MIAMI BEACH
CONVENTION CENTER DISTRICT
MASTER PLAN

PORTMAN-CMC
TECHNICAL APPENDIX

3 MAY 2013

PORTMAN-CMC

ENTERTAINMENT

EXPERIENCES
THAT
MATTER

BRC

WITH EVERY VISITOR EXPERIENCE WE CREATE, AND IN EVERY HEART WE TOUCH, WE STRIVE TO LEAVE THE WORLD A BETTER PLACE BY AWAKENING THE BEST IN PEOPLE.

MUSEUM OF LATIN AMERICAN CULTURE

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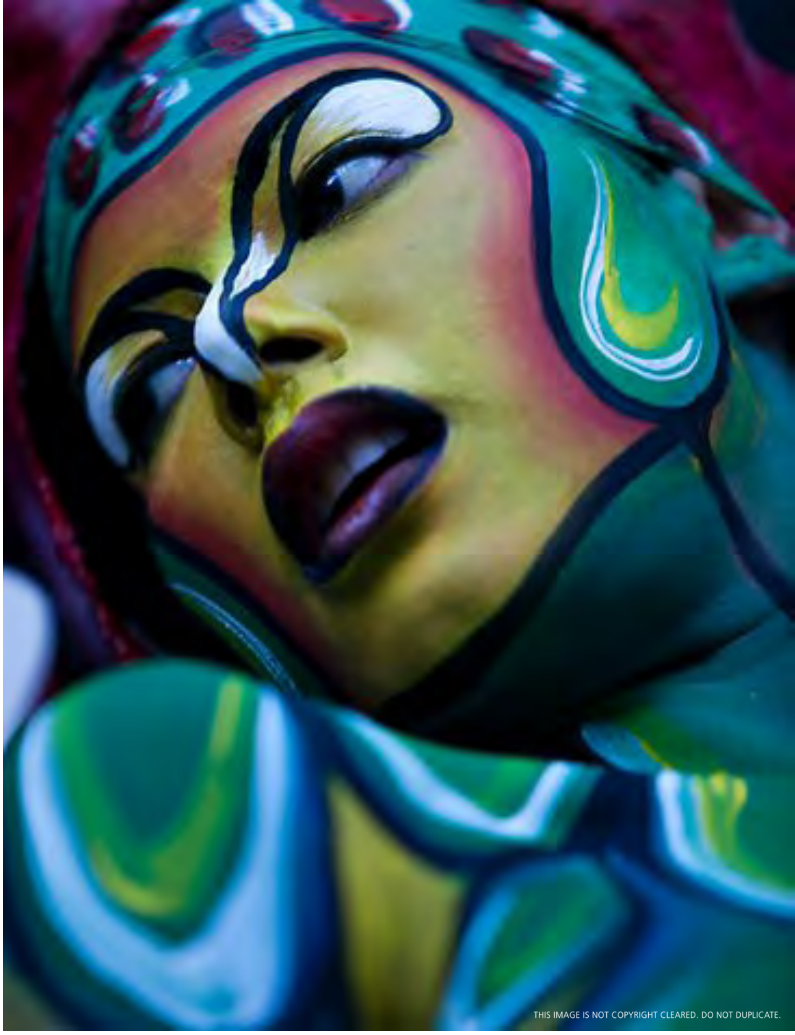
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COMMUNITY RECORDING & BROADCASTING STUDIO

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JACKIE GLEASON CENTER FOR PERFORMING ART

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JUKARI INDOOR & OUTDOOR GYM

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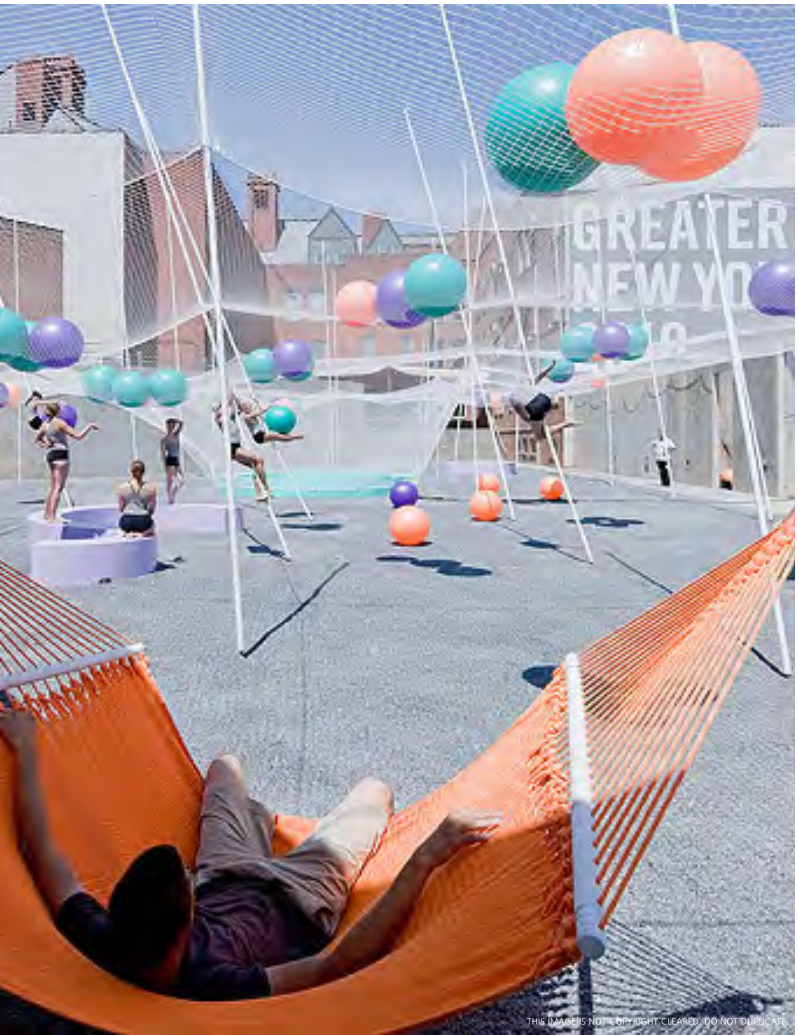

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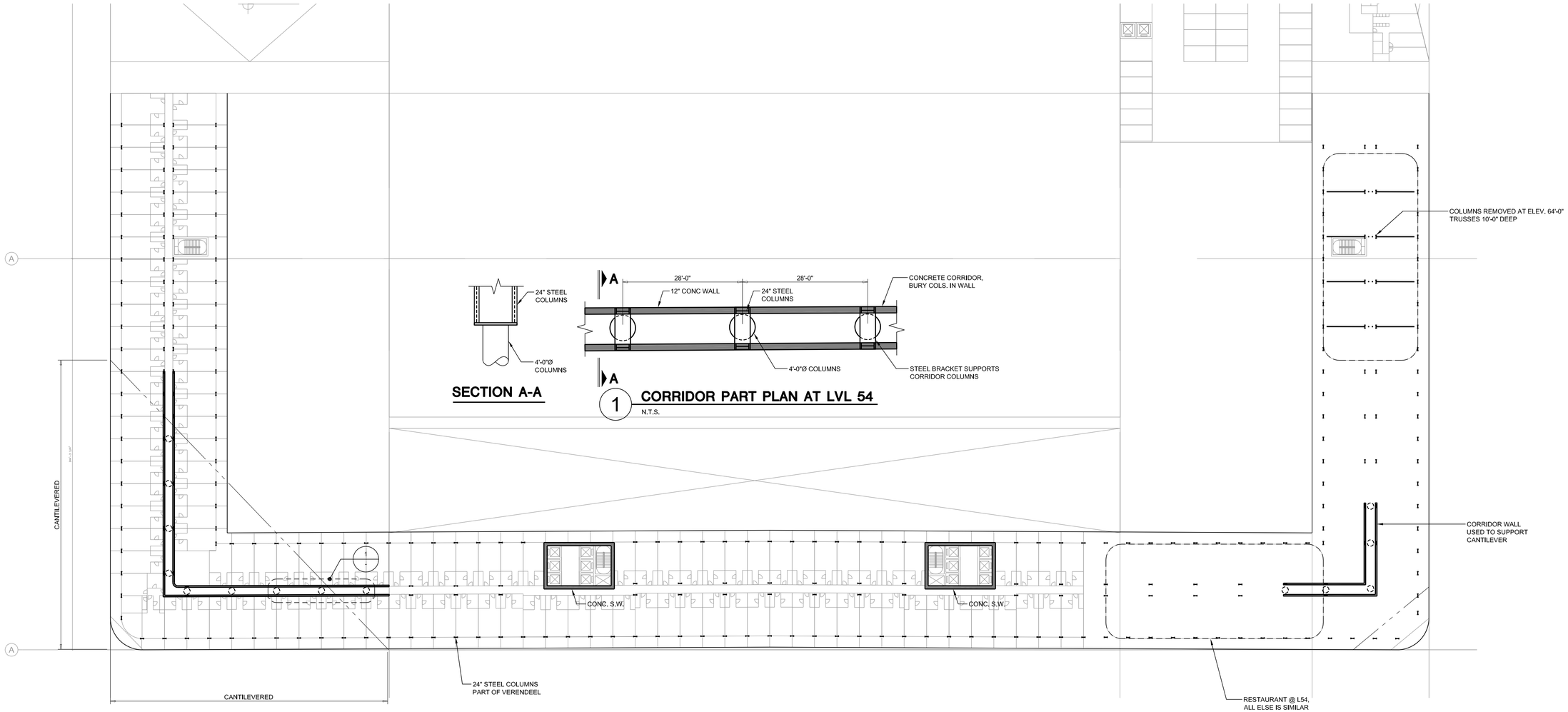
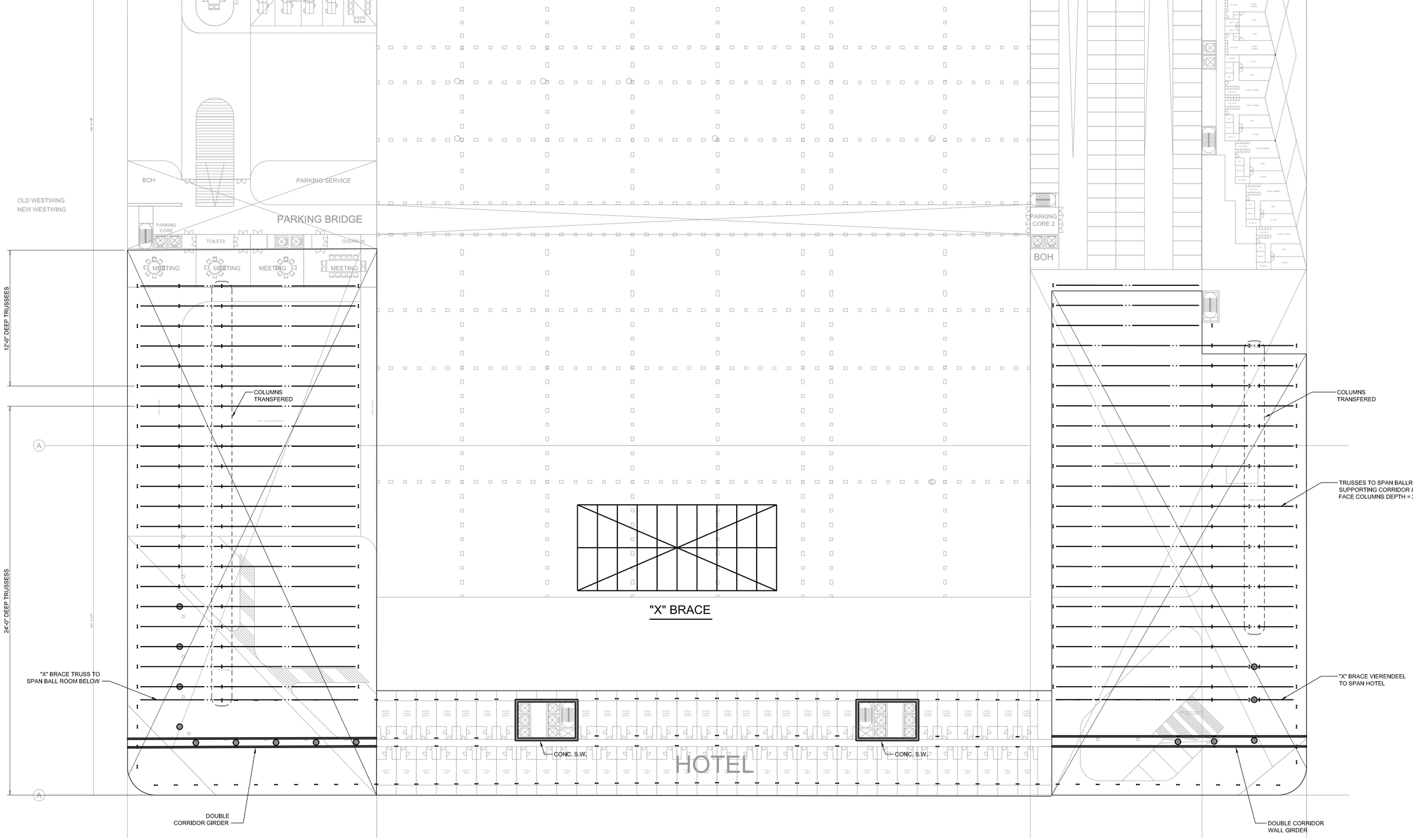
STRUCTURE



P13010.00-T-LVL54

SCALE: 1/32" = 1'-0"



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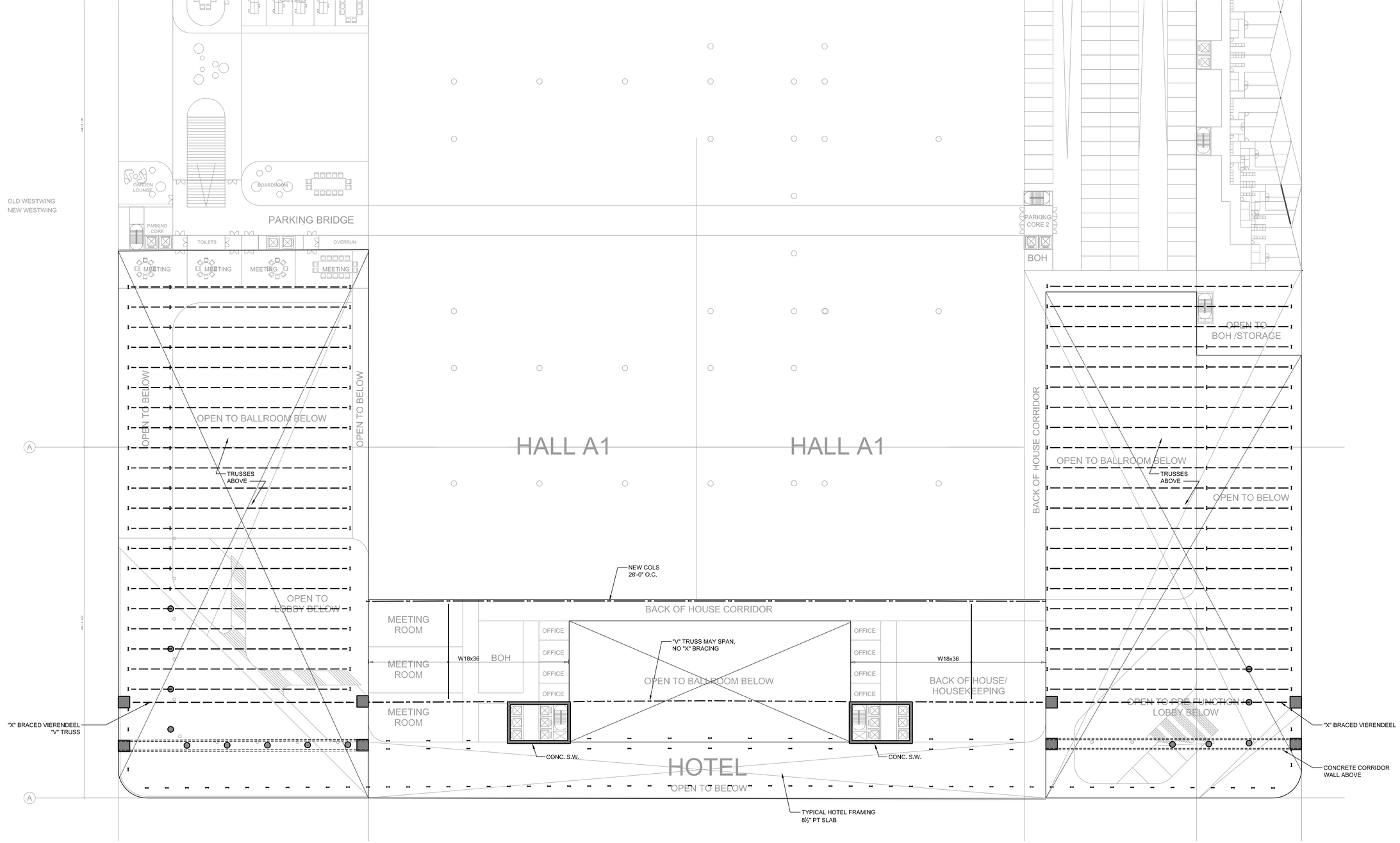

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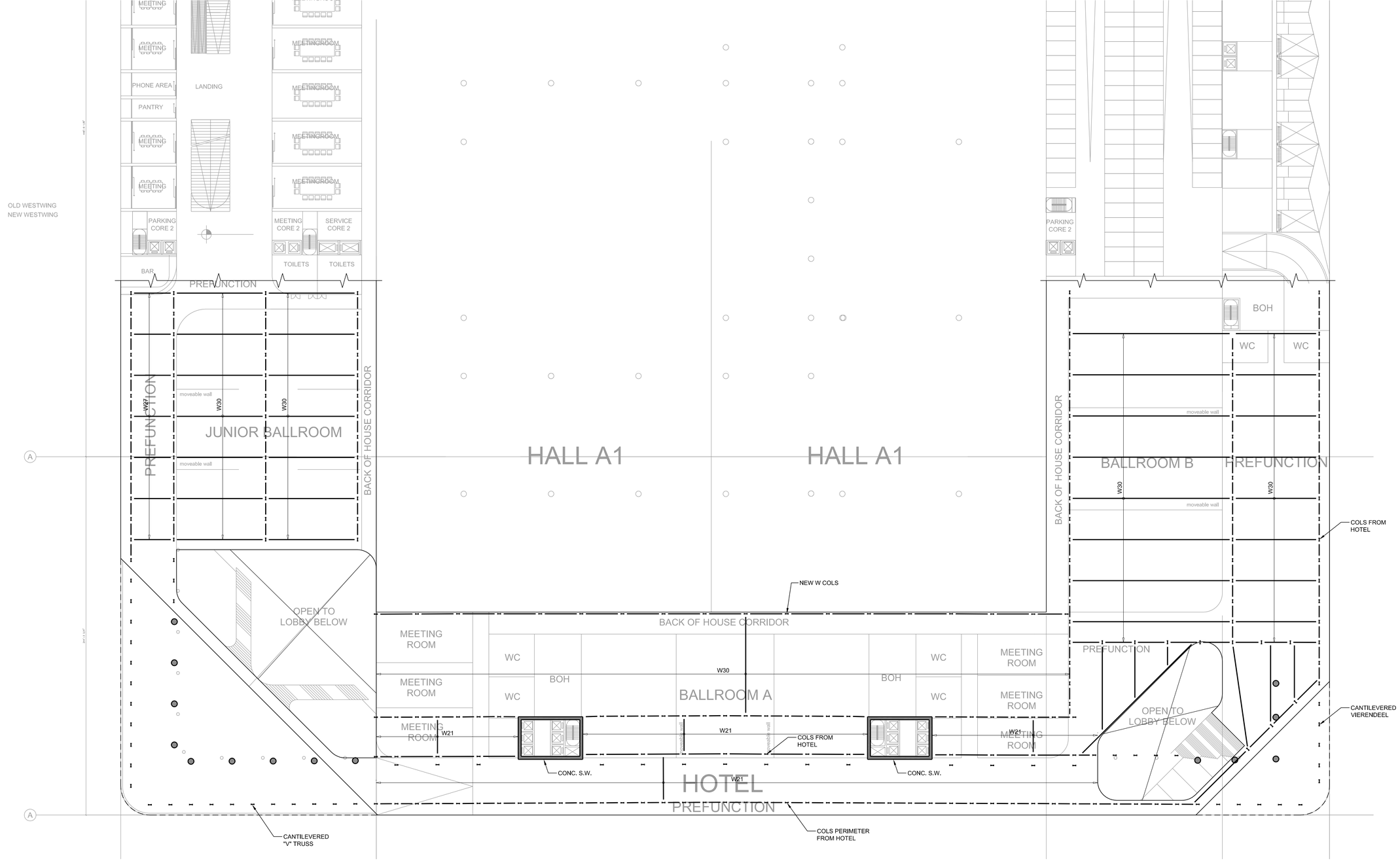


P13010.00-T-LVL16

SCALE: 1/32" = 1'-0"

TRAFFIC

Traffic Counts

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Convention Center
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Convention Center Drive (NB) / Prarie Ave (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	1	0	3	4	0	1	13	14	12	69	10	91	11	77	5	93	202
07:15 AM	07:30 AM	1	0	4	5	1	2	5	8	10	94	9	113	13	88	3	104	230
07:30 AM	07:45 AM	2	0	3	5	8	7	11	26	6	104	6	116	16	138	4	158	305
07:45 AM	08:00 AM	3	2	2	7	1	8	10	19	11	104	11	126	26	129	6	161	313
08:00 AM	08:15 AM	1	2	7	10	3	4	11	18	7	137	11	155	15	159	5	179	362
08:15 AM	08:30 AM	3	1	6	10	2	13	16	31	10	142	7	159	30	155	7	192	392
08:30 AM	08:45 AM	5	4	6	15	4	6	12	22	7	118	8	133	27	158	3	188	358
08:45 AM	09:00 AM	3	2	5	10	3	10	11	24	9	115	9	133	25	148	4	177	344

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Convention Center Drive (NB) / Prarie Ave (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
08:00 AM	09:00 AM	12	9	24	45	12	33	50	95	33	512	35	580	97	620	19	736	1,456
PEAK HOUR FACTOR					0.75				0.77				0.91				0.96	0.93

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Convention Center
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Convention Center Drive (NB) / Prarie Ave (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	38	7	22	67	1	5	16	22	15	154	4	173	10	177	5	192	454
04:15 PM	04:30 PM	15	5	11	31	3	5	8	16	11	161	7	179	14	164	10	188	414
04:30 PM	04:45 PM	23	10	29	62	4	3	14	21	18	182	10	210	18	198	3	219	512
04:45 PM	05:00 PM	17	6	24	47	1	5	9	15	21	171	5	197	14	162	6	182	441
05:00 PM	05:15 PM	14	7	19	40	2	3	11	16	15	158	5	178	20	182	6	208	442
05:15 PM	05:30 PM	7	5	17	29	6	2	6	14	20	196	4	220	13	183	3	199	462
05:30 PM	05:45 PM	13	3	19	35	4	6	16	26	15	183	8	206	12	169	2	183	450
05:45 PM	06:00 PM	12	5	16	33	2	4	13	19	15	181	3	199	10	172	12	194	445

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Convention Center Drive (NB) / Prarie Ave (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:30 PM	05:30 PM	61	28	89	178	13	13	40	66	74	707	24	805	65	725	18	808	1,857
PEAK HOUR FACTOR					0.72				0.79				0.91				0.92	0.91

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Blvd/Michigan Avenue/19th Street
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Michigan Avenue/19th Street								Dade Blvd								GRAND TOTAL
		SOUTHBOUND (19TH ST)				SOUTHBOUND (MICHIGAN AV)				EASTBOUND				WESTBOUND				
		L (Mich N)	R (Mich S)	R	TOTAL	L	R (Dade)	R (19th)	TOTAL	L	T	R	TOTAL	T	R (Mich)	R (19th)	TOTAL	
07:30 AM	07:45 AM	0	7	4	11	130	1	8	139	0	23	0	23	49	66	1	116	289
07:45 AM	08:00 AM	0	8	3	11	120	0	9	129	0	49	0	49	50	66	0	116	305
08:00 AM	08:15 AM	0	9	4	13	140	1	12	153	0	54	0	54	89	80	6	175	395
08:15 AM	08:30 AM	1	9	2	12	142	3	5	150	0	64	0	64	79	82	3	164	390
08:30 AM	08:45 AM	1	11	4	16	154	0	7	161	0	79	0	79	102	109	3	214	470
08:45 AM	09:00 AM	0	18	1	19	179	5	4	188	0	66	0	66	120	81	2	203	476
09:00 AM	09:15 AM	0	15	3	18	185	3	12	200	0	54	0	54	93	75	3	171	443
09:15 AM	09:30 AM	1	20	7	28	187	7	11	205	0	62	0	62	117	70	0	187	482

