TRENDS IN TRANSPORTATION

L.K. Nandam, P.E., District One Secretary
Florida’s population is projected to grow from 20.8 million in 2018 to 26.5 million residents in 2040, an increase of 27%.

67% of Florida’s population growth between 2018 and 2045 is projected to be concentrated in 10 counties: Miami-Dade, Orange, Hillsborough, Broward, Palm Beach, Lee, Duval, Polk, Osceola, & Manatee.
Governor’s Priorities: Enhance Safety, Improve Mobility and Leverage Technology

Our Mission:

The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of our environment and communities.

How do we accomplish this?

- Plan and Design for Safety
- Mobility Enhancement through community partnerships
- Promote Technologies to Enhance our Efforts
Florida Transportation Plan

Improved Mobility

Partnering with Communities

Focus on Safety – Vision Zero
Community Engagement

Designing and Planning for a Transportation Network that promotes Community Visions – Through Planning Studio

- Heartland 2060 Plan
- TPO Long Range Transportation Planning Process
- Multi modal master planning in partnership with local partners
- Comprehensive Plan updates
- Freight Master Plans aligned with local plans and industry trends
- Corridor/Network Master planning
Trends Impacting Transportation

Safety       Community Success      Technology

Strategic Intermodal System Planning

- SIS facilities backbone of Heartland

Master Planning of corridors critical to maintain mobility
- US 17 Widening Complete
- SR 29 PD&E
- US 27 System Improvements
- SR 60 PD&E
- SR 70 Master Planning
- I-4 Ultimate Master Planning
- NE Polk Mobility study

Need for parallel network to support and protect SIS facilities

MCORES
Purpose

- Revitalize rural communities
- Encourage job creation
- Provide regional connectivity while leveraging technology
- Enhance quality of life and public safety
- Protect the environment and natural resources

Objective

Advance construction of regional corridors intended to accommodate multiple modes of transportation and multiple types of infrastructure.
Study Focus Areas

Southwest-Central Florida Connector

from Collier County to Polk County
140 miles
Planning Process

Explore
Existing/Future Conditions
Goals

Evaluate
Potential Opportunities
Evaluation Criteria

Recommend
Opportunities for Project Development
Opportunities for Future Study

Public Input
Suncoast Connector task force and Northern Turnpike Connector task force shall evaluate design features and the need for acquisition of state conservation lands that mitigate the impact of project construction on:

a. Water quality and quantity of springs, rivers, and aquifer recharge areas
b. Agricultural land uses
c. Wildlife habitat

Southwest-Central Florida Connector task force shall:

a. Address the impacts of project construction on panther and other critical wildlife habitat and evaluate the need for acquisition of lands for state conservation or as mitigation for project construction
b. Evaluate wildlife crossing design features to protect panther and other critical wildlife habitat corridor connections
Task Forces may consider and recommend innovative concepts to combine right-of-way acquisition with the acquisition of lands or easements to facilitate environmental mitigation or ecosystem, wildlife habitat, or water quality protection or restoration.

- FDOT, in consultation with the Department of Environmental Protection, may incorporate those features into each corridor during the project development phase.
- FDOT may accept donations of land for use as transportation rights-of-way or to secure or use transportation rights-of-way for such projects.
Program Schedule

1. **Approved by Governor**
   - 5/17/2019

2. **Task Force Members**
   - Appointed by FDOT Secretary
   - 8/1/2019

3. **Construction by**
   - 12/31/2022

4. **Construction by**
   - 12/31/2030

5. **7/1/2019**
   - Effective

6. **10/1/2020**
   - Final Report Submitted to Governor and Legislature

7. **12/31/2023**
   - FDOT Provides Affected Local Governments with Copy of the Applicable Task Force Report & Project Alignments

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Project construction in any corridor is not eligible for funding until submission of the final report of the corridor task force for that corridor and completion of 30 percent of the design phase of any project within a corridor, except for project phases that are under construction or for which project alignment has been determined.
**TECHNOLOGY ADVANCEMENTS AUTONOMOUS-CONNECTED-ELECTRIC-SHARED (ACES)**

**Nationally,**

**FULLY ELECTRIC VEHICLES**

are projected to represent **8%** of total automobiles sold by 2025.

**The global market for CONNECTED CARS**

is expected to grow **270%** by 2022.

**SHARED AIR TRANSPORTATION, AIR TAXIS, or FLYING CARS**

may launch by the year **2023**

**MULTIPLE URBAN AREAS** in Florida

already have **ELECTRIC BUSES** in their fleets and many plan to transition to **ALL-ELECTRIC FLEETS** by 2035.

The cumulative number of **SHARED VEHICLE TRIPS** has increased **10X** in the last 5 YEARS.
**Land Use**
- Higher density requirements may be more attainable
- Reduced Parking Lot Sizes
- Remote lots to make better use of urban land

**Transportation Demand**
- Scenario based modeling

**Infrastructure**
- Test beds
- Industry Partnerships
FDOT Trends Impacting Transportation

Safety  Community Success  Technology

Project Location

- Total boundary: 475 acres
- Infield: Phase 2
- 45 miles to Tampa
- 46 miles to Orlando

POLK PARKWAY

Teco-Auburndale Trail

Jacksonville
Tallahassee
Miami
Orlando

Tampa
Trends Impacting Transportation

Safety    Community Success    Technology

Varied Environments
Diverse Scenarios
Highly Reconfigurable

Main Access & Building Facilities
Sensor Test Chamber
Roadway Geometry Track
High-Speed Oval
Loop Track
Pick-Up/Drop-Off
Urban
Complex Suburban
Dynamic Test Pad