

Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways
www.michigan.gov/its



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In the Spotlight

On Dec. 5, 2009, two full-time operators began assisting current operations at the Blue Water Bridge, a state-owned facility in Port Huron. In recent years, the number of Intelligent Transportation Systems equipment in the area has increased. The operators will help monitor the 16 cameras along the freeway approaching the bridge along with a myriad of security cameras; the operators will also disseminate traffic and bridge information to the motoring public on two small Dynamic Message Signs (DMS) and seven large DMS. In its early deployment phase, the Blue Water Bridge traffic operations has an initial goal to outreach and assist in traffic incident management along the area freeways and a long-term goal to become a fully operational Traffic Management Center.

Blue Water Bridge



Compiled by:

URS

Summary

Data Key

Dec. 2009

Call Card



Total Assists

Freeway Courtesy Patrol (FCP) drivers fill out information on data cards for each stop (abandoned vehicles), assist (occupied vehicles, debris, accidents, etc.), and tow.

4,239

Call Tracking



Total Calls

Operators manually enter all incoming and outgoing control room calls, including two-way communications, select Michigan State Police (MSP) Computer-Aided Dispatch entries, and high-impact incident notifications.

5,724

Mi Drive Web Site



Total Page Views

Operators inform media and general public about current incident information such as lane closures and road construction. Real-time camera images are also available.

195,257

Advanced Traffic Management System



Total Incidents

Data is entered into the Advanced Traffic Management System in order to send messages to Dynamic Message Signs (DMS) and to post incidents on the Web site.

508

Quality Assurance/Quality Control



All High-Impact Incidents

Comprehensive and systematic quality assurance/quality control audit of freeway operations including messaging and high-impact notifications (freeway closures, lane closures where only one lane is open, and freeway-to-freeway ramp closures).

100% Accurate

MaintStar



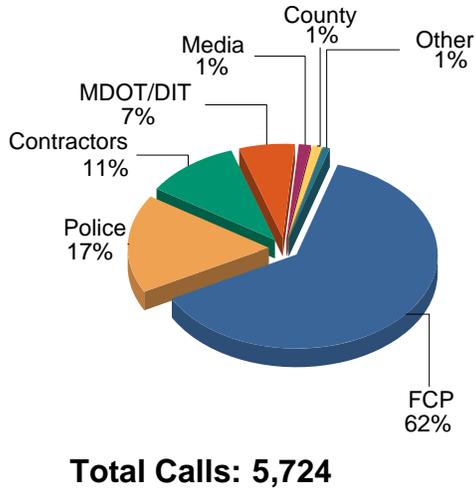
System Availability

MaintStar manages maintenance issues for all Intelligent Transportation System (ITS) equipment, including Dynamic Message Signs (DMS) and Closed-Circuit Television (CCTV) cameras, and tracks work orders and overall ITS performance.

DMS: 89%

CCTV: 93%

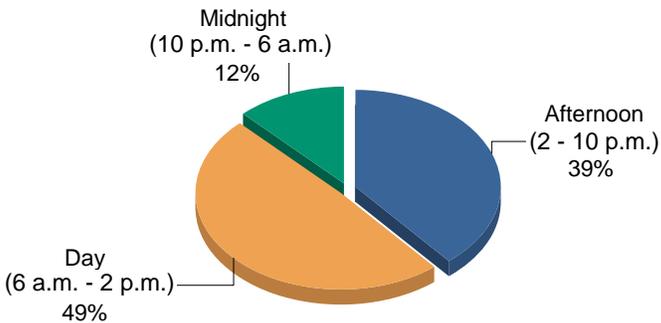
Calls by Type



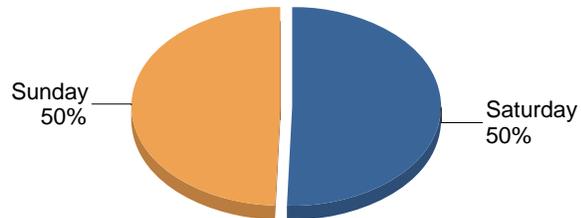
Agency	No. of Calls
FCP	3,548
Contractors	618
City	3
County	69
Federal	0
Fire	3
Police	961
Border	0
MDOT/DIT	373
Media	73
Special Events	31
Transit	2
State	0
Parking	0
Airport	0
Animals	0
OTHER	43
Total	5,724

