Utah Department of Transportation
Traffic Operations Center
January 2008
Monthly Report

2060 South 2760 West Salt Lake City, Utah 84104 801-887-3710 www.CommuterLink.Utah.Gov

TOC Mission

•To Support UDOT and the Department of Public Safety in Improving Highway Safety.

•To Help Provide Reliable and Efficient Travel.

•To Provide Useful and Timely Real-time Traffic Information.

•To Work Together with Other Government Agencies to Serve the Public.

•To Provide Excellent Customer Service.

Field Devices Summary

Freeway Cameras	215
Surface Street Cameras	296
Dial-up Cameras	6
Total Cameras	517
Freeway VMS	55
Surface VMS	30
Portable VMS	16
Total VMS	96
HAR (6 permanent/11 portable)	17
TMS	260
RWIS	50
Traffic Signals Connected	1338
Connected Ramp Meters	28

Operations Summary

VMS Messages Displayed (incl. Travel Time)	9,897
Signal Timing Calls	60
Signal Maintenance Calls	130
New Work Orders	324
Incident Responses	1113
Website Visitor Sessions (estimated)	389,794
511 Calls	148,540
Weather Desk Calls	1101
CommuterLink Questions	19

Employee of the Month

Congratulations to our Employee of the Month for January Brad Cameron

TOC Activities

TOC Community Art Wall

Administration Highlights

Administration – Liz Olschewski

We would like to congratulate Brad Cameron for receiving the January Employee of the Month. Early 2007 the ITS Section experienced a high turnover in personnel leaving Brad Cameron as the only remaining seasoned Project Manager. At certain points in time he was the Statewide ITS Project Manager. He spent many weeks while PM jobs were being filled covering the duties and responsibilities of the vacated PM positions. Once the positions were filled he willingly participated in the orientation and educating. Brad is always willing to help. Most recently he volunteered on two separate occasions to spend additional, after normal working hours, time in promoting/ PR activities for CommuterLink. Brad traveled to the Davis County Transportation Expo and the Utah County Transportation Expo, set-up, manned, interacted with the traveling public and took-down the CommuterLink Booth. He is a teammate you can count on.

The Traffic Operations Center continually displays different artists creations on our community art wall. Of late the Traffic Operations Center has been featuring artists from the Utah Watercolor Society. Barbara Glick is the coordinator for the Utah Watercolor Society. The art wall has featured artists creations with the theme of "Roadside Memories" and will soon display the theme of "Technology and Visual Art Intermingled " which will begin in April and run through June. Please stop by to enjoy these wonderful pieces of art.

Operations Highlights

Control Room Operations – Chris Siavrakas

"Life Elevated" is the name our New Year's Resolution which was to finally implement our new Traveler Information (TI) program. Troy Hyer has taken the challenge to chart new territory to establish new expanded efforts to acquire information from our government, business, and recreation partners and to improve the reliability, timeliness and quality of Traveler Information. We hope to strengthen the decision making ability for travelers and allow them better opportunity to get more out of their life in Utah. Every informed traveler that avoids a dangerous or congested incident gets double credit in improving the quality of life for Utah travelers, first for themselves by not having to endure the impacts, and second, by reducing the impact to those that cannot choose an alternate by not being in and contributing to the congestion. To assist Troy is this effort, Vicki Trapane and Cathy Pappas have enthusiastically been shifted from the operator team to the TI team. We have long recognized the need to give our travelers more information and have coupled this with noticing how electronics have vastly improved information transfer and we will work to utilize those electronic mediums to their fullest.

Signal Systems – Mark Taylor

Weather Desk – Ralph Patterson

The Weather Desk handled another record breaking month for Phone calls (both received and call outs). This was a record breaking amount for any previous January and second overall for any month. Strong Work Weather Desk!

Ralph attended the American Meteorological Society's 86th annual meeting in New Orleans, where he organized and taught an all day course titled Transportation Meteorology, as well as took part in the AMS/ITSA Transportation Committee meetings where he represents the State Dot perspective...

The Dog Valley RWIS site, damaged by the Milford Fire this last summer, was rebuilt as well as two newly commissioned RWIS sites; Parley's Canyon (Quarry Site) and at the Wendover Port of Entry...

All UDOT's RWIS sites can be at http://www.nw-weathernet.com/udot/maintenance/udot_maintenance_map.html

ITS Deployment Section

ITS Standards and Specifications:

The 2008 edition was distributed to the TOC Project Managers. A meeting was held to finalize the design criteria for the Cantilever VMS structure. A mono-tube was selected. TransCore will provide drawings in February to be incorporated in the I-15 traveler information projects in Region 4.

