MIAMI-DADE MOVES 2040 Miami-Dade MP0 continues its

legacy for lasting change

Building on Successes 21st Century Technologies Port of the Future Better Travel Times Places We Want to Live International Gateway Affordable Travel Choices Congestion Relief Economic Engines New Revenues

Mobility Choice Moves Miami

Miami-Dade Moves to 2040

Ships Trains Planes Walkways Express Lanes Automobiles Commuters Tollways Buses Bikes



Miami-Dade County is coming of age with a robust transportation and transit system, a world class cruise and container port, a stateof-the-art international airport, expansion of popular managed lanes, enhanced bus, and a new approach to "complete" streets to enhance bicycle and pedestrian access.

The investments of the past three decades are beginning to bear fruit. On July 28, 2012, Metrorail's new Orange Line opened transit connections from points north, south, east and west. The Miami Intermodal Center (MIC) adjacent to the Miami International Airport (MIA) provides new access and new economic growth opportunities surrounding one of the region's most significant economic engines. The Rental Car Center in the MIC boasts 3.4 million square feet of space with 16 rental car companies and 6,500 vehicles serving 28,000 customers per day. No need for a shuttle from the airport. A MIA Mover takes you there in minutes. The gateway to the world, MIA is in the limelight.



Air, Land and Sea -Miami-Dade <mark>leads</mark> the way



Metrorail – 24.4 miles heavy rail, 23 stations



Metromover – Free downtown circulator 4.4 miles, 21 stations



Tri-Rail – 72 miles commuter rail from Miami to Palm Beach County



Amtrak – Intercity passenger rail



Metrobus – 90 bus routes with 800 buses



95 Express – Extending into Broward County 4 Express Routes



PortMiami is another major transportation hub and jobs generator for Miami and the region. A multi-faceted jewel, PortMiami is known for cargo and cruise lines. Its most recent Master Plan calls for further expansion of its markets and a new strategy to develop its property for retail through a public private partnership.

Florida's top container cargo port is growing and getting deeper to prepare for super-sized cargo ships that will use the Panama Canal Expansion by 2015. Total improvements of over \$2 billion are currently underway for the Deep Dredge as well as intermodal truck and rail connections, including the tunnel for truck access. Already the *Cargo Gateway of the Americas*, PortMiami, FEC and CSX rail carriers are gearing up for an expected annual economic impact of \$34 billion each year. Also known as the *Cruise Capital of the World*, over four million passengers travel to PortMiami which serves as corporate headquarters of four of the world's largest cruise lines.



Miami-Dade 2040 Long Range Transportation Plan

MIAMI GARDENS

HIALEAH

TAMIAMI

3

CORAL GABLES

MIAM

Updates in Progress

Mar Halland

2035 Miami-Dade Long Range Transportation Plan Cost Feasible Transportation Improvements

LEGEND

- Interchange/Intersection Improvement
- Multimodal Improvement
- Congestion Management Point
- Congestion Management Segment
- Highway Improvement
- Transit Improvement
- ////// Existing Rail Transit

HOMESTEAD

Compliance with Federal and State Requirements Study

January 2013

MIAMI

Getting Ready for 2040 LRTP - The Study

Best Practices Research: Peer MPOs and exemplary LRTPs; fresh innovative ideas; planning trends; funding options

Emphasis Areas Review: What should we pay close attention to in the 2040 LRTP Update?

Policy and Funding: MAP-21 and emerging guidance; Florida's Legislature; revenue generation and use; capacity building; policy developments; innovations in project delivery

Regional Issues: Harmonizing guiding principles and priorities; activity-based modeling for the regional LRTP; intercounty travel

Sustainability: Livability planning and complete streets initiatives; Transportation Systems Management & Operations review; climate resiliency

Engaging the Public: Trends and techniques to get the conversation started and involve more people, including those not typically heard

Performance Measures by Emphasis Area: New federal mandate for performance-based planning

Making the most of what we have Miami-Dade MPO takes a fresh look at emerging emphasis areas and national trends in long range planning for metropolitan areas.









Best Practices Research

Early in our Study we took a close look at how other peer regions address their transportation planning process. Exemplary MPOs were identified from around the country for review of best practices. In our examination of emphasis areas and recent trends of these LRTPs, we asked the following questions:

- · How are transportation needs identified?
- How are investments prioritized and selected?
- How is performance monitored?
- How is the public engaged?
- What makes this LRTP exemplary?

