

Michigan Intelligent Transportation Systems Center

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



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In the Spotlight



According to the National Traffic Incident Management Coalition, for every minute that a freeway travel lane is blocked during a peak travel period, four minutes of travel delay results after the incident is cleared. Time is money. With a 10 percent clear time reduction, the cost of the incident could have been decreased by over 18 percent; if the clear time were reduced by 25 percent, the incident cost could have been decreased by 44 percent. If the MITS Center works collaboratively with other first responder agencies to reduce the time required to clear an incident while maintaining the safety of the first responders on site, a significant cost decrease could be realized.

Incident Delay Model Cost Analysis				
Location	Southbound I-75 @ Sashabaw			
Date	Monday, January 5, 2009			
Type	Freeway Closure Incident - All Three Lanes Closed			
	Duration	Reduction	Cost	Potential
Actual	189 Minutes		\$1,833,468	Cost Savings
Accelerated Clear	171 Minutes	10%	\$1,500,866	\$332,602
Time Scenarios	142 Minutes	25%	\$1,031,326	\$802,142

Compiled by:



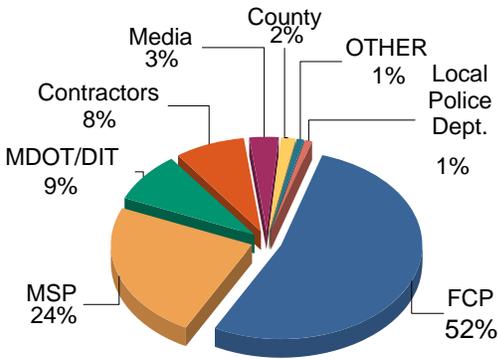
Summary

Data Key

Jan. 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.		3,625
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.		4,378
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.		253,566
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.		763
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: 88% CCTV: 89%

Calls by Type



Total Calls: 4,414

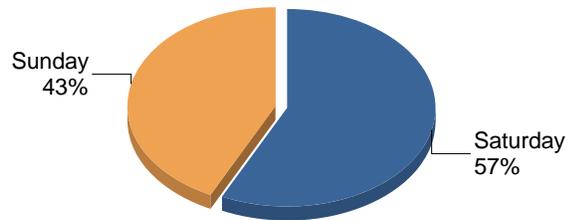
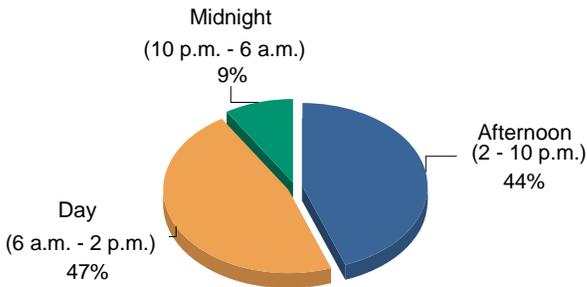
Agency	No. of Calls
FCP	2,340
Contractors	365
City	2
County	72
Federal	0
Fire	0
Local Police Dept.	36
MSP	1,037
Border	0
MDOT/DIT	378
Media	140
Special Events	2
Transit	0
Parking	0
Airport	0
Animals	0
OTHER	42
Total	4,414

Local Police Dept.	Total
St. Clair Shores PD	8
Auburn Hills PD	6
Allen Park PD	5
Troy PD	5
Livonia PD	2
Taylor PD Traffic Bureau	2
Bloomfield Twp. PD	1
Farmington Hills PD	1
Flat Rock PD	1
Harper Woods PD	1
Plymouth Twp. PD	1
Rockwood PD	1
Washtenaw County Sheriff	1
Wayne County Sheriff	1
Total	36

