Technical Memorandum #3: Goals, Objectives and Performance Measures February 2020

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Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP)

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1. Introduction

The purpose of Technical Memorandum #3 (TM 3) is to establish a vision for Martin County's transportation system, develop goals, objectives to accomplish the community's vision. Further, this technical memorandum includes a discussion of evaluation criteria and corresponding performance measures relative to the goals and objectives of the Martin MPO's 2045 Long Range Transportation Plan's (LRTP) – *Martin in Motion*. The 2045 LRTP goals, objectives, and performance measures will guide project evaluation, selection, prioritization, and ultimately allocation of transportation funds available over the next 25 years.

This technical memorandum is organized as described below:

Chapter 1: Introduction - explains the purpose of TM 3, public participation process used to obtain feedback regarding goals, objectives and performance measures as well as report organization.

Chapter 2: Vision, Goals Objectives and Performance Measures – includes a vision statement and describes goals, objectives and performance measures to accomplish the community's transportation vision. In addition, it lists project evaluation criteria and corresponding performances measures as well as summary notes to assign scores. Further, Chapter 2 addresses the MPO's goals, objectives and performance measures relationship to the Florida Transportation Plan (FTP) *Next 50 Years* and national goals identified in the Fixing America's Surface Transportation Act (FAST Act).

Chapter 3: System Performance Report – identifies performance measures and targets set by FDOT and Martin MPO to support national goals for federal-aid highway and public transportation programs consistent with Moving Ahead for Progress in the 21st Century Act (MAP-21) and FAST Acts.

A system performance report is included in the 2045 LRTP Cost Feasible Plan (CFP). The system performance report provides an evaluation of baseline conditions and description of anticipated progress toward the Martin MPO-adopted targets for the federally required highway and transit performance measures. The discussion of anticipated progress is based on the 20-year cost feasible plan, which represents those projects and programs that are recommended to be advanced with the funds that are expected to be available to implement Martin in Motion. This system perform report is consistent with Code of Federal Regulations – 23 CRF §450.324 (d) (4); 23 CRF §450.324 (f) (3), (f)(4) requirements.

Chapter 4: Next Steps – includes a summary discussion on how the goals, objectives and performance measures included in TM 3 will be used to support development of the 2045 LRTP.

1.1 Public Participation

A robust public participation process was used to develop the vision statement, goals, objectives and performance measures for the Martin MPO's 2045 LRTP- *Martin in Motion*. The project team presented draft goals and objectives as well as performance measures to the Project Steering Committee (PSC), the MPO Advisory Committee(s) and Policy Board and Florida Department of Transportation (FDOT), District Four to obtain feedback and input. All the MPO meetings were open to general public. In addition, a draft vision statement was presented at three public open house sessions conducted throughout Martin County. Based on input received at various meetings, the goals, objectives and performance measures were modified (**Table 1-1**).

Meeting	Location	Timeframe
Project Steering Committee (PSC) #1	2401 SE Monterey Road, Stuart, FL 34996 Martin County Administrative Center	August 26, 2019
Public Open House/Visioning Session #1	121 SW Flagler Avenue, Stuart, FL 34994 Stuart City Hall	October 2, 2019
Public Open House/Visioning Session #2	15200 SW Adams Avenue, Indiantown, FL 34956 Lahti Library	October 3, 2019
Public Open House/Visioning Session #3	4940 SE Anchor Ave., Stuart, 34997 Port Salerno Civic Center	October 8, 2019
Project Steering Committee (PSC) #2	2401 SE Monterey Road, Stuart, FL 34996 Martin County Administrative Center	November 5, 2019
Martin MPO Joint Advisory Committee	900 SE Ruhnke Street, Stuart, FL 34994 BOCC Building Department	November 18, 2019
FDOT, District Four	3400 W. Commercial Boulevard, Ft. Lauderdale, FL 33309	November 21, 2019
Martin MPO Policy Board	2401 SE Monterey Road, Stuart, FL 34996 Martin County Administrative Center	December 9, 2019

Table 1-1: Public Meetings and Agency Coordination

The goals, objectives and performance measures included in TM#3 were unanimously approved by the MPO Joint Advisory Committee and Policy Board in November 2019 and December 2019 respectively.

2. Vision, Goals, Objectives and Performance Measures

Based on input received from public involvement and outreach activities, stakeholder interviews and agency coordination and initial technical analyses, the following vision statement was developed for the multimodal transportation system in Martin County by the project team and presented to the Project Steering Committee for their input and consideration.