Although all MPOs follow the same guidance from the Federal Highway Administration for metropolitan planning requirements, the manner in which they address these requirements varies widely.



Exemplary LRTPs

A common theme among all regions is identification of transportation needs that exceed funding availability.

In several of the major metropolitan areas reviewed (Chicago, New York City, St. Paul, or Denver) over 50 percent of their state's population lives in those metropolitan areas. Miami-Dade County's population at 13.3 percent of the State of Florida is much smaller. Population is a major factor in transportation funding appropriations.



Best Practices Research

Our research suggests that there is a definite paradigm shift occurring in transportation planning. That shift is driven by many factors:

- Shrinking revenues
- Changing development patterns
- Economic recession resulting in loss of jobs and lower housing values
- Advances in real-time technology

In comparing Miami-Dade to other regions, there are a number of differences noted. There are only three single-county MPOs in the group, but they are much larger than Miami-Dade. The Phoenix area is twice and San Diego's coverage is four times as large as Miami-Dade.

Miami-Dade falls in the mid-range covering 2,015 square miles, but it has a relatively high density compared with many southern and southwestern cities at 1,237 persons per square mile. The smallest area covered is the Oregon Metro in Portland at 487 square miles, but this region also has the second highest density of 3,080 persons per square mile, second to New York City's 4,537 persons per square mile.

Delaware Valley Regional Planning Council is the only MPO included in this review that crosses state boundaries (PA/NJ).

Recent Trends

Funding

- Shortfalls relative to need
- Transit and capacity management are favored solutions over added-capacity highways
- Recognition that fuel taxes are unsustainable

Performance Measures

- New focus on land consumption, environmental impacts, and quality of life indicators
- Scorecards and Dashboards
- All transportation modes represented
- Use of scenario planning to analyze and visualize outcomes

Regional Plans

- New generation of activity-based models
- Regional growth and transportation investments in infrastructure

Public Engagement

- Transportation planning in comprehensive plans that assess a full range of issues (climate change, sustainable development, public health, education, water supplies, energy use, climate resiliency, etc.)
- New technologies
- Visualization and plain English documents

The new surface transportation legislation consolidates and streamlines a complex body of law. It introduces a paradigm shift in how we fund and deliver transportation infrastructure projects. Earmarks and most discretionary spending are eliminated. Program consolidation, project delivery streamlining, and performance-based planning herald a new dawn in how we plan for our transportation future. Key features listed here will require significant rulemaking, circulars and guidance.

Policy and Funding

Moving Ahead for Progress... in the 21st Century (MAP-21) Effective 12/1/12 through 12/31/14

Funding Levels Remain Stable

Simplifies and Focuses Funding Programs:

No earmarks. Fewer set-asides. States decide how to spend.

Streamlines Project Delivery

- Environmental review simplified adds categorical exclusions
- Allows Construction Manager/General Contractor contracts
- Reduces agency review periods

America Fast Forward:

Expands Transportation Infrastructure Funding Innovation Act (TIFIA) to \$1 Billion/year

Federal Transit Administration Safety Oversight Role

Performance-Based Planning Requirements

- National Highway Performance Program
- Highway Safety Improvement Program
- Congestion Mitigation and Air Quality
 Program
- National Freight Movement

New MPO Board Member: Public transportation representation

New Starts Funding Program Changes

- Alternatives Analysis requirement eliminated
- Travel Demand Modeling optional
- Baseline Alternative eliminated
- Use of pre-qualifications or warrants for funding eligibility
- Planning process streamlined with fewer phases

Strategic Use of Public Private Partnerships (P3) for Transit and Tolling: Provide improvements sooner and reduce cost of construction. Most P3 projects involve highway investments with reliable future revenue streams from users of the facilities or taxpayers. Projects are advanced through "availability payments" contingent upon keeping the facility available at agreed-upon service levels. P3 arrangements for transit projects require identification of future revenue streams which is more difficult to secure compared to tollways and congestion management.

Revenue Sources: The needs identified in the 2035 LRTP were twice the available funding. How can we fill the funding gaps?

