

Memorandum

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To:	Ricardo Gutierrez, Broward MPO Priscila Clawges, Broward MPO Patrice Gillespie Smith, Urban Health Partnerships
Cc:	Ali Hanes, E.I., Kimley-Horn Carolina Simoes, Kimley-Horn
From:	Stewart Robertson, P.E., Kimley-Horn
Date:	June 25, 2013

Subject: Broward Complete Streets Initiative, Phase II Demonstration Projects – MMLOS Analysis 043429002

Kimley-Horn and Associates, Inc. conducted an alternative level of service analysis utilizing the identified multimodal level of service (MMLOS) tool from the national scan conducted as an earlier task of this initiative (*National Scan of Alternative Level of Service Methodologies*, Kimley-Horn and Associates, Inc., April 2013). The MMLOS analysis was conducted for two Complete Streets demonstration projects to illustrate and measure the benefits of a more flexible tool than the traditional roadway-based level of service tool that has long been conventional in traffic engineering and transportation planning. The two Complete Streets demonstration with its local government partners and the Broward Complete Streets Technical Advisory Committee (Complete Streets TAC).

The two demonstration projects are Hollywood Boulevard from City Hall Circle to the Dixie Highway and Sunset Strip from NW 72nd Avenue to NW 19th Street. Meetings were held with the local municipalities (Hollywood and Sunrise) to help establish the vision for the type of roadway elements that will be included in the ultimate design of the Complete Streets demonstration projects.

The intent of the analysis is to compare the existing conditions to the proposed future conditions to the extent that the future conditions are known from the planning stages of the projects. The final street design improvements may be modified somewhat during programming and design.

The results of the MMLOS analysis are shown in the spreadsheets attached to this memorandum. Also attached are summary notes from MPO staff describing the results of the meetings held with the local municipalities.

Below are stated a few important points to note within the results.

 The Automobile LOS score reported by LOSPLAN is unreliable for these corridors because there are few signalized intersections. LOSPLAN



assumes that all intersections studied are signalized and does not provide a choice for unsignalized intersections or roundabouts.

- Therefore, since the Automobile LOS score reported by LOSPLAN is unreliable for these corridors, Kimley-Horn took the extra step of calculating the Automobile LOS based on the FDOT Generalized Level of Service Tables. Within the FDOT Generalized Level of Service Tables. Within the FDOT Generalized Level of Service Tables, for Hollywood Boulevard we used interrupted flow facility thresholds. For the proposed future condition on Sunset Strip, we used uninterrupted flow for a 2 lane divided roadway (one lane in each direction) because there will be roundabouts instead of signalized or stop-controlled intersections. We were able to show that the Automobile LOS will remain the same on both of the demo project corridors.
- The Pedestrian LOS (PLOS) score is highly impacted by motor vehicle traffic volume per lane. Therefore, through this demo analysis we have found that the PLOS equation contained in the Highway Capacity Manual 2010 (and roughly replicated in the FDOT LOSPLAN software) does not work well for before-and-after comparisons of road diets. The reason is because in the "after" condition, all of the traffic volume is concentrated in one lane instead of two lanes (in the case of Sunset Strip). Therefore the equation calculated PLOS as if there were twice as much traffic volume on the street in the "after" condition. As a result, the analysis shows a slight degradation of PLOS on Sunset Strip. Keep in mind that the PLOS for both the existing and the future condition on Sunset Strip is good (B to C).
- We conducted an extensive analysis of PLOS for these two corridors to try to identify ways to improve the way it was modeling pedestrian conditions for these two demo project streets. We set-up an Excel spreadsheet to calculate the PLOS equation (Equations 17-31 through 17-34) directly from the Highway Capacity Manual (HCM) 2010. The results of this Excel spreadsheet are also attached. From this, we determined that the primary reason that there is not much difference in the PLOS score on Hollywood Boulevard between the before and after conditions is that the buffer distance and sidewalk width changes only slightly between the before and after conditions. The reason that the PLOS score degrades on Sunset Strip is because the PLOS equation uses the peak period 15-minute traffic volume per lane (so in the after condition all of the peak period traffic is concentrated in one lane rather than spread out between two lanes, effectively doubling the volume from the perspective of the PLOS model).
- The proposed Complete Streets demo projects improve Bicycle LOS (BLOS) from D to C on Hollywood Boulevard and from D to B on Sunset Strip.
- The proposed Complete Streets demo projects improve Bus LOS from C to B on Hollywood Boulevard and remain at D on Sunset Strip.