Procurement:

UDOT Procurement solicited the RFP for 354 ITS cabinet and received bids from (2) vendors). Gades Sales and AM Signal responded. One 334 C cabinet is scheduled to arrive near the end of the month. S/2 -Transcore – Bids were received for the TS/2 cabinets.

Intersection Video Detection - Transcore - Vendor demonstrations were scheduled for February 13, 2008.Wireless RFI – The RFP was still under modification during January. Discussions were taking place on whether to solicit RFPs or use alternate procurement methods such as Procurement - On Line when needed. It was determined that the TOC would contract the work long term.

Fiber Optic Cable Service Specification: Work continued on modifying the pay item descriptions to meet the current needs of the Traffic Ops Center.The RWIS contract with Campbell Scientic Inc. was still in the renewal process with more justifications for price increases required.

Region 4

TransCore has begun working on the connection from St. George City to St. George DPS. Included in this work will be 5 CCTV cameras at various locations. This work will be the start of an overall communication coordination effort for the area. Americom is doing a fine job with the Cedar City fiber interconnect and should be completing their work 2/28/08. Siemens will be doing the integration and have been hired.

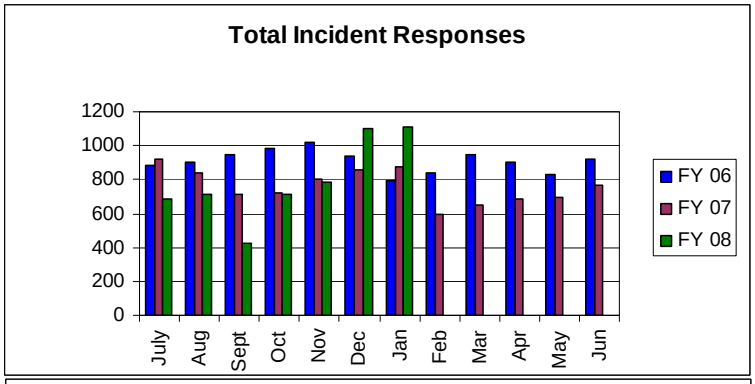
The SR-6 HAR's have been installed and commissioned and the CCTV's are all up and running. They have been integrated into the Price DPS, Colton Maintenance Shed and Spanish Fork Maintenance Shed. The Colton Shed Forman is very pleased with the new cameras.

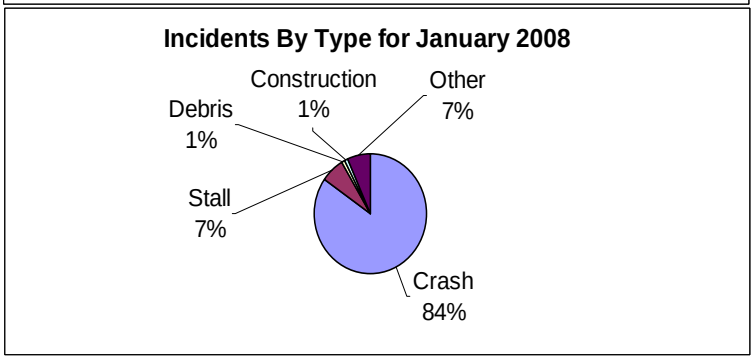
The I-15 milepost 0 to 10 project has been advertised and a Pre-Construction Meeting in Feb. This is a full build out from the Arizona State line to Exit 10 in the St. George area.