Calls by Shift



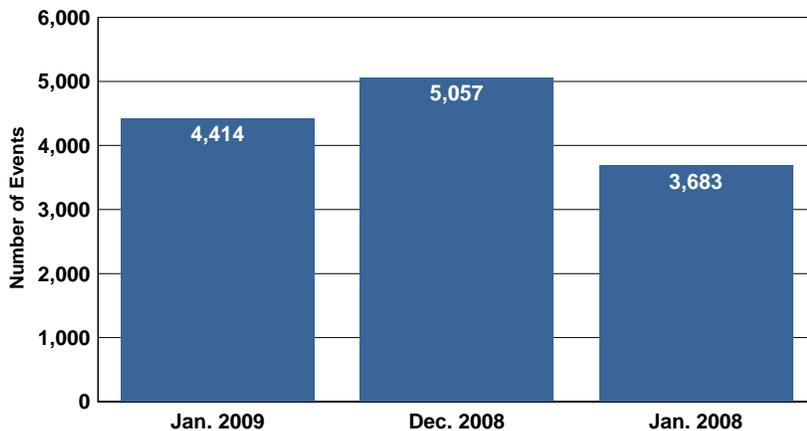
Calls by Weekend Day

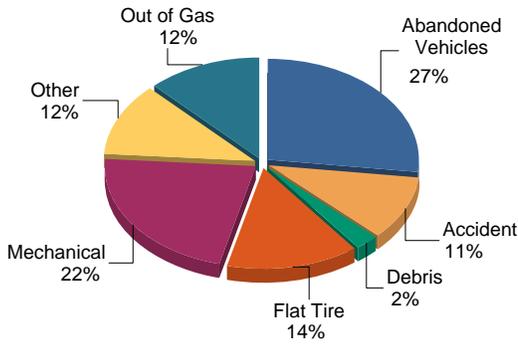


Average Number of Calls per Weekday: 168

Average Number of Calls per Weekend: 159

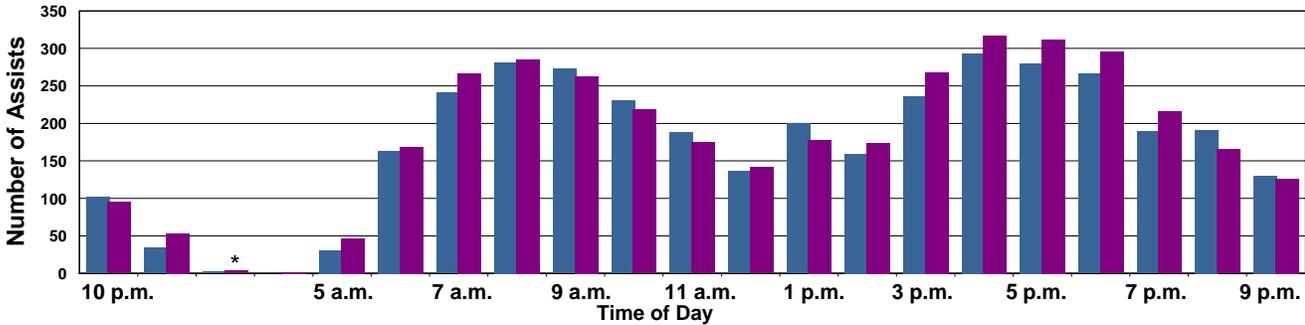
Monthly Event History





January Total: 3,625
2,624 Assists
1,001 Abandoned Vehicle Stops

FCP Assists by Time of Day



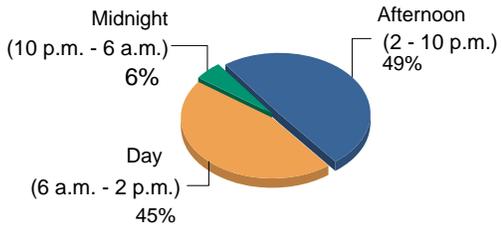
* FCP coverage hours adjusted for Gateway Project, no scheduled coverage from 12 a.m. - 5 a.m.



