METROPOLITAN PLANNING ORGANIZATION BOARD EXECUTIVE COMMITTEE

1:30 p.m., September 9, 2015

Cape Coral Public Works Building Room 200 815 Nicolas Parkway, Cape Coral, FL 33915



AGENDA

Call to Order

Roll Call

New Business

- 1. Public Comments on New Business Items
- 2. *Election of a Chair for the meetings (Don Scott)
- 3. *Evaluation of the MPO Director (Don Scott)
- 4. +TIGER Project Update (Johnny Limbaugh)
- 5. +Presentation and Discussion on the 2040 Long Range Transportation Plan (Don Scott)
- 6. +Discussion on the SR 82 Lee Boulevard to Shawnee Road Pavement Selection Report (Don Scott)

Other Business

- 7. Public Comments on Items Not on the Agenda
- 8. Announcements
- 9. Information and Distribution Items

Adjournment

All meetings of the Lee County Metropolitan Planning Organization (MPO) are open to the public. In accordance with the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting should contact Mr. Johnny Limbaugh at the Lee MPO 48 hours prior to the meeting by calling (239) 330-2242; if you are hearing or speech impaired call (800) 955-8770 Voice / (800) 955-8771 TDD. Or, e-mail ilimbaugh@leempo.com.

The MPO's planning process is conducted in accordance with Title VI of the Civil Rights Act of 1964 and related statutes. Any person or beneficiary who believes he has been discriminated against because of race, color, religion, sex, age, national origin, disability, or familial status may file a complaint with the Lee County MPO Title VI Coordinator Johnny Limbaugh at (293) 330-2242 or by writing him at P.O. Box 150045, Cape Coral, Florida 33915-0045.

ELECTION OF A CHAIR FOR THE EXECUTIVE COMMITTEE MEETINGS

RECOMMENDED ACTION: Councilman Leonardo has resigned from the MPO and we

now need to elect a Chair for the Executive Committee

meetings.

Councilman Leonardo resigned from the MPO Board on August 24, 2015 and we now need to elect a Chair for the Executive Committee meetings. In addition, the MPO Board will now need to elect a new Chair of the MPO Board and staff would like to discuss the options based on the rotation of the members we have followed in the past and addressing the addition of the Village of Estero into that list. Listed below is the order of the rotation for the Chair and Vice Chair that we have followed in the past:

- City of Fort Myers (Current Chair)
- Lee County (Current Vice-Chair)
- Town of Fort Myers Beach
- City of Cape Coral
- City of Sanibel (Current Treasurer)
- City of Bonita Springs

COMPLETE AND APPROVE THE EXECUTIVE DIRECTORS EVALUATION

RECOMMENDED ACTION: To complete and approve an evaluation of the Executive

Director.

Since the MPO became independent, the Executive Committee has evaluated the MPO Executive Director. The evaluation is attached for the Committee members use in evaluating the performance of the Executive Director and to identify any goals for the next year or areas for improvement. Staff is asking the Committee members to fill out the evaluation prior to the meeting and then bring it to the meeting where the results of the review will be discussed. The staff has filled out the accomplishments section from some of the accomplishments that the MPO has had over the last year.

As part of the evaluation process, the Executive Committee will also be asked to weigh in on whether to provide staff raises as part of this process. The last MPO staff raises of 3% were received back in February of 2014 consistent with raises that were being provided in the local jurisdictions.

Executive Director Performance Evaluation Form

Employee Name:	_Donald Scott
Evaluation Date:	_September 9, 2015

This evaluation is for the period ending September 1, 2015.

Each Board Member is to give some thought to the Executive Director's performance over the last year. For each of the evaluation categories, bullet points have been provided to assist you with the evaluation.

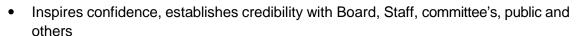
Prior to the September 9, 2015 MPO Executive Committee meeting, please make note of your observations using this form and bring it with you to the meeting. At the meeting, the Board will reach a consensus on the ratings and comments for each category in order to "speak in one voice."

The Employee will be evaluated on the following areas:

- Leadership
- Management
- Communications
- Policy Matters
- Staff Development

Leadership

Rating:	
---------	--



- Maintains a "BIG PICTURE" outlook and is aware of MPO and transportation issues
- Exhibits diligence in leading the organization
- Forecasts trends, responds to change, and invites innovation
- Solicits and acts upon ideas of others when appropriate
- Provides direction and support to the Board regarding its obligations and role
- Demonstrates excellence in carrying out job responsibilities and accomplishing goals
- Engages in learning and growth activities to improve job performance
- Participates in relevant and worthwhile professional organizations

General Comments or Examples:			

Management

Rating:	

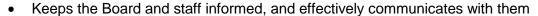


- Manages the MPO's activities consistent with relevant laws, policies and procedures
- Develops reasonable budgets, communicates them to the Board, and operates within budgetary limits
- Ensures the efficient and effective functioning of the MPO through delegation to the staff and consultants
- Recognizes the need for internal controls and promotes their value to the staff
- Exhibits skill in problem solving

General Comments or Examples:			

Communications

Rating:	



- Represents the MPO as the primary spokesperson and liaison to the committee's, consultants, state officials, local jurisdictions and the public
- Provides information on legislative or regulatory matters impacting the MPO
- Organizes ideas and information logically and presents them well
- Effectively communicates, speaks and writes clearly and concisely the issues at hand using understandable terminology
- Manages communications with the media and the general public
- Projects a positive image as the Executive Director of the MPO

General Comments or Examples:			

Policy Matters

Rating:	

- Understands and respects the Board's policy role
- Assists the Board on policy matters including the overall direction of the MPO
- Recommends policies or changes to policies to comply with laws and procedural changes as well as implementing the best practices in the transportation field
- Effectively interprets Board policies and concerns and develops a consistent direction for the staff to follow
- Initiates changes in day-to-day operations to conform to established Board policies
- Provides well-balanced information and clear recommendations to the Board

General Comments or Examples:			

