



Attachment T

Signal Warrant Analysis

**26841.01: Sands Integrated Resort
Traffic Impact Study Attachments
Attachment T – Signal Warrant Analysis**



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**26841.01: Sands Integrated Resort
Traffic Impact Study Attachments
Attachment T – Signal Warrant Analysis**





T-1 Signal Warrant Analysis - Charles Lindbergh Blvd at Site Access

**26841.01: Sands Integrated Resort
Traffic Impact Study Attachments
Attachment T – Signal Warrant Analysis**



Traffic Volume Development

Project: CONF-Sands Project No: 26481
 Calc by: CJL Date: 3/20/2024
 Check by: Date:
 Analysis Condition: 2030 Build
 Intersection: Charles Lindbergh Blvd at Sands Boulevard Posted Speed 45

Growth Rate 0.6%
 # Years 7
 Growth 1.0428
 Assumes No OPDs
 Assumes no reduction in NB RT movements given roadway speed, volume and mix of type of vehicles

Time	Mainline Charles Lindbergh Blvd																					Major Street Build Volume						
	No-Build Volumes			Site Generated Trips																								
				Casino/Hotel Autos				Employees				Restaurant/Retail/Public Attraction				Theater		Meetings and Conference					Ridehailing					
	EB	WB	Total	WB (Enter)		EB (Exit)		WB (Enter)		EB (Exit)		WB (Enter)		EB (Exit)		WB (Enter)		EB (Exit)		WB (Enter)			EB (Exit)		Total			
Hourly				67%	Hourly	39%	Hourly	5%	Hourly	42.5%	Hourly	32.5%	Hourly	22.5%	Hourly	33%	Hourly	37.5%	Hourly	33%	Hourly	37.5%	Hourly	32.5%		Hourly	30.0%	
12:00 AM	45	63	108	132	88	289	113	3	0	55	23	3	1	10	2	0	0	0	0	0	0	0	0	7	2	15	5	342
1:00 AM	30	47	77	117	78	171	67	0	0	55	23	2	1	3	1	0	0	0	0	0	0	0	0	6	2	8	2	251
2:00 AM	27	24	52	36	24	136	53	0	0	30	13	3	1	3	1	0	0	0	0	0	0	0	0	2	1	7	2	147
3:00 AM	25	35	60	54	36	226	88	4	0	2	1	3	1	5	1	0	0	0	0	0	0	0	0	3	1	11	3	191
4:00 AM	38	50	87	18	12	117	46	10	1	15	6	3	1	3	1	0	0	0	0	0	0	0	0	1	0	6	2	156
5:00 AM	68	135	203	18	12	27	11	13	1	0	0	10	3	3	1	0	0	0	0	8	3	0	0	3	1	2	1	236
6:00 AM	201	338	540	93	62	95	37	197	10	13	6	23	7	13	3	0	0	0	48	16	0	0	9	3	6	2	686	
7:00 AM	353	982	1335	218	146	200	78	327	16	95	40	38	12	26	6	0	0	0	72	23	0	0	18	6	12	4	1666	
8:00 AM	444	1364	1808	410	275	256	100	455	23	154	65	50	16	47	11	0	0	0	114	37	3	1	30	10	16	5	2351	
9:00 AM	465	1114	1579	463	310	429	167	124	6	41	17	61	20	53	12	0	0	0	56	18	4	2	29	9	26	8	2148	
10:00 AM	455	801	1256	605	405	461	180	133	7	5	2	94	31	80	18	0	0	0	46	15	16	6	40	13	30	9	1942	
11:00 AM	598	728	1326	597	400	509	199	72	4	0	0	219	71	105	24	0	0	0	23	7	20	8	43	14	33	10	2063	
12:00 PM	710	841	1551	628	421	601	234	124	6	1	0	290	94	229	52	0	0	0	36	12	46	17	51	17	47	14	2418	
1:00 PM	691	789	1480	690	462	640	250	105	5	2	1	194	63	237	53	0	0	0	13	4	54	20	47	15	48	14	2367	
2:00 PM	761	771	1533	589	395	760	296	158	8	7	3	146	47	225	51	0	0	0	15	5	79	30	39	13	54	16	2397	
3:00 PM	955	896	1851	699	468	643	251	58	3	176	75	187	61	156	35	0	0	0	3	1	107	40	45	15	48	14	2814	
4:00 PM	1173	775	1948	739	495	750	293	29	1	37	16	202	66	128	29	0	0	0	1	0	101	38	48	16	51	15	2917	
5:00 PM	1171	768	1939	694	465	626	244	13	1	367	156	226	73	224	50	0	0	0	0	0	5	2	47	15	47	14	2959	
6:00 PM	747	682	1429	793	531	675	263	15	1	241	102	220	72	224	50	0	0	0	0	0	1	0	51	17	47	14	2479	
7:00 PM	512	485	997	740	496	705	275	73	4	206	88	140	46	247	56	0	0	0	0	0	0	0	45	15	48	14	1991	
8:00 PM	448	353	801	800	536	643	251	27	1	194	82	111	36	147	33	0	0	0	0	0	0	0	45	15	40	12	1767	
9:00 PM	292	296	588	687	460	682	266	14	1	83	35	92	30	119	27	0	0	0	0	0	0	0	40	13	41	12	1432	
10:00 PM	150	176	326	609	408	640	250	168	8	110	47	18	6	38	9	0	0	0	0	0	0	0	32	10	33	10	1074	
11:00 PM	86	123	209	466	312	614	239	29	1	265	113	6	2	17	4	0	0	0	0	0	0	0	24	8	31	9	897	
Totals	10445	12636	23083	10895	7297	10895	4251	2151	108	2154	914	2341	761	2342	530	0	0	0	435	141	436	164	705	231	707	211	37691	

Traffic Vo Traffic Volume Development

Project: Project: CONF-Sands Project No: 26481
 Calc by: Calc by: CJL Date: 3/20/2024
 Check by: Check by: Date:
 Analysis ConAnalysis Condition: 2030 Build
 Intersection Intersectio Charles Lindbergh Blvd at Sands Boulevard Posted Speed 45

Time	Sands Boulevard - Site Driveway									Driveway					
	Site Generated Trips - NB									Total	% left	% right	less rt	DW vol	
	Casino		Restaurant/Retail/P ublic Attraction		Theater		Meetings and Conference		Ridehailing						Site Driveway
	NB (Exit)	NB (Exit)	NB (Exit)	NB (Exit)	NB (Exit)	NB (Exit)	NB (Exit)	NB (Exit)							
Houlrly	28.5%	Houlrly	20.0%	Houlrly	5.0%	Houlrly	5.0%	Houlrly	12.5%						
12:00 AM	289	82	10	2	0	0	0	0	15	2	86	0	0	0	86
1:00 AM	171	49	3	1	0	0	0	0	8	1	51	0	0	0	51
2:00 AM	136	39	3	1	0	0	0	0	7	1	41	0	0	0	41
3:00 AM	226	64	5	1	0	0	0	0	11	1	66	0	0	0	66
4:00 AM	117	33	3	1	0	0	0	0	6	1	35	0	0	0	35
5:00 AM	27	8	3	1	0	0	0	0	2	0	9	0	0	0	9
6:00 AM	95	27	13	4	0	0	0	0	6	1	32	0	0	0	32
7:00 AM	200	57	26	7	0	0	0	0	12	2	66	0	0	0	66
8:00 AM	256	73	47	13	0	0	3	0	16	2	88	0	0	0	88
9:00 AM	429	122	53	15	0	0	4	0	26	3	140	0	0	0	140
10:00 AM	461	131	80	23	0	0	16	1	30	4	159	0	0	0	159
11:00 AM	509	145	105	30	0	0	20	1	33	4	180	0	0	0	180
12:00 PM	601	171	229	65	0	0	46	2	47	6	244	0	0	0	244
1:00 PM	640	182	237	68	0	0	54	3	48	6	259	0	0	0	259
2:00 PM	760	217	225	64	0	0	79	4	54	7	292	0	0	0	292
3:00 PM	643	183	156	44	0	0	107	5	48	6	238	0	0	0	238
4:00 PM	750	214	128	36	0	0	101	5	51	6	261	0	0	0	261
5:00 PM	626	178	224	64	0	0	5	0	47	6	248	0	0	0	248
6:00 PM	675	192	224	64	0	0	1	0	47	6	262	0	0	0	262
7:00 PM	705	201	247	70	0	0	0	0	48	6	277	0	0	0	277
8:00 PM	643	183	147	42	0	0	0	0	40	5	230	0	0	0	230
9:00 PM	682	194	119	34	0	0	0	0	41	5	233	0	0	0	233
10:00 PM	640	182	38	11	0	0	0	0	33	4	197	0	0	0	197
11:00 PM	614	175	17	5	0	0	0	0	31	4	184	0	0	0	184
Totals	10895		2342	666	0	0	436	21	707	89	3878	0	0	0	3878

Figure 4C-2
Reduced Four-Hour Vehicular Volume Warrant
 Source: Federal MUTCD
Build Conditions