Police	Total
MSP	898
Allen Park PD	10
Livonia PD	9
Wayne County Sheriff	7
Detroit PD	6
Troy PD	6
Romulus PD	4
St. Clair Shores PD	4
Brownstown Twp. PD	2
St. Clair County Sheriff	2
Taylor PD Traffic Bureau	2
Auburn Hills PD	1
Bloomfield Twp. PD	1
Chesterfield PD	1
Dearborn PD	1
Huron Twp. PD	1
Livingston County Sheriff	1
Monroe County Sheriff	1
Novi PD	1
Roseville PD	1
Southfield PD	1
Warren PD	1
Total	961

Calls by Shift



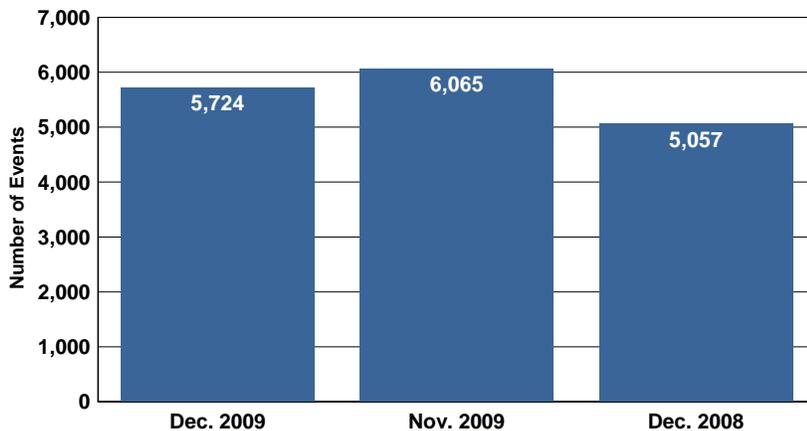
Calls by Weekend Day



Average Number of Calls per Weekday: 205

Average Number of Calls per Weekend: 251

Monthly Event History

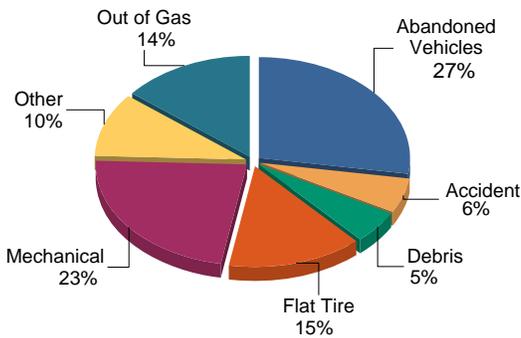


FCP Assist Type

FCP Random Fact & Monthly Totals



During the morning rush in December, FCP performed 284 assists between 8 and 9 a.m.; during the evening rush, FCP performed 301 assists between 4 and 5 p.m.

