



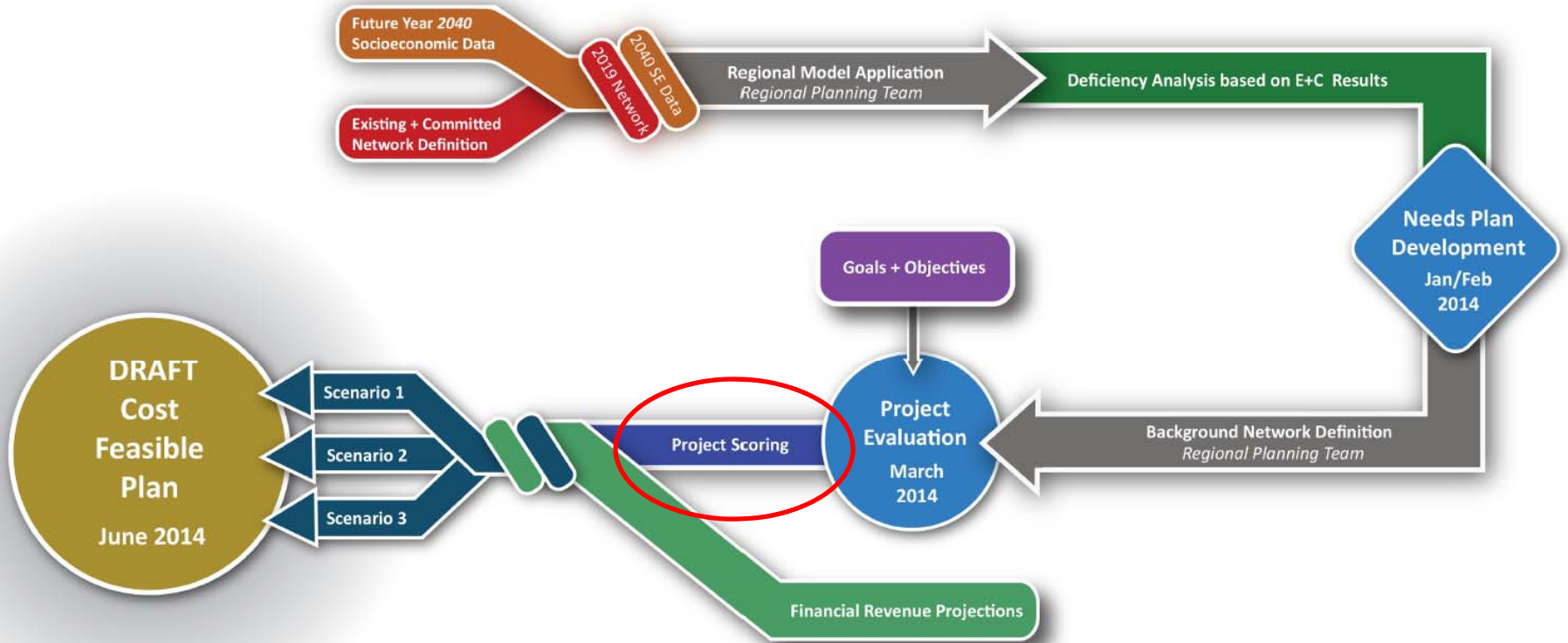
April 11, 2014

2040 LRTP

Agenda

- ▶ Introductions
- ▶ Needs Projects Evaluation Methodology
- ▶ Needs Projects Evaluation Preliminary Results
 - Duplicate Projects
 - Companion Projects
- ▶ Next Steps
 - Public Meetings
 - Project Cost Estimates
 - Cost Feasible Plan Development
- ▶ Meeting Adjournment

LRTP Update Process



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Needs/Cost Feasible Plan Milestones

- Assess Needs – January/February 2014
- Evaluate/Prioritize Needs – March/April 2014
- Present Needs to Public – April/May 2014
- Develop Cost Feasible Plan – May 2014
- Review/Revise/Finalize DRAFT Cost Feasible Plan – June 2014



