FCCMA

PLANting a Sustainable Network for Future Growth with Multimodal Transit
INTRODUCTION

WHAT'S THE PROBLEM

OUR STORY, DORAL

HOW DOES THE PROBLEM APPLY TO YOU

THE EFFORT

DISCUSSION
INTRODUCTION
What's The Problem

• Keeping Pace With Growth
• Providing Efficient and Effective Infrastructure so People Can Move
What's The Solution

- Intelligent Context Sensitive Planning
  - Intergraded Land Use Plans and Transportation Plans
  - Local Connections, With an Eye Toward Regional Priorities

- Ease of Implementation
  - CIP (Updated Frequently)

- Spread the Funding Burden
  - Mobility Fee
  - Tied To Comp Plan Policies
• Incorporated -2003
• One of 32 Cities
• Centrally located
All Roads Lead THROUGH Doral
Explosion of Growth
Development Patterns

Commercial - 1994

Commercial - 2015

Industrial – 1994

Industrial - 2015
Residential Projects

The Pressure Is On
Non-Residential Projects

The Pressure Is On
Mixed-Use Projects

The Pressure Is On
City of Doral
City Owned Property

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Doral Demographics

- 50,000+ People
- 15 Sq. Miles
- 81% of all Households are Families
- Median Age: 32.4
- Jobs in Doral: 72,780
- Resident Workforce: 18,765
- 91% Multi-Lingual
- 97% + Highschool Education
Compared to Miami-Dade County

Doral has...

- **Higher Median Household Income**: $70,157 vs. Miami-Dade’s $41,420
- **Higher Percentage of YOUTHS under 18-years old**
- **Lower Percentage of ELDERLY population**
- **Higher Percentage of Households with at least 1 automobile**: 97.6% vs. Miami-Dade’s 88.4%
- **Lower POVERTY Rate**
#1 Tile District in USA | Home to the Miami Free Zone
Over 100 Multinational Companies | Over 50 Banking & Financial Institutions
Over 2,600 Trade and Logistics Companies
A Major Destination and Employment Center…
Traffic and Areas of Employment

Darker – Higher Job Density
Doral’s Resident Worker Population
Doral is a young affluent mobile community.
The Perfect Storm

Results in Congestion
Not Unusual for Florida Cities
How does the problem apply to you?

☑️ Its Coming, Whether You Like it or Not
How Are We Dealing With This

- Keeping Pace With Growth
- Developer Driven vs Community Needs
- Community Character
- Quality of Life
- Growth vs No Growth
- Even a Sidewalk is Difficult
What's The Problem

Land Use Patterns

• 19th Century, 20th Century, 21st Century
• Density?
• Design?
How Are We Dealing With This

Investment in Long Term Planning

Integrating Land Use and Transportation

- Comprehensive Plan
- Transportation Plan
- CIP
- Mobility Fee

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2003-2014 Future (10-20 years)

- Population: 26,438 to 80,351
- Parks: 109 acres to 344.5 acres
- City roads (Centerline miles): 68 miles to 90 approx
- Bikeways: 0 miles to 11.5 miles
- Public transit: 0 to 60 – 70 miles
- Ad Valorem (not including proposed annexation areas): $ 13,250,000 to $28-30 Million
- Assessed Value: $ 4.9 Billion to $ 11.8 Billion
- Employees: 24 to 318
- Code Compliance: 1 officer (all of west Dade) to 10 officers
- Police Officers: 15 to 105 + 5 part time
- Vision: No plan to 8 Master Plans, Update CDMP, TMP
Land Use and Transportation Are Inextricably Linked

- Land Use – Comprehensive Plan
  - Pockets of Transit Oriented Density

- Transportation – Transportation Plan – (CIP)
  - Linking Nodes within City with Multi-Modal Access
LANDMARK SOUTH
Retail | Restaurant

LANDMARK NORTH
Residential

LANDMARK NORTH & SOUTH
These Concepts Are Implemented Through The Doral Mobility Plan
This is a Paradigm Shift in Transportation Planning, Not Only For The City But For The Region

**GOAL** To improve mobility within Doral and help plan for its future

**PRESERVE** quality of life in Doral

**PRESERVE** and maintain the transportation system in Doral

**PROMOTE** safe and secure multi-modal transportation

**SUPPORT** intermodal access and connectivity

**SUPPORT** economic growth
Scope of Services

- **Public Involvement** (Task I)
- **Review of Background Information and Previous Slides** (Task II)
- **Data Collection** (Task III)
- **Analysis** (Task IV)
- **Project Development** (Task V)
- **Implementation Strategy** (Task VI)
- **Education and Awareness Program** (Task VII)
- **Reporting** (Task VIII)
Mobility Plan Philosophy

This is the balance between the ART and SCIENCE of Transportation Planning.