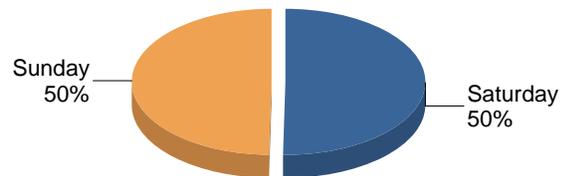
FCP Dispatches by Weekday Shift



FCP Dispatches by Weekend Day

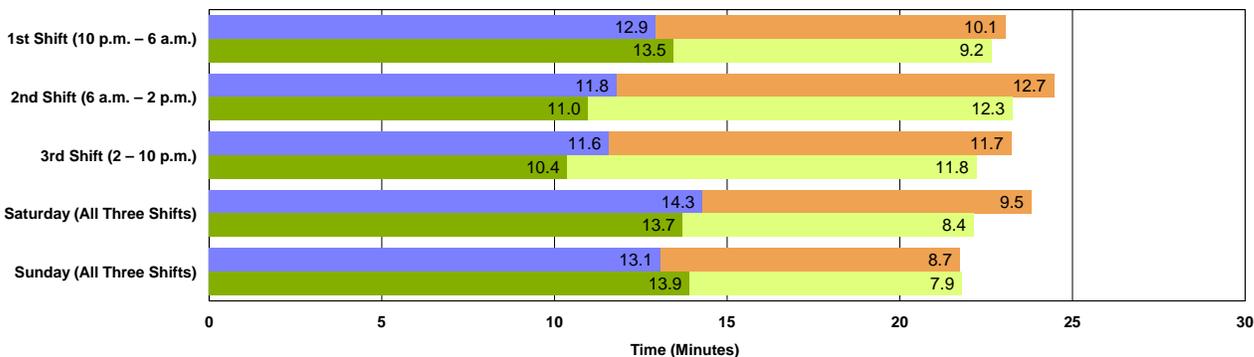


Average Number of Dispatches per Weekday: 31



Average Number of Dispatches per Weekend: 32

FCP Average Service Times





Motorist Quote of the Month:

"Last week on I-75 just north of M-59, my tire went flat. At the exact time I was pulling off the freeway, one of your 'angels' pulled in behind me. I just want you to know what a great resource this patrol is and how much I appreciated it. There I was, five months pregnant and at risk of being late for work, but he saved the day. I offered him a tip to be able to buy him at least a cup of coffee, and he very politely refused it, letting me know he was not able to take tips. He was great, and I really appreciate this service; for the first time I felt my tax dollars weren't being wasted."

Courtesy
Patrol



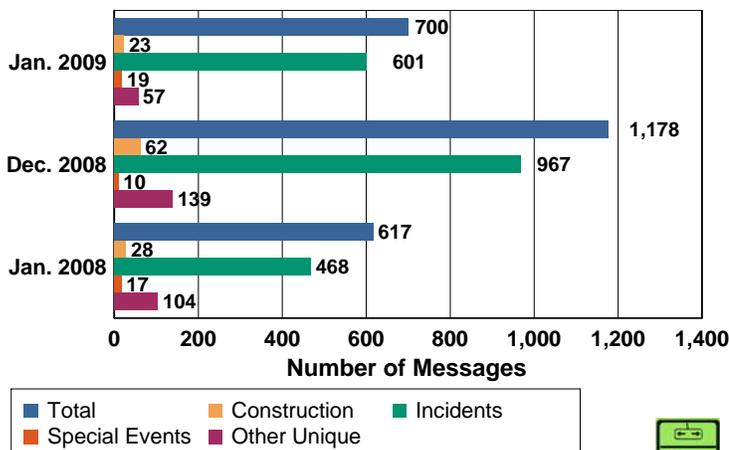
Freeway	Segment	TOTAL ASSISTS (miles)	ASSISTS PER MILE		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)	
			Jan. 2009	FYTD 2009 Avg.	Jan. 2009	FYTD Avg.	Jan. 2009	FYTD Avg.
I-75	Oakland County Line to I-696	37.0	355	354.8	9.6	9.6	19.0	19.3
	I-696 to I-94	8.0	222	231.3	27.8	28.9	9.4	8.2
	I-94 to I-96	5.6	47	59.5	8.4	10.6	9.8	10.7
	I-96 to I-275	37.0	165	156.0	4.5	4.2	18.1	13.2
	Total	87.6	789	801.5	9.0	9.1	14.6	13.3
I-94	Washtenaw County Line to M-39	20.7	344	341.5	16.6	16.5	10.3	10.5
	M-39 to I-75	9.0	244	267.5	27.1	29.7	10.1	10.2
	I-75 to I-696	10.0	222	273.8	22.2	27.4	13.0	10.8
	I-696 to St. Clair County Line	21.0	123	129.8	5.9	6.2	8.3	12.0
	Total	60.7	933	1,012.5	15.4	16.7	11.0	10.6
I-96	Livingston County Line to I-275/I-696	11.0	121	126.3	11.0	11.5	14.3	14.1
	I-275/M-14 to M-39	12.0	143	138.0	11.9	11.5	11.5	10.9
	M-39 to I-75	11.0	243	236.8	22.1	21.5	12.1	10.9
	Total	34.0	507	501.0	14.9	14.7	12.6	11.8
I-275	I-96/I-696 to M-14/I-96	8.0	80	91.3	10.0	11.4	12.9	11.6
	M-14/I-96 to I-94	12.0	138	145.0	11.5	12.1	16.2	12.4
	I-94 to I-75	17.5	70	68.5	4.0	3.9	16.3	15.7
	Total	37.5	288	304.8	7.7	8.1	15.1	12.6
I-696	I-96/I-275 to M-10	9.3	144	130.8	15.5	14.1	11.0	11.7
	M-10 to I-75	9.0	131	137.0	14.6	15.2	9.7	9.7
	I-75 to I-94	10.4	170	205.3	16.3	19.7	12.1	10.1
	Total	28.7	445	473.0	15.5	16.5	10.9	10.5
I-375		1.2	2	6.5	1.7	5.4	7.5	6.0
M-10 (Lodge)		17.9	280	308.0	15.6	17.2	10.3	9.4
M-14		6.4	55	51.8	8.6	8.1	13.8	12.2
M-39 (Southfield)		14.2	208	197.3	14.6	13.9	11.9	12.3
M-5 (Grand River)		10.3	62	45.0	6.0	4.4	12.4	12.1
M-8 (Davison)		2.2	56	64.3	25.5	29.2	10.4	10.0
Total		300.7	3,625	3,765.5				