- o 2-cent Local Option Gas Tax
- o Expanded Use of Managed Lanes

Leveraging Local Funds: Most (72 percent) of Miami-Dade's \$35 billion projected revenues in the 2035 Cost Affordable Plan comes from local sources. Ways to leverage more local funds as a match for federal dollars will be explored during the 2040 LRTP Update.

South Florida Express Lanes

Envisioned: The success of the 95 Express has inspired a plan to use congestion pricing to improve travel speeds and reliability with a network of express lanes in Miami-Dade and beyond. The plan builds on the 95 Express "proof of concept" and recommends a network of connected congestion priced express lanes that offer predictable travel choices. This is a performance-based operations and planning system that links real-time and historical data with future planning.

Policy and Funding



Innovative Policies/Incentive Programs:

The need for a more sustainable funding mechanism to support transportation infrastructure and alternative modes of transportation is a common theme in transportation plans.

- o **Mileage Based User Fees** are growing in popularity and are under study or pilot testing in a number of states and regions. Interest stems from revenue potential and the need for a more viable means of supporting our transportation systems. Issues remain and vary somewhat from state to state. *New York and Puget Sound have included future funds in their Cost Feasible Plans.*
- Congestion Parking Strategies, or demand-responsive pricing systems, are used to manage growth, improve parking availability and access, and generate revenues for revitalization programs.

Policy and Funding

Implementation Assistance – Making the link between transportation and land use involves many jurisdictions and implementers. MPOs across the country are using local initiatives to build capacities and focus capital investment to great advantage.

Technology Tools for Getting Around

Public transportation and mobility choices are providing new ways to connect people with where they need to go with a greater degree of ease. Some key research areas include:

- Mobile device applications (or apps) that help people pay for and find their connections
- Card-based systems that integrate multiple transportation systems
- Demand-responsive pricing mechanisms for travel lanes and parking spaces

With these new technologies come challenges. Trial studies and pilot systems now in place worldwide provide insights into the potential for new applications for transportation.

Miami-Dade MPO works closely with county transit and transportation providers in addition to a myriad of regional planning entities. The private sector is getting more involved, with Florida East Coast Industries now poised to implement the intercity *All Aboard Florida* from Miami to Orlando. *We all have a stake in our transportation future.*

Regionally-Significant Transportation Corridors

- I-95
- I-75
- US 27
- CSX/FEC passenger rail
- Palmetto Parkway

Regional Issues

Harmonizing Guiding Principles

- Mandates
- Initiatives

Master Plan Updates

- Freight
- Ports
- Airports
- Bicycle

Seven50

This seven-county, fifty-year planning process addresses a number of cross-cutting issues that affect transportation across the region. The Development Patterns Working Group will provide a back-drop for regional issues that link transportation to land use.



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Regional Activity-Based Modeling

For the first time, our tri-county region of Miami-Dade, Broward and Palm Beach counties will use a model that focuses on the behavior of individuals - predicting where and when they travel, and for what purpose. How many cars a household has, household size, if the household has a toll transponder, income, age – many factors go into the replication of travel choices we make every day. *Built on a regional level, each individual county will apply the model* to their 2040 LRTP Update process.



Regional Issues

Air Quality Standards and Compliance

EPA is scheduled to update National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter late in 2013. Miami-Dade's status as attainment, and the urbanized Southeast Florida Airshed which comprises parts of our tricounty region, may be put into question before the completion of the 2040 LRTP Update, yet *it would take years to process a change in status* and adopt a State Implementation Plan should an updated NAAQS lead to non-attainment. Because Miami-Dade is in attainment with the NAAQS, Congestion Mitigation and Air Quality competitive grants are not available in this area.

The subject of sustainability is prominently displayed in most LRTPs across the country, including Miami-Dade's 2035 LRTP. Southeast Florida (Miami-Dade, Monroe, Broward, and Palm Beach counties) entered into a Climate Change Compact working cooperatively to adapt to sea-level rise and have adopted a *climate resiliency* action plan. But sustainability is about more than climate resiliency. Other emphasis areas reviewed are:

Transportation Systems Management & Operations (TSM&O)

