Corridor Analysis Methodology
I-75 Relief Task Force

Presented by:
Xavier Pagan
Natural & Community Resources Administrator
State Environmental Management Office, Florida Department of Transportation

NOTE: Information is preliminary and subject to change

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Agenda

• Corridor planning process
• Corridor analysis methodology
• Overview of Planning Corridor Assessment Tool
• Preliminary Land Suitability Map
  – Input on Avoidance and Minimization Areas
• Next steps
FDOT Transportation Project Delivery Process

Future Corridors
Planning
Project Development & Environment (PD&E)
PD&E Approval
Design
Right-of-Way
Construction
Maintenance

Stakeholder Involvement
Environmental Considerations
ETDM
Future Corridor Planning Process

- **CONCEPT**
  - Study Area Defined and Needs Identified

- **EVALUATION**
  - Potential Corridors Identified

- **PROJECT DEVELOPMENT**
  - Specific Alternatives Identified for Detailed Analysis

- **IMPLEMENTATION**
  - Efficient Transportation Decision Making
  - Project Development & Environment

**Recommendations expected Fall 2016**

**Current and future studies**

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Conceptual Level Corridor Planning

• Why important?
  – Detailed focus on a *particular corridor or region*
  – Help determine where there is a transportation *need*
  – Identify corridor options that *avoid sensitive environmental areas* and satisfy purpose and need

• Planning objectives to inform Project Development
  – *Purpose and need*
  – *Modes* to be considered (highway, transit, etc.)
  – *Preliminary screening* of alternatives and elimination of unreasonable alternatives
  – Basic description of the *environmental setting*
  – Preliminary *identification of environmental impacts* and environmental mitigation
  – Based on federal guidance to *Link Planning and NEPA*
Corridor Planning

- **Define initial options**
  - General areas, swaths and locations
  - Conceptual level
  - Early public and agency input

- **Conduct Alternative Corridor Evaluation**
  - Based on Task Force Recommendations
  - Identify unreasonable alternatives
  - During FDOT’S ETDM Screen

- **Project Development**
  - Specific alternatives
  - Detailed analysis
What is ACE?

• **Alternative Corridor Evaluation (ACE)** process established in coordination with FDOT’s Environmental Technical Advisory Team
  – Includes representatives from Metropolitan Planning Organizations/Transportation Planning Organizations (MPOs/TPOs), federal and state agencies, and participating Native American Tribes.

• Intended for various project types **regardless of mode**

• Purpose of ACE is to identify **reasonable alternatives** for PD&E analysis

• Provides a **continuously coordinated and documented process** to make corridor decisions with input from agencies, organizations and the public

• Early **avoidance, minimization and consideration/identification of mitigation opportunities**

• Helps refine the affected environment and **identify issues/resources of focus**
Corridor Planning Basics

• Define **initial corridor options and considerations**
  – *Existing and potential new corridors*

• Define **environmental setting**
  – Issues/resources of focus
  – Data collection and agency coordination

• Develop Corridor Analysis Methodology with input from agencies, organizations and the public
  – e.g., Land Suitability Mapping and/or other tools

• **Define/refine corridor options** using methodology

• Document **evaluation results**
  – Input from Task Force, agencies and public
  – Refine options based on input and reevaluate

Identify Corridor Constraints (Avoidance and Minimization)

Conduct Environmental Screening of Potential Areas of Opportunity for Corridors

Evaluate/Refine Potential Corridors
Considerations for Corridor Development

• **Task Force Charge**
  – Consistency with Guiding Principles

• **Purpose and Need**
  – Travel demand model
  – Socioeconomic analyses
  – Consistency with regional and local plans

• **Environmental screening**
  – Planning Corridor Assessment Tool (PCAT)
  – Land Suitability Mapping (LSM)
  – Evaluation of impacts/evaluation matrix

• **Engineering feasibility**
  – Funding considerations

• **Public and agency input**
Data Collection

• Over 80 Data Layers Initially Identified
  – Agency Coordination
  – ETAT Webinar January 29, 2016
  – Input on 4C Maps

• Major categories include:
  – Natural, cultural, social and physical resources

• A preliminary list of data layers was provided for review to the Environmental Technical Advisory Team (ETAT)
Evaluation Framework – LSM/PCAT

8 Steps

1. Identify Crucial Environmental Layers
2. Assign Relative Rankings
   • Based on agency input
3. Aggregate Layers/Land Suitability Mapping
4. Identify Least Environmental Impact Paths
5. Review and Refine Corridors
6. Quantify Potential Corridor Impacts
7. Refine Corridors and Re-quantify Impacts
8. Consider Other Impacts and Reduce Corridors
Aggregate Layers/Land Suitability Mapping

- Combine maps in GIS
- Create Land Suitability Map
- 100m x 100m blocks
- Higher ranking blocks will be avoided
Identify Least Environmental Impact Paths

- Based on LSM
- Uses PCAT spatial analyst tool
- Quantify impacts
- Evaluation Matrix of all considerations
Preliminary Land Suitability Map

- Insert Final LSM Map (also a display board)
Next Steps

• Input on Avoidance and Minimization Areas
  – Task Force Meeting #3
  – Agency Coordination Meeting #2
  – Community Workshops

• Identify potential corridors for further input and analysis
  – Purpose and Need
  – Conduct environmental screening (PCAT/LSM analysis)
  – Engineering considerations
  – Public and agency input
How to get involved. . .

- Provide *input on proposed data layers* to be used
- Provide *input on preliminary avoidance and minimization areas* shown
- Provide *input and insight on issues and considerations* in the initial focus area
For more information contact:

Huiwei Shen, Project Manager
Manager, Systems Planning Office
Florida Department of Transportation
Phone: 850-414-4911
Email: Huiwei.Shen@dot.state.fl.us

Xavier Pagan
Natural & Community Resources Administrator
Florida Department of Transportation
Phone: 850-414-5620
Email: Xavier.Pagan@dot.state.fl.us
Thank You!