Most Utilized DMS

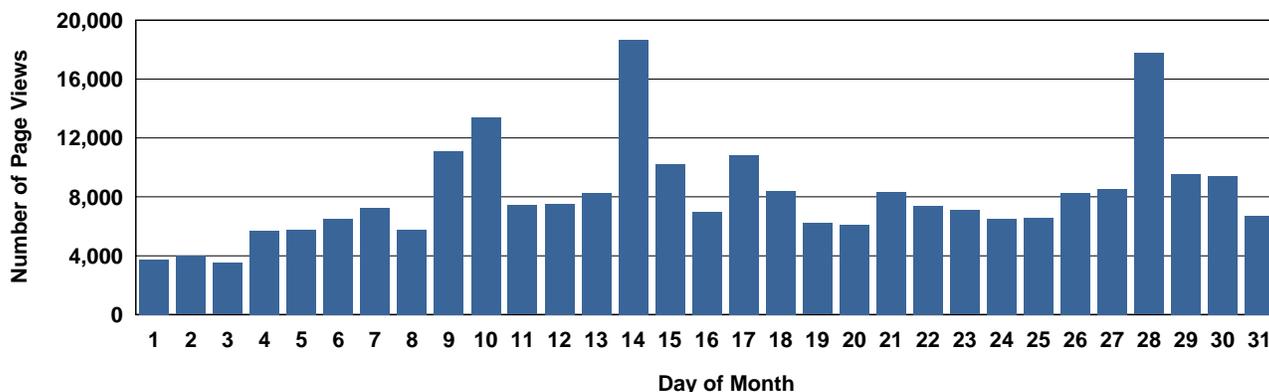


1. I-696 WB at Ryan
2. I-96 EB at Beck
3. I-696 EB at Manistee
4. I-94 EB at Second
5. I-94 WB at Burns

Unique DMS Messages by Type



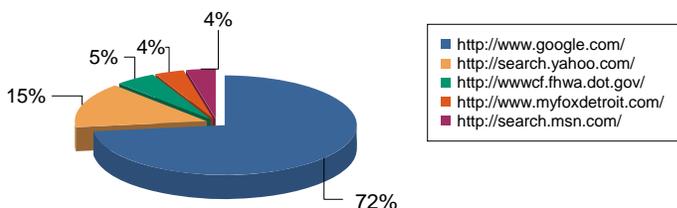
Mi Drive Web Site Daily Page Views



Top 5 Recurring Site Requests to Mi Drive Web Site



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



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

Does not include Michigan.gov requests.