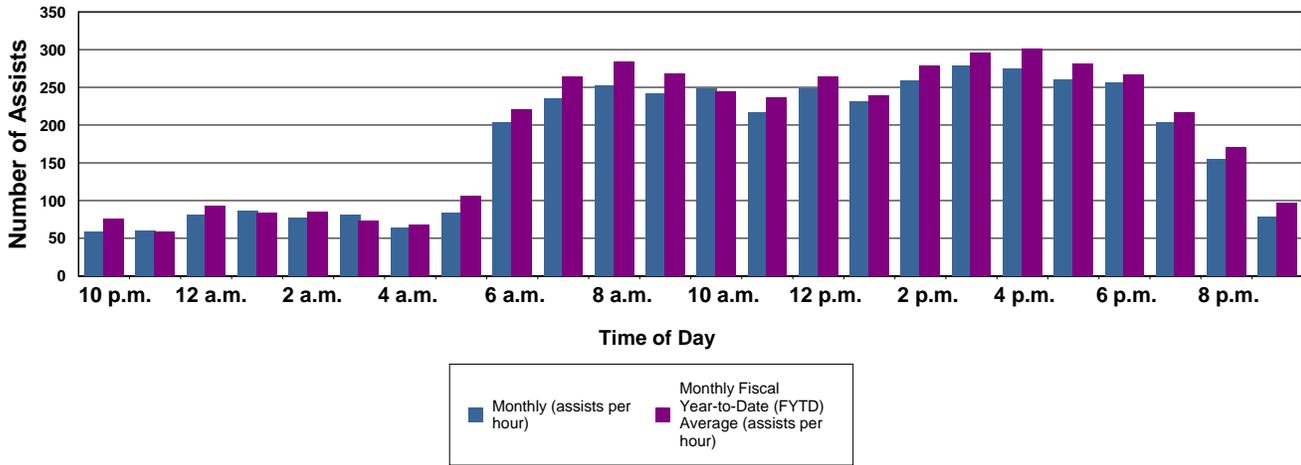


December Total: 4,239

3,018 Assists

1,221 Abandoned Vehicle Stops

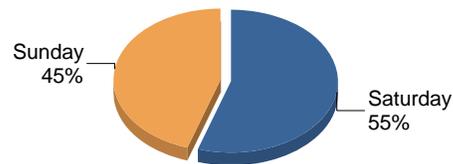
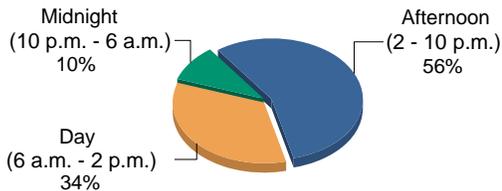
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift



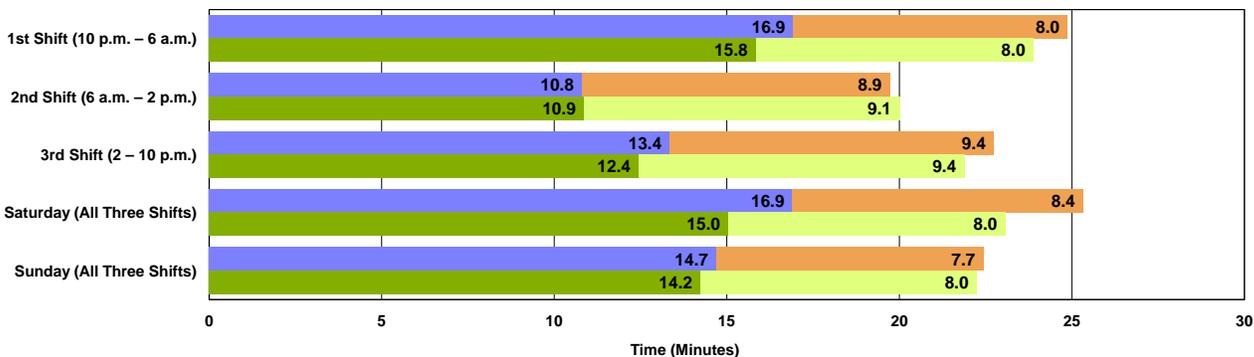
FCP Dispatches by Weekend Day



Average Number of Dispatches per Weekday: 28

Average Number of Dispatches per Weekend: 35

FCP Average Service Times





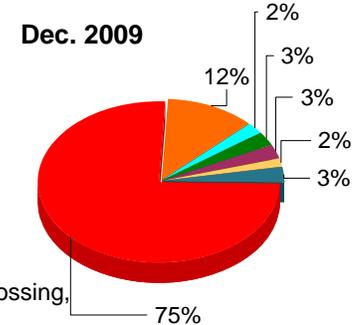
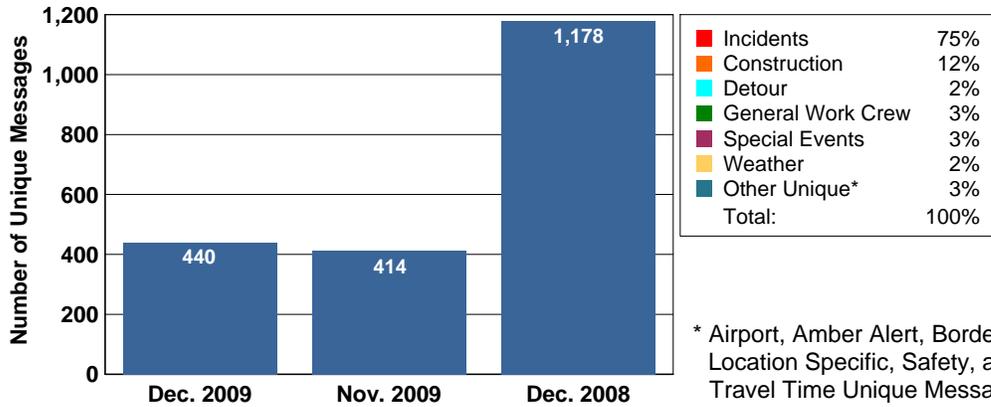
Motorist Quote of the Month:

"I was just writing to thank the nice man in the MDOT courtesy van that helped me on Tuesday, December 22, 2009. Around 4:45 p.m., I was traveling on westbound I-94 at about 12 Mile Road when my vehicle got a flat tire. The nice man in the MDOT courtesy van just happened to be coming down the freeway at that time. He put my spare on for me and I was on my way in less than 10 minutes. Thank you so much!"

Courtesy Patrol

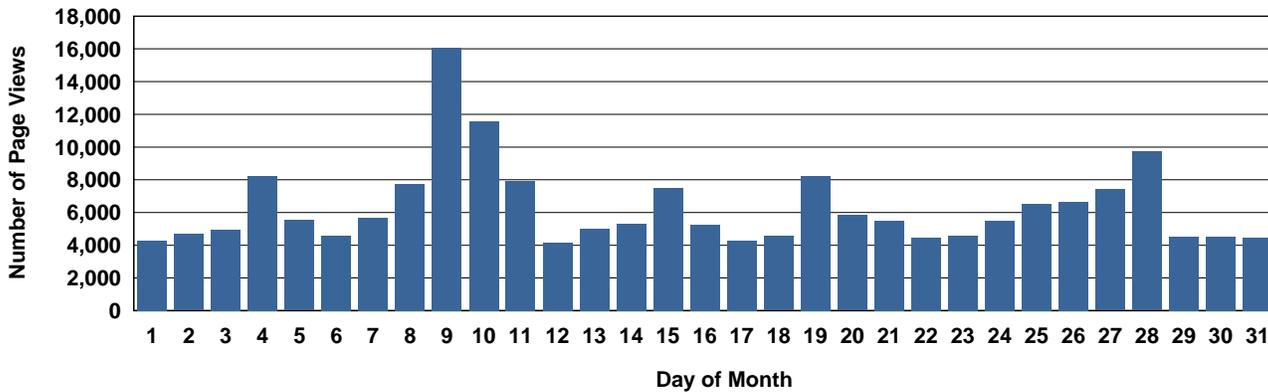
Freeway Segment	TOTAL ASSISTS (miles)	TOTAL ASSISTS		ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)	
		Dec. 2009	FYTD Avg.	Dec. 2009	FYTD Avg.	Dec. 2009	FYTD Avg.	Dec. 2009	FYTD Avg.
I-75									
Oakland County Line to I-696	37.0	277	327.3	7.5	8.8	16.1	17.2	10.8	10.1
I-696 to I-94	8.0	238	282.7	29.8	35.3	9.4	9.3	10.4	10.9
I-94 to I-96	5.6	73	77.7	13.0	13.9	10.3	9.9	11.3	12.4
I-96 to I-275	37.0	266	271.3	7.2	7.3	14.2	13.6	8.1	8.6
I-94	87.6	854	959.0	9.7	32.8	12.3	12.6	9.9	10.1
I-96									
Washtenaw County Line to M-39	20.7	288	322.7	13.9	15.6	12.6	12.2	9.1	8.6
M-39 to I-75	9.0	274	280.3	30.4	31.1	10.6	10.2	10.1	9.4
I-75 to I-696	10.0	271	322.3	27.1	32.2	15.0	12.4	9.3	9.4
I-696 to St. Clair County Line	21.0	243	233.7	11.6	11.1	14.0	11.5	6.7	7.6
I-275	60.7	1,076	1,159.0	17.7	57.3	13.0	11.6	8.8	8.8
I-696									
Livingston County Line to I-275/I-696	11.0	135	121.3	12.3	11.0	25.6	20.0	7.3	7.8
I-275/M-14 to M-39	12.0	237	257.0	19.8	21.4	13.9	12.4	8.0	8.6
M-39 to I-75	11.0	309	346.0	28.1	31.5	10.9	11.4	8.3	7.6
M-59 (Veterans)	34.0	681	724.3	20.0	63.9	15.6	14.0	8.0	8.0
M-10 (Lodge)									
I-96/I-696 to M-14/I-96	8.0	99	98.3	12.4	12.3	20.6	16.9	10.6	9.7
M-14/I-96 to I-94	12.0	140	156.7	11.7	13.1	13.0	13.7	6.5	7.7
I-94 to I-75	17.5	72	76.3	4.1	4.4	13.0	15.8	7.1	7.5
M-14	37.5	311	331.3	8.3	26.5	15.6	15.0	7.9	8.3
M-39 (Southfield)									
I-96/I-275 to M-10	9.3	130	148.7	14.0	16.0	18.0	15.1	6.8	7.7
M-10 to I-75	9.0	146	158.7	16.2	17.6	13.0	13.0	9.4	8.8
I-75 to I-94	10.4	212	206.7	20.4	19.9	11.0	11.6	7.2	8.0
M-5 (Grand River)	28.7	488	514.0	17.0	53.7	13.6	12.9	7.8	8.2
M-8 (Davison)									
M-59 (Veterans)	24.0	25	28.7	1.0	1.2			10.5	11.4
I-375	1.2	8	9.0	6.7	7.5	9.5	10.1	15.4	10.7
M-10 (Lodge)	17.9	375	412.7	20.9	23.1	11.1	11.5	10.3	9.6
M-14	6.4	69	67.7	10.8	10.6	17.6	15.2	8.5	8.2
M-39 (Southfield)	14.2	265	276.0	18.7	19.4	12.0	11.9	8.4	9.5
M-5 (Grand River)	10.3	37	36.7	3.6	3.6	11.4	14.8	8.6	6.3
M-8 (Davison)	2.2	50	56.0	22.7	25.5	6.1	7.2	9.4	8.6
Total	324.7	4,239	4,574.3						