Staff Development

Rating:
5- Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable
 Creates an atmosphere that fosters teamwork, creativity, and public participation Assures all employees are well informed regarding MPO policies, procedures, and strategic direction Sets clear standards of performance for the staff Encourages professional development and appropriate training of staff Addresses cross training Assists staff in problem solving General Comments or Examples:

Rating Summary

Categories	Rating
Leadership	
Management	
Communications	
Policy Matters	
Staff Development	
Overall	
ary Comments:	

Significant Accomplishments:

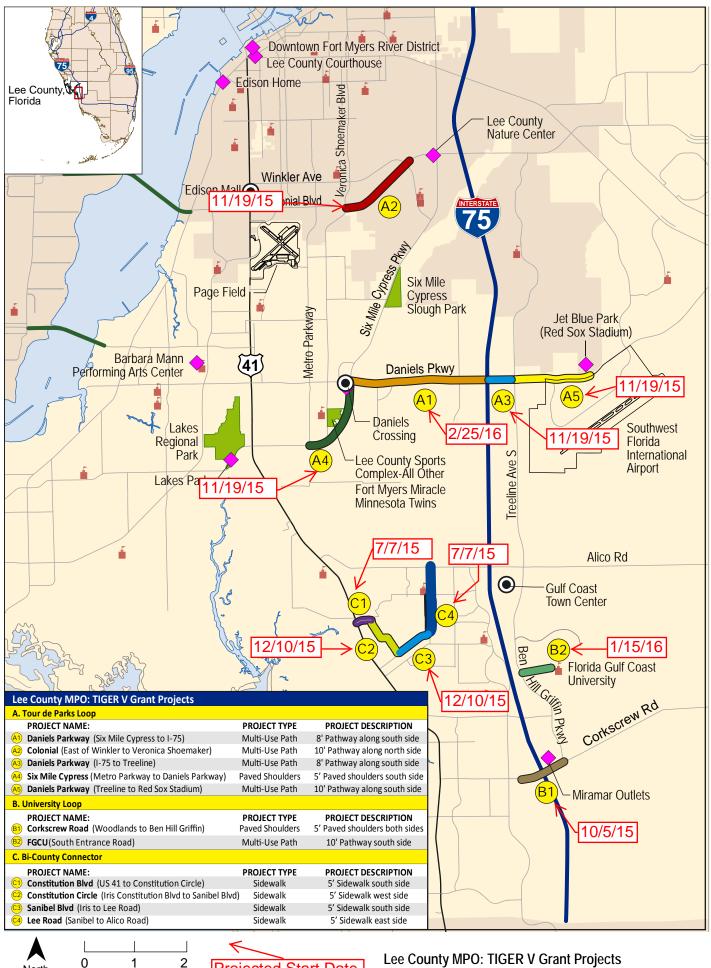
TIGER CEI and Design Build project underway with first segments now under construction. Ongoing planning studies including the tasks needed for updating the 2040 Long Range Plan, Transit Bus Queue Jump study, Bus Pull-out Study and San Carlos pre-PD&E study. Process Local Agency Program agreements for upcoming studies to include the round-a-bout studies and the Cape Coral Bicycle Pedestrian Master Plan. Update of MPO documents and agreements including amendments to the TIP, UPWP, LRTP and TDSP. Development of updated urbanized boundaries and roadway functional classifications. Develop MPO priorities including Joint priorities with Collier and Charlotte MPO's. Completed quadrennial federal certification and yearly state certification. Presentations to APA, ECCL, Hackathon, MPOAC, Healthy Lee, Community Agency Affinity Group, Estero Transportation Committee, Panther Sub-committee and Lehigh Acres Community Council. Participate and attend statewide performance measurement Committee, MPOAC, APA, CUTS, LAP, Panther Recovery Subcommittee, SIS/FTP and Freight Meetings. Held sixty one TAC, CAC, LCB, TMOC, BPCC, MEC and MPO Board Meetings and three public workshops. Upgraded software to include Microsoft Project, timesheet program and electronic procurement submittal and selection process. Submit and received regional grant funding for next phase of rail study.

Areas Needing Improvement/Development Goals:

UPDATE ON THE TIGER PROJECT

RECOMMENDED ACTION: Staff will provide an update on the TIGER project.

The MPO staff will give an update on the TIGER project that now has project segments that are under construction in San Carlos Park. Attached is the project map and scheduled start dates for the various segments.



PRESENTATION AND DISCUSSION ON THE 2040 LONG RANGE TRANSPORTATION PLAN

RECOMMENDED ACTION: The MPO staff will give a presentation on the public

comments we have received to date and will discuss the

development of the cost feasible project list.

Over the last few months, the MPO staff and consultants have held two public workshops, various community meetings and have received comments from the website and online engagement activities. The MPO staff will give a presentation on the input we have received to date along with some of the new proposed roadway alternatives that have come up recently. **Attached** are the projects by jurisdiction along with the highlighted bridges that have been added to the Lee County list.

