Project Development and Environment Study (PD&E)

MDX Board Workshop March 30, 2010



Overview

- MDX vision projects developed and prioritized by MDX Board in 2007
 - Blue Ribbon Committee
- MDX vision projects included in 2035 Miami Dade MPO Long Range Plan (October 2009) and in Work Program
- PD&E studies comply with FDOT standards and National Environmental Policy Act (NEPA) requirements





Planning Tasks Completed

- Concept Studies
 - 924 West
 - 924 East
 - Establishes framework for PD&E phase
- Advance Notification (AN) and Efficient Transportation Decision Making (ETDM)
 - Provides early coordination with permitting and environmental agencies
- Initial public outreach along project corridors
 - Elected officials
 - Agencies
 - Stakeholders









Class of Action Determination

- Not all PD&E's are alike
- Type or Class of Action depends on
 - Complexity and magnitude of project
 - Connections to Interstate System
 - Funding requirements
- Determination is a result of
 - Coordination with FDOT D-6
 - Evaluation and consultation with FHWA
- Categories
 - Categorical Exclusions
 - State Environmental Impact Reports
 - Environmental Assessment
 - Environmental Impact Statements



Components of a PD&E Study

- Environmental
 - Identification of the study area and corridor definition
 - Environmental analysis and assessment of impacts
 - Natural/Physical Social / Economic / Cultural / Historic
- Engineering
 - Preliminary conceptual engineering design of roadway
- Public Involvement
 - Coordination with federal, state and local agencies and governmental entities
 - Outreach to elected officials and the public to provide information and an opportunity to express their views



Environmental Components

- Natural
 - Air
 - Noise
 - Water Quality
 - Floodplains
 - Wetlands
 - Fish
 - Wildlife
 - Contamination
 - Farmlands
 - Visual
 - Aesthetics











Environmental Components

- Socio/Cultural
 - Archaeological Sites
 - Historic Sites
 - Parks
 - **Recreation Facilities**
 - **Utilities**
 - Railroads
 - **Community Cohesion**
 - Community Features
 - Schools, Churches, Businesses, Cemeteries, Emergency Service Providers, etc.
 - **Relocation Potential**



Engineering Component

- Field Reviews
- Existing Conditions
- Traffic Data
- Crash Data
- Geotechnical
- Right-of-Way
- Transportation Plans
- Structures
- Utilities
- Cost







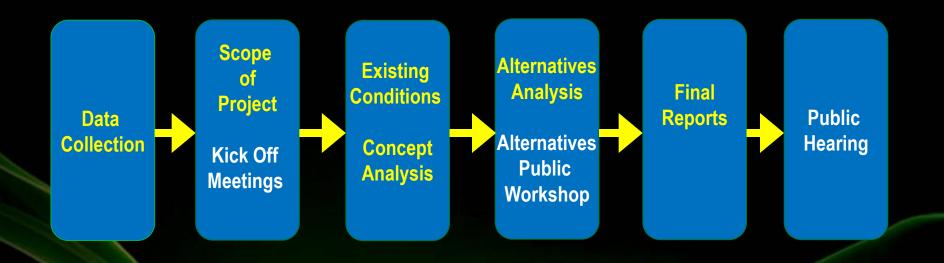
Public Involvement Component

- Objective
 - Make public aware of project
 - Solicit input
- Scheduled Meetings
 - Kick off Meeting
 - Alternatives Workshop
 - Public Hearing
- Unscheduled Meetings
 - Elected official briefings
 - Key stakeholders
 - Conflict resolution
 - Consensus building
 - Board Committees
 - MPO Board





PD&E Study Process



Public Involvement Process



Products of a PD&E Study

- Approved environmental document including preferred alternative with public consensus
 - Identification of impacts and mitigation
 - Permits required
 - Costs for preferred alternative used for inclusion in Work Program's next phase of design and construction
 - Identification of other potential funding alternatives
 - Federal, State, PPP



Project that is constructible, permittable, financeable and supported by stakeholders

- Environmental Test
- Engineering Test
- ✓ Public Test



SR 924 West Extension PD&E Study

West Extension to the Homestead Extension of Florida's Turnpike (HEFT)

