

MPOS AND PERFORMANCE DATA

Carl Mikyska

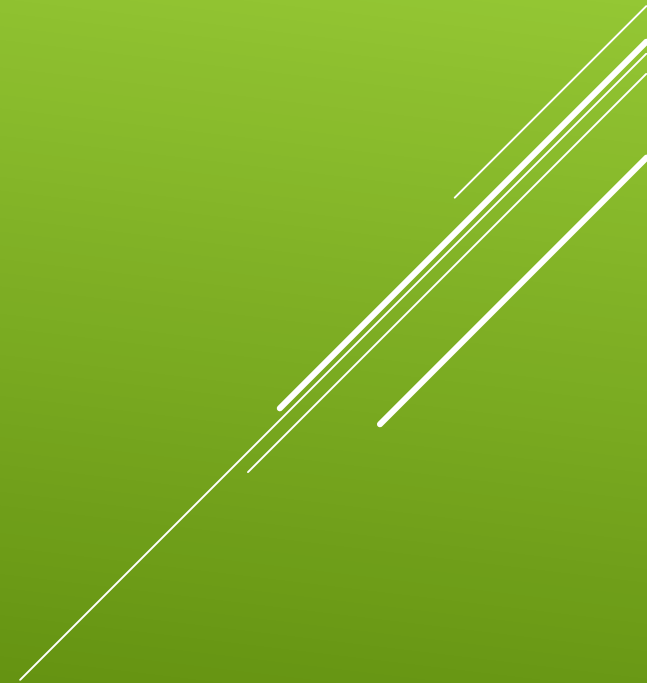
Executive Director

Florida Metropolitan Planning Organization Advisory Council

OPENING THOUGHT ON DATA

No data on air propeller was available, but we had always understood that it was not a difficult matter to secure an efficiency of 50% with marine propellers.

Orville Wright



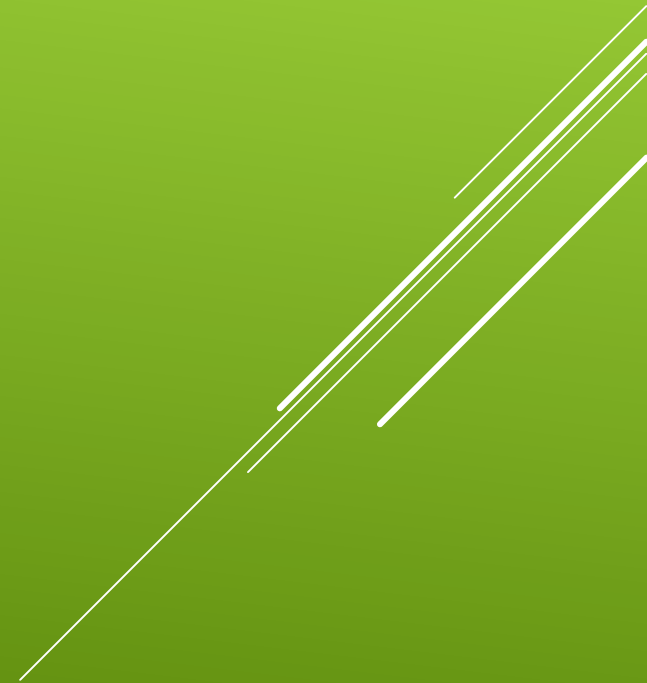
MPOS AND DATA

- ▶ Performance measures will be nothing new
 - ▶ MPOs have used data for years
 - ▶ MPOs are very good with data
 - ▶ Data has gotten easier
 - ▶ Getting it
 - ▶ Transferring it



MPOS AND DATA - CONTINUED

- ▶ A lot of unknowns
 - ▶ Time
 - ▶ Expense
- ▶ FDOT Role - Provider



EXAMPLES OF MPOS DEMONSTRATING DATA PROFICIENCY



Using data to rank projects

RIVER TO SEA TPO

(3) Mobility and Operational Benefits (30 points max.)

This criterion looks at the extent of traffic operational benefits that will be derived from a proposed project.

Mobility and Operational Benefits		Points	
Existing volume to capacity ratio (i.e., existing congestion severity)	Select only one	< 0.75	☐ 0
		0.75 to 0.99	☐ 3
		1.00 to 1.25	☐ 4
		> 1.25	☐ 5
Mobility Enhancements (i.e., level of increased mobility that a project will provide)	Select all that apply	- None	☐ 0
		- Bike, Pedestrian or Transit	☐ 0 - 5
		- Access Management, ITS, Critical Bridge, Intersection Improvement, or Traffic Signal Retiming ¹	☐ 0 - 10
Approved signal warrant (new signals only), left turn phase warrant, left turn lane warrant, street light warrant or widening justification ² , access management or ITS improvements ³	Select only one	No	☐ 0
		Yes	☐ 0 - 5
Hurricane evacuation route upgrade including, but not limited to, converting critical traffic signal to mast arm or other operational improvements ⁴	Select only one	No	☐ 0
		Yes	☐ 0 - 5
Subtotal			0 - 30

¹ Attach Traffic Signal Timing Study.