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Needs Projects Evaluation Methodology

- Projects must be evaluated, scored, and ranked for Cost Feasible Plan development
- Project evaluation methodology is a 4-step process
 - ✓1. Technical evaluation against specific elements and criteria in 2040 Goals and Objectives.
 - ✓2. Assign weighted project scores for project ranking. (Complementary projects identified/grouped.)
 3. Presentation of technical results/ranked projects to Committee for further evaluation/tweaking.
 4. Further consideration of model results for quantitative mobility benefits (ongoing)



Needs Projects Evaluation Methodology

Technical Evaluation

Technical evaluation involves a detailed process to isolate and relate projects to “elements” within Goals and Objectives

- ✓1. Identify elements and develop GIS data to represent them.
- ✓2. Identify metrics to relate projects to elements.
(e.g. transit projects within ¼ mile of elderly areas)
- ✓3. Perform GIS analysis to measure projects against elements.
- ✓4. Group/Identify complementary projects that do not score similarly.



Needs Projects Evaluation Methodology Scoring

Process carefully designed to provide a fair and balanced scoring across all projects

1. For every element addressed within each Goal, 1 point is awarded to the project.
2. Because there are varying numbers of elements in the different goals, a percentage of addressed elements is computed for each goal (e.g. 2 of 4 elements addressed = 50%).
3. Percentage of addressed elements (by goal) is multiplied by the weight for the goal.
4. The product of step 3 for each Goal is summed for a total weighted score.



Needs Projects Evaluation Methodology - Scoring Example

GOAL 8: Preserve Existing System (4/6) = 67%

Climate Change Vulnerability
Operational/Maintenance Improvement on Evacuation Facility
Operational/maintenance improvement
TDM or non capital improvement
Operational Improvement using technological solutions
Managed Lanes Improvement

GOAL 7: Optimize Sound Investments (2/3) = 67%

Improvement Eligible for TRIP or other Regional Funding
Improvement to local road with connection to a regional facility
Viable Candidate for P3

GOAL 6: Enhance Connectivity (1/6) = 17%

Multimodal Improvement on SIS Facility
Freight Improvement addressing intermodal operation integration
Intermodal freight improvement within 1/2 mile of freight Os and Ds
Improvement to facility crossing regional jurisdictional boundaries
Transit/Multimodal Improvement
Connection to a SIS facility

GOAL 5: Protect the Environment/ Quality of Life (3/4) = 75%

Not within 1/2 Mile of Historic Areas
Improvement within Urban Expansion Area
Decreases Dependence on Fossil Fuels
Is not within 1/2 mile of environmentally sensitive areas

GOAL 1: Improve System & Travel (6/11) = 55%

Within 1/4 mile of health care facilities
Within 1/4 Mile of Recreational Facilities
Within 1/4 Mile of Educational Facilities
Within 1/4 Mile of Major Employment Facilities
Within 1/4 Mile of cultural facilities
Transit improvement within 1/4 mile of disadvantaged communities
Transit improvement within 1/4 mile of elderly/disabled communities
Managed Lanes or Transit Improvement
Transit improvement outside of current service coverage area
Managed Lanes or Fixed Guideway Transit
Connection to or Improvement to Facility of Regional Significance