2.1 Vision Statement

To create and maintain a safe, efficient and resilient multimodal transportation network to meet mobility and accessibility needs of Martin County's residents and visitors, while preserving the environment, supporting economic growth and enhancing the quality of life.

2.2 Goals and Objectives

The goals and objectives provide a transparent and concise framework at the outset to guide transportation investments through the 2045 LRTP – *Martin in Motion*. The following five goals and 29 objectives focus on outcomes that help accomplish the community's vision for a safe and balanced multimodal transportation network in the County.

Infrastructure Maintenance and Congestion Management Goal

An efficient multimodal transportation system that supports economic growth and enhances the quality of life.

Objectives:

- Prioritize improvements that help maintain existing roadways and bridges.
- Prioritize improvements that maintain or improve acceptable travel performance.
- Improve access to jobs.
- Improve transit access to employment.
- Improve transit access to recreational activities.
- Support improvements to transit service.
- Manage traffic congestion.
- Support improvements to major freight corridors.
- Implement strategies to reduce per capita vehicle miles of travel.
- Prioritize funding to support smaller scale congestion management projects and programs (Transportation System Management and Operations (TSM&O)).
- Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.
- Support projects that enhance the quality of life.

Safety Goal

A safe multimodal transportation system that meets the needs of all the users.

Objectives:

- Prioritize projects that improve hurricane evacuation needs.
- Prioritize projects and programs that improve safety on corridors with highest number of crashes with fatal and incapacitating injuries for all modes and users.
- Implement strategies to enhance bicycle and pedestrian safety.
- Reduce transit vehicle crashes and facility-accidents.

Environmental and Equity Goal

Preserve natural environment and promote equity and healthy communities.

Objectives:

- Minimize adverse impacts to the natural environment.
- Reduce on-road mobile source emissions.
- Increase the bicycle facility coverage throughout the planning area.
- Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.
- Implement strategies that increase the miles of shared used path to support the trail network.
- Prioritize improvements that provide non-motorized access to recreational opportunities.
- Minimize adverse impacts to the minority and/or low income populations.
- Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.

Innovation Goal

A transportation system with an ability to harness changes in the future.

Objectives:

- Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.
- Prioritize projects that improve extreme weather resiliency and/or harden infrastructure against Sea Level Rise (SLR).

Project Streamlining and Delivery Goal

A transportation system that reflects the community's needs and desires.

Objectives:

- Advance projects that the community supports.
- Prioritize projects that can be accelerated through project development process.
- Support projects that are strategically important for Martin County.

2.3 Evaluation Criteria and Performance Measures

Moving Ahead for Progress in the 21st Century Act (MAP-21) and FAST Acts require state DOTs and MPOs to adopt and implement a performance based approach to align planning goals and objectives with investment decisions to improve safety, asset conditions, and system performance. To that end, 63 performance measures corresponding to 32 evaluation criteria and relative to five goals and 29 objectives were developed to assess transportation projects and system performance as well as assist with Congestion Management Process (CMP) Update and scenario planning. Out of 63 performance measures, 29 are required to evaluate transportation system per FAST Act requirements. The performance measures under the FAST Act address highway safety, system performance, bridge and pavement conditions, and transit asset management and safety while the remaining 34 performance measures incorporate factors and criteria that are important to the local community (**Table 2-1**).