² Attach Warrant Study to application; otherwise VTPO staff will assume that a Warrant Study justifying the improvement has not been completed.

³ Access management and ITS improvements include, but are not limited to, addition of non-traversable median greater than 50% project length, addition of curb/gutter at intersection or greater than 50% project length, closure of minor intersections or crossovers, reduction of the number of access points (driveways or driveway widths), elimination of existing at-grade RR crossing, elimination of existing on-street parking, provision of traffic signal preemption for emergency vehicles, connection of three or more traffic signals, and new connection of traffic signal system to computerized signal control.

⁴ The term "other operational improvements" includes any improvement that will likely result in a significant: a) increase in vehicular capacity or b) reduction in the probable occurrence or severity of traffic delay and/or disruption from signal failure, lane blockage, etc.

Using data to
show needs

There is a lot
data assembled
to create these
“simple” maps

METROPLAN ORLANDO

Figure 4: 2040 HIGHWAY NEEDS (NUMBER OF LANES)

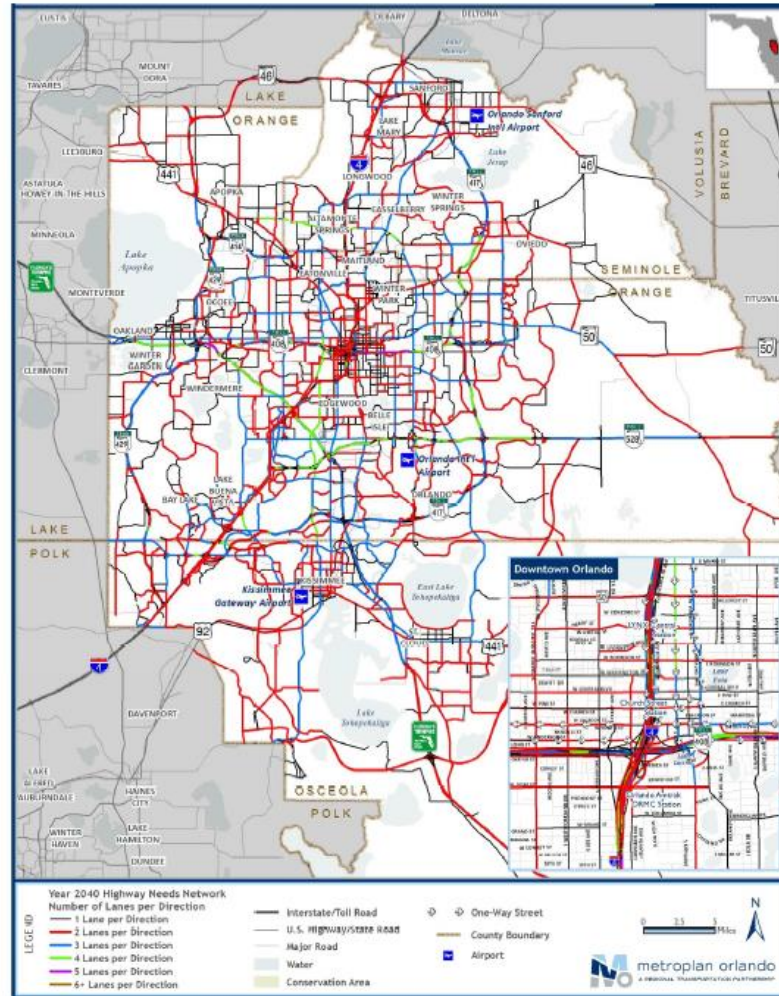
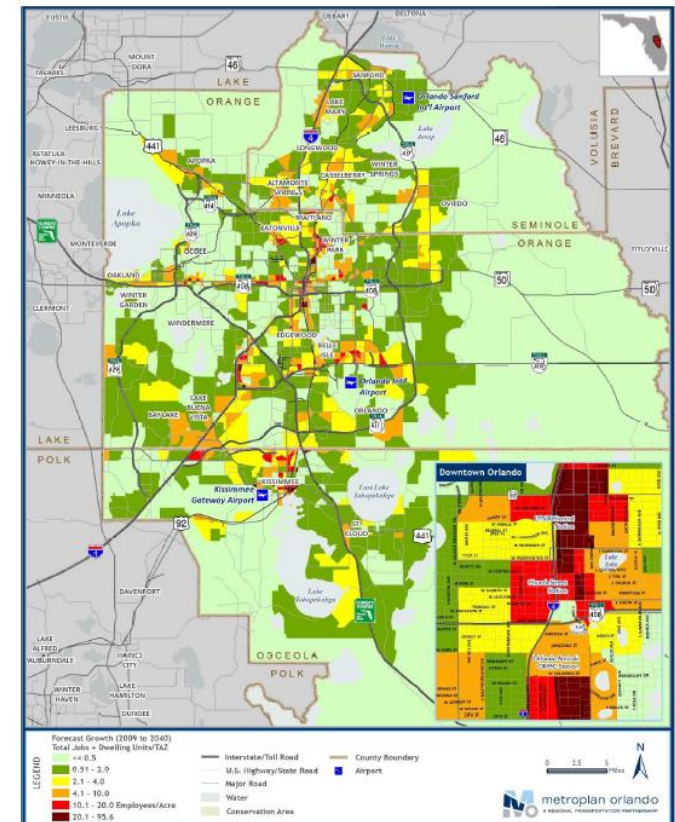
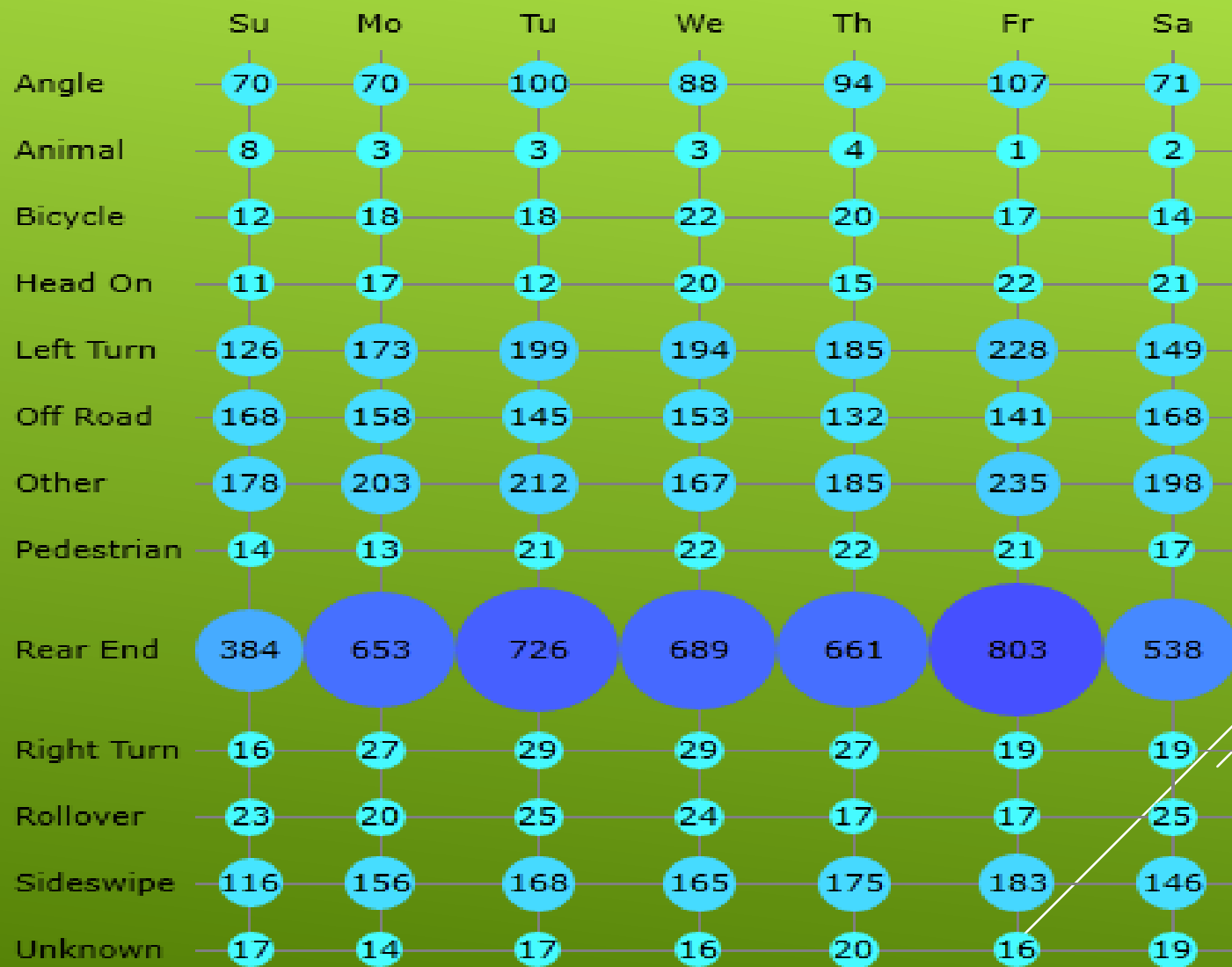


