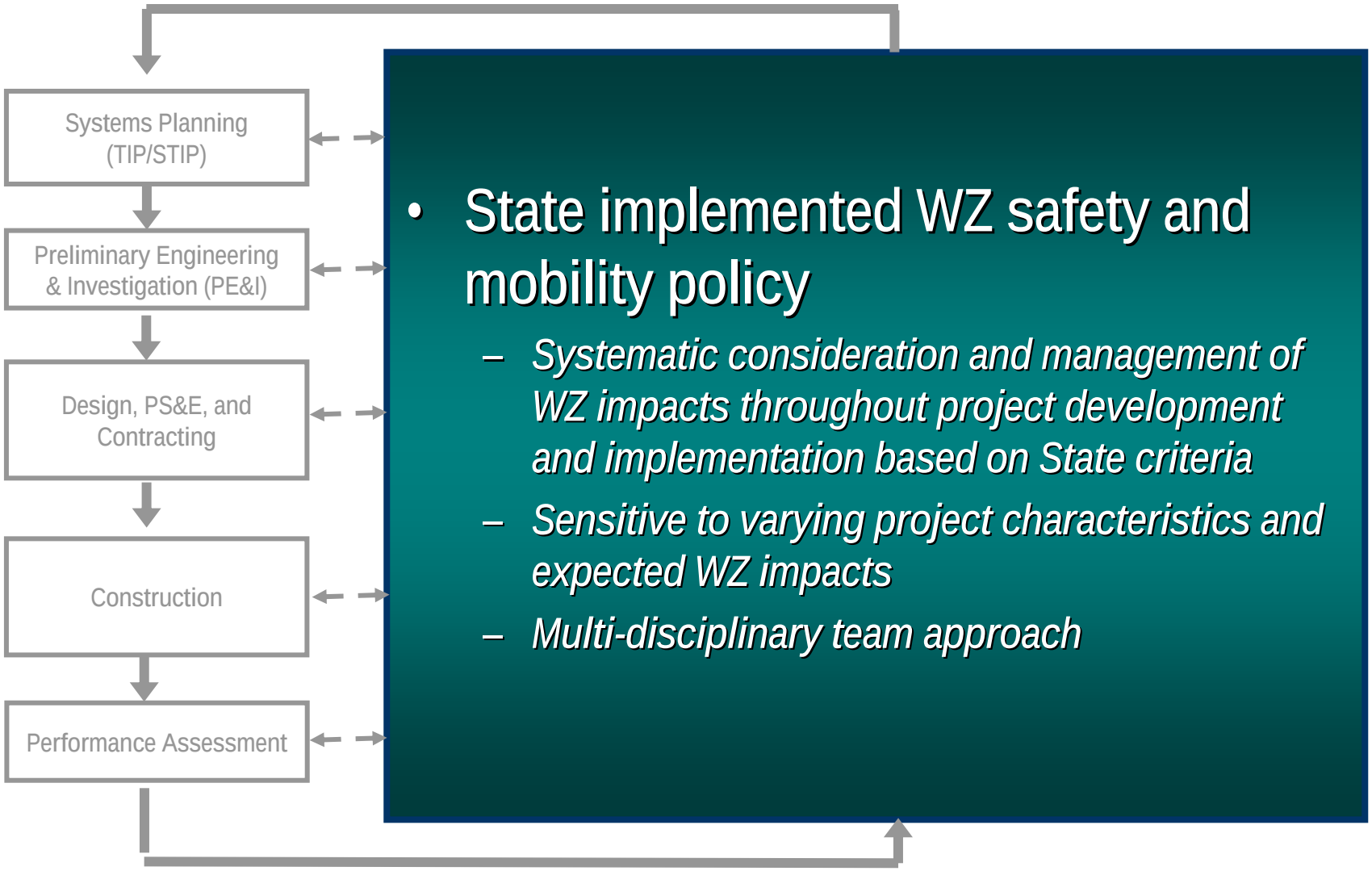
Project-Level Procedures to Assess and Manage Impacts on Individual Projects


How do the New Provisions Influence Project Delivery?