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
				% of pavements on the Interstate System in GOOD condition. (<i>Higher is better</i>)	Available from FDOT	Rate Projects; System Performance Report	x
			Payament condition	% of pavements on the Interstate System in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x
		Prioritize improvements that help	Pavement condition	% of pavements on the non-Interstate NHS in GOOD condition. (Higher is better)	Available from FDOT	Rate Projects; System Performance Report	x
		bridges.		% of pavements on the non-Interstate NHS in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x
			NHS bridge condition	% of NHS bridges by deck area classified as in GOOD condition. (Higher is better)	Available from FDOT	Rate Projects; System Performance Report	x
				% of NHS bridges by deck area classified as in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x
		Prioritize improvements that maintain or improve acceptable travel performance.	Level of service	Vehicle miles of travel operating at or better than adopted level of service standard. (<i>Higher is better</i>)	Martin County LOS Report, TCRPM 5.0	Rate Projects; System Performance Report, Evaluate Scenarios	
				Percent of jobs within 30-minute auto travel time for average household. (<i>Higher is better</i>)	TCRPM 5.0	Rate Projects; Evaluate Scenarios	
		Improve access to jobs.	Job access	Percent of jobs within 30-minute in-vehicle travel time (transit) for average household. (<i>Higher is better</i>)	TCRPM 5.0	Rate Projects; Evaluate Scenarios	
Infrastructure	An efficient multimodal Improve transit acc	Improve transit access to		Percent of jobs within a quarter mile of transit stops. (Higher is better)	Marty, SE data, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
and Congestion Management	transportation system that supports economic growth and	employment.		Percent of population within a quarter mile of transit stops. (Higher is better)	Marty, SE data, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
Goal	enhances the quality of life.	Improve transit access to recreational activities.	Access to recreational amenities.	Number of recreational facilities served by a transit route. (<i>Higher is better</i>)	Marty, Martin County	Rate Projects	
				Changes in frequency or headway. (Lower is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
				Changes in geographic coverage. (Higher is better)	Bus routes, GIS	Rate Projects; Evaluate Scenarios; CMP Update	
				Change in revenue hours of service relative to base year. <i>(Higher is better)</i>	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
			Transit supply, demand and cost	Change in revenue miles of service. (Higher is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
		Support improvements to transit		Ridership <i>(Higher is better)</i>	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
		service.		Riders per revenue hour. <i>(Higher is better)</i>	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
				Total annualized capital cost and O&M cost per rider. (Lower is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
				On-time performance (Mini-bus). <i>(Higher is better)</i>	Marty	Rate Projects; System Performance Report	x
			System reliability	On-time performance (Demand Response). (Higher is better)	Marty	Rate Projects; System Performance Report	x
				On-time performance (Cutaway Bus). <i>(Higher is better)</i>	Marty	Rate Projects; System Performance Report	X

Table 2-1: Goals, Objectives and Performance Measures, Martin in Motion

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
				Missed runs due to major breakdown, as a percentage of total runs by mode (Mini-bus). (Lower is better)	Marty	System Performance Report	х
			System performance	Missed runs due to major breakdown, as a percentage of total runs by mode (Demand Response). <i>(Lower is better)</i>	Marty	System Performance Report	х
				Missed runs due to major breakdown, as a percentage of total runs by mode (Cutaway Bus). <i>(Lower is better)</i>	Marty	System Performance Report	х
		Support improvements to transit		Number of Vehicles out of service for 30 or more days by mode (MB). (Lower is better)	Marty	System Performance Report	х
		service.	Maintenance Resources	Number of Vehicles out of service for 30 or more days by mode (DR). (Lower is better)	Marty	System Performance Report	х
				Number of Vehicles out of service for 30 or more days by mode (CB). (Lower is better)	Marty	System Performance Report	х
			Maintain fleet (revenue vehicles)	Age - % of revenue vehicles within a particular asset class (Bus and Cutaway Bus) that have met or exceeded their Useful Life Benchmark (ULB). <i>(Lower is better)</i>	Marty	Rate Projects; System Performance Report	х
			Maintain equipment (Non- revenue/service automobile)	Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB). <i>(Lower is better)</i>	Marty	System Performance Report	х
Infrastructure Maintenance	An efficient multimodal		Delay	Vehicle hours of delay per capita compared to base year conditions. (Lower is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
and Congestion Management Goal	supports economic growth and enhances the quality of life.	Manage traffic congestion		Travel time reliability index on congested corridors on non-NHS facilities. (Lower is better)	Regional Integrated Transportation Information System (RITIS)	Rate Projects, CMP Update	
			Travel time reliability	% of person-miles traveled on the Interstate that are reliable. (Higher is better)	Available from FDOT	Rate Projects; System Performance Report; CMP Update	х
				% of person-miles traveled on the non-Interstate NHS that are reliable. (<i>Higher is better</i>)	Available from FDOT	Rate Projects; System Performance Report; CMP Update	Х
		Support improvements to major freight corridors.		Truck Travel Time Reliability Index (TTTRI) on the Interstate. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report; CMP Update	Х
		Implement strategies to reduce per	Vehicle miles traveled	Vehicle miles of travel per capita. (Lower is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
		capita vehicle miles of travel.	Travel demand management	High occupant vehicle (HOV) person trips. (Higher is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
		Prioritize funding to support smaller scale congestion management projects and programs (TSM&O).		Dollars of funding to plan, design, and implement congestion management projects and programs. <i>(Higher is better)</i>	Revenue Forecast, FDOT and Martin MPO	Rate Projects, CMP Update	
		Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.	Funding	Percent of major roadways with appropriate bicycle, pedestrian and transit facilties. <i>(Higher is better)</i>	GIS, Martin MPO and FDOT	Rate Projects; Evaluate Scenarios; CMP Update	