GOAL 2: Increase Safety (1/3) = 33%

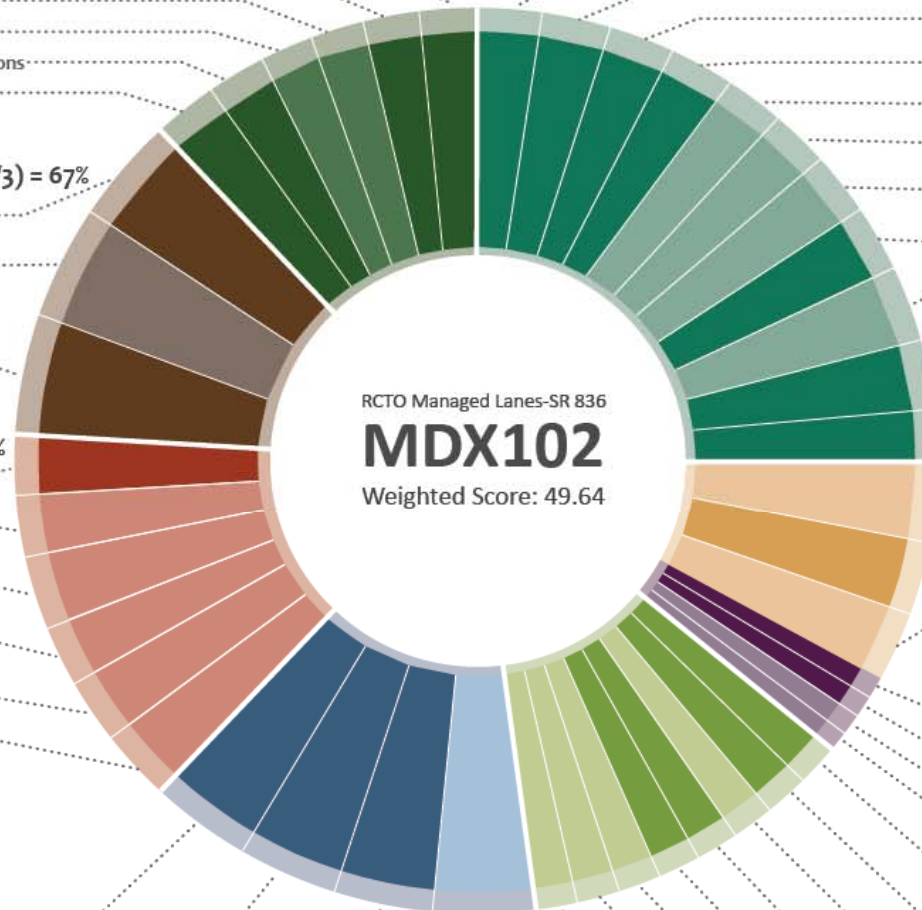
Primary focus on safety
Improvement to High Crash Facility
Primary focus is non-motorized safety

GOAL 3: Increase Security (2/4) = 50%

Increases Capacity on Evacuation Facility with Access to the Elderly/Disabled
Increases Capacity on Evacuation Facility
Primary focus is security
Security improvement at port/intermodal facility

GOAL 4: Economic Vitality (2/9) = 25%

Access to tourist destinations
Improves freight access to airports/seaports
Transit/multimodal improvement with providing access to major employment centers
Improvement on Freight Facility
Within 1/4 Mile of Economic Development and Redevelopment Areas
Highway improvement with access to agriculture



Needs Projects Evaluation Methodology

Scoring Example

MDX102:	RCTO Managed Lanes - SR 836
Limits:	SR 826/836 Int. to Just west of I-95
Description:	Managed Lanes

Goal	Goal Score	Goal Weight	Weighted Score
Goal 1	55%	25	13.8
Goal 2	33%	8	2.6
Goal 3	50%	3	1.5
Goal 4	25%	12	3.0
Goal 5	75%	14	10.5
Goal 6	17%	14	2.4
Goal 7	67%	12	8.0
Goal 8	67%	12	8.0
Total:		100	49.6



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Needs Projects Evaluation Methodology

Scoring Assumptions

➤ Proximity criteria

- Express Bus and Express Lanes – utilize termini
- Expressways – utilize segment
- Other – utilize segment

➤ Yes/No criteria

- Viable candidate for P3 –toll facility or transit
- Decrease dependence on fossil fuels – express lanes, transit, congestion management



Needs Projects Evaluation Preliminary Results

Focus today on general input. Detailed/Project specific input should be provided in one or more of the following ways:

1. General Input can be provided today OR
2. Input can be provided at the time of cost feasible plan development when more information regarding feasibility is available OR
3. Individual meetings can be scheduled to discuss specific project results/priorities.