FIGURE 3: 2040 FORECAST GROWTH IN UNITS AND JOBS



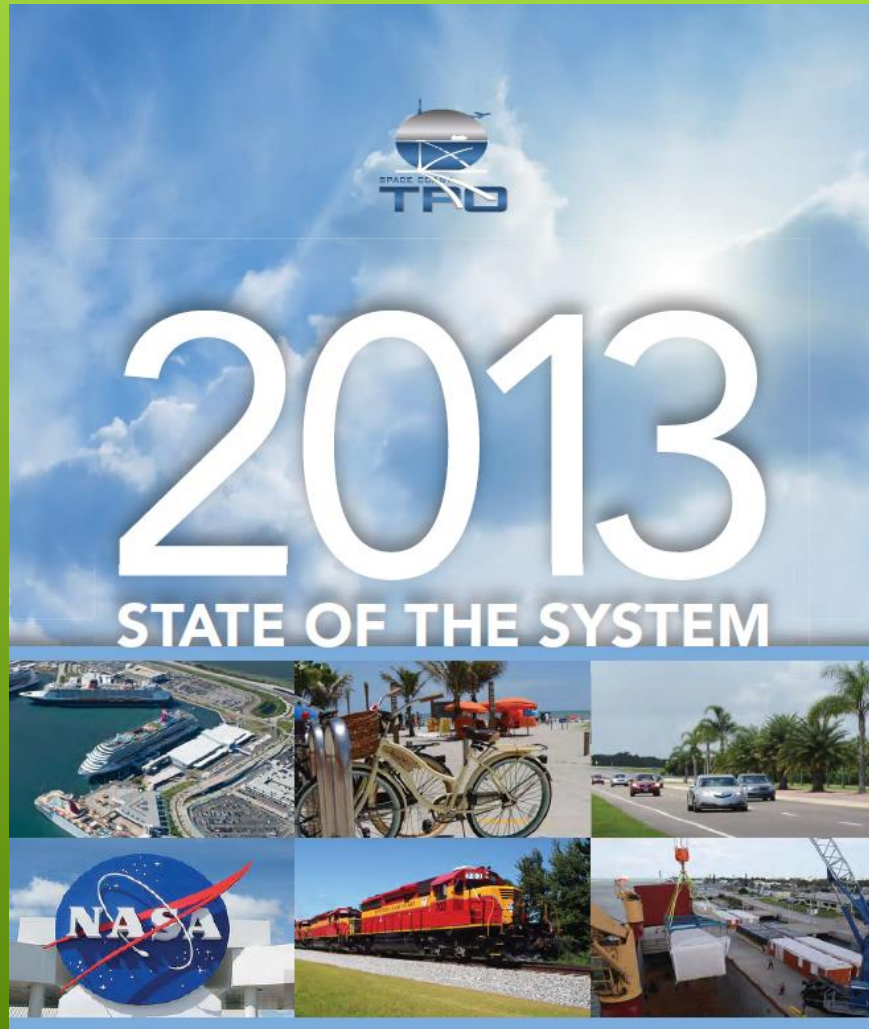
CRASH TYPES BY DAY OF THE WEEK

2ND QTR.