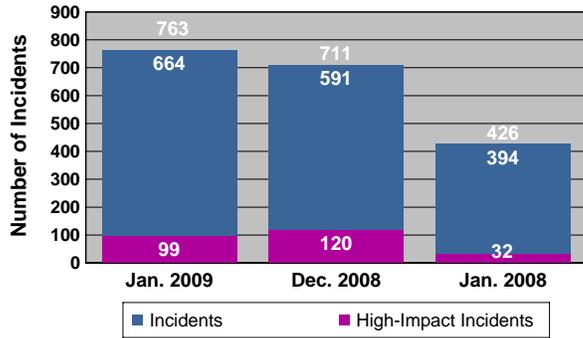
Incident Communication Accuracy



Weekend DMS Snapshot Review	Jan. 2009	Dec. 2008	Jan. 2008
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Jan. 2009	Dec. 2008	Jan. 2008
All High-Impact Messages	100%	100%	94%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	100%	93%
Ramp Closure Messages	100%	100%	80%
Other Communication	Jan. 2009	Dec. 2008	Jan. 2008
Advisory Text Messages	94%	99%	97%
Web Site Incident Postings	94%	97%	100%



Total Number of Incidents



High-Impact Incident Activity



	Jan. 2009	Dec. 2008	Jan. 2008
Freeway Closures All Lanes Closed	39	35	13
Lane Closures Only One Lane Open	46	63	14
Ramp Closures Freeway to Freeway	14	22	5
Total	99	120	32

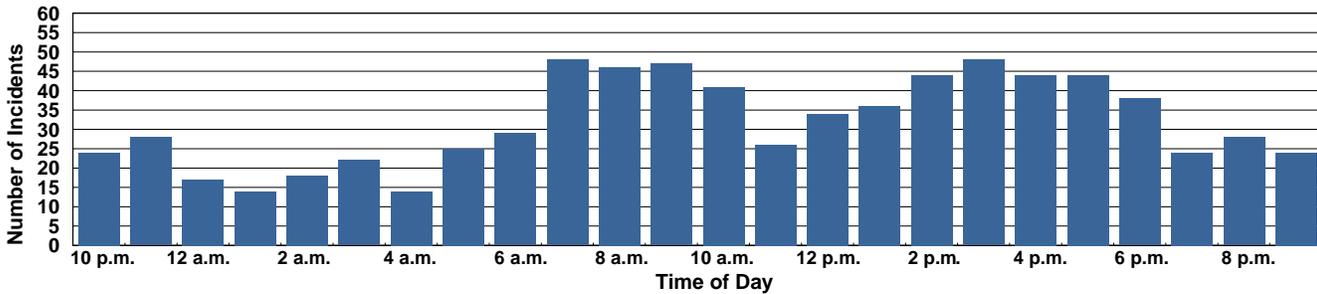
High-impact incidents account for **13%** of the total incidents in January.

Total Incidents by Roadway

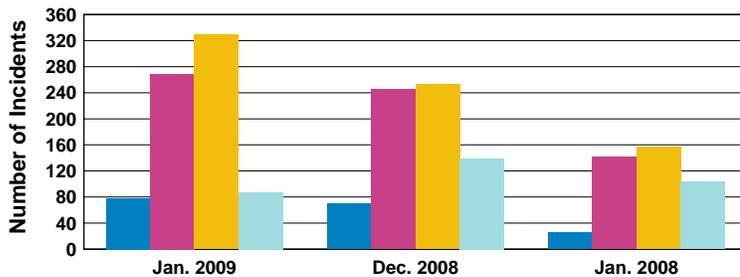


Freeway	Jan. 2009	Dec. 2008	Jan. 2008
I-75 (CHRYSLER/FISHER)	177	143	123
I-94 (FORD)	163	171	91
I-696 (REUTHER)	144	116	84
I-96 (JEFFRIES)	70	80	38
M-10 (LODGE)	49	49	22
M-39 (SOUTHFIELD)	86	83	36
I-275	74	68	32
I-375	0	1	0
Total	763	711	426