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Michigan Avenue/19th Street								Dade Blvd								GRAND TOTAL
		SOUTHBOUND (19TH ST)				SOUTHBOUND (MICHIGAN AV)				EASTBOUND				WESTBOUND				
		L (Mich N)	R (Mich S)	R	TOTAL	L	R (Dade)	R (19th)	TOTAL	L	T	R	TOTAL	T	R (Mich)	R (19th)	TOTAL	
08:30 AM	09:30 AM	2	64	15	81	705	15	34	754	0	261	0	261	432	335	8	775	1,871
PEAK HOUR FACTOR					0.72				0.92				0.83				0.91	0.97

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Meridian Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Michigan Avenue/19th Street								Dade Blvd								GRAND TOTAL
		SOUTHBOUND (19TH ST)				SOUTHBOUND (MICHIGAN AV)				EASTBOUND				WESTBOUND				
		L (Mich N)	R (Mich S)	R	TOTAL	L	R (Dade)	R (19th)	TOTAL	L	T	R	TOTAL	T	R (Mich)	R (19th)	TOTAL	
04:30 PM	04:45 PM	0	10	10	20	131	1	10	142	0	82	0	82	75	233	8	316	560
04:45 PM	05:00 PM	0	10	25	35	118	2	21	141	0	82	0	82	117	157	5	279	537
05:00 PM	05:15 PM	0	8	18	26	128	4	6	138	0	81	0	81	116	147	7	270	515
05:15 PM	05:30 PM	1	12	21	34	128	7	10	145	0	82	0	82	92	198	3	293	554
05:30 PM	05:45 PM	0	9	22	31	108	7	12	127	0	64	0	64	85	198	4	287	509
05:45 PM	06:00 PM	2	6	27	35	126	2	14	142	0	101	0	101	108	150	5	263	541
06:00 PM	06:15 PM	0	14	13	27	128	4	13	145	0	97	0	97	96	165	3	264	533
06:15 PM	06:30 PM	1	12	10	23	109	5	7	121	0	90	0	90	109	161	8	278	512

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Michigan Avenue/19th Street								Dade Blvd								GRAND TOTAL
		SOUTHBOUND (19TH ST)				SOUTHBOUND (MICHIGAN AV)				EASTBOUND				WESTBOUND				
		L (Mich N)	R (Mich S)	R	TOTAL	L	R (Dade)	R (19th)	TOTAL	L	T	R	TOTAL	T	R (Mich)	R (19th)	TOTAL	
04:30 PM	05:30 PM	1	40	74	115	505	14	47	566	0	327	0	327	400	735	23	1158	2,166
PEAK HOUR FACTOR					0.82				0.98				1.00				0.92	0.97

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: 17th Street & Meridian
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Meridian Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	5	30	7	42	22	32	5	59	11	68	3	82	5	46	18	69	252
07:15 AM	07:30 AM	0	20	2	22	34	22	14	70	20	81	9	110	2	46	9	57	259
07:30 AM	07:45 AM	4	29	4	37	29	48	14	91	23	73	9	105	5	49	16	70	303
07:45 AM	08:00 AM	5	41	7	53	24	41	7	72	28	79	8	115	8	59	16	83	323
08:00 AM	08:15 AM	10	63	5	78	37	44	27	108	25	81	9	115	4	53	23	80	381
08:15 AM	08:30 AM	6	51	11	68	49	48	51	148	24	92	11	127	9	65	11	85	428
08:30 AM	08:45 AM	11	32	3	46	41	59	49	149	17	87	6	110	12	57	17	86	391
08:45 AM	09:00 AM	4	32	8	44	59	71	39	169	22	80	8	110	9	61	13	83	406

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Meridian Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
08:00 AM	09:00 AM	31	178	27	236	186	222	166	574	88	340	34	462	34	236	64	334	1,336
PEAK HOUR FACTOR					0.76				0.85				0.91				0.97	0.94

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Meridian Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Meridian Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	17	74	7	98	28	69	30	127	22	73	6	101	16	100	37	153	479
04:15 PM	04:30 PM	14	48	7	69	30	44	21	95	32	102	12	146	12	95	23	130	440
04:30 PM	04:45 PM	11	65	6	82	35	69	17	121	30	98	14	142	17	117	41	175	520
04:45 PM	05:00 PM	9	69	9	87	39	70	16	125	39	92	16	147	16	117	29	162	521
05:00 PM	05:15 PM	13	57	9	79	25	56	23	104	31	95	17	143	17	117	36	170	496
05:15 PM	05:30 PM	9	70	10	89	27	70	22	119	36	100	12	148	20	100	31	151	507
05:30 PM	05:45 PM	13	58	7	78	26	66	21	113	41	85	19	145	13	121	37	171	507
05:45 PM	06:00 PM	12	72	7	91	23	70	18	111	37	97	11	145	11	89	42	142	489

PM HOUR PERIOD TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Meridian Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:30 PM	05:30 PM	42	261	34	337	126	265	78	469	136	385	59	580	70	451	137	658	2,044
PEAK HOUR FACTOR					0.95				0.94				0.98				0.94	0.98

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Meridian Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Meridian Avenue								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	40	8	5	53	0	10	12	22	8	89	75	172	8	79	3	90	337
07:15 AM	07:30 AM	21	2	6	29	3	7	12	22	12	124	66	202	14	83	2	99	352
07:30 AM	07:45 AM	35	3	4	42	1	7	7	15	9	126	86	221	18	128	1	147	425
07:45 AM	08:00 AM	33	6	14	53	0	4	14	18	21	139	77	237	25	126	0	151	459
08:00 AM	08:15 AM	59	11	29	99	1	6	17	24	11	140	100	251	25	150	0	175	549
08:15 AM	08:30 AM	39	5	15	59	0	10	21	31	9	139	124	272	42	136	3	181	543
08:30 AM	08:45 AM	43	3	14	60	2	11	13	26	4	127	126	257	55	130	1	186	529
08:45 AM	09:00 AM	34	7	16	57	6	5	10	21	13	125	173	311	29	136	1	166	555

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Meridian Avenue								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
08:00 AM	09:00 AM	175	26	74	275	9	32	61	102	37	531	523	1091	151	552	5	708	2,176
PEAK HOUR FACTOR					0.69				0.82				0.88				0.95	0.98

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Meridian Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Meridian Avenue								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	140	19	31	190	0	11	20	31	12	159	62	233	32	179	3	214	668
04:15 PM	04:30 PM	85	8	35	128	0	6	9	15	12	177	60	249	18	177	1	196	588
04:30 PM	04:45 PM	98	6	47	151	1	5	10	16	13	158	80	251	27	192	3	222	640
04:45 PM	05:00 PM	116	9	49	174	1	7	15	23	8	146	93	247	27	158	2	187	631
05:00 PM	05:15 PM	101	7	46	154	1	8	12	21	8	131	63	202	26	178	1	205	582
05:15 PM	05:30 PM	85	8	53	146	1	9	11	21	15	169	78	262	29	165	2	196	625
05:30 PM	05:45 PM	91	12	55	158	0	4	12	16	16	163	77	256	38	163	2	203	633
05:45 PM	06:00 PM	102	7	57	166	2	7	9	18	7	154	67	228	28	164	1	193	605

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Meridian Avenue								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	05:00 PM	439	42	162	643	2	29	54	85	45	640	295	980	104	706	9	819	2,527
PEAK HOUR FACTOR					0.85				0.69				0.98				0.92	0.95

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Michigan Avenue & Alton Road
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Alton Road								Michigan Avenue								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	1	165	4	170	144	259	1	404	0	1	0	1	1	1	69	71	646
07:15 AM	07:30 AM	2	140	2	144	133	276	3	412	0	0	2	2	1	3	64	68	626
07:30 AM	07:45 AM	0	195	9	204	152	323	2	477	1	2	2	5	1	2	76	79	765
07:45 AM	08:00 AM	0	234	8	242	128	296	0	424	1	2	2	5	0	2	84	86	757
08:00 AM	08:15 AM	1	228	16	245	155	309	1	465	1	4	0	5	2	2	109	113	828
08:15 AM	08:30 AM	0	224	14	238	172	339	0	511	0	4	2	6	5	1	73	79	834
08:30 AM	08:45 AM	0	242	11	253	171	314	9	494	0	1	2	3	2	2	70	74	824
08:45 AM	09:00 AM	1	198	15	214	190	259	7	456	1	3	2	6	0	2	68	70	746

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Alton Road								Michigan Avenue								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:45 AM	08:45 AM	1	928	49	978	626	1258	10	1894	2	11	6	19	9	7	336	352	3,227
PEAK HOUR FACTOR					0.97				0.93				0.79				0.78	0.97

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Michigan Avenue & Alton Road
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Alton Road								Michigan Avenue								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	1	298	16	315	123	262	5	390	0	1	3	4	7	1	245	253	962
04:15 PM	04:30 PM	1	324	14	339	128	262	1	391	3	5	1	9	1	1	166	168	907
04:30 PM	04:45 PM	0	342	14	356	113	211	19	343	1	6	1	8	0	1	158	159	866
04:45 PM	05:00 PM	1	317	16	334	126	248	16	390	1	0	0	1	3	1	203	207	932
05:00 PM	05:15 PM	1	304	16	321	104	259	2	365	0	1	2	3	3	1	194	198	887
05:15 PM	05:30 PM	1	296	18	315	120	282	3	405	0	1	0	1	5	0	148	153	874
05:30 PM	05:45 PM	1	311	17	329	120	265	6	391	1	2	1	4	2	0	167	169	893
05:45 PM	06:00 PM	1	359	20	380	106	267	4	377	0	1	0	1	3	2	164	169	927

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Alton Road								Michigan Avenue								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	05:00 PM	3	1281	60	1344	490	983	41	1514	5	12	5	22	11	4	772	787	3,652
PEAK HOUR FACTOR					0.94				0.97				0.61				0.78	0.95

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: 17th Street & Washington Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Washington Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	27	21	8	56	1	33	9	43	18	24	31	73	5	31	3	39	211
07:15 AM	07:30 AM	13	27	5	45	4	42	15	61	13	34	32	79	7	25	0	32	217
07:30 AM	07:45 AM	26	34	4	64	3	65	31	99	25	20	26	71	4	23	1	28	262
07:45 AM	08:00 AM	28	45	7	80	1	54	31	86	23	24	35	82	3	31	2	36	284
08:00 AM	08:15 AM	25	51	3	79	7	61	32	100	14	34	30	78	10	26	3	39	296
08:15 AM	08:30 AM	28	43	8	79	8	99	27	134	22	34	45	101	6	33	2	41	355
08:30 AM	08:45 AM	27	46	4	77	10	89	33	132	24	35	42	101	6	32	3	41	351
08:45 AM	09:00 AM	31	50	5	86	5	75	31	111	12	27	52	91	11	17	5	33	321

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Washington Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	09:00 AM	111	190	20	321	30	324	123	477	72	130	169	371	33	108	13	154	1,182
PEAK HOUR FACTOR					0.93				0.89				0.92				0.94	0.93

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: 17th Street & Washington Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Washington Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	49	91	11	151	7	61	32	100	22	62	28	112	11	39	3	53	416
04:15 PM	04:30 PM	29	89	16	134	5	63	44	112	34	50	37	121	16	38	6	60	427
04:30 PM	04:45 PM	48	105	21	174	4	67	27	98	43	65	40	148	10	51	7	68	488
04:45 PM	05:00 PM	46	116	25	187	5	77	46	128	44	53	39	136	7	38	10	55	506
05:00 PM	05:15 PM	47	109	13	169	6	60	31	97	47	56	37	140	11	44	8	63	469
05:15 PM	05:30 PM	59	96	17	172	6	66	45	117	39	44	29	112	15	35	7	57	458
05:30 PM	05:45 PM	49	101	9	159	5	74	35	114	45	43	34	122	11	45	5	61	456
05:45 PM	06:00 PM	51	98	15	164	7	72	43	122	47	51	32	130	11	48	3	62	478

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY

ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Washington Avenue								17th Street								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:30 PM	05:30 PM	200	426	76	702	21	270	149	440	173	218	145	536	43	168	32	243	1,921
PEAK HOUR FACTOR					0.94				0.86				0.91				0.89	0.95

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Washington Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Tuesday

TIME INTERVAL		Washington Ave (NB) / School Bus Entrance (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
07:00 AM	07:15 AM	19	0	17	36	0	0	0	0	0	51	21	72	27	64	0	91	199
07:15 AM	07:30 AM	17	0	21	38	0	0	0	0	0	62	39	101	31	86	0	117	256
07:30 AM	07:45 AM	21	0	21	42	0	0	0	0	1	80	38	119	55	150	1	206	367
07:45 AM	08:00 AM	23	0	35	58	0	0	0	0	0	78	28	106	41	130	1	172	336
08:00 AM	08:15 AM	34	0	36	70	0	0	0	0	0	108	41	149	53	143	1	197	416
08:15 AM	08:30 AM	24	1	39	64	0	0	0	0	0	102	44	146	85	170	0	255	465
08:30 AM	08:45 AM	31	0	33	64	0	0	0	0	0	81	55	136	60	151	1	212	412
08:45 AM	09:00 AM	34	0	34	68	0	0	0	0	0	87	37	124	57	137	1	195	387

AM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Washington Ave (NB) / School Bus Entrance (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
08:00 AM	09:00 AM	123	1	142	266	0	0	0	0	0	378	177	555	255	601	3	859	824
PEAK HOUR FACTOR					0.95				NA				0.93				0.84	0.90

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

DAVID PLUMMER & ASSOCIATES, INC.

TURNING MOVEMENT COUNTS

Project Name: Miami Beach Convention Center
Location: Dade Boulevard & Washington Avenue
Observer: Traffic Survey Specialists, Inc.

Project Number: 12125
Count Date: 4/17/2013
Day of Week: Wednesday

TIME INTERVAL		Washington Ave (NB) / School Bus Entrance (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
04:00 PM	04:15 PM	70	0	83	153	0	0	0	0	0	141	39	180	47	118	1	166	499
04:15 PM	04:30 PM	58	0	77	135	0	0	0	0	0	130	49	179	49	124	1	174	488
04:30 PM	04:45 PM	73	0	76	149	0	0	0	0	0	153	36	189	43	136	0	179	517
04:45 PM	05:00 PM	66	1	94	161	0	0	0	0	0	155	46	201	41	113	0	154	516
05:00 PM	05:15 PM	96	0	102	198	0	0	0	0	0	127	36	163	56	110	0	166	527
05:15 PM	05:30 PM	60	0	98	158	0	0	0	0	0	168	50	218	41	133	0	174	550
05:30 PM	05:45 PM	65	0	99	164	0	0	0	0	0	172	37	209	40	125	1	166	539
05:45 PM	06:00 PM	39	1	98	138	0	0	0	0	1	156	35	192	65	135	2	202	532

PM PEAK HOUR TURNING MOVEMENT COUNT SUMMARY
ANNUAL AVERAGE DAILY TRAFFIC CONDITIONS

TIME INTERVAL		Washington Ave (NB) / School Bus Entrance (SB)								Dade Boulevard								GRAND TOTAL
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL	
05:00 PM	06:00 PM	260	1	397	658	0	0	0	0	1	623	158	782	202	503	3	708	1,443
PEAK HOUR FACTOR					0.83				NA				0.90				0.88	0.98

Note: 2012 FDOT Seasonal Weekly Volume Factor = 1.01

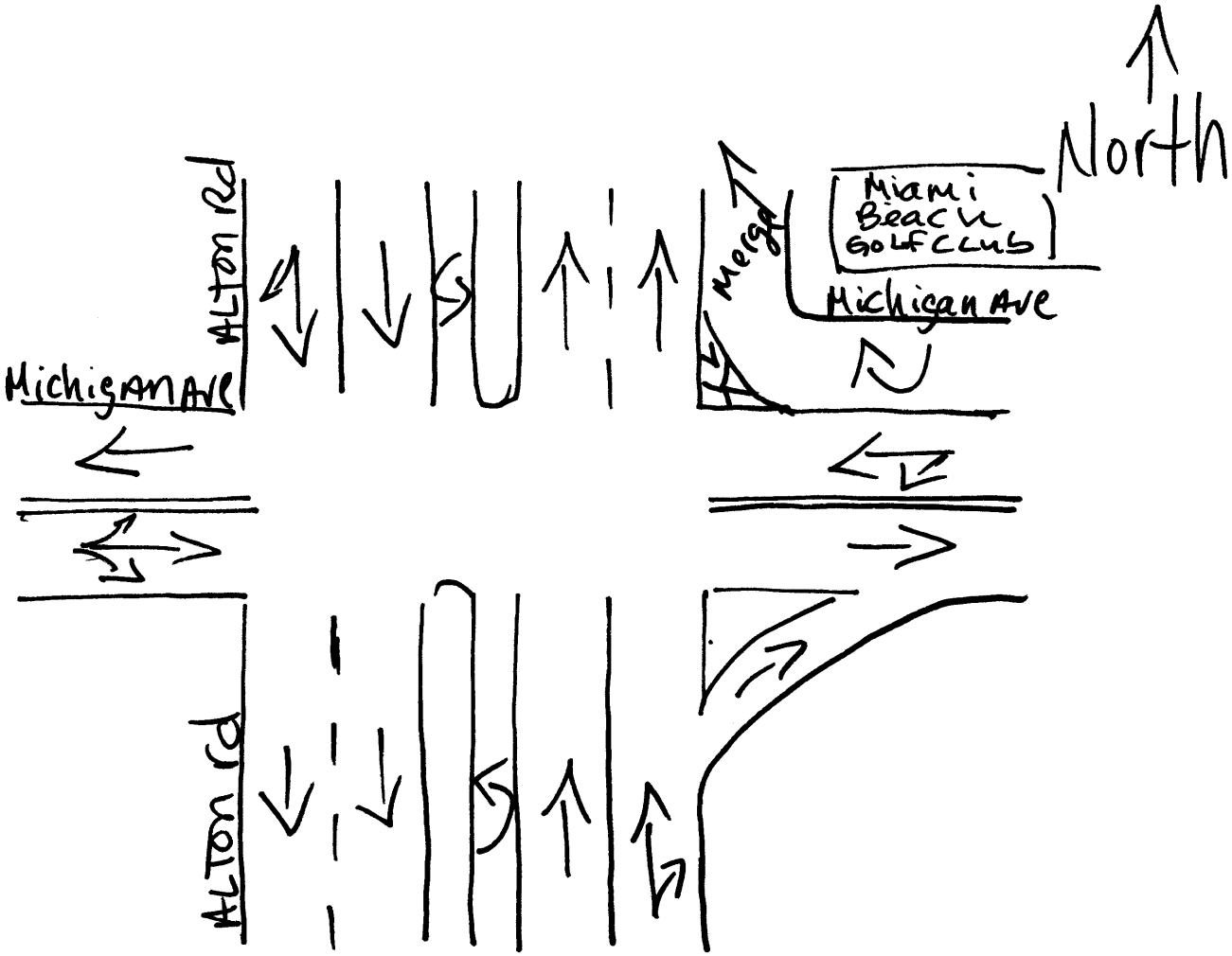
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

MICHIGAN AVENUE & ALTON ROAD
MIAMI BEACH, FLORIDA
COUNTED BY: WAYNE ASSAM
SIGNALIZED

Site Code : 00130058
Start Date: 04/17/13
File I.D. : MICHALTO
Page : 1

PEDESTRIANS

	ALTON ROAD From North				MICHIGAN AVENUE From East				ALTON ROAD From South				MICHIGAN AVENUE From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3
07:45	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	6
08:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	6	8
08:15	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	1	6
Hr Total	0	0	0	4	0	0	0	3	0	0	0	7	0	0	0	9	23
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hr Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
* BREAK *																	
16:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Hr Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4
17:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	4
17:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	6
Hr Total	0	0	0	0	0	0	0	1	0	0	0	9	0	0	0	5	15
TOTAL	0	0	0	4	0	0	0	4	0	0	0	19	0	0	0	16	43



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

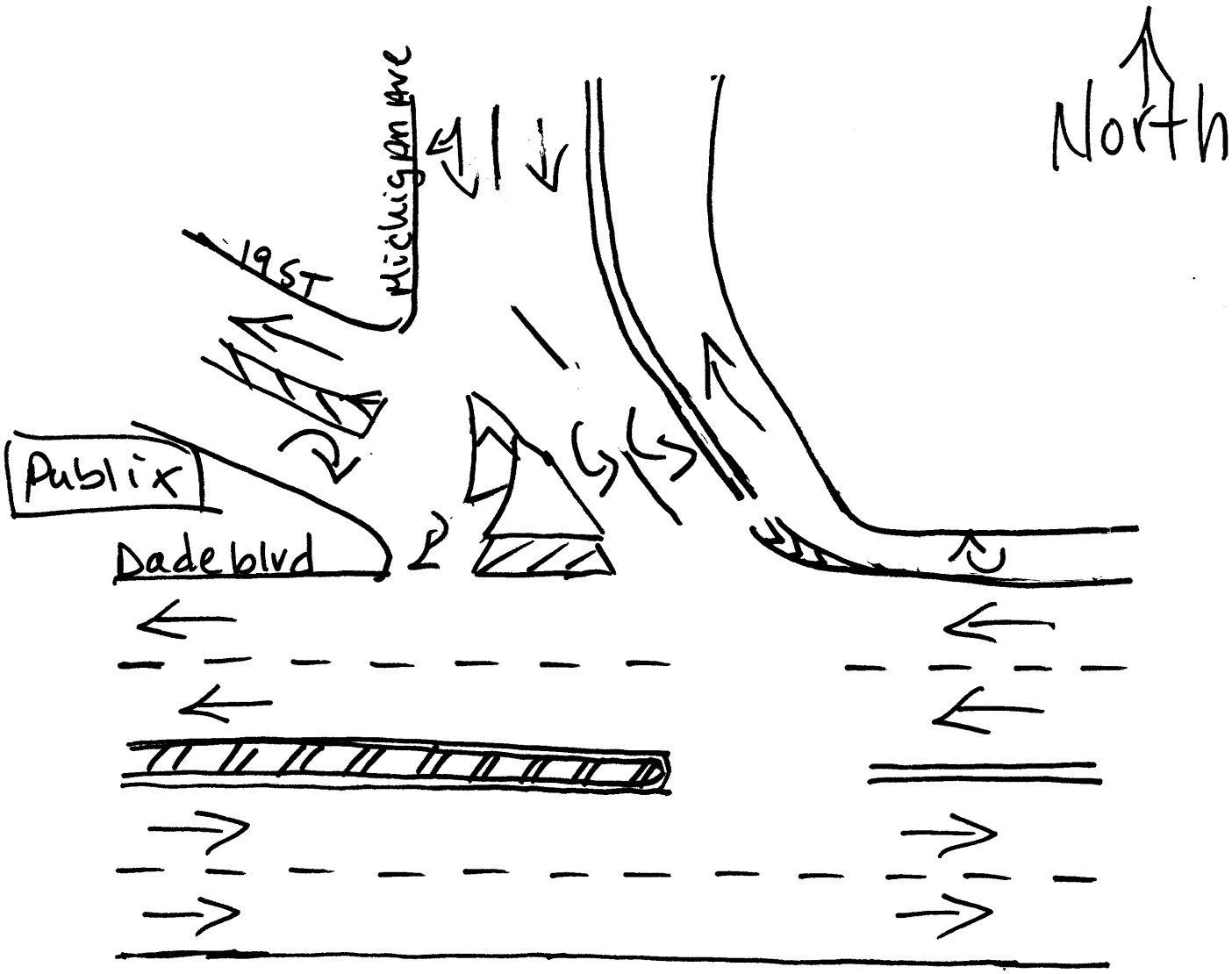
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