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
Infrastructure Maintenance and Congestion Management Goal	An efficient multimodal transportation system that supports economic growth and enhances the quality of life.	Support projects that enhance the quality of life.	Quality of life	Transportation projects that are located in Community Redevelopment Areas (CRAs). <i>(Higher is better)</i>	Martin County, Cities, Village of Indiantown	Rate Projects	
		Prioritize projects that improve hurricane evacuation needs. Hurricane Evacuation Centerline miles of roadway on evacuation routes operating at or belter than the adopted level of service. (Higher is better) L			Martin County LOS Report, GIS, TCRPM 5.0	Rate Projects	
				Number of fatalities (Lower is better)	Crach Analysia		Х
		Prioritize projects and programs that improve safety on corridors with highest number of crackes with fatal	Fatal and sorious injuny graphes	Rate of fatalities per 100 million vehicle miles traveled (VMT). (Lower is better)	Reporting System, Signal	Rate Projects: Evaluate	x
		and incapacitating injuries for all	Fatar and senous injury crashes	Number of serious injuries. (Lower is better)	Four Analytics, Crash	Scenarios; System	Х
	A safe multimodal	modes and users.		Rate of serious injuries per 100 million vehicle miles traveled (VMT). (Lower is better)	Modification Factors (CMFs) to	Performance Report; CMP Update	X
Safety Goal	meets the needs of all the users.	Implement strategies to enhance bicycle and pedestrian safety.	Bicycle and pedestrian crashes	Number of non-motorized fatalities and serious injuries. (Lower is better)	safety		x
				Number of accidents per 100,000 revenue miles by mode (MB). <i>(Lower is better)</i>	Marty	System Performance Report	x
		Reduce transit vehicle crashes and	Sofotyrick	Number of accidents per 100,000 revenue miles by mode (DR). (Lower is better)	Marty	System Performance Report	x
	facility-accidents			Number of accidents per 100,000 revenue miles by mode (CB). <i>(Lower is better)</i>	Marty	System Performance Report	x
			Marty	System Performance Report	x		
		Minimize adverse impacts to the natural environment.	Environmentally sensitive lands	Acres of impacted environmentally sensitive lands, such as, wetlands or significant wildlife habitat or conservation lands. <i>(Lower is better)</i>	GIS, Florida Geographic Data Library (FGDL) and Martin County	Rate Projects	
		Reduce on-road mobile source emissions	Air pollution and greenhouse gas emissions	Change in pollutants (tonnage) including carbon dioxide/greenhouse gas. (Lower is better)	TCRPM 5.0, FTA	Rate Projects; Evaluate Scenarios	
		Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.	Pedestrian facilities	Miles of pedestrian facilties on the major roadway system in areas with high population and employment density. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
Environmental and Equity	Preserve natural environment and promote equity and	Increase the bicycle facility coverage throughout the planning area.	Bicycle infrastructure	Miles of bicycle facilties on the major roadway system. (Higher is better)	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
Goal	healthy communities.	Implement strategies that increase the miles of shared used path to support the trail network.	Shared use path	Miles of shared use facility. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
		Prioritize improvements that provide non-motorized access to recreational opportunities.	Bicycle and pedestrian facilities	Percent of major roadways that access recreational opportunities with bicycle and pedestrian facilities. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
		Minimize adverse impacts to the minority and/or low income populations.	Environmental justice	Investment in transportation improvement projects in environmental justice areas compared to the rest of the county. <i>(Higher is better)</i>	Martin MPO, FDOT	Rate Projects; Evaluate Scenarios	

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
Environmental and Equity Goal	Preserve natural environment and promote equity and healthy communities.	Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.	Environmental justice Number of jobs within 30 minutes of in-vehicle travel time by public transportation during peak hour. <i>(Higher is better)</i>		TCRPM 5.0	Evaluate Scenarios	
Innovation Cool	A transportation system with	Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.	Emerging technologies (ACES)	Funding for projects that have ITS components to advance ACES. (<i>Higher is better</i>)	Martin MPO, FDOT	Rate Projects; Evaluate Scenarios	
mnovation Goa	Innovation Goal an ability to harness changes in the future. Prioritize projects extreme weather harden infrastruc Level Rise (SLR)		Extreme weather resiliency	Transportation improvement projects located in areas prone to inundation due to storm surge, king tides and other extreme weather events including SLR. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios	
		Advance projects that the community supports.		Level of support for improvements in the community. (Higher is better)	Martin MPO, FDOT	Rate Projects	
Project Streamlining and Delivery Goal A transportation system that reflects the community's needs and desires.		Prioritize projects that can be accelerated through project development process.	Community support	Right of way availability and/or cost. (Lower is better)	Martin County, FDOT	Rate Projects	
	Support projects that are strategically important for Martin County.High impact transportation projectsFunding allocation for strategic transportation improvement projects. (Higher is better)		Martin MPO	Rate Projects; Evaluate Scenarios			

*Notes:

§ Performance measures for evaluating alternative planning scenarios and preparing a System Performance Report will be applied at system level or countywide.