State and Federal Projects

at SR 884 Colonial Blvd/Lee Blvd Shawnee n/Transit, Pedestrian, and Capacity Improvements W. of Santa Barbara East of Pondella at Corkscrew Road Homestead Intersection at Colonial Blvd Collier Co. Line Business 41 Business 41 Business 41 Alabama Del Pine Dr Hancock Creek Blvd (NE 24th Ave) Chiquita Boulevard w/o Santa Barbara 24th Ave US 41	Interchange le 2 to 6 lanes Idella 4 to 6 lanes Interchange lad 4 to 6 lanes Intersection Inters		8.20 8.20 7.15 7.05 6.90 6.70 6.70 6.70 6.47 6.35 6.35 6.35 6.15 6.15 6.15 6.15 5.70	w w w w w w w w	70.00 36.80 78.00 35.30 70.80 70.80 11.40 11.40 19.90 61.50	0.50 0.50 0.50 0.50 3.20 5.20 3.20	Committed project Unknown PD&E study to determine Unknown, box funds and conduct operational study
onial Blvd/Lee Blvd Shawnee Pedestrian, and Capacity Improvements of Santa Barbara East of Ponde t Corkscrew Road Homesteac Intersection at Colonial Blvd Collier Co. Li Business 41 I-75 Shawnee Alabama Del Pine Dr Hancock Creek Blvd (N Shiquita Boulevard w/o Santa Barl 24th Ave US 41		85 85 86 86 87 87 80 80 80 80 80 80 80 80 80 80 80 80 80	6.35 6.30 6.35 6.35 6.15 6.15 6.15 6.15 6.15 6.15 6.15 6.1	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	36.80 78.00 35.30 35.30 70.80 70.80 11.40 11.40 26.50 61.50	2.90 0.50 3.20 1.20 5.20	Committed project Unknown PD&E study to determine Unknown, box funds and conduct operational study
Pedestrian, and Capacity Improvements V. of Santa Barbara East of Ponde at Corkscrew Road Homestead Intersection at Colonial Blvd Collier Co. Li Business 41 I-75 Shawnee Alabama Del Pine Dr Hancock Creek Blvd (N. Chiquita Boulevard W/o Santa Barl 24th Ave US 41		85 85 86 86 83 87 90 80 80 80 80 80 80 80 80	7.05 6.90 6.85 6.70 6.70 6.50 6.35 6.35 6.35 6.35 6.35 6.35 6.35 5.30	w w w w w w w	36.80 78.00 35.30 18.40 70.80 35.30 11.40 26.50 61.50	2.90 0.50 3.20 1.20 5.20 3.20	Unknown, box funds and conduct operational study
V. of Santa Barbara East of Ponde at Corkscrew Road Alabama Homesteac Homesteac Intersection at Colonial Blvd Collier Co. Li Business 41 I-75 Shawnee Alabama Del Pine Dr Hancock Creek Blvd (N:hiquita Boulevard w/o Santa Barl 24th Ave US 41		85 86 87 83 83 84 84 80 80 80 80 80 80	6.90 6.85 6.70 6.70 6.50 6.35 6.35 6.35 6.35 6.35 6.35 6.35 5.30	w w w w w w w	36.80 78.00 35.30 18.40 70.80 35.30 11.40 26.50 26.50 61.50	2.90 0.50 3.20 1.20 5.20 3.20	Unknown, box funds and conduct operational study
		96 86 83 79 79 90 82 84 80 80 80 80 80 80	6.85 6.70 6.70 6.50 6.47 6.35 6.35 6.15 6.15 6.15 6.15 6.15	w w w w w w w	35.30 35.30 18.40 70.80 35.30 11.40 26.50 61.50	0.50 3.20 1.20 5.20 3.20	Unknown, box funds and conduct operational study
		86 83 79 90 82 84 80 80 80 80 80 80 80	6.70 6.70 6.47 6.35 6.35 6.35 6.15 6.15 6.15 5.70	w w w w w w	35.30 18.40 70.80 35.30 11.40 26.50 19.90	3.20 1.20 5.20 3.20	Unknown, box funds and conduct operational study
		83 79 90 82 84 80 80 80 80 73 73	6.70 6.50 6.47 6.35 6.30 6.15 6.15 6.15 5.70	w w w w w w	18.40 70.80 35.30 11.40 26.50 61.50	1.20 5.20 3.20	Unknown, box funds and conduct operational study
		79 90 82 84 80 80 80 73 73	6.50 6.47 6.35 6.30 6.15 6.15 6.15 5.87	w w w w w w	18.40 70.80 35.30 11.40 26.50 19.90 61.50	1.20 5.20 3.20	
		90 82 80 80 80 80 73 73	6.47 6.35 6.30 6.15 6.15 6.15 5.87	w w w w w w	18.40 70.80 35.30 11.40 26.50 19.90 61.50	1.20 5.20 3.20	
		82 84 80 80 80 73 73	6.35 6.30 6.15 6.15 6.15 5.87	w w w w w	35.30 11.40 26.50 19.90 61.50	5.20	
		84 80 80 80 73 73	6.30 6.15 6.15 6.15 5.87 5.70	w w w w	35.30 11.40 26.50 19.90 61.50	3.20	
		80 80 80 73 73	6.15 6.15 6.15 5.87 5.70	w w w	11.40 26.50 19.90 61.50		
		80 80 73 84	6.15 6.15 5.87 5.70	\$ \$ \$	26.50 19.90 61.50	0.90	
		80 73 84	6.15 5.87 5.70	\$	19.90	2.00	
		73	5.87	\$	61.50	1.50	
SR 31 Buckingham Rd		84	5.70			2.50	
Sunnery Road	5	Č					Included in Lee to Shawnee wideing project
Daniels Parkway South of Winkler Avenue	er Avenue 4 to 6 lanes	69	5.53	\$	67.50	4.10	
SR 80 Charlotte Co. Line	o. Line 2 to 4 lanes	77	5.42	\$	58.10	4.20	
Homestead Hendry County Line	ty Line 2 to 4 lanes	77	5.35	\$	31.10	3.70	
Metro/Fowler SR 82		64	4.83				Improvement unknown
Van Buren Parkway Charlotte Co. Line	o. Line 2 to 4 lanes	89	4.80	\$	89.50	5.50	
Michigan Avenue Ortiz Avenue	nue 5 to 6 lanes	89	4.80	\$	2.10	0.90	
Fowler St Palm Beach Blvd	1 Blvd Two way	26	4.73	\$	5.50	1.00	Convert one way to two way traffic
at Bonita Beach Rd	Interchange	74	4.65	\$	91.40	0.50	
Fowler St Palm Beach Blvd	Two way	54	4.53	ئ	5.50	1.00	Convert one way to two way traffic
US 41 Business 41	41 4 to 6 lanes	26	4.50	\$	14.60	1.10	
Collier Co. Line s/o Caloosahatchee Bridge	hee Bridge 6 to 10 lanes	29	4.45		485.10	25.60	
at Daniels Parkway	Interchange	72	4.45	\$	91.90	0.50	
Bridge Replacement	Reconstruct Bridge	ge 54	4.42	\$	30.10		
US 41	New 4 lanes	26	4.03				used v/c from highest volume endpoint - total cost included ir
e/o US 41 e/o Prarie Pines	Pines 2 to 4 lanes	53	3.99				Total cost included in #96
I-75 SR 31	New 4 lanes	42	3.59	\$ 2	263.20	11.10	
Mellow Dr I-75	New 2 lane	33	2.69	\$	29.00	1.70	
Corkscrew Road Alico Road	ad New 4 lanes	26	2.40	\$	98.20	3.70	used v/c from highest volume endpoint
Phase III	Signal	12	0.75	\$	8.00	∀/N	

