Hernando Citrus MPO

Traffic Segment Studies for County Line Road, US 41, & SR 200





N Lecanto Hwy

A Format Adam St to Marion C.L.



MPO Board Meeting 6/6/2024





HERNANDO/CITRUS METROPOLITAN PLANNING ORGANIZATION

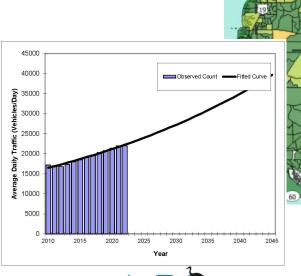
Review of Study Objectives

For each of the four corridors:

 Assess the existing traffic conditions by determining generalized level of service (LOS).

Determine the severity of congestion.

- Identify growth trends and travel characteristics.
- Estimate over time when roadways may or will reach a failing condition.





HERNANDO/CITRUS METROPOLITAN 2 PLANNING ORGANIZATION

Corridor 1: County Line Road (including Ayers Road Extension), from US 19 to US 41

County Line Road - Hemando	Lanes	Posted	LOS	Context	Capacity	Capacity	2022	2023	2023	2023
County	/Type	Speed	Standard	Class	at LOS C	at LOS D	AADT	AADT*	V/C	LOS
US 19 to Cobblestone	4LD	50	D	C3R	32,585	35,435	21,000	19,675	0.56	С
Cobblestone to Mariner	2LU	50	D	C3R	17,640	20,160	20,000	22,594	1.12	F
Mariner to Suncoast	2LU	50	D	C3R	17,640	20,160	22,000	21,972	1.09	F
Suncoast to US 41 (Ayers Ext.)	4LD	45	D	C3R	32,585	35,435	N/A	6,842	0.19	С

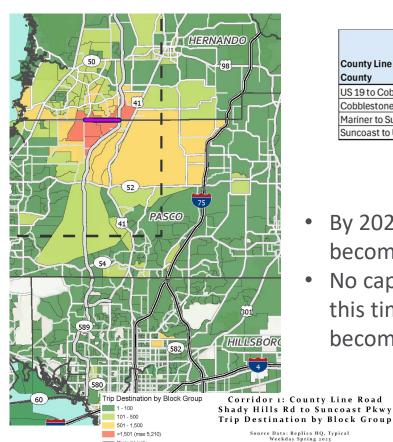
County Line Road - Hernando	Lanes	LOS	Context	Capacity	Capacity	2023 AM	2023 PM	2023	2023	2023 AM	2023 PM
County	/Type	Std.	Class	at LOS C	at LOS D	PH 2W Vol*	PH 2W Vol*	AMV/C	PMV/C	LOS	LOS
US 19 to Cobblestone	4LD	D	C3R	2,936	3,192	1,365	1,627	0.43	0.51	С	С
Cobblestone to Mariner	2LU	D	C3R	1,584	1,818	1,496	1,850	0.82	1.02	С	F
Mariner to Suncoast	2LU	D	C3R	1,584	1,818	1,673	1,897	0.92	1.04	D	F
Suncoast to US 41 (Ayers Ext.)	4LD	D	C3R	2,936	3,192	501	584	0.16	0.18	С	С

- Cobblestone to Mariner (2L) currently deficient for daily and PM Peak traffic conditions.
- Mariner to Suncoast (2L) currently deficient for daily and PM Peak traffic conditions.
- Currently, there are no committed and funded capacity improvements for these segments.
- Origin and Destination analysis suggests regional impact for the corridor.





Corridor 1: County Line Road (including Ayers Road Extension), from US 19 to US 41



County Line Road - Hemando County	Lanes /Type		Context Class	Capacity at LOS C			PM PH	Est. 2028 AM PH 2W Vol*	Est. 2028 PM PH 2W Vol*	Est. 2028 AM LOS	Est. 2028 PM LOS	Trend 3a AGR
US 19 to Cobblestone	4LD	D	C3R	2,936	3,192	1,365	1,627	1,390	1,656	С	С	0.36%
Cobblestone to Mariner	2LU	D	C3R	1,584	1,818	1,496	1,850	1,632	2,018	D	F	1.75%
Mariner to Suncoast	2LU	D	C3R	1,584	1,818	1,673	1,897	1,897	2,150	F	F	2.54%
Suncoast to US 41 (Ayers Ext.)	4LD	D	C3R	2,936	3,192	501	584	597	696	С	С	3.57%

- By 2028, the Mariner to Suncoast segment is also projected to become deficient in the AM peak-hour.
- No capacity improvements such as four-laning are funded at this time with the Cobblestone to Mariner segment showing as becoming four-laned between 2036 and 2045 in the LRTP.