§ To rate and prioritize transportation improvements, candidate projects will be evaluated using project level performance measures based on future year data/metrics.

§ Data from previous years or recent past will be used to develop performance measures for CMP Update and System Performance Report.

§ All of the performance measures may not need to be operationalized for project prioritization.

§ Appropriate performances measures will be applied across various modes.

§ Some of the performance measures will be qualitative while others quantitative.

§ Key Performance Measures (KPMs) included in the System Performance Report to be tracked on an annual basis.

As demonstrated in **Table 2-2**, the 2045 LRTP – *Martin in Motion's* goals and objectives and performance measures are consistent with the FTP Next 50 Years goals as well as FAST Act. Further, Martin in Motion's goals and objectives are consistent with the County Comprehensive Plan as well.

Table 2-2: Martin in Motion Goals vs. National and State Goals

	Fixi	ng Ame	erica's Nati	Surfa onal G	ce Trai Soals	nsporta	ation	2	2060 F	lorida Sta	Transp ate Go	oortatio als	on Pla	n	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Infrastructure Maintenance and Congestion Management Goal:	An eff	icient	multir	nodal	trans	portat	tion s	ystem	that s	uppo	rts ec	onom	ic gro	wth a	nd enhances the quality of li
															% of pavements on the Interstate Sy
															% of pavements on the Interstate S
Prioritize improvements that help maintain existing roadways and bridges	x	x						x	x						% of pavements on the non-Intersta
								~							% of pavements on the non-Intersta
															% of NHS bridges by deck area clas
															% of NHS bridges by deck area clas
Prioritize improvements that maintain or improve acceptable travel performance.				x	х					х		х			Vehicle miles of travel operating at o
												V	V		Percent of jobs within 30-minute aut
Improve access to jobs.												X	X		Percent of jobs within 30-minute in-
Improve transit access to employment			v		v							v			Percent of jobs within a quarter mile
			^		^							^			Percent of population within a quarter
Improve transit access to recreational activities.						Х					Х		Х		Number of recreational facilities services
															Changes in frequency or headway.
															Changes in geographic coverage. (I
			x		x					x	x	x			Change in revenue hours of service
Support improvements to transit service.															Change in revenue hours of service
															Riders per revenue hour. (Higher is
															Total annualized capital cost and Oa
															On-time performance (Mini-bus). (H
				X						Х					On-time performance (Demand Res
															On-time performance (Cutaway Bus

Performance Measure

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ssified as in POOR condition. (Lower is better)

or better than adopted level of service standard. (Higher is better)

to travel time for average household. (Higher is better)

vehicle travel time (transit) for average household. (Higher is better)

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	Fixir	ng Ame	erica's Nati	Surfa onal G	ce Tran Soals	nsporta	ation	:	2060 F	lorida Sta	Transp ate Go	oortatio als	on Plar	1	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Infrastructure Maintenance and Congestion Management Goal:	An effi	cient	multir	nodal	trans	portat	ion s	ystem	that s	uppo	rts eco	onom	ic gro\	wth a	nd enhances the quality of life
															Missed runs due to major breakdown
															Missed runs due to major breakdown is better)
															Missed runs due to major breakdown better)
Cumulant improvements to terms it as miles		v		V						v					Number of Vehicles out of service for
Support improvements to transit service.		X		X					X	×					Number of Vehicles out of service for
															Number of Vehicles out of service for
															Age - % of revenue vehicles within a exceeded their Useful Life Benchmar
															Age - % of vehicles that have met or
															Vehicle hours of delay per capita con
															Travel time reliability index on conge
Manage traffic congestion.			X	Х	X					X		X			% of person-miles traveled on the Int
															% of person-miles traveled on the no
Support improvements to major freight corridors.					Х						Х	Х			Truck Travel Time Reliability Index (1
Implement strategies to reduce per capita vehicle miles of travel			x	x		x				x				x	Vehicle miles of travel per capita. (Lo
														~	High occupant vehicle (HOV) person
Prioritize funding to support smaller scale congestion management projects and programs (TSM&O).			x							x				х	Dollars of funding to plan, design, an <i>is better)</i>