The adjustment factors recommended in the National Scan of Alternative Level of Service Methodologies, April 2013, are summarized on the following page along with scoring threshold ranges for PLOS/BLOS and Bus LOS.

ADJUSTMENT FACTORS

5 Pedestrian Connectivity: Distance between intersections or mid-block crossings

300' or less	5
301' to 400'	4
401' to 500'	3
501' to 600'	2
Over 600'	0

6 Presence and quality of pedestrian features (good sidewalk condition; lack of obstacles; ADA compliance; shade trees; street furniture)

High quality	
Moderate quality	
Low quality	
Poor quality or no features	

URBAN FORM RATING								
Good	Fair	Poor						
Close (<30')	Mixed	Far (<u>></u> 30')						
Close (<30')	Mixed	Far (<u>></u> 30')						
None	Some	Many						
Rear	Side	Front						
	URBAN Good Close (<30') Close (<30') None Rear	URBAN FORM RAT Good Fair Close (<30')						

Urban Form Rating	Bicycle/Pedestrian Adjustment Factor	Transit Adjustment Factor ¹
Good	0.80	1.2
Fair	0.95	0.95
Poor	1.2	0.80

adjustment factor due to the inverse scoring scale used in ARTPLAN.

LOS THRESHOLDS

Multimodal LOS

The bike and pedestrian level of service (LOS) is determined by comparing the bike and ped score with the following table:

Level of Service Link, Interchange and/or Segment Score

Α	<u><</u> 2.00
В	> 2.00-2.75
С	> 2.75-3.50
D	> 3.50-4.25
Е	> 4.25-5.00
F	> 5.00

The bus level of service (LOS) is determined by comparing the bus score with the following table:

Level of Service	Link Score
A	> 6
В	> 4 and ≤ 6
С	\geq 3 and \leq 4
D	≥ 2 and < 3
Е	≥ 1 and < 2
F	< 1

			1				LOS	PLAN RESU	LTS			Γ	FINAL RESI	JLTS - AFTE	R APPLICAT	TION OF AD	JUSTMENT	FACTORS	r
Roadway	Roadway From To		Direction ⁽¹⁾	Service Volume Auto LOS	Auto LOS ⁽²⁾	Bicycle LOS Score	Bicycle LOS Grade	Ped LOS Score	Ped LOS Grade	Bus LOS Score	Bus LOS Grade	Average Bike/Ped Factor	Average Transit Factor	Bicycle LOS Score	Bicycle LOS Grade	Ped LOS Score	Ped LOS Grade	Bus LOS Score	Bus LOS Grade
	City Hall Circle	24th Avenue	Eastbound	D	F	4.63	E	1.88	A	3.11	С	0.89	1.09	4.13	D	1.68	А	3.40	С
Hollywood	24th Avenue	S 22nd Avenue	Eastbound	D	F	4.23	D	2.12	В	3.28	С	0.89	1.09	3.77	D	1.89	А	3.58	С
Boulevard	S 22nd Avenue	Dixie Highway	Eastbound	D	F	4.39	E	1.74	A	2.80	D	0.89	1.09	3.91	D	1.55	A	3.06	С
				D	F	4.42	E	1.96	А	3.12	С	0.89	1.09	3.94	D	1.75	А	3.41	С
	NW 72nd Avenue	NW 68th Avenue	Westbound	D	D	4.23	D	2.72	В	2.96	D	1.01	0.94	4.27	E	2.74	В	2.79	D
Sunsat Strin	NW 68th Avenue	NW 64th Avenue	Westbound	D	F	4.25	E	2.07	В	2.96	D	0.97	0.97	4.11	D	2.00	В	2.86	D
Sunsersurp	NW 64th Avenue	NW 19th Street	Westbound	D	E	4.22	D	2.70	В	3.29	С	1.01	0.94	4.26	E	2.72	В	3.10	С
		Overall		D	E	4.23	D	2.56	В	3.06	С	1.00	0.95	4.21	D	2.55	В	2.90	D

EXISTING CONDITIONS RESULTS

Notes: (1) ARTPLAN 2012 produces LOS results for the peak direction only.

(2) ARTPLAN only considers a segment with a signalized intersection at its terminus; therefore, the Auto LOS results from ARTPLAN do not apply to the context of these corridors.