Unique DMS Messages by Type



* Airport, Amber Alert, Border Crossing, Location Specific, Safety, and Travel Time Unique Messages

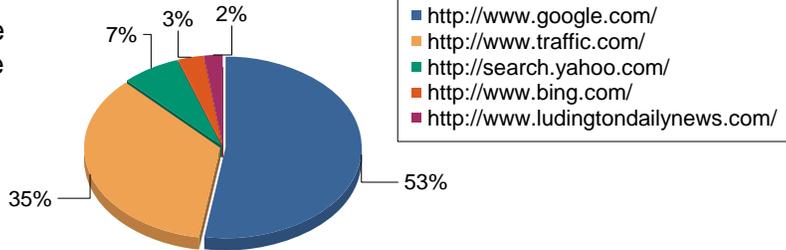
Mi Drive Web Site December Daily Page Views



Top 5 Recurring Site Requests to Mi Drive Web Site in December



In **December**, the Mi Drive Web site experienced the most activity on **Wednesdays**.



Does not include Michigan.gov requests (443,743).

On an average day in **December**, the Mi Drive Web site received the most hits between **4 and 5 p.m.**

Incident Communication Accuracy



Weekend DMS Snapshot Review	Dec. 2009	Nov. 2009	Dec. 2008
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Dec. 2009	Nov. 2009	Dec. 2008
All High-Impact Messages	100%	100%	100%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	100%	100%
Ramp Closure Messages	100%	100%	100%
Other Communication	Dec. 2009	Nov. 2009	Dec. 2008
Advisory Text Messages	95%	96%	99%
Web Site Incident Postings	96%	94%	97%