Performance Measure

n, as a percentage of total runs by mode (Mini-bus). *(Lower is better)*

n, as a percentage of total runs by mode (Demand Response). (Lower

n, as a percentage of total runs by mode (Cutaway Bus). (Lower is

r 30 or more days by mode (MB). *(Lower is better)*

r 30 or more days by mode (DR). *(Lower is better)*

r 30 or more days by mode (CB). *(Lower is better)*

particular asset class (Bus and Cutaway Bus) that have met or rk (ULB). *(Lower is better)*

exceeded their Useful Life Benchmark (ULB). (Lower is better)

mpared to base year conditions. *(Lower is better)*

sted corridors on non-NHS facilities. (Lower is better)

terstate that are reliable. (Higher is better)

on-Interstate NHS that are reliable. (Higher is better)

TTTRI) on the Interstate. (Lower is better)

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trips. (Higher is better)

nd implement congestion management projects and programs. (Higher

	Fixir	ng Ame	erica's Natio	Surfac onal G	e Tran oals	isporta	ation	:	2060 F	lorida St	Transp ate Go	oortatio als	on Plar	ı	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.		х							х						Percent of major roadways with app
Support projects that enhance the quality of life.					х	х						x	х		Transportation projects that are loca <i>better</i>)
Safety Goal: A safe multimodal transportation system that meets	s the r	leeds	of all t	the us	ers.										
Prioritize projects that improve hurricane evacuation needs.	х			х				х	х		х				Centerline miles of roadway on evac (Higher is better)
Prioritize projects and programs that improve safety on corridors with highest number of crashes with fatal and incapacitating injuries for all modes and users.	x							x			x				Number of fatalities <i>(Lower is better)</i> Rate of fatalities per 100 million vehi Number of serious injuries. <i>(Lower is</i> Rate of serious injuries per 100 milli
Implement strategies to enhance bicycle and pedestrian safety.	Х							Х			Х				Number of non-motorized fatalities a
Reduce transit vehicle crashes and facility-accidents	x							x			x				Number of accidents per 100,000 re Number of accidents per 100,000 re Number of accidents per 100,000 re Number of facility-accident related a
Environmental and Equity Goal: Preserve natural environment a	nd pro	omote	equity	y and	health	ny cor	nmun	ities.							
Minimize adverse impacts to the natural environment.						х	х						х	х	Acres of impacted environmentally s conservation lands. (Lower is better)
Reduce on-road mobile source emissions						х							х	х	Change in pollutants (tonnage) inclu
Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.	x					х		х			x		х	х	Miles of pedestrian facilities on the n density. <i>(Higher is better)</i>
Increase the bicycle facility coverage throughout the planning area.	Х					Х		Х			Х		Х	Х	Miles of bicycle facilities on the majo
Implement strategies that increase the miles of multi-use trails and support the trail network.	х					х		х			х		x	х	Miles of shared use facility. (Higher

Performance Measure

propriate bicycle, pedestrian and transit facilities. (Higher is better)

ated in Indiantown or other community redevelopment areas. (Higher is

cuation routes operating at or belter than the adopted level of service.

icle miles traveled (VMT). (Lower is better)

s better)

ion vehicle miles traveled (VMT). (Lower is better)

and serious injuries. (Lower is better)

evenue miles by mode (MB). (Lower is better)

evenue miles by mode (DR). (Lower is better)

evenue miles by mode (CB). *(Lower is better)*

accidents to employees or customers. (Lower is better)

sensitive lands, such as, wetlands or significant wildlife habitat or

uding carbon dioxide/greenhouse gas. (Lower is better)

major roadway system in areas with high population and employment

or roadway system. (Higher is better)

is better)

	Fixir	ng Am	erica's Nati	Surfac onal G	ce Trar oals	nsporta	ation	:	2060 F	lorida T Sta	Fransp ite Go	ortatio als	on Plan	ı	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Prioritize improvements that provide non-motorized access to recreational opportunities.						х							х	Х	Percent of major roadways that acc (Higher is better)
Minimize adverse impacts to the minority and/or low-income populations.					х							х	х		Investment in transportation improve the county. (Higher is better)
Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.					х							х	х		Number of jobs within 30 minutes of (Higher is better)
Innovation Goal: A transportation system with an ability to harn	ess ch	ange	s in th	e futu	re.										
Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.				х	х	х			x		х	х	х	х	Funding for projects that have ITS c
Prioritize projects that improve extreme weather resiliency and/or harden infrastructure against Sea Level Rise (SLR)	х	х		х	х	х		х	х	х		х	х	х	Transportation improvement project and other extreme weather events i
Project Streamlining and Delivery Goal: A transportation system	that i	reflect	ts the	comm	unity'	s nee	ds an	d des	ires.						
Advance projects that the community supports.					Х		Х				Х		Х		Level of support for improvements in
Prioritize projects that can be accelerated through project development process.							Х					Х	Х	Х	Right of way availability and/or cost.
Support project that are strategically important for Martin County.					х	х	х		х		х		х		Funding allocation for strategic trans