DADE BOULEVARD & MICHIGAN AVENUE & 19TH
MIAMI BEACH, FLORIDA
COUNTED BY: MAURICE GOMEZ
SIGNALIZED

Site Code : 00130058
Start Date: 04/17/13
File I.D. : DADEMICH
Page : 1

PEDESTRIANS

	MICHIGAN AVENUE From North	DADE BOULEVARD From East			DADE BOULEVARD From West			19TH STREET From Northwest	
	Peds	Thru	Right	Peds	Left	Thru	Peds		Total
Date 04/17/13									
07:30	2	0	0	0	0	0	0		2
07:45	2	0	0	0	0	0	0		2
08:00	1	0	0	0	0	0	0		1
08:15	3	0	0	1	0	0	0		4
Hr Total	8	0	0	1	0	0	0		9
08:30	9	0	0	0	0	0	0		9
08:45	1	0	0	0	0	0	0		1
09:00	3	0	0	0	0	0	0		3
09:15	10	0	0	0	0	0	0		10
Hr Total	23	0	0	0	0	0	0		23
---------- * BREAK * ----------									
16:30	5	0	0	0	0	0	0		5
16:45	11	0	0	0	0	0	0		11
17:00	4	0	0	1	0	0	0		5
17:15	9	0	0	1	0	0	0		10
Hr Total	29	0	0	2	0	0	0		31
17:30	9	0	0	0	0	0	0		9
17:45	7	0	0	0	0	0	0		7
18:00	5	0	0	0	2	0	0		7
18:15	5	0	0	0	0	0	0		5
Hr Total	26	0	0	0	2	0	0		28
TOTAL	86	0	0	3	2	0	0	91	



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

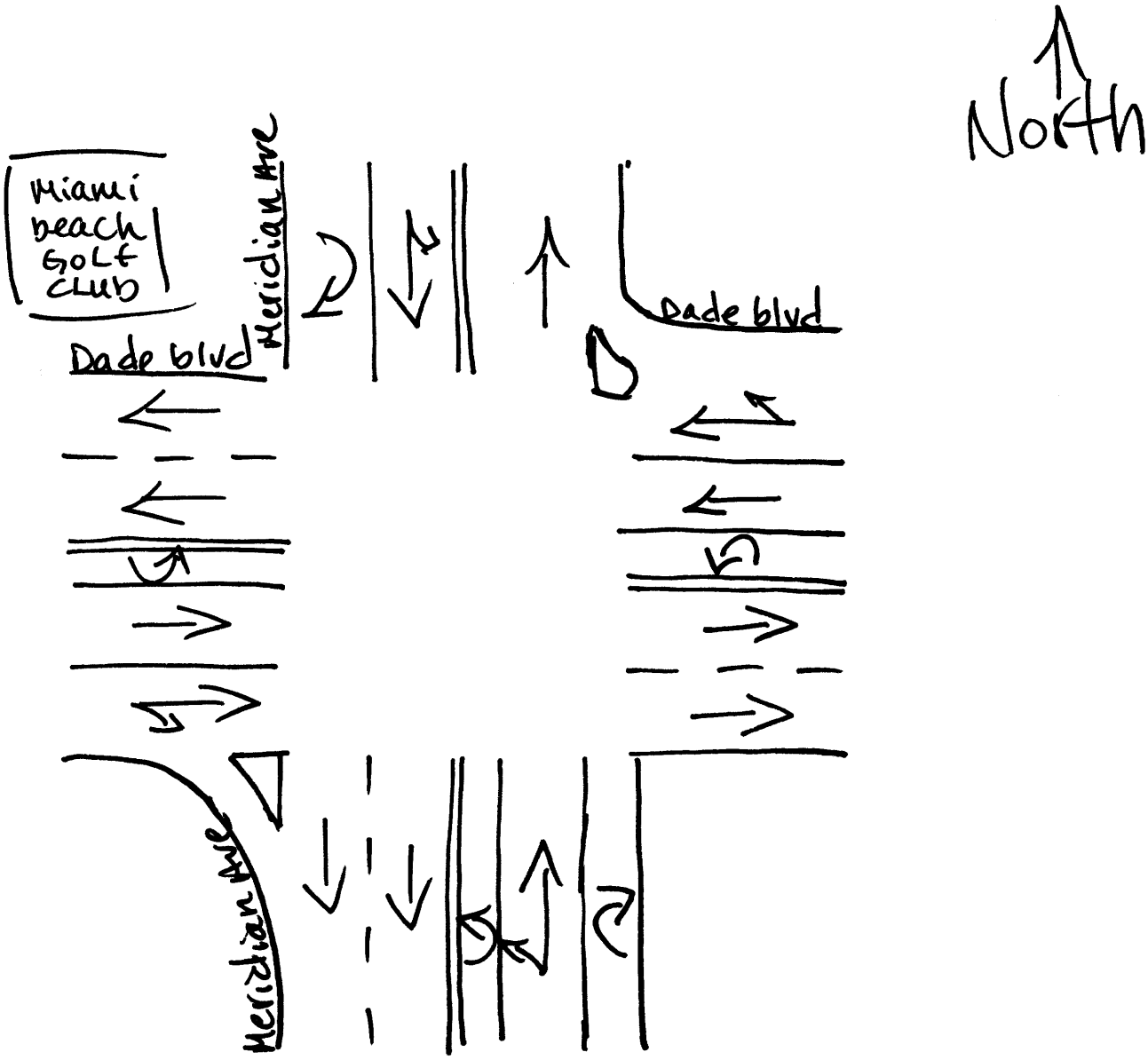
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

DADE BOULEVARD & MERIDIAN AVENUE
MIAMI BEACH, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Site Code : 00130058
Start Date: 04/17/13
File I.D. : DADEMERI
Page : 1

PEDESTRIANS

	MERIDIAN AVENUE From North				DADE BOULEVARD From East				MERIDIAN AVENUE From South				DADE BOULEVARD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	5
08:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	5
Hr Total	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	5	13
08:30	0	0	0	9	0	0	0	2	0	0	0	0	0	0	0	4	15
08:45	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	6
09:00	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	2	5
09:15	0	0	0	9	0	0	0	2	0	0	0	0	0	0	0	3	14
Hr Total	0	0	0	21	0	0	0	6	0	0	0	1	0	0	0	12	40
* BREAK *																	
16:30	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	0	5
16:45	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	12	17
17:00	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	14
17:15	0	0	0	6	0	0	0	1	0	0	0	4	0	0	0	4	15
Hr Total	0	0	0	19	0	0	0	3	0	0	0	6	0	0	0	23	51
17:30	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	4	10
17:45	0	0	0	5	0	0	0	1	0	0	0	1	0	0	0	4	11
18:00	0	0	0	6	0	0	0	4	0	0	0	0	0	0	0	7	17
18:15	0	0	0	4	0	0	0	1	0	0	0	2	0	0	0	8	15
Hr Total	0	0	0	19	0	0	0	6	0	0	0	5	0	0	0	23	53
TOTAL	0	0	0	66	0	0	0	15	0	0	0	13	0	0	0	63	157



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

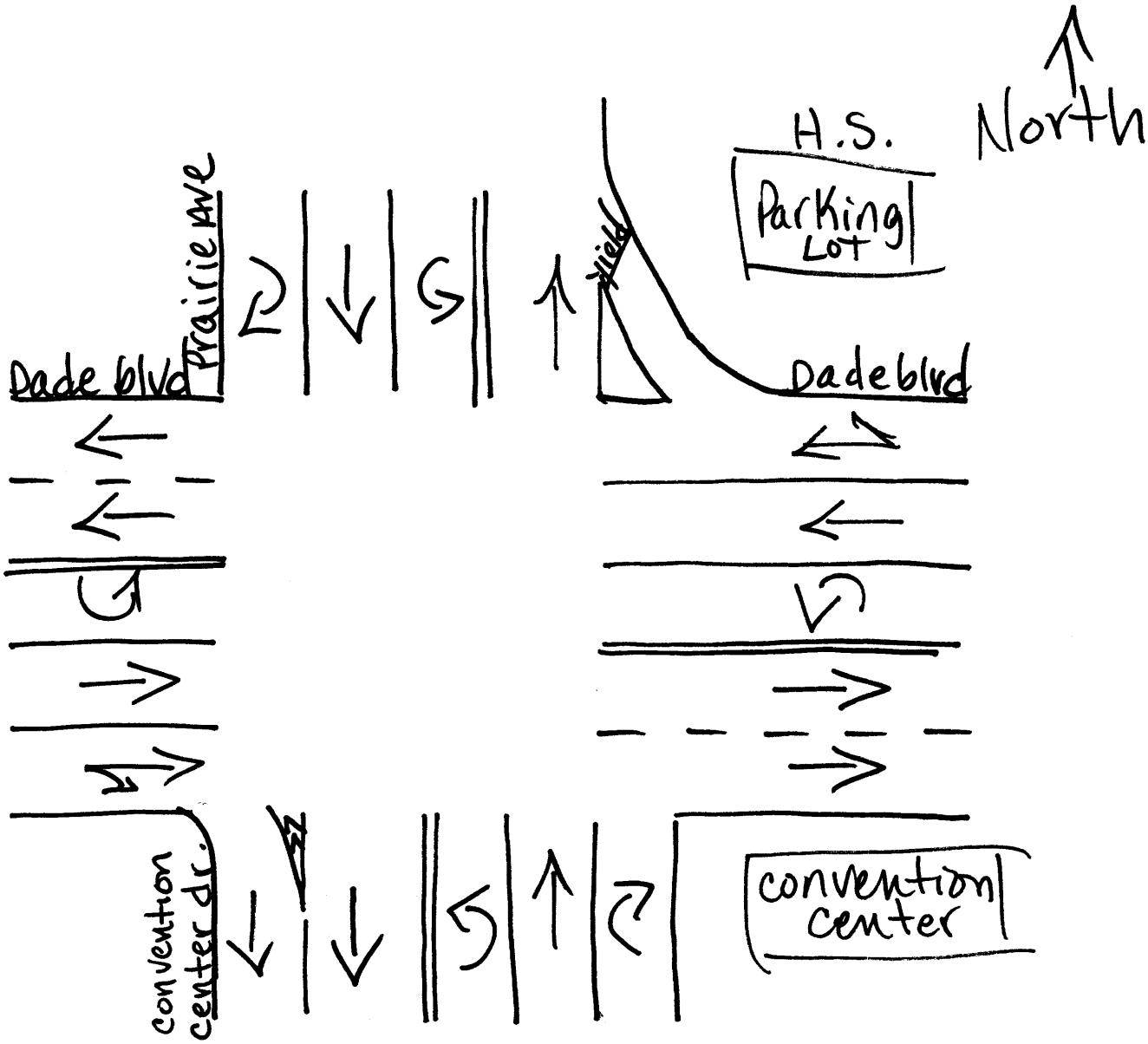
DADE BOULEVARD & CONVENTION CENTER
DRIVE/PRAIRIE AVENUE, MIAMI BEACH, FL
COUNTED BY: CARLOS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130058
Start Date: 04/17/13
File I.D. : DADECONV
Page : 1

PEDESTRIANS

	PRAIRIE AVENUE From North				DADE BOULEVARD From East				CONVENTION CENTER DRIVE From South				DADE BOULEVARD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	11
07:45	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	6
08:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
08:15	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	3
Hr Total	0	0	0	12	0	0	0	11	0	0	0	0	0	0	0	1	24
08:30	0	0	0	10	0	0	0	4	0	0	0	0	0	0	0	1	15
08:45	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	4
09:00	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	6
09:15	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	4	8
Hr Total	0	0	0	19	0	0	0	7	0	0	0	2	0	0	0	5	33
* BREAK *																	
16:30	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0	5	10
16:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	4
17:00	0	0	0	3	0	0	0	75	0	0	0	68	0	0	0	4	150
17:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Hr Total	0	0	0	9	0	0	0	76	0	0	0	69	0	0	0	12	166
17:30	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	2	11
17:45	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	2	6
18:00	0	0	0	4	0	0	0	4	0	0	0	3	0	0	0	0	11
18:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	13	0	0	0	8	0	0	0	4	0	0	0	4	29
TOTAL	0	0	0	53	0	0	0	102	0	0	0	75	0	0	0	22	252



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
Signalized

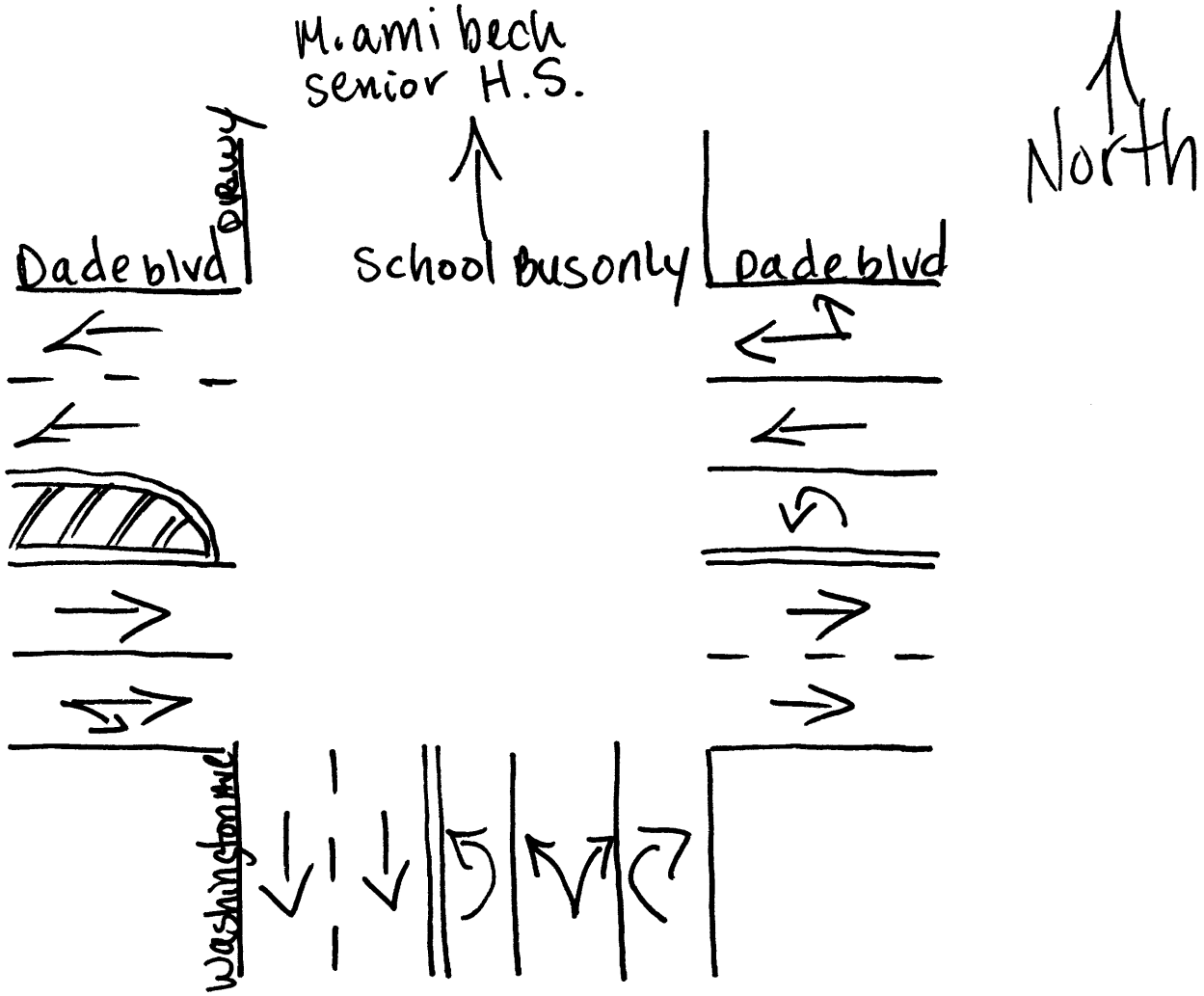
DADE BOULEVARD & WASHINGTON AVENUE
MIAMI BEACH, FLORIDA
COUNTED BY: RICHARD MENDEZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130058
Start Date: 04/17/13
File I.D. : DADEWASH
Page : 1

PEDESTRIANS

	SCHOOL BUS ENTRANCE From North				DADE BOULEVARD From East				WASHINGTON AVENUE From South				DADE BOULEVARD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	13
07:45	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	7
08:00	0	0	0	3	0	0	0	6	0	0	0	0	0	0	0	3	12
08:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	7
Hr Total	0	0	0	17	0	0	0	11	0	0	0	0	0	0	0	11	39
08:30	0	0	0	8	0	0	0	3	0	0	0	2	0	0	0	3	16
08:45	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	4
09:00	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	7	13
09:15	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	6	14
Hr Total	0	0	0	14	0	0	0	10	0	0	0	7	0	0	0	16	47
* BREAK *																	
16:30	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	4	10
16:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
17:00	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0	7	13
17:15	0	0	0	8	0	0	0	2	0	0	0	2	0	0	0	24	36
Hr Total	0	0	0	14	0	0	0	7	0	0	0	5	0	0	0	35	61
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
17:45	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	3	10
18:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	11	13
18:15	0	0	0	3	0	0	0	6	0	0	0	0	0	0	0	14	23
Hr Total	0	0	0	9	0	0	0	6	0	0	0	3	0	0	0	33	51
TOTAL	0	0	0	54	0	0	0	34	0	0	0	15	0	0	0	95	198



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

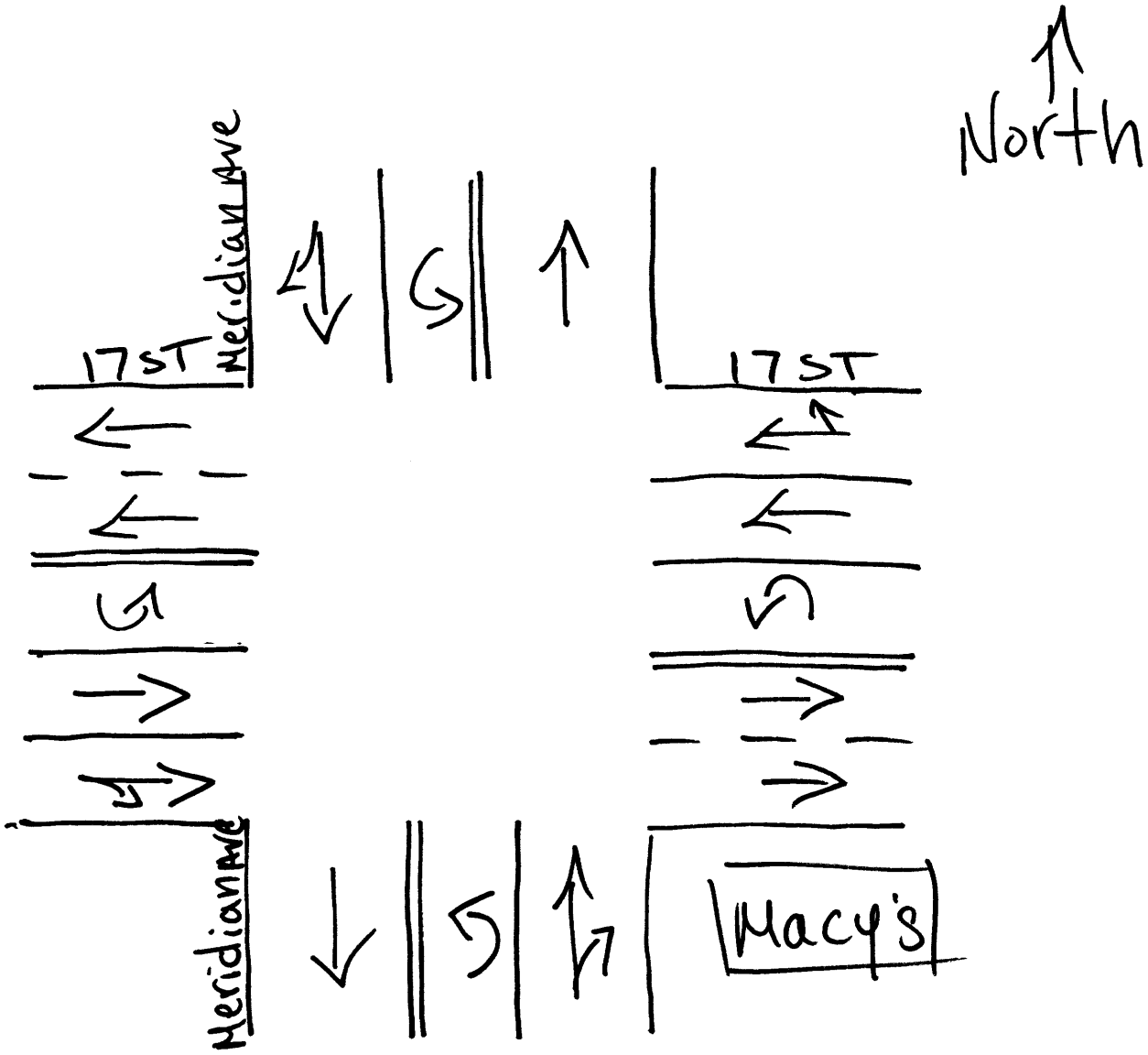
17TH STREET & MERIDIAN AVENUE
MIAMI BEACH, FLORIDA
COUNTED BY: MARISA CRUZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130058
Start Date: 04/17/13
File I.D. : 17S_MERI
Page : 1

PEDESTRIANS

	MERIDIAN AVENUE From North				17TH STREET From East				MERIDIAN AVENUE From South				17TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	1	0	0	0	5	0	0	0	13	0	0	0	6	25
07:45	0	0	0	10	0	0	0	7	0	0	0	3	0	0	0	7	27
08:00	0	0	0	1	0	0	0	5	0	0	0	11	0	0	0	5	22
08:15	0	0	0	5	0	0	0	4	0	0	0	8	0	0	0	4	21
Hr Total	0	0	0	17	0	0	0	21	0	0	0	35	0	0	0	22	95
08:30	0	0	0	5	0	0	0	6	0	0	0	13	0	0	0	5	29
08:45	0	0	0	2	0	0	0	15	0	0	0	8	0	0	0	14	39
09:00	0	0	0	9	0	0	0	5	0	0	0	11	0	0	0	20	45
09:15	0	0	0	6	0	0	0	12	0	0	0	10	0	0	0	6	34
Hr Total	0	0	0	22	0	0	0	38	0	0	0	42	0	0	0	45	147
* BREAK *																	
16:30	0	0	0	6	0	0	0	2	0	0	0	10	0	0	0	15	33
16:45	0	0	0	2	0	0	0	10	0	0	0	5	0	0	0	11	28
17:00	0	0	0	10	0	0	0	9	0	0	0	6	0	0	0	10	35
17:15	0	0	0	5	0	0	0	14	0	0	0	7	0	0	0	18	44
Hr Total	0	0	0	23	0	0	0	35	0	0	0	28	0	0	0	54	140
17:30	0	0	0	11	0	0	0	7	0	0	0	12	0	0	0	28	58
17:45	0	0	0	17	0	0	0	6	0	0	0	17	0	0	0	19	59
18:00	0	0	0	6	0	0	0	6	0	0	0	9	0	0	0	5	26
18:15	0	0	0	11	0	0	0	9	0	0	0	14	0	0	0	13	47
Hr Total	0	0	0	45	0	0	0	28	0	0	0	52	0	0	0	65	190
TOTAL	0	0	0	107	0	0	0	122	0	0	0	157	0	0	0	186	572