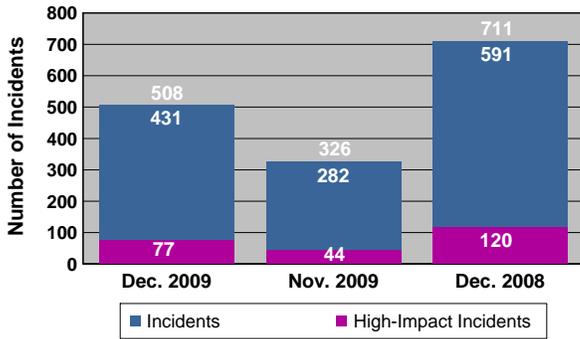
Most Utilized DMS



1. M-10 NB at Porter
2. M-10 NB at M. L. King
3. I-696 WB at Ryan
4. I-75 NB at Woodward Hgts.
5. I-94 EB at Second



Total Number of Incidents



High-Impact Incident Activity



	Dec. 2009	Nov. 2009	Dec. 2008
Freeway Closures All Lanes Closed	19	15	35
Lane Closures Only One Lane Open	51	25	63
Ramp Closures	7	4	22
Freeway-to-Freeway			
Total	77	44	120

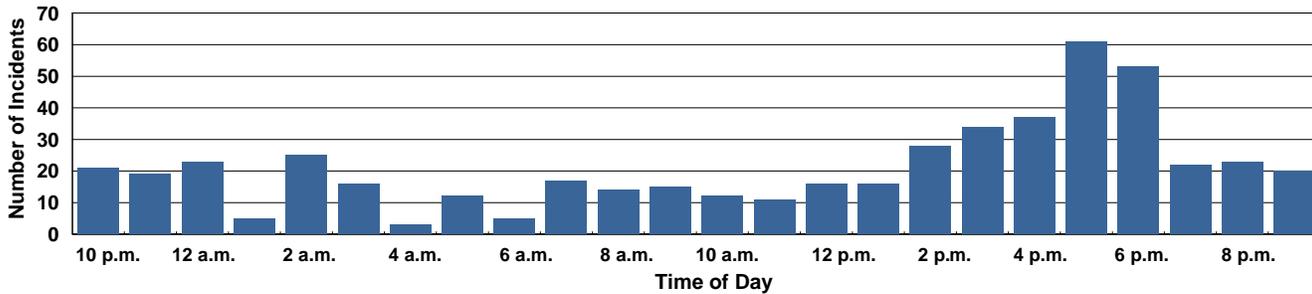
High-impact incidents account for **15%** of the total incidents in December.

Total Incidents by Roadway

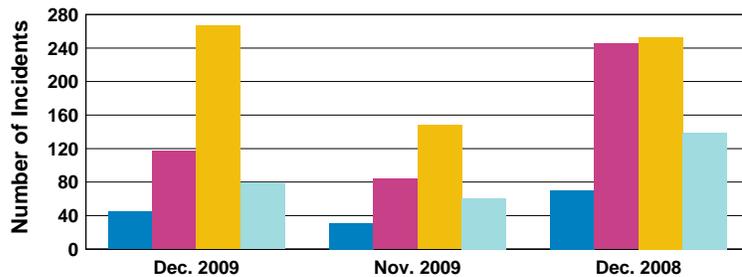


Freeway	Dec. 2009	Nov. 2009	Dec. 2008
I-75 (CHRYSLER/FISHER)	150	93	143
I-94 (FORD)	126	72	171
I-696 (REUTHER)	64	42	116
I-96 (JEFFRIES)	53	29	80
M-10 (LODGE)	34	26	49
M-39 (SOUTHFIELD)	31	28	83
I-275	48	32	68
I-375	1	4	1
M-59	1	0	0
Total	508	326	711