Performance Measure

cess recreational opportunities with bicycle and pedestrian facilities.

rement projects in environmental justice areas compared to the rest of

f in-vehicle travel time by public transportation during peak hour.

components to advance ACES. *(Higher is better)*

cts located in areas prone to inundation due to storm surge, king tides including SLR. (*Higher is better*)

in the community. (Higher is better)

(Lower is better)

sportation improvement projects. (Higher is better)

3. System Performance Report

In addition to the identification and discussion of performance measures included in this technical memorandum, *Martin in Motion* also included a system performance report consistent with the Code of Federal Regulations §450.324(f)(4) in the 2045 LRTP CFP. This report provides an evaluation of baseline conditions and description of anticipated progress toward the Martin MPO-adopted targets for the federally required highway and transit performance measures. The discussion of anticipated progress is based on the 20-year cost feasible plan, which represents those projects and programs that are recommended to be advanced with the funds that are expected to be available to implement *Martin in Motion*. System performance reports produced for subsequent Martin MPO long range transportation plans should include comparisons to the system performance reports included in previous long range plans beginning with *Martin in Motion*.

3.1 Performance Measures

As required by Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act, the USDOT has established performance measures through rulemaking process corresponding to the following seven national goals:

- Improving Safety;
- Maintaining Infrastructure Condition;
- Reducing Traffic Congestion;
- Improving the Efficiency of the System and Freight Movement;
- Protecting the Environment; and,
- Reducing Delays in Project Delivery.

Consistent with MAP-21 and FAST Acts, the FDOT in collaboration with Martin MPO and in coordination with Marty have established performance targets (PM1, PM2 and PM3 rules) for various performance measures. These performance targets serve as benchmarks to measure progress made toward achieving the national goals. The process, methodology and rationale for developing specific performance targets are documented in the Martin MPO's FY 2019/20-2023/24 TIP. Below is a summary description of relevant performance measures and targets:

3.1.1 Safety

Safety Performance Management Measures Final Rule (PM1) establishes the safetyrelated performance measures. The performance targets for safety established by FDOT and supported by Martin MPO are included in **Table 3-1**.

Safety Performance Measures and Targets	Statewide Target (2020)	MPO Target (2020)
Number of fatalities	0	0
Rate of fatalities per 100 million vehicle miles traveled (VMT)	0	0
Number of serious injuries	0	0
Rate of serious injuries per 100 million vehicle miles traveled (VMT)	0	0
Number of non-motorized fatalities and serious injuries	0	0

Table 3-1: Safety Performance Measures and Targets

Source: Martin MPO Resolution Number #20-04, February 2020

3.1.2 Maintaining Infrastructure Condition – Pavement and Bridge

Pavement and Bridge Condition Performance Measures Final Rule (PM2), establishes the following six performance measures to assess the condition of the pavements and bridges on the National Highway System (NHS):

- 1. Percentage of pavements on the Interstate System in GOOD condition;
- 2. Percentage of pavements on the Interstate System in POOR condition;
- 3. Percentage of pavements on the non-Interstate NHS in GOOD condition;
- 4. Percentage of pavements on the non-Interstate NHS in POOR condition;
- 5. Percentage of NHS bridges by deck area classified as in GOOD condition; and
- 6. Percentage of NHS bridges by deck area classified as in POOR condition.

The FDOT has also developed a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. **Table 3-2** includes FDOT's statewide performance targets for the pavement and bridge measures, which are supported by Martin MPO.

