FLORIDA DEPARTMENT OF TRANSPORTATION - DISTRICT VI
TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS (TSM&O)
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DMS Usage Report – December 2016

Summary of Monthly Operations

In the month of December, there were 44,250 messages posted with 10,173 DMS activations for 1,516 events. The DMS efficiency was 99.87% (1,514 of the 1,516 signable events had DMS messages posted) for all roadways. There was an average of 6.71 DMSs activated per each signable event and an average of 4.35 DMS messages were posted per each DMS activation. This resulted in an average of 29.19 DMS messages being posted per each signable event.

Notes: DMS messages not associated with an event are not included because the SunGuide Software requirement to associate a message does not function properly at this time.

Summary of Average Monthly Operations

- $\frac{10173\,DMS\ Activations}{1516 Events} =$ **6.71** *Average DMS Activations per Event*

  An average of 6.71 DMSs were activated per each signable event

- $\frac{44250\,DMS\ Messages}{10173\,DMS\ Activations} =$ **4.35** *Average DMS Messages per Activation*

  An average of 4.35 DMS messages were posted per each DMS activation

- $6.71\frac{DMS\,Activations}{Events} \times 4.35\frac{DMS\,Messages}{DMS\,Activations} =$ **29.19*** *DMS Messages per Event*

  An average of 29.19 DMS messages were posted per each signable event*

  **Based on actual numbers of average DMS activation/event and average DMS messages/activation. Not based on rounded numbers shown in this report.*

Table 1 DMS Usage for Other Agencies

Agency	Number of Messages
Port of Miami Tunnel	347
FDOT District 4	1208
Florida's Turnpike Enterprise	7
Miami-Dade Expressway Authority	1612
Total	**3174**

Table 2 DMS Usage by Event Type

Event Type Message	Number of Messages
FDOT District 6 Incidents	18631
Other Districts' Incidents	2135
Construction	4467
Safety	16417
Vehicle Alert	2600
Total	**44250**

Table 3a DMS Usage by Roadway (*Limited Access Facilities*)

Roadway	ID	Location	# of Activations	# of Messages	Duration (Hr:Min:Ss)	Availability
I-95 Mainline	1	I-95 NB beyond NW 103 St	221	883	2062:17:12	100.00%
	22	I-95 NB south of NW 62 St	138	638	1158:31:17	99.13%
	75	I-95 NB before SR 112	257	850	964:21:13	86.89%
	77	I-95 NB beyond SW 8 St	329	1134	1178:27:42	96.88%
	2***	I-95 SB north of Ives Dairy Rd	250	910	1225:08:05	N/A***
	3***	I-95 SB north of Miami Gardens Dr	251	924	1230:37:26	N/A***
	095NB013.5LL***	I-95 NB north of NW 173 St	118	480	964:30:54	N/A***
	20	I-95 SB south of NW 119 St	118	500	839:02:36	100.00%
	21	I-95 SB south of NW 62 St	131	593	961:18:41	99.13%
	74	I-95 SB beyond of SR 112	137	668	1038:50:37	99.69%
	76	I-95 SB before Rickenbacker Cswy	41	344	839:31:58	100.00%
		I-95 Mainline Subtotal	***1991***	***7924***	***12462:37:41***	***97.72%***
I-95 Express	95X40	95X NB at NW 62nd St	180	696	1180:40:34	99.53%
	95X45	95X NB at NW 125th St	215	825	1304:04:21	100.00%
	95XSB45	95X SB at NW 62nd St	105	504	918:55:57	99.57%
	95XSB50	95X SB at NW 125th St	104	480	896:09:51	99.86%
	095SB014.6-EL***	95X SB at Miami Gardens Dr	244	823	1189:42:32	N/A***
	095NB014.8-EL***	95X SB north of Miami Gardens Dr	101	435	948:35:48	N/A***
		I-95 Express Subtotal	***949***	***3763***	***6438:09:03***	***99.74%***
SR 826	4	SR 826 EB east of NW 67 Ave	131	642	1048:43:26	96.41%
	5	SR 826 EB east of NW 37 Ave	318	1071	1342:55:05	100.00%
	14****	SR 826 NB beyond NW 122 St	117	693	891:11:46	N/A****
	15*	SR 826 WB beyond NW 17 Ave	0	0	0:00:00	N/A*
	17	SR 826 WB beyond NW 47 Ave	104	487	1053:46:05	99.53%
	19	SR 826 WB beyond NW 67 Ave	126	653	1099:24:18	99.59%
	826NB58	SR 826 NB before NW 58 St	94	507	761:32:14	97.91%
	826SB103****	SR 826 SB before NW 103 St	20	126	255:46:30	N/A****
	826SB58	SR 826 SB before NW 58 St	82	402	774:55:48	99.36%
	826NB1.3-LL	SR 826 NB before SW 72 St	60	347	711:40:07	97.23%
	826NB4.8-LL**	SR 826 NB at SW 24 St	190	648	1043:36:15	N/A**
	826SB8.8-LL**	SR 826 SB at NW 36 St	129	424	712:31:55	N/A**
		SR 826 Subtotal	***1371***	***6000***	***9696:03:29***	***98.58%***
I-75	43	I-75 NB before Miami Gardens Dr	59	393	1599:20:25	100.00%
	44	I-75 SB before Miami Gardens Dr	159	815	1337:35:52	97.83%
	42	I-75 SB ramp from NW 138 St	175	886	1374:17:57	100.00%
		I-75 Subtotal	***393***	***2094***	***4311:14:14***	***99.28%***
I-195 Mainline	57	I-195 EB before North Miami Ave	35	288	744:42:19	99.87%
	105	I-195 WB before Alton Rd	99	423	786:03:00	95.61%
		I-195 Mainline Subtotal	***134***	***711***	***1530:45:19***	***97.74%***
I-395	886WB	Port Blvd WB before US-1	177	656	818:55:56	99.86%
	104	I-395 WB at Watson Island	306	888	964:05:22	95.61%
		I-395 Subtotal	***483***	***1544***	***1783:01:18***	***97.74%***
		Limited Access Facilities Subtotal	***5321***	***22036***	***36221:51:04***	***98.44%***