				EDOT Generalized			LOS	PLAN RESU	LTS			FINAL RESULTS - AFTER APPLICATION OF ADJUSTMENT FACTORS									
Roadway	From	То	Direction ⁽¹⁾	Service Volume Auto LOS ⁽³⁾	Auto LOS ⁽²⁾	Bicycle LOS Score	Bicycle LOS Grade	Ped LOS Score	Ped LOS Grade	Bus LOS Score	Bus LOS Grade	Average Bike/Ped Factor	Average Transit Factor	Bicycle LOS Score	Bicycle LOS Grade	Ped LOS Score	Ped LOS Grade	Bus LOS Score	Bus LOS Grade		
	City Hall Circle 24th Avenue Eastbour		Eastbound	D	F	3.73	D	1.8	А	3.79	С	0.83	1.16	3.08	С	1.49	А	4.39	В		
Hollywood	24th Avenue	S 22nd Avenue	Eastbound	D	F	2.88	С	2.04	В	3.62	С	0.87	1.13	2.50	В	1.77	А	4.10	В		
Boulevard	S 22nd Avenue	Dixie Highway	Eastbound	D	F	3.49	С	1.66	А	3.41	С	0.87	1.13	3.02	С	1.44	А	3.86	С		
		Overall			F	3.38	С	1.88	А	3.64	С	0.85	1.14	2.87	С	1.60	А	4.16	В		
	NW 72nd Avenue	NW 68th Avenue	Westbound	D	F	2.69	В	3.54	D	2.69	D	0.98	0.98	2.65	В	3.48	C	2.65	D		
Sunsat Strin	NW 68th Avenue	NW 64th Avenue	Westbound	D	F	2.89	С	2.74	В	2.96	D	0.94	1.01	2.72	В	2.58	В	2.98	D		
sunset strip	NW 64th Avenue	NW 19th Street	Westbound	D	F	2.60	В	3.21	C	3.14	С	0.98	0.98	2.56	В	3.16	С	3.09	С		
		Overall			F	2.73	В	3.25	С	2.90	С	0.97	0.99	2.65	В	3.16	С	2.87	D		

FUTURE PROPOSED CONDITIONS RESULTS

Notes: (1) ARTPLAN 2012 produces LOS results for the peak direction only.

(2) ARTPLAN only considers a segment with a signalized intersection at its terminus; therefore, the Auto LOS results from ARTPLAN do not apply to the context of these corridors.

(3) The future condition results for Sunset Strip were calculated using uninterrupted flow since the traffic signal on the corridor will be replaced by a roundabout.

EXISTING CONDITIONS ADJUSTMENT FACTORS

				P	edestrian	Connectivity			Pedestria	n Features		Bu	ilding Setba	cks	Spacing	j Between B	uildings	Phys	ical Barriers	ers Off-Street Parking					
																		Barriers							
Roadway	From	То	Direction	Distance				Presence										between						Average	Average
				between		Bike/Ped	Transit	and		Bike/Ped	Transit	Building	Bike/Ped	Transit		Bike/Ped	Transit	Sidewalk and	Bike/Ped	Transit		Bike/Ped	Transit	Bike/Ped	Transit
				crossings	Score	Factor	Factor	Quality	Score	Factor	Factor	Setbacks	Factor	Factor	Spacing	Factor	Factor	Building	Factor	Factor	Location	Factor	Factor	Factor	Factor
	City Hall	24th Avonuo	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
	Circle	24th Avenue	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
Hollywood	24th	S 22nd	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
Boulevard	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
	S 22nd	Dixie	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
	Avenue	Highway	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.89	1.09
	NW 72nd	NW 68th	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	1.01	0.94
	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	1.01	0.94
Supcot Strip	NW 68th	NW 64th	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Mixed	0.95	0.95	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.97	0.97
Sunset Strip	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Mixed	0.95	0.95	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.97	0.97
	NW 64th	NW 19th	Eastbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	1.01	0.94
	Avenue	Street	Westbound	Over 600'	0	1.2	0.8	Moderate	3	0.95	0.95	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	1.01	0.94