Source: Signal Four Analytics

METROPLAN
ORLANDO

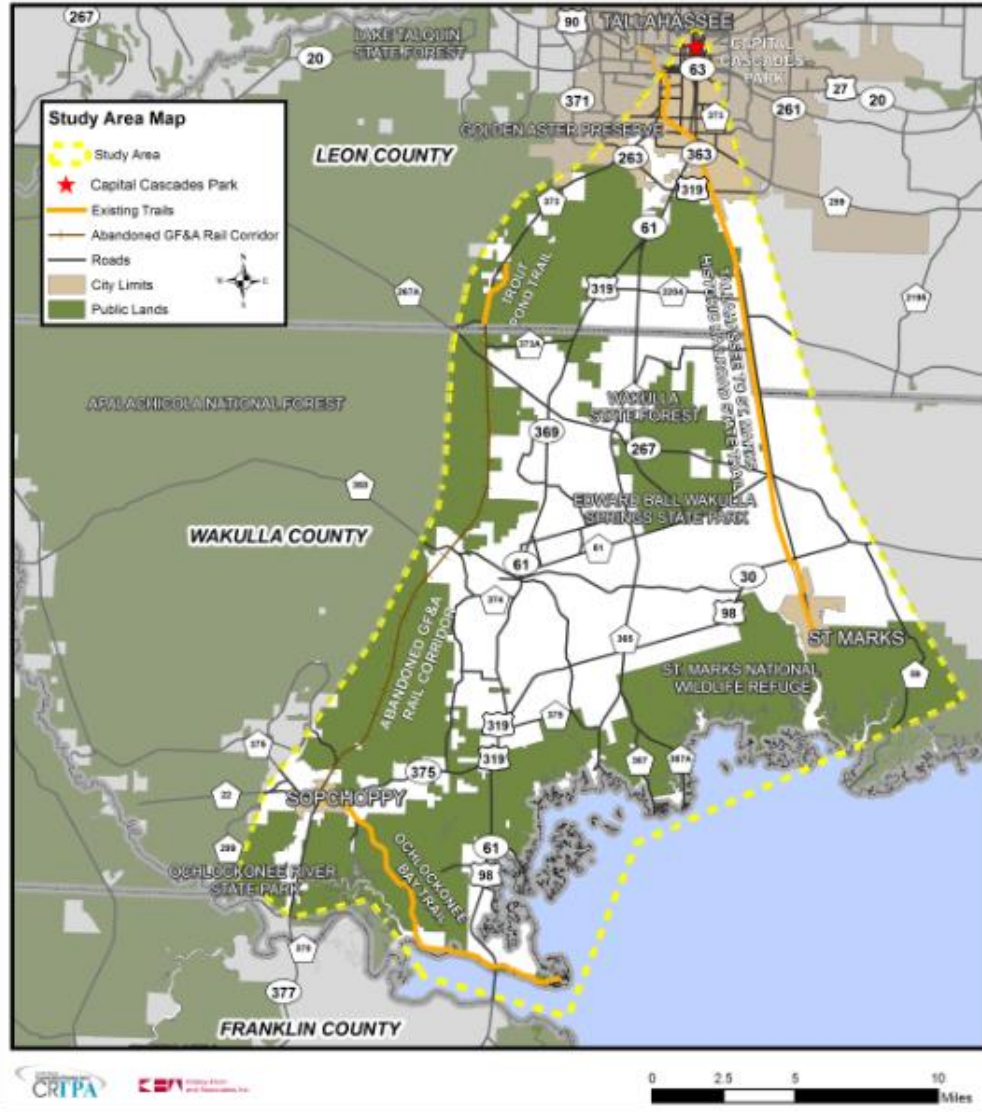


SPACE COAST TPO

- 232 pages
- Comprehensive
- A lot of data
- Great amounts of detail aggregated

Capital City to the Sea Trails

CONNECTING PEOPLE AND PLACES



Plans are:

Part Vision

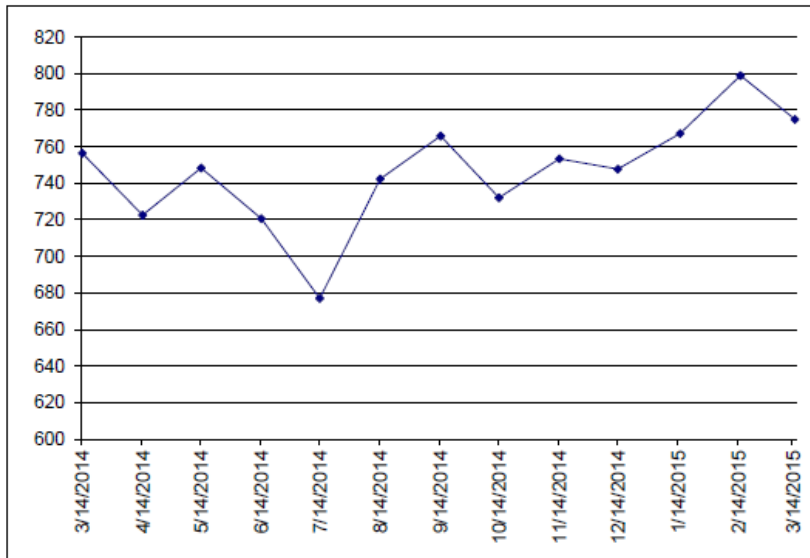
Part Research

Part Fact (Read Data)

CAPITAL REGION TPA

THE TREASURE COAST CONNECTOR (ROUTE 1 TO 6)
MONTHLY OPERATING STATISTICS

OPS # OF DAYS	TOTAL TRIPS	REVENUE MILES	REVENUE HOURS	TRIPS PER		DAY
				REVENUE MILE	REVENUE HOUR	
Mar-14	21	15885	26,172	1,848	0.61	8.60
Apr-14	22	15896	27,431	1,936	0.58	8.21
May-14	21	15715	26,146	1,848	0.60	8.50
Jun-14	21	15133	25,993	1,848	0.58	8.19
Jul-14	22	14894	27,162	1,936	0.55	7.69
Aug-14	21	15589	25,897	1,848	0.60	8.44
Sep-14	21	16083	25,947	1,848	0.62	8.70
Oct-14	23	16837	28,628	2,024	0.59	8.32
Nov-14	19	14313	23,694	1,672	0.60	8.56
Dec-14	21	15702	26,061	1,848	0.60	8.50
Jan-15	20	15344	24,917	1,760	0.62	8.72
Feb-15	19	15179	23,607	1,672	0.64	9.08
Mar-15	22	17048	27,257	1,936	0.63	8.81



MPOs are good at “Mining Data”