Notes	Unknown, box funds based on study														Project is committed			used v/c from highest volume endpoint												WB span replacement by 2028 (using toll rev)	Design underway; construction committed			Committed project				used v/c from highest volume endpoint	used v/c from nignest volume endpoint		used v/c from highest volume endpoint		used v/c from highest volume endpoint											
Length (miles)		3.64	1.30	0.50	1.00	1.70	4.20	1.00	1.00	1.50	0.70	2.80	2.80	2.30		5.50	3.30	2.70	5.50	1.40	4.50	1.00	4.20	4.30	3.60	7.20	3.60	1.80	1.00	0.80			2.30		8.10		:	2.10	2.30	2.20	3.90	7.00	3.70											
Cost		36.50	9.30	"		37.40						"	35.50			13.40						12.70		82.30		112.20		` '		10 10			20.70	30.10				32.70		33.10				26.00		1.00			1.00					3.00
Weighted Score	7.30	\$ 26.9	6.73 \$	6.55 \$		6.05	5.90				5.68 \$		5.60 \$			5.48						5.10 \$		5.05						4.85 \$		4.57 \$	4.48		4.33 \$	3.92		3.88					2.40 \$	Λ 40	\$	\$	\$	W 40	Λ υ	n v	\$	s	\$	φ.
Unweighted \ Score	92	95	87	87	5 5	2/	75	202	20	70	73	65	72	29	89	98	65	89	09	09	58	28	28	55	55	55	55	09	63	09	63	53	56	54	52	44	44	20	30	51	46	51	26											
Improvement	Intersection	2 to 4 lanes	2 to 4 lanes	Overpass	Reconstruction	4 to 6 lanes	4 to 6 lanes	Reconstruction	Reconstruction	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	4 to 6 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	New 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	4 to 6 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 3 lanes	2 to 3 lanes	Reconstruct Bridge	2 to 4 lanes	Reconstruct Bridge	New 2 lane	Reconstruct Bridge	New 4 lanes	Reconstruct Bridge	Reconstruct Bridge	New 4 lanes	2 to 4 lanes	2 to 4 lanes	New 4 lanes	New 4 lanes	New 4 lanes	Reconstruct Bridge Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge	Reconstruct Bridge
To		Van Buren Parkway	Luckett Road			Bell Blvd	e/o Ben Hill Griffin Pkwv			Sunrise	1-75	Business 41	SR 82	Buckingham Rd	Alabama	Alico Road	Gunnery Rd	Daniels Parkway	Beth Stacey Blvd	Homestead Rd	Homestead Rd	Bonita Beach Road	SR 80	SR 80	Pallii Beacii Bivu	Leeland Heights Blvd	Lee Blvd	Cypress Lake Drive	Metro Pkay		Airport Haul Road		SR 78	Plantation Koad	Hendry County Line			Gunnery Rd	Milwaukee	Alico Connector	Buckingham Rd	SR 82	Alico Road											
From	at Summerlin	Pine Island Road	Martin Luther King	at Santa Barbara	Segment 4	Lee Blvd	US 41	Segment 5	Segment 6	Milwaukee	Ortiz Avenue	NE 24TH	Gateway Blvd	Lee Blvd	Sunrise	Ben Hill Grittin	Lee Blvd	North of Alico Road	Gunnery Rd	23rd St SW	SR 82	Collier Co. Line	Buckingham Rd	Orange River Blvd.	SR 82	SR 82	SR 82	Gladiolus Drive	US 41		Ben Hill Griffin		US 41/N. Tamiami Tri	Metro Parkway Bridge Replacement	Sunshine Blvd			Buckingham Rd	SR 82	Airport Haul Road	e/o I-75	Alico	Corkscrew Road		Over Boca Grande Canal	Over Monroe Canal			Over Millors Gulley	Over Spanish Creek	Over Ficthers Creeekj	Over Cypress Creek	Over Porpoise Pass Canal	Over Pine Island Creek
Rank Facility	1 Colonial	2 Burnt Store Road	3 Ortiz Avenue	4 Veterans		5 Ortiz Avenue	8 Corkscrew Road				12 Luckett Road	13 Littleton Road	14 Daniels Parkway			1/ Corkscrew Road		Ė	1	22 Beth Stacey Boulevard		24 Livingston/Imperial Parkway		26 Buckingham Road	\top	29 Bell Boulevard				33 Cape Coral Bridge			37 Littleton Road	38 North Airport Rd Extension 39 Big Carlos Bridge		41 Big Hickory Pass Br		43 Luckett Road ext.	44 Luckett Road ext. 45 Homestead Boad				50 CR 951 Extension	51 Orange River Bridge 52 Alva Drawbridge					5/ Constitution Circle		60 River Road			63 Pine Island Road

Bonita Springs Projects

Ran	lk Facility	From	70	Improvement	Unweighted Score	Weighted Score	Cost	Length (miles)	Notes
1	Bonita Beach Road	1-75	Bonita Grande Drive	4 to 6 lanes	9/	5.75	\$ 19.00	1.50	
2	Terry Street	Bonita Grande Drive	West Imperial Parkway	2 to 4 lanes	58	5.45	\$ 28.70	1.50	
3	Bonita Grande Drive	Terry Street	Bonita Beach Road	2 to 4 lanes	26	4.48	\$ 20.40	1.00	
4	Sandy Lane Extension	Strike Lane	Pelican Colony	New 2 lane	46	3.90	\$ 23.43	1.00	
							\$ 91.53		