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

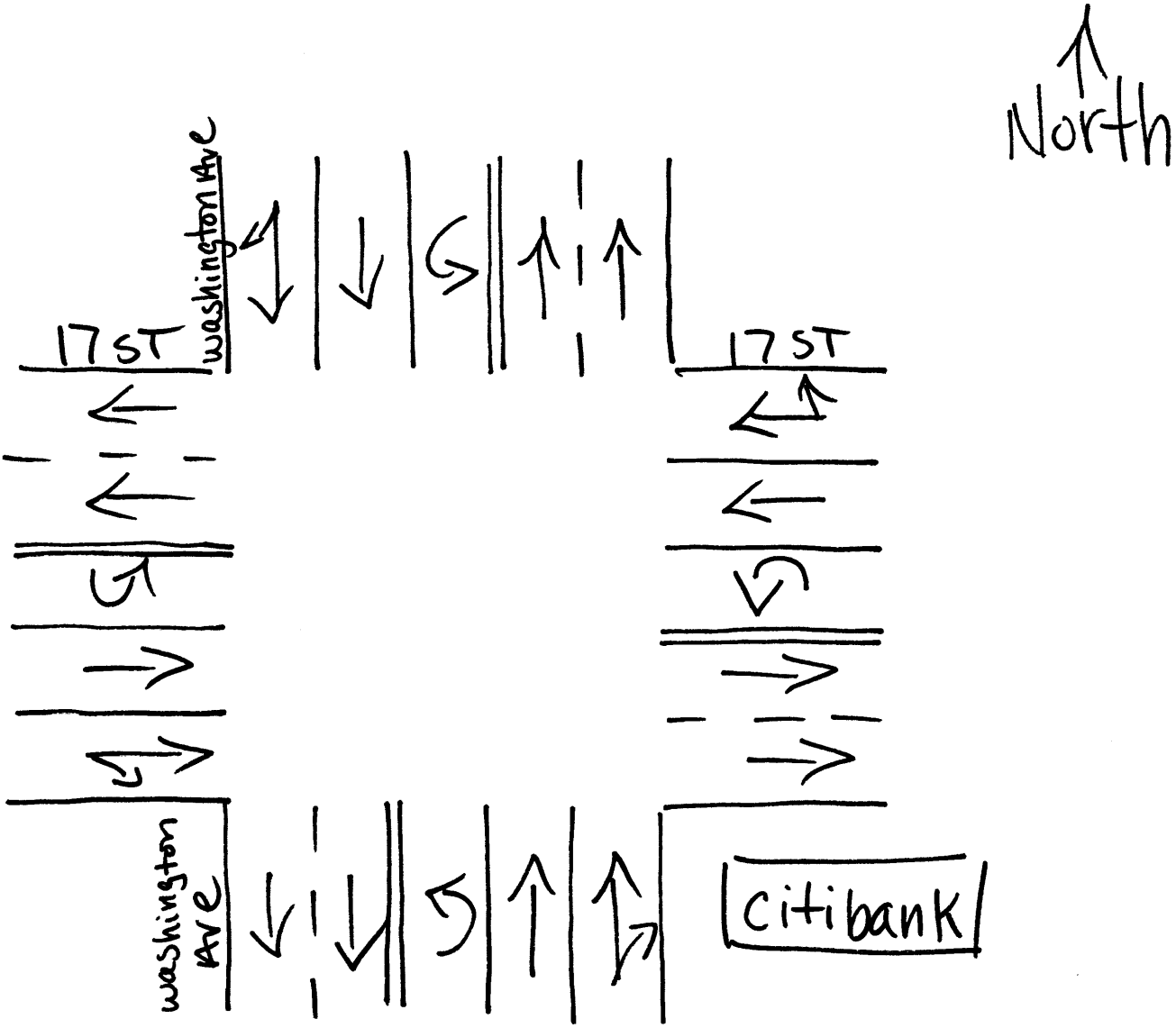
17TH STREET & WASHINGTON AVENUE
MIAMI BEACH, FLORIDA
COUNTED BY: LUIS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130058
Start Date: 04/17/13
File I.D. : 17S_WASH
Page : 1

PEDESTRIANS

	WASHINGTON AVENUE From North				17TH STREET From East				WASHINGTON AVENUE From South				17TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/17/13																	
07:30	0	0	0	8	0	0	0	1	0	0	0	3	0	0	0	2	14
07:45	0	0	0	7	0	0	0	8	0	0	0	7	0	0	0	9	31
08:00	0	0	0	6	0	0	0	6	0	0	0	7	0	0	0	6	25
08:15	0	0	0	5	0	0	0	9	0	0	0	4	0	0	0	6	24
Hr Total	0	0	0	26	0	0	0	24	0	0	0	21	0	0	0	23	94
08:30	0	0	0	5	0	0	0	12	0	0	0	5	0	0	0	8	30
08:45	0	0	0	9	0	0	0	13	0	0	0	15	0	0	0	13	50
09:00	0	0	0	7	0	0	0	9	0	0	0	6	0	0	0	10	32
09:15	0	0	0	3	0	0	0	8	0	0	0	7	0	0	0	3	21
Hr Total	0	0	0	24	0	0	0	42	0	0	0	33	0	0	0	34	133
* BREAK *																	
16:30	0	0	0	17	0	0	0	18	0	0	0	20	0	0	0	16	71
16:45	0	0	0	8	0	0	0	10	0	0	0	29	0	0	0	24	71
17:00	0	0	0	10	0	0	0	11	0	0	0	14	0	0	0	24	59
17:15	0	0	0	15	0	0	0	10	0	0	0	15	0	0	0	23	63
Hr Total	0	0	0	50	0	0	0	49	0	0	0	78	0	0	0	87	264
17:30	0	0	0	19	0	0	0	24	0	0	0	15	0	0	0	49	107
17:45	0	0	0	13	0	0	0	4	0	0	0	26	0	0	0	19	62
18:00	0	0	0	12	0	0	0	19	0	0	0	15	0	0	0	27	73
18:15	0	0	0	11	0	0	0	9	0	0	0	20	0	0	0	36	76
Hr Total	0	0	0	55	0	0	0	56	0	0	0	76	0	0	0	131	318
TOTAL	0	0	0	155	0	0	0	171	0	0	0	208	0	0	0	275	809



Miami beach, Florida
April 17, 2013
drawn by: Luis Palomino
signalized

Historic Growth Rate

Backgroung Growth Trend Calculations

Miami Beach Convention Center

STATION	LOCATION	2007	2008	2009	2010	2011	2012
0012	Alton Rd, N of 20 St	47,500	46,500	47,000	46,000	47,000	48500
5159	Collins Av, N of 5 St	14,300	13,600	15,300	12,900	13,600	16700
9080	McArthur Cswy, W of Palm Island	91,000	87,500	94,000	87,000	90,500	96500
0031	McArthur Cswy, W of Palm Island	92,550	90,563	94,771	91,629	93,300	93662
2647	Alton Rd, N of Nautilus Dr	6,400	5,900	6,800	6,300	6,500	6800
5388	Arthur Godfrey Rd, W of Indian Creek Dr	39,000	36,500	37,500	38,500	44,000	42500
2527	McArthur Cswy, W of Alton Rd	79,500	72,500	68,500	66,000	80,000	83500
2646	Indian Creek Dr, S of 38 St	16,500	13,500	14,000	12,000	10,500	15000
0108	SR 112, E of US 1	99,861	103,482	102,922	101,403	101,165	100664
2542	Alton Rd, S of Venetian Cwy	39,500	37,500	38,500	39,000	39,500	37000
5170	Collins Av, N of 21 St	25500	27000	26500	25000	26500	25000
2528	McArthur Cswy, E of Meridian Blvd	34,000	34,500	35,500	35,000	35,000	32500
Total		**585,611**	**569,045**	**581,293**	**560,732**	**587,565**	**598,326**
Yearly Growth			***-2.9%***	***2.1%***	***-3.7%***	***4.6%***	***1.8%***
Growth Trend (Average)							0.4%

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 0012 - SR 907/ALTON RD, 200' N OF 20 ST (MIAMI BEACH)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	48500 C	N 22500	S 26000	9.00	55.70	2.50
2011	47000 C	N 22500	S 24500	9.00	55.10	3.50
2010	46000 C	N 23000	S 23000	8.98	54.08	3.50
2009	47000 C	N 23500	S 23500	8.99	53.24	3.90
2008	46500 C	N 23000	S 23500	9.09	55.75	2.10
2007	47500 C	N 23000	S 24500	8.01	54.34	2.20
2006	46500 C	N 23000	S 23500	7.97	54.22	3.00
2005	46500 F	N 22500	S 24000	8.80	53.80	5.30
2004	46500 C	N 22500	S 24000	9.00	53.30	5.30
2003	42500 C	N 20500	S 22000	8.80	53.40	4.80
2002	44000 C	N 21500	S 22500	9.80	52.30	1.70
2001	45500 C	N 22500	S 23000	8.20	53.50	5.00
2000	41500 C	N 20000	S 21500	8.20	53.10	1.70
1999	35500 C	N 18500	S 17000	9.10	52.70	1.90
1998	41500 C	N 20000	S 21500	7.40	52.70	2.00
1997	45000 C	N 22000	S 23000	9.10	64.50	2.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5159 - SR AIA/COLLINS AV, 200' N 5 ST(MIAMI BEACH)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	16700 C	N 7100	S 9600	9.00	55.70	8.40
2011	13600 C	N 6900	S 6700	9.00	55.10	7.50
2010	12900 C	N 6200	S 6700	8.98	54.08	8.80
2009	15300 C	N 7600	S 7700	8.99	53.24	8.40
2008	13600 C	N 6300	S 7300	9.09	55.75	5.30
2007	14300 C	N 6500	S 7800	8.01	54.34	4.90
2006	13100 C	N 5800	S 7300	7.97	54.22	2.20
2005	16100 C	N 7300	S 8800	8.80	53.80	5.50
2004	17400 C	N 8400	S 9000	9.00	53.30	8.20
2003	16200 C	N 7000	S 9200	8.80	53.40	4.90
2002	17000 C	N 8200	S 8800	9.80	52.30	2.60
2001	17600 C	N 8800	S 8800	8.20	53.50	3.00
2000	20100 C	N 8100	S 12000	8.20	53.10	3.50
1999	18600 C	N 9100	S 9500	9.10	52.70	3.20
1998	18700 C	N 8200	S 10500	6.00	52.70	2.50
1997	14600 C	N 6800	S 7800	9.10	64.50	2.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 9080 - SR A1A/MACARTHUR CSWY, 1000' W PALM ISL ENT @R31

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	96500 C	E 48500	W 48000	9.00	53.40	4.40
2011	90500 C	E 45500	W 45000	9.00	51.90	4.20
2010	87000 C	E 42500	W 44500	7.16	52.27	4.20
2009	94000 C	E 49000	W 45000	9.21	57.60	3.50
2008	87500 C	E 43500	W 44000	7.42	52.15	2.80
2007	91000 C	E 45000	W 46000	7.11	53.51	2.30
2006	76000 C	E 33500	W 42500	7.18	52.50	4.00
2005	69000 C	E 35000	W 34000	7.30	52.50	4.90
2004	76000 C	E 37000	W 39000	7.40	52.00	4.90
2003	86000 C	E 42000	W 44000	7.30	54.00	2.40
2002	80500 C	E 40500	W 40000	9.20	68.00	3.50
2001	70000 C	E 35000	W 35000	8.20	53.50	3.40
2000	81000 C	E 41000	W 40000	8.20	53.10	2.80
1999	69000 C	E 32500	W 36500	9.10	52.70	3.00
1998	75000 C	E 37500	W 37500	9.30	52.70	2.60
1997	74000 C	E 37500	W 36500	9.10	64.50	2.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 0031 - SRA1A,MCARTHR CSWY,0.2MI W OF PALM ISL ENT,DADE CO

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	93662 C	E 46310	W 47352	9.00	53.40	2.30
2011	93300 C	E 46206	W 47094	9.00	51.90	2.40
2010	91629 C	E 45592	W 46037	7.16	52.27	2.20
2009	94771 C	E 0	W 0	7.42	52.15	2.70
2008	90563 C	E 44996	W 45567	7.42	52.15	2.70
2007	92550 C	E 45984	W 46566	7.11	53.51	2.70
2006	91366 C	E 45735	W 45631	7.18	52.50	2.40
2005	90151 C	E 44845	W 45306	7.30	52.50	2.40
2004	89596 C	E 44565	W 45031	7.40	52.00	2.50
2003	90344 C	E 44899	W 45445	7.30	54.00	2.60
2002	90056 C	E 44957	W 45099	7.50	54.60	2.60
2001	90405 C	E 45835	W 44570	7.40	53.60	6.00
2000	88892 C	E 44474	W 44418	7.30	52.90	6.10
1999	86673 C	E 43148	W 43525	7.30	54.30	4.60
1998	83436 C	E 41765	W 41671	9.10	60.70	4.00
1997	78749 C	E 38974	W 39775	9.50	58.50	4.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2647 - SR 907 ALTON ROAD 200' N OF NAUTILUS DR

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	6800 C	N 4600	S 2200	9.00	55.70	6.60
2011	6500 C	N 4400	S 2100	9.00	55.10	4.90
2010	6300 C	N 4100	S 2200	8.98	54.08	1.90
2009	6800 C	N 4600	S 2200	8.99	53.24	4.30
2008	5900 C	N 3800	S 2100	9.09	55.75	4.20
2007	6400 C	N 4100	S 2300	8.01	54.34	4.00
2006	6400 C	N 4000	S 2400	7.97	54.22	2.10
2005	6500 C	N 4400	S 2100	8.80	53.80	0.00
2004	6100 C	N 3900	S 2200	9.00	53.30	8.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5388 - SR 112/ARTHUR GODFREY RD, 200' W INDIAN CREEK DR

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	42500 C	E 23000	W 19500	9.00	55.70	4.90
2011	44000 C	E 23000	W 21000	9.00	55.10	5.00
2010	38500 C	E 20500	W 18000	8.98	54.08	6.20
2009	37500 C	E 19000	W 18500	8.99	53.24	6.00
2008	36500 C	E 19000	W 17500	9.09	55.75	5.90
2007	39000 C	E 22000	W 17000	8.36	54.73	5.70
2006	36500 C	E 21000	W 15500	8.70	56.15	13.70
2005	32000 C	E 17000	W 15000	8.50	53.00	5.50
2004	34500 C	E 18000	W 16500	8.70	54.00	7.00
2003	38500 C	E 20500	W 18000	8.50	53.40	4.20
2002	39500 C	E 20000	W 19500	9.80	52.30	3.50
2001	40000 C	E 21000	W 19000	8.20	53.50	4.10
2000	40000 C	E 20500	W 19500	8.20	53.10	3.10
1999	41000 C	E 20500	W 20500	9.10	52.70	3.00
1998	39000 C	E 20500	W 18500	6.80	52.70	2.20
1997	31500 C	E 16000	W 15500	9.10	64.50	3.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 87 - MIAMI-DADE

SITE: 2527 - SR A1A/MACARTHUR CSWY, 200' W SR 907/ALTON RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	83500 C	E 41000	W 42500	9.00	53.40	8.40
2011	80000 C	E 39500	W 40500	9.00	51.90	7.50
2010	66000 C	E 36000	W 30000	7.16	52.27	8.80
2009	68500 C	E 36500	W 32000	9.21	57.60	8.40
2008	72500 C	E 36500	W 36000	7.42	52.15	5.30
2007	79500 C	E 40000	W 39500	7.11	53.51	4.90
2006	80500 C	E 39500	W 41000	7.18	52.50	2.20
2005	78000 C	E 40000	W 38000	7.30	52.50	5.50
2004	91500 C	E 46000	W 45500	7.40	52.00	8.20
2003	74000 C	E 36500	W 37500	7.30	54.00	4.90
2002	86000 C	E 43000	W 43000	9.20	68.00	2.60
2001	83000 C	E 41000	W 42000	8.20	53.50	3.00
2000	77500 C	E 38000	W 39500	8.20	53.10	3.50
1999	75000 C	E 42000	W 33000	9.10	52.70	3.20
1998	76000 C	E 36000	W 40000	9.30	52.70	2.50
1997	78000 C	E 43000	W 35000	9.10	64.50	2.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 87 - MIAMI-DADE

SITE: 2646 - INDIAN CREEK DR. 200' SOUTH OF 38 STREET

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	15000 C	S 15000	0	9.00	99.90	8.40
2011	10500 C	S 10500	0	9.00	99.90	7.50
2010	12000 C	S 12000	0	8.98	99.99	8.80
2009	14000 C	S 14000	0	8.99	99.99	8.40
2008	13500 C	S 13500	0	9.09	99.99	5.30
2007	16500 C	S 16500	0	8.01	99.99	4.90
2006	12500 C	S 12500	B 0	7.97	99.99	2.20
2005	25500 F	S		8.80	99.90	5.50
2004	25500 C	S 25500	0	9.00	99.90	8.20
2003	18500 C	S 18500	0	8.80	99.90	4.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 87 - MIAMI-DADE

SITE: 0108 - SR-112/I-195, 1 MI E OF SR-5/US-1, DADE CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	100664 C	E 50681	W 49983	8.00	52.90	2.40
2011	101165 C	E 50738	W 50427	8.00	51.90	2.30
2010	101403 C	E 48397	W 53006	8.28	52.35	2.30
2009	102922 C	E 47706	W 55216	8.11	53.74	5.30
2008	103482 C	E 48445	W 55037	8.36	54.73	2.30
2007	99861 C	E 47278	W 52583	8.36	54.73	2.40
2006	100000 F			8.53	52.98	13.20
2005	96863 C	E 48685	W 48178	8.50	53.00	13.40
2004	94995 C	E 47850	W 47145	8.70	54.00	10.20
2003	96580 C	E 48933	W 47647	8.50	53.40	10.50
2002	95735 C	E 48348	W 47387	8.50	52.50	2.30
2001	94638 C	E 47590	W 47048	8.50	54.30	2.80
2000	93190 C	E 47044	W 46146	9.10	56.40	2.10
1999	94278 C	E 46729	W 47549	9.70	55.00	2.30
1998	90135 C	E 44573	W 45562	9.20	54.40	2.20
1997	89997 C	E 44667	W 45330	9.60	56.20	3.40

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FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 87 - MIAMI-DADE

SITE: 2542 - SR 907/ALTON RD, 200' S OF VENETIAN CSWY

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	37000 C	N 19000	S 18000	9.00	55.70	7.50
2011	39500 C	N 19000	S 20500	9.00	55.10	1.50
2010	39000 C	N 20000	S 19000	8.98	54.08	1.50
2009	38500 C	N 19000	S 19500	8.99	53.24	6.20
2008	37500 C	N 17500	S 20000	9.09	55.75	4.80
2007	39500 C	N 18500	S 21000	8.01	54.34	5.20
2006	36500 C	N 17500	S 19000	7.97	54.22	1.60
2005	34000 C	N 17000	S 17000	8.80	53.80	9.30
2004	39000 C	N 18500	S 20500	9.00	53.30	9.30
2003	32500 C	N 16000	S 16500	8.80	53.40	10.60
2002	33000 C	N 16000	S 17000	9.80	52.30	5.80
2001	32500 C	N 16500	S 16000	8.20	53.50	5.50
2000	32000 C	N 15000	S 17000	8.20	53.10	5.90
1999	29000 C	N 13500	S 15500	9.10	52.70	5.90

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S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
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COUNTY: 87 - MIAMI-DADE

SITE: 5170 - SR A1A/COLLINS AV, N OF 21 ST (MIAMI BEACH)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	25000 C	N 12000	S 13000	9.00	55.70	4.30
2011	26500 C	N 13500	S 13000	9.00	55.10	2.80
2010	25000 C	N 12500	S 12500	8.98	54.08	2.80
2009	26500 C	N 13000	S 13500	8.99	53.24	2.70
2008	27000 C	N 13500	S 13500	9.09	55.75	4.60
2007	25500 C	N 12500	S 13000	8.01	54.34	5.10
2006	25500 C	N 12500	S 13000	7.97	54.22	2.70
2005	25500 C	N 13000	S 12500	8.80	53.80	11.60
2004	30500 C	N 15000	S 15500	9.00	53.30	11.60
2003	23500 C	N 11500	S 12000	8.80	53.40	6.90
2002	31500 C	N 16000	S 15500	9.80	52.30	4.00
2001	29500 F	N 14500	S 15000	8.20	53.50	6.00
2000	29500 C	N 14500	S 15000	8.20	53.10	4.90
1999	26000 C	N 12500	S 13500	9.10	52.70	4.30
1998	26500 C	N 13000	S 13500	6.10	52.70	2.50
1997	19000 C	N 9500	S 9500	9.10	64.50	2.70

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S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2012 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2528 - SR A1A/MACARTHUR CSWY, 150' E OF MERIDIAN AVE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2012	32500 C	E 14500	W 18000	9.00	53.40	8.40
2011	35000 C	E 16500	W 18500	9.00	51.90	7.50
2010	35000 C	E 16500	W 18500	7.16	52.27	8.80
2009	35500 C	E 16500	W 19000	9.21	57.60	8.40
2008	34500 C	E 16000	W 18500	7.42	52.15	5.30
2007	34000 C	E 16500	W 17500	7.11	53.51	4.90
2006	40500 C	E 19500	W 21000	7.18	52.50	2.20
2005	35000 C	E 16000	W 19000	7.30	52.50	5.50
2004	41500 C	E 20500	W 21000	7.40	52.00	8.20
2003	40500 C	E 18500	W 22000	7.30	54.00	4.90
2002	43500 C	E 21000	W 22500	9.20	68.00	2.60
2001	45500 C	E 22000	W 23500	8.20	53.50	3.00
2000	37000 C	E 18500	W 18500	8.20	53.10	3.50
1999	46000 C	E 24500	W 21500	9.10	52.70	3.20
1998	46500 C	E 24000	W 22500	6.60	52.70	2.50
1997	39000 C	E 18000	W 21000	9.10	64.50	2.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Trip Generation and Internalization

Trip Generation

Miami Beach Convention Center

Site Information

	Existing	*Proposed*
Land Use	Convention Center	Convention Center
Square Footage	1,136,610	1,179,883
Average Event Attendance	4,500	4,500

Assumptions

Peak Period	Weekday 7:30-9:30 AM	Weekday 4:30-6:30 PM
Employees	10% of Attendees	10% of Attendees
Auto Occupancy	2.5 Attendees 1.5 Employees	2.5 Attendees 1.5 Employees
% Attending during Peak Period	75%	25%
% of Auto Trips Occuring during 1 hour	80%	80%
Directional Distribution	70% in - 30% out	40% in - 60% out
Transit Usage	10%	10%
Pedestrain & Bicycle	5%	5%

Convention Center Trip Generation

	AM Peak Hour			PM Peak Hour		
	Total	**In**	**Out**	**Total**	**In**	**Out**
Existing Use (1,136,610 Sq Feet)						
Attendees	1,080	756	324	360	144	216
Employees	180	0	180	60	24	36
Subtotal	**1,260**	**756**	**504**	**420**	**168**	**252**
Transit	-126	-88	-38	-42	-17	-25
Pedestrian/ Bicycle	-63	-44	-19	-21	-8	-13
Net New External Total	1,071	624	447	357	143	214
Proposed Use (1,179,883 Sq Feet)						
Use Increase (SF) 3.8%	41	24	17	14	5	8

Trip Generation and Internalization (AM Peak Hour)

Miami Beach Convention Center

Residential Condo		Hotel		Museum		Retail		Convention Center [1]		
Land Use 230		*Land Use 310*		*Land Use 580*		*Land Use 820*		*NA*		
300 Dwelling Units		800 Rooms		61,381 SF GFA		124,819 SF		1,179,883 SF		
In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	
21	**103**	**250**	**174**	**15**	**2**	**110**	**68**	**648**	**464**	1,855 Gross Trips
-3	-15	-38	-26	-2	0	-17	-10	NA	NA	-111 -15.0% Other Modes
18	**88**	**212**	**148**	**13**	**2**	**93**	**58**	**648**	**464**	1,744 Vehicle Trips

34% *30* **1** *5%* *1*
37% *7* **0** *7%* *0*
34% *30* **8** *9%* *8*
37% *7* **4** *7%* *4*
2% *2* **2** *2%* *13*
2% *0* **0** *2%* *9*
34% *50* **1** *9%* *1*
37% *78* **0** *7%* *0*
34% *50* **8** *9%* *8*
37% *78* **4** *7%* *4*
50% *74* **74** *100%* *648*
50% *106* **106** *100%* *464*
29% *1* **1** *31%* *29*
31% *4* **4** *29%* *17*

Residential Condo		Hotel		Museum		Retail		Convention Center		
Land Use 230		Land Use 310		Land Use 580		Land Use 820		*NA*		
300 Dwelling Units		800 Rooms		61,381 SF GFA		124,819 SF		1,179,883 SF		
In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	
21	**103**	**250**	**174**	**15**	**2**	**110**	**68**	**648**	**464**	1,855 ITE Trips
-3	-15	-38	-26	-2	0	-17	-10	NA	NA	-111 -15.0% Transit
18	**88**	**212**	**148**	**13**	**2**	**93**	**58**	**648**	**464**	1,744 Vehicle Trips

Adjustement Factor:

-1 *-1*
0 *0*
-8 *-8*
-4 *-4*
-2 *-2*
0 *0*
-1 *-1*
0 *0*
-8 *-8*
-4 *-4*
-74 *-74*
-106 *-106*
-1 *-1*
-4 *-4*

14	77	102	65	7	1	76	46	572	358	1,318 External Trips
	14.2%		*53.6%*		*46.7%*		*19.2%*		*16.4%*	*24.4%* % Internal
						-21	-21			*35.0%* Pass-by
								-624	-447	Existing Use
14	**77**	**102**	**65**	**7**	**1**	**55**	**25**	**-52**	**-89**	**204 Net New External Trips**

[1] Transit and Other Modes of Transportation are already accounted for in the trip generation for this use

Trip Generation and Internalization (PM Peak Hour)

Miami Beach Convention Center

Residential Condo		Hotel		Museum		Retail		Convention Center [1]		
Land Use 230		*Land Use 310*		*Land Use 580*		*Land Use 820*		*NA*		
300 Dwelling Units		800 Rooms		61,381 SF GFA		124,819 SF		1,179,883 SF		
In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	
99	**49**	**245**	**235**	**2**	**9**	**334**	**361**	**148**	**222**	1,704 Gross Trips
-15	-7	-37	-35	0	-1	-50	-54	NA	NA	-199 -15.0% Other Modes
84	**42**	**208**	**200**	**2**	**8**	**284**	**307**	**148**	**222**	1,505 Vehicle Trips
	53%				*9%*					
	22		**0**		*0*					
31%					*12%*					
26			**1**		*1*					
	53%					*9%*				
	22		**22**			*26*				
31%							*12%*			
26			**26**				*37*			
	2%								*2%*	
	1				**1**				*3*	
2%										*2%*
2					**2**					*4*
			53%		*9%*					
			106	**0**	*0*					
		31%				*12%*				
		64		**1**		*1*				
			53%				*9%*			
			106		**26**		*26*			
		31%						*12%*		
		64			**37**			*37*		
			50%						*100%*	
			100			**100**			*148*	
		50%								*100%*
		104				**104**				*222*
					20%		*20%*			
					2	**2**	*57*			
				20%				*20%*		
				0		**0**		*61*		

Residential Condo		Hotel		Museum		Retail		Convention Center		
Land Use 230		Land Use 310		Land Use 580		Land Use 820		*NA*		
300 Dwelling Units		800 Rooms		61,381 SF GFA		124,819 SF		1,179,883 SF		
In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	
99	**49**	**245**	**235**	**2**	**9**	**334**	**361**	**148**	**222**	1,704 ITE Trips
-15	-7	-37	-35	0	-1	-50	-54	NA	NA	-199 -15.0% Transit
84	**42**	**208**	**200**	**2**	**8**	**284**	**307**	**148**	**222**	1,505 Vehicle Trips
										Adjustement Factor:
	0				*0*					
-1					*-1*					
	-11					*-11*				50%
-13							*-13*			
	-1							*-1*		
-2									*-2*	
			0		*0*					
		-1			*-1*					
			-26			*-26*				
		-37					*-37*			
			-100					*-100*		
		-104							*-104*	
					-2	*-2*				
				0			*0*			
-16	-12	-142	-126	0	-4	-39	-50	-101	-106	-596 Internal
68	30	66	74	2	4	245	257	47	116	909 External Trips
	22.2%		*65.7%*		*40.0%*		*15.1%*		*55.9%*	*39.6%* % Internal
						-88	-88			*35.0%* Pass-by
								-143	-214	Existing Use
68	**30**	**66**	**74**	**2**	**4**	**157**	**169**	**-96**	**-98**	**376 Net New External Trips**

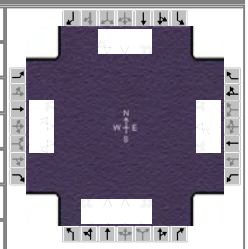
[1] Transit and Other Modes of Transportation are already accounted for in the trip generation for this use

Intersection Capacity Analysis

Existing Conditions

2010 HCS Signalized Intersection Results Summary

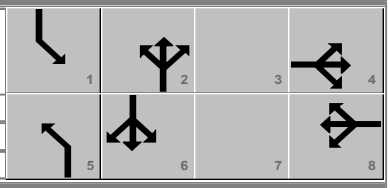
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Alton Road/17th Street	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	229	140	33	161	82	126	80	573	243	245	1011	144

Signal Information			
Cycle, s	122.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	44.1	31.0	20.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	1.0	1.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	5	2	1	6
Case Number	10.0	10.0	9.0	9.0	1.1	3.0	1.1	4.0
Phase Duration, s	36.0	36.0	25.0	25.0	12.0	49.1	12.0	49.1
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.2	3.2	3.1	3.1	3.1	3.1
Queue Clearance Time *(g_s)*, s	16.5	16.5	12.9	12.9	5.5	18.2	11.0	41.8
Green Extension Time *(g_e)*, s	0.7	0.7	0.5	0.5	0.0	5.5	0.0	2.4
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.07	0.07	0.57	0.04	1.00	0.86

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	244	93	91	171	87	134	85	610	259	261	627	602
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1742	1774	1863	1610	1774	1773	1579	1774	1863	1781
Queue Service time *(g_s)*, s	14.5	4.8	5.0	10.9	5.0	9.3	3.5	16.2	15.3	9.0	39.6	39.8
Cycle Queue Clearance Time *(g_c)*, s	14.5	4.8	5.0	10.9	5.0	9.3	3.5	16.2	15.3	9.0	39.6	39.8
Capacity *(c)*, veh/h	450	473	442	291	305	264	206	1282	570	375	673	644
Volume-to-Capacity Ratio *(X)*	0.541	0.197	0.206	0.590	0.286	0.508	0.414	0.476	0.453	0.696	0.932	0.935
Available Capacity *(c_a)*, veh/h	450	473		291	305	264	206	1336	595	375	702	671
Back of Queue *(Q)*, veh/ln	6.4	2.2	2.1	5.0	2.3	3.7	1.5	6.8	5.8	7.2	21.0	20.3
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	39.4	35.8	35.9	47.3	44.8	46.6	28.0	30.1	29.8	28.1	37.6	37.6
Incremental Delay *(d_2)*, s/veh	0.7	0.1	0.1	2.2	0.2	0.7	0.5	0.1	0.2	4.7	18.4	19.5
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	40.1	35.9	36.0	49.4	45.0	47.3	28.5	30.2	30.0	32.7	55.9	57.1
Level of Service (LOS)	D	D	D	D	D	D	C	C	C	C	E	E
Approach Delay, s/veh / LOS	38.3	D		47.7	D		30.0	C		52.3	D	
Intersection Delay s/veh / LOS	43.4						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.0	C	2.9	C	2.8	C	2.4	B
Bicycle LOS Score / LOS	0.8	A	1.1	A	1.3	A	1.7	A

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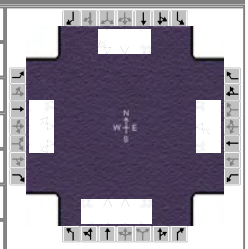
2010 HCS Signalized Intersection Results Summary

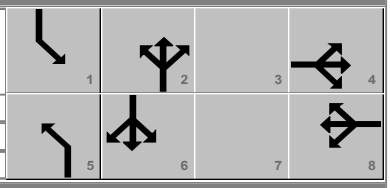
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Alton Road/17th Street	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	277	138	42	221	148	265	74	859	207	218	944	230

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	44.1	31.0	20.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	1.0	1.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	2	2	1	6
Case Number	10.0	10.0	9.0	9.0	5.3	5.3	1.0	4.0
Phase Duration, s	34.0	34.0	30.0	30.0	90.0	90.0	10.0	36.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.2	3.2	0.0	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	16.9	16.9	22.8	22.8			9.0	
Green Extension Time *(g_e)*, s	0.8	0.8	0.4	0.4	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.00	0.00	1.00	1.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	295	47	144	235	157	282	79	914	220	232	645	604
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	2286	598	1764	1798	1265	1610	443	1773	1579	1774	1863	1736
Queue Service time *(g_s)*, s	14.9	8.7	9.0	15.8	14.9	20.8	22.9	27.4	12.8	7.0	36.5	36.8
Cycle Queue Clearance Time *(g_c)*, s	14.9	8.7	9.0	15.8	14.9	20.8	49.7	27.4	12.8	7.0	36.5	36.8
Capacity *(c)*, veh/h	510	133	394	346	243	396	138	1391	619	261	874	815
Volume-to-Capacity Ratio *(X)*	0.578	0.354	0.367	0.680	0.647	0.711	0.571	0.657	0.356	0.888	0.738	0.742
Available Capacity *(c_a)*, veh/h	510	133		346	243	396	138	1391	619	261	874	815
Back of Queue *(Q)*, veh/ln	8.6	1.3	3.9	7.5	5.0	8.8	3.1	12.1	5.1	9.7	17.2	16.2
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	45.0	42.6	42.7	48.8	48.4	44.8	52.4	32.3	27.9	32.8	28.0	28.1
Incremental Delay *(d_2)*, s/veh	1.1	0.6	0.2	4.4	4.6	5.0	16.1	2.4	1.6	27.8	5.5	6.0
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	46.1	43.2	42.9	53.2	53.1	49.8	68.5	34.8	29.5	60.7	33.5	34.1
Level of Service (LOS)	D	D	D	D	D	D	E	C	C	E	C	C
Approach Delay, s/veh / LOS	44.9	D		51.8	D		36.0	D		38.0	D	
Intersection Delay s/veh / LOS	40.7						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.0	C	2.9	C	2.8	C	2.4	B
Bicycle LOS Score / LOS	0.9	A	1.6	A	1.5	A	1.7	A

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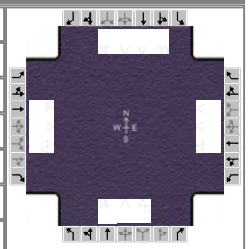
2010 HCS Signalized Intersection Results Summary

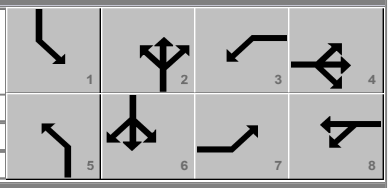
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Alton Road/Dade Blvd	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	158	60	28	277	104		46	755	141	51	1079	89

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.0	51.0	11.0	32.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	14.0	37.0	14.0	37.0	14.0	55.0	14.0	55.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	10.1	4.5	13.0	4.8	3.7		3.9	
Green Extension Time *(g_e)*, s	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	168	47	46	295	111	0	49	490	463	54	1148	95
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1669	1774	1773	1736	1774	1863	1760	1774	1773	1579
Queue Service time *(g_s)*, s	8.1	2.3	2.5	11.0	2.8	0.0	1.7	25.0	25.0	1.9	33.5	4.5
Cycle Queue Clearance Time *(g_c)*, s	8.1	2.3	2.5	11.0	2.8	0.0	1.7	25.0	25.0	1.9	33.5	4.5
Capacity *(c)*, veh/h	533	497	445	541	946		290	776	733	345	1478	658
Volume-to-Capacity Ratio *(X)*	0.315	0.095	0.104	0.544	0.117	0.000	0.169	0.631	0.631	0.157	0.777	0.144
Available Capacity *(c_a)*, veh/h	533	497	445	541	946		290	776	733	345	1478	658
Back of Queue *(Q)*, veh/ln	3.4	1.0	1.0	6.9	1.2		0.7	11.7	11.1	0.8	14.7	1.7
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	27.3	33.1	33.2	30.4	33.3		20.1	27.7	27.7	17.8	30.2	21.7
Incremental Delay *(d_2)*, s/veh	0.1	0.0	0.0	0.6	0.0	0.0	0.1	3.9	4.1	0.1	4.1	0.5
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	27.5	33.1	33.2	31.1	33.3		20.2	31.6	31.8	17.9	34.3	22.2
Level of Service (LOS)	C	C	C	C	C		C	C	C	B	C	C
Approach Delay, s/veh / LOS	29.5	C		31.7	C		31.1	C		32.7	C	
Intersection Delay s/veh / LOS	31.8						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	3.0	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.7	A	0.8	A	1.3	A	1.6	A

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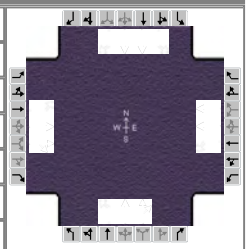
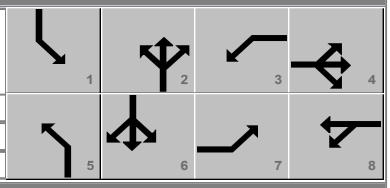
2010 HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Alton Road/Dade Blvd	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	104	108	63	285	130		65	1090	282	71	1076	44

Signal Information												
Cycle, s	130.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	11.0	61.0	11.0	32.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	4.0	3.0	4.0	0.0	0.0		
				Red	0.0	0.0	0.0	1.0	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	14.0	37.0	14.0	37.0	14.0	65.0	14.0	65.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	7.8	8.4	13.0	6.0	4.4		4.6	
Green Extension Time *(g_e)*, s	0.0	0.6	0.0	0.6	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.89	0.00	1.00	0.00	0.01		0.01	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	111	115	67	303	138	0	69	750	710	76	1145	47
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	1774	1773	0	1774	1863	1731	1774	1773	1579
Queue Service time *(g_s)*, s	5.8	6.4	4.3	11.0	4.0	0.0	2.4	47.2	48.6	2.6	33.4	2.1
Cycle Queue Clearance Time *(g_c)*, s	5.8	6.4	4.3	11.0	4.0	0.0	2.4	47.2	48.6	2.6	33.4	2.1
Capacity *(c)*, veh/h	474	459	389	441	873		306	860	799	237	1637	729
Volume-to-Capacity Ratio *(X)*	0.233	0.251	0.172	0.688	0.158	0.000	0.226	0.872	0.888	0.318	0.699	0.064
Available Capacity *(c_a)*, veh/h	474	459	389	441	873		306	860	799	237	1637	729
Back of Queue *(Q)*, veh/ln	2.5	3.0	1.7	9.1	1.7		1.0	23.3	22.7	1.2	14.4	0.8
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	31.1	39.4	38.6	38.1	38.4		18.9	31.6	31.9	25.4	27.8	19.4
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	3.7	0.0	0.0	0.1	11.9	14.0	0.3	2.5	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	31.2	39.5	38.7	41.9	38.5		19.1	43.4	45.9	25.7	30.3	19.6
Level of Service (LOS)	C	D	D	D	D		B	D	D	C	C	B
Approach Delay, s/veh / LOS	36.2	D		40.8	D		43.5	D		29.7	C	
Intersection Delay s/veh / LOS	37.6						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.9	C	3.0	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.7	A	0.9	A	1.7	A	1.5	A

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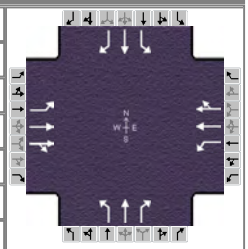
2010 HCS Signalized Intersection Results Summary

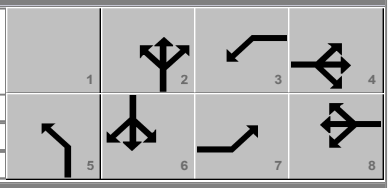
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.93
Intersection	Dade Blvd (EW) & Convent	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	33	512	35	97	620	19	12	9	24	12	33	50

Signal Information			
Cycle, s	85.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	5.1	9.0	45.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	6	6
Case Number	1.1	4.0	1.1	4.0	1.0	3.0	5.3	5.3
Phase Duration, s	12.0	50.0	12.0	50.0	13.0	23.1	10.1	10.1
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.0	3.1	3.0	3.1	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s	2.6	9.6	3.9	11.1	2.1	3.1	4.8	4.8
Green Extension Time *(g_e)*, s	0.0	2.4	0.1	2.4	0.0	0.3	0.3	0.3
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	35	297	291	104	345	342	13	10	26	13	35	54
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1820	1774	1863	1843	1774	1863	1579	1399	1863	1579
Queue Service time *(g_s)*, s	0.6	7.6	7.6	1.9	9.1	9.1	0.1	0.3	1.1	0.7	1.6	2.8
Cycle Queue Clearance Time *(g_c)*, s	0.6	7.6	7.6	1.9	9.1	9.1	0.1	0.3	1.1	0.7	1.6	2.8
Capacity *(c)*, veh/h	589	985	963	634	985	975	350	396	336	168	111	94
Volume-to-Capacity Ratio *(X)*	0.060	0.301	0.302	0.164	0.350	0.351	0.037	0.024	0.077	0.077	0.319	0.570
Available Capacity *(c_a)*, veh/h	589	985	963	634	985	975	350	1292	1095	891	1073	909
Back of Queue *(Q)*, veh/ln	0.2	2.9	2.8	0.6	3.4	3.4	0.2	0.2	0.4	0.3	0.7	1.1
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	6.3	11.2	11.2	6.4	11.6	11.6	19.8	26.5	26.8	38.0	38.3	38.9
Incremental Delay *(d_2)*, s/veh	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.6	2.0
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	6.3	11.3	11.3	6.5	11.7	11.7	19.8	26.5	26.9	38.0	38.9	40.9
Level of Service (LOS)	A	B	B	A	B	B	B	C	C	D	D	D
Approach Delay, s/veh / LOS	11.0	B		11.0	B		24.9	C		39.9	D	
Intersection Delay s/veh / LOS	13.3						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.4	B	2.8	C	2.9	C
Bicycle LOS Score / LOS	1.0	A	1.1	A	0.6	A	0.7	A

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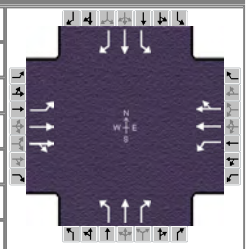
2010 HCS Signalized Intersection Results Summary

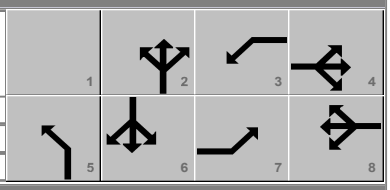
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.91
Intersection	Dade Blvd (EW) & Convent	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	74	707	24	65	725	18	61	28	89	13	13	40

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	5.1	9.0	45.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	6	6
Case Number	1.1	4.0	1.1	4.0	1.0	3.0	5.3	5.3
Phase Duration, s	12.0	50.0	12.0	50.0	13.0	23.0	10.0	10.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.0	3.1	3.0	3.1	3.3	3.3	3.3
Queue Clearance Time *(g_s)*, s	3.5	13.1	3.3	13.3	2.6	6.4	4.3	4.3
Green Extension Time *(g_e)*, s	0.0	3.3	0.0	3.3	0.0	0.4	0.4	0.4
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	81	404	399	71	410	407	67	31	98	14	14	44
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1841	1774	1863	1847	1774	1863	1579	1373	1863	1579
Queue Service time *(g_s)*, s	1.5	11.1	11.1	1.3	11.3	11.3	0.6	1.1	4.4	0.8	0.6	2.3
Cycle Queue Clearance Time *(g_c)*, s	1.5	11.1	11.1	1.3	11.3	11.3	0.6	1.1	4.4	0.8	0.6	2.3
Capacity *(c)*, veh/h	537	986	975	542	986	978	366	395	334	166	110	93
Volume-to-Capacity Ratio *(X)*	0.151	0.410	0.410	0.132	0.416	0.416	0.183	0.078	0.293	0.086	0.130	0.473
Available Capacity *(c_a)*, veh/h	537	986	975	542	986	978	366	1293	1096	876	1074	910
Back of Queue *(Q)*, veh/ln	0.5	4.2	4.1	0.4	4.2	4.2	1.1	0.5	1.6	0.3	0.3	0.9
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	6.8	12.0	12.0	6.7	12.1	12.1	20.0	26.8	28.1	38.0	37.9	38.7
Incremental Delay *(d_2)*, s/veh	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.2	0.1	0.2	1.4
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	6.8	12.1	12.1	6.7	12.2	12.2	20.1	26.9	28.3	38.1	38.1	40.1
Level of Service (LOS)	A	B	B	A	B	B	C	C	C	D	D	D
Approach Delay, s/veh / LOS	11.6	B		11.7	B		25.3	C		39.3	D	
Intersection Delay s/veh / LOS	14.0						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.4	B	2.8	C	2.9	C
Bicycle LOS Score / LOS	1.2	A	1.2	A	0.8	A	0.6	A

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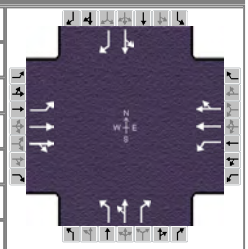
2010 HCS Signalized Intersection Results Summary

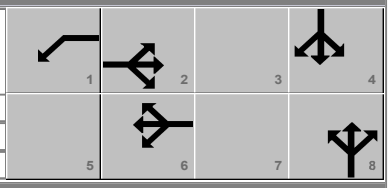
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Meridian Avenue	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Exsiting AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	531	523	151	552	5	175	26	74	9	32	61

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	42.0	21.0	15.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	2	2	1	6	8	8	4	4
Case Number	6.3	6.3	1.0	4.0	9.0	9.0	11.0	11.0
Phase Duration, s	71.0	71.0	10.0	81.0	19.0	19.0	25.0	25.0
Change Period, *(Y+Rc)*, s	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway *(MAH)*, s	0.0	0.0	3.1	0.0	3.2	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s			5.9		11.5	11.5	5.2	5.2
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
Phase Call Probability			1.00		1.00	1.00	1.00	1.00
Max Out Probability			1.00		0.77	0.77	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	38	542	534	154	285	284	179	27	76	42	0	62
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	840	1863	1579	1774	1863	1857	1774	1863	1579	1843	1900	1579
Queue Service time *(g_s)*, s	2.7	23.8	29.6	3.9	8.7	8.7	9.5	1.2	4.3	1.8	0.0	3.2
Cycle Queue Clearance Time *(g_c)*, s	2.7	23.8	29.6	3.9	8.7	8.7	9.5	1.2	4.3	1.8	0.0	3.2
Capacity *(c)*, veh/h	425	782	663	261	969	966	266	279	237	387	399	332
Volume-to-Capacity Ratio *(X)*	0.089	0.693	0.805	0.591	0.294	0.294	0.671	0.095	0.319	0.108	0.000	0.188
Available Capacity *(c_a)*, veh/h	425	782	663	261	969	966	266	279	237	387	399	332
Back of Queue *(Q)*, veh/ln	0.6	11.0	12.3	2.4	3.6	3.6	4.5	0.6	1.6	0.8	0.0	1.2
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	17.6	23.7	25.4	20.1	13.6	13.6	40.2	36.6	37.9	31.9	0.0	32.5
Incremental Delay *(d_2)*, s/veh	0.4	5.0	10.1	2.4	0.8	0.8	5.3	0.1	0.3	0.0	0.0	0.1
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	18.0	28.7	35.5	22.6	14.4	14.4	45.4	36.7	38.2	32.0	0.0	32.6
Level of Service (LOS)	B	C	D	C	B	B	D	D	D	C		C
Approach Delay, s/veh / LOS	31.6	C		16.1	B		42.7	D		32.3	C	
Intersection Delay s/veh / LOS	28.0						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.3	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.4	A	1.1	A	1.0	A	0.7	A

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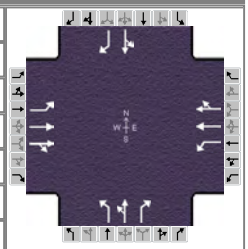
2010 HCS Signalized Intersection Results Summary

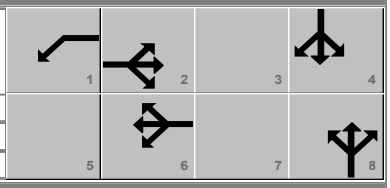
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Meridian Avenue	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Exsiting PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	45	640	295	104	706	9	439	42	162	2	29	54

