

# Technical Advisory Committee (TAC)

January 16, 2019 CareerSource Heartland Sebring, FL



# 1) Call to Order

- Roll Call
- Announcements
- Recognitions



# 2) Public Comment



# 3) Approval of Minutes\*

October 17, 2018 Meeting



# 4) TAC Bylaws Amendment

Page 9



#### **Requested Action**

# Motion to approve proposed amendment to TAC Bylaws



# 5) FDOT Draft Tentative Work Program

Page 11

https://www.youtube.com/watch?v=RZmjNLT\_LcI

# **Project Highlights**





# **Project Highlights**





# **Project Highlights**







### 6) Performance Management Measures and Targets\*

Page 27

# FDOT Safety Performance Measures and Targets

Safety Measure	HRTPO Target	<b>2011-15</b> Average	<b>2012-16</b> Average	<b>2013-17</b> Average	2013-17 Statewide
Number of Fatalities	0	57.4	60.6	66.8	2,821
Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)	0	2.025	2.099	2.235	1.360
Number of Serious Injuries	0	299.8	341.8	390	20,910
Rate of Serious Injuries per 100 million VMT	0	10.577	11.744	12.899	10,122
Number of Non-motorized Fatalities and Non-motorized Serious Injuries	0	33.2	32.4	33.4	3,249





# **Requested Action**

Motion to provide a recommendation to the HRTPO Board related to safety targets



### 7) FDOT Project Applications and Priorities for FY 2025

Page 29

# HRTPO Evaluated Criteria, Amended November 28, 2018

LRTP Goals	Evaluation Criteria for Congestion Management Projects				
	Safety				
ety	Road/intersection has experienced 1 or more fatal or serious accidents in previous 5 years				
Saf	Pedestrian Safety				
	Road/intersection has 1 or more car/pedestrian incidents past 5 years				
Project Status/Funding Availability					
ficie	Local funding is available to advance or contribute to project				
qEU	Level of Service (LOS)				
an	Segment of road or intersection does not meet FDOT LOS Standards				
ptic	Truck Factor				
Truck factor on segment of road or intersection managed by FDOT is greater than 10%					
de l	Non Interstate Reliability				
Provi	Person miles traveled on Non Interstate NHS segment of road managed by FDOT reported as not reliable or below 50% on FDOT scale	20			
	Community and/or Environmental Impact				
ate lity Ces	Potential negative impact on community or environment				
Pla Cre	No impact to community or environment	5			
	Potential positive impact on community or environment	10			
LRTP Goals	Evaluation Criteria for Transportation Alternative Projects	Criteria Scoring			
	Safety				
fety	Adjacent road has 1 or more car/pedestrian incidents past 5 years	20			
	School Zone Safety				
e Sa	Project is within 1-2 miles from a K-12 school	4			
No	Project is 1/2 mile to 1 mile from a K-12 school	10			
2					

16 ect is within 1/2 mile of a K-12 schoo oiect is within 1/4 mile of a K-12 schoo 18 20 roject is within 1/8 mile of a K-12 school 0 15 ts to network pletes connection/closes gap 30 ect Status/Funding Availability 10 dditional phase or connects to project in Five-Year Work Program or funded Local Capita provement Program 0 tential negative impact on community or environment 5 ct to community or environmen tential positive impact on community or environment 10 as of Limited Modal Choice ro Vehicle Household rate in project Census track 6.1% or higher 10

- Criteria now unique for Congestion Management and Transportation Alternatives
- TRIP criteria still based on Evaluation Check List

SCOP, SCRAP, MSCOP, and CIGP projects not evaluated by the HRTPO



tte Qual

Adopted: April 27, 2016 | Amended: November 28, 2018

# **Process for Priority Selection**

- □ Project submission to HRTPO January 28, 2018
- Project review by HRTPO staff
- Project submittal to FDOT
- Preliminary score review by local jurisdiction
- Project review by TAC and CAC
- Project review by HRTPO
- Ranking endorsement by TAC and CAC
- Priority List Adoption by HRTPO



# SCOP, SCRAP, & MSCOP

- Applications were updated 12/11/18
- Do not complete a FDOT District 1 Application for SCOP, SCRAP, or MSCOP
- SCOP and SCRAP
  - Submit to HRTPO by January 28; Priorities by March 15
- MSCOP
  - Submit to FDOT Central Office by March 22 and copy the HRTPO





# 8) Long Range Transportation Plan (LRTP)

Page 41

#### Long Range Transportation Plan (LRTP)

- Describes a vision for the region as well as defines the policies, operational strategies, and projects.
- A LRTP identifies the cost feasible transportation improvements for a 25-year period.
- A LRTP is updated every 5 years to adjust to changing population forecasts and land uses and updated costs and revenues.
- Considers all transportation modes such as transit and bikes
- Includes Congestion Management Process for relatively inexpensive projects such as intersections.
- It involves input of government and citizens
- It is adopted by the Transportation Planning Organization



#### **Travel Demand Modeling Overview**





#### What Is a Traffic Model?

- Typical definition:
  - A computer program that replicates the travel choices that individuals make
- Simply: A forecast of future travel patterns
  - Where are people traveling to and from?
  - What routes are they choosing to get there?