◆ Charles Lindbergh Blvd at Sands Blvd

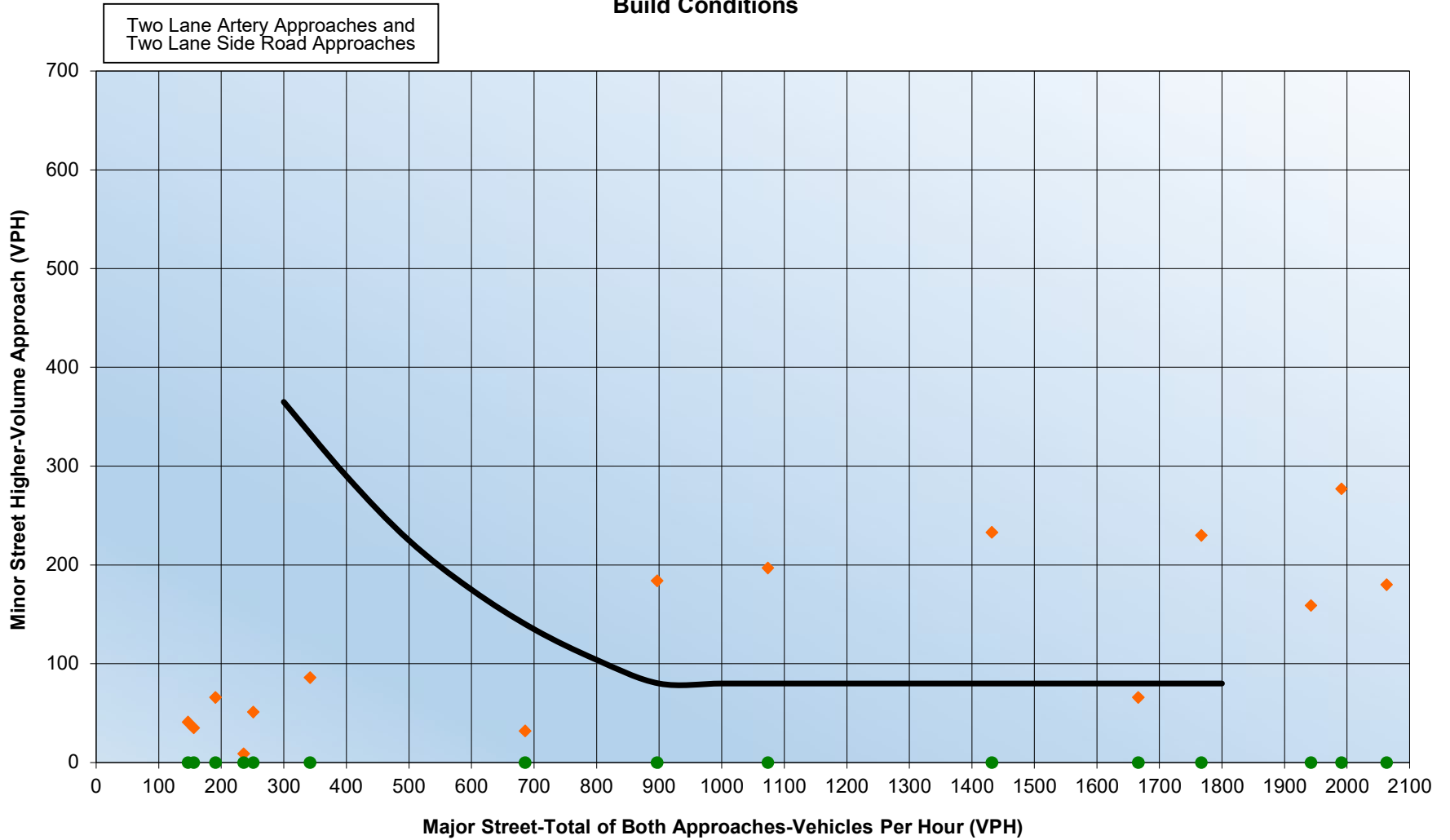
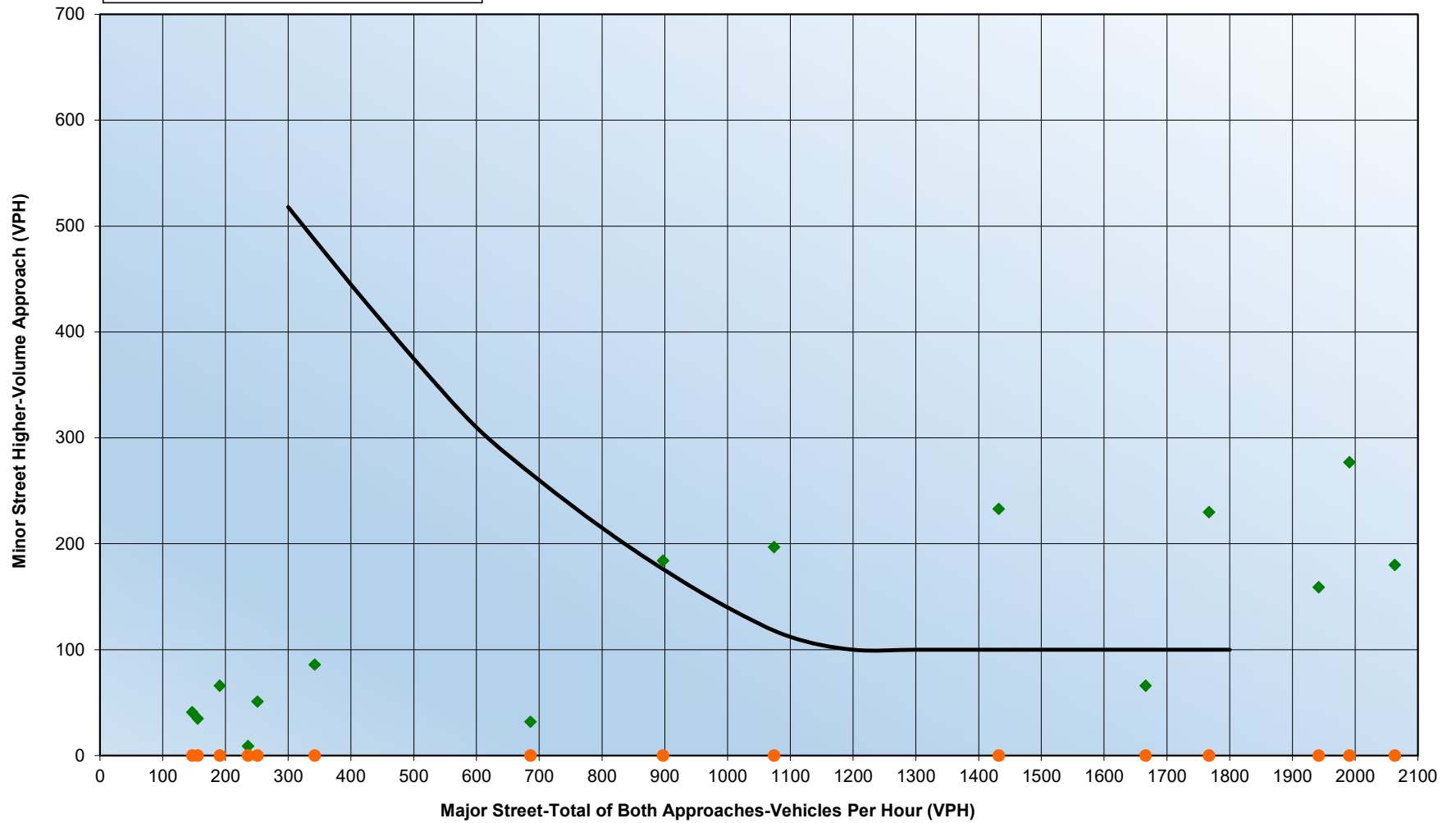


Figure 4C-4
Reduced Peak Hour Volume Warrant
Source: Federal MUTCD
Build Condition

◆ Charles Lindbergh Blvd
at Sands Blvd

Two Lane Artery Approaches and
Two Lane Side Road Approaches





T-2 Signal Warrant Analysis - Sands Blvd at Eastbound/Westbound (Node 406)



Traffic Vo Traffic Volume Development

Project: Project: CONF-Sands Project No 26841.01 Growth Rate 0.006
 Calc by: Calc by: CJL Date: 45372 # Years 7
 Check by: Check by: Date: Growth 1,0427636
 Analysis Condition: 2030 Build
 Intersection: Node 406 Sands Boulevard at Eastbound/Westbound

Time	Eastbound										Westbound											
	Site Generated Trips - EB										Site Generated Trips - WB											
	Casino		Restaurant/Retail/ Public Attraction		Theater	Meetings and Conference		Ridehailing	Build Volume - Site Drwy	EB Total	Casino		Restaurant/Retail/ Public Attraction		Theater	Meetings and Conference		Ridehailing	Build Volume WB Total			
	EB (Exit)	5.0%	EB (Exit)	5.0%	Hourly	EB (Exit)	0.0%	Hourly			25.0%	Hourly	WB (Exit)	0.0%	Hourly	WB (Exit)	0.0%	Hourly		WB (Exit)	0.0%	
12:00 AM	289	14	10	1	0	0	0	0	15	4	19	289	0	10	0	0	0	0	0	15	0	0
1:00 AM	171	9	3	0	0	0	0	0	8	2	11	171	0	3	0	0	0	0	0	8	0	0
2:00 AM	196	7	3	0	0	0	0	0	7	2	9	196	0	3	0	0	0	0	0	7	0	0
3:00 AM	226	11	5	0	0	0	0	0	11	3	14	226	0	5	0	0	0	0	0	11	0	0
4:00 AM	117	6	3	0	0	0	0	0	6	2	8	117	0	3	0	0	0	0	0	6	0	0
5:00 AM	27	1	3	0	0	0	0	0	2	1	2	27	0	3	0	0	0	0	0	2	0	0
6:00 AM	95	5	13	1	0	0	0	0	6	2	8	95	0	13	0	0	0	0	0	6	0	0
7:00 AM	200	10	26	1	0	0	0	0	12	3	14	200	0	26	0	0	0	0	0	12	0	0
8:00 AM	256	13	47	2	0	0	0	3	16	4	19	256	0	47	0	0	0	3	0	16	0	0
9:00 AM	429	21	53	3	0	0	4	0	26	7	31	429	0	53	0	0	0	4	0	26	0	0
10:00 AM	461	23	80	4	0	0	16	0	30	8	35	461	0	80	0	0	0	16	0	30	0	0
11:00 AM	509	25	105	5	0	0	20	0	33	8	38	509	0	105	0	0	0	20	0	33	0	0
12:00 PM	601	30	229	11	0	0	46	0	47	12	53	601	0	229	0	0	0	46	0	47	0	0
1:00 PM	640	32	237	12	0	0	54	0	48	12	56	640	0	237	0	0	0	54	0	48	0	0
2:00 PM	760	38	225	11	0	0	79	0	54	14	63	760	0	225	0	0	0	79	0	54	0	0
3:00 PM	643	32	156	8	0	0	107	0	48	12	52	643	0	156	0	0	0	107	0	48	0	0
4:00 PM	750	38	128	6	0	0	101	0	51	13	57	750	0	128	0	0	0	101	0	51	0	0
5:00 PM	626	31	224	11	0	0	5	0	47	12	54	626	0	224	0	0	0	5	0	47	0	0
6:00 PM	675	34	224	11	0	0	1	0	47	12	57	675	0	224	0	0	0	1	0	47	0	0
7:00 PM	705	35	247	12	0	0	0	0	48	12	59	705	0	247	0	0	0	0	0	48	0	0
8:00 PM	643	32	147	7	0	0	0	0	40	10	49	643	0	147	0	0	0	0	0	40	0	0
9:00 PM	682	34	119	6	0	0	0	0	41	10	50	682	0	119	0	0	0	0	0	41	0	0
10:00 PM	640	32	38	2	0	0	0	0	33	8	42	640	0	38	0	0	0	0	0	33	0	0
11:00 PM	614	31	17	1	0	0	0	0	31	8	40	614	0	17	0	0	0	0	0	31	0	0
Totals	10895	544	2342	115	0	0	436	0	707	181	840	10895	0	2342	0	0	0	436	0	707	0	0

No % of Emr

Warrant 1, Eight-Hour Vehicular Volume

Project: CONF-Sands Project No: 26481.01
 Calc by: CJL Date: 3/21/2024
 Check by: Date:
 Analysis Condition: 2030 Build
 Analysis Condition: Node 406 Sands Boulevard at Eastbound/Westbound
 Lane Configuration: Main 2, Side 2 3

FULL BUILD CONDITONS - WARRANT 1, (100%) NOT MET

**Warrant 1, Eight-Hour Vehicular Volume
2030 Build**

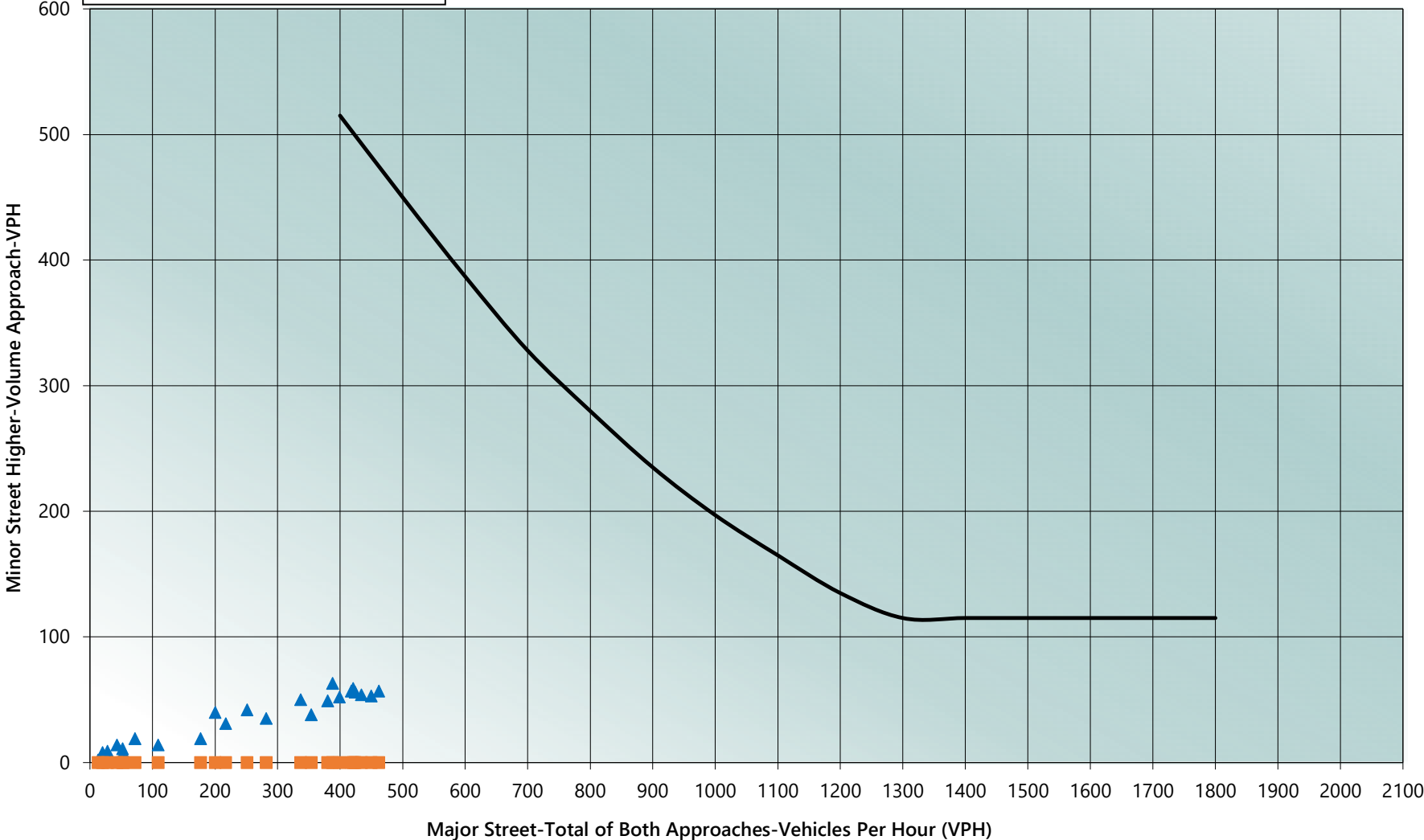
Hour	Mainline Sands Boulevard	Minor Eastbound	Minor Westbound	Condition A												Condition B																							
				100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction				100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction							
				Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall								
Beginning	NB/SB	EB	WB																																				
12:00 AM	72	19	0																																				
1:00 AM	52	11	0																																				
2:00 AM	28	9	0																																				
3:00 AM	43	14	0																																				
4:00 AM	20	8	0																																				
5:00 AM	13	2	0																																				
6:00 AM	53	8	0																																				
7:00 AM	109	14	0																																				
8:00 AM	177	19	0																																				
9:00 AM	217	31	0																																				
10:00 AM	282	35	0																																				
11:00 AM	354	38	0																																				
12:00 PM	450	53	0									Y				Y																							
1:00 PM	424	56	0									Y				Y																			Y				
2:00 PM	388	63	0									Y				Y																			Y				
3:00 PM	399	52	0									Y				Y																			Y				
4:00 PM	418	57	0									Y				Y																			Y				
5:00 PM	434	54	0									Y				Y																			Y				
6:00 PM	462	57	0									Y				Y																			Y				
7:00 PM	421	59	0									Y				Y																			Y				
8:00 PM	380	49	0													Y																							
9:00 PM	337	50	0													Y																							
10:00 PM	251	42	0																																				
11:00 PM	200	40	0																																				
Threshold				600	200	200		480	160	160		420	140	140		336	112	112		900	100	100		720	80	80		630	70	70		504	56	56					
Hours Met							0				0				0				0				0				0				0				0				
Required							8				8				8				8				8				8				8				8				
Warrant Met?							No				No				No				No				No				No				No				No				