Jaco	Escility		Ę	monoxome	Unweighted	Weighted	+300	Length	Notes
Nallh			2		Score	Score	1603	(miles)	NOTES
1	Chiquita Boulevard	Pine Island Road	Cape Coral Parkway	4 to 6 lanes	61	5.23	\$ 72.60	4.50	
2	Andalusia Boulevard	Pine Island Road	Tropicana Parkway	4 to 6 lanes	28	4.68	\$ 6.90	0.40	
3	Andalusia Boulevard	Jacaranda Parkway	Kismet Parkway	New 4 lanes	58	4.68	\$ 26.30	1.10	
4	Kismet Parkway	NW 18th Avenue	Chiquita Boulevard	2 to 4 lanes	58	4.68	\$ 5.00	0:30	
2	NE 24th Avenue	Pondella Road	Garden Boulevard	2 to 4 lanes	28	4.68	\$ 48.20	2.50	
9	Tropicana Parkway	Chiquita Boulevard	Nelson Road	2 to 4 lanes	51	4.40	\$ 19.50	1.00	
7	Nelson Road North	Embers Parkway	Tropicana Parkway	2 to 4 lanes	55	4.38	\$ 9.60	0:20	
8	Kismet Parkway	Burnt Store Road	El Dorado Parkway	New 4 lanes	48	3.68	\$ 38.60	2.00	
6	NE 24th Avenue	Garden Boulevard	Del Prado Boulevard	New 4 lanes	48	3.68	\$ 26.90	08.0	
10	Surfside Boulevard	Trafalgar Parkway	Pine Island Road	New 4 lanes	41	3.65	\$ 36.30	1.00	
11	Garden Boulevard	North of DeNavarra Parkway	NE 23rd Place	2 to 4 lanes	39	3.20	\$ 12.70	0.70	
12	12 Jacaranda Parkway	Old Burnt Store Road	Burnt Store Road	New 2 lane	29	2.45	\$ 22.50	1.00	
							\$ 325.10		

Cape Coral Projects

Cost Length Notes (miles)	\$ 22.40 1.30		\$ 11.00 0.60			~ · · · · · · · · · · · · · · · · · · ·
Weighted Score	5.88	5.58	4.93	4.83	2.98	
Unweighted Score	77	29	58	64	41	
Improvement	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	2 to 4 lanes	New 4 lanes	
То	Veronica Shoemaker	Fowler St	Fowler St	SR 80	Ortiz Avenue	
From	Evans Avenue	US 41	US 41	Michigan Avenue	Veronica Shoemaker	
Facility	Hanson Street	Hanson Street	Edison Avenue	Veronica Shoemaker	Hanson Extension	
Rank	1	2	3	4	2	

Fort Myers Projects

DISCUSSION ON THE SR 82 LEE BOULEVARD TO SHAWNEE ROAD PAVEMENT SELECTION REPORT

RECOMMENDED ACTION: Follow up discussion from the MPO Board meeting on the

SR 82 Lee Boulevard to Shawnee Road concrete

determination.

At the last MPO Board meeting, there was discussion about the concrete versus asphalt discussions for the SR 82 from Lee Boulevard to Shawnee Road project. The FDOT had been asked to present at an upcoming MPO Board meeting on why concrete was chosen for the job as it raised the cost by about \$20 million dollars. To provide some additional information on this item, **attached** is the SR 82 Pavement Selection Report (minus the appendices) for the project that indicated that asphalt was the recommendation based on the factors analyzed.

PAVEMENT TYPE SELECTION REPORT

SR 82 (Immokalee Road)
From Lee Blvd. (CR 884) to Shawnee Rd.
Lee County, Florida

FPID No. 425841-1-52-01

Project Type: Reconstruction

Prepared for:

Florida Department of Transportation District One Bartow, Florida

January 2013

Prepared by:

Bowyer-Singleton & Associates, Inc. 520 South Magnolia Avenue Orlando, Florida 32801 Certification of Authorization No. 1221

No 68558

No 6858

No 68558

No 6858

No 68558

Raymond G. Lee, P.E.

P.E. License Number 66958

FDOT Concurrence

Bernie A. Masing, P.E.

FDOT District One Design Engineer

May 6-24-13

PAVEMENT TYPE SELECTION REPORT

SR 82 (Immokalee Road) From Lee Blvd. (CR 884) to Shawnee Rd. Lee County, Florida

FPID No. 425841-1-52-01

TABLE OF CONTENTS

EXEC		SUMMARY	
1.0	PROJ	ECT DESCRIPTION	1
2.0	PRINC	CIPAL FACTORS	2
	2.1	Traffic	
	2.2	Soil Characteristics	2
	2.3	Weather	
	2.4	Construction Considerations	.3
	2.5	Recycling	3
	2.6	Cost Comparison	3
3.0	SECO	NDARY FACTORS	4
	3.1	Performance of Similar Pavements in the Area	.4
	3.2	Adjacent Existing Pavements	.4
	3.3	Conservation of Materials and Energy	
	3.4	Availability of Local Materials or Contractor Capabilities	
	3.5	Traffic Safety	.4
	3.6	Incorporation of Experimental Features	
	3.7	Stimulation of Competition	.5
	3.8	Municipal Preference, Participating Local Government Preference and	_
		Recognition of Local Industry	.5
4.0	ECON	IOMIC ANALYSIS	
	4.1	Base Data	
		4.1.1 Time Periods	
		4.1.2 Rehabilitation Strategies	
		4.1.3 Design and Cost Assumptions	
		4.1.4 Flexible Pavement Assumptions	
		4.1.5 Rigid Pavement Assumptions	
		4.1.6 Exceptions	
	4.2	Pavement Type Selection Economic Analysis	
		4.2.1 Cost per Project Mile	
		4.2.2 Cost per Project	
5.0	CONC	CLUSION AND RECOMMENDATION	.9