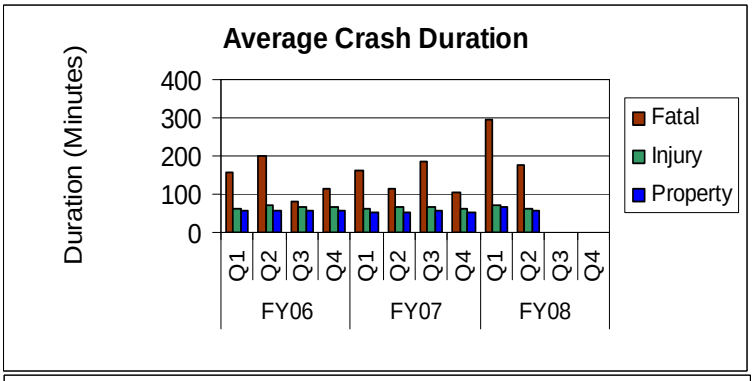
Acronyms

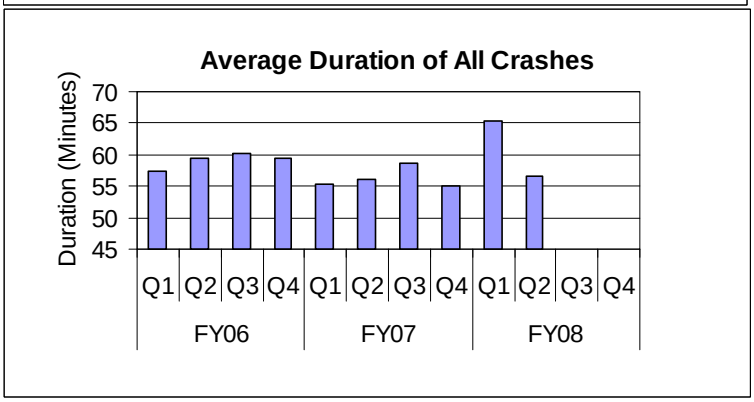
CCTV	Closed Circuit Television	I2TMS	Integrated Interagency Traffic Management System
RWIS	Road-Weather Information System	TOC	Traffic Operations Center
DPS	Department of Public Safety	VMS	Variable Message Sign
TMS	Traffic Monitoring Station	ITS	Intelligent Transportation System
HAR	Highway Advisory Radio	TMD	Traffic Management Division

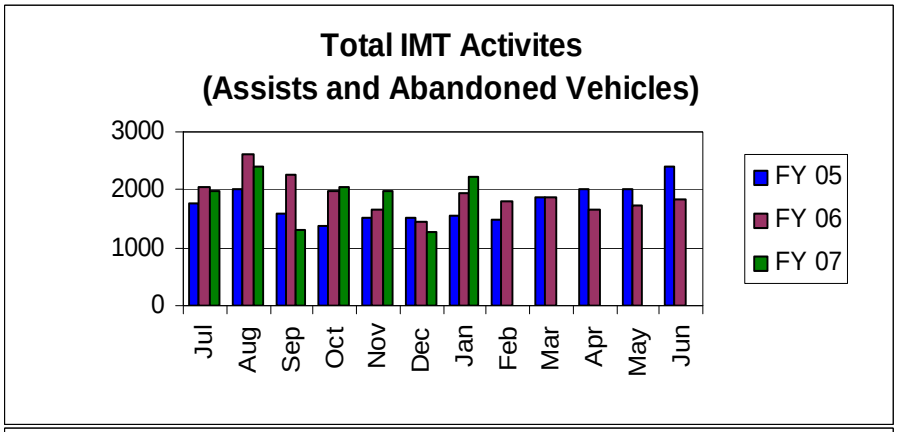
An incident response occurs each time an incident is recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Crashes are separated into three subcategories: property damage, personal injury, and fatal. Each time an incident is created, information is sent to the 511 system, the website, and to the public through email alerts. An incident remains active until it has been completely cleared from the roadway.