FUTURE PROPOSED CONDITIONS ADJUSTMENT FACTORS

				P	edestrian	Connectivity	1		Pedestria	n Features		Bu	ilding Setba	cks	Spacing	g Between B	uildings	Phys	ical Barriers	5	Off	-Street Par	king		
																		Barriers							
Roadway	From	То	Direction	Distance				Presence										between						Average	Average
				between		Bike/Ped	Transit	and		Bike/Ped	Transit	Building	Bike/Ped	Transit		Bike/Ped	Transit	Sidewalk and	Bike/Ped	Transit		Bike/Ped	Transit	Bike/Ped	Transit
				crossings	Score	Factor	Factor	Quality	Score	Factor	Factor	Setbacks	Factor	Factor	Spacing	Factor	Factor	Building	Factor	Factor	Location	Factor	Factor	Factor	Factor
	City Hall	24th Avonuo	Eastbound	501' to 600'	2	0.95	0.95	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.83	1.16
	Circle	24th Avenue	Westbound	501' to 600'	2	0.95	0.95	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.83	1.16
Hollywood	24th	S 22nd	Eastbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.87	1.13
Boulevard	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.87	1.13
	S 22nd	Dixie	Eastbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.87	1.13
	Avenue	Highway	Westbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Close	0.8	1.2	Close	0.8	1.2	None	0.8	1.2	Rear	0.8	1.2	0.87	1.13
	NW 72nd	NW 68th	Eastbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.98	0.98
	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.98	0.98
Supcot Strip	NW 68th	NW 64th	Eastbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Mixed	0.95	0.95	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.94	1.01
Sunset Strip	Avenue	Avenue	Westbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Mixed	0.95	0.95	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.94	1.01
	NW 64th	NW 19th	Eastbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.98	0.98
	Avenue	Street	Westbound	Over 600'	0	1.2	0.8	High	5	0.8	1.2	Far	1.2	0.8	Mixed	0.95	0.95	None	0.8	1.2	Side	0.95	0.95	0.98	0.98