Corridor 2: US 41 in Hernando County, from County Line Road to Ayers Road

US 41 - Hernando County	Lanes /Type	Posted Speed				Capacity at LOS D		2023 Est AADT*	2023 V/C	2023 LOS
00 41 - Hemando County	7.700	opeca	otunadia	Ottass	ut E O O O	ut Loop B	70.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• • • • • • • • • • • • • • • • • • • •	
County Line Road to Ayers Road	2LU	45	D	C3R	19,600	22,400	16,100	16,410	0.73	С

	Lanes	LOS	Context	Capacity	Capacity	2023 AM	2023 PM	2023	2023	2023 AM	2023 PM
US 41 - Hernando County	/Type	Std.	Class	at LOS C	at LOS D	PH 2W Vol*	PH 2W Vol*	AMV/C	PMV/C	LOS	LOS
County Line Road to Ayers Road	2LU	D	C3R	1,848	2,121	1,477	1,477	0.70	0.70	С	С

US 41 - Hernando County	Lanes /Type	Posted Speed	LOS Standard		The second second	Capacity at LOS D		Est. 2028 AADT*	Est. 2028 LOS	Trend 3a AGR
County Line Road to Ayers Road	2LU	45	D	C3R	19,600	22,400	16,410	18,057	С	1.93%

						2023	2023	2028 AM	2028 PM	2028	2028		
	Lanes	LOS	Context	Capacity	Capacity	AM PH	PM PH	PH 2W	PH 2W	AM	PM	Trend	K
US 41 - Hernando County	/Type	Std.	Class	at LOS C	at LOS D	2W Vol*	2W Vol*	Vol*	Vol*	LOS	LOS	3a AGR	Factor
County Line Road to Ayers Road	2LU	D	C3R	1,848	2,121	1,477	1,477	1,625	1,625	С	С	1.93%	9.0

- Corridor is currently within LOS standard for daily and Peak traffic conditions.
- Corridor is projected to remain within LOS standard for daily and peak-hour traffic conditions within the 5-year forecast.
- Currently, there are no committed and funded capacity improvements for these segments.
- Origin and Destination analysis suggests limited regional impact for the corridor.





Corridor 2: US 41 in Hernando County, from County Line Road to Ayers Road



Change in TBRPM Socioeconomic Data 2015 - 2045

		2015-2035		2035-2045		2015-2045
	2015	AGR	2035	AGR	2045	AGR
D.U.s	3,813	4.51%	9,222	2.42%	11,717	3.81%
Population	8,682	4.56%	21,197	2.42%	26,921	3.84%
Employees	5,488	2.61%	9,179	1.93%	11,118	2.38%
K-12 Enrol.	2,053	1.35%	2,685	1.52%	3,122	1.41%

Note: TAZs of influence selected using Replica O and D analysis AGR is an annualized (compounding) growth rate.

				2024		TBRPM		2045		TBRPM	
	Posted	LOS	Context	TBRPM	MSV	2024	2024	TBRPM	MSV	2045	2045
US 41 - Hernando County	Speed	Standard	Class	Lanes	2024	AADT	V/C	Lanes	2045	AADT	V/C
County Line Road to Ayers Road	45	D	C3R	2LU	22,400	22,941	1.02	4LD	37,300	22,889	0.61

- Current growth rates for the corridor and future volume estimates from the TBRPM suggest corridor volumes exceeding existing capacity by 2040.
- This corridor is currently listed in the LRTP as being widened from two to four lanes between 2031 and 2035.





Corridor 3: US 41 in Citrus County, from E Arlington Street to SR 200 (Carl G Rose Hwy)

	Lanes	Posted	LOS	Context	Capacity	Capacity	2022	2023 Est	2023	2023
US 41 - Citrus County	/Type	Speed	Standard	Class	atLOSC	at LOS D	AADT	AADT*	V/C	LOS
E Arlington to Independence	2LU	50	D	C3R	19,600	23,520	22,000	22,306	0.95	D
Independence to Norvell Bryant	2LU	50	D	C3C	15,300	22,785	22,000	19,798	0.87	D
Norvell Brayant to SR 200	2LU	50	D	C3C	15,300	22,785	23,000	19,683	0.86	D

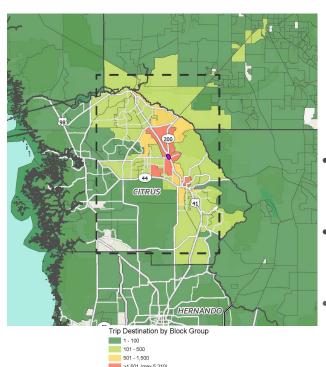
	Lanes	Posted	LOS	Context	Capacity	Capacity	2023 Est	Est. 2028	Est. 2028	Trend 3a
US 41 - Citrus County	/Type	Speed	Standard	Class	at LOS C	at LOS D	AADT*	AADT*	LOS	AGR
E Arlington to Independence	2LU	50	D	C3R	19,600	23,520	22,306	23,900	F	1.39%
Independence to Norvell Bryant	2LU	50	D	C3C	15,300	22,785	19,798	21,213	D	1.39%
Norvell Brayant to SR 200	2LU	50	D	C3C	15,300	22,785	19,683	20,924	D	1.23%

- Corridor is currently within LOS standard for daily and peak-hour traffic conditions.
- Portions of the corridor are projected to exceed or be nearing capacity for daily and peak-hour traffic conditions within the 5-year forecast.
- Currently, there are no committed and funded capacity improvements for these segments.
- Origin and Destination analysis suggests limited regional impact for the corridor.