Table 3b DMS Usage by Roadway (Arterials)

Roadway	ID	Location	# of Activations	# of Messages	Duration (Hr:min:ss)	Availability
I-95 Arterial	109***	Ives Dairy EB Rd before I-95	169	649	926:46:29	N/A***
	113***	Ives Dairy Rd WB before I-95	0	0	0:00:00	N/A***
	110***	Miami Gardens Dr EB before I-95	185	686	938:06:07	N/A***
	111	Miami Gardens Dr WB before I-95	192	732	942:19:21	99.16%
	112*	NW 103 St EB before I-95	0	0	0:00:00	N/A*
	106	NW 79 St EB before I-95	167	559	811:45:28	99.84%
	107	NW 54 St EB before I-95	163	552	719:32:14	86.50%
	108	SW 8 St EB before I-95	123	567	813:44:34	99.51%
		I-95 Arterial Subtotal	***999***	***3745***	***5152:14:13***	***96.25%***
Golden Glades Interchange	6	SR 826 WB west of NE 2nd Ave	320	1107	1350:52:22	100.00%
	7	Turnpike SB to Golden Glades	273	1015	1170:04:05	100.00%
	9	US-441 NB at TRI-Rail	107	531	1036:57:25	100.00%
	10	SR 9 NB before Park & Ride	109	543	1035:35:58	97.91%
	8	US-441 SB at NW 179 St	217	868	1175:50:43	100.00%
		Golden Glades Interchange Subtotal	***1026***	***4064***	***5769:20:33***	***99.58%***
SR 826 Arterial	SW24EB	SW 24 St EB before SR 826	119	523	798:55:09	99.90%
	SW24WB	SW 24 St WB before SR 826	102	449	671:10:37	85.46%
	SW40EB	SW 40 St EB before SR 826	90	457	754:41:32	99.87%
	SW40WB	SW 40 St WB before SR 826	89	454	754:36:34	99.89%
	SW56EB	SW 56 St EB before SR 826	75	412	741:38:57	99.89%
	SW56WB	SW 56 St WB before SR 826	75	409	739:47:38	99.79%
	SW72EB	SW 72 St EB before SR 826	71	376	738:07:14	99.89%
	SW72WB	SW 72 St WB before SR 826	71	378	738:07:59	99.89%
	WFLAGLEREB**	W Flagler ST EB before SR 826	129	525	664:17:24	N/A**
	WFLAGLERWB**	W Flagler ST WB before SR 826	128	528	664:15:14	N/A**
	NW25EB**	NW 25 ST EB before SR 826	148	558	641:38:25	N/A**
	NW25WB**	NW 25 ST WB before SR 826	152	572	666:54:11	N/A**
	NW36EB**	NW 36 ST EB before SR 826	138	532	657:17:13	N/A**
	NW36WB**	NW 36 ST WB before SR 826	139	541	659:33:36	N/A**
	SW8EB**	SW 8 ST EB before SR 826	127	474	667:34:26	N/A**
	SW8WB**	SW 8 ST WB before SR 826	124	466	665:53:29	N/A**
	SW88EB**	Kendall DR EB before SR 826	50	259	551:39:57	N/A**
	SW88WB**	Kendall DR WB before SR 826	50	260	554:52:38	N/A**
		SR 826 Arterial Subtotal	***1877***	***8173***	***12331:02:13***	***98.07%***
I-195 Arterial	38	Alton Rd SB before I-195	63	332	795:37:13	99.56%
	39	Arthur Godfrey WB before I-195	63	341	802:26:17	99.60%
	40	Alton Rd NB before I-195	62	330	793:22:44	99.21%
		I-195 Arterial Subtotal	***188***	***1003***	***2391:26:14***	***99.46%***