Total Incidents per Hour

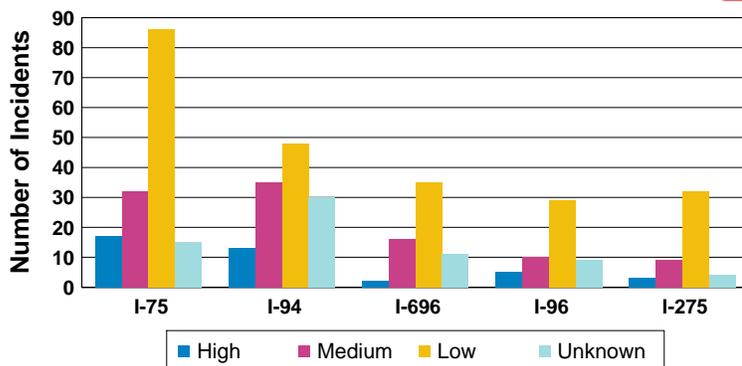


Total Incident Severity/Duration by Month

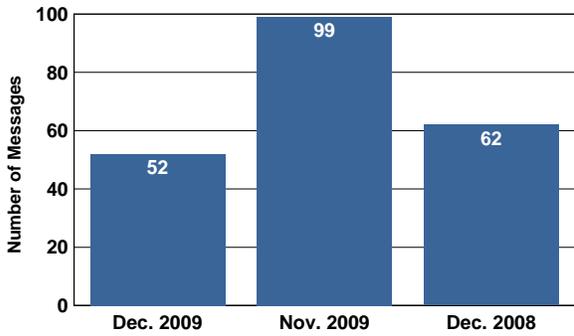


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between 20 and 44 minutes, and total closures (all lanes) less than 20 minutes
- Shoulder closures less than 90 minutes, single-lane closures or partial closures (more than one lane, but not all) less than 20 minutes
- The duration and/or severity is unknown