PLOS - PEDESTRIAN FACILITY ALTERNATIVE MMLOS ANALYSIS COMPARISON BASED ON HIGHWAY CAPACITY MANUAL 2010 EQUATION 17-31																									
					Traffic				La	nes			Wid	th of		Buffer	Tree		Swalk	Swalk	Equation 1	7-32 thro	ugh 17.	Pede	strian
				Length	Volume	Dir.	Hourly	v _m	(L)	Dir	Speed	Pav	eme		Width	Spacin		Width	Pres.	34 Term	Calculat	tions	L	os
Dir	Road Name	From	То	(mi)	ADT	Factor	Factor		Th	Med	Lanes	(mph)	w,	W ₁	p _{pk}	in feet	9 in Buffor	f _b	in feet	Factor	F	F	F	Value	Grade
					(vpd)	(D)	(Kd)	(vph)	#		N _{th}		(ft)	(ft)		(W _{buf})	(ft on		(WaA)	(f _{sw})	'w	۰v	's		
						Evic	ting Co	ndition									ctr)								
	Existing Conditions																								
EB	Hollywood Blvd	City Hall Circle	N 24th Avenue	0.1926	19,500	0.52	0.09	916	4	U	2	35	11	17	0.90	5	30	4.1	9	3.5	-5.82	1.042	0.490	1.76	A
WB	Hollywood Blvd	City Hall Circle	N 24th Avenue	0.1926	19,500	0.52	0.09	916	4	U	2	35	12	16	0.50	5	30	4.1	9	3.5	-5.59	1.042	0.490	1.99	A
EB	Hollywood Blvd	N 24th Avenue	S 22nd Ave	0.2068	19,500	0.52	0.09	916	4	U	2	35	12	16	0.50	5	30	4.1	9	3.5	-5.59	1.042	0.490	1.99	A
WB	Hollywood Blvd	N 24th Avenue	S 22nd Ave	0.2068	19,500	0.52	0.09	916	4	0	2	35	12	16	0.30	5	30	4.1	9	3.5	-5.45	1.042	0.490	2.13	в
EB	Hollywood Bivd	S 22nd Ave	Dixie Highway	0.0994	19,500	0.52	0.09	916	4	0	2	35	11	17	0.80	6	30	4.1	1	3.9	-5.79	1.042	0.490	1.79	A
WB	Hollywood Biva	S 22nd Ave	Dixie Highway	0.0994	19,500	0.52	0.09	916	4	U	2	35	11	17	0.50	5	30	4.1	9	3.3	-5.59	1.042	0.490	1.99	A
EB	Sunset Strip	NVV 72nd Avenue	NVV 68th Avenue	0.3460	18,100	0.57	0.09	929	4	D	2	30	10	0	0.00	30	34	3.8	4	4.8	-6.09	1.056	0.360	1.38	A
WB	Sunset Strip	NW 72nd Avenue	NW 68th Avenue	0.3460	18,100	0.57	0.09	929	4	D	2	30	10	0	0.00	30	40	3.4	4	4.8	-5.98	1.056	0.360	1.48	A
EB	Sunset Strip	NW 68th Avenue	NW 64th Avenue	0.2409	10,100	0.57	0.09	929	4	D	2	30	10	0	0.30	0	0	1.0	4	4.0	-4.65	1.056	0.360	2.01	
WB	Sunset Strip	NW 68th Avenue	NW 64th Avenue	0.2409	10,100	0.57	0.09	929	4	D	2	30	11	/	0.50	15	0	1.0	8	3.0	-5.18	1.056	0.360	2.28	В
EB	Sunset Strip	NVV 64th Avenue	NVV 19th Street	0.2411	18,100	0.57	0.09	929	4	D	2	30	10	0	0.00	10	30	3.7	4	4.0	-5.45	1.056	0.360	2.01	B
WB	Sunset Strip	NVV 64th Avenue	NVV 19th Street	0.2411	16,100	0.57	0.09	929	4	U	2	30	10	0	0.00	14	30	3.1	4	4.0	-5.59	1.050	0.300	2.07	D
	Proposed Conditions																								
EB	Hollywood Blvd	City Hall Circle	N 24th Avenue	0.1926	19,500	0.52	0.09	916	4	D	2	35	10	8	1.00	9	30	4.1	11	2.7	-5.98	1.042	0.490	1.60	Α
WB	Hollywood Blvd	City Hall Circle	N 24th Avenue	0.1926	19,500	0.52	0.09	916	4	D	2	35	10	8	0.75	9	30	4.1	11	2.7	-5.86	1.042	0.490	1.72	Α
EB	Hollywood Blvd	N 24th Avenue	S 22nd Ave	0.2068	19,500	0.52	0.09	916	4	D	2	35	10	8	0.75	9	30	4.1	11	2.7	-5.86	1.042	0.490	1.72	Α
WB	Hollywood Blvd	N 24th Avenue	S 22nd Ave	0.2068	19,500	0.52	0.09	916	4	D	2	35	10	8	0.50	9	30	4.1	11	2.7	-5.72	1.042	0.490	1.86	Α
EB	Hollywood Blvd	S 22nd Ave	Dixie Highway	0.0994	19,500	0.52	0.09	916	4	D	2	35	10	8	1.00	9	30	4.1	11	2.7	-5.98	1.042	0.490	1.60	Α
WB	Hollywood Blvd	S 22nd Ave	Dixie Highway	0.0994	19,500	0.52	0.09	916	4	D	2	35	10	8	0.75	9	30	4.1	11	2.7	-5.86	1.042	0.490	1.72	Α
EB	Sunset Strip	NW 72nd Avenue	NW 68th Avenue	0.3460	18,100	0.57	0.09	929	2	D	1	30	11	7	0.00	30	34	3.8	8	3.6	-6.20	2.112	0.360	2.32	В
WB	Sunset Strip	NW 72nd Avenue	NW 68th Avenue	0.3460	18,100	0.57	0.09	929	2	D	1	30	11	7	0.00	30	40	3.4	8	3.6	-6.11	2.112	0.360	2.41	В
EB	Sunset Strip	NW 68th Avenue	NW 64th Avenue	0.2409	18,100	0.57	0.09	929	2	D	1	30	11	7	0.50	0	0	1.0	8	3.6	-5.19	2.112	0.360	3.33	С
WB	Sunset Strip	NW 68th Avenue	NW 64th Avenue	0.2409	18,100	0.57	0.09	929	2	D	1	30	11	22	0.50	0	0	1.0	8	3.6	-5.31	2.112	0.360	3.21	С
EB	Sunset Strip	NW 64th Avenue	NW 19th Street	0.2411	18,100	0.57	0.09	929	2	D	1	30	11	7	0.00	15	35	3.7	8	3.6	-5.64	2.112	0.360	2.88	С
WB	Sunset Strip	NW 64th Avenue	NW 19th Street	0.2411	18,100	0.57	0.09	929	2	D	1	30	11	7	0.00	14	35	3.7	8	3.6	-5.59	2.112	0.360	2.93	С