Needs Projects Evaluation Preliminary Results

Duplicate Projects

Duplication of projects in the needs plan

1. Projects submitted by multiple agencies
(e.g. Beach Transit Connection – CoM121 & MDT135)
2. Projects on same segment that can possibly be combined
(e.g. I-395 – CoM123 and SIS122)
3. Projects on same segment that may serve the same need
(e.g. Northeast corridor – MDT132U & SFRTA102)



Project Duplication/Conflict

MDT232 and SFRTA105

L RTP ID	Facility	From	To	Description	Score
MDT232	FEC Corridor: Kendall to MIC at MIA	Dadeland North Metrorail Station	MIC at MIA	Service would operate on its own dedicated right of way grade separated intersections. Stations to remain at grade. BRT	50.29
SFRTA105	FEC South Spur/Ludlam Trail Premium Transit	Miami Intermodal Center	Dadeland North Area	Premium transit service and non-motorized facility	50.29

MDT132U and SFRTA102

L RTP ID	Facility	From	To	Description	Score
MDT132U	Northeast Corridor (Biscayne BRT)	Downtown Miami	Aventura Mall	Full BRT	41.78
SFRTA102	Tri-Rail Coastal Link	Downtown Miami	Broward County Line	Passenger rail on the FEC corridor	46.33

Project Duplication/Conflict

CoM101 and CoM122

L RTP ID	Facility	From	To	Description	Score
CoM101	Miami Streetcar	Miami Design District	Downtown Miami	Connect Downtown with Midtown/Design District with a fixedrail streetcar or light rail system.	44.12
CoM122	Miami Streetcar (Downtown-Midtown)	NE 36 Street	Flagler Street	Streetcar link from Downtown to Midtown Miami. Streetcar.	44.12

MDT135 and CoM121

L RTP ID	Facility	From	To	Description	Score
MDT135	Beach Connection (fka Baylink)	Downtown Intermodal Terminal	Miami Beach Convention Ctr. 17 St / Wash Ave	Premium transit service connecting Downtown Miami and Miami Beach. Fare structure same as Metrorail. Stops every .5 to .25 miles. LRT	47.95
CoM121	Beach Corridor Transit Connection	City of Miami	Miami Beach	Connect Downtown with Miami Beach with a fixed-rail system (Baylink). LRT	43.35



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Project Duplication/Conflict

► CoM123 and SIS122

L RTP ID	Facility	From	To	Description	Score
CoM123	I-395	I-95	MacArthur Causeway	Reconstruction/realignment of I-395	37.70
SIS122	SR 836/I-395	E of I-95	MacArthur Causeway Bridge	Ultimate Improvement	2024-2040

Note: SIS122 is funded in SIS cost feasible plan in 2024-2040 period (Priority III-IV in LRTP terms)

Project Duplication/Conflict



► FP1073 and H108

L RTP ID	Facility	From	To	Description	Score
FP1073	SR 25/Okeechobee Road/US 27 & NW South River Drive	Palmetto Expressway		Add WB South River Dr access to SB SR 826 for truck and auto. Add signage to disable NB through movement at NB ramp and Okeechobee.	35.65
H108	Palmetto Exwy and Okeechobee Road fly over access ramps			Construct a NB Palmetto Exwy to NWB Okeechobee Road fly over ramp. Construct a NB Palmetto Exwy to SEB Okeechobee Road fly over ramp. Construct a SWB Okeechobee Road to SB Palmetto Exwy fly over ramp.	33.65

► PW116 and FP1040 and FDOT113

L RTP ID	Facility	From	To	Description	Score
PW116	NW 36 th /41 st St	NW 42 nd Ave	HEFT	Express Street (ITS, Grade Separations, Etc.)	37.76
FP1040	NW 36 th /41 st St	HEFT	LeJeune Rd	Redesign NW 36th/41st Street as a superarterial express street	35.76
FDOT113	SR 112 (WB)	NW 36 th St/Okeechobee		Reconstruct intersection	37.87