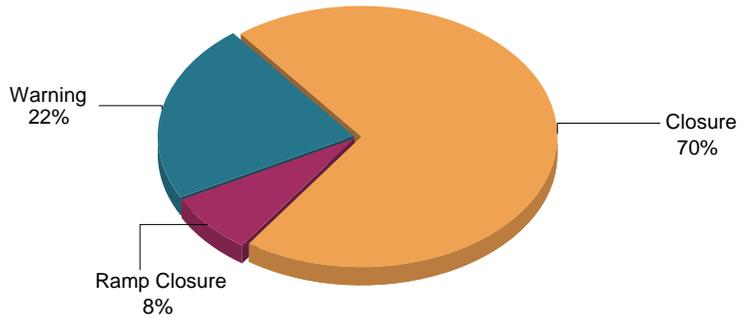
Severity/Duration by Top 5 Freeways



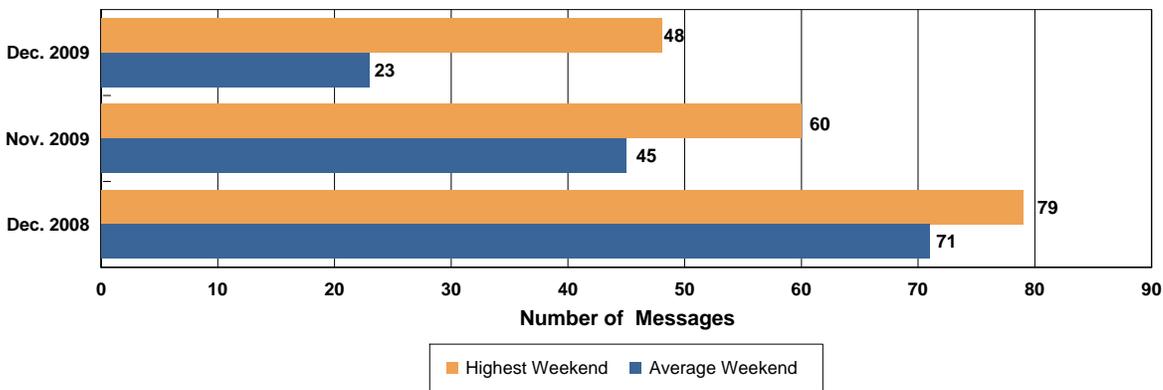
Unique Construction Messages



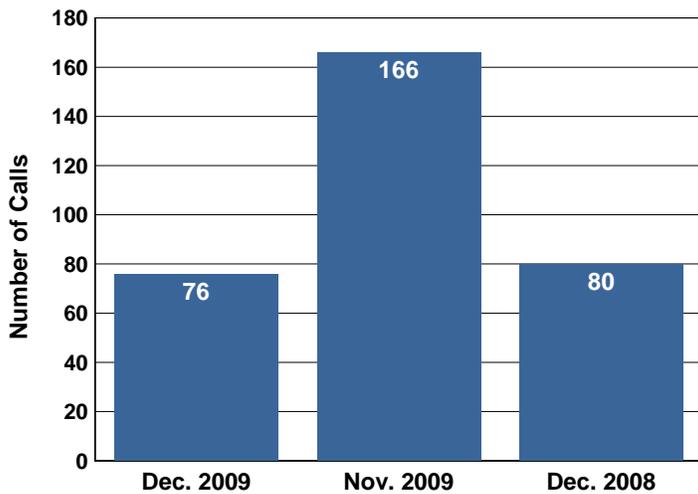
Highest Weekend Unique Construction Messages



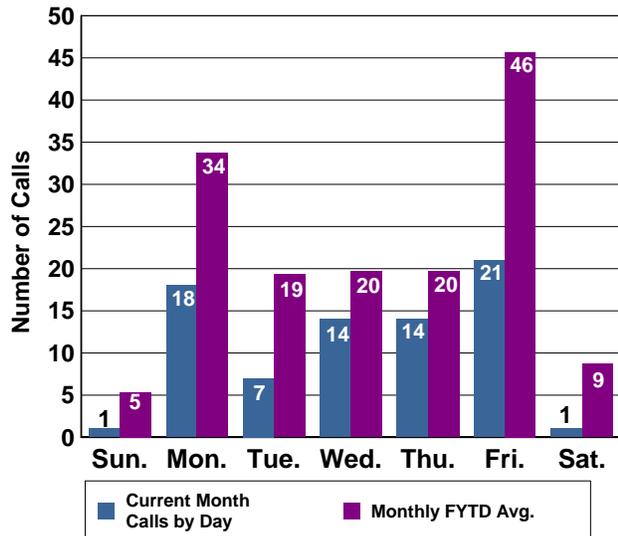
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



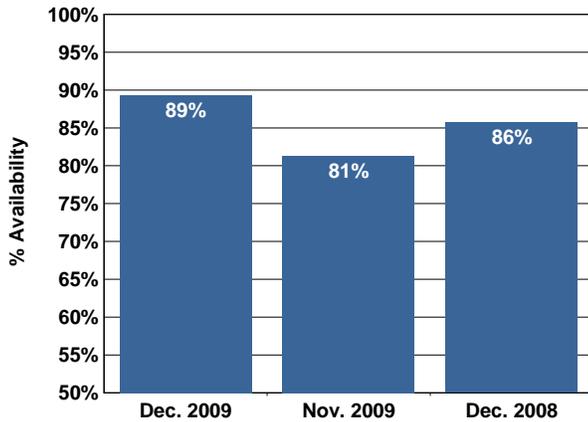
Construction Activity



DMS Availability *



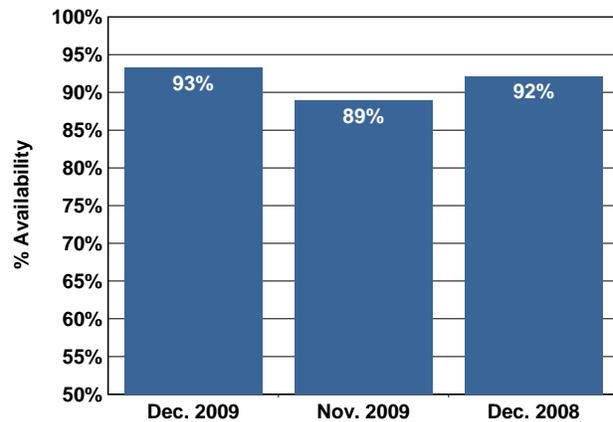
	Dec. 2009	Nov. 2009	Dec. 2008
Available	59	54	54
Not Available	7	12	9
Total	66	66	63



CCTV Camera Availability *



	Dec. 2009	Nov. 2009	Dec. 2008
Available	152	145	153
Not Available	12	19	13
Total	164	164	166



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
I-75 @ Caniff	Repaired Damaged Conduit and Replaced Cables
TOTAL	1
DMS	
-----	-
TOTAL	0

* Starting October 2009, availability is now calculated as a monthly average instead of a monthly median value.