The Corradino Group









Study Area



Purpose and Need

- Provide direct connection between I-75, the HEFT, SR 924 (Gratigny) and SR 826 (Palmetto)
- Serve east-west mobility needs in northern Miami-Dade County
- Population growth of 28.6% and employment growth of 40.5% by the year 2035.
- Future planned developments for industrial and business generating freight traffic with better roadway system interconnection
- Alleviate traffic congestion and provide additional transportation capacity



Class of Action Determination

- Coordination with FDOT D-6
- Evaluation and Consultation with FHWA
- Categorical Exclusion Type II
- State Environmental Impact Report (SEIR)

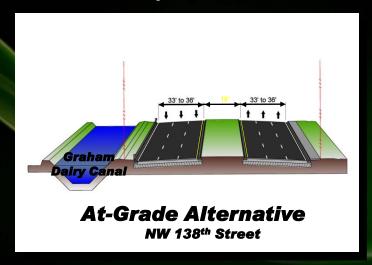


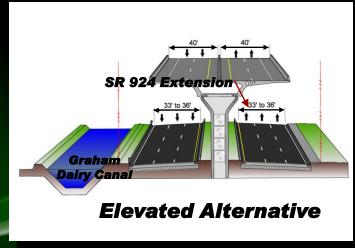
Corridor Analysis



NW 138th Street Corridor

- NW 138th Street Alignment
 - At-grade (6 lanes)
 - Limited access (4 lanes) with frontage roads
 - Elevated freeway (4 lanes) no access midway
 - Elevated freeway (4 lanes) with midway access
- HEFT ramp connection

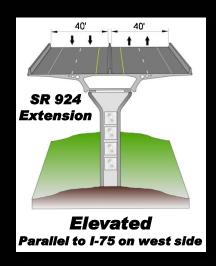


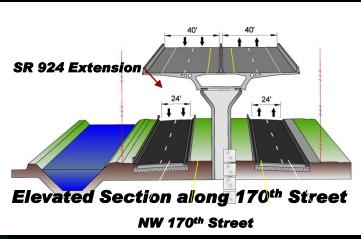




NW 170th Street Corridor

- North-South I-75 Alignment
 - Four-lane facility along the west side of I-75
 - Facility within the existing I-75 footprint
- NW 170th Street Alignment
 - Four-lane elevated facility
 - South Side
 - North Side
 - Median
- HEFT Interchange







Coordination with FDOT's I-75 PD&E

- Concepts will be compatible with the I-75 preferred alternative
 - Critical piece of the connection



Environmental Issues

- Nature
 - Wetlands evaluation
 - Contamination screening
 - Wildlife and habitat (threatened and endangered species, biological assessment)
- Physical
 - Noise analysis
 - Air Quality analysis



Environmental Issues

- Social-Cultural
 - Archaeological Sites
 - Historic Sites
 - Parks
 - Recreation Facilities
 - Utilities
 - Community Cohesion
 - Community Features
 - Schools, Churches, Businesses, Cemeteries, Emergency Service Providers, etc.
 - Relocation Potential



Graham Dairy House



Engineering Issues

- Traffic modeling & operational analysis
- I-75 SIMR Re-evaluation
- Turnpike IJR @ NW 138th St. or NW 170th St.
- Interchange concepts
- Tolling
- Coordination with other projects in the study area:
 - HEFT Widening PD&E Study
 - I-75 PD&E Study
 - HEFT/NW 170th Street Interchange PD&E Study





Permits Required

Permits anticipated to be required include:

- United States Army Corps of Engineers
- South Florida Water Management District
- Florida Department of Environmental Protection
- Miami Dade County Department of Environmental Resource Management











Public Involvement

- Early & continuous coordination w/ local municipalities
- Public/Agency kick-off meetings
 - April 13, 2010
 - April 14, 2010
- Alternatives Public Workshop
- Public Information Meetings
- Public Hearing





Milestone Schedule

Activities	Date
Public/Agency Kick-off Meetings	April 2010
Alternatives Workshop	November 2010
Project Development Summary Report	May 2011
Public Hearing	August 2011
Environmental Documents	November 2011
Location and Design Concept Acceptance	January 2012