Corridor 3: US 41 in Citrus County, from E Arlington Street to SR 200 (Carl G Rose Hwy)



						2023	2023	Est. 2028 AM	Est. 2028 PM	Est. 2028	Est. 2028	
	Lanes	LOS	Context	Capacity	Capacity	AM PH	PM PH	PH 2W	PH 2W	AM	PM	Trend
US 41 - Citrus County	/Type	Std.	Class	at LOS C	at LOS D	2W Vol*	2W Vol*	Vol*	Vol*	LOS	LOS	3a AGR
E Arlington to Independence	2LU	D	C3R	1,848	2,121	1,980	1,980	2,121	2,121	F	F	1.39%
Independence to Norvell Bryant	2LU	D	C3C	1,449	2,048	1,470	1,703	1,575	1,825	D	D	1.39%
Norvell Brayant to SR 200	2LU	D	C3C	1,449	2,048	1,427	1,694	1,517	1,801	D	D	1.23%

- By 2028, the Arlington to Independence segment, is projected to become deficient for both daily traffic and for peak-hour traffic conditions.
- Growth rates based on historic AADT suggest that the segments between Independence and SR 200 will become deficient between 2030 and 2035.
- The corridor is showing as becoming four-laned between 2031 and 2045 in the LRTP





Corridor 4: SR 200/Carl G Rose Highway, from E Adams Street to Marion County Line

SR 200 - Citrus County	Lanes /Type	Posted Speed	LOS Standard	Context		Capacity at LOS D	2022 AADT	2023 Est AADT*	2023 V/C	2023 LOS
E Adams to N Lecanto Hwy	2LU	55	D	C2T	13,800		11,300	11,618	0.65	С
N Lecanto Hwy to Marion CL	2LU	55	С	C2	8,200	14,000	16,100	14,869	1.81	F

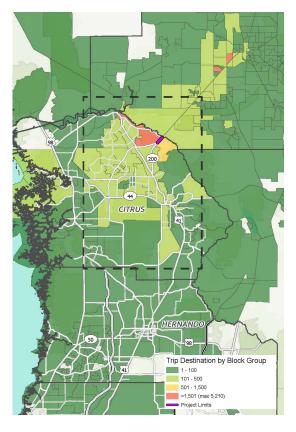
	Lanes	LOS	Context	Capacity	Capacity	2023 AM	2023 PM	2023	2023	2023 AM	2023 PM
SR 200 - Citrus County	/Type	Std.	Class	at LOS C	at LOS D	PH 2W Vol*	PH 2W Vol*	AMV/C	PMV/C	LOS	LOS
E Adams to N Lecanto Hwy	2LU	D	C2T	1,310	1,710	494	576	0.29	0.34	С	С
N Lecanto Hwy to Marion CL	2LU	С	C2	780	1,330	1,091	1,240	1.40	1.59	D	D

- N Lecanto Highway to Marion County Line (2L) is currently deficient for daily and peakhour traffic conditions.
- Currently, there are no committed and funded capacity improvements for this corridor.
- Origin and Destination analysis suggests regional impact for the corridor.





Corridor 4: SR 200/Carl G Rose Highway, from E Adams Street to Marion County Line



TBRPM 9.3 Future Forecast

				2024		TBRPM		2045		TBRPM	
	Posted	LOS	Context	TBRPM	MSV	2024	2024	TBRPM	MSV	2045	2045
SR 200 - Citrus County	Speed	Standard	Class	Lanes	2024	AADT	V/C	Lanes	2045	AADT	V/C
E Adams to N Lecanto Hwy	55	D	C2T	2LU	18,000	23,350	1.30	2LU/4LD	18,000	22,504	1.25
N Lecanto Hwy to Marion CL	55	С	C2	2LU	8,200	28,505	3.48	2LU	8,200	28,494	3.47

¹ Number of Lanes from TBRPM scenario year. 2 MSV is the capacity at the LOS standard for the segmentbased on the FDOT 2023 QLOS Handbook.

- SR 200 from US 41 to Marion County Line is currently listed in the TIP as an unfunded Priority Project.
- SR 200 from North Lecanto Highway to Marion County Line is currently deficient at LOS F under existing daily and peak-hour traffic conditions.
- This corridor is projected to be deficient by 2045, as projected by the TBRPM 9.3 LRTP 2045 Cost Feasible model scenario





³ Volume has been adjusted to AADT using an MOCF of 0.95 from the most recent FDOT Peak Season Correction Report. 2024 model uses 2045 SE data on the 2024E+C network.

Questions?

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