Why We Have Been Successful

figuring out what you want

figuring out what you need

...of the two should be your projects
What’s the problem?

- Capacity
- Multimodalism
- Natural Shift in Use / Priorities
Complete Streets
Capacity Is The Issue
### East-West Corridors: 2015 Condition

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Notes: 1 Roadway Name
## Our Problem

### TODAY

#### Doral Master Plan (MAP-2)

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**Notes:** Routine Traffic

### TOMORROW

#### Doral Master Plan (MAP-3)

**LOS WORKSHEET**

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**Notes:** Routine Traffic
How To Think Differently
We Must Use Our Roads Differently

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<th>CAPACITY</th>
<th>PEOPLE/HR.</th>
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It's All About Capacity
Mobility is the measure of your ability to get to and from where you want or need to go.

Creating Capacity Through Mobility and Accessibility
Transportation Network

- Approximately 204 miles of roads
- 4 categories - State, County, City and Private Roads - means that Doral coordinate with multiple jurisdictions to effect changes

- Florida Turnpike (SR 821)
- Palmetto Expressway (SR 826)
- Dolphin Expressway (SR 836)
- Multiple MDT Routes and proximity to Palmetto Station in Medley
- Doral Trolley serves as internal Circulator
- Developing Bicycle Network
- Adjacent to Miami International Airport
Transit Options and Trends in Doral

- The auto predominates! (93.3% of workers)
- 8.4% of all workers carpool
- Public transit usage is comparatively low when compared to national, state, and county trends (0.8% of workers)
- Biking, Walking, and other means of transit have potential for improvement (0.8% of workers employ this option)

Source: US Census 2012 Est.

So what does this all mean?
Bicycling

• Bicycle Network Plan

• Currently:
  • 8.8 miles of paths completed (4.0 miles bike lanes, 4.3 miles shared off-road, 0.5 miles maintenance path)
  • 24.2 miles planned (16.0 miles bike paths, 8.2 shared off-road)

• Doral is exploring the possibility of Bicycle Rental Stations similar to those found in Miami Beach.
Pedestrian Environment

Doral has undertaken plans to improve its pedestrian environment (i.e. Doral Boulevard Street Beautification Master Plan).

Walking as a mode of transit has different factors affecting its usage:

- General perception of safety
- Are the places I want to go connected?
- If I get tired, is there a place for me to rest?
- Is my path visually appealing? Is there a sense of place?

HIGHLY RELATED TO URBAN DESIGN!
Will I trip?

They won’t hit me will they?

Am I separate from the car traffic?
Are there seats available if I’m waiting for the bus?

What if I’m in a wheelchair? Is there enough room for me to move? Some benches, but only at bus stops.

It’s hot outside. Is there shade?
Are there crossing signals that I can see?

Can I cross the road safely?

Separation of traffic (cars, bicycles, pedestrians)

Do I have to run across to be safe?
What we Aspire To
Project Categories

ROADWAY

TRANSIT

BICYCLE AND PEDESTRIAN

POLICY
Roadway projects involve the development of linkages and, along with the construction of new linkages, new pathways which increase area mobility can be implemented.

**COMPLETE STREETS**
- NW 36th/NW 41st Avenue Corridor Safety Study
- Roadway Construction – NW 97th Avenue
- Roadway Construction – NW 104th Avenue
- Roadway Construction – NW 117th Avenue
- Intersection Safety Studies
- Truck Traffic Routing
- City Edge Park and Ride Facilities
Roadway

Complete Streets

- Sidewalk Installation
- Bicycle Lanes/Shared-Use Off Road Pathways
- Install Bus Shelter
- Crosswalk Striping
- Dedicated Lane Designations
  - Pedestrian
  - Bicycle Lane
  - Vehicular
  - Bus
Transit

- Bus Stop Amenities Improvements (Shelters, benches, etc.)
- Intermodal Hub Study
- MDT Operations Analysis
- Trolley Operations Analysis
- Bus/Trolley Signalization programs at intersections
- Express routes to Palmetto Station
- Express Routes to Miami International Airport
- Express lunch routes
- Trolley Sunday Service
Doral TMP