Needs Projects Evaluation Preliminary Results

Companion Projects

- Companion projects defined as...
 1. Projects that complement each other
(e.g. Direct Access Ramps & PnR Lot/Express Bus Service – MDT192, MDT103, MDT175)
 2. Projects that are codependent
(e.g. Express Bus Service & PnR Lot – MDT153 & MDT120)
- Scores adjusted for consistency

Companion Projects

Express Bus and I-75 PNR

L RTP ID	Facility	From	To	Description	Score
MDT153	I-75/Gratigny	I-75 and Miami Gardens Drive Interchange Park-and-Ride	Park-and-Ride/Transit Terminal at Gratigny Pkwy/NW 119 St/NW 27 Ave	Express transit service between FDOT park-and-ride in Miami Gardens (MDT120) and Miami-Dade College on managed lanes. End-to-end service, no stops.	42.47
MDT120	I-75 Park-and-Ride Lot (FDOT Study)	I-75 and Miami Gardens Drive Interchange		Park-and-Ride	42.47

Note: SIS107 – I-75 from SR 826 to NW 170th St Ultimate Improvement – funded in SIS cost feasible plan in 2024-2040 period (Priority III-IV in LRTP terms)



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Companion Projects

Express Bus and Golden Glades Terminal

L RTP ID	Facility	From	To	Description	Score
MDT171	NW 7th Avenue Enhanced Bus	Downtown Miami	Golden Glades Interchange	This route would provide premium limited-stop transit service along NW 7 Avenue between Downtown Miami and the park -and-ride lot located at the Golden Glades Interchange. Fare structure same as local bus with stops every mile. Convert Route 277 to Enhanced Bus	50.52
MDT167	Golden Glades Multimodal Terminal (Phase 2)			Phase 2 construction of a parking garage to accommodate 1,800 additional vehicles and ground floor retail.	50.52



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Companion Projects

Express Bus and Miami Lakes Terminal

L RTP ID	Facility	From	To	Description	Score
MDT240	Palmetto Express (Central) via Plametto Intermodal Terminal	Dolphin Station (HEFT/NW 12 St)	Miami Lakes Terminal (NW 154 St / SR-826)	Express bus	36.36
MDT207	Miami Lakes Terminal	Palmetto (SR-826) Expwy and NW 154 St		Add new transit terminal, kiss-and-ride and park-and-ride lot	36.36



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Companion Projects

► Kendal BRT and terminals

L RTP ID	Facility	From	To	Description	Score
MDT133U	Kendall Corridor (Kendall BRT)	West Kendall Transit Terminal at Kendal Town Center (Kendall Drive and SW 162nd Avenue)	Dadeland North Metrorail Station	Full BRT	33.41
MDT194	West Kendall Transit Terminal Improvements	SW 88th St / SW 162nd Ave		Improve bus hub, add kiss-and-ride, expand parking.	33.41
MDT160	Intermodal Terminal at SW 88th St / HEFT	SW 88 th St / HEFT		Multimodal terminal	33.41



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Companion Projects

► BRT, Dolphin Station, and Direct Access Ramps

L RTP ID	Facility	From	To	Description	Score
MDT175	East-West Corridor BRT with dedicated lanes along SW 8th St	SW 8th Street/SW 147th Avenue	MIC at MIA	Convert to full BRT	43.29
MDT103	Dolphin Station Park-and-Ride/Transit Terminal (HEFT at NW 12th Street)	HEFT at NW 12th Street		Transit Hub with a park-and-ride facility. Project to include a kiss-and-ride, 12 bus bays and 1,000 parking spaces.	43.29
MDT192	Direct Ramps to Dolphin Stn Intermodal Terminal from SR-836 Managed Lanes			Direct access ramps	43.29
MDT243	Direct Ramps to Dolphin Stn Intermodal Terminal from HEFT Managed Lanes			Direct access ramps	43.29