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	34.0	16.0	28.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	2	2	1	6	8	8	4	4
Case Number	6.3	6.3	1.0	4.0	9.0	9.0	11.0	11.0
Phase Duration, s	58.0	58.0	10.0	68.0	32.0	32.0	20.0	20.0
Change Period, *(Y+Rc)*, s	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway *(MAH)*, s	0.0	0.0	3.1	0.0	3.2	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s			5.1		26.3	26.3	5.0	5.0
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.1
Phase Call Probability			1.00		1.00	1.00	1.00	1.00
Max Out Probability			1.00		1.00	1.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	46	504	450	106	366	364	448	43	165	32	0	55
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	723	1863	1663	1774	1863	1854	1774	1863	1579	1857	0	1579
Queue Service time *(g_s)*, s	4.7	24.5	24.5	3.1	13.7	13.7	24.3	1.7	8.4	1.5	0.0	3.0
Cycle Queue Clearance Time *(g_c)*, s	8.4	24.5	24.5	3.1	13.7	13.7	24.3	1.7	8.4	1.5	0.0	3.0
Capacity *(c)*, veh/h	291	633	565	252	820	816	497	522	442	297		253
Volume-to-Capacity Ratio *(X)*	0.158	0.796	0.796	0.421	0.446	0.446	0.902	0.082	0.374	0.106	0.000	0.218
Available Capacity *(c_a)*, veh/h	291	633	565	252	820	816	497	522	442	297		253
Back of Queue *(Q)*, veh/ln	0.9	12.3	11.1	1.2	6.1	6.0	12.8	0.7	3.1	0.7		1.2
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	25.9	29.9	29.9	20.0	19.5	19.5	34.7	26.5	29.0	35.9		36.6
Incremental Delay *(d_2)*, s/veh	1.2	10.0	11.1	0.4	1.8	1.8	19.1	0.0	0.2	0.1	0.0	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	27.1	39.9	40.9	20.4	21.3	21.3	53.7	26.6	29.1	35.9		36.7
Level of Service (LOS)	C	D	D	C	C	C	D	C	C	D		D
Approach Delay, s/veh / LOS	39.8	D		21.2	C		45.8	D		36.4	D	
Intersection Delay s/veh / LOS	35.1						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.3	B	2.9	C	2.8	C
Bicycle LOS Score / LOS	1.3	A	1.2	A	1.6	A	0.6	A

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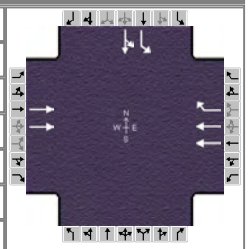
2010 HCS Signalized Intersection Results Summary

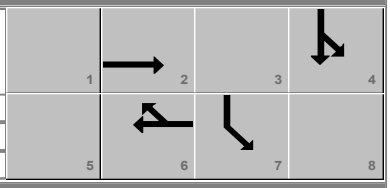
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM PeaK Hour	PHF	0.97
Intersection	Dade Blvd/Michigan Avenu	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Exisitng AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		261			432	343				705	1	

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	59.0	31.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	0		4	4
Case Number	0.0	4.0	0.0	3.0	0.0		10.0	10.0
Phase Duration, s	0.0	100.0	0.0	100.0	0.0		36.0	36.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	0.0		5.0	5.0
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	0.0		3.1	3.1
Queue Clearance Time *(g_s)*, s							19.8	19.8
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.0		1.4	1.4
Phase Call Probability							1.00	1.00
Max Out Probability							0.03	0.03

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	269	0	0	445	354	0			727	1	0
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1773	0	0	1773	1579	0			3543	1900	0
Queue Service time *(g_s)*, s	0.0	3.4	0.0	0.0	5.9	11.8	0.0			17.8	0.0	0.0
Cycle Queue Clearance Time *(g_c)*, s	0.0	3.4	0.0	0.0	5.9	11.8	0.0			17.8	0.0	0.0
Capacity *(c)*, veh/h		2093			2093	931				1098	589	
Volume-to-Capacity Ratio *(X)*	0.000	0.129	0.000	0.000	0.213	0.380	0.000			0.662	0.002	0.000
Available Capacity *(c_a)*, veh/h		2093			2093	931				1098	589	
Back of Queue *(Q)*, veh/ln		1.2			2.2	4.1				15.0	0.0	
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh		9.1			9.6	10.8				29.9	23.8	
Incremental Delay *(d_2)*, s/veh	0.0	0.1	0.0	0.0	0.2	1.2	0.0			1.2	0.0	0.0
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Control Delay *(d)*, s/veh		9.2			9.8	12.0				31.1	23.8	
Level of Service (LOS)		A			A	B				C	C	
Approach Delay, s/veh / LOS	9.2	A		10.8	B		0.0			31.1	C	
Intersection Delay s/veh / LOS	18.8						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.7	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	0.7	A	1.1	A			1.7	A

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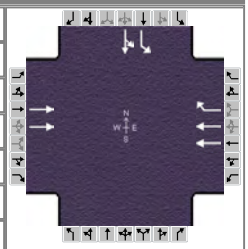
2010 HCS Signalized Intersection Results Summary

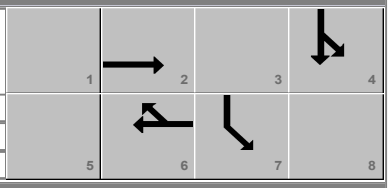
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM PeaK Hour	PHF	0.92
Intersection	Dade Blvd/Michigan Avenu	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Exisitng pM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		327			400	735				505	1	

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	61.0	29.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	0		4	4
Case Number	2.0	4.0	2.0	3.0	3.0		10.0	10.0
Phase Duration, s	0.0	100.0	0.0	100.0	0.0		34.0	34.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	0.0		3.1	3.1
Queue Clearance Time *(g_s)*, s							15.0	15.0
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.0		1.0	1.0
Phase Call Probability							1.00	1.00
Max Out Probability							0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	355	0	0	435	799	0			549	1	0
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1773	1610	1810	1773	1579	0			3541	1900	0
Queue Service time *(g_s)*, s	0.0	4.3	0.0	0.0	5.4	40.0	0.0			13.0	0.0	0.0
Cycle Queue Clearance Time *(g_c)*, s	0.0	4.3	0.0	0.0	5.4	40.0	0.0			13.0	0.0	0.0
Capacity *(c)*, veh/h		2163			2163	963				1027	551	
Volume-to-Capacity Ratio *(X)*	0.000	0.164	0.000	0.000	0.201	0.830	0.000			0.535	0.002	0.000
Available Capacity *(c_a)*, veh/h		2163			2163	963				1027	551	
Back of Queue *(Q)*, veh/ln		1.6			2.0	14.7				10.9	0.0	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh		8.5			8.7	15.4				29.8	25.2	
Incremental Delay *(d_2)*, s/veh	0.0	0.2	0.0	0.0	0.2	8.2	0.0			0.3	0.0	0.0
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
Control Delay *(d)*, s/veh		8.6			8.9	23.6				30.1	25.2	
Level of Service (LOS)		A			A	C				C	C	
Approach Delay, s/veh / LOS	8.6	A		18.4	B		0.0			30.1	C	
Intersection Delay s/veh / LOS	19.8						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.7	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	0.8	A	1.5	A			1.4	A

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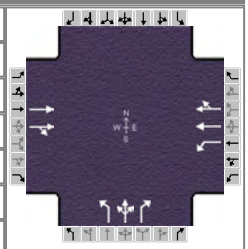
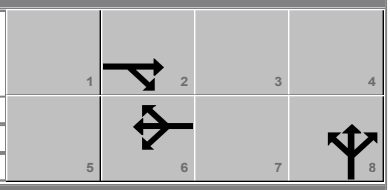
2010 HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.90
Intersection	Dade Blvd/Washington Ave	Analysis Year	2013	Analysis Period	1> 7:00
File Name	EXISTING am.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		378	177	255	601	3	123	1	142			

Signal Information												
Cycle, s	100.0	Reference Phase	2									
Offset, s	0	Reference Point	End	Green	65.0	25.0	0.0	0.0	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	0.0	0.0	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	6	6	8	8	7	
Case Number	0.0	4.0	6.0	6.0	9.0	9.0	0.0	
Phase Duration, s	0.0	100.0	100.0	100.0	30.0	30.0	0.0	
Change Period, *(Y+Rc)*, s	4.0	5.0	5.0	5.0	5.0	5.0	4.0	
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	3.3	3.3	0.0	
Queue Clearance Time *(g_s)*, s					10.3	10.3		
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.5	0.5	0.0	
Phase Call Probability					1.00	1.00		
Max Out Probability					0.00	0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	324	293	283	336	335	137	1	158	0		
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1863	1662	803	1863	1859	1774	1863	1579	0		
Queue Service time *(g_s)*, s	0.0	7.4	7.5	23.2	7.7	7.7	6.3	0.0	8.3	0.0		
Cycle Queue Clearance Time *(g_c)*, s	0.0	7.4	7.5	30.7	7.7	7.7	6.3	0.0	8.3	0.0		
Capacity *(c)*, veh/h		1211	1080	534	1211	1209	444	466	395			
Volume-to-Capacity Ratio *(X)*	0.000	0.267	0.271	0.531	0.277	0.277	0.308	0.002	0.400	0.000		
Available Capacity *(c_a)*, veh/h		1211	1080	534	1211	1209	444	466	395			
Back of Queue *(Q)*, veh/ln		2.8	2.5	4.4	2.9	2.9	2.6	0.0	3.1			
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Uniform Delay *(d_1)*, s/veh		7.4	7.4	14.0	7.5	7.5	30.5	28.1	31.2			
Incremental Delay *(d_2)*, s/veh	0.0	0.5	0.6	3.7	0.6	0.6	0.1	0.0	0.2	0.0		
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Control Delay *(d)*, s/veh		8.0	8.1	17.7	8.0	8.0	30.6	28.1	31.5			
Level of Service (LOS)		A	A	B	A	A	C	C	C			
Approach Delay, s/veh / LOS	8.0	A		10.9	B		31.1	C		0.0		
Intersection Delay s/veh / LOS	13.1						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.9	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	1.0	A	1.3	A	1.0	A		

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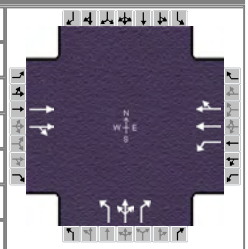
2010 HCS Signalized Intersection Results Summary

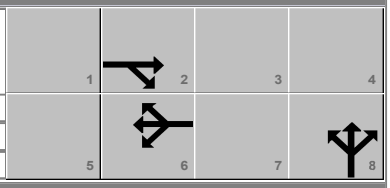
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Washington Ave	Analysis Year	2013	Analysis Period	1> 7:00
File Name	EXISTING PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		623	158	202	503	3	260	1	397			

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	55.0	35.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	6	6	8	8	7	
Case Number	0.0	4.0	6.0	6.0	9.0	9.0	0.0	
Phase Duration, s	0.0	60.0	100.0	100.0	40.0	40.0	0.0	
Change Period, *(Y+Rc)*, s	4.0	5.0	5.0	5.0	5.0	5.0	4.0	
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	3.3	3.3	0.0	
Queue Clearance Time *(g_s)*, s					24.4	24.4		
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	1.2	1.2	0.0	
Phase Call Probability					1.00	1.00		
Max Out Probability					0.04	0.04		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	413	384	206	258	258	265	1	405	0		
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1863	1732	679	1863	1859	1774	1863	1579	0		
Queue Service time *(g_s)*, s	0.0	12.8	12.8	25.2	7.2	7.3	11.4	0.0	22.4	0.0		
Cycle Queue Clearance Time *(g_c)*, s	0.0	12.8	12.8	38.1	7.2	7.3	11.4	0.0	22.4	0.0		
Capacity *(c)*, veh/h		1025	953	358	1025	1022	621	652	553			
Volume-to-Capacity Ratio *(X)*	0.000	0.403	0.404	0.575	0.252	0.252	0.427	0.002	0.733	0.000		
Available Capacity *(c_a)*, veh/h		1025	953	358	1025	1022	621	652	553			
Back of Queue *(Q)*, veh/ln		5.3	5.0	4.5	3.0	3.0	4.7	0.0	8.8			
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Uniform Delay *(d_1)*, s/veh		13.0	13.0	24.0	11.8	11.8	24.8	21.1	28.4			
Incremental Delay *(d_2)*, s/veh	0.0	1.2	1.3	6.6	0.6	0.6	0.2	0.0	4.4	0.0		
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Control Delay *(d)*, s/veh		14.2	14.3	30.6	12.3	12.3	25.0	21.1	32.8			
Level of Service (LOS)		B	B	C	B	B	C	C	C			
Approach Delay, s/veh / LOS	14.2	B		17.6	B		29.7	C		0.0		
Intersection Delay s/veh / LOS	20.1						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.9	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	1.1	A	1.1	A	1.6	A		

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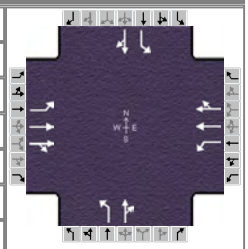
2010 HCS Signalized Intersection Results Summary

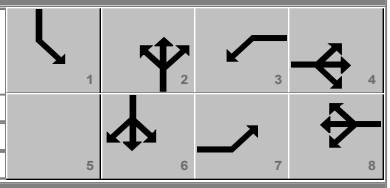
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Merdian Av &17 St)	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	88	340	34	34	236	64	31	178	27	186	222	166

Signal Information			
Cycle, s	95.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	26.0	10.0	37.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	2	2	1	6
Case Number	1.1	4.0	1.1	4.0	6.3	6.3	1.0	4.0
Phase Duration, s	13.0	42.0	13.0	42.0	30.0	30.0	10.0	40.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	4.7	9.1	3.0	7.8			8.8	
Green Extension Time *(g_e)*, s	0.1	1.3	0.0	1.3	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.05	0.00	0.00	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	94	201	197	36	163	156	33	0	218	198	0	413
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1803	1774	1863	1727	969	0	1820	1774	0	1730
Queue Service time *(g_s)*, s	2.7	7.0	7.1	1.0	5.6	5.8	2.8	0.0	9.5	6.8	0.0	18.8
Cycle Queue Clearance Time *(g_c)*, s	2.7	7.0	7.1	1.0	5.6	5.8	11.6	0.0	9.5	6.8	0.0	18.8
Capacity *(c)*, veh/h	610	725	702	572	725	673	241		479	395		637
Volume-to-Capacity Ratio *(X)*	0.154	0.277	0.280	0.063	0.225	0.232	0.137	0.000	0.456	0.501	0.000	0.648
Available Capacity *(c_a)*, veh/h	610	725	702	572	725	673	241		479	395		637
Back of Queue *(Q)*, veh/ln	1.0	2.9	2.9	0.4	2.3	2.2	0.7		4.5	2.7		8.2
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	13.0	19.8	19.9	12.7	19.4	19.5	33.8		29.3	19.5		24.9
Incremental Delay *(d_2)*, s/veh	0.0	0.1	0.1	0.0	0.1	0.1	1.2	0.0	3.1	0.4	0.0	5.0
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	13.0	19.9	20.0	12.7	19.5	19.5	35.0		32.4	19.8		29.9
Level of Service (LOS)	B	B	B	B	B	B	D		C	B		C
Approach Delay, s/veh / LOS	18.6	B		18.8	B		32.8	C		26.6	C	
Intersection Delay s/veh / LOS	23.6						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.9	A	0.8	A	0.9	A	1.5	A

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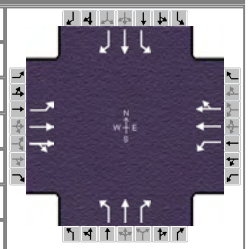
2010 HCS Signalized Intersection Results Summary

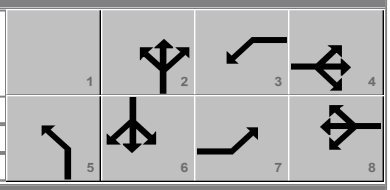
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Merdian Av &17 St)	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	365	59	70	451	137	42	261	34	126	265	78

Signal Information			
Cycle, s	95.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	5.1	9.0	45.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	2	2	1	6
Case Number	1.1	4.0	1.1	4.0	6.3	6.3	1.0	4.0
Phase Duration, s	13.0	42.0	13.0	42.0	30.0	30.0	10.0	40.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	6.3	10.3	4.1	14.4			6.4	
Green Extension Time *(g_e)*, s	0.1	2.1	0.0	2.1	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.49	0.00	0.02	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	145	230	222	74	324	301	45	0	314	134	0	365
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1772	1774	1863	1714	1013	1863	1825	1774	1863	1789
Queue Service time *(g_s)*, s	4.3	8.2	8.3	2.1	12.2	12.4	3.5	0.0	14.5	4.4	0.0	15.4
Cycle Queue Clearance Time *(g_c)*, s	4.3	8.2	8.3	2.1	12.2	12.4	8.8	0.0	14.5	4.4	0.0	15.4
Capacity *(c)*, veh/h	469	725	690	545	725	667	285	490	480	323	686	659
Volume-to-Capacity Ratio *(X)*	0.309	0.316	0.321	0.137	0.447	0.451	0.157	0.000	0.654	0.415	0.000	0.553
Available Capacity *(c_a)*, veh/h	469	725	690	545	725	667	285	490	480	323	686	659
Back of Queue *(Q)*, veh/ln	1.6	3.4	3.3	0.8	5.1	4.8	1.0	0.0	7.1	1.8	0.0	6.8
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	14.2	20.2	20.2	13.1	21.4	21.5	31.3	0.0	31.1	19.9	0.0	23.8
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	0.0	0.2	0.2	1.2	0.0	6.8	0.3	0.0	3.3
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	14.3	20.3	20.3	13.1	21.6	21.7	32.4	0.0	37.9	20.3	0.0	27.1
Level of Service (LOS)	B	C	C	B	C	C	C		D	C		C
Approach Delay, s/veh / LOS	18.9	B		20.7	C		37.2	D		25.3	C	
Intersection Delay s/veh / LOS	24.0						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.8	C	2.8	C
Bicycle LOS Score / LOS	1.0	A	1.1	A	1.1	A	1.3	A

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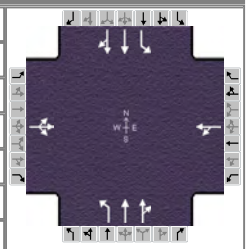
2010 HCS Signalized Intersection Results Summary

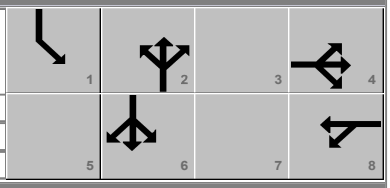
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.97
Intersection	Michigan Avenue/Alton Roa	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	2	11	6	9	7		1	928	49	626	1258	10

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	16.0	70.0	31.0	0.0	0.0	0.0
Yellow	3.0	4.0	4.0	0.0	0.0	0.0
Red	0.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	2	2	1	6
Case Number	8.0	8.0	8.0	8.0	6.3	6.3	1.0	4.0
Phase Duration, s	36.0	36.0	36.0	36.0	75.0	75.0	19.0	94.0
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.1	3.1	2.9	2.9			18.0	
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.00	0.00	0.00	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	20	0	0	16	0	0	1	508	499	645	654	653
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1644	0	0	1082	0	1342	419	1863	1829	1774	1863	1857
Queue Service time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	22.5	22.5	16.0	22.2	22.2
Cycle Queue Clearance Time (g_c), s	1.1	0.0	0.0	0.9	0.0	0.0	22.4	22.5	22.5	16.0	22.2	22.2
Capacity (*c*), veh/h	423			301	0		271	1003	985	477	1275	1272
Volume-to-Capacity Ratio (*X*)	0.046	0.000	0.000	0.055	0.000	0.000	0.004	0.507	0.507	1.352	0.513	0.513
Available Capacity (c_a), veh/h	423			301	0		271	1003	985	477	1275	1272
Back of Queue (*Q*), veh/ln	0.5			0.4			0.0	10.0	9.8	34.6	8.9	8.9
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio (*RQ*)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	38.1			38.0	0.0		26.1	19.0	19.0	29.0	10.0	10.0
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.9	171.8	1.5	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	38.1			38.1	0.0		26.1	20.9	20.9	200.8	11.4	11.5
Level of Service (LOS)	D			D			C	C	C	F	B	B
Approach Delay, s/veh / LOS	38.1	D		38.1	D		20.9	C		74.0	E	
Intersection Delay s/veh / LOS	55.7						E					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.9	C	2.9	C	2.1	B	2.1	B
Bicycle LOS Score / LOS	0.5	A	0.5	A	1.3	A	2.1	B

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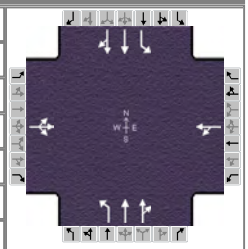
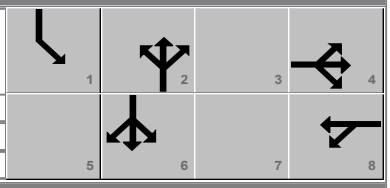
2010 HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.97
Intersection	Michigan Avenue/Alton Roa	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	5	12	5	11	4		3	1281	60	490	983	41

Signal Information												
Cycle, s	130.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	28.0	58.0	31.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.0	1.0	1.0	0.0	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	2	2	1	6
Case Number	8.0	8.0	8.0	8.0	6.3	6.3	1.0	4.0
Phase Duration, s	36.0	36.0	36.0	36.0	63.0	63.0	31.0	94.0
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.3	3.3	2.8	2.8			30.0	
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.00	0.00	0.00	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	23	0	0	15	0	0	3	696	687	505	532	524
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1461	0	0	955	0	1342	532	1863	1833	1774	1863	1836
Queue Service time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	42.9	43.1	28.0	16.4	16.4
Cycle Queue Clearance Time (g_c), s	1.3	0.0	0.0	0.8	0.0	0.0	16.9	42.9	43.1	28.0	16.4	16.4
Capacity *(c)*, veh/h	382			276	0		353	831	818	482	1275	1257
Volume-to-Capacity Ratio *(X)*	0.059	0.000	0.000	0.056	0.000	0.000	0.009	0.837	0.840	1.048	0.417	0.417
Available Capacity (c_a), veh/h	382			276	0		353	831	818	482	1275	1257
Back of Queue *(Q)*, veh/ln	0.6			0.4			0.1	21.0	20.8	19.2	6.5	6.4
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	38.2			38.0	0.0		30.2	31.8	31.9	44.7	9.0	9.0
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	10.1	54.1	1.0	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	38.2			38.0	0.0		30.3	41.7	42.0	98.8	10.1	10.1
Level of Service (LOS)	D			D			C	D	D	F	B	B
Approach Delay, s/veh / LOS	38.2	D		38.0	D		41.8	D		38.8	D	
Intersection Delay s/veh / LOS	40.2						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.9	C	2.9	C	2.1	B	2.1	B
Bicycle LOS Score / LOS	0.5	A	0.5	A	1.6	A	1.8	A

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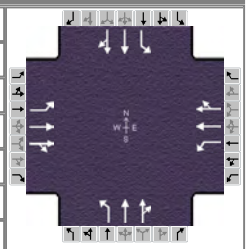
2010 HCS Signalized Intersection Results Summary

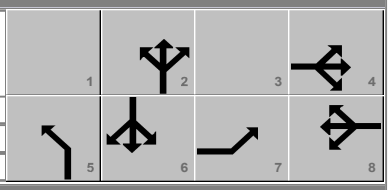
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.93
Intersection	Washington Av &17 St	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	72	130	169	33	108	13	111	190	20	30	324	123

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	37.0	5.0	24.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	8	8	5	2	6	6
Case Number	1.0	4.0	6.3	6.3	1.0	4.0	6.3	6.3
Phase Duration, s	8.0	37.0	29.0	29.0	11.0	53.0	42.0	42.0
Change Period, *(Y+Rc)*, s	3.0	5.0	5.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.2	3.2	3.1	0.0	0.0	0.0
Queue Clearance Time *(g_s)*, s	4.4	9.5	12.1	12.1	4.5			
Green Extension Time *(g_e)*, s	0.0	0.9	0.8	0.8	0.1	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00			
Max Out Probability	1.00	0.00	0.01	0.01	0.64			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	77	140	182	35	65	65	119	114	112	32	249	231
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	1054	1863	1793	1774	1863	1801	1150	1863	1689
Queue Service time *(g_s)*, s	2.4	4.7	7.5	2.6	2.4	2.5	2.5	2.7	2.8	1.6	8.2	8.4
Cycle Queue Clearance Time *(g_c)*, s	2.4	4.7	7.5	10.1	2.4	2.5	2.5	2.7	2.8	4.4	8.2	8.4
Capacity *(c)*, veh/h	479	662	561	366	497	478	527	993	960	658	766	694
Volume-to-Capacity Ratio *(X)*	0.162	0.211	0.324	0.097	0.132	0.135	0.227	0.114	0.117	0.049	0.325	0.333
Available Capacity *(c_a)*, veh/h	479	662	561	366	497	478	527	993	960	658	766	694
Back of Queue *(Q)*, veh/ln	0.9	2.0	2.7	0.7	1.0	1.0	0.9	1.1	1.1	0.4	3.6	3.4
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	16.5	20.2	21.1	31.1	25.1	25.1	9.5	10.4	10.5	17.8	18.0	18.1
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.1	1.1	1.3
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	16.5	20.3	21.2	31.1	25.1	25.2	9.5	10.7	10.7	17.9	19.1	19.4
Level of Service (LOS)	B	C	C	C	C	C	A	B	B	B	B	B
Approach Delay, s/veh / LOS	20.0	B		26.4	C		10.3	B		19.2	B	
Intersection Delay s/veh / LOS	18.1						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.8	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.8	A	0.6	A	0.8	A	0.9	A