PAVEMENT TYPE SELECTION REPORT

SR 82 (Immokalee Road) From Lee Blvd. (CR 884) to Shawnee Rd. Lee County, Florida

FPID No. 425841-1-52-01

APPENDICES

APPENDIX A: Project Location Map

APPENDIX B: Straight Line Diagram

APPENDIX C: Typical Section

APPENDIX D: Traffic Data

APPENDIX E: Resilient Modulus & Geotechnical Data

APPENDIX F: Flexible Pavement Design

APPENDIX G: Rigid Pavement Design

APPENDIX H: Pavement Type Selection Economic Analysis

APPENDIX I: Pavement Management Rehabilitation Statistics

APPENDIX J: Comments and Correspondence

APPENDIX K: PTSR Checklist

EXECUTIVE SUMMARY

This Pavement Type Selection Report has been developed in order to evaluate the type of pavement most appropriate for SR 82 (Immokalee Road), from east of Lee/Colonial Blvd. (CR 884) to east of Shawnee Rd., in Lee County. The project consists of fully reconstructing the existing two-lane undivided rural roadway to a six-lane divided high-speed urban roadway, a total distance of approximately 4.5 miles.

This report evaluates both flexible (asphalt) and rigid (concrete) pavement design sections in accordance with the FDOT *Pavement Type Selection Manual*, dated June 2011 (Document No. 625-010-005-D).

1.0 PROJECT DESCRIPTION

The project is located on SR 82 (Immokalee Road), in Lee County, Florida. The proposed project begins just east of the Lee/Colonial Boulevard (CR 884) intersection, in the City of Ft. Myers, and extends easterly to just east of Shawnee Road, in Lehigh Acres. A Project Location Map is shown in **Appendix A**.

SR 82 is classified as an Urban Minor Arterial from the beginning of project (M.P. 7.082) to just east of Lee Memorial Park (M.P. 8.711) and as a Rural Minor Arterial to the end of project (M.P. 11.544). The Straight Line Diagram for this section of SR 82, Roadway ID 12070000, is included in **Appendix B**. SR 82 is also classified as an emerging Strategic Intermodal System (SIS) facility and is designated as a hurricane evacuation route. The design speed for this facility is 55 miles-per-hour (mph). The proposed roadway will be centered in the existing 200-foot of right-of-way.

A six-lane high speed urban typical section, shown in **Appendix C**, is proposed consisting of three 12-foot wide travel lanes in each direction, separated by a raised 30-foot wide grassed median. This roadway section will also include six and one-half-foot (eight-foot useable) shoulders adjacent to the inside and outside travel lanes. Type E curb and gutter will be provided along the median and outside edges of the roadway along with a closed stormwater conveyance system. A continuous five-foot wide concrete sidewalk will be provided on the north side of the roadway and a 10-foot wide shared-use path will be provided on the south side of the roadway. Appropriate left and/or right turn lanes will be provided at major intersections. This high-speed urban typical section has a 49-foot border width and is to be constructed within the existing 200-foot of right-of-way. A Continuous Flow Intersection (CFI) will be provided at SR 82 and Daniels Parkway/Gunnery Road.

2.0 PRINCIPAL FACTORS

2.1 Traffic

Existing and projected traffic data and Equivalent Single Axle Loads (ESAL's) were provided by the FDOT District One Traffic Operations Office. (See **Appendix D**)

Traffic Data:

K =	8.8%
D =	53.8%
T _(24 Hour) =	11.2%
T _(Design Hour) =	5.6%
2012 AADT =	24,200
2015 AADT =	27,500
2035 AADT =	49,300

ESAL Data:

	Pavement Type	
	Flexible	Rigid
Opening to Mid-Design Year (2015-2025)	3,901,000	5,342,000
Opening to Design Year (2025-2035)	8,881,000	12,168,000

2.2 Soil Characteristics

Bulk soil samples were retrieved for Resilient Modulus (M_R) testing at 13 locations along the length of the project and transported to the FDOT State Materials Office in Gainesville, Florida. A design M_R value of 12,000 psi is recommended for use in the pavement design (See **Appendix E**)

Borings have generally encountered fine sand and silty sand soils (A-3 and A-2-4) of varying depths, between one-foot to more than 15-feet, below existing grades. Organic soil/muck was encountered in an isolated area and will be removed during construction in accordance with Standard Index 500. The estimated seasonal high groundwater table depths range from above the existing ground surface to 2 ½ feet below the existing ground surface. The Roadway Soil Survey Sheet and Soil Profiles are also provided in **Appendix E** of this report.

The proposed six-lane high-speed urban arterial typical section will be constructed on embankment fill material for the length of the project. The proposed roadway grades will provide at least three feet of separation between the roadway base and the estimated seasonal high groundwater levels.

Generally, the existing shallow subsurface soils encountered are suitable for supporting the proposed roadway improvements for both asphalt and concrete pavement types. However, the special select soil material Soil Embankment Option for concrete pavement design according to Standard Index 505 may be used because of the

predominance of mostly sandy soils present in the area based on the borings. The existing soil conditions favor the use of concrete pavement over asphalt pavement.

2.3 Weather

The project is located in Lee County. Extreme climate conditions such as freeze-thaw cycles will not be a determining factor on the selection of a pavement type for this project, since this project is located in South Florida. There are no concerns of extreme weather, except for the high rainfall conditions during the late spring and summer months. High rainfall conditions require consideration of adequate drainage for the roadway subgrade as well as the pavement surface for both asphalt and concrete pavements.

2.4 Construction Considerations

The anticipated sequencing for the construction of the roadway includes constructing the new eastbound lanes on fill embankment while maintaining traffic on the existing travel lanes. The next sequence of construction will be to shift traffic to the newly constructed lanes and construct the westbound lanes on fill. The median work will be completed in the final construction sequence. The phasing of construction in this manner does not have a strong influence on the pavement type selected for this project. However, the construction of the Continuous Flow Intersection (CFI) at Daniels Parkway/Gunnery Road will require multiple construction phases in order to maintain the existing traffic patterns. The complexity of the maintenance of traffic sequencing, with multiple traffic shifts onto newly paved sections of roadway, would favor the use of asphalt over concrete pavement because of the significant savings in material cure times.