Project Delivery Cycle

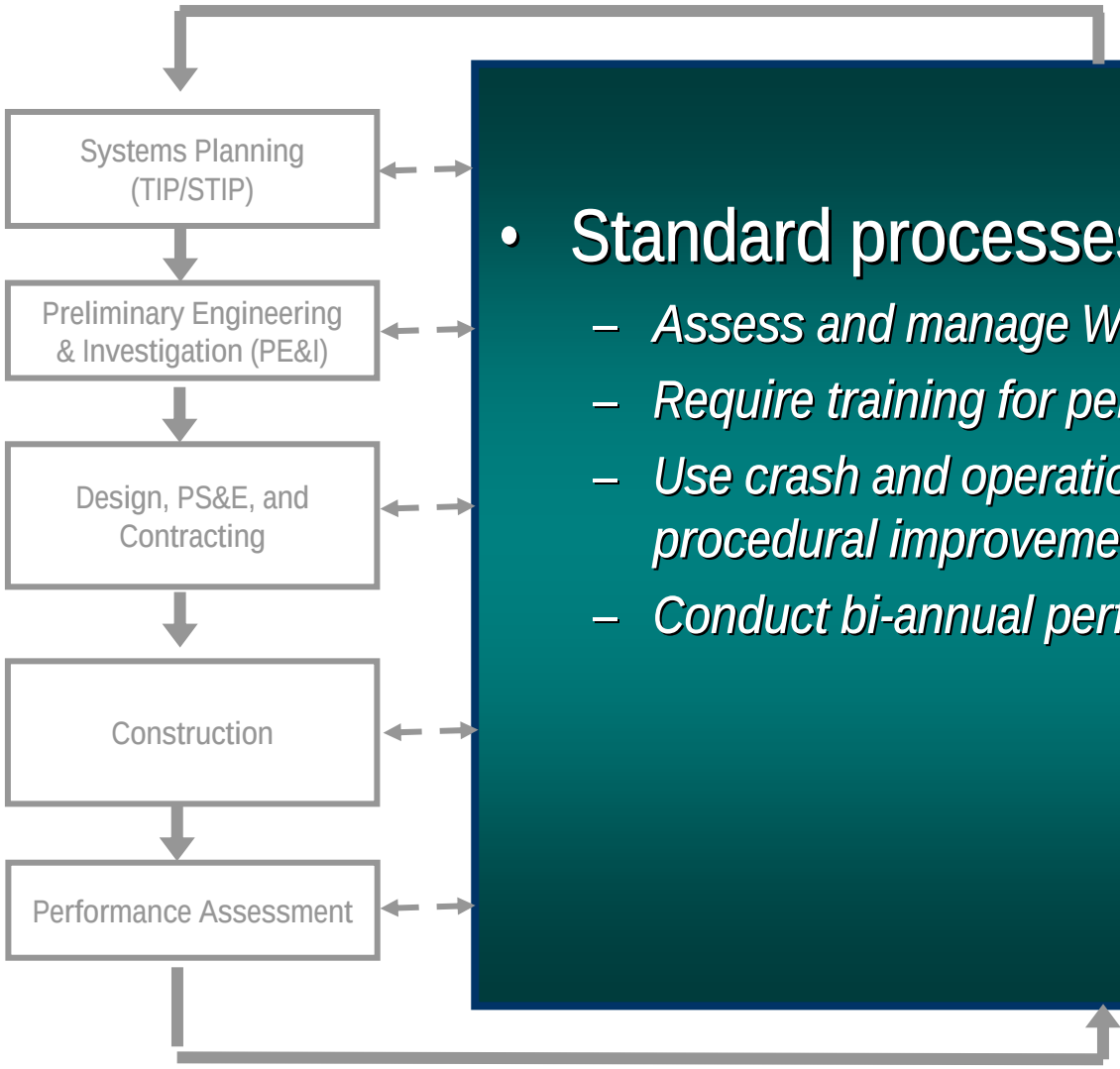


Policy



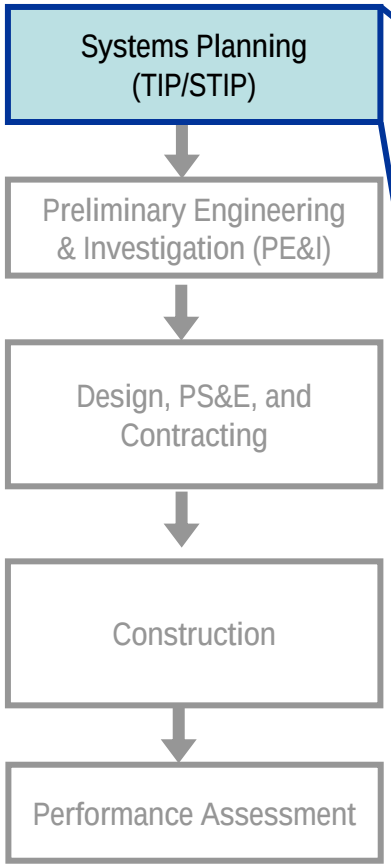
- State implemented WZ safety and mobility policy
  - *Systematic consideration and management of WZ impacts throughout project development and implementation based on State criteria*
  - *Sensitive to varying project characteristics and expected WZ impacts*
  - *Multi-disciplinary team approach*