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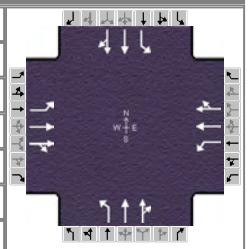
2010 HCS Signalized Intersection Results Summary

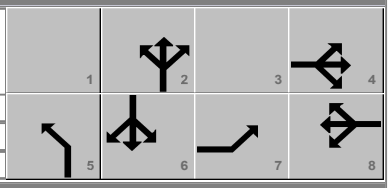
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.93
Intersection	Washington Av &17 St	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	173	218	145	43	168	32	200	426	76	21	270	149

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	36.0	6.0	24.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	8	8	5	2	6	6
Case Number	1.0	4.0	6.3	6.3	1.0	4.0	6.3	6.3
Phase Duration, s	9.0	38.0	29.0	29.0	11.0	52.0	41.0	41.0
Change Period, $(Y+R_c)$, s	3.0	5.0	5.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.2	3.2	3.1	0.0	0.0	0.0
Queue Clearance Time (g_s), s	7.9	10.2	13.8	13.8	7.0			
Green Extension Time (g_e), s	0.0	1.3	1.1	1.1	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00			
Max Out Probability	1.00	0.00	0.03	0.03	1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	186	234	156	46	109	106	215	276	264	23	290	160
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	989	1863	1760	1774	1863	1764	862	1863	1579
Queue Service time (g_s), s	5.9	8.2	6.2	3.6	4.1	4.2	5.0	7.5	7.6	1.7	10.0	6.1
Cycle Queue Clearance Time (g_c), s	5.9	8.2	6.2	11.8	4.1	4.2	5.0	7.5	7.6	9.2	10.0	6.1
Capacity *(c)*, veh/h	453	683	579	353	497	469	508	973	921	458	745	631
Volume-to-Capacity Ratio *(X)*	0.410	0.343	0.269	0.131	0.219	0.226	0.423	0.284	0.287	0.049	0.390	0.254
Available Capacity (c_a), veh/h	453	683	579	353	497	469	508	973	921	458	745	631
Back of Queue *(Q)*, veh/ln	2.3	3.4	2.2	0.9	1.8	1.7	1.7	3.1	2.9	0.4	4.4	2.3
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	16.9	20.6	20.0	32.1	25.7	25.8	11.1	12.1	12.1	21.6	19.2	18.0
Incremental Delay (d_2), s/veh	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.7	0.8	0.2	1.5	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	17.1	20.8	20.1	32.2	25.8	25.8	11.3	12.8	12.9	21.8	20.7	19.0
Level of Service (LOS)	B	C	C	C	C	C	B	B	B	C	C	B
Approach Delay, s/veh / LOS	19.4	B		26.9	C		12.4	B		20.2	C	
Intersection Delay s/veh / LOS	18.0						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.8	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	1.0	A	0.7	A	1.1	A	0.9	A

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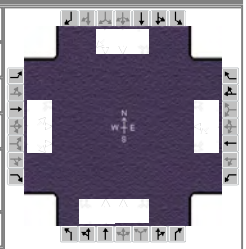
Intersection Capacity Analysis

Future Conditions with Project

2010 HCS Signalized Intersection Results Summary

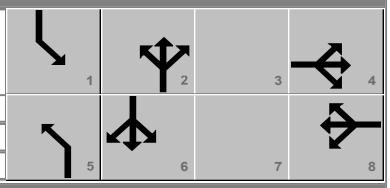
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Alton Road/17th Street	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	235	144	34	193	84	129	82	587	250	252	1037	148

Signal Information			
Cycle, s	123.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	44.1	31.0	20.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	1.0	1.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	5	2	1	6
Case Number	10.0	10.0	9.0	9.0	1.1	3.0	1.1	4.0
Phase Duration, s	36.0	36.0	25.0	25.0	12.0	50.0	12.0	50.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.2	3.2	3.1	3.1	3.1	3.1
Queue Clearance Time *(g_s)*, s	17.1	17.1	15.5	15.5	5.6	18.7	11.0	43.4
Green Extension Time *(g_e)*, s	0.7	0.7	0.4	0.4	0.0	5.7	0.0	1.6
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.42	0.42	0.65	0.05	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	250	96	94	205	89	137	87	624	266	268	643	617
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1742	1774	1863	1610	1774	1773	1579	1774	1863	1781
Queue Service time *(g_s)*, s	15.1	5.0	5.2	13.5	5.2	9.6	3.6	16.7	15.8	9.0	41.1	41.4
Cycle Queue Clearance Time *(g_c)*, s	15.1	5.0	5.2	13.5	5.2	9.6	3.6	16.7	15.8	9.0	41.1	41.4
Capacity *(c)*, veh/h	447	469	439	288	303	262	201	1298	578	372	682	652
Volume-to-Capacity Ratio *(X)*	0.559	0.204	0.213	0.712	0.295	0.524	0.433	0.481	0.460	0.721	0.944	0.947
Available Capacity *(c_a)*, veh/h	447	469		288	303	262	201	1326	590	372	697	666
Back of Queue *(Q)*, veh/ln	6.7	2.3	2.2	6.5	2.4	3.9	1.5	7.1	6.0	7.7	22.2	21.6
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	40.1	36.3	36.4	48.8	45.3	47.2	28.3	30.0	29.7	28.7	37.8	37.8
Incremental Delay *(d_2)*, s/veh	1.0	0.1	0.1	6.9	0.2	0.9	0.5	0.1	0.2	5.8	20.8	22.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	41.0	36.4	36.5	55.7	45.5	48.1	28.9	30.1	30.0	34.5	58.6	60.0
Level of Service (LOS)	D	D	D	E	D	D	C	C	C	C	E	E
Approach Delay, s/veh / LOS	39.0	D		51.2	D		30.0	C		55.0	D	
Intersection Delay s/veh / LOS	45.2						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.0	C	2.9	C	2.8	C	2.4	B
Bicycle LOS Score / LOS	0.9	A	1.2	A	1.3	A	1.7	A

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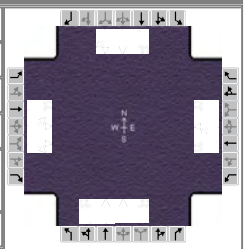
2010 HCS Signalized Intersection Results Summary

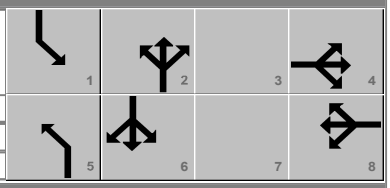
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Alton Road/17th Street	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	287	143	43	283	153	274	77	890	214	226	978	238

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	44.1	31.0	20.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	1.0	1.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	2	2	1	6
Case Number	10.0	10.0	9.0	9.0	5.3	5.3	1.0	4.0
Phase Duration, s	34.0	34.0	30.0	30.0	90.0	90.0	10.0	36.0
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.2	3.2	0.0	0.0	3.1	0.0
Queue Clearance Time (g_s), s	16.9	16.9	23.7	23.7			9.0	
Green Extension Time (g_e), s	0.8	0.8	0.3	0.3	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.00	0.00	1.00	1.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	305	50	148	301	163	291	82	947	228	240	667	626
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	2368	619	1764	2303	1307	1610	425	1773	1579	1774	1863	1736
Queue Service time (g_s), s	14.9	8.9	9.2	15.8	14.9	21.7	22.1	28.8	13.3	7.0	38.5	38.9
Cycle Queue Clearance Time (g_c), s	14.9	8.9	9.2	15.8	14.9	21.7	51.0	28.8	13.3	7.0	38.5	38.9
Capacity *(c)*, veh/h	528	138	394	443	251	396	127	1391	619	252	874	815
Volume-to-Capacity Ratio *(X)*	0.578	0.363	0.375	0.680	0.647	0.735	0.643	0.680	0.368	0.955	0.763	0.769
Available Capacity (c_a), veh/h	528	138		443	251	396	127	1391	619	252	874	815
Back of Queue *(Q)*, veh/ln	8.9	1.4	4.0	9.5	5.2	9.3	3.5	12.7	5.3	11.0	18.2	17.3
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	45.0	42.7	42.8	48.8	48.4	45.1	55.3	32.7	28.0	34.7	28.5	28.6
Incremental Delay (d_2), s/veh	1.0	0.6	0.2	3.5	4.5	6.2	22.3	2.7	1.7	43.9	6.3	6.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	46.1	43.3	43.0	52.2	52.9	51.3	77.6	35.4	29.7	78.6	34.8	35.5
Level of Service (LOS)	D	D	D	D	D	D	E	D	C	E	C	D
Approach Delay, s/veh / LOS	44.9	D		52.0	D		37.2	D		42.0	D	
Intersection Delay s/veh / LOS	42.7						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.0	C	2.9	C	2.8	C	2.4	B
Bicycle LOS Score / LOS	0.9	A	1.7	A	1.5	A	1.8	A

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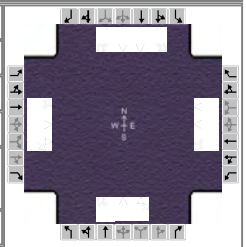
2010 HCS Signalized Intersection Results Summary

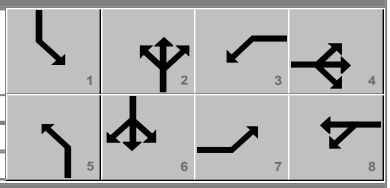
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Alton Road/Dade Blvd	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	162	67	29	284	112		48	775	145	52	1106	91

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.0	51.0	11.0	32.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	14.0	37.0	14.0	37.0	14.0	55.0	14.0	55.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	10.3	4.7	13.0	5.1	3.7		3.9	
Green Extension Time *(g_e)*, s	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	172	52	51	302	119	0	51	503	475	55	1177	97
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1678	1774	1773	1736	1774	1863	1760	1774	1773	1579
Queue Service time *(g_s)*, s	8.3	2.5	2.7	11.0	3.1	0.0	1.7	25.9	25.9	1.9	34.8	4.6
Cycle Queue Clearance Time *(g_c)*, s	8.3	2.5	2.7	11.0	3.1	0.0	1.7	25.9	25.9	1.9	34.8	4.6
Capacity *(c)*, veh/h	528	497	448	537	946		283	776	733	338	1478	658
Volume-to-Capacity Ratio *(X)*	0.326	0.104	0.113	0.563	0.126	0.000	0.180	0.648	0.648	0.164	0.796	0.147
Available Capacity *(c_a)*, veh/h	528	497	448	537	946		283	776	733	338	1478	658
Back of Queue *(Q)*, veh/ln	3.5	1.1	1.1	7.2	1.3		0.7	12.2	11.5	0.8	15.3	1.8
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	27.4	33.2	33.3	30.7	33.4		20.6	28.0	28.0	18.1	30.6	21.8
Incremental Delay *(d_2)*, s/veh	0.1	0.0	0.0	0.8	0.0	0.0	0.1	4.2	4.4	0.1	4.5	0.5
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	27.5	33.2	33.3	31.6	33.4		20.7	32.1	32.4	18.2	35.1	22.2
Level of Service (LOS)	C	C	C	C	C		C	C	C	B	D	C
Approach Delay, s/veh / LOS	29.7	C		32.1	C		31.7	C		33.4	C	
Intersection Delay s/veh / LOS	32.3						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	3.0	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.7	A	0.8	A	1.3	A	1.6	A

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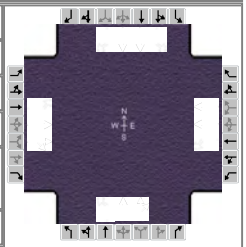
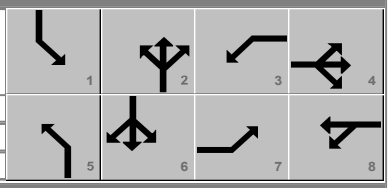
2010 HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Alton Road/Dade Blvd	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	107	121	64	292	143		66	1117	289	72	1103	46

Signal Information													
Cycle, s	130.0	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	11.0	61.0	11.0	32.0	0.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.0	4.0	3.0	4.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	1.0	0.0	0.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	14.0	37.0	14.0	37.0	14.0	65.0	14.0	65.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	8.0	9.3	13.0	6.4	4.4		4.7	
Green Extension Time *(g_e)*, s	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.00	1.00	0.00	0.01		0.01	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	114	129	68	311	152	0	70	768	728	77	1173	49
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	1774	1773	0	1774	1863	1731	1774	1773	1579
Queue Service time *(g_s)*, s	6.0	7.3	4.4	11.0	4.4	0.0	2.4	49.1	50.8	2.7	34.6	2.2
Cycle Queue Clearance Time *(g_c)*, s	6.0	7.3	4.4	11.0	4.4	0.0	2.4	49.1	50.8	2.7	34.6	2.2
Capacity *(c)*, veh/h	467	459	389	430	873		299	860	799	230	1637	729
Volume-to-Capacity Ratio *(X)*	0.244	0.281	0.175	0.722	0.174	0.000	0.235	0.893	0.911	0.333	0.717	0.067
Available Capacity *(c_a)*, veh/h	467	459	389	430	873		299	860	799	230	1637	729
Back of Queue *(Q)*, veh/ln	2.6	3.3	1.7	9.7	1.9		1.0	24.6	24.2	1.3	14.9	0.9
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	31.2	39.7	38.6	38.9	38.6		19.3	32.1	32.5	26.4	28.2	19.5
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	5.1	0.0	0.0	0.1	13.6	16.4	0.3	2.7	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	31.3	39.8	38.7	44.0	38.6		19.5	45.7	49.0	26.7	30.9	19.6
Level of Service (LOS)	C	D	D	D	D		B	D	D	C	C	B
Approach Delay, s/veh / LOS	36.4	D		42.3	D		46.0	D		30.2	C	
Intersection Delay s/veh / LOS	39.1						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.9	C	3.0	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.7	A	0.9	A	1.8	A	1.6	A

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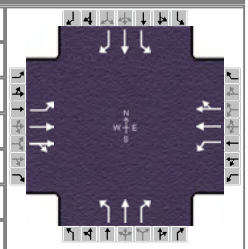
2010 HCS Signalized Intersection Results Summary

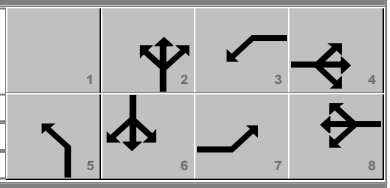
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.91
Intersection	Dade Blvd (EW) & Convent	Analysis Year	Future w Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	76	725	37	87	743	18	74	65	109	13	52	41

Signal Information			
Cycle, s	85.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	5.1	9.0	45.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	6	6
Case Number	1.1	4.0	1.1	4.0	1.0	3.0	5.3	5.3
Phase Duration, s	12.0	50.0	12.0	50.0	13.0	23.1	10.1	10.1
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.0	3.1	3.0	3.1	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s	3.5	13.8	3.8	13.7	2.8	7.5	4.5	4.5
Green Extension Time *(g_e)*, s	0.0	3.5	0.1	3.5	0.1	0.6	0.6	0.6
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	84	422	415	96	420	416	81	71	120	14	57	45
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1830	1774	1863	1847	1774	1863	1579	1323	1863	1579
Queue Service time *(g_s)*, s	1.5	11.8	11.8	1.8	11.7	11.7	0.8	2.7	5.5	0.9	2.5	2.4
Cycle Queue Clearance Time *(g_c)*, s	1.5	11.8	11.8	1.8	11.7	11.7	0.8	2.7	5.5	0.9	2.5	2.4
Capacity *(c)*, veh/h	528	985	968	527	985	976	334	397	336	164	112	95
Volume-to-Capacity Ratio *(X)*	0.158	0.429	0.429	0.181	0.426	0.427	0.243	0.180	0.356	0.087	0.509	0.473
Available Capacity *(c_a)*, veh/h	528	985	968	527	985	976	334	1291	1094	846	1072	909
Back of Queue *(Q)*, veh/ln	0.5	4.4	4.3	0.6	4.4	4.4	1.3	1.2	2.0	0.3	1.2	0.9
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	6.9	12.2	12.2	7.0	12.2	12.2	21.4	27.4	28.5	38.0	38.8	38.7
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	1.3	1.4
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	6.9	12.3	12.3	7.0	12.3	12.3	21.5	27.5	28.8	38.1	40.1	40.0
Level of Service (LOS)	A	B	B	A	B	B	C	C	C	D	D	D
Approach Delay, s/veh / LOS	11.9	B		11.8	B		26.3	C		39.8	D	
Intersection Delay s/veh / LOS	15.0						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.4	B	2.8	C	2.9	C
Bicycle LOS Score / LOS	1.2	A	1.3	A	0.9	A	0.7	A

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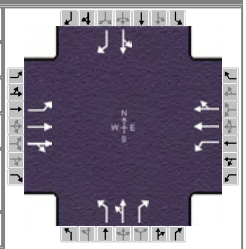
2010 HCS Signalized Intersection Results Summary

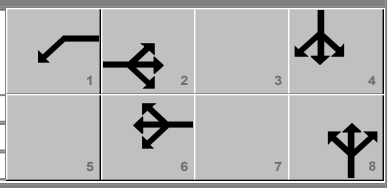
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Meridian Avenue	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	38	551	541	155	572	5	183	27	76	9	33	63

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	42.0	21.0	15.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	2	2	1	6	8	8	4	4
Case Number	6.3	6.3	1.0	4.0	9.0	9.0	11.0	11.0
Phase Duration, s	71.0	71.0	10.0	81.0	19.0	19.0	25.0	25.0
Change Period, *(Y+Rc)*, s	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway *(MAH)*, s	0.0	0.0	3.1	0.0	3.2	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s			6.0		12.0	12.0	5.4	5.4
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
Phase Call Probability			1.00		1.00	1.00	1.00	1.00
Max Out Probability			1.00		1.00	1.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	39	562	552	158	295	294	187	28	78	43	0	64
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	824	1863	1579	1774	1863	1857	1774	1863	1579	1843	0	1579
Queue Service time *(g_s)*, s	2.9	25.1	31.2	4.0	9.0	9.0	10.0	1.3	4.4	1.9	0.0	3.4
Cycle Queue Clearance Time *(g_c)*, s	2.9	25.1	31.2	4.0	9.0	9.0	10.0	1.3	4.4	1.9	0.0	3.4
Capacity *(c)*, veh/h	418	782	663	251	969	966	266	279	237	387		332
Volume-to-Capacity Ratio *(X)*	0.093	0.719	0.833	0.631	0.304	0.304	0.702	0.099	0.328	0.111	0.000	0.194
Available Capacity *(c_a)*, veh/h	418	782	663	251	969	966	266	279	237	387		332
Back of Queue *(Q)*, veh/ln	0.6	11.7	13.2	2.6	3.8	3.8	4.8	0.6	1.7	0.8		1.3
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	17.7	24.1	25.9	20.9	13.7	13.7	40.4	36.7	38.0	31.9		32.5
Incremental Delay *(d_2)*, s/veh	0.4	5.6	11.7	3.9	0.8	0.8	6.8	0.1	0.3	0.0	0.0	0.1
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	18.1	29.7	37.6	24.7	14.5	14.5	47.2	36.7	38.3	32.0		32.6
Level of Service (LOS)	B	C	D	C	B	B	D	D	D	C		C
Approach Delay, s/veh / LOS	33.1	C		16.7	B		43.8	D		32.4	C	
Intersection Delay s/veh / LOS	29.1						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.3	B	2.9	C	2.9	C
Bicycle LOS Score / LOS	1.4	A	1.1	A	1.0	A	0.7	A

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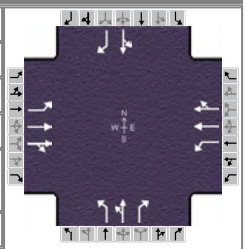
2010 HCS Signalized Intersection Results Summary

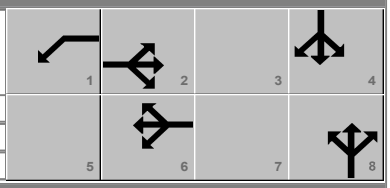
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Meridian Avenue	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	668	310	107	735	9	457	43	166	2	30	55

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	42.0	21.0	15.0	0.0	0.0
Yellow	3.0	4.0	4.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	2	2	1	6	8	8	4	4
Case Number	6.3	6.3	1.0	4.0	9.0	9.0	11.0	11.0
Phase Duration, s	58.0	58.0	10.0	68.0	32.0	32.0	20.0	20.0
Change Period, *(Y+Rc)*, s	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway *(MAH)*, s	0.0	0.0	3.1	0.0	3.2	3.2	3.2	3.2
Queue Clearance Time *(g_s)*, s			5.2		27.7	27.7	5.1	5.1
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Phase Call Probability			1.00		1.00	1.00	1.00	1.00
Max Out Probability			1.00		1.00	1.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	47	527	471	109	380	379	466	44	169	33	0	56
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	703	1863	1662	1774	1863	1855	1774	1863	1579	1857	0	1579
Queue Service time *(g_s)*, s	5.0	26.1	26.1	3.2	14.4	14.4	25.7	1.7	8.7	1.5	0.0	3.1
Cycle Queue Clearance Time *(g_c)*, s	9.4	26.1	26.1	3.2	14.4	14.4	25.7	1.7	8.7	1.5	0.0	3.1
Capacity *(c)*, veh/h	280	633	565	241	820	816	497	522	442	297		253
Volume-to-Capacity Ratio *(X)*	0.167	0.833	0.833	0.454	0.464	0.464	0.939	0.084	0.383	0.110	0.000	0.222
Available Capacity *(c_a)*, veh/h	280	633	565	241	820	816	497	522	442	297		253
Back of Queue *(Q)*, veh/ln	1.0	13.3	12.1	1.3	6.4	6.4	14.2	0.8	3.2	0.7		1.2
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	26.5	30.4	30.4	20.9	19.7	19.7	35.2	26.5	29.0	35.9		36.6
Incremental Delay *(d_2)*, s/veh	1.3	12.2	13.5	0.5	1.9	1.9	25.6	0.0	0.2	0.1	0.0	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	27.8	42.6	43.8	21.4	21.6	21.6	60.7	26.6	29.2	36.0		36.7
Level of Service (LOS)	C	D	D	C	C	C	E	C	C	D		D
Approach Delay, s/veh / LOS	42.5	D		21.6	C		50.7	D		36.5	D	
Intersection Delay s/veh / LOS	37.6						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.3	B	2.9	C	2.8	C
Bicycle LOS Score / LOS	1.3	A	1.2	A	1.6	A	0.6	A

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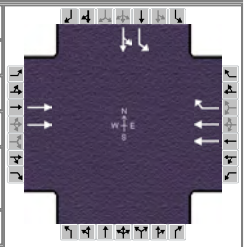
2010 HCS Signalized Intersection Results Summary

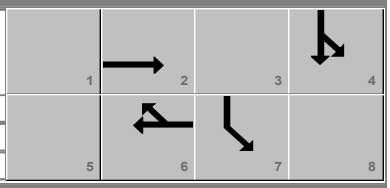
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM PeaK Hour	PHF	0.97
Intersection	Dade Blvd/Michigan Avenu	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		274			448	343				729	1	