Total Incidents per Hour

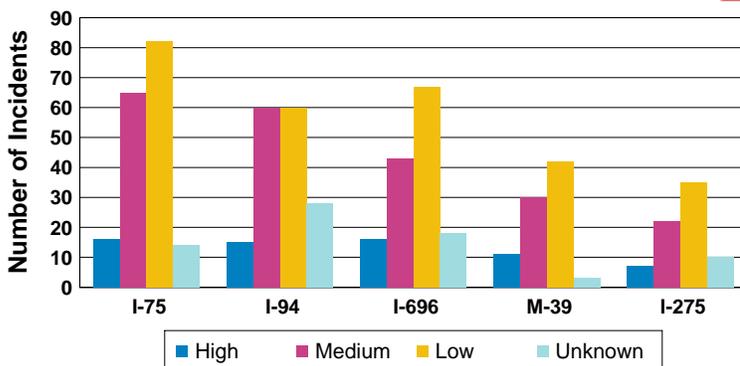


Total Incident Severity/Duration by Month

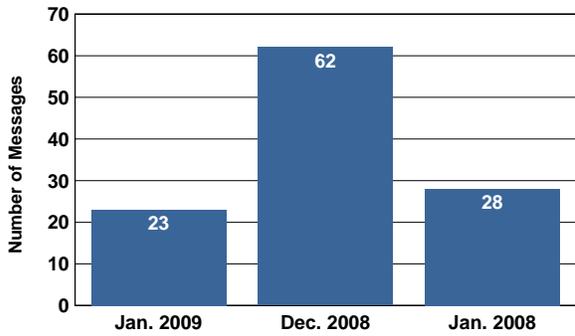


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between 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

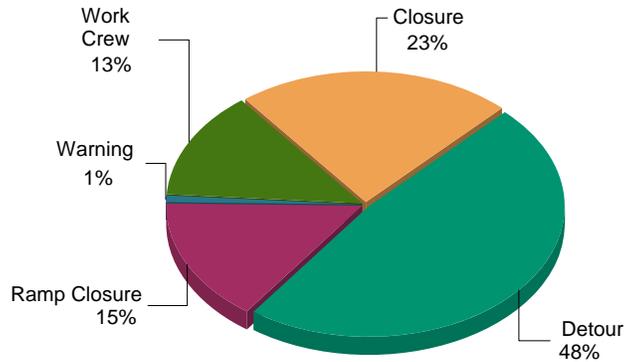
Severity/Duration by Top 5 Freeways



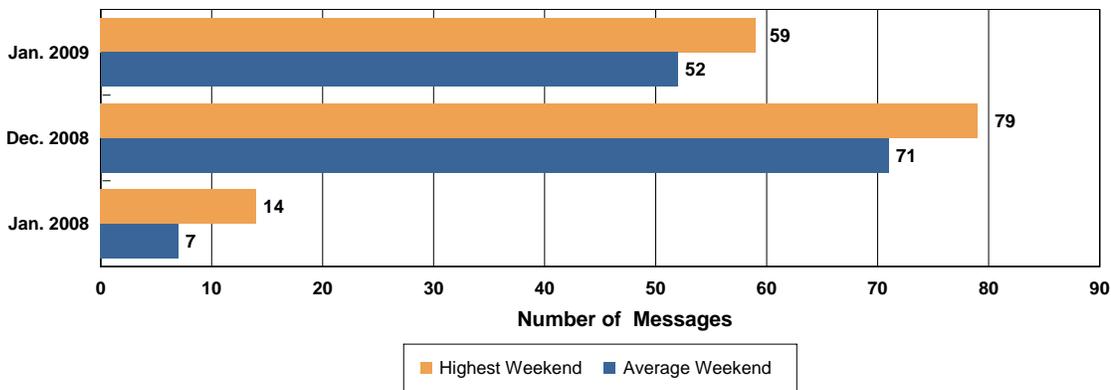
Unique Construction Messages



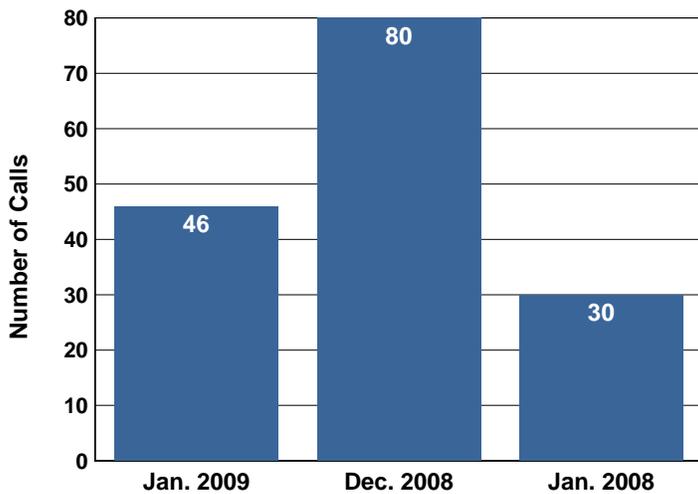
Highest Weekend Unique Construction Messages