Figure 4C-1 Four-Hour Vehicular Volume Warrant

Source: Federal MUTCD
Build Conditions

▲ Sands Blvd at
eastbound/westbound

Two Lane Artery Approaches and
Two Lane Side Road Approaches





T-3 Signal Warrant Analysis - Sands Blvd at North Dr. (Node 408)



Traffic Volume Development

Project: CONF-Sands Project No: 26841.01
 Calc by: CJL Date: 3/21/2024
 Check by: Date:
 Analysis Condition: 2030 Build
 Intersection: Node 408 Sands Boulevard at North Drive

Growth Rate 0.6%
 # Years 7
 Growth 1.0428

Time	Mainline Sands Boulevard																								Build Volume																
	No-Build Volumes			Site Generated Trips																																					
				Casino/Hotel Autos			Employees			Restaurant/Retail/Public Attraction			Theater		Meetings and Conference			Ridehailing																							
	NB	SB	Total	NB (Enter)		SB (Enter)	NB (Exit)	NB (Enter)		SB (Enter)	NB (Exit)	NB (Enter)		SB (Enter)	(Exit)	NB (Enter)		SB (Enter)	NB (Exit)	SB (Exit)	Total																				
			Hourly	18.0%	Hourly	57.0%	Hourly	2.5%	Hourly	0%	Hourly	0.0%	Hourly	42.0%	Hourly	22.5%	Hourly	2.5%	Hourly	0%	Hourly	5.0%	Hourly	2.5%	Hourly	5.0%	Hourly	0.0%	Hourly	15.0%	Hourly	16.0%	Hourly	12.0%	Hourly	0.0%					
12:00 AM	0	0	0	132	24	132	75	289	7	3	0	3	0	3	1	3	1	10	0	0	0	0	0	0	0	0	0	0	7	1	7	1	15	2	15	0	112				
1:00 AM	0	0	0	117	21	117	67	171	4	0	0	0	0	2	1	2	0	3	0	0	0	0	0	0	0	0	0	0	6	1	6	1	8	1	8	0	96				
2:00 AM	0	0	0	36	6	36	21	136	3	0	0	0	0	3	1	3	1	3	0	0	0	0	0	0	0	0	0	2	0	2	0	7	1	7	0	33					
3:00 AM	0	0	0	54	10	54	31	226	6	4	0	4	0	3	1	3	1	5	0	0	0	0	0	0	0	0	0	3	0	3	0	11	1	11	0	50					
4:00 AM	0	0	0	18	3	18	10	117	3	10	0	10	0	3	1	3	1	3	0	0	0	0	0	0	0	0	0	1	0	1	0	6	1	6	0	19					
5:00 AM	0	0	0	18	3	18	10	27	1	13	0	13	0	10	4	10	2	3	0	0	0	0	0	0	0	0	8	0	8	0	0	0	2	0	2	0	20				
6:00 AM	0	0	0	93	17	93	53	95	2	197	0	197	0	23	10	23	5	13	0	0	0	0	0	0	0	0	48	1	48	2	0	9	1	6	0	93					
7:00 AM	0	0	0	218	39	218	124	200	5	327	0	327	0	38	16	38	9	26	1	0	0	0	0	0	0	72	2	72	4	0	18	3	18	3	12	1	12	0	207		
8:00 AM	0	0	0	410	74	410	234	256	6	455	0	455	0	50	21	50	11	47	1	0	0	0	0	0	0	114	3	114	6	3	30	5	30	5	16	2	16	0	368		
9:00 AM	0	0	0	463	83	463	264	429	11	124	0	124	0	61	26	61	14	53	1	0	0	0	0	0	0	56	1	56	3	4	29	4	29	5	26	3	26	0	415		
10:00 AM	0	0	0	605	109	605	345	461	12	133	0	133	0	94	39	94	21	80	2	0	0	0	0	0	0	46	1	46	2	16	40	6	40	6	30	4	30	0	547		
11:00 AM	0	0	0	597	107	597	340	509	13	72	0	72	0	219	92	219	49	105	3	0	0	0	0	0	0	23	1	23	1	20	0	43	6	43	7	33	4	33	0	623	
12:00 PM	0	0	0	628	113	628	358	601	15	124	0	124	0	290	122	290	65	229	6	0	0	0	0	0	0	36	1	36	2	46	0	51	8	51	8	47	6	47	0	704	
1:00 PM	0	0	0	690	124	690	393	640	16	105	0	105	0	194	81	194	44	237	6	0	0	0	0	0	0	13	0	13	1	54	0	47	7	47	8	48	6	48	0	686	
2:00 PM	0	0	0	589	106	589	336	760	19	158	0	158	0	146	61	146	33	225	6	0	0	0	0	0	0	15	0	15	1	79	0	39	6	39	6	54	6	54	0	580	
3:00 PM	0	0	0	699	126	699	398	643	16	58	0	58	0	187	79	187	42	156	4	0	0	0	0	0	0	3	0	3	0	107	0	45	7	45	7	48	6	48	0	685	
4:00 PM	0	0	0	739	133	739	421	750	19	29	0	29	0	202	85	202	45	128	3	0	0	0	0	0	0	1	0	1	0	101	0	48	7	48	8	51	6	51	0	727	
5:00 PM	0	0	0	694	125	694	396	626	16	13	0	13	0	226	95	226	51	224	6	0	0	0	0	0	0	0	0	0	0	0	5	0	47	7	47	8	47	6	47	0	710
6:00 PM	0	0	0	793	143	793	452	675	17	15	0	15	0	220	92	220	50	224	6	0	0	0	0	0	0	0	0	0	1	0	51	8	51	8	47	6	47	0	782		
7:00 PM	0	0	0	740	133	740	422	705	18	73	0	73	0	140	59	140	32	247	6	0	0	0	0	0	0	0	0	0	0	0	0	0	45	7	45	7	48	6	48	0	690
8:00 PM	0	0	0	800	144	800	456	643	16	27	0	27	0	111	47	111	25	147	4	0	0	0	0	0	0	0	0	0	0	0	0	0	45	7	45	7	40	5	40	0	711
9:00 PM	0	0	0	687	124	687	392	682	17	14	0	14	0	92	39	92	21	119	3	0	0	0	0	0	0	0	0	0	0	0	0	0	40	6	40	6	41	5	41	0	613
10:00 PM	0	0	0	609	110	609	347	640	16	168	0	168	0	18	8	18	4	38	1	0	0	0	0	0	0	0	0	0	0	0	0	32	5	32	5	33	4	33	0	500	
11:00 PM	0	0	0	466	84	466	266	614	15	29	0	29	0	6	3	6	1	17	0	0	0	0	0	0	0	0	0	0	0	0	24	4	24	4	31	4	31	0	381		
Totals	0	0	0	10895	1961	10895	6211	10895	273	2151	0	2151	0	2341	984	2341	528	2342	59	0	0	0	0	0	0	435	10	435	22	436	0	705	106	705	111	707	87	707	0	10352	

No % of Employees, Theater, LIRR Shuttle, NYC Shuttle, or Deliveries entering or exiting this intersection

Traffic Vo Traffic Volume Development

Project: Project: CONF-Sands Project No 26841.01 Growth Rate: 0.006
 Calc by: Calc by: C.J.L Date: 45372 # Years 7
 Check by: Check by: Date: Growth 1.0427636
 Analysis Condition: 2030 Build
 Intersection: Intersection: Node 408 Sands Boulevard at North Drive

Time	North Drive																					
	North Dr. Eastbound																					
	Site Generated Trips - NB										Build Volume - Site Drwy- NB											
	Casino EB (Exit)	Restaurant/Retail/Public Attraction EB (Exit)	Theater EB (Exit)	Meetings and Conference EB (Exit)	Ridehailing EB (Exit)	Build Volume - Site Drwy- NB	Casino	Restaurant/Retail/Public Attraction	Theater	Meetings and Conference	Ridehailing	Build Volume										
Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly	Total					
37.5%	49.5%	0.0%	7.5%	19.0%	Total	0.0%	0.0%	0.0%	0.0%	0.0%	Total											
12:00 AM	289	108	10	5	0	0	0	0	15	3	116	289	0	10	0	0	0	0	15	0	0	
1:00 AM	171	64	3	1	0	0	0	0	8	2	67	171	0	3	0	0	0	0	8	0	0	
2:00 AM	136	51	3	1	0	0	0	0	7	1	53	136	0	3	0	0	0	0	7	0	0	
3:00 AM	226	85	5	2	0	0	0	0	11	2	89	226	0	5	0	0	0	0	11	0	0	
4:00 AM	117	44	3	1	0	0	0	0	6	1	46	117	0	3	0	0	0	0	6	0	0	
5:00 AM	27	10	3	1	0	0	0	0	2	0	11	27	0	3	0	0	0	0	2	0	0	
6:00 AM	95	36	13	5	0	0	0	0	6	1	42	95	0	13	0	0	0	0	6	0	0	
7:00 AM	200	75	26	10	0	0	0	0	12	2	87	200	0	26	0	0	0	0	12	0	0	
8:00 AM	256	96	47	18	0	0	3	0	16	3	117	256	0	47	0	0	0	3	16	0	0	
9:00 AM	429	161	53	20	0	0	4	0	26	5	186	429	0	53	0	0	0	4	26	0	0	
10:00 AM	461	173	80	30	0	0	16	1	30	6	210	461	0	80	0	0	0	16	30	0	0	
11:00 AM	509	191	105	39	0	0	20	2	33	6	238	509	0	105	0	0	0	20	33	0	0	
12:00 PM	601	225	229	86	0	0	46	3	47	9	323	601	0	229	0	0	0	46	47	0	0	
1:00 PM	640	240	237	89	0	0	54	4	48	9	342	640	0	237	0	0	0	54	48	0	0	
2:00 PM	760	285	225	84	0	0	79	6	54	10	385	760	0	225	0	0	0	79	54	0	0	
3:00 PM	643	241	156	59	0	0	107	8	48	9	317	643	0	156	0	0	0	107	48	0	0	
4:00 PM	750	281	128	48	0	0	101	8	51	10	347	750	0	128	0	0	0	101	51	0	0	
5:00 PM	626	235	224	84	0	0	5	0	47	9	328	626	0	224	0	0	0	5	47	0	0	
6:00 PM	675	253	224	84	0	0	1	0	47	9	346	675	0	224	0	0	0	1	47	0	0	
7:00 PM	705	264	247	93	0	0	0	0	48	9	366	705	0	247	0	0	0	0	48	0	0	
8:00 PM	643	241	147	55	0	0	0	0	40	8	304	643	0	147	0	0	0	0	40	0	0	
9:00 PM	682	256	119	45	0	0	0	0	41	8	309	682	0	119	0	0	0	0	41	0	0	
10:00 PM	640	240	38	14	0	0	0	0	33	6	260	640	0	38	0	0	0	0	33	0	0	
11:00 PM	614	230	17	6	0	0	0	0	31	6	242	614	0	17	0	0	0	0	31	0	0	
Totals	10895	4085	2342	880	0	0	436	32	707	134	5131	10895	0	2342	0	0	0	436	0	707	0	0