Traffic Counts and Level of Service Report
Fall 2014

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
KEEN RD	JUANITA AVE to ST LUCIE BLVD	2,566	590	220	C	0.393	225	C	0.402
KINGS HWY	OKEECHOBEE RD to CROSSROADS PKWY	7,321	790	321	C	0.406	328	C	0.415
KINGS HWY	CROSSROADS PKWY to GRAHAM RD	7,321	620	321	C	0.518	328	C	0.529
KINGS HWY	GRAHAM RD to PICOS RD	7,852	620	387	C	0.624	372	C	0.600
KINGS HWY	PICOS RD to ORANGE AVE	7,852	790	387	C	0.490	372	C	0.471
KINGS HWY	ORANGE AVE to ANGLE RD	14,224	870	749	C	0.861	754	C	0.867
KINGS HWY	ANGLE RD to ST LUCIE BLVD	11,141	790	613	C	0.776	616	C	0.780
KINGS HWY	ST LUCIE BLVD to INDRIIO RD	13,000	790	806	D	0.960	758	C	0.959
KITTERMAN RD	OLEANDER AVE to US 1	3,162	710	225	C	0.643	200	C	0.571
KITTERMAN RD	US 1 to LENNARD EXT	2,100	710	146	C	0.417	128	C	0.366
KIRBY LOOP RD	EDWARDS RD to 35TH ST	4,200	590	271	C	0.484	280	C	0.500
LENNARD RD	US 1 to MARIPOSA AVE	17,579	1,710	905	D	0.529	1,024	D	0.599
LENNARD RD	MARIPOSA AVE to MELALEUCA BLVD	17,579	1,710	905	D	0.529	1,024	D	0.599
LENNARD RD	MELALEUCA BLVD to JENNINGS RD	17,579	1,630	905	D	0.555	1,024	D	0.628
LENNARD RD	JENNINGS RD to HILLMOOR DR	17,579	1,710	905	D	0.529	1,024	D	0.599
LENNARD RD	HILLMOOR DR to TIFFANY AVE	17,579	1,710	905	D	0.529	1,024	D	0.599
LENNARD RD	TIFFANY AVE to WALTON RD	4,845	1,710	300	C	0.390	278	C	0.361
LENNARD RD	WALTON RD to S OF SAVANNA CLUB BLVD	3,450	790	510	D	0.646	541	D	0.685
LYNGATE DR	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	10,110	920	691	C	0.794	625	C	0.718
LYNGATE DR	MORNINGSIDE BLVD to US 1	10,110	920	691	C	0.794	625	C	0.718
MARIPOSA AVE	LENNARD RD to HALLAHAN ST	6,997	840	601	C	0.761	610	C	0.772
MCNEIL RD	OKEECHOBEE RD to KIRBY LOOP RD	4,400	790	256	C	0.656	276	C	0.708
MCNEIL RD	KIRBY LOOP RD to EDWARDS RD	4,400	510	256	D	0.502	276	D	0.541
MCCARTY RD	WILLIAMS RD to MIDWAY RD	350	510	32	C	0.128	27	C	0.108
MCCARTY RD	MIDWAY RD to OKEECHOBEE RD	300	510	30	C	0.120	31	C	0.124
MELALEUCA BLVD	LENNARD RD to GREEN RIVER PKWY	9,100	920	598	C	0.687	541	C	0.622
MIDWAY RD	EAST TORINO PKWY to MILNER DR	19,000	840	950	F	1.131	985	F	1.173
MIDWAY RD	MILNER DR to W OF SELVITZ RD	19,000	750	950	F	1.267	985	F	1.313
MIDWAY RD	OKEECHOBEE RD to SHINN RD	4,802	760	277	C	0.413	352	C	0.525