4 Ts: Tolling - Transit - Telecommuting – Technology District 6 TSM&O Toolbox Congestion Mitigation Process Update

Land Use and Transportation

Connection

Seven50 Scenario Planning Jobs-Housing Balance

Sustainability

Livability Planning

Complete Streets HUD-EPA-DOT Livability Principles

Public Health

Encourage walking, biking, transit Access to transit Access to healthy foods

Equity: Access and Affordable Housing

Environmental Justice Transportation Equity Affordable Housing

Safety and Security

Bicycle/Pedestrian Safety Emergency Preparedness Regional Evacuation Plans Target Improvements at High Accident Locations

Sustainability and Sea Level Resiliency

GreenPrint Scorecard Climate Change Compact



MPOs are required to provide meaningful opportunities for the public to be engaged in the transportation planning process prior to decisions about projects and funding. Special efforts are required to engage people not typically heard from. New technologies are great and really expand our ability to reach more people and expand the conversation in new ways.

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Engaging the Public

Trends in public engagement

- Visualization maps and graphics
- Worldwide web dissemination
- Smart Phone "Apps"
- Use of social media
- Focus groups
- Discussion groups
- Telephone eTownHall meetings

Face-to-face contact and the connection with the human voice remain the strongest and most trustworthy means of engaging people.



Performance Measures

Shrinking budgets = Sharper focus on outcomes we can measure

Performance Measures: Miami-Dade MPO uses measures of effectiveness to prioritize projects for inclusion in the LRTP. Performance measures go the next step to monitor outcomes against established targets and disseminate results to the public.

Under MAP-21, the U.S. Department of Transportation Secretary will establish performance measures for national and interstate highway performance.

Targets: Once national measures are established, states will set targets for those measures. MPOs will also establish targets for transit performance in cooperation with transit providers to ensure consistency with:

- Transit Asset Management System (§5326)
- Public Transportation Agency Safety Plan (§5329)

Different targets will be established for urban versus rural areas.

MAP-21 Requirements

Monitoring: MPOs will be required to monitor outcomes of transportation plans relative to established targets.

Reporting: States will be required to report performance outcomes every two years. The Secretary of Transportation will roll up and report these outcomes to Congress. *Corrective action may be prompted – not sanctions*.

Florida has an enviable record over 90% of our highways and bridges meet a state-of-good-repair.

MAP-21 National Goals:

- 1. Safety
- 2. Infrastructure Condition
- 3. Congestion Reduction
- 4. System Reliability
- 5. Freight Movement & Economic Vitality
- 6. Environmental Sustainability
- 7. Reduced Project Delivery Delays



Recommendations

Building Consensus

Shaping the Future of Transportation

Leading the Way to Prosperity and a Sustainable Future

Align with recent and emerging principles and priorities.

- HUD DOT EPA Livability Principles
- Governor Scott's Transportation Vision and FDOT Implementation Priorities
- Six Pillars of Florida's Future Economy
- Seven50 Regional Vision and Blueprint

Take a fresh look at transit corridors and technology in the needs assessment.

- East-west connectivity
- All Aboard Florida
- Florida East Coast Passenger Rail
- Regional Bus Corridors

Recommendations (continued)

Explore new funding opportunities with MAP-21 to leverage local funds.

- Public Private Partnerships more funds for Transportation Infrastructure Financing Innovation Act (up to \$1 billion/year by 2014)
- Transit-Oriented Development Planning Pilot
- Corridor-Based Bus Rapid Transit Projects
- Core Capacity Improvement Projects
- State of Good Repair Program

Develop and implement new revenue sources.

- Explore Use of 2-cent Local Option Gas Tax
- Possible Mileage Based User Fee Pilot Project
- Explore potential for congestion parking strategies



Coordinate closely with the State of Florida in developing MAP-21 Performance Measures.

- Secretary of Transportation develops
 Performance Measures by April 1, 2013
- State targets due April 1, 2014
- MPO Performance Targets 10/1/15
- Miami-Dade LRTP due October 29, 2014

Analyze and streamline existing LRTP Performance Measures.

- Reportable Measurable
- Focus on Person Throughput

Consider incorporating new Performance Measures in the LRTP.

- Multimodal
- Bicycle/pedestrian safety
- Impact of transportation investments to the economy and jobs



The Transportation Planning Agency for Miami-Dade County 111 NW First Street, Suite 920 • Miami, FL 33128 Phone: 305-375-4507 E-mail: mpo@miamidade.gov

For more information on the study 2040 Long Range Transportation Plan (LRTP): Compliance with Federal and State Requirements please visit **www.miamidade.gov/mpo**

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