Alex Motta, when are we going to replace these devices.

Table 3b – *continued* DMS Usage by Roadway (*Arterials*)

Roadway	ID	Location	# of Activations	# of Messages	Duration (Hr:Min)	Availability
US-1 in Miami-Dade County	23	US-1 NB beyond SW 17 Ave	248	855	1005:27:12	99.77%
	45	US-1 SB before SW 80 St	42	299	754:18:52	99.95%
	47	US-1 SB at Florida's Turnpike	26	251	734:32:43	99.87%
	46	US-1 NB before Killian Dr	60	363	946:32:16	99.74%
	48	US-1 NB at Florida's Turnpike	31	280	833:51:21	99.87%
US-1 in Miami-Dade County Subtotal			***407***	***2048***	***4274:42:24***	***99.84%***
US-1 South of Florida City	62	US-1 NB at Mile Marker 126	27	256	735:12:06	100.00%
	64	US-1 NB at Mile Marker 106	30	263	1409:53:10	99.09%
	66	US-1 NB at Mile Marker 91.5	27	257	801:35:13	100.00%
	68	US-1 NB at Mile Marker 39.5	35	281	797:53:55	98.08%
	71	US-1 NB at Mile Marker 7.5	33	312	1591:06:16	99.71%
	61	US-1 SB at Mile Marker 126	36	334	1609:59:46	99.93%
	63	US-1 SB at Mile Marker 113	35	311	867:03:46	100.00%
	65	US-1 SB at Mile Marker 106	39	312	835:03:34	97.10%
	67	US-1 SB at Mile Marker 91.5	33	298	795:38:11	99.81%
	69	US-1 SB at Mile Marker 39.5	37	309	815:59:13	100.00%
	70	US-1 SB at Mile Marker 7.5	23	248	760:59:00	97.02%
US-1 South of Florida City Subtotal			***355***	***3181***	***11020:24:10***	***99.16%***
Arterials Subtotal			***4852***	***22214***	***40939:09:47***	***98.77%***
Limited Access Facilities Subtotal			***5321***	***22036***	***36221:51:04***	***98.44%***
Grand Total			***10173***	***44250***	***77161:00:51***	***98.63%***

**DMS 15 and 112 were undergoing testing for Capital Improvement and were used periodically. Messages posted on these DMS are not computed and system availability is not measured for these devices.*

***Twelve DMS along the SR 826 Section 5 project are operational and are still under warranty; system availability is not measured for these devices.*