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	59.0	31.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	0		4	4
Case Number	0.0	4.0	0.0	3.0	0.0		10.0	10.0
Phase Duration, s	0.0	100.0	0.0	100.0	0.0		36.0	36.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	0.0		5.0	5.0
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	0.0		3.1	3.1
Queue Clearance Time *(g_s)*, s							19.8	19.8
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.0		1.5	1.5
Phase Call Probability							1.00	1.00
Max Out Probability							0.04	0.04

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	282	0	0	462	354	0			752	1	0
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1773	0	0	1773	1579	0			3664	1900	0
Queue Service time *(g_s)*, s	0.0	3.5	0.0	0.0	6.1	11.8	0.0			17.8	0.0	0.0
Cycle Queue Clearance Time *(g_c)*, s	0.0	3.5	0.0	0.0	6.1	11.8	0.0			17.8	0.0	0.0
Capacity *(c)*, veh/h		2093			2093	931				1136	589	
Volume-to-Capacity Ratio *(X)*	0.000	0.135	0.000	0.000	0.221	0.380	0.000			0.662	0.002	0.000
Available Capacity *(c_a)*, veh/h		2093			2093	931				1136	589	
Back of Queue *(Q)*, veh/ln		1.3			2.3	4.1				15.5	0.0	
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh		9.1			9.7	10.8				29.9	23.8	
Incremental Delay *(d_2)*, s/veh	0.0	0.1	0.0	0.0	0.2	1.2	0.0			1.2	0.0	0.0
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Control Delay *(d)*, s/veh		9.3			9.9	12.0				31.1	23.8	
Level of Service (LOS)		A			A	B				C	C	
Approach Delay, s/veh / LOS	9.3	A		10.8	B		0.0			31.1	C	
Intersection Delay s/veh / LOS	18.8						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.7	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	0.7	A	1.2	A			1.7	A

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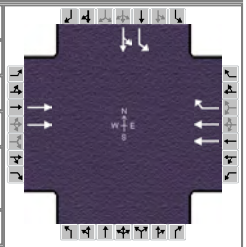
2010 HCS Signalized Intersection Results Summary

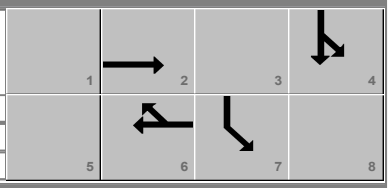
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM PeaK Hour	PHF	0.92
Intersection	Dade Blvd/Michigan Avenu	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		345			419	754				528	1	

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	61.0	29.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	0		4	4
Case Number	0.0	4.0	0.0	3.0	0.0		10.0	10.0
Phase Duration, s	0.0	100.0	0.0	100.0	0.0		34.0	34.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	0.0		5.0	5.0
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	0.0		3.1	3.1
Queue Clearance Time *(g_s)*, s							15.0	15.0
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.0		1.1	1.1
Phase Call Probability							1.00	1.00
Max Out Probability							0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	375	0	0	455	820	0			574	1	0
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1773	0	0	1773	1579	0			3702	1900	0
Queue Service time *(g_s)*, s	0.0	4.6	0.0	0.0	5.7	42.1	0.0			13.0	0.0	0.0
Cycle Queue Clearance Time *(g_c)*, s	0.0	4.6	0.0	0.0	5.7	42.1	0.0			13.0	0.0	0.0
Capacity *(c)*, veh/h		2163			2163	963				1074	551	
Volume-to-Capacity Ratio *(X)*	0.000	0.173	0.000	0.000	0.211	0.851	0.000			0.535	0.002	0.000
Available Capacity *(c_a)*, veh/h		2163			2163	963				1074	551	
Back of Queue *(Q)*, veh/ln		1.7			2.1	15.7				11.4	0.0	
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh		8.5			8.7	15.8				29.8	25.2	
Incremental Delay *(d_2)*, s/veh	0.0	0.2	0.0	0.0	0.2	9.4	0.0			0.3	0.0	0.0
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Control Delay *(d)*, s/veh		8.7			8.9	25.2				30.1	25.2	
Level of Service (LOS)		A			A	C				C	C	
Approach Delay, s/veh / LOS	8.7	A		19.4	B		0.0			30.1	C	
Intersection Delay s/veh / LOS	20.4						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.7	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	0.8	A	1.5	A			1.4	A

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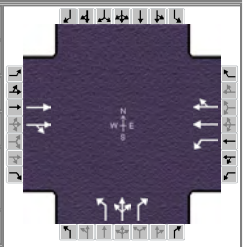
2010 HCS Signalized Intersection Results Summary

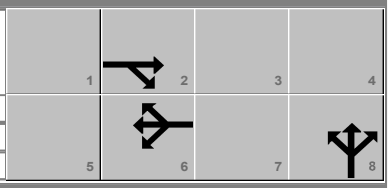
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.90
Intersection	Dade Blvd/Washington Ave	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		406	181	267	641	3	126	1	151			

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	65.0	25.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	6	6	8	8	7	
Case Number	0.0	4.0	6.0	6.0	9.0	9.0	0.0	
Phase Duration, s	0.0	100.0	100.0	100.0	30.0	30.0	0.0	
Change Period, *(Y+Rc)*, s	4.0	5.0	5.0	5.0	5.0	5.0	4.0	
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	3.3	3.3	0.0	
Queue Clearance Time *(g_s)*, s					10.9	10.9		
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	0.5	0.5	0.0	
Phase Call Probability					1.00	1.00		
Max Out Probability					0.00	0.00		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	342	310	297	358	357	140	1	168	0		
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1863	1668	777	1863	1860	1774	1863	1579	0		
Queue Service time *(g_s)*, s	0.0	7.9	8.0	26.6	8.3	8.3	6.4	0.0	8.9	0.0		
Cycle Queue Clearance Time *(g_c)*, s	0.0	7.9	8.0	34.5	8.3	8.3	6.4	0.0	8.9	0.0		
Capacity *(c)*, veh/h		1211	1084	515	1211	1209	444	466	395			
Volume-to-Capacity Ratio *(X)*	0.000	0.283	0.286	0.576	0.296	0.296	0.316	0.002	0.425	0.000		
Available Capacity *(c_a)*, veh/h		1211	1084	515	1211	1209	444	466	395			
Back of Queue *(Q)*, veh/ln		3.0	2.7	4.9	3.1	3.1	2.7	0.0	3.4			
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Uniform Delay *(d_1)*, s/veh		7.5	7.5	14.9	7.6	7.6	30.5	28.1	31.5			
Incremental Delay *(d_2)*, s/veh	0.0	0.6	0.7	4.6	0.6	0.6	0.2	0.0	0.3	0.0		
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Control Delay *(d)*, s/veh		8.1	8.2	19.6	8.2	8.2	30.7	28.1	31.7			
Level of Service (LOS)		A	A	B	A	A	C	C	C			
Approach Delay, s/veh / LOS	8.1	A		11.5	B		31.2	C		0.0		
Intersection Delay s/veh / LOS	13.5						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.9	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	1.0	A	1.3	A	1.0	A		

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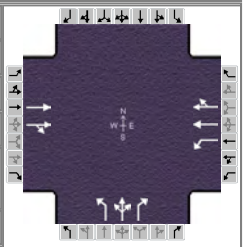
2010 HCS Signalized Intersection Results Summary

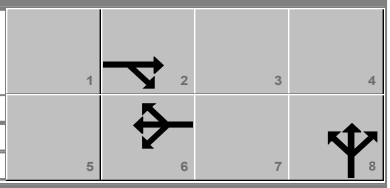
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 30, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.98
Intersection	Dade Blvd/Washington Ave	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h		675	162	217	555	3	267	1	416			

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	55.0	35.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	0.0	0.0	0.0	0.0
Red	1.0	1.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	6	6	8	8	7	
Case Number	0.0	4.0	6.0	6.0	9.0	9.0	0.0	
Phase Duration, s	0.0	100.0	100.0	100.0	40.0	40.0	0.0	
Change Period, *(Y+Rc)*, s	4.0	5.0	5.0	5.0	5.0	5.0	4.0	
Max Allow Headway *(MAH)*, s	0.0	0.0	0.0	0.0	3.3	3.3	0.0	
Queue Clearance Time *(g_s)*, s					25.9	25.9		
Green Extension Time *(g_e)*, s	0.0	0.0	0.0	0.0	1.2	1.2	0.0	
Phase Call Probability					1.00	1.00		
Max Out Probability					0.08	0.08		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	0	442	412	221	285	284	272	1	424	0		
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	0	1863	1737	644	1863	1859	1774	1863	1579	0		
Queue Service time *(g_s)*, s	0.0	14.0	14.0	31.0	8.1	8.1	11.8	0.0	23.9	0.0		
Cycle Queue Clearance Time *(g_c)*, s	0.0	14.0	14.0	45.0	8.1	8.1	11.8	0.0	23.9	0.0		
Capacity *(c)*, veh/h		1025	956	336	1025	1023	621	652	553			
Volume-to-Capacity Ratio *(X)*	0.000	0.431	0.432	0.659	0.278	0.278	0.439	0.002	0.768	0.000		
Available Capacity *(c_a)*, veh/h		1025	956	336	1025	1023	621	652	553			
Back of Queue *(Q)*, veh/ln		5.8	5.5	5.4	3.4	3.3	4.8	0.0	9.6			
Overflow Queue *(Q_3)*, veh/ln		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Uniform Delay *(d_1)*, s/veh		13.3	13.3	26.5	12.0	12.0	25.0	21.1	28.9			
Incremental Delay *(d_2)*, s/veh	0.0	1.3	1.4	9.8	0.7	0.7	0.2	0.0	5.9	0.0		
Initial Queue Delay *(d_3)*, s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Control Delay *(d)*, s/veh		14.6	14.7	36.3	12.6	12.6	25.1	21.1	34.8			
Level of Service (LOS)		B	B	D	B	B	C	C	C			
Approach Delay, s/veh / LOS	14.6	B		19.3	B		31.0	C		0.0		
Intersection Delay s/veh / LOS	21.1						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.9	A	1.9	A	2.9	C	2.7	B
Bicycle LOS Score / LOS	1.2	A	1.1	A	1.6	A		

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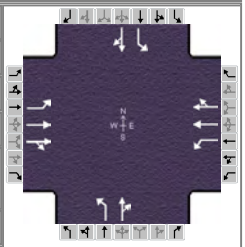
2010 HCS Signalized Intersection Results Summary

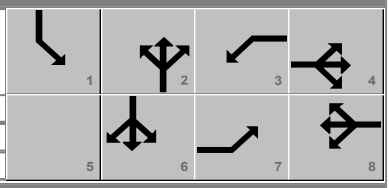
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.94
Intersection	Merdian Av &17 St	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	96	386	35	35	270	66	32	182	28	191	228	175

Signal Information			
Cycle, s	95.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	26.0	10.0	37.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	2	2	1	6
Case Number	1.1	4.0	1.1	4.0	6.3	6.3	1.0	4.0
Phase Duration, s	13.0	42.0	13.0	42.0	30.0	30.0	10.0	40.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	4.9	10.1	3.0	8.5			9.0	
Green Extension Time *(g_e)*, s	0.1	1.5	0.0	1.5	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.08	0.00	0.00	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	102	226	222	37	183	175	34	0	223	203	0	429
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1808	1774	1863	1737	955	0	1819	1774	0	1728
Queue Service time *(g_s)*, s	2.9	8.0	8.1	1.0	6.3	6.5	2.9	0.0	9.8	7.0	0.0	19.8
Cycle Queue Clearance Time *(g_c)*, s	2.9	8.0	8.1	1.0	6.3	6.5	12.7	0.0	9.8	7.0	0.0	19.8
Capacity *(c)*, veh/h	590	725	704	548	725	677	229		479	391		637
Volume-to-Capacity Ratio *(X)*	0.173	0.312	0.315	0.068	0.252	0.259	0.149	0.000	0.467	0.520	0.000	0.674
Available Capacity *(c_a)*, veh/h	590	725	704	548	725	677	229		479	391		637
Back of Queue *(Q)*, veh/ln	1.1	3.4	3.3	0.4	2.6	2.5	0.8		4.6	2.8		8.7
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	13.1	20.2	20.2	12.7	19.6	19.7	34.8		29.4	19.6		25.2
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	0.0	0.1	0.1	1.4	0.0	3.2	0.6	0.0	5.6
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	13.2	20.2	20.3	12.8	19.7	19.8	36.1		32.7	20.2		30.8
Level of Service (LOS)	B	C	C	B	B	B	D		C	C		C
Approach Delay, s/veh / LOS	18.9	B		19.1	B		33.1	C		27.4	C	
Intersection Delay s/veh / LOS	23.9						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.9	A	0.8	A	0.9	A	1.5	A

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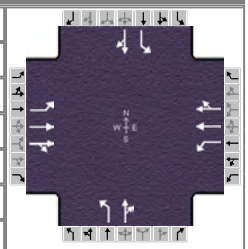
2010 HCS Signalized Intersection Results Summary

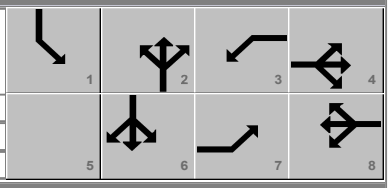
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.94
Intersection	Merdian Av &17 St)	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	149	454	60	72	516	140	43	268	35	129	272	89

Signal Information			
Cycle, s	95.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	26.0	10.0	37.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	2	2	1	6
Case Number	1.1	4.0	1.1	4.0	6.3	6.3	1.0	4.0
Phase Duration, s	13.0	42.0	13.0	42.0	30.0	30.0	10.0	40.0
Change Period, *(Y+Rc)*, s	3.0	5.0	3.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time *(g_s)*, s	6.7	12.3	4.2	16.1			6.5	
Green Extension Time *(g_e)*, s	0.1	2.4	0.0	2.4	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.83	0.00	0.02	0.01			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	159	278	269	77	361	337	46	0	322	137	0	384
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1786	1774	1863	1725	995	0	1825	1774	0	1784
Queue Service time *(g_s)*, s	4.7	10.2	10.3	2.2	14.0	14.1	3.7	0.0	15.0	4.5	0.0	16.5
Cycle Queue Clearance Time *(g_c)*, s	4.7	10.2	10.3	2.2	14.0	14.1	10.1	0.0	15.0	4.5	0.0	16.5
Capacity *(c)*, veh/h	442	725	696	503	725	672	270		480	317		657
Volume-to-Capacity Ratio *(X)*	0.358	0.383	0.386	0.152	0.498	0.501	0.169	0.000	0.671	0.433	0.000	0.584
Available Capacity *(c_a)*, veh/h	442	725	696	503	725	672	270		480	317		657
Back of Queue *(Q)*, veh/ln	1.8	4.3	4.1	0.8	5.9	5.5	1.0		7.4	1.8		7.3
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	14.6	20.8	20.8	13.3	22.0	22.0	32.3		31.3	20.1		24.1
Incremental Delay *(d_2)*, s/veh	0.2	0.1	0.1	0.1	0.2	0.2	1.4	0.0	7.3	0.3	0.0	3.8
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	14.8	20.9	21.0	13.3	22.2	22.2	33.6		38.6	20.5		27.9
Level of Service (LOS)	B	C	C	B	C	C	C		D	C		C
Approach Delay, s/veh / LOS	19.6	B		21.3	C		38.0	D		26.0	C	
Intersection Delay s/veh / LOS	24.4						C					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.8	C	2.8	C
Bicycle LOS Score / LOS	1.1	A	1.1	A	1.1	A	1.3	A

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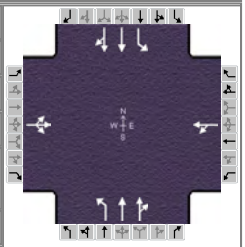
2010 HCS Signalized Intersection Results Summary

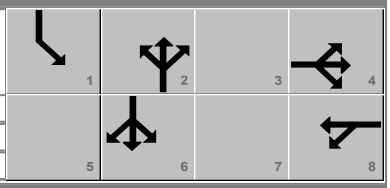
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.97
Intersection	Michigan Avenue/Alton Roa	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	5	12	9	17	4		7	1313	67	502	1008	42

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	28.0	58.0	31.0	0.0	0.0	0.0
Yellow	3.0	4.0	4.0	0.0	0.0	0.0
Red	0.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	4	4	8	8	2	2	1	6
Case Number	8.0	8.0	8.0	8.0	6.3	6.3	1.0	4.0
Phase Duration, s	36.0	36.0	36.0	36.0	63.0	63.0	31.0	94.0
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.5	3.5	3.2	3.2			30.0	
Green Extension Time (g_e), s	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00			1.00	
Max Out Probability	0.00	0.00	0.00	0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	27	0	0	22	0	0	7	716	706	518	545	537
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1490	0	0	917	0	0	519	1863	1831	1774	1863	1836
Queue Service time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.3	45.0	45.3	28.0	17.0	17.0
Cycle Queue Clearance Time (g_c), s	1.5	0.0	0.0	1.2	0.0	0.0	18.2	45.0	45.3	28.0	17.0	17.0
Capacity *(c)*, veh/h	388			269	0		343	831	817	474	1275	1257
Volume-to-Capacity Ratio *(X)*	0.069	0.000	0.000	0.081	0.000	0.000	0.021	0.862	0.865	1.091	0.427	0.428
Available Capacity (c_a), veh/h	388			269	0		343	831	817	474	1275	1257
Back of Queue *(Q)*, veh/ln	0.7			0.5			0.2	22.3	22.1	20.8	6.8	6.7
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	38.3			38.1	0.0		30.9	32.4	32.5	45.3	9.1	9.1
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	11.4	11.8	68.3	1.0	1.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	38.3			38.2	0.0		31.0	43.8	44.3	113.6	10.2	10.2
Level of Service (LOS)	D			D			C	D	D	F	B	B
Approach Delay, s/veh / LOS	38.3	D		38.2	D		44.0	D		43.6	D	
Intersection Delay s/veh / LOS	43.7						D					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.9	C	2.9	C	2.1	B	2.1	B
Bicycle LOS Score / LOS	0.5	A	0.5	A	1.7	A	1.8	A

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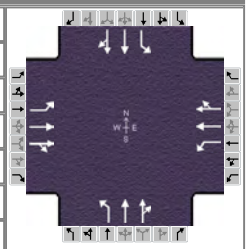
2010 HCS Signalized Intersection Results Summary

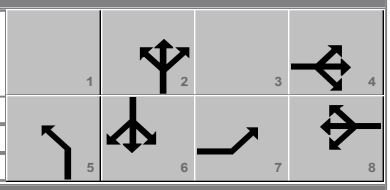
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	AM Peak Hour	PHF	0.93
Intersection	Washington Av &17 St	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Existing AM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	72	130	169	33	108	13	111	190	20	30	324	123

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	37.0	5.0	24.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	8	8	5	2	6	6
Case Number	1.0	4.0	6.3	6.3	1.0	4.0	6.3	6.3
Phase Duration, s	8.0	37.0	29.0	29.0	11.0	53.0	42.0	42.0
Change Period, *(Y+Rc)*, s	3.0	5.0	5.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.2	3.2	3.1	0.0	0.0	0.0
Queue Clearance Time *(g_s)*, s	4.4	9.5	12.1	12.1	4.5			
Green Extension Time *(g_e)*, s	0.0	0.9	0.8	0.8	0.1	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00			
Max Out Probability	1.00	0.00	0.01	0.01	0.64			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	77	140	182	35	65	65	119	114	112	32	249	231
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	1054	1863	1793	1774	1863	1801	1150	1863	1689
Queue Service time *(g_s)*, s	2.4	4.7	7.5	2.6	2.4	2.5	2.5	2.7	2.8	1.6	8.2	8.4
Cycle Queue Clearance Time *(g_c)*, s	2.4	4.7	7.5	10.1	2.4	2.5	2.5	2.7	2.8	4.4	8.2	8.4
Capacity *(c)*, veh/h	479	662	561	366	497	478	527	993	960	658	766	694
Volume-to-Capacity Ratio *(X)*	0.162	0.211	0.324	0.097	0.132	0.135	0.227	0.114	0.117	0.049	0.325	0.333
Available Capacity *(c_a)*, veh/h	479	662	561	366	497	478	527	993	960	658	766	694
Back of Queue *(Q)*, veh/ln	0.9	2.0	2.7	0.7	1.0	1.0	0.9	1.1	1.1	0.4	3.6	3.4
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay *(d_1)*, s/veh	16.5	20.2	21.1	31.1	25.1	25.1	9.5	10.4	10.5	17.8	18.0	18.1
Incremental Delay *(d_2)*, s/veh	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.1	1.1	1.3
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	16.5	20.3	21.2	31.1	25.1	25.2	9.5	10.7	10.7	17.9	19.1	19.4
Level of Service (LOS)	B	C	C	C	C	C	A	B	B	B	B	B
Approach Delay, s/veh / LOS	20.0	B		26.4	C		10.3	B		19.2	B	
Intersection Delay s/veh / LOS	18.1						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.8	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	0.8	A	0.6	A	0.8	A	0.9	A

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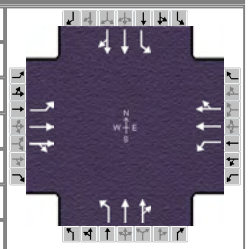
2010 HCS Signalized Intersection Results Summary

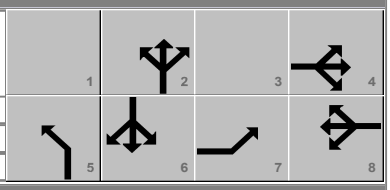
General Information				Intersection Information	
Agency	dpa			Duration, h	0.25
Analyst	es	Analysis Date	Apr 29, 2013	Area Type	Other
Jurisdiction		Time Period	PM Peak Hour	PHF	0.93
Intersection	Washington Av &17 St	Analysis Year	2013	Analysis Period	1> 7:00
File Name	Future PM.xus				
Project Description	Miami Beach Convention Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	177	224	149	44	172	33	205	457	78	22	295	153

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	36.0	6.0	24.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	0.0	0.0
Red	0.0	1.0	0.0	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	8	8	5	2	6	6
Case Number	1.0	4.0	6.3	6.3	1.0	4.0	6.3	6.3
Phase Duration, s	9.0	38.0	29.0	29.0	11.0	52.0	41.0	41.0
Change Period, $(Y+R_c)$, s	3.0	5.0	5.0	5.0	3.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.2	3.2	3.1	0.0	0.0	0.0
Queue Clearance Time (g_s), s	8.0	10.5	14.2	14.2	7.1			
Green Extension Time (g_e), s	0.0	1.3	1.1	1.1	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00			
Max Out Probability	1.00	0.00	0.04	0.04	1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	190	241	160	47	111	109	220	294	281	24	317	165
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1774	1863	1579	980	1863	1760	1774	1863	1768	834	1863	1579
Queue Service time (g_s), s	6.0	8.5	6.4	3.8	4.2	4.4	5.1	8.1	8.1	1.8	11.1	6.3
Cycle Queue Clearance Time (g_c), s	6.0	8.5	6.4	12.2	4.2	4.4	5.1	8.1	8.1	10.0	11.1	6.3
Capacity *(c)*, veh/h	451	683	579	347	497	469	490	973	923	440	745	631
Volume-to-Capacity Ratio *(X)*	0.422	0.353	0.277	0.136	0.224	0.232	0.450	0.302	0.305	0.054	0.426	0.261
Available Capacity (c_a), veh/h	451	683	579	347	497	469	490	973	923	440	745	631
Back of Queue *(Q)*, veh/ln	2.3	3.5	2.3	0.9	1.8	1.8	1.8	3.3	3.2	0.4	4.9	2.4
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Storage Ratio *(RQ)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uniform Delay (d_1), s/veh	16.9	20.7	20.1	32.4	25.7	25.8	11.5	12.2	12.2	22.1	19.5	18.1
Incremental Delay (d_2), s/veh	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.8	0.9	0.2	1.8	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay *(d)*, s/veh	17.2	20.8	20.2	32.4	25.8	25.9	11.7	13.0	13.1	22.3	21.3	19.1
Level of Service (LOS)	B	C	C	C	C	C	B	B	B	C	C	B
Approach Delay, s/veh / LOS	19.5	B		27.0	C		12.7	B		20.6	C	
Intersection Delay s/veh / LOS	18.2						B					

MultiModal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.8	C	2.8	C	2.8	C
Bicycle LOS Score / LOS	1.0	A	0.7	A	1.1	A	0.9	A

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