* Volumes shown were adjusted using FDOT Seasonal Factors

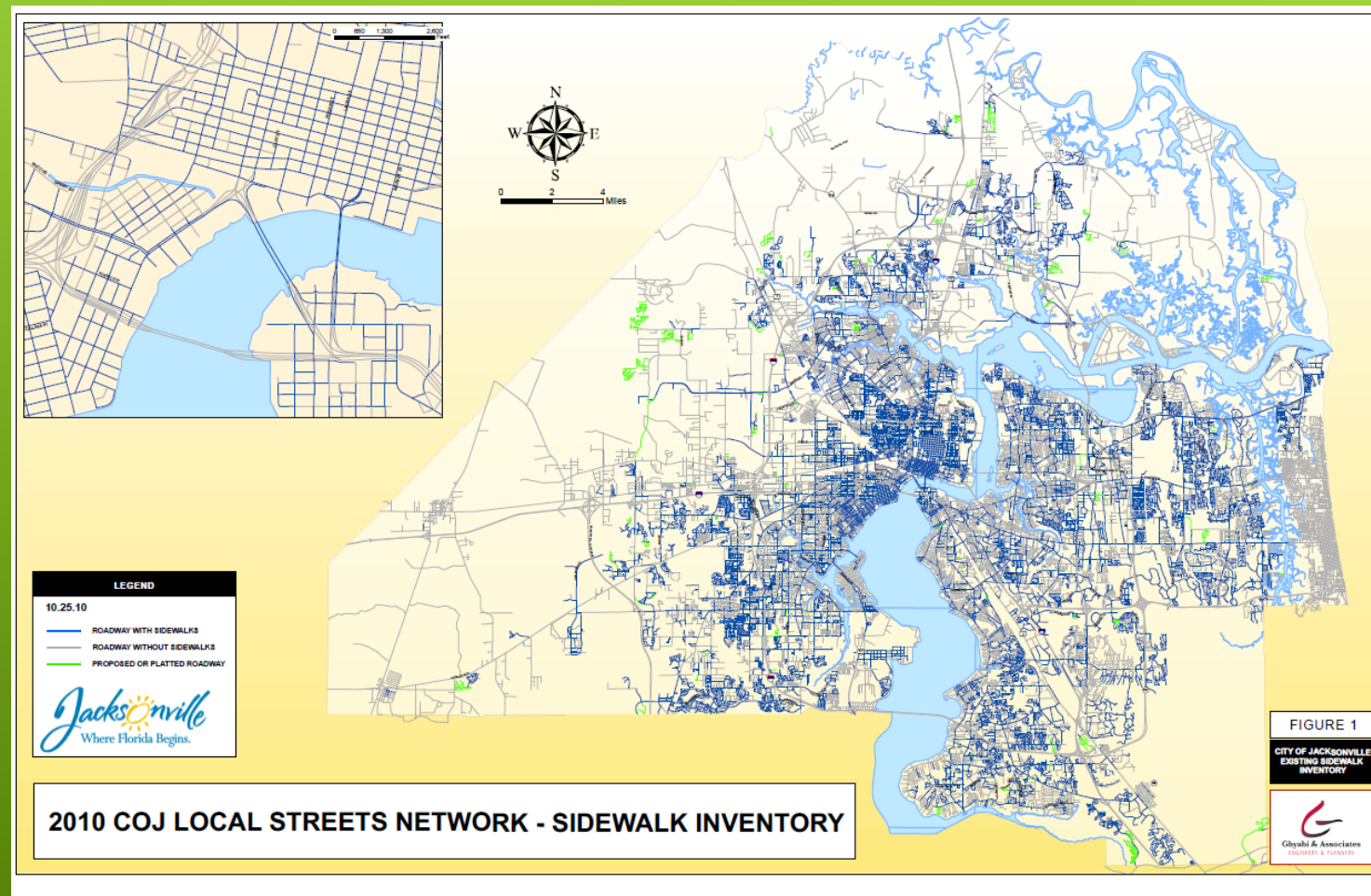
* AADT = Annual Average Daily Traffic

ST. LUCIE TPO

A complete inventory of sidewalks in Jacksonville

Data Intensive!

Great for
decision-making



JUST WHAT WILL BE REQUIRED?

It could be “No big deal” or it could be “OMG!!!!”

The Devil is in the details

- ▶ Time and Money
 - ▶ Already have it?
 - ▶ How reported?
 - ▶ Same format?
 - ▶ Transfer effort?