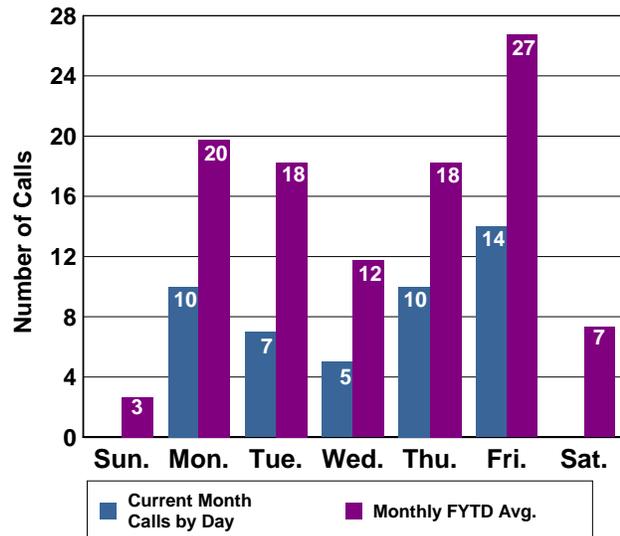
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



Construction Activity



DMS Availability

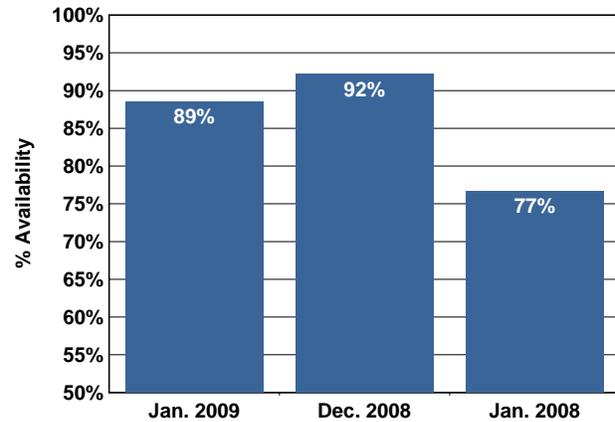
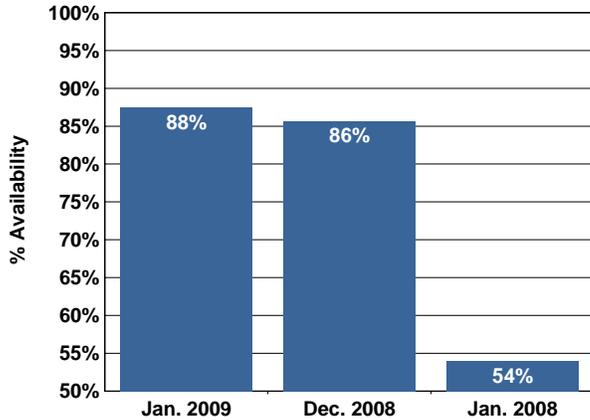


	Jan. 2009	Dec. 2008	Jan. 2008
Available	63	54	34
Not Available	9	9	29
Total	72	63	63

CCTV Camera Availability



	Jan. 2009	Dec. 2008	Jan. 2008
Available	147	153	127
Not Available	19	13	39
Total	166	166	166



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
I-696 @ Telegraph	Replaced dual cameras with single camera
MITS Center Parking Lot	Replaced dual cameras with single camera
TOTAL	2
DMS	
Westbound I-94 @ Beech Daly	Engineered new communications
Eastbound I-94 @ Beech Daly	Engineered new communications
Southbound I-75 @ 13 Mille	Installed a new radio for communications
TOTAL	3