No % of Emrg

Figure 4C-1 Four-Hour Vehicular Volume Warrant

Source: Federal MUTCD
Build Conditions

▲ Sands Boulevard at North Dr.
eastbound

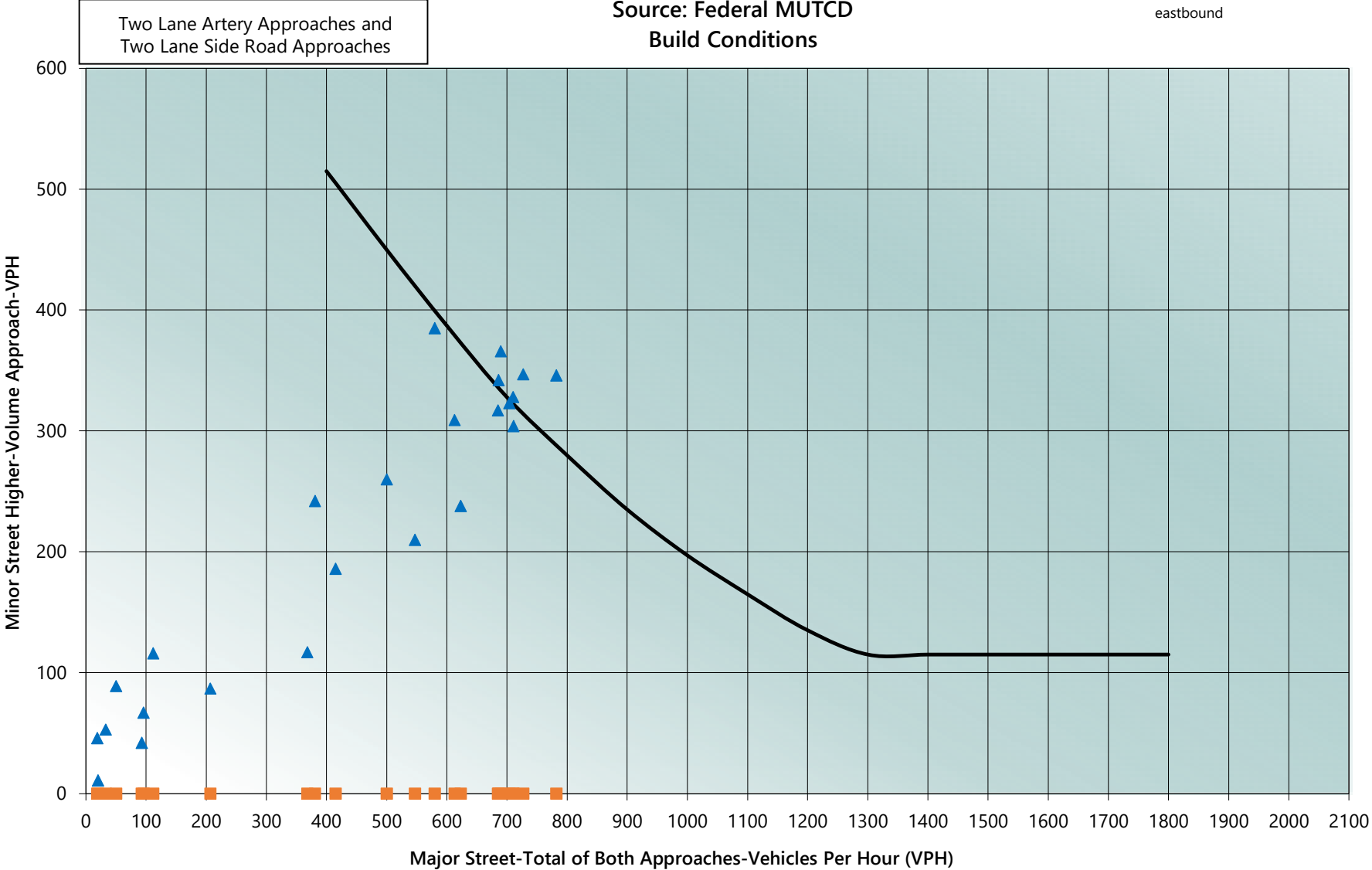
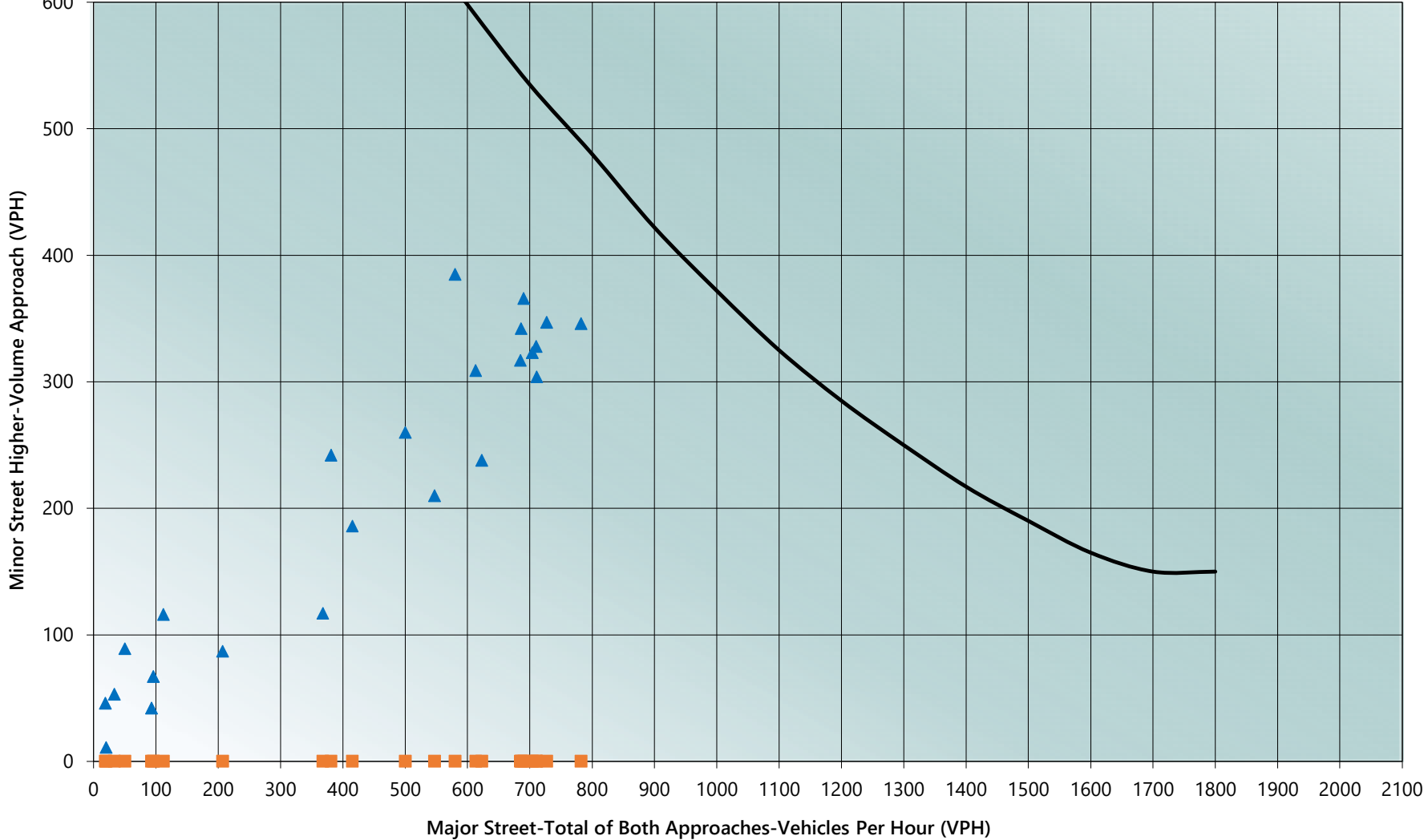


Figure 4C-3 Peak Hour Volume Warrant
Source: Federal MUTCD
Build Conditions

- ▲ North Drive at Site Driveway NB
- North Drive at Site Driveway SB

Two Lane Artery Approaches and
 Two Lane Side Road Approaches



Warrant 3, Peak Hour

Project:	CONF-Sands	Project No:	26481.01
Calc by:	CJL	Date:	3/21/2024
Check by:		Date:	
Analysis Condition:	2030 Build		
Intersection:	Node 408	Sands Boulevard at North Drive	

Part A

3 Leg, Main 2, Side 2 ▼

Thresholds

Part A.1	Part A.2	Part A.3
5	150	650

User Input

	Main line	Side	Delay (2)	Delay (veh/hr)	Part A		Part A.3	Meets Part A Warrant?
					Part A.1	Part A.2		
AM PH	279	104	9.6	0.277	no	no	no	no
PM PH	709	355	19.7	1.943	no	yes	yes	no
Fri Evening	1071	477	174.9	23.174	yes	yes	yes	yes
Sat Midday	1089	490	175.8	23.928	yes	yes	yes	yes
Sat Evenin	1337	647	6233.5	1120.298	yes	yes	yes	yes



T-4 Signal Warrant Analysis - West Dr. at Garage C /MSK Access (Node 410)



Traffic Volume Development

Project: CONF-Sands
 Calc by: CIL
 Check by:
 Analysis Condition: 2030 Build
 Intersection: Node 410 West Drive at Garage C/MSK Access