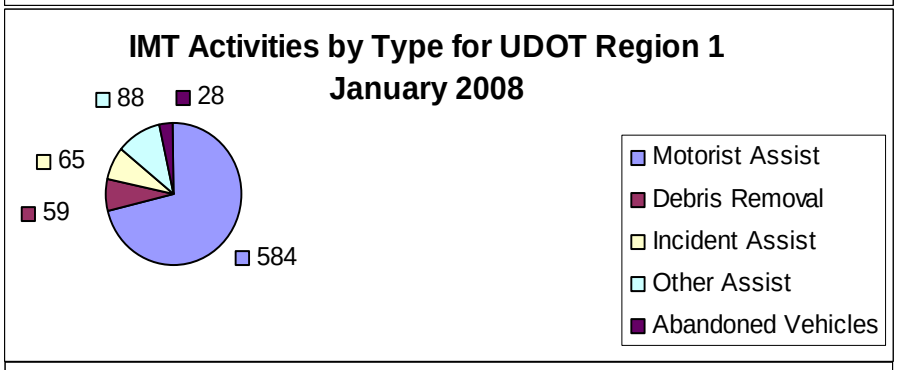


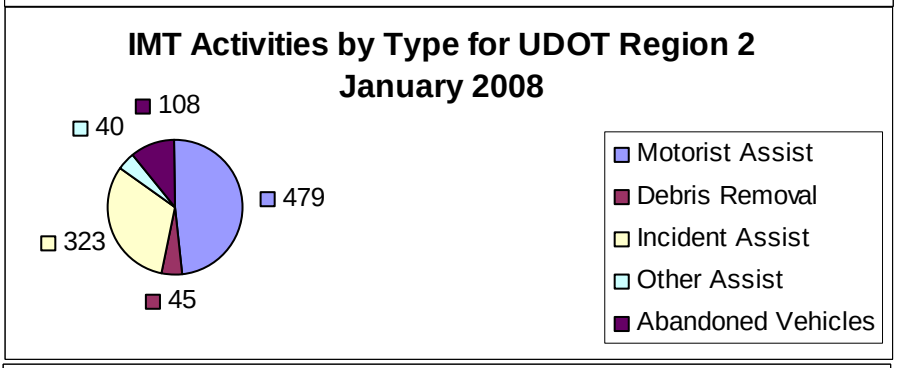


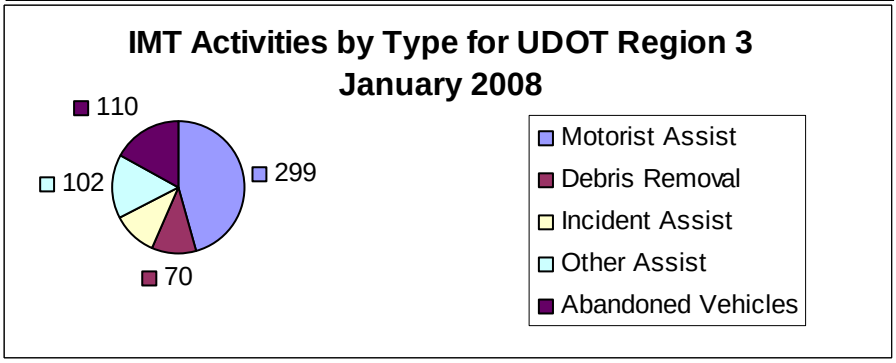





Total IMT Activites
(Assists and Abandoned Vehicles)
3000
2000
1000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 05
FY 06
FY 07


IMT Activities by Type for UDOT Region 1
January 2008
88
28
65
59
584
Motorist Assist
Debris Removal
Incident Assist
Other Assist
Abandoned Vehicles


IMT Activities by Type for UDOT Region 2
January 2008
108
40
479
323
45
Motorist Assist
Debris Removal
Incident Assist
Other Assist
Abandoned Vehicles


IMT Activities by Type for UDOT Region 3
January 2008
110
102
299
70
Motorist Assist
Debris Removal
Incident Assist
Other Assist
Abandoned Vehicles

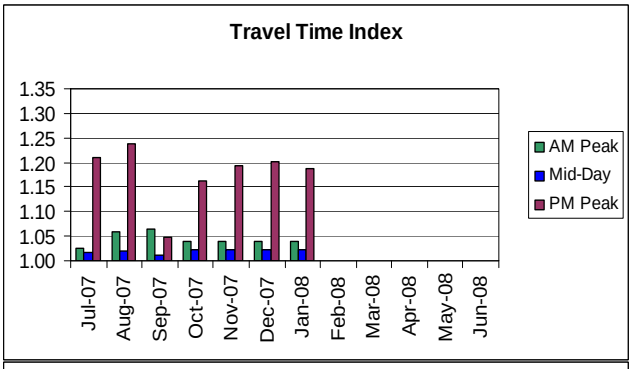
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

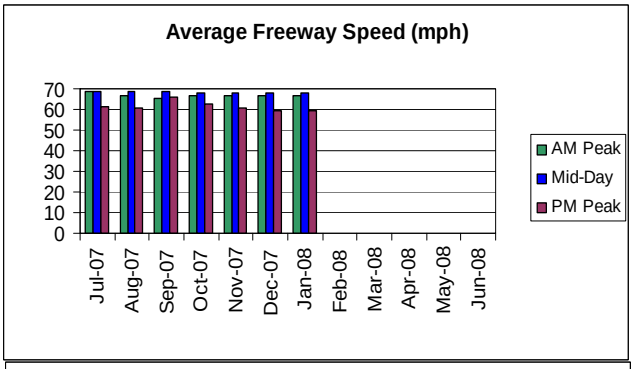
Travel Time Index: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of 1.0 represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

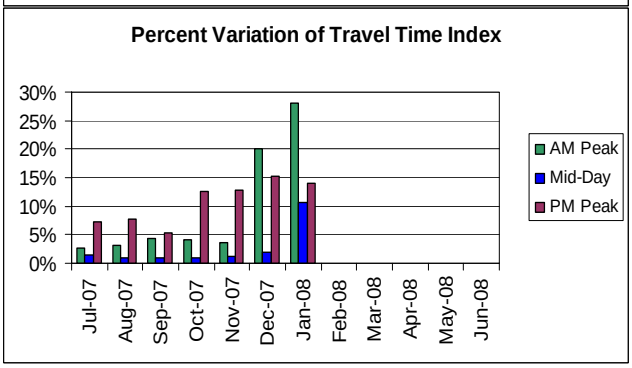
Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time Index changes from day-to-day.

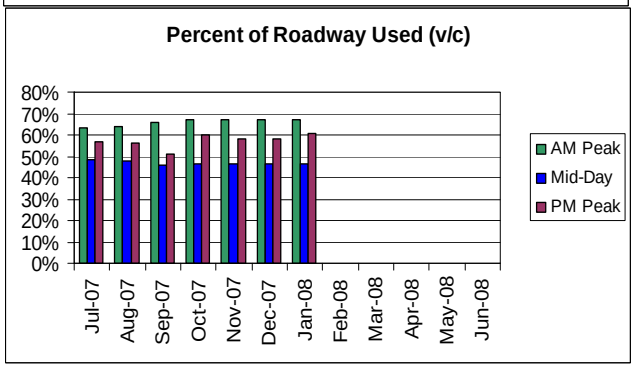
Average Freeway Speed: The freeway speed is weighted by volume.

Percent of Roadway Used: The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).







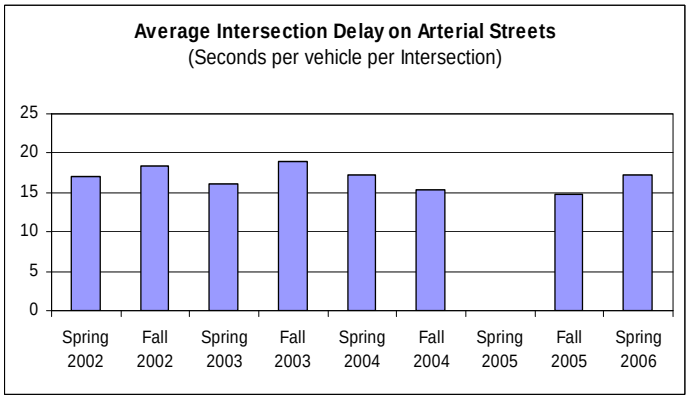


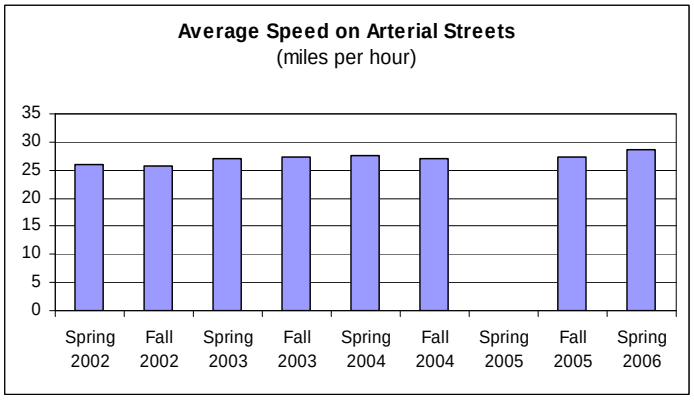
Segment	Period	TTI
I-15 NB from 600 N to I-215 W	PM Peak	2.81
I-15 SB from I-215 W to 600 N	AM Peak	2.73
I-15 NB from I-215 S to 4500 S	AM Peak	2.56
I-15 SB from 4500 S to I-215 S	AM Peak	2.4
I-215 S WB from Knudsen's Corner to I-15	AM Peak	2.31

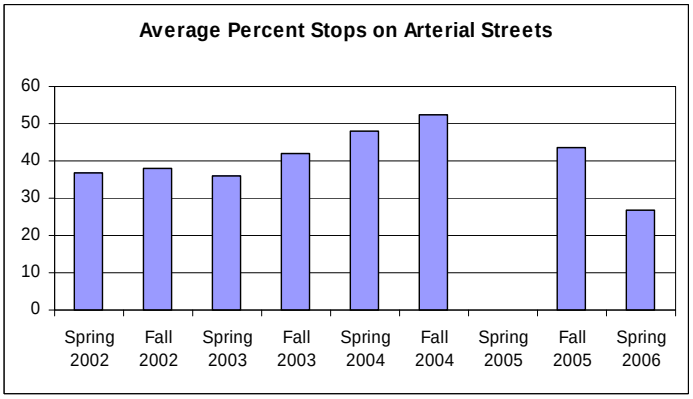
Surface Street Traffic Level of Service

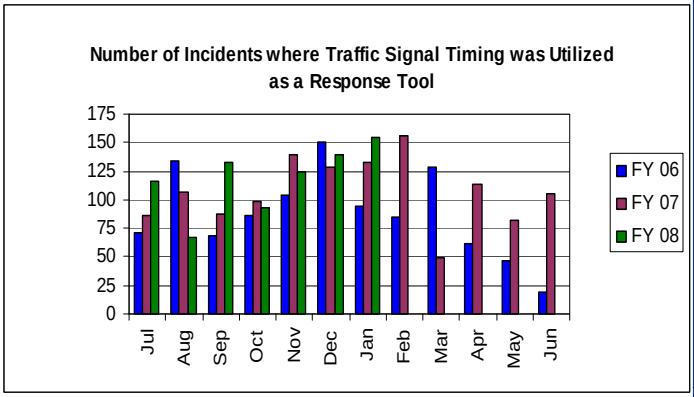
The surface street traffic statistics are generated through a series of Travel Time measurements. These are conducted using a special equipped vehicle which measures the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Traffic Systems Section gathers these measurements from Regions 1, 2, 3, and 4 twice each year. The chart in the lower right hand corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help relieve excessive congestion.

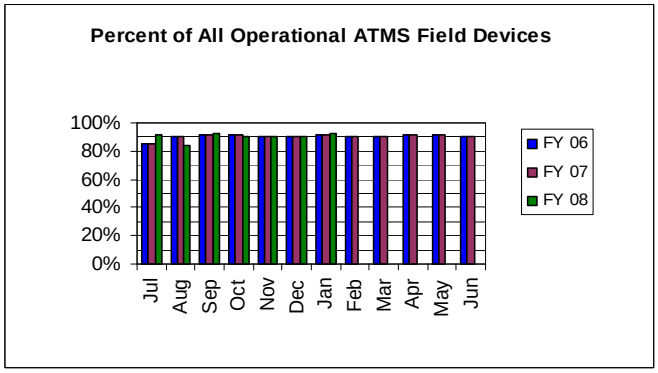
The following charts illustrate data gathered during semi-annual timing runs up to Spring of 2006. The following months will show data gathered for each of the four UDOT Regions.










Percent of All Operational ATMS Field Devices
100%
80%
60%
40%
20%
0%
Jul
Aug
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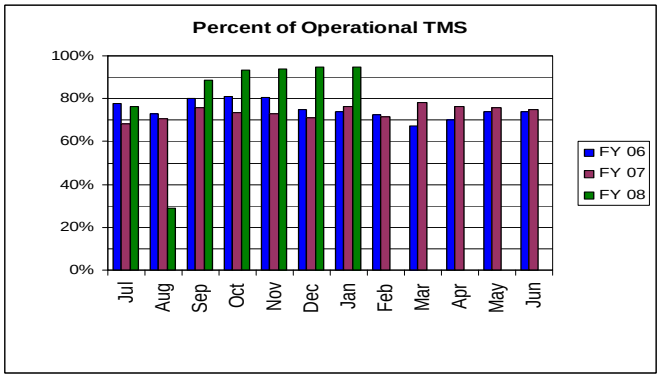
FY 06
FY 07
FY 08


Percent of Operational TMS
100%
80%
60%
40%
20%
0%
Jul
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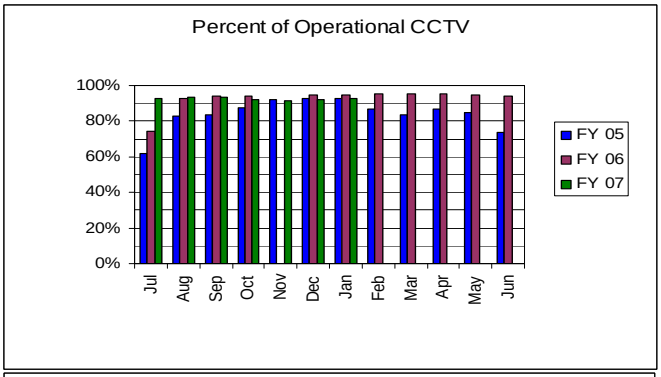
FY 06
FY 07
FY 08


Percent of Operational CCTV
100%
80%
60%
40%
20%
0%
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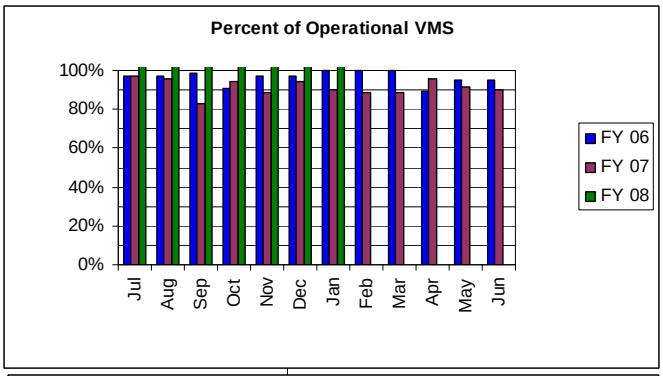
FY 05
FY 06
FY 07


Percent of Operational VMS
100%
80%
60%
40%
20%
0%
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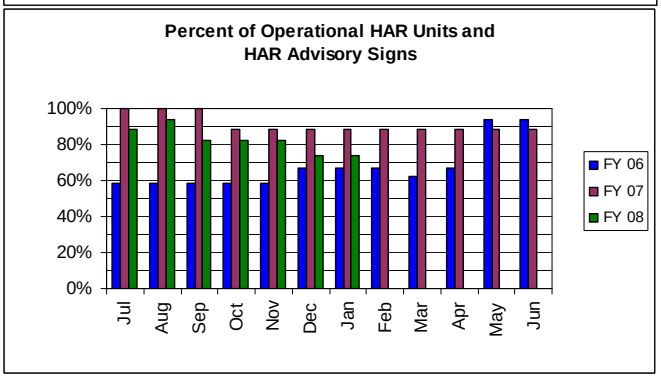
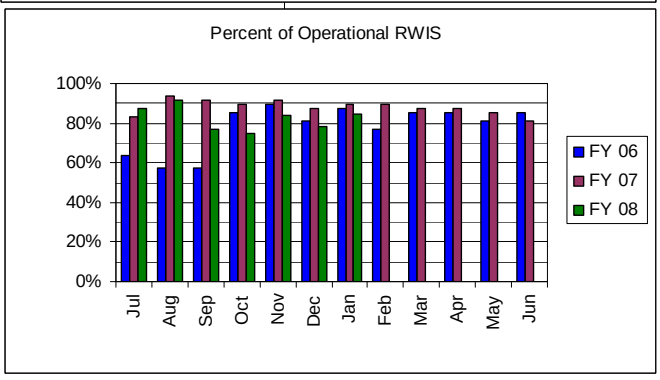
FY 06
FY 07
FY 08


Percent of Operational HAR Units and
HAR Advisory Signs
100%
80%
60%
40%
20%
0%
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 06
FY 07
FY 08


Percent of Operational RWIS
100%
80%
60%
40%
20%
0%
Jul
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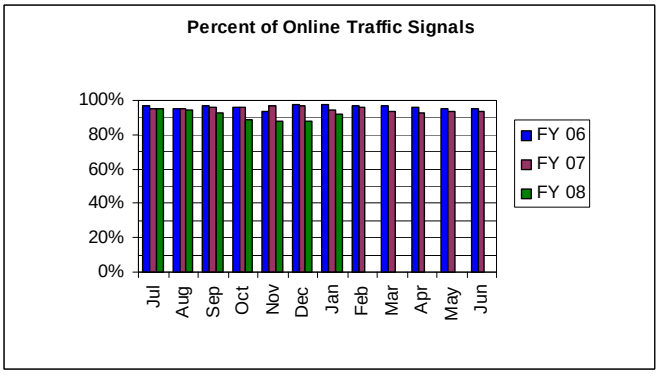
FY 06
FY 07
FY 08


Percent of Online Traffic Signals
100%
80%
60%
40%
20%
0%
Jul
Aug
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Nov
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Jan
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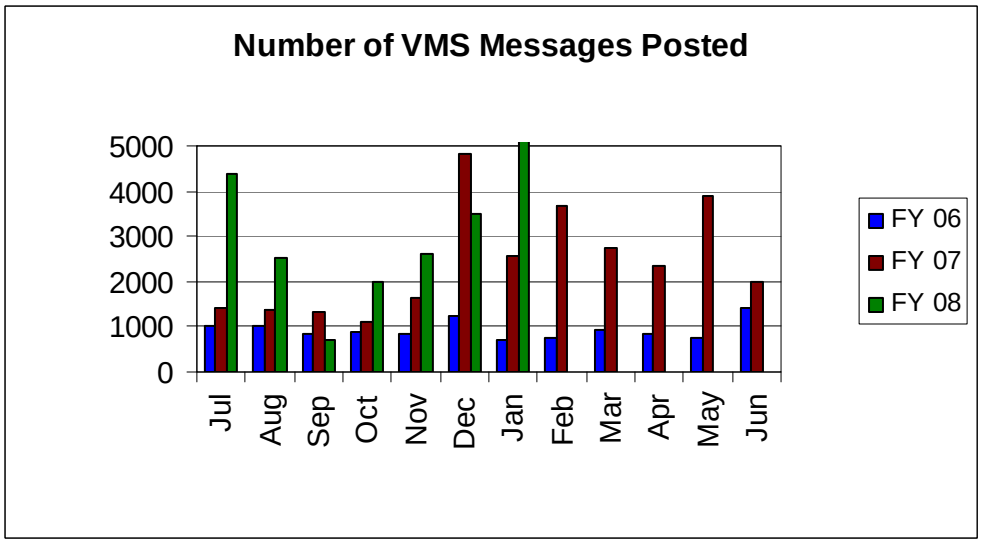
Apr
May
Jun
FY 06
FY 07
FY 08


Number of VMS Messages Posted
5000
4000
3000
2000
1000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
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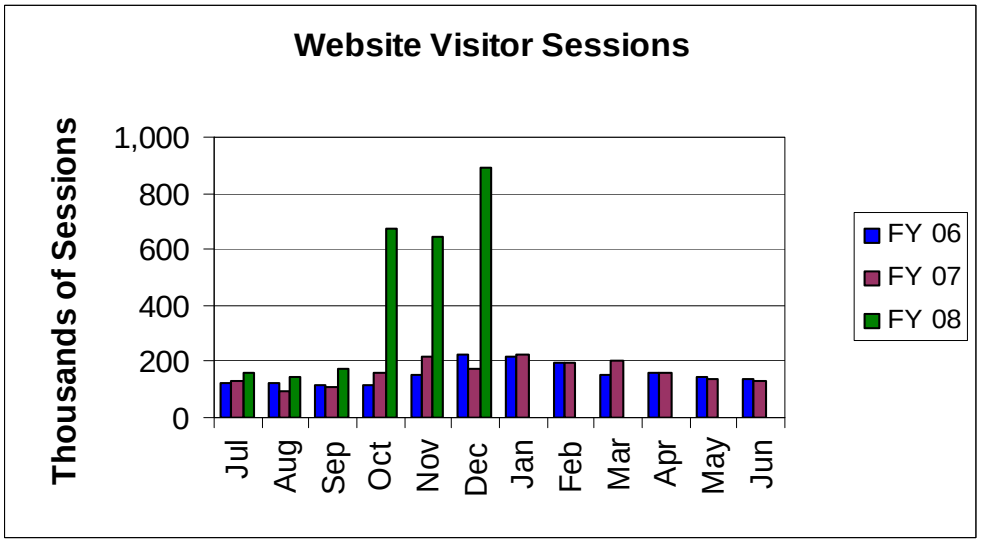
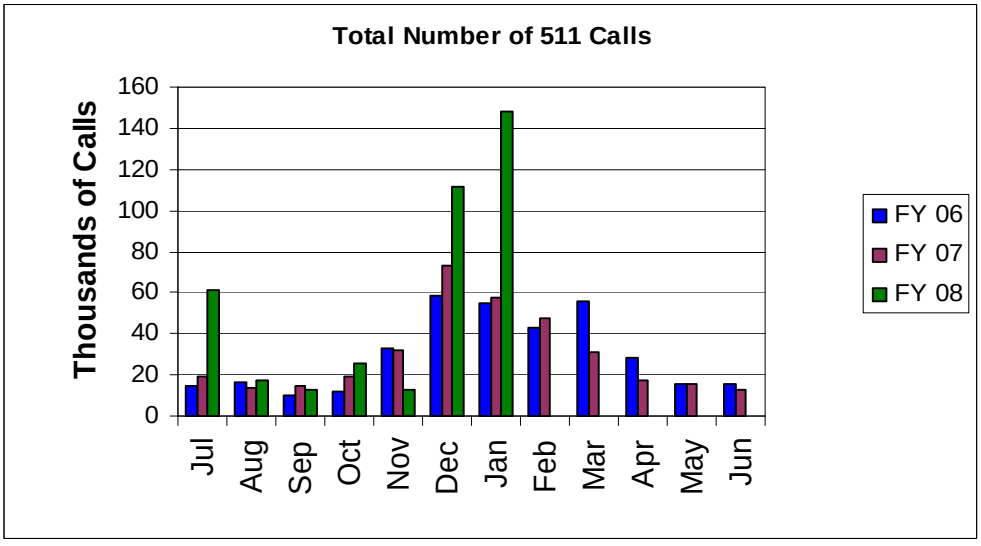
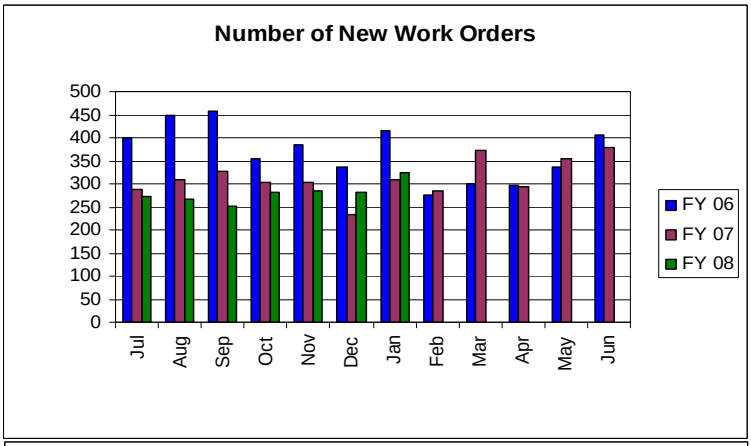