SR 924 East Extension PD&E Study

East Extension to I-95

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Study Area

 SR 924 East will complete MDX's Vision for Northern county East West connectivity





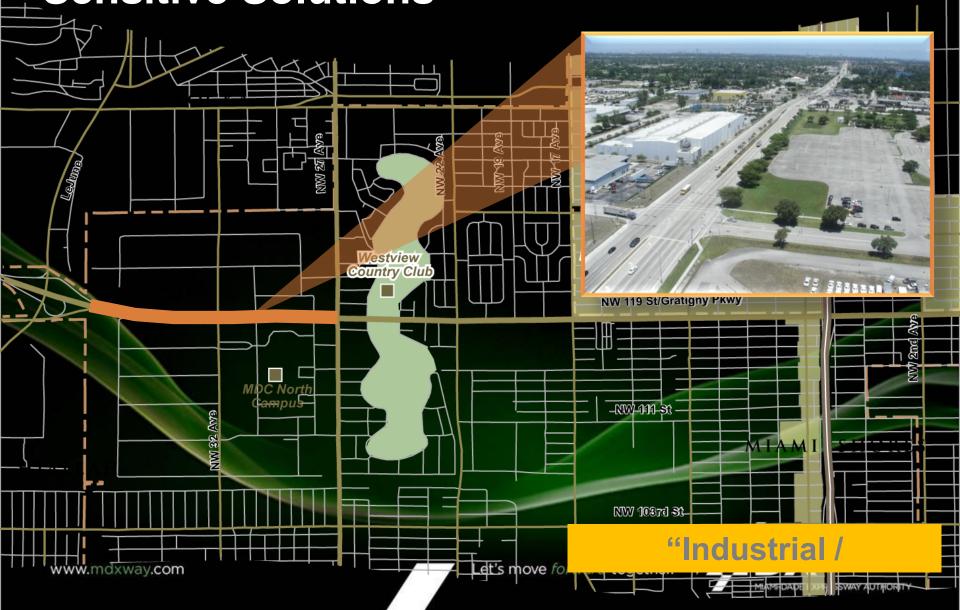
Purpose and Need

- Mobility enhancement (meet population growth projections)
- Overall system connectivity
- Multi-Modal network
- Regional "Managed Lanes Network"
- Local roadway network
- Purpose of project built around expanded mobility, meeting the transportation needs of today and tomorrow



