Alternative Corridor Evaluation Process (ACE)

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Presentation Summary

- Intent
- Overview of corridor planning and screening
- Process and technology integration
- Conclusions
Why a new process?

- Integrating technology and process
- Bringing greater value to technology
- Improve Planning and Environmental Linkages
- Take advantage of MAP-21 flexibilities – using planning products
- Statewide consistency
- Focus Environmental Impact Statements
Project Identification & Phasing

- Planning
- Project Development & Environment
- PD&E/NEPA Approval
- Design
- Right-of-Way
- Construction
- Maintenance

Public Involvement

Environmental Considerations

ETDM
Corridor Planning and Screening Process

- Study Area(s) Defined and Needs Identified
- Concept Report
- Framework for Further Study
- Conceptual Screening
- Evaluation Report
- Corridor Purpose and Need
- Initial Implementation Plan
- Evaluation
- Potential Corridors Identified
- Criteria Screening
- Specific Alternatives Identified for Analysis
- ETDM/PD&E
- Project Development
- Implementation
- Approved Environmental Documents
- Preferred Alternative(s) for Design and Engineering
- Preliminary Financial Plan
**Concept Stage**

- Consistency with State Long-Range Transportation Plan goals and objectives
- Early identification of needs
- Public Involvement/Coordination/Input using technology
  - Locals
  - Regulatory and resource agencies (Federal, State and Local)
  - Other stakeholders
  - Review of considerations by Stakeholders
- High level consideration and identification of potential community and environmental resource concerns
  - GIS Analysis, data mining
  - Early avoidance and minimization and identification of mitigation opportunities
Data Management

Natural:
- Wetlands
- Water Quality and Quantity
- Floodplains
- Wildlife and Habitat
- Coastal and Marine

Physical:
- Noise
- Air Quality
- Contamination
- Navigation
- Infrastructure

Special Designations (e.g., SSL, AP, OFWs, etc.)

Community:
- Aesthetics
- Land Use
- Relocation Potential
- Farmlands
- Economic
- Mobility
- Social/Community Concerns

Cultural:
- Section 4(f) Potential
- Historic and Archaeological Sites
- Recreation Areas
Concept Stage – Screening Tool

- Helps scope the corridor

- Environmental Screening Tool (EST)
  - Over 550 Data Layers
  - Potential identification of environmental features, areas to avoid, etc.

- Helps set the framework for future activities
  - Refinement of analysis
  - Continuous coordination
  - Documentation

- No project, YET…
Example Project Area
Concept Stage Expectations

- Build an understanding of the corridor area
- Identify environmental features
- Receive actionable commentary from stakeholders
- Identify avoidance and minimization strategies
- Identify mitigation opportunities that may be or may become available, if projects are identified and advanced
**Evaluation Stage**

- Refine corridor(s) – consider multiple corridors, modes and environmental issues/resources

- Develop corridor purpose and need

- Identify strategies – operational and capital

- Work closer with MPOs, Local Governments and other stakeholders

- Continue outreach and coordination with stakeholders

- Community and environmental avoidance, minimization and mitigation opportunities that may be or may become available, if projects are identified and advanced
The Alternative Corridor Evaluation Process

- Continuous coordination with Lead Agency including concurrence at decision points
- Documented involvement of stakeholders in decision-making
- Uses existing and new vetted technologies
- Flexibility in its application
- Information all in one place, products available for future phases
- Define Purpose and Need
- Define affected environment
- Identify reasonable alternatives for NEPA Analysis
What is ACE?

- Intended for various project types regardless of mode:
  - New alignments
  - Major realignments
  - Major bypasses – truck, city/town, etc.
  - Other projects?

- Purpose of ACE is to identify reasonable alternatives for NEPA analysis

- Provides a continuously coordinated and documented process to make corridor decisions with stakeholder involvement

- Early avoidance, minimization and consideration/identification of mitigation opportunities

- Helps refine the affected environment and identify issues/resources of focus
ACE Basics

- Define initial corridor alternative(s) and considerations
  - Use Corridor Planning Process and technology

- Define environmental setting
  - Issues/resources of focus
  - Greater understanding and coordination

- Develop Analysis Methodology Memorandum to define/refine alternatives with stakeholder input
  - e.g., Land Suitability Mapping and/or other tools

- Define/refine corridor alternatives using methodology

- Alternative Corridor Evaluation Report (ACER)
  - Defined affected environment
  - Alternative(s) for detailed study in NEPA with stakeholder input
  - Elimination of unreasonable alternative(s)
Project Area

Corridor Constraint Area – area where corridors alternatives can be developed

US 441

SR 710
ACE Process

Qualifying corridor examples:
- New alignments
- Major realignments
- Major bypasses
- Consultation with lead

EST GIS intersection results (CCI, SCE, standard EST analyses)

Preliminary Environmental Discussion (PED)

Lead Agency concurrence on the elimination of any unreasonable alternatives

Apply methodology and use tools to refine corridor alternatives (Land Suitability Mapping, etc.)