PROPOSED EXPRESS TROLLEY ROUTES
Bus Stop Amenities Improvements

Source: Melendrez
Signalization Programs

Source: Melendrez
Bicycle + Pedestrian

PEDESTRIAN
- Pedestrian Improvements at Intersections (Crosswalk striping, pedestrian crosswalk signals)
- ADA compliance improvements for sidewalks
- Pedestrian islands
- Mid Block crossings
- Installation of missing sidewalks
- Additional Connections to Miami International Mall

BICYCLE
- Bicycle signalization programs at intersections
- Completing the bicycle system
- Bicycle racks and lockers installation
- Bicycle Rental Program
- Bicycle Trail Rest Areas
- Additional Connections to Miami International Mall
- Bicycle Safety and Education Programs
Example of Crosswalk Improvements

Source: Melendrez
Bicycle + Pedestrian

Source: Melendrez
Policy

Travel Demand Management Policies

Managed Lanes
Alternative Transit/Carpooling Incentives

Linking of Land Development and Transit Policies

Regional Intermodal Hub development (MDT)
Preservation of Pedestrian Pathways During and Post Construction
Parking ordinance revisions

Support for Regional Transportation Policies

Managed Lanes
Allocation of MDX Resources to Transit
Improvement of connections in regional system
Instead of simply listing project by type, we have taken this effort further.

Developed 5 PROJECT AREAS

Listed improvements in each area: COSTS
The Projects

Doral Transit Mobility Plan
Project Area 1

Section 5

Study Areas
- NW 41st/ NW 36th corridor safety study (Project R17)
- Intersection safety study (Project R16)

Proposed Road Features
- Shared-use off-road path (Project R21)
- Bicycle lanes (Project R31)
- Trolley lunch/bike (Project T9)
- Bicycle racks (Project R3)

Proposed Crossing Features
- Intersection striping/crosswalk improvement (Project 1)
- Mid-block crossing w/ pedestrian islands (Project 21)
- Pedestrian island (Project 18)
- Install crosswalk signals (Project 1)
- Move sidewalk obstacle/ADA compliance (Project 18)
- Sidewalk repair (Project 14)

Proposed Bus Stop Features
- Signal priority for buses (Project T19)
- Move bus stop (Project T10)
- Install bus shelter (Project T3)
- Trolley lunch stop (Project T9)

Project | Description | Cost
---|---|---
1 | Pedestrian Improvement @ Intersections | $6,000
8 | ADA Compliance/ Sidewalk Obstruction Removal | $19,000
14 | Sidewalk Repair | $800
18 | Pedestrian Islands | $14,000
21 | Mid-Block Crossings | $30,000
B3 | Bicycle Racks | $8,000
B13 | Bicycle Signalization Program | $180
B21 | Complete Bicycle Network | $650,000
R16 | Intersection Safety Studies | $25,000
R17 | NW 36th/NW 41st Ave. Corridor Safety Study | $25,000
T3 | Bus Shelter Installation | $80,000
T9 | Trolley Lunch Route Pilot Program | $5,000
T19 | Signal Priority for Buses/ Trolley | $14,000

*Note: All costs were given in May 2017.
*Note: Project locations are depicted on the associated map.
### Projects

**Study Areas**
- NW 41st/ NW 36th corridor safety study [Project R17]
- Intersection safety study [Project R16]

**Proposed Road Features**
- Shared-use off-road path [Project B21]
- Bicycle lanes [Project B21]
- Trolley lunch route [Project T9]
- Bicycle racks [Project B3]

**Proposed Crossing Features**
- Intersection striping crosswalk improvement [Project 1]
- Mid-block crossing w/ pedestrian islands [Project 21]
- Pedestrian island [Project 18]
- Install crosswalk signals [Project 1]
- Move sidewalk obstacle/ ADA compliance [Project 8]
- Sidewalk repair [Project 14]

**Proposed Bus Stop Features**
- Signal priority for buses [Project T10]
- Move bus stop [Project T3]
- Install bus shelter [Project T3]
- Trolley lunch stop [Project T9]

### Cost Chart

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Implementation

Projects go to Capital Improvement Program
Mobility Fee is Applied to Development – Rational Nexus is Established)
Development Helps Fund Multi-Modal Improvements

Viola! Mobility

GOAL
To improve mobility within Doral and help plan for its future
What's The Solution

- Keeping Pace With Growth
- Providing Efficient and Effective Infrastructure so People Can Move
- Intelligent Context Sensitive Planning
- Intergrated Land Use Plans and Transportation Plans
- Local Connections, With an Eye Toward Regional Priorities
- Ease of Implementation
- Spread the Funding Burden
FOR MORE INFORMATION / QUESTIONS

City of Doral
Public Works Department
305.593.6740
publicworks@cityofdoral.com
THANK YOU