Project Complexity Requires Real Time Communication Tools

Varying Nature of Corridor Requires Context Sensitive Solutions



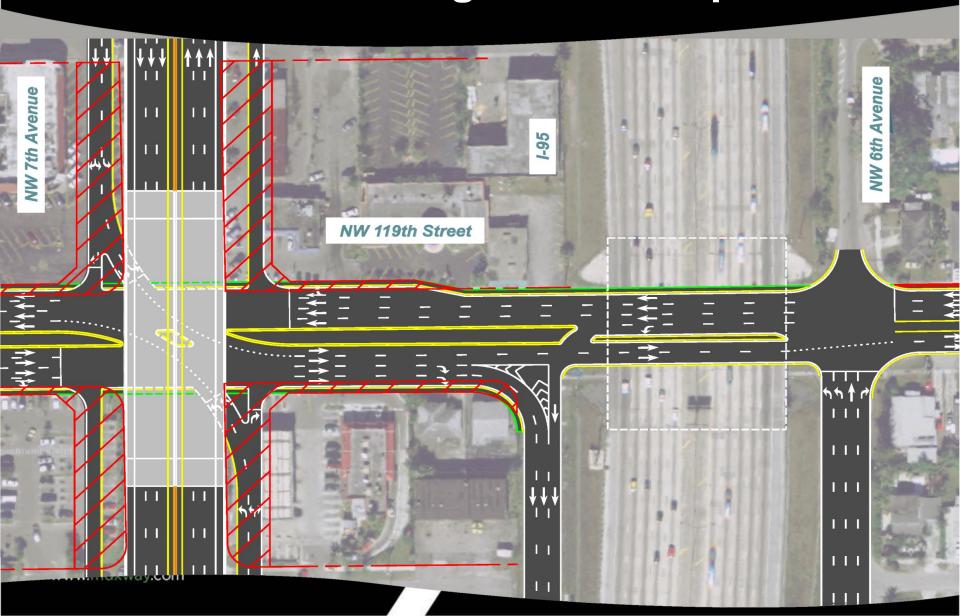
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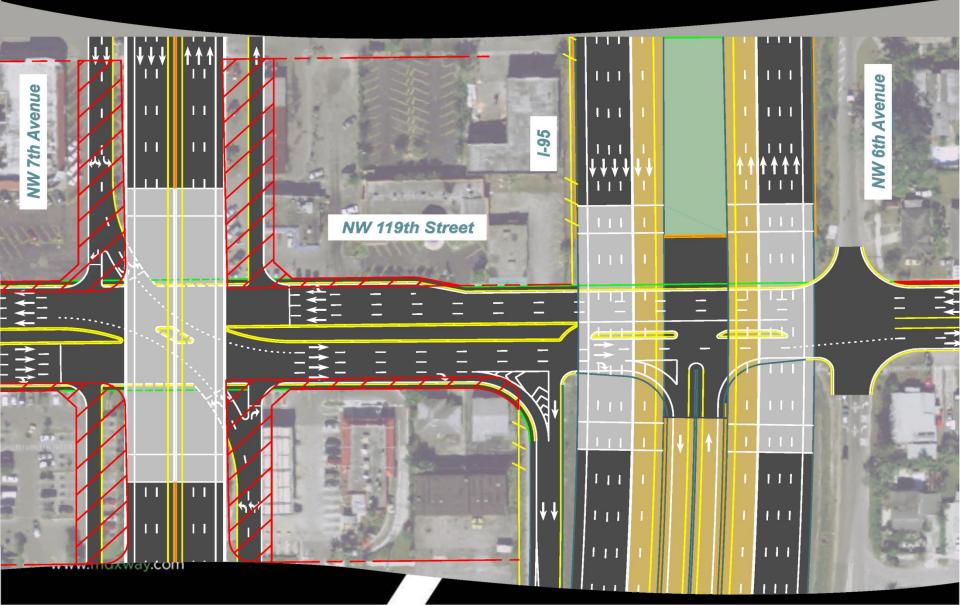


I-95 Connection – Expand Existing Ramps While Minimizing Costs & Impacts



Priority Connection to I-95 Express (Toll "System to System" Along Peak Demand **Direction** 1-95 www.mdxwav.com

I-95 Express – Reduced Structure Alternatives



Pros and Cons of Partial Versus Full Interchange at Gratigny and I-95



- Free Flow from East to South and North to West
- Signal Progression for movements to/from the North
- Maintains I-95
 Express connectivity
 in both directions



Expanded Median Alternative Continues Initial Vision, Including Community "Green Space"





Narrow Median Alternative Expands Exterior Land Use Integration Options





At-Grade Alternative Increases R/W Impacts Along Full SR-924 Corridor NW 119th Street

Physical Constraints For North Corridor Transit Crossing Require Innovation and Cooperation www.mdxwav.con

Local Service on NW 119 Street Enhanced Through Improved Transit Amenities





Local neighborhood services

- New MDT Route 19
- New shelters, benches, wider sidewalks
- Enhanced Pedestrian connections