2.5 Recycling

The Florida Department of Transportation has successfully recycled both asphalt and concrete pavements. There is an opportunity to recycle the existing asphalt pavement, during the construction of this project. Reclaimed asphalt pavement (RAP) material can be used as a component of new asphalt for this project within the allowable percentage tolerances. No concrete pavement exists to be recycled during the initial construction of the project. Should concrete be selected, there is an opportunity for future recycling of the material. The initial asphalt recycling opportunity favors the use of asphalt pavement over concrete pavement.

2.6 Cost Comparison

A detailed cost analysis is presented in **Section 4.2** and **Appendix H** of this report. An analysis period of 40-years is used to compare the present worth value of each alternative, including rehabilitation. The present worth per mile cost comparison between asphalt and concrete is as follows:

Asphalt Alternative Cost \$2,275,949 per mile

Concrete Alternative Cost \$4,256,075 per mile

The comparative cost analysis resulted in a present worth savings of \$1,980,126 per mile in favor of asphalt pavement over concrete pavement.

3.0 SECONDARY FACTORS

3.1 Performance of Similar Pavements in the Area

There have been no significant performance differences noted in District One for either asphalt or concrete. Therefore, both may be considered for construction on this project.

3.2 Adjacent Existing Pavements

The adjacent SR 82 roadway section to the west, from Ortiz Avenue to Lee Boulevard (CR 884), was recently reconstructed in 2012 using asphalt pavement. The adjacent roadway section, east of Shawnee Road, was resurfaced in 2010 using asphalt pavement. In addition, most of the intersecting roadways are constructed of asphalt pavement. This should not be a determining factor in the pavement type selection for this project. Either asphalt or concrete may be successfully constructed to match the existing asphalt at the project limits.

3.3 Conservation of Materials and Energy

The utilization of the Special Select Soil Option for concrete pavement could eliminate the need for asphalt treated permeable base, structural asphalt, and stabilized subgrade. In addition, optional base material and stabilization used for the asphalt pavement option could be eliminated. This could conserve materials and energy by not having to acquire, transport and place these materials at the site. Therefore, the use of concrete will conserve more materials and energy over that of asphalt.

3.4 Availability of Local Materials or Contractor Capabilities

Local materials are available for both asphalt and concrete pavement. For pavement type selection purposes, neither asphalt nor concrete availability is significantly different. However, the presence of select soil within the project area would eliminate the need for a stabilized subsoil and optional base material used in asphalt construction, which would favor concrete pavement over asphalt pavement.

The vast majority of FDOT roadway projects incorporate asphalt pavement rather than concrete pavement. As a result, the construction industry in Florida is more experienced in asphalt construction. For this reason, asphalt pavement has an advantage over concrete pavement.

3.5 Traffic Safety

Both asphalt and concrete pavements will provide an acceptable wearing course surface, delineation through pavement and shoulder contrast and reflectivity under highway lighting.

3.6 Incorporation of Experimental Features

No experimental features are included in this Pavement Type Selection Report.

3.7 Stimulation of Competition

It is desirable that monopoly situations be avoided, and that improvements in products and methods are encouraged through continued competition among industries involved in the production of paving materials. Because the vast majority of FDOT roadway projects incorporate asphalt pavement, the use of concrete pavement would stimulate more competition.

3.8 Municipal Preference, Participating Local Government Preference and Recognition of Local Industry

There has been no known preference stated by local municipalities, local governments, or local industry for one material over another. Therefore, it is assumed that either asphalt or concrete pavement would be acceptable for this project.

4.0 ECONOMIC ANALYSIS

4.1 Base Data

4.1.1 Time Periods

- The total analysis period = 40 years
- The initial pavement design life = 20 years

4.1.2 Rehabilitation Strategies

The Pavement Management statistics, included in **Appendix I**, indicate that the average age that asphalt roadways are rated deficient is 13.4 years statewide and 14.4 years in District One. The data analysis also indicates that the average rehabilitation age at which asphalt roadways are actually resurfaced statewide is 15.9 years.

The statistics indicate that concrete roadways are rated deficient statewide at an average age of 17.4 years and the average rehabilitation age at which concrete roadways are actually rehabilitated is 20.3 years.

The Pavement Management statistics support the following rehabilitation strategies for asphalt and concrete roadways recommended by the Pavement Type Selection Manual (June 2011).

Rehab Period	Asphalt Pavement		
14 Year	Mill 2 ¼", Resurface ¾" OGFC and 1 ½" Str. AC		
28 Year	Mill 2 ¼", Resurface ¾" OGFC and 1 ½" Str. AC		
	Concrete Pavement		
20 Year	CPR (3% Slab Replacement)		
30 Year	CPR (5% Slab Replacement)		

where:

CPR - Concrete Pavement Rehabilitation OGFC - Open Graded Friction Course Str. AC - Structural Asphaltic Concrete

4.1.3 Design and Cost Assumptions

- A discount rate of 3.5% will be used.
- Cost will be summarized by project mile.
- The cost of shoulder construction and rehabilitation will be considered in the economic analysis.
- Salvage value representing any significant remaining life after the last rehabilitation will not be considered in the economic analysis.
- Maintenance costs will not be considered in the economic analysis.

- User costs (motorist delay time, vehicle operating costs, and accident costs) are insignificant and not will be considered in the analysis.
- Maintenance of Traffic (MOT), Construction Engineering and Inspection (CEI) and Design costs will be 10% of construction costs and are anticipated to be the same for both asphalt and concrete pavement options. Therefore, these indirect costs will not be included in the economic analysis.
- Special select soils are present within the project corridor and should be paid for as embankment (Pay Item No. 120-6). Therefore, the costs associated for both asphalt and concrete pavements will be the same for embankment and will not be considered in the economic analysis.
- Units of construction were determined as follows:

Length of Project = MP 7.082 to MP 11.544 = 4.462 miles Length Used in Economic Analysis = 1 mile = 5.280 feet

Total Pavement Area = (5,280 ft. x 12 ft. per lane x 6 lanes) = 380,160 Sq. Ft.= 42,240 Sq. Yd.