Lead Agency concurrence on the elimination of any unreasonable alternatives

Need to complete Alternative Corridor Evaluation (ACE)

Define initial alternative corridors (area, swath, general alternatives)

Standard EST Planning Screen

Preliminary Planning Screen Summary Report (≤ 60 days)

Methodology Memo (MM) review — 30 days for agency review:
- Local government (understood)
- Agency partner (understood)
- Lead Agency (concur)

Republish Preliminary Planning Screen Summary Report with ACE MM

Refine and/or eliminate alternative corridors and attach Alternative Corridor Evaluation Report (ACER)

Final Planning Screen Summary Report with ACER

Public Review

EST Programming Screen

Standard EST Programming Screen review

Preliminary Programming Screen Summary Report

Lead Agency concurrence on the elimination of any unreasonable alternatives

Lead Agency acceptance of Class of Action Determination

Project Development and Environment Process
Methodology Memorandum

- **Background**
  1. Contact personnel
  2. Basic project information
     a. Include any previous planning studies or relevant information
     b. Include any known issues of concern
  3. Brief description
  4. Brief Purpose and Need of the project

- **Describe the goals and objectives of the ACE**
  1. Provide the status in project delivery
  2. Define the intent of the study
  3. Identify the decision points/milestones

- **Describe the methods that will be used to analyze the alternatives and make decisions**
  1. Describe alternative corridors
  2. Describe screening criteria
  3. Briefly describe the data that will be used and how it will support the decision making process going forward
  4. Describe the rationale that will be used to eliminate alternatives
  5. Describe the data tools that will be used in the analysis [i.e., EST, Land Suitability Mapping (LSM), Quantum, etc.]

- **A brief description of stakeholder involvement**
Corridor Alternatives developed using LSM
Project Development Stage (NEPA)

- Clearly defined project
- Defined Purpose and Need
- ETDM Programming Screen prior to initiation of NEPA as appropriate
  - Agency and stakeholder coordination/consultation continues
  - Alternative(s) for analysis including the “No Build”
  - Detailed impact analysis and determinations
  - Preferred alternative defined, approved and advanced
ACE Process

Qualifying corridor examples:
- New alignments
- Major realignments
- Major bypasses
- Consultation with lead

EST GIS intersection results (CCI, SCE, standard EST analyses)

Preliminary Environmental Discussion (PED)

Lead Agency concurrence on the elimination of any unreasonable alternatives

Apply methodology and use tools to refine corridor alternatives (Land Suitability Mapping, etc.)

Lead Agency concurrence on the elimination of any unreasonable alternatives

Create / Update Advance Notification package

Lead Agency concurrence on the elimination of any unreasonable alternatives

Lead Agency acceptance of Class of Action Determination

Need to complete Alternative Corridor Evaluation (ACE)

Define initial alternative corridors (area, swath, general alternatives)

EST Internal Assessment

EST Planning Screen

Stakeholder review (ETAT, Lead, Public) – 45 days

Standard EST Planning Screen

Methodology Memo (MM) review – 30 days for agency review:
- Local government (understood)
- Agency partner (understood)
- Lead Agency (concurs)

Republish Preliminary Planning Screen Summary Report with ACE MM

Refine and/or eliminate alternative corridors and attach Alternative Corridor Evaluation Report (ACER)

Final Planning Screen Summary Report with ACER

EST Programming Screen

Stakeholder review (ETAT, Lead, Public) – 45 days

Standard EST Programming Screen review

Preliminary Programming Screen Summary Report

Final Programming Screen Summary Report

Project Development and Environment Process

Public Review
Corridors determined (concurrence by Lead Agency with Stakeholder involvement) to be **reasonable** for NEPA analysis
ACE in a nutshell...
NEPA Study

- Detailed Engineering and Environmental analysis (ground level) of the identified reasonable alternatives
  - Continued Public Involvement
  - Balanced consideration of Engineering and Environment
  - Avoid, minimize and for unavoidable impacts mitigate
  - Environmental Document (EA, EIS or state document)

- Public Hearing

- Final Agency findings

- Final Environmental Document

- Preferred alternative advanced to Final Design – in some cases we may combine Preliminary Design activities as well
Environmental Framework

- Continuous coordination with stakeholder input
  - Concept Stage – GIS analysis, conservation plans,…
  - Evaluation Stage – ACE (Methodology Memorandum), screening, reasonable alternatives…
  - Project Development Stage – NEPA, Preliminary Design…

- Open, documented process that integrates technologies

- Continuity in process and decisions
  - Planning and Environmental Linkages
  - Documented decisions

- Balanced consideration of the environment & transportation – joint planning
Questions?