Performance Measures and Targets	Current (2018) Statewide Conditions	Martin MPO 4-Year Target
% of pavements on the Interstate System in GOOD condition	66%	60%
% of pavements on the Interstate System in POOR condition	0.1%	5%
% of pavements on the non-Interstate NHS in GOOD condition	45%	40%
% of pavements on the non-Interstate NHS in POOR condition	0.4%	5%
% of NHS bridges by deck area classified as in GOOD condition	72%	50%
% of NHS bridges by deck area classified as in POOR condition	1%	10%

Table 3-2	: Pavement	and	Bridae	Condition	Performance	Measures	and	Targets
	. I avoinoiti	ana	Dilago	Solution		measures	and	rurgets

Source: Martin MPO TIP, FY 2019/20-FY2023/24

3.1.3 Reducing Traffic Congestion and Improving Efficiency of the System and Freight Movement - System Performance

System Performance Measures Final Rule (PM3) requires state DOTs and MPOs to establish targets for the following performance measures:

1. Percent of person-miles on the Interstate system that are reliable;

- 2. Percent of person-miles on the non-Interstate NHS that are reliable; and
- 3. Truck Travel Time Reliability Index (applicable only to Interstate system).

The Martin MPO agreed to support FDOT's statewide system performance targets shown in **Table 3-3**.

Performance Measures and Targets	Current (2018) Statewide Conditions	Martin MPO 4-Year Target
% of person-miles traveled on the Interstate that are reliable	82%	70%
% of person-miles traveled on the non-Interstate NHS that are reliable	84%	50%
Truck Travel Time Reliability Index (TTTRI) on the Interstate	1.43	2

Source: Martin MPO TIP, FY 2019/20-FY2023/24

3.1.4 Asset Management: Transit Asset Performance

As required by Federal Transit Administration's (FTA) final Transit Asset Management (TAM) rule, Martin County in cooperation with Martin MPO developed a TAM plan, and established state of good repair standards and performance measures for four asset categories (**Table 3-4** and **Table 3-5**).

Criteria	Statewide Target (2019)	FY 2018 Goal	Actual
Safety Risks	Number of accidents per 100,00 revenue miles by mode (MB)	1	TBD
	Number of accidents per 100,00 revenue miles by mode (DR)	1	TBD
	Number of accidents per 100,00 revenue miles by mode (CB)	1	TBD
	Number of facility-accident related accidents to employees or customers	0	TBD
System Reliability	On-time performance (MB)	92%	TBD
	On-time performance (DR)	92%	TBD
	On-time performance (CB)	92%	TBD
Maintenance Resources	Number of vehicles out of service for 30 or more days by mode (MB)	1	TBD
	Number of vehicles out of service for 30 or more days by mode (DR)	1	TBD
	Number of vehicles out of service for 30 or more days by mode (CB)	1	TBD
System Performance	Missed runs due to major breakdown, as percentage of total runs by mode (MB)	<6	TBD
	Missed runs due to major breakdown, as percentage of total runs by mode (DR)	<6	TBD
	Missed runs due to major breakdown, as percentage of total runs by mode (CB)	<6	TBD

Table 3-4: MARTY Annual TAM Goals

Source: Martin MPO TIP, FY 2019/20-FY2023/24

Table 3-5: TAM Performance Measures and Targets

Asset Category- Performance Measures	Asset Class	2019 Target	2020 Target	2021 Target	2022 Target	2023 Target
Revenue Vehicles						
Age - % of revenue vehicles	BU - Bus	0%	0%	0%	0%	0%
within a particular asset class that have met or exceeded their Useful Like Benchmark (ULB)	CU - Cutaway Bus	50%	50%	0%	0%	0%
	VN - Van	100%	100%	100%	100%	100%
Equipment						
Age - % of vehicles within a particular asset class that have met or exceeded their Useful Like Benchmark (ULB)	Non-Revenue/Service Automobile	0%	0%	0%	0%	0%
Facilities						
Condition - % of facilities with a	Administration	N/A	N/A	N/A	N/A	N/A
condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Maintenance	N/A	N/A	N/A	N/A	N/A
	Parking Structures	N/A	N/A	N/A	N/A	N/A
	Passenger Facilities	N/A	N/A	N/A	N/A	N/A

Source: Martin MPO TIP, FY 2019/20-FY2023/24

4. Next Steps

The project team will use goals, objectives and performance measures included in this technical memorandum throughout the LRTP process to ensure consistency with local, state and federal requirements, evaluate transportation improvement projects for prioritization, assess system performance, select projects to relieve traffic congestion and compare planning scenarios. Ultimately, information included in this technical memorandum will assist the project team to develop a cost feasible plan to accomplish the community's vision for transportation in Martin County.

The system performance report included in the 2045 LRTP CFP provides an evaluation of baseline conditions and description of anticipated progress toward the Martin MPOadopted targets for the federally required highway and transit performance measures. The discussion of anticipated progress in the system performance report is based on the 20-year cost feasible plan, which represents those projects and programs that are recommended to be advanced with the funds that are expected to be available to implement *Martin in Motion*.