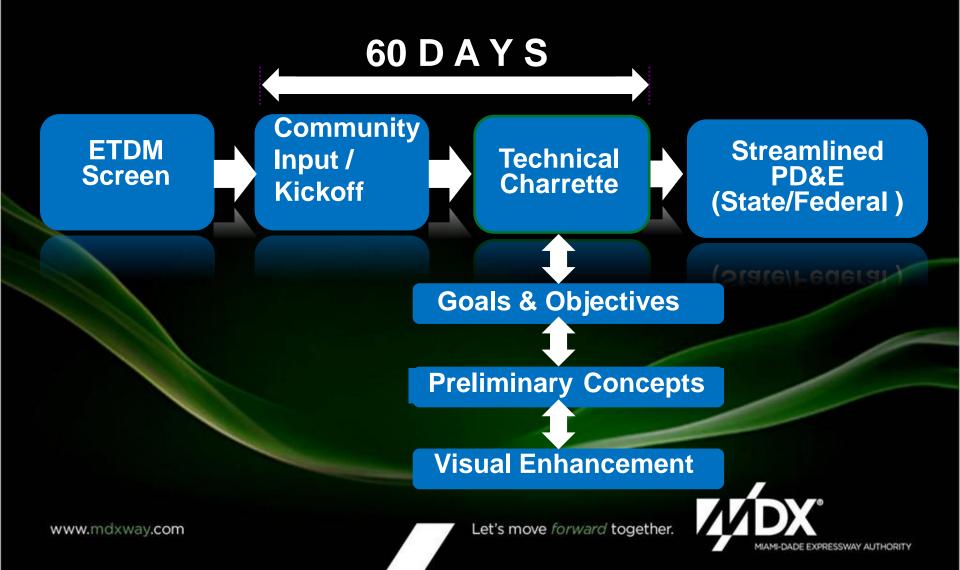




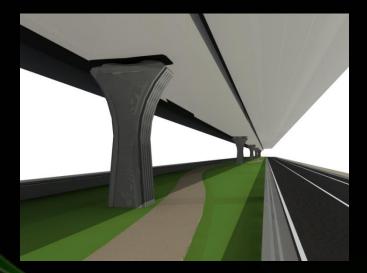
Relationships With Key Stakeholders Will Facilitate Support for the Project



Early Community Input to Expedite PD&E



Aesthetics Key Role in Public Acceptance







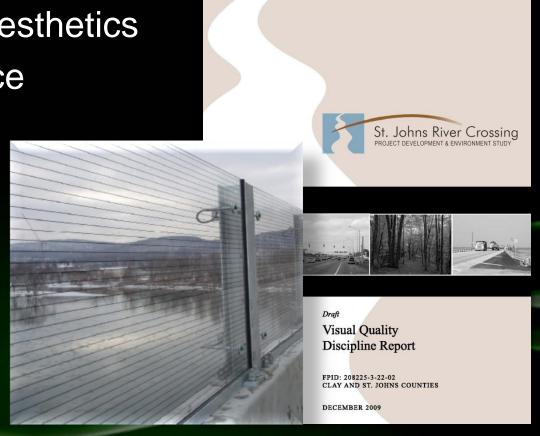






Environmental Issues

- Visual Quality and Aesthetics
- Environmental Justice
- Noise
- Contamination
- Cultural Resources





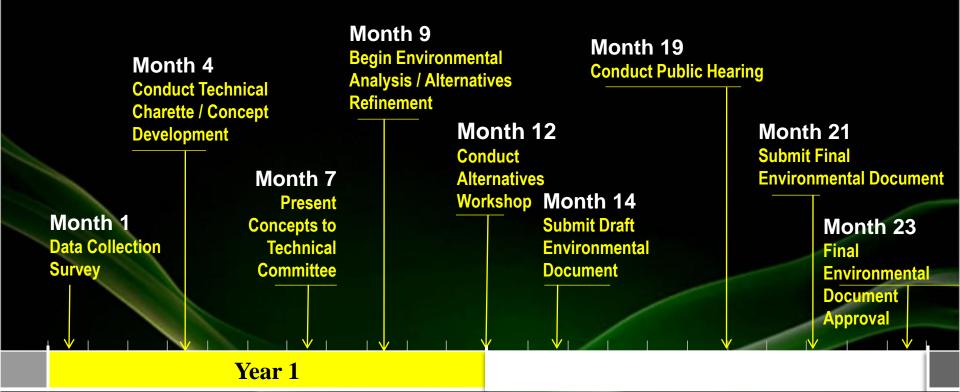
Engineering Issues

- Construction and life cycle costs
- Construction methods and traffic control
 - considerations
- Business impacts
- Aesthetics
- Construction duration
- Noise and vibration impacts





Schedule



Multi-Media Technologies Bring Project Vision to Life