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Companion Projects



Express Bus, Palmetto Terminal, and Direct Access Ramps

L RTP ID	Facility	From	To	Description	Score
MDT172	Palmetto Express Bus (North)	Palmetto Intermodal Terminal	Miami Gardens/I-75 Interchange	This route would provide express commuter transit service between the proposed FDOT park-and-ride lot at I-75 (as proposed by the FDOT I-75 Express Bus Service Alternatives Study) and Miami Gardens Drive Interchange to the Palmetto Mtrl Stn via SR 826 on managed lanes.	38.64
MDT106	Palmetto Intermodal Terminal	Palmetto Expressway and NW 74th Street		Acquiring an 11.88-acre parcel south of the Palmetto Metrorail Station to construct Palmetto Station Intermodal Terminal to include: long-term parking, short-term parking, kiss-and-ride, pool-and-ride and a minimum of 8 bus bays and 2 layover bays.	38.64
MDT191	Direct Ramps to Palmetto Intermodal Terminal from Palmetto Managed Lanes			Direct access ramps	38.64

Note: SIS119 – SR 826 from NW 103rd ST to NW 154th St Ultimate Improvement – funded in SIS cost feasible plan in 2024-2040 period (Priority III-IV in LRTP terms)

Companion Projects



► US-1 BRT, Busway, Busway Lots

L RTP ID	Facility	From	To	Description	Score
MDT164	US-1 (Busway)	SW 88th St	SW 344th St	Bus only grade separations at all intersections including and south of 98th Street. Stations remain at grade.	41.79
MDT161	US-1 (Busway)	SW 88 th St	SW 344th St	BRT on busway with grade separated intersections. Stop locations every mile.	41.79
MDT109	Busway Lot - SW 312th Street	Busway	SW 312th Street	Park-and-Ride with 90 surface stalls.	41.79
MDT110	Busway Lot - SW 200th Street	Busway	SW 200th Street	Park-and-Ride/Transit Terminal with 140 surface stalls.	41.79
MDT186	Expand overcapacity park-and-ride lot at SW 152nd Street	SW 152nd Street		New parking garage (500 spaces), ground floor retail, and office space.	41.79
MDT189	Expand overcapacity park-and-ride lot at Dadeland South Mtrl	Dadeland South Mtrl		New parking garage (1000 spaces), ground floor retail, and office space. With a minimum of 8 additional articulated bays (service and layover) are needed.	41.79
MDT112	Busway Lot - SW 136th Street	Busway	SW 136th Street	Park-and-Ride with 50-75 surface stalls.	41.79
MDT114	Busway Lot - SW 104th Street	Busway	SW 104th Street	Park-and-Ride with 250-300 surface stalls.	41.79
MDT187	Expand overcapacity park-and-ride lot at SW 168th Street	SW 168th Street		Add 300 parking spaces	41.79
MDT178	Busway/SW 112th Street/Killian Pkwy	at SW 112th Street	Busway	New Park-and-Ride facility with minimum of 200 spaces	41.79
MDT226	Kiss-and-Rides at all Busway Stations	SW 344th Street/Busway	Dadeland South Mtrl Stn	Kiss-and-Ride	41.79
MDT188	Expand overcapacity park-and-ride lot at Dadeland North Stn	Dadeland North Mtrl		New parking garage (1000 spaces), ground floor retail, and office space. With a minimum of 8 additional articulated bays (service and layover) are needed.	41.79

Next Steps – Public Meetings

- Public Meetings 4/22, 4/24, 4/29, 4/30, 5/1, 5/6
 - Evaluation of groupings of projects by project type
 - Exercise to identify needed improvements (with cost constraint element)



Next Steps – Project Costs

- Detailed project costs needed to build Cost Feasible Plan
 - Planning/Design
 - Right of Way
 - Construction
 - O&M
- Historical project costs for projects included in 2035 LRTP Cost Feasible Plan can be accessed at:
<http://www.miamidade2035transportationplan.com/docs/Miami-Dade2035-FinancialResourcesReportAppB.pdf>
- Project cost estimates not provided will be estimated using FDOT unit cost information



Miami-Dade 2040 LRTP

Questions / Comments

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