Growth Rate: 0.6%
 # Years: 7
 Growth: 1.0428

Project No: 26841.01

Date: #####

Time	Mainline West Drive																											Build Volume															
	No-Build Volumes			Site Generated Trips																																							
				Casino/Hotel Autos			Employees			Restaurant/Retail/Public Attraction			Theater		Meetings and Conference			Ridehailing				Deliveries																					
	NB	SB	Total	NB (Enter) Hourly	SB (Enter) 6.0%	SB (Exit) 0.0%	NB (Enter) Hourly	SB (Enter) 95%	SB (Exit) 0.0%	NB (Enter) Hourly	SB (Enter) 16.0%	SB (Exit) 0.0%	NB (Enter) Hourly	SB (Enter) 56%	SB (Exit) 34.5%	NB (Enter) Hourly	SB (Enter) 58.0%	SB (Exit) 0.0%	NB (Enter) Hourly	SB (Enter) 30.5%	NB (Exit) Hourly	SB (Exit) 19.5%	NB (Exit) Hourly	SB (Exit) 0.0%	NB (Enter) Hourly	100.0%	Total																
12:00 AM	0	0	0	132	8	132	0	3	3	3	0	55	3	3	0	10	0	0	0	0	0	0	7	2	7	1	15	0	15	0	8	8	25										
1:00 AM	0	0	0	117	7	117	0	0	0	0	0	55	3	2	0	3	0	0	0	0	0	6	2	6	1	8	0	8	0	8	8	21											
2:00 AM	0	0	0	36	2	36	0	0	0	0	0	30	2	3	0	3	0	0	0	0	0	2	1	2	0	7	0	7	0	8	8	13											
3:00 AM	0	0	0	54	3	54	0	4	4	4	0	2	0	3	0	5	0	0	0	0	0	3	1	3	1	11	0	11	0	8	8	17											
4:00 AM	0	0	0	18	1	18	0	11	10	10	0	15	1	3	0	3	0	0	0	0	0	1	0	1	0	6	0	6	0	8	8	20											
5:00 AM	0	0	0	18	1	18	0	27	13	13	0	0	0	10	2	10	0	3	0	0	8	5	8	0	0	3	1	3	1	2	0	8	8	30									
6:00 AM	0	0	0	93	6	93	0	95	0	197	187	197	0	13	1	23	4	23	0	13	0	0	0	0	0	9	3	9	2	6	0	8	8	239									
7:00 AM	0	0	0	218	13	218	0	200	0	327	311	327	0	95	5	38	6	38	0	26	0	0	0	0	0	18	5	18	4	12	0	12	0	8	8	394							
8:00 AM	0	0	0	410	25	410	0	256	0	455	432	455	0	154	8	50	8	50	0	47	0	0	0	0	114	66	114	0	3	0	30	9	30	6	16	0	16	0	8	8	552		
9:00 AM	0	0	0	463	28	463	0	429	0	124	118	124	0	41	2	61	10	61	0	53	0	0	0	0	0	56	32	56	0	4	0	29	9	29	6	26	0	26	0	8	8	213	
10:00 AM	0	0	0	605	36	605	0	461	0	133	126	133	0	5	0	94	15	94	0	80	0	0	0	0	0	46	27	46	0	16	0	40	12	40	8	30	0	30	0	8	8	232	
11:00 AM	0	0	0	597	36	597	0	509	0	72	68	72	0	0	0	219	35	219	0	105	0	0	0	0	0	23	13	23	0	20	0	43	13	43	8	33	0	33	0	8	8	181	
12:00 PM	0	0	0	628	38	628	0	601	0	124	118	124	0	1	0	290	46	290	0	229	0	0	0	0	0	36	21	36	0	46	0	51	16	51	10	47	0	47	0	8	8	257	
1:00 PM	0	0	0	690	41	690	0	640	0	105	100	105	0	2	0	194	31	194	0	237	0	0	0	0	0	13	8	13	0	54	0	47	14	47	9	48	0	48	0	8	8	211	
2:00 PM	0	0	0	589	35	589	0	760	0	158	150	158	0	7	0	146	23	146	0	225	0	0	0	0	0	15	9	15	0	79	0	39	12	39	8	54	0	54	0	8	8	245	
3:00 PM	0	0	0	699	42	699	0	643	0	58	55	58	0	176	9	187	30	187	0	156	0	0	0	0	0	3	2	3	0	107	0	45	14	45	9	48	0	48	0	8	8	169	
4:00 PM	0	0	0	739	44	739	0	750	0	29	28	29	0	37	2	202	32	202	0	128	0	0	0	0	0	1	1	1	0	101	0	48	15	48	9	51	0	51	0	8	8	139	
5:00 PM	0	0	0	694	42	694	0	626	0	13	12	13	0	367	18	226	36	226	0	224	0	0	0	0	0	0	0	0	0	5	0	47	14	47	9	47	0	47	0	8	8	139	
6:00 PM	0	0	0	793	48	793	0	675	0	15	14	15	0	241	12	220	35	220	0	224	0	0	0	0	0	0	0	0	1	0	51	16	51	10	47	0	47	0	8	8	143		
7:00 PM	0	0	0	740	44	740	0	705	0	73	69	73	0	206	10	140	22	140	0	247	0	0	0	0	0	0	0	0	0	0	45	14	45	9	48	0	48	0	8	8	176		
8:00 PM	0	0	0	800	48	800	0	643	0	27	26	27	0	194	10	111	18	111	0	147	0	0	0	0	0	0	0	0	0	0	45	14	45	9	40	0	40	0	8	8	133		
9:00 PM	0	0	0	687	41	687	0	682	0	14	13	14	0	83	4	92	15	92	0	119	0	0	0	0	0	0	0	0	0	0	40	12	40	8	41	0	41	0	8	8	101		
10:00 PM	0	0	0	609	37	609	0	640	0	168	160	168	0	110	6	18	3	18	0	38	0	0	0	0	0	0	0	0	0	0	32	10	32	6	33	0	33	0	8	8	230		
11:00 PM	0	0	0	466	28	466	0	614	0	29	28	29	0	265	13	6	1	6	0	17	0	0	0	0	0	0	0	0	0	24	7	24	5	31	0	31	0	8	8	90			
Totals	0	0	0	10895	654	10895	0	10895	0	2151	2044	2151	0	2154	109	2341	372	2341	0	2342	0	0	0	0	0	0	435	254	435	0	436	0	705	216	705	139	707	0	707	0	192	192	3980

No % of Theater, LIRR Shuttle, NYC Shuttle, or Deliveries entering or exiting this intersection

Traffic Volume Development

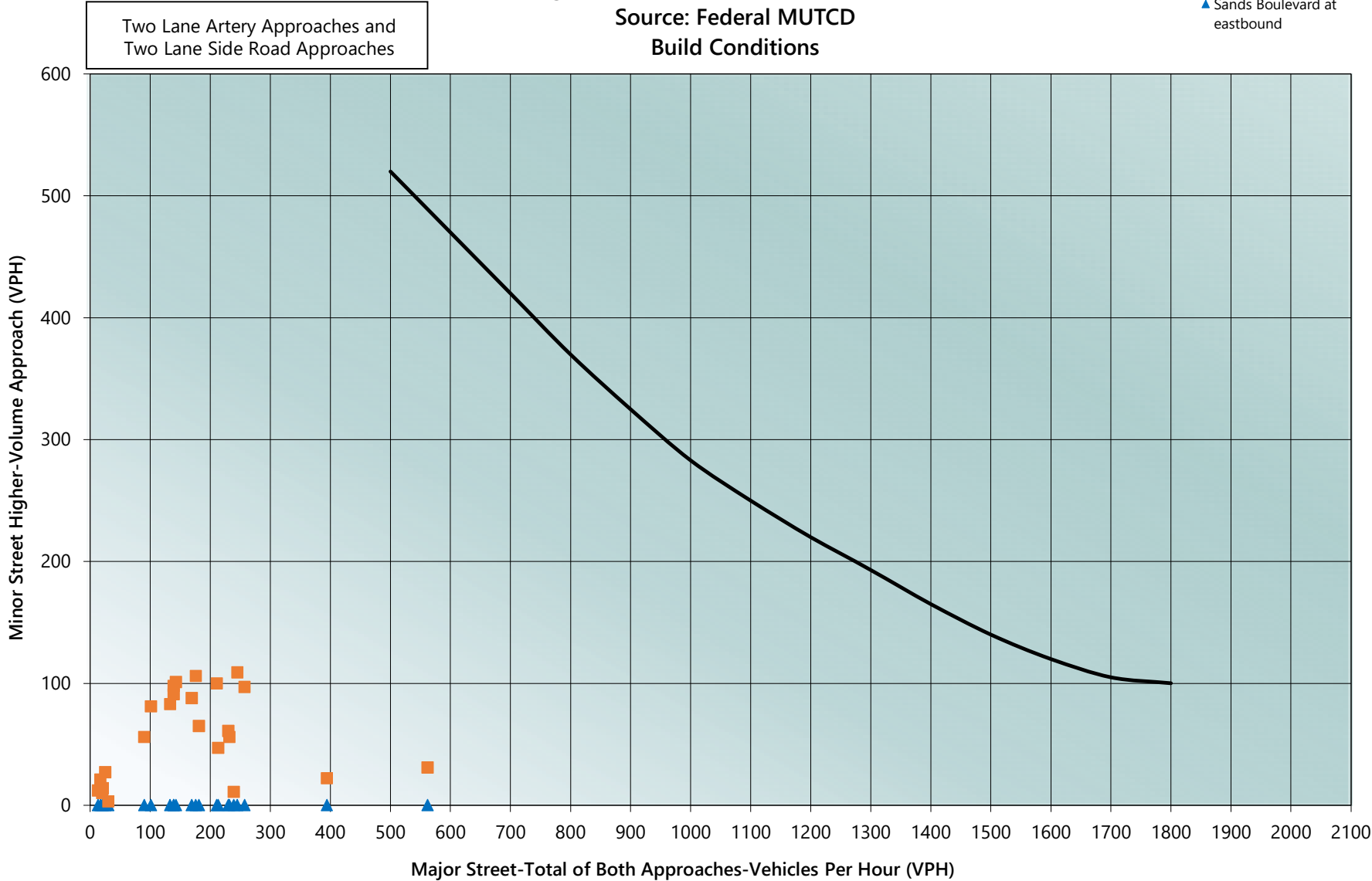
Project: Project: 0 Project No: 26841.01 Growth Rate 0.6%
 Calc by: Calc by: 0 Date: ##### # Years 7
 Check by: Check by: Date: ##### Growth 1.0428
 Analysis Con/Analysis Condition: 2030 Build
 Intersection: Intersection: Node 410 West Drive at Garage C/MSK Access

Time	MSK Access Eastbound							Garage C Westbound										
	Site Generated Trips - EB						Build Volume - Site Drwy - EB	Site Generated Trips - WB						Build Volume				
	Casino EB (Exit) Hourly 0.0%	Restaurant/Retail/P ublic Attraction EB (Exit) Hourly 0.0%	Theater EB (Exit) Hourly 0.0%	Meetings and Conference EB (Exit) Hourly 0.0%	Ridehailing EB (Exit) Hourly 0.0%	Hourly 0.0%		Casino WB (Exit) Hourly 6.0%	Restaurant/Retail/Publi c Attraction WB (Exit) Hourly 16.0%	Theater WB (Exit) Hourly 90.0%	Meetings and Conference WB (Exit) Hourly 0.0%	Ridehailing WB (Exit) Hourly 50.0%	Total					
12:00 AM	289	0	0	0	0	15	0	289	17	10	2	0	0	0	0	15	8	27
1:00 AM	171	0	3	0	0	8	0	171	10	3	0	0	0	0	0	8	4	14
2:00 AM	136	0	3	0	0	7	0	136	8	3	0	0	0	0	7	4	12	
3:00 AM	226	0	5	0	0	11	0	226	14	5	1	0	0	0	11	6	21	
4:00 AM	117	0	3	0	0	6	0	117	7	3	0	0	0	0	6	3	10	
5:00 AM	27	0	3	0	0	2	0	27	2	3	0	0	0	0	2	1	3	
6:00 AM	95	0	13	0	0	6	0	95	6	13	2	0	0	0	6	3	11	
7:00 AM	200	0	26	0	0	12	0	200	12	26	4	0	0	0	12	6	22	
8:00 AM	256	0	47	0	0	16	0	256	15	47	8	0	0	3	16	8	31	
9:00 AM	429	0	53	0	0	26	0	429	26	53	8	0	0	4	26	13	47	
10:00 AM	461	0	80	0	0	30	0	461	28	80	13	0	0	16	30	15	56	
11:00 AM	509	0	105	0	0	33	0	509	31	105	17	0	0	20	33	17	65	
12:00 PM	601	0	229	0	0	48	0	601	36	229	37	0	0	46	47	24	97	
1:00 PM	640	0	237	0	0	54	0	640	38	237	38	0	0	54	48	24	100	
2:00 PM	760	0	225	0	0	79	0	760	46	225	36	0	0	79	54	27	109	
3:00 PM	643	0	156	0	0	107	0	643	39	156	25	0	0	107	48	24	98	
4:00 PM	750	0	128	0	0	101	0	750	45	128	20	0	0	101	51	26	91	
5:00 PM	626	0	224	0	0	5	0	626	38	224	36	0	0	5	47	24	98	
6:00 PM	675	0	224	0	0	1	0	675	41	224	36	0	0	1	47	24	101	
7:00 PM	705	0	247	0	0	0	0	705	42	247	40	0	0	0	48	24	106	
8:00 PM	643	0	147	0	0	0	0	643	39	147	24	0	0	0	40	20	83	
9:00 PM	682	0	119	0	0	0	0	682	41	119	19	0	0	0	41	21	81	
10:00 PM	640	0	38	0	0	0	0	640	38	38	6	0	0	0	33	17	61	
11:00 PM	614	0	17	0	0	0	0	614	37	17	3	0	0	0	31	16	56	
Totals	10895	0	2342	0	0	436	0	10895	656	2342	375	0	0	436	0	707	359	1390

No % of The:

Figure 4C-3 Peak Hour Volume Warrant
 Source: Federal MUTCD
 Build Conditions

▲ Sands Boulevard at eastbound



Warrant 3, Peak Hour

Project:	CONF-Sands	Project No:	26481.01
Calc by:	CJL	Date:	3/21/2024
Check by:		Date:	
Analysis Condition:	2030 Build		
Intersection:	Node 410	West Drive at Garage C/MSK Access	

Part A

4 Leg, Main 2, Side 1 

Thresholds

Part A.1	Part A.2	Part A.3
4	100	800

User Input

	Main line	Side	Delay (s)	Delay (veh/hr)	Part A		Part A.3	Meets Part A Warrant?
					Part A.1	Part A.2		
AM PH	692	26	11.5	0.083	no	no	no	no
PM PH	172	96	9.2	0.245	no	no	no	no
Fri Evening	872	194	17.6	0.948	no	yes	yes	no
Sat Midday	321	132	10.2	0.374	no	yes	no	no
Sat Evenin	366	205	11.1	0.632	no	yes	no	no



T-5 Signal Warrant Analysis - South Dr. at Garage B/MSK Access (Node 415)



Traffic Volume Development

Project: CONF-Sands
 Calc by: C.JL
 Check by:
 Analysis Condition: 2030 Build
 Intersection: Node 415 South Drive at Parking Garage B/MSK Access

Project No: 26841.01
 Date: 4/3/21
 # Years: 7
 Growth: 1.0427636

Growth Rate: 0.006

Time	MSK Access										Parking Garage B												
	Site Driveway - NB										Site Driveway - SB												
	Site Generated Trips - NB										Casino SB (Exit)	Restaurant/Retail/Pubi c Attraction SB (Exit)	Theater SB (Exit)	Meetings and Conference SB (Exit)	Ridehailing SB (Exit)	Build Volume - Site Drwy- NB	Casino SB (Exit)	Restaurant/Retail/Pubi c Attraction SB (Exit)	Theater SB (Exit)	Meetings and Conference SB (Exit)	Ridehailing SB (Exit)	Build Volume - Site Drwy- SB	
	Casino NB (Exit)	Restaurant/Retail/ Public Attraction NB (Exit)	Theater NB (Exit)	Meetings and Conference NB (Exit)	Ridehailing NB (Exit)	Total	Casino SB (Exit)	Restaurant/Retail/Pubi c Attraction SB (Exit)	Theater SB (Exit)	Meetings and Conference SB (Exit)													Ridehailing SB (Exit)
Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Total	
12:00 AM	289	0	10	0	0	0	0	15	0	0	289	0	10	0	0	0	0	0	0	0	15	0	0
1:00 AM	171	0	3	0	0	0	0	8	0	0	171	0	3	0	0	0	0	0	0	0	8	0	0
2:00 AM	136	0	3	0	0	0	0	7	0	0	136	0	3	0	0	0	0	0	0	0	7	0	0
3:00 AM	226	0	5	0	0	0	0	11	0	0	226	0	5	0	0	0	0	0	0	0	11	0	0
4:00 AM	117	0	3	0	0	0	0	6	0	0	117	0	3	0	0	0	0	0	0	0	6	0	0
5:00 AM	27	0	3	0	0	0	0	2	0	0	27	0	3	0	0	0	0	0	0	0	2	0	0
6:00 AM	95	0	13	0	0	0	0	6	0	0	95	0	13	0	0	0	0	0	0	0	6	0	0
7:00 AM	200	0	26	0	0	0	0	12	0	0	200	0	26	0	0	0	0	0	0	0	12	0	0
8:00 AM	256	0	47	0	0	0	3	16	0	0	256	0	47	0	0	3	16	0	0	0	16	0	0
9:00 AM	429	0	53	0	0	0	4	26	0	0	429	0	53	0	0	4	26	0	0	0	26	0	0
10:00 AM	461	0	80	0	0	0	16	30	0	0	461	0	80	0	0	16	30	0	0	0	30	0	0
11:00 AM	509	0	105	0	0	0	20	33	0	0	509	0	105	0	0	20	33	0	0	0	33	0	0
12:00 PM	601	0	229	0	0	0	46	47	0	0	601	0	229	0	0	46	47	0	0	0	47	0	0
1:00 PM	640	0	237	0	0	0	54	48	0	0	640	0	237	0	0	54	48	0	0	0	48	0	0
2:00 PM	760	0	225	0	0	0	79	54	0	0	760	0	225	0	0	79	54	0	0	0	54	0	0
3:00 PM	643	0	156	0	0	0	107	48	0	0	643	0	156	0	0	107	48	0	0	0	48	0	0
4:00 PM	750	0	128	0	0	0	101	51	0	0	750	0	128	0	0	101	51	0	0	0	51	0	0
5:00 PM	626	0	224	0	0	0	5	47	0	0	626	0	224	0	0	5	47	0	0	0	47	0	0
6:00 PM	675	0	224	0	0	0	1	47	0	0	675	0	224	0	0	1	47	0	0	0	47	0	0
7:00 PM	705	0	247	0	0	0	0	48	0	0	705	0	247	0	0	0	48	0	0	0	48	0	0
8:00 PM	643	0	147	0	0	0	0	40	0	0	643	0	147	0	0	0	40	0	0	0	40	0	0
9:00 PM	682	0	119	0	0	0	0	41	0	0	682	0	119	0	0	0	41	0	0	0	41	0	0
10:00 PM	640	0	38	0	0	0	0	33	0	0	640	0	38	0	0	0	33	0	0	0	33	0	0
11:00 PM	614	0	17	0	0	0	0	31	0	0	614	0	17	0	0	0	31	0	0	0	31	0	0
Totals	10895	0	2342	0	0	0	436	707	0	0	10895	0	2342	0	0	436	707	0	0	0	707	0	0

No % of Emf

Warrant 1, Eight-Hour Vehicular Volume

Project: CONF-Sands Project No: 26481.01
 Calc by: CJL Date: 3/20/2024
 Check by: Date:
 Analysis Condition: 2030 Build
 Analysis Condition: Node 415 South Drive at Parking Garage B/MSK Access
 Lane Configuration Main 2, Side 2 3

BUILD CONDITIONS - WARRANT 2, (100%) NOT MET

Warrant 1, Eight-Hour Vehicular Volume 2030 Build																																								
Hour Beginning	Mainline	Minor	Minor	Condition A												Condition B																								
	South Drive	Site Driveway - NB	Site Driveway - SB	100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction				100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction								
				Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall									
12:00 AM	43	0	0																																					
1:00 AM	31	0	0																																					
2:00 AM	22	0	0																																					
3:00 AM	30	0	0																																					
4:00 AM	19	0	0																																					
5:00 AM	21	0	0																																					
6:00 AM	71	0	0																																					
7:00 AM	118	0	0																																					
8:00 AM	180	0	0																																					
9:00 AM	138	0	0																																					
10:00 AM	148	0	0																																					
11:00 AM	143	0	0																																					
12:00 PM	194	0	0																																					
1:00 PM	172	0	0																																					
2:00 PM	172	0	0																																					
3:00 PM	160	0	0																																					
4:00 PM	158	0	0																																					
5:00 PM	177	0	0																																					
6:00 PM	180	0	0																																					
7:00 PM	175	0	0																																					
8:00 PM	154	0	0																																					
9:00 PM	139	0	0																																					
10:00 PM	110	0	0																																					
11:00 PM	103	0	0																																					
Threshold Hours Met Required				600	200	200	0	480	160	160	0	420	140	140	0	336	112	112	0	900	100	100	0	720	80	80	0	630	70	70	0	504	56	56	0					
Warrant Met?							No				No				No				No				No				No											No		



T-6 Signal Warrant Analysis - North Dr. at Garage A (Node 416)



Traffic Volume Development

Project: CONF-Sands Project No: 26841.01 Growth Rate 0.6%
 Calc by: CJL Date: 3/20/2024 # Years 7
 Check by: Date: Growth 1.0428
 Analysis Condition: 2030 Build
 Intersection: Node 416 North Drive at Parking Garage A (Valet Below Mice)/Nassau Coliseum Access

Time	Mainline																				Build Volume										
	North Drive																														
	No-Build Volumes			Site Generated Trips																											
	EB	WB	Total	Casino/Hotel Autos		Employees		Restaurant/Retail/Public Attraction		Theater		Meetings and Conference		Ridehailing			Total														
WB (Enter)				EB (Enter)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	WB (Exit)																
			Hourly	2.5%	Hourly	6%	Hourly	0%	Hourly	0.0%	Hourly	2.5%	Hourly	10.0%	Hourly	0%	Hourly	0.0%	Hourly	7.5%	Hourly	2.5%	Hourly	23.0%	Hourly	3.5%	Hourly	6.0%			
12:00 AM	0	0	0	132	3	132	8	3	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	7	2	7	0	15	1	14	
1:00 AM	0	0	0	117	3	117	7	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	6	1	6	0	8	0	11		
2:00 AM	0	0	0	36	1	36	2	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	2	0	2	0	7	0	3		
3:00 AM	0	0	0	54	1	54	3	4	0	4	0	3	0	3	0	0	0	0	0	0	0	0	3	1	3	0	11	1	6		
4:00 AM	0	0	0	18	0	18	1	10	0	10	0	3	0	3	0	0	0	0	0	0	0	0	1	0	1	0	6	0	1		
5:00 AM	0	0	0	18	0	18	1	13	0	13	0	10	0	10	1	0	0	0	0	0	0	8	1	8	0	3	1	3	0	4	
6:00 AM	0	0	0	93	2	93	6	197	0	197	0	23	1	23	2	0	0	0	0	0	48	4	48	1	9	2	9	0	6	0	18
7:00 AM	0	0	0	218	5	218	13	327	0	327	0	38	1	38	4	0	0	0	0	0	72	5	72	2	18	4	18	1	12	1	36
8:00 AM	0	0	0	410	10	410	25	455	0	455	0	50	1	50	5	0	0	0	0	0	114	9	114	3	30	7	30	1	16	1	62
9:00 AM	0	0	0	463	12	463	28	124	0	124	0	61	2	61	6	0	0	0	0	0	56	4	56	1	29	7	29	1	26	2	63
10:00 AM	0	0	0	605	15	605	36	133	0	133	0	94	2	94	9	0	0	0	0	0	46	3	46	1	40	9	40	1	30	2	78
11:00 AM	0	0	0	597	15	597	36	72	0	72	0	219	5	219	22	0	0	0	0	0	23	2	23	1	43	10	43	2	33	2	95
12:00 PM	0	0	0	628	16	628	38	124	0	124	0	290	7	290	29	0	0	0	0	0	36	3	36	1	51	12	51	2	47	3	111
1:00 PM	0	0	0	690	17	690	41	105	0	105	0	194	5	194	19	0	0	0	0	0	13	1	13	0	47	11	47	2	48	3	99
2:00 PM	0	0	0	589	15	589	35	158	0	158	0	146	4	146	15	0	0	0	0	0	15	1	15	0	39	9	39	1	54	3	83
3:00 PM	0	0	0	699	17	699	42	58	0	58	0	187	5	187	19	0	0	0	0	0	3	0	3	0	45	10	45	2	48	3	98
4:00 PM	0	0	0	739	18	739	44	29	0	29	0	202	5	202	20	0	0	0	0	0	1	0	1	0	48	11	48	2	51	3	103
5:00 PM	0	0	0	694	17	694	42	13	0	13	0	226	6	226	23	0	0	0	0	0	0	0	0	0	47	11	47	2	47	3	104
6:00 PM	0	0	0	793	20	793	48	15	0	15	0	220	6	220	22	0	0	0	0	0	0	0	0	0	51	12	51	2	47	3	113
7:00 PM	0	0	0	740	19	740	44	73	0	73	0	140	4	140	14	0	0	0	0	0	0	0	0	0	45	10	45	2	48	3	96
8:00 PM	0	0	0	800	20	800	48	27	0	27	0	111	3	111	11	0	0	0	0	0	0	0	0	0	45	10	45	2	40	2	96
9:00 PM	0	0	0	687	17	687	41	14	0	14	0	92	2	92	9	0	0	0	0	0	0	0	0	0	40	9	40	1	41	2	81
10:00 PM	0	0	0	609	15	609	37	168	0	168	0	18	0	18	2	0	0	0	0	0	0	0	0	0	32	7	32	1	33	2	64
11:00 PM	0	0	0	466	12	466	28	29	0	29	0	6	0	6	1	0	0	0	0	0	0	0	0	0	24	6	24	1	31	2	50
Totals	0	0	0	10895	270	10895	654	2151	0	2151	0	2341	59	2341	233	0	0	0	0	0	435	33	435	10	705	162	705	26	707	42	1489