Standard Procedures



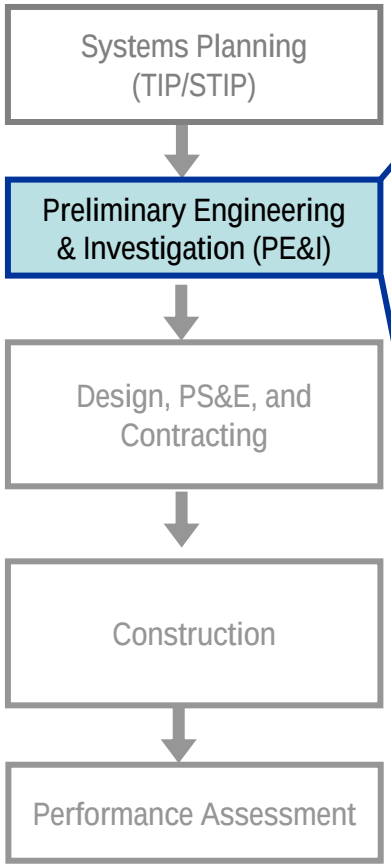
- Standard processes / procedures to
  - *Assess and manage WZ impacts*
  - *Require training for personnel*
  - *Use crash and operational data for process / procedural improvement*
  - *Conduct bi-annual performance reviews*

Systems Planning (TIP/STIP)



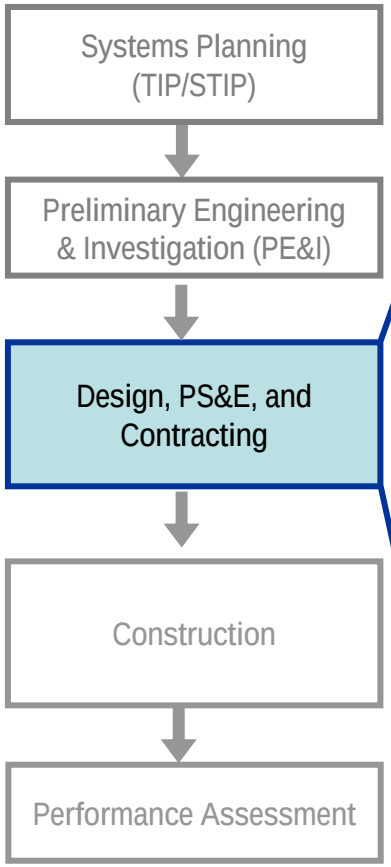
- Identify projects expected to cause "significant work zone impacts" early in the project development process

Preliminary Eng. / Investigation (PE&I)



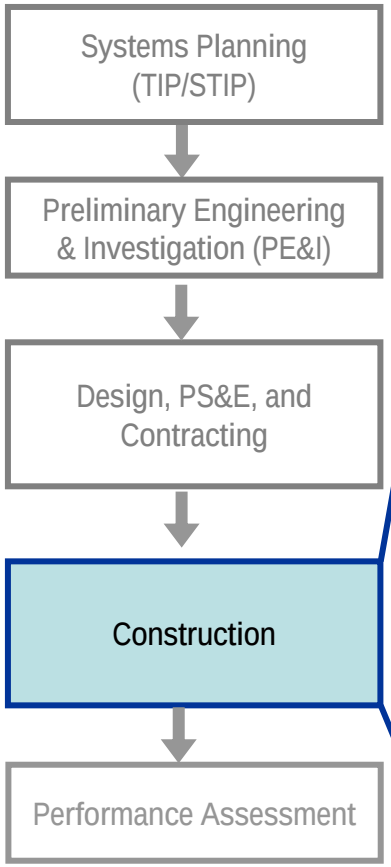
- Identify potential WZ impacts
- Identify potential transportation management strategies
- Identify other coordination issues

Design, PS&E, and Contracting



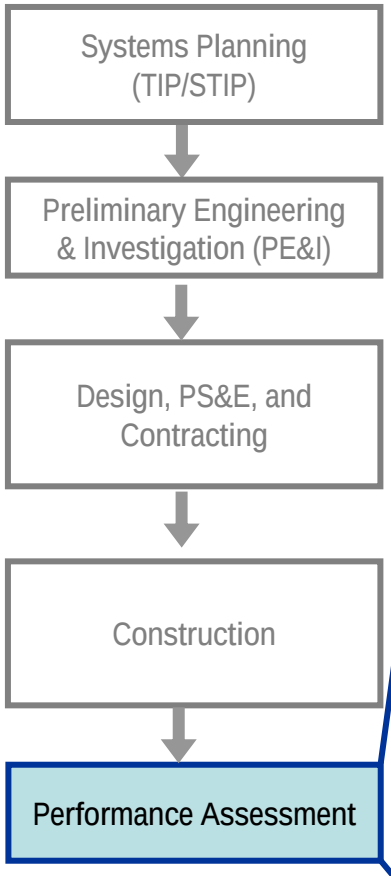
- Assess WZ impacts (progressively and comprehensively)
  - *Address alternative design, construction, contracting, and management strategies in the assessment*
- Develop appropriate TMP
- Include appropriate TMP items in PS&E