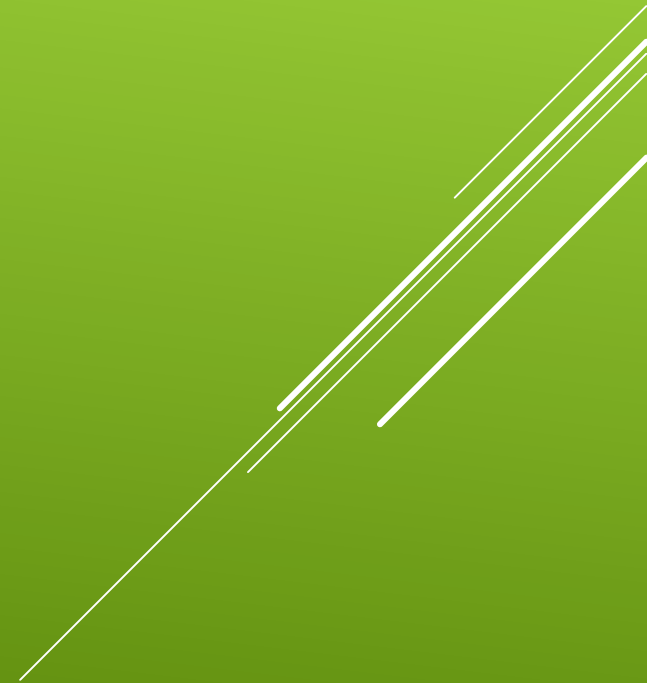


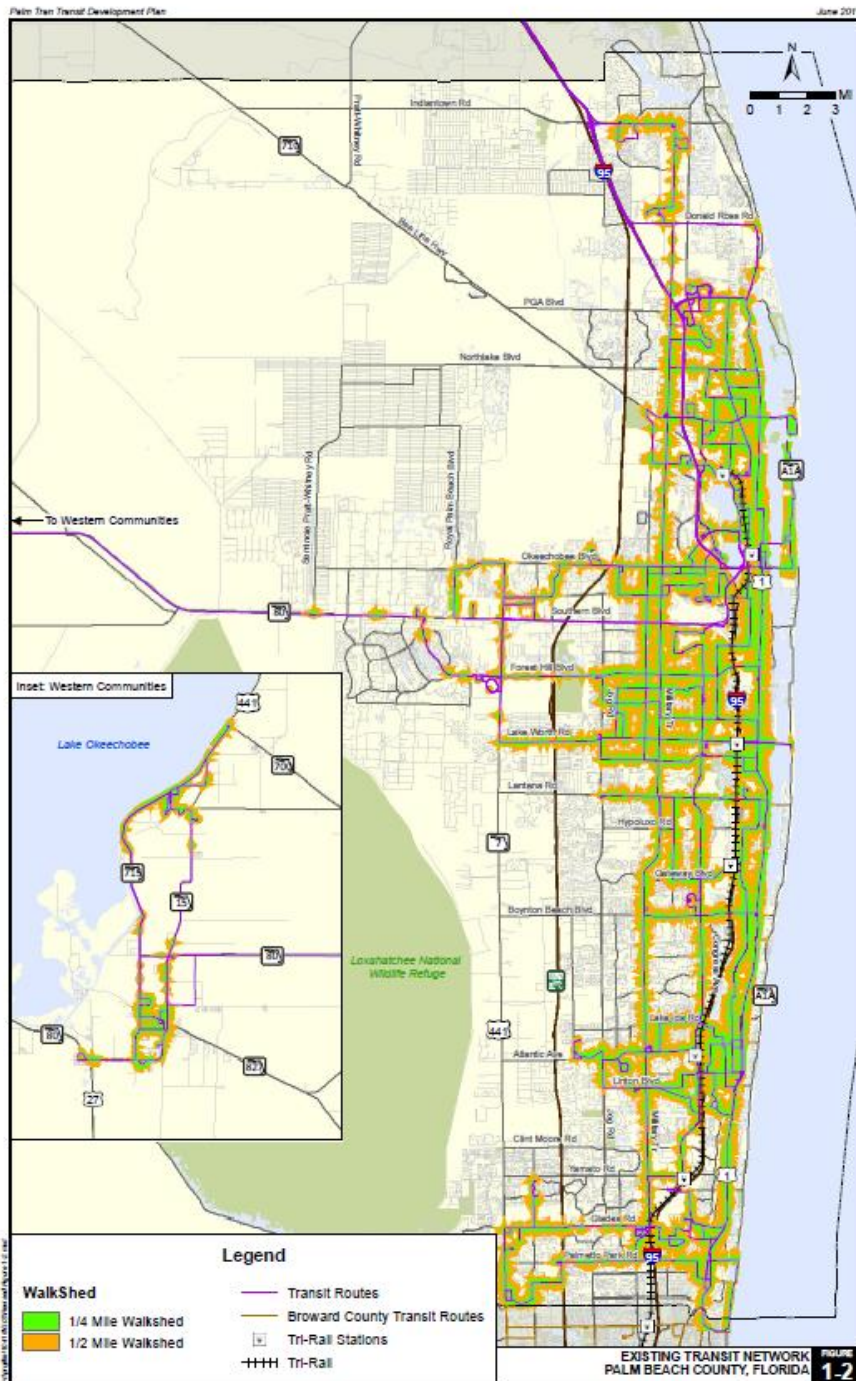
MPOS HAVE:

- ▶ Lots of data
- ▶ The capability

▶ THE BIG QUESTIONS

- ▶ Does the request match what we have?
- ▶ Will I have to collect new data? – Very expensive and time-consuming





PALM BEACH MPO

It is evident that this took a lot of data and time to produce

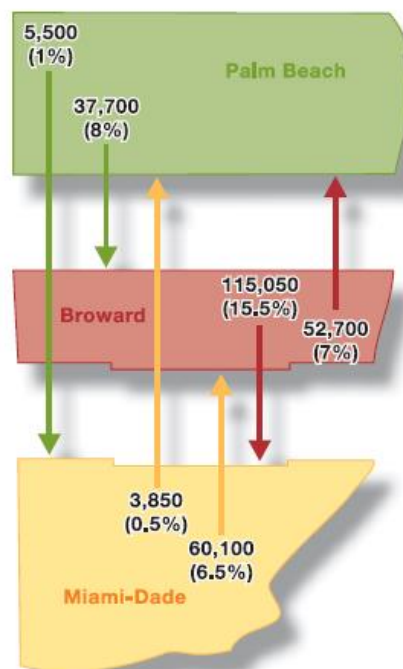
But.....

Data and Analysis

Travel Patterns and Commuting

Many residents of our region work and live in different counties, making regionalism more and more important as we continue to grow over the next two decades. Herein different regional travel patterns are summarized.

2000 Census Commuter Patterns



This looks easy.....

Simplicity is a key in communicating

Don't confuse good communication with ease of effort!

BROWARD MPO

CLOSING

To write it, it took three months; to conceive it three minutes; to collect the data in it all my life.

F. Scott Fitzgerald explaining his novel *This Side of Paradise*



REMEMBER – THERE ARE 2 RULES TO SUCCESS

1. Never tell everything you know.



QUESTIONS?