No % of Employees, Theater, LIRR Shuttle, NYC Shuttle, or Deliveries entering or exiting this intersection

Traffic Volume Development

Project: Project: CONF-Sands
 Calc by: Calc by: CJL
 Check by: Check by:
 Analysis Condition: 2030 Build
 Intersection: Node 416

Project No: 26841.01
 Date: 45371
 Date:

North Drive at Parking Garage A (Valet Below Mice)/Nassau Coliseum Access

Time	Nassau Coliseum Access							Parking Garage A														
	Site Driveway - NB							Site Driveway - SB														
	Site Generated Trips - NB						Build Volume - Site Drwy - NB						Build Volume - Site Drwy - SB									
	Casino NB (Exit)	Restaurant/Retail/Public Attraction NB (Exit)	Theater NB (Exit)	Meetings and Conference NB (Exit)	Ridehailing NB (Exit)			Casino SB (Exit)	Restaurant/Retail/Public Attraction SB (Exit)	Theater SB (Exit)	Meetings and Conference SB (Exit)	Ridehailing SB (Exit)										
Hourly	5.0%	Hourly	5.0%	Hourly	0.0%	Hourly	10.0%	Hourly	25.0%	Total	Hourly	73.5%	Hourly	67.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Total	
12:00 AM	289	14	10	1	0	0	0	0	15	4	19	289	212	10	7	0	0	0	0	15	0	219
1:00 AM	171	9	3	0	0	0	0	0	8	2	11	171	126	3	2	0	0	0	0	8	0	128
2:00 AM	136	7	3	0	0	0	0	0	7	2	9	136	100	3	2	0	0	0	0	7	0	102
3:00 AM	226	11	5	0	0	0	0	0	11	3	14	226	166	5	3	0	0	0	0	11	0	169
4:00 AM	117	6	3	0	0	0	0	0	6	2	8	117	86	3	2	0	0	0	0	6	0	88
5:00 AM	27	1	3	0	0	0	0	0	2	1	2	27	20	3	2	0	0	0	0	2	0	22
6:00 AM	95	5	13	1	0	0	0	0	6	2	8	95	70	13	9	0	0	0	0	6	0	79
7:00 AM	200	10	26	1	0	0	0	0	12	3	14	200	147	26	17	0	0	0	0	12	0	164
8:00 AM	256	13	47	2	0	0	3	0	16	4	19	256	188	47	31	0	0	3	0	16	0	219
9:00 AM	429	21	53	3	0	0	4	0	26	7	31	429	315	53	36	0	0	4	0	26	0	351
10:00 AM	461	23	80	4	0	0	16	2	30	8	37	461	339	80	54	0	0	16	0	30	0	393
11:00 AM	509	25	105	5	0	0	20	2	33	8	40	509	374	105	70	0	0	20	0	33	0	444
12:00 PM	601	30	229	11	0	0	46	5	47	12	58	601	442	229	153	0	0	46	0	47	0	595
1:00 PM	640	32	237	12	0	0	54	5	48	12	61	640	470	237	159	0	0	54	0	48	0	629
2:00 PM	760	38	225	11	0	0	79	8	54	14	71	760	559	225	151	0	0	79	0	54	0	710
3:00 PM	643	32	156	8	0	0	107	11	48	12	63	643	473	156	105	0	0	107	0	48	0	578
4:00 PM	750	38	128	6	0	0	101	10	51	13	67	750	551	128	86	0	0	101	0	51	0	637
5:00 PM	626	31	224	11	0	0	5	1	47	12	55	626	460	224	150	0	0	5	0	47	0	610
6:00 PM	675	34	224	11	0	0	1	0	47	12	57	675	496	224	150	0	0	1	0	47	0	646
7:00 PM	705	35	247	12	0	0	0	0	48	12	59	705	518	247	165	0	0	0	0	48	0	683
8:00 PM	643	32	147	7	0	0	0	0	40	10	49	643	473	147	98	0	0	0	0	40	0	571
9:00 PM	682	34	119	6	0	0	0	0	41	10	50	682	501	119	80	0	0	0	0	41	0	581
10:00 PM	640	32	38	2	0	0	0	0	33	8	42	640	470	38	25	0	0	0	0	33	0	495
11:00 PM	614	31	17	1	0	0	0	0	31	8	40	614	451	17	11	0	0	0	0	31	0	462
Totals	10895	544	2342	115	0	0	436	44	707	181	884	10895	8007	2342	1568	0	0	436	0	707	0	9575

No % of Emf

Warrant 1, Eight-Hour Vehicular Volume

Project: CONF-Sands Project No: 26481.01
 Calc by: CJL Date: 3/20/2024
 Check by: Date:
 Analysis Condition: 2030 Build
 Analysis Condition: Node 416 North Drive at Parking Garage A (Valet Below Mice)/Nassau Coliseum Access
 Lane Configuration: Main 2, Side 2 3

BUILD CONDITIONS - WARRANT 2, (100%) NOT MET

Warrant 1, Eight-Hour Vehicular Volume 2030 Build																																							
Hour Beginning	Mainline North Drive	Minor Site Driveway - NB	Minor Site Driveway - SB	Condition A												Condition B																							
				100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction				100%: Basic minimum hourly volume				80%: Used for combination of Conditions A and B after trial of other measures				70%: Mainline speed ≥ 40 mph or isolated community with population < 10,000				56%: Combination of A and B and speed or population reduction							
				Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall	Main	Side 1	Side 2	Overall				
12:00 AM	14	19	219	Y				Y					Y				Y				Y				Y				Y				Y						
1:00 AM	11	11	128																																				
2:00 AM	3	9	102																																				
3:00 AM	6	14	169					Y					Y																										
4:00 AM	1	8	88																																				
5:00 AM	4	2	22																																				
6:00 AM	18	8	79																																				
7:00 AM	36	14	164										Y																										
8:00 AM	62	19	219				Y						Y																										
9:00 AM	63	31	351				Y						Y																										
10:00 AM	78	37	393				Y						Y																										
11:00 AM	95	40	444				Y						Y																										
12:00 PM	111	58	595				Y						Y																										
1:00 PM	99	61	629				Y						Y																										
2:00 PM	83	71	710				Y						Y																										
3:00 PM	98	63	578				Y						Y																										
4:00 PM	103	67	637				Y						Y																										
5:00 PM	104	55	610				Y						Y																										
6:00 PM	113	57	646				Y						Y																										
7:00 PM	96	59	683				Y						Y																										
8:00 PM	96	49	571				Y						Y																										
9:00 PM	81	50	581				Y						Y																										
10:00 PM	64	42	495				Y						Y																										
11:00 PM	50	40	462				Y						Y																										
Threshold Hours Met				600	200	200	0	480	160	160	0	420	140	140	0	336	112	112	0	900	100	100	0	720	80	80	0	630	70	70	0	504	56	56	0				
Required							8				8				8				8				8				8				8				8				8
Warrant Met?							No				No				No				No				No				No				No				No				No

Figure 4C-1 Four-Hour Vehicular Volume Warrant
Source: Federal MUTCD
Build Conditions

- ▲ North Drive at Site Driveway NB
- North Drive at Site Driveway SB

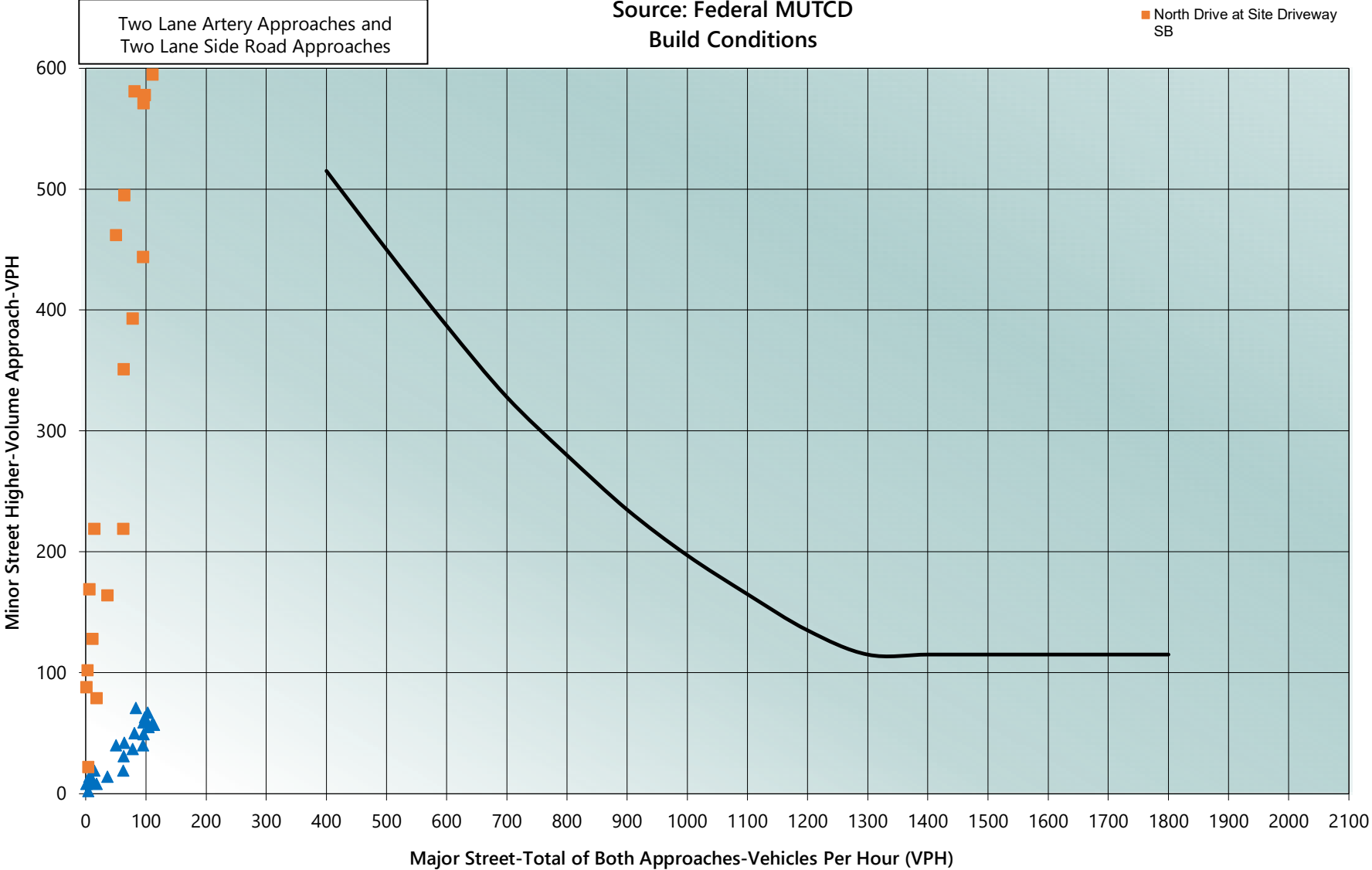
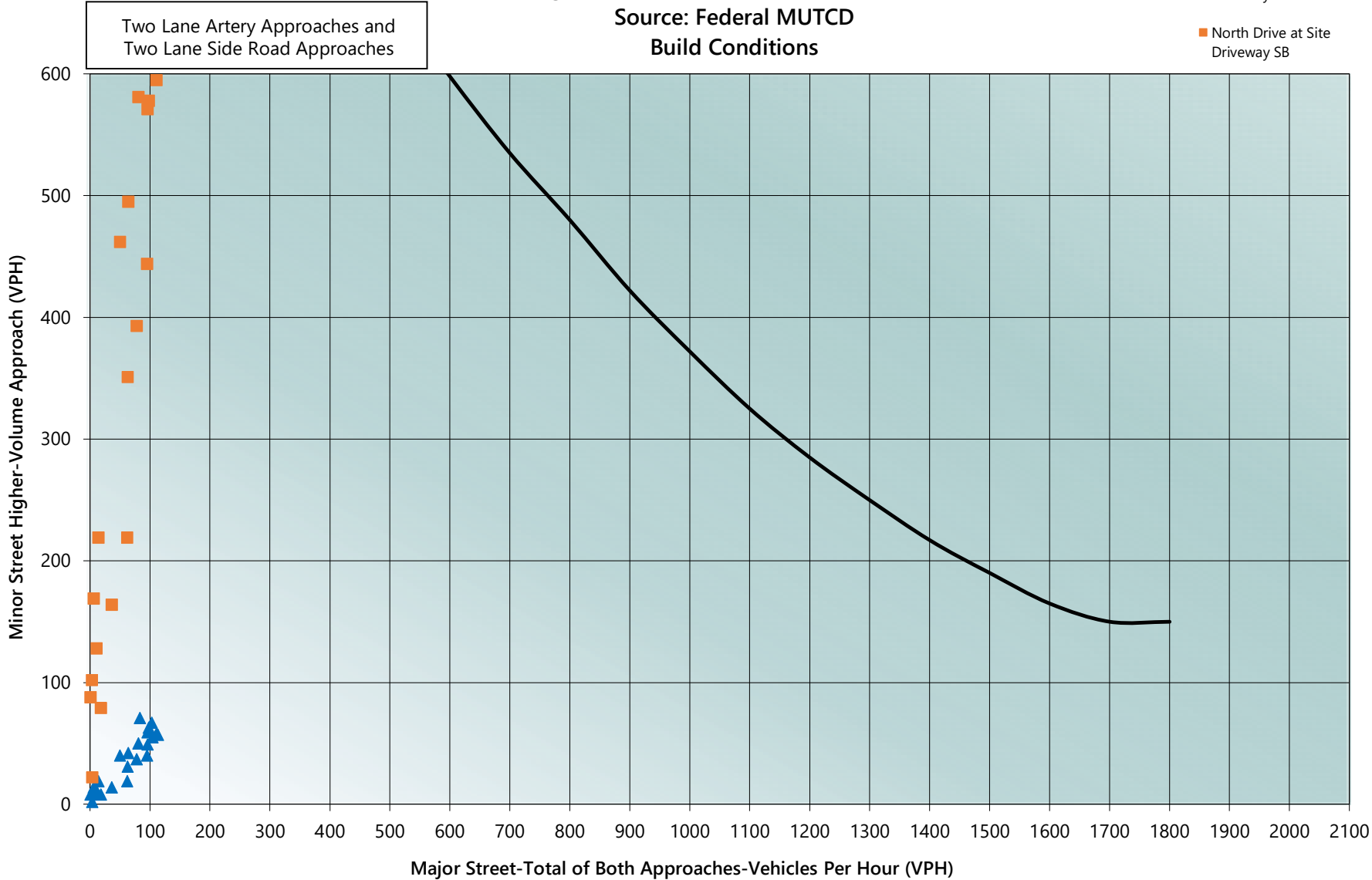