Total Shoulder Area = $(5,280 \text{ ft. } \times (6.5+6.5 \text{ ft.}) \times 2 \text{ directions} = 137,280 \text{ Sq. Ft.}$ = 15,253 Sq. Yd.

4.1.4 Flexible Pavement Assumptions

- Future asphalt rehabilitation in years 14 and 28 will be to mill and resurface the existing 34" friction course and 1 ½" of structural course.
- Rehabilitation in year 28 includes the addition of 1" of structural course.
- It is assumed that future milling will remove cracked pavement and an ARMI layer will not be required.
- FC-5 is not included in the initial asphalt construction but is included in the rehabilitation scenarios.
- FC-5 is included in the shoulders for a high-speed urban arterial roadway section.

4.1.5 Rigid Pavement Assumptions

- Future concrete rehabilitation in years 20 and 30 will respectively include 3% and 5% slab replacement, cleaning and resealing joints and grinding.
- It is assumed that the existing select soils have sufficient stability for construction of the concrete pavement option. Therefore, the three inches of aggregate to be mixed in the top six inch layer will not be included for the cost analysis. (See FDOT Rigid Pavement Design Manual, January 2009, Section 2.1, Pg. 2.2.0).

4.1.6 Exceptions

There are no exceptions to note for this report.

= 23,560 feet

4.2 Pavement Type Selection Economic Analysis

4.2.1 Cost per Project Mile

The tables below present the costs per mile for each pavement type alternative. See **Appendix H** for additional information and calculation sheets.

ASPHALT PAVEMENT	Cost	3.5% Discount	Present Worth
Initial Construction	\$1,511,394	1.00000	\$1,511,394
14-Year Rehabilitation	\$636,311	0.61778	\$405,457
28-Year Rehabilitation	\$940,900	0.38165	\$359,099
Salvage Value			\$0
		Total =	\$2,275,949

CONCRETE PAVEMENT	Cost	3.5% Discount	Present Worth
Initial Construction	\$3,836,800	1.00000	\$3,836,800
20-Year Rehabilitation	\$439,159	0.50257	\$220,706
30-Year Rehabilitation	\$557,340	0.35628	\$198,568
Salvage Value			\$0
		Total =	\$4,256,075

The Life-Cycle Cost Analysis (RealCost) Software was utilized to compute user costs and the conclusion was that the user costs were insignificant when compared to the total agency costs for both asphalt and concrete. Therefore, user costs were not considered when selecting the recommended pavement type.

4.2.2 Cost per Project

The present worth total for initial construction and future rehabilitation of the full 4.462 miles of SR 82, from Lee Blvd. (CR 884) to Shawnee Road, is \$10,155,284 for asphalt pavement and \$18,990,607 for concrete pavement.

5.0 CONCLUSION AND RECOMMENDATION

The following is a summary of previously discussed factors and their associated pavement type preference:

FACTORS	FAVORS
Principal Factors	
Traffic	N
Embankment Characteristics	С
Weather	N
Construction Considerations	Α
Recycling	Α
Cost Comparison	Α
Secondary Factors	
Performance of Similar Pavements in the Area	N
Adjacent Existing Pavements	N
Conservation of Materials and Energy	С
Availability of Local Materials or Contractor Capabilities	Α
Traffic Safety	N
Incorporation of Experimental Features	N
Stimulation of Competition	С
Municipal, Local Government Preferences, and Recognition of Local Industry	N
Economic Analysis	Α

- N Favor neither asphalt nor concrete
- A Favors Asphalt
- C Favors Concrete

Based upon the principal and secondary factors considered in this *Pavement Type Selection Report*, it is recommended that **asphalt** be used in the construction of this project.

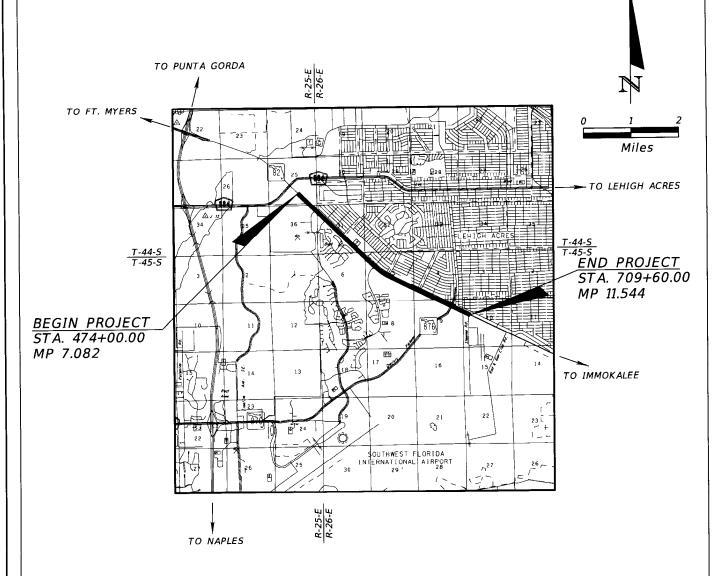
APPENDIX A

Project Location Map

PROJECT LOCATION MAP

FINANCIAL PROJECT ID 425841-1-52-01 LEE COUNTY (12070)

STATE ROAD NO. 82 FROM LEE BLVD. (CR 884) TO SHAWNEE ROAD



Project Manager: Ray Porter

District One, Project Management 801 North Broadway Avenue * Post Office Box 1249 * Bartow, Florida 33831-1249 (863) 519-2484 (Phone) * (863) 519-2892 (Fax) * MS I-29 jray.porter@dot.state.fl.us (email)