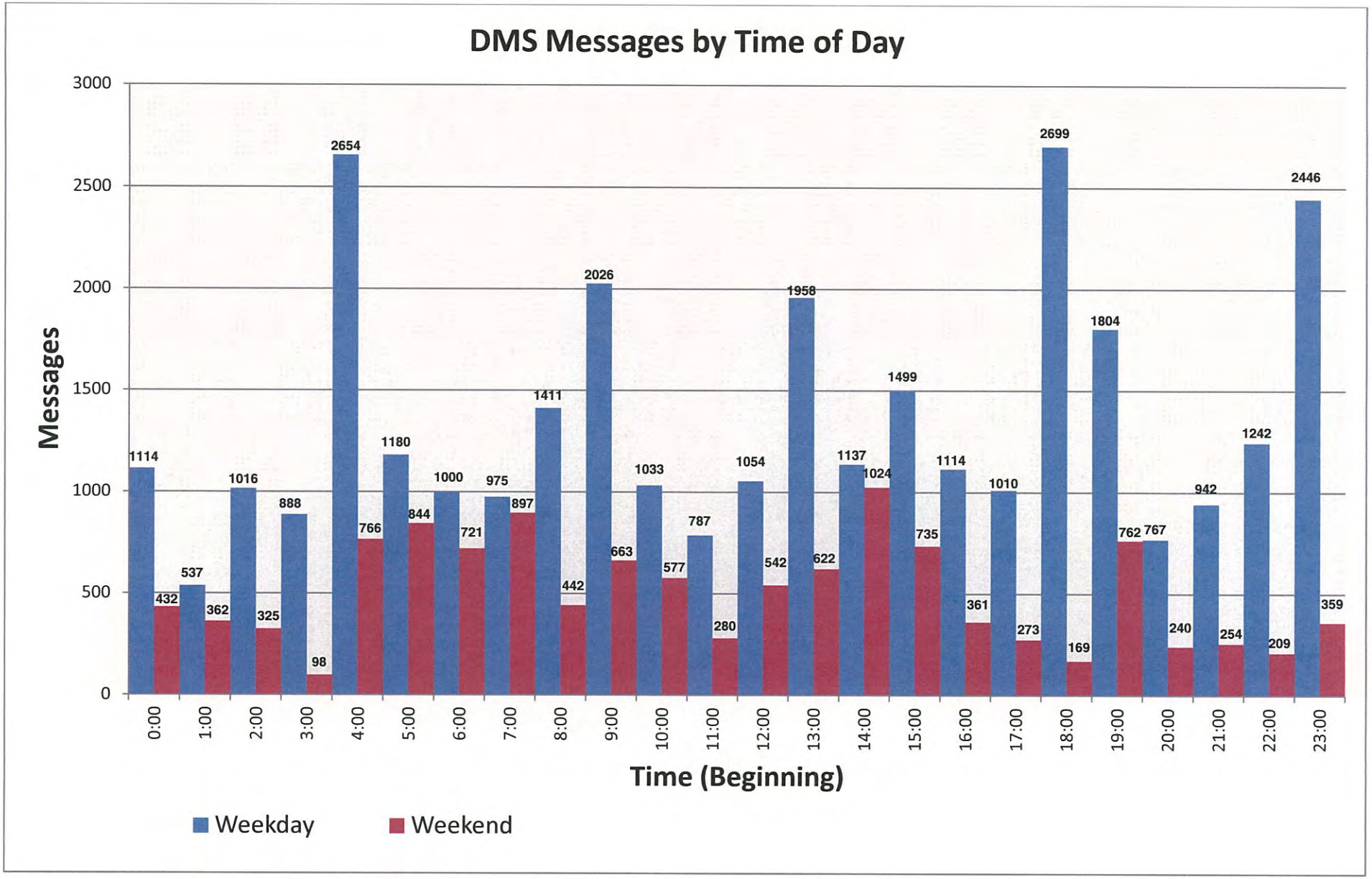
**** DMS 2, 3, 109, 110, 113, FLD6DOT095NB013.5-LL, FLD6DOT095SB014.6-EL, and FLD6DOT095NB014.8-EL are operational and are under the Express Lanes Phase 2 Contractor; thus, system availability is not measured for these devices.*

*****DMS 14 and 826SBNW103ST01 are under the SR-826/I-75 Express Lanes Contractor; thus, system availability is not measured for these devices.*