Robertson, Stewart

From: Sent: To:	Gutierrez Ricardo <gutierrezr@browardmpo.org> Thursday, May 23, 2013 5:10 PM 'Laura Borgesi'; Jonathan Vogt (JVOGT@hollywoodfl.org); Robertson, Stewart; Jeffers, Betsy (Betsy.Jeffers@dot.state.fl.us); Suarez, Jesus (Jesus.Suarez@dot.state.fl.us); Barr, Alexander; Walter Wernecke (WWERNECKE@hollywoodfl.org)</gutierrezr@browardmpo.org>
Cc:	Sanders Buffy; Clawges Priscila
Subject:	Hollywood Blvd Complete Streets meeting

Good afternoon,

We want to thank all of you for attending this meeting. The meeting ran just a little longer than anticipated, however, I am sure we can all agree that it was very productive and worthwhile use of our time. Stewart, thank you for staying a little longer and providing and sharing some of your extensive experience with Complete Streets with the group. The following was discussed and agreed upon:

- o Drainage will be provided at curve
- o No raised crosswalks/speed tables will be designed as requested by City staff
- o Stamp asphalt will be used for the cross walks
- o Crosswalks will be lighted
- o Stamp concrete will be used for the sidewalks
- o Sidewalks will be 11' wide
- o Both travel lanes will be 10'
- Pedestrian lighting will be provided every 80'
- o All bus stops will have shelters
- o Real time technology infrastructure will be provided in preparation for future Premium Transit Service
- o Traffic light relocation at 24th Ave possibly will be required
- o Landscaping will be funded by the City/Hardscape will be funded by the MPO *
- o Bioswales will be considered for at least some of the landscaped areas
- Reversed back-in parking will be considered. Not off the table at this time
- Lighting upgrades costs will be the responsibility of the City *
- * Additional discussion still required to finalized funding responsibilities

Next Steps

City staff to provide FDOT additional cost information to complete LRE FODT will revised LRE as per discussion and additional cost information received from City Staff

Please let me know if you have any changes to any of the above.

Ricardo

Ricardo S. Gutierrez Trade Centre South - 100 West Cypress Creek Road, Suite 850 Fort Lauderdale, Florida 33309 Phone: 954-876-0033 Direct: 954-876-0044 Fax: 954-876-0062



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Robertson, Stewart

From:	Gutierrez Ricardo <gutierrezr@browardmpo.org></gutierrezr@browardmpo.org>
Sent:	Friday_May.31_2013.1:13 PM
То:	'AGavazzi@sunrisefl.gov'; 'dabderhalden@sunrisefl.gov'; Robertson, Stewart; Jeffers, Betsy (Betsy, leffers@dot.state.fl.us); Suarez, Jesus (Jesus Suarez@dot.state.fl.us); Abin, Avcel
Cc:	Clawges Priscila; Sanders Buffy
Subject:	Sunset Strip Coordination meeting

Good afternoon,

Thank you all for attending. Find below a summary of what was discussed and agreed upon at the meeting.

- > For the Multimodal Level of Service (MMLOS) analysis, we agreed to the following:
 - Limits NW 72 Ave to NW 19 St
 - Road diet (4LD to 2LD)
 - 2LD with 11' travel lanes,
 - 5' Bike Lane with 2' buffer
 - Sidewalk will be 8' wide
 - The remaining 2' will be allocated to the swale area to improve the drainage and/or to provide a wider sidewalk. Currently the road is 20' wide in each direction. New cross section will be 18' in each direction. (11' travel lane, 5' bike lane and 2' buffer).
 - Roundabouts at NW 19 St and NW 64 Ave
- Currently, the Broward MPO has programmed a bike lane project on Sunset Strip from Nob Hill Rd to NW 64 Ave (FY 2016/17). The Broward MPO agreed to look into the possibility of extending the limits to Sunrise Blvd. New limits will be from Nob Hill Rd to Sunrise Blvd.
- The bike lane project as currently scoped by FDOT staff, will require additional pavement (5' in each direction) to accommodate a bike lane. This will most likely worsen the drainage problems that already exist.
- It was agreed that road diet (4LD to 2LD 11' travel lane, 5' bike lane and 2' buffer) for the entire segment will not only improve drainage, but also provide better and safer access for all modes of transportation.
- City staff will start conversations with appropriate staff and elected officials regarding the proposed road diet.
- Stewart Robertson will provide the results of the MMLOS analysis, when available, to further justify the implementation of a road diet on this corridor.

Let me know if you have any changes and/or additions to any of the above.

Ricardo

Ricardo S. Gutierrez Trade Centre South - 100 West Cypress Creek Road, Suite 850 Fort Lauderdale, Florida 33309 Phone: 954-876-0033 Direct: 954-876-0044 Fax: 954-876-0062



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