Construction



- Implement TMP requirements
- Monitor safety and mobility
  - *Use field observations, crash data, and operational information to manage impacts*
- Consult with appropriate stakeholders
- Review random projects as appropriate

Performance Assessment (Post-hoc)



- Analyze crash and operational data from multiple projects
  - *Towards improving processes and procedures*
- Maintain data and information resources to support improvements
- Conduct bi-annual process reviews
  - *WZ data analysis and/or project reviews*
  - *Improve WZ processes and procedures, data and information resources, and training programs*

In Essence

- Advance WZ considerations as early as practical / possible
- A State driven approach – implement a policy to consider and manage WZ impacts of projects
- Develop and implement State-level procedures for systematic consideration and management of WZ impacts
- Understand the WZ impacts of different projects and project types
- Manage the WZ impacts of projects by developing and implementing TMPs appropriate to the project
- Monitor the performance of WZs during implementation and make changes to TMP, if necessary
- Analyze post-construction data across multiple projects to improve policy, practices, processes and procedures

Next Steps

- Prepare FHWA field staff to support final rule
  - *Detailed web conferencing on all requirements of the rule*
  - *Highlight strategies to use in improving WZ safety and mobility*
- Develop detailed implementation guidance for the final rule
- Develop additional guidance material on specific aspects of the final rule
  - *Communication and outreach*
  - *Transportation Management Planning*
  - *Work zone impact assessment*
  - *Roadside safety audits*
  - *Work zone training courses*
- Conduct final rule outreach through
  - *FHWA web site and publications*
  - *AASHTO subcommittees*
  - *Presentations at conferences*

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- **<u>§ 630.1006 Work zone safety and mobility policy.</u>**
- **Each State shall implement a policy for the systematic consideration and management of work zone impacts on all Federal-aid highway projects.** This policy shall address work zone impacts throughout the various stages of the project development and implementation process. **<u>This policy may take the form of processes, procedures, and/or guidance</u>,** and may vary based on the characteristics and expected work zone impacts of individual projects or classes of projects. The States should institute this policy using a multi-disciplinary team and in partnership with the FHWA. The States are encouraged to implement this policy for non-Federal-aid projects as well.

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- **<u>§ 630.1008 State-level processes and procedures.</u>**
- (b) Work zone assessment and management procedures. States should develop and implement systematic procedures to assess work zone impacts in project development, and to manage safety and mobility during project implementation.
- (c) **Work zone data. States shall use field observations, available work zone crash data, and operational information to manage work zone impacts for specific projects during implementation.** States shall continually pursue improvement of work zone safety and mobility by analyzing work zone crash and operational data from multiple projects to improve State processes and procedures.

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- **<u>§ 630.1008 State-level processes and procedures. (cont.)</u>**
- (d) Training. States shall require that personnel involved in the development, design, implementation, operation, inspection, and enforcement of work zone related transportation management and traffic control be trained, appropriate to the job decisions each individual is required to make.
- (e) Process review. In order to assess the effectiveness of work zone safety and mobility procedures, the States shall perform a process review at least every two years.

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- **<u>§ 630.1010 Significant projects.</u>**
- (a) A significant project is one that, alone or in combination with other concurrent projects nearby is anticipated to cause sustained work zone impacts (as defined in § 630.1004) that are greater than what is considered tolerable based on State policy and/or engineering judgment.
  - *<u>Work zone impacts</u> refer to work zone-induced deviations from the normal range of transportation system safety and mobility.*

- (c) All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures shall be considered as significant projects.

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- **§ 630.1012 Project-level procedures.**
- (b) Transportation Management Plan (TMP). A TMP consists of strategies to manage the work zone impacts of a project. Its scope, content, and degree of detail may vary based upon the State's work zone policy, and the State's understanding of the expected work zone impacts of the project. **For significant projects** (as defined in § 630.1010), the State shall develop a TMP that consists of a Temporary Traffic Control (TTC) plan and addresses both Transportation Operations (TO) and Public Information (PI) components. For individual projects or classes of projects that the State determines to have less than significant work zone impacts, the TMP may consist only of a TTC plan. States are encouraged to consider TO and PI issues for all projects.

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- **§ 630.1012 Project-level procedures. (cont.)**
- (e) Responsible persons. The State and the contractor shall each designate a trained person, as specified in § 630.1008(d), at the project level who has the primary responsibility and sufficient authority for implementing the TMP and other safety and mobility aspects of the project.