Figure 4C-3 Peak Hour Volume Warrant
 Source: Federal MUTCD
 Build Conditions

- ▲ North Drive at Site Driveway NB
- North Drive at Site Driveway SB



Warrant 3, Peak Hour

Project:	CONF-Sands	Project No:	26481.01
Calc by:	CJL	Date:	3/20/2024
Check by:		Date:	
Analysis Condition:	2030 Build		
Intersection:	Node 416 North Drive at Parking Garage A (Valet Below Mice)/Nassau Coliseum Access		

Part A

3 Leg, Main 2, Side 2

Thresholds

Part A.1	Part A.2	Part A.3
5	150	650

User Input

	Main line	Side	Delay	Delay (veh/hr)	Part A		Part A.3	Meets Part A Warrant?
					Part A.1	Part A.2		
AM PH	204	20	7	0.039	no	no	no	no
PM PH	104	610	10.6	1.796	no	yes	yes	no
Fri Evening	916	60	7.1	0.118	no	no	yes	no
Sat MIDDAY	940	62	7.1	0.122	no	no	yes	no
Sat Evenin	188	1156	18.1	5.812	yes	yes	yes	yes



T-7 Signal Warrant Analysis - North Dr. at Rideshare Entrance (Node 417)

Traffic Volume Development

Project: CONF-Sands
 Calc by: CJL
 Check by:
 Analysis Condition: 2030 Build
 Intersection: Node 417

Growth Rate: 0.6%
 # Years: 7
 Growth: 1.0428

Project No: 26841.01

Date: 3/21/2024

Date:

North Drive at Rideshare Entrance

Time	Mainline																							Build Volume																
	North Drive																																							
	No-Build Volumes			Site Generated Trips																			Total																	
	EB	WB	Total	Casino/Hotel Autos			Employees		Restaurant/Retail/Public Attraction			Theater		Meetings and Conference			Ridehailing																							
WB (Enter)				EB (Enter)	EB (Exit)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	EB (Exit)	WB (Enter)	EB (Enter)	WB (Enter)	EB (Enter)	EB (Exit)	WB (Enter)	EB (Enter)	WB (Exit)	EB (Exit)																					
			Hourly	72.5%	Hourly	3.5%	Hourly	37.5%	Hourly	0%	Hourly	0.0%	Hourly	62.0%	Hourly	7.5%	Hourly	49.5%	Hourly	0%	Hourly	0.0%	Hourly	7.5%	Hourly	0.0%	Hourly	7.5%	Hourly	23.0%	Hourly	0.0%	Hourly	6.0%	Hourly	19.0%				
12:00 AM	0	0	0	132	96	132	5	289	108	3	0	3	0	3	2	3	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	7	0	15	3	222
1:00 AM	0	0	0	117	85	117	4	171	64	0	0	0	0	2	1	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	6	0	8	0	158	
2:00 AM	0	0	0	36	26	36	1	136	51	0	0	0	0	3	2	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	7	0	82		
3:00 AM	0	0	0	54	39	54	2	226	85	4	0	4	0	3	2	3	0	5	2	0	0	0	0	0	0	0	0	0	0	0	3	1	3	0	11	1	134			
4:00 AM	0	0	0	18	13	18	1	117	44	10	0	10	0	3	2	3	0	3	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	6	0	6	1	62		
5:00 AM	0	0	0	18	13	18	1	27	10	13	0	13	0	10	6	10	1	3	1	0	0	0	0	0	0	0	0	0	0	3	1	3	0	2	0	2	0	34		
6:00 AM	0	0	0	93	67	93	3	95	36	197	0	197	0	23	14	23	2	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2	9	0	6	1	135
7:00 AM	0	0	0	218	158	218	8	200	75	327	0	327	0	38	24	38	3	26	13	0	0	0	0	0	0	0	0	0	0	0	0	0	18	4	18	0	12	1	293	
8:00 AM	0	0	0	410	297	410	14	256	96	455	0	455	0	50	31	50	4	47	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1	16	3	485
9:00 AM	0	0	0	463	336	463	16	429	161	124	0	124	0	61	38	61	5	53	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	600
10:00 AM	0	0	0	605	439	605	21	461	173	133	0	133	0	94	58	94	7	80	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	759
11:00 AM	0	0	0	597	433	597	21	509	191	72	0	72	0	219	136	219	16	105	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	871
12:00 PM	0	0	0	628	455	628	22	601	225	124	0	124	0	290	180	290	22	229	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1047	
1:00 PM	0	0	0	690	500	690	24	640	240	105	0	105	0	194	120	194	15	237	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1044
2:00 PM	0	0	0	589	427	589	21	760	285	158	0	158	0	146	91	146	11	225	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	975
3:00 PM	0	0	0	699	507	699	24	643	241	58	0	58	0	187	116	187	14	156	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1099
4:00 PM	0	0	0	739	536	739	26	750	281	29	0	29	0	202	125	202	15	128	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1078
5:00 PM	0	0	0	694	503	694	24	626	235	13	0	13	0	226	140	226	17	224	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1053
6:00 PM	0	0	0	793	575	793	28	675	253	15	0	15	0	220	136	220	17	224	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1144
7:00 PM	0	0	0	740	537	740	26	705	264	73	0	73	0	140	87	140	11	247	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1089
8:00 PM	0	0	0	800	580	800	28	643	241	27	0	27	0	111	69	111	8	147	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1019
9:00 PM	0	0	0	687	498	687	24	682	256	14	0	14	0	92	57	92	7	119	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	920
10:00 PM	0	0	0	609	442	609	21	640	240	168	0	168	0	18	11	18	1	38	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	749
11:00 PM	0	0	0	466	338	466	16	614	230	29	0	29	0	6	4	6	0	17	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	610
Totals	0	0	0	10895	7900	10895	381	10895	4085	2151	0	2151	0	2341	1452	2341	176	2342	1155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15552	

No % of Employees, Theater, LIRR Shuttle, NYC Shuttle, or Deliveries entering or exiting this intersection

Traffic Vo Traffic Volume Development

Project: Project: CONF-Sands
 Calc by: Calc by: CJL
 Check by: Check by:
 Analysis Con Analysis Condition: 2030 Build
 Intersection: Intersection: Node 417 North Drive at Rideshare Entrance

Project No 26841.01
 Date: 45372
 Date:

Growth Rate 0.006
 # Years 7
 Growth 1.0427636

Time	Nassau Coliseum Access Site Driveway - NB								Parking Garage A Site Driveway - SB									
	Site Generated Trips - NB							Build Volume - Site Drwy- NB					Build Volume - Site Drwy- SB					
	Casino NB (Exit)	Restaurant/Retail/ Public Attraction NB (Exit)	Theater NB (Exit)	Meetings and Conference NB (Exit)	Ridehailing NB (Exit)				Casino SB (Exit)	Restaurant/Retail/Publ ic Attraction SB (Exit)	Theater SB (Exit)	Meetings and Conference SB (Exit)		Ridehailing SB (Exit)	Total			
	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Hourly	0.0%	Total	
12:00 AM	289	0	10	0	0	0	15	0	0	289	0	10	0	0	0	15	0	0
1:00 AM	171	0	3	0	0	0	8	0	0	171	0	3	0	0	0	8	0	0
2:00 AM	196	0	3	0	0	0	7	0	0	196	0	3	0	0	0	7	0	0
3:00 AM	226	0	5	0	0	0	11	0	0	226	0	5	0	0	0	11	0	0
4:00 AM	117	0	3	0	0	0	6	0	0	117	0	3	0	0	0	6	0	0
5:00 AM	27	0	3	0	0	0	2	0	0	27	0	3	0	0	0	2	0	0
6:00 AM	95	0	13	0	0	0	6	0	0	95	0	13	0	0	0	6	0	0
7:00 AM	200	0	26	0	0	0	12	0	0	200	0	26	0	0	0	12	0	0
8:00 AM	256	0	47	0	0	0	16	0	0	256	0	47	0	0	0	16	0	0
9:00 AM	429	0	53	0	0	0	26	0	0	429	0	53	0	0	4	26	0	0
10:00 AM	461	0	80	0	0	0	30	0	0	461	0	80	0	0	16	30	0	0
11:00 AM	509	0	105	0	0	0	33	0	0	509	0	105	0	0	20	33	0	0
12:00 PM	601	0	229	0	0	0	47	0	0	601	0	229	0	0	46	47	0	0
1:00 PM	640	0	237	0	0	0	48	0	0	640	0	237	0	0	54	48	0	0
2:00 PM	760	0	225	0	0	0	54	0	0	760	0	225	0	0	79	54	0	0
3:00 PM	643	0	156	0	0	0	48	0	0	643	0	156	0	0	107	48	0	0
4:00 PM	750	0	128	0	0	0	51	0	0	750	0	128	0	0	101	51	0	0
5:00 PM	626	0	224	0	0	0	47	0	0	626	0	224	0	0	5	47	0	0
6:00 PM	675	0	224	0	0	0	47	0	0	675	0	224	0	0	1	47	0	0
7:00 PM	705	0	247	0	0	0	48	0	0	705	0	247	0	0	0	48	0	0
8:00 PM	643	0	147	0	0	0	40	0	0	643	0	147	0	0	0	40	0	0
9:00 PM	682	0	119	0	0	0	41	0	0	682	0	119	0	0	0	41	0	0
10:00 PM	640	0	38	0	0	0	33	0	0	640	0	38	0	0	0	33	0	0
11:00 PM	614	0	17	0	0	0	31	0	0	614	0	17	0	0	0	31	0	0
Totals	10895	0	2342	0	0	0	436	0	0	10895	0	2342	0	0	436	0	0	0

No % of Emr