Table 4 Number of Messages by Roadway

Sign For Events On			DMS Located Along											
			I-95 Mainline	95 Express	SR 826	I-75	I-195 Mainline	I-395	I-95 Arterial	GGI	SR 826 Arterial	I-195 Arterial	US-1 in Miami-Dade County	US-1 South of Florida City
Vehicle Alert			459	140	342	151	55	54	127	92	331	99	237	513
Safety Messaging			2,652	1,441	2,060	602	395	387	1,005	1,179	2,967	519	1,014	2,196
District 6	Miami-Dade	I-95	2,146	471	333	1	140	395	1,665	905	14	208	190	0
District 6	Miami-Dade	Express Lanes	1,164	1,024	306	0	1	298	3	796	0	3	316	0
District 6	Miami-Dade	I-195	92	0	0	0	64	24	67	0	0	81	1	0
District 6	Miami-Dade	I-395	104	26	0	0	0	88	62	0	0	0	17	0
District 6	Miami-Dade	MacArthur Causeway	88	24	0	0	0	8	20	0	0	0	26	0
District 6	Miami-Dade	SR-886/Port Boulevard	0	0	0	0	0	34	0	0	0	0	0	0
District 6	Miami-Dade	SR-826	392	274	2,222	999	0	0	367	757	4,407	0	56	0
District 6	Miami-Dade	I-75	0	0	137	220	0	0	0	0	0	0	0	0
District 6	Miami-Dade	US-1	27	0	0	0	0	8	8	0	32	0	103	6
District 6	Monroe	US-1	0	0	0	0	0	0	0	0	0	0	0	407
District 6	Monroe	Card Sound Road	0	0	0	0	0	0	0	0	0	0	0	0
District 6	Miami-Dade	SR-997/ Krome Avenue	0	0	0	0	0	0	0	0	0	0	0	0
District 6	Miami-Dade	SR-9	0	0	0	0	0	0	0	0	0	0	0	0
District 6	Miami-Dade	US-27	0	0	0	0	0	0	0	0	0	0	0	0
District 6	Miami-Dade	US-441	0	0	0	0	0	0	0	0	0	0	0	0
District 6	Miami-Dade	OTHER	69	33	42	49	13	7	42	30	48	18	23	58
District 6	Monroe	OTHER	0	0	0	0	0	0	0	0	0	0	0	0
MDX	Miami-Dade	SR-836	257	7	334	0	0	235	35	0	120	0	9	0
MDX	Miami-Dade	SR-836 Extension to 137th Ave	0	0	0	0	0	0	0	0	0	0	0	0
MDX	Miami-Dade	SR-112	97	39	0	0	43	6	24	0	0	75	0	0
MDX	Miami-Dade	SR-874	0	0	27	0	0	0	0	0	254	0	20	0
MDX	Miami-Dade	SR-878	0	0	0	0	0	0	0	0	0	0	0	0
MDX	Miami-Dade	SR-924	0	0	16	14	0	0	0	0	0	0	0	0
District 4	Broward	I-95	136	115	82	0	0	0	218	255	0	0	0	0
District 4	Broward	Express Lanes	101	99	45	0	0	0	0	45	0	0	0	0
District 4	Broward	I-75	0	0	54	58	0	0	0	0	0	0	0	0
District 4	Broward	I-595	0	0	0	0	0	0	0	0	0	0	0	0
District 4	Palm Beach	I-95	0	0	0	0	0	0	0	0	0	0	0	0
District 4	Indian River	I-95	0	0	0	0	0	0	0	0	0	0	0	0
District 4	Broward	OTHER	0	0	0	0	0	0	0	0	0	0	0	0
Turnpike	Miami-Dade	Floridas Turnpike	0	0	0	0	0	0	0	5	0	0	1	1
Turnpike	Miami-Dade	Floridas Turnpike Spur	0	0	0	0	0	0	0	0	0	0	0	0
Turnpike	Broward	Floridas Turnpike	0	0	0	0	0	0	0	0	0	0	0	0
Turnpike	Palm Beach	Floridas Turnpike	0	0	0	0	0	0	0	0	0	0	0	0
Turnpike	Martin	Floridas Turnpike	0	0	0	0	0	0	0	0	0	0	0	0
Turnpike	St. Lucie	Floridas Turnpike	0	0	0	0	0	0	0	0	0	0	0	0
Port	Miami-Dade	Port Miami Tunnel	140	70	0	0	0	0	102	0	0	0	35	0
Subtotal of On Route			2,146	1,024	2,222	220	64	88	1,665	905	4,407	81	103	407
Subtotal of Off Route			5,778	2,739	3,778	1,874	647	1,456	2,080	3,159	3,766	922	1,945	2,774
Total District 6			7,193	3,433	5,442	2,022	668	1,303	3,366	3,759	7,799	928	1,983	3,180
Other Agencies			731	330	558	72	43	241	379	305	374	75	65	1
Total			7,924	3,763	6,000	2,094	711	1,544	3,745	4,064	8,173	1,003	2,048	3,181

Notes: *Vehicle Alert messages are signed for entire Miami-Dade and Monroe Counties; thus, they are not location-specific events.*
Safety messages are signed for entire Miami-Dade and Monroe Counties; thus, is not location-specific event.
On Route – When a DMS signs for an incident on the same route as where the DMS is located.
Off Route – When a DMS signs for an incident on different routes from where the DMS is located.


DMS Messages by Time of Day
Messages
3000
2500
2000
1500
1000
500
0
0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
1114 537 1016 888 2654 1180 1000 975 1411 2026 1033 787 1054 1958 1137 1499 1114 1010 2699 1804 767 942 1242 2446
432 362 325 98 766 844 721 897 442 663 577 280 542 622 1024 735 361 273 169 762 240 254 209 359
Time (Beginning)
Weekday
Weekend