#### Why Are Models Important?

- They help us determine how much traffic will be on our roadways in the future.
- They help us to understand the impact that development has on our transportation system.
- They guide future transportation improvements.
- Allows us to think--what if?



#### **Components of a Travel Demand Model**

- Population (how many people do we have?)
- Households (where do they live?)
- Hotels/Motels
- Employment (jobs, shopping, restaurants, recreation, etc.)
- Schools (K-12, College locations)







# Heartland 2060 Building a Resilient Region



#### **Consortium Partners**

- DeSoto County
- Glades County
- Hardee County
- Hendry County
- Highland County
- Okeechobee County

- CareerSource Heartland
- FHREDI
- Sebring Airport Authority
- University of Florida
- Archbold Biological Station
- Central Florida Regional Planning Council



#### **Heartland Regional TPO Population Change**

			% Change		% Change
County/Area	1990	2000	1990-2000	2010	2000-2010
DeSoto	23,865	32,209	34.96%	34,862	8.24%
Hardee	19,499	26,938	38.15%	27,731	2.94%
Highlands	68,432	87,366	27.67%	98,786	13.07%
Okeechobee	29,627	35,910	21.21%	39,996	11.38%
Glades	7,591	10,576	39.32%	12,884	21.82%
Hendry	25,773	36,210	40.50%	39,140	8.09%
Six County Region	174,787	229,209	31.14%	253,399	10.55%
Florida	12,938,071	15,982,824	23.53%	18,801,310	17.63%
Nation	248,718,302	281,424,603	13.15%	308,745,538	9.71%

Sources: 2009 BEBR and the 2010 Census Release at http://2010.census.gov/2010census/data/index.php, US Census Bureau



#### Transportation, Land Use and Natural Resources:





The population in the Heartland is projected to double in size by 2060.

#### **Projected 2060 Population**







#### The Heartland Tomorrow... Future Industry Clusters

#### Where we could be going...







#### **Projected 2060 Employment**

Today's economy is expected to almost double







#### **Projected 2060 Employment**

Projected jobs increase by 11% in the Energy-Focused Economy and 10% in the Trade Economy





#### **Forecast Data for the Heartland Model**

- By Traffic Analysis Zone (TAZ)
- Data forecast to 2040
- Based upon BEBR
- Based upon the adopted Future Land Use for 6 Counties and each City
- Regional Economic Model, Inc. (REMI)
- Land Use Allocation Model by University of Florida
- All environmental and natural system GIS for the region used in model
- Guided by expert focus groups, volunteers, citizens, and the Heartland 2060 Consortium



# To provide the socio-economic data by Traffic Analysis Zone (Z-data) which is the basis of forecasting trips for the future.



#### Traffic Analysis Zones (TAZ)

- What is a TAZ?
- Geographic area where data is stored
- Population, Employment, School Enrollment
- Similar to Census geography (aggregated)
- Aggregated Census Blocks



#### **Traffic Analysis Zones (TAZ)**





#### **The Four Step Model**





#### **Trip Generation**

Determines how many trips are being produced from and attracted to each TAZ?



#### Productions and Attractions



#### **Trip Distribution**





#### **Trip Assignment**

# The path on the roadway network a trip will most likely take between zones



#### **Model Outputs**

- Link volumes and speeds
- Estimates of regional Vehicle Miles Traveled (VMT) and Vehicle Hours of Travel (VHT)
- Measures of congestion Volume to Capacity Ratio (V/C)



#### **Roadway Network**





#### Loaded Network Volumes (on Plots)





#### **Models**

- Two Time Frames
  - Base Year (new base year 2015)
  - Forecast Year (new forecast year 2045)
- Base Year Model
  - Calibrated to match traffic counts
  - Replicates existing conditions
  - Gives confidence for future predictions



#### **D1RPM - District 1 Regional Planning Model**





#### HRTPO 2040 Draft Roadway Deficiencies





#### **Cost Feasibility**

# The difference between wishing and dreaming and having an adopted Long Range Transportation Plan!







### Long Range Transportation Plan

- Must be updated at least every 5 years to maintain a 25-year horizon year
- May be amended at anytime with technical analysis, required advertising, Committee review (TAC/CAC), and public involvement
- Major projects must be in the LRTP for FDOT and FHWA funding
- It must be multi-modal
- Coordination between local government Comprehensive Plans and the LRTP are key links to the TPO process



# **Anticipated Schedule**





# What is a Strategic Intermodal System?

- Florida's highest priority of transportation hubs, corridors, and connectors
- Primary focus for implementing the Florida Transportation Plan
- Focus on moving people and freight
  - Between Florida and other states and nations
  - Between regions of Florida
- Re-evaluated every 3 years
- HRTPO does not set these priorities but they must be part of the LRTP



#### **Network Alternatives** Okeechobee, SR 710 Extension Phase 3





# **Network Alternatives**

Hardee/Highlands, County Connector @ Schumacher Rd





#### **Network Alternatives** DeSoto, South County Connector





#### After the LRTP: Typical Progression of Project Phases







# 9) FDOT Update



# **10) Other Business**



# **11) Next Meeting**

March 20, 2019 10 a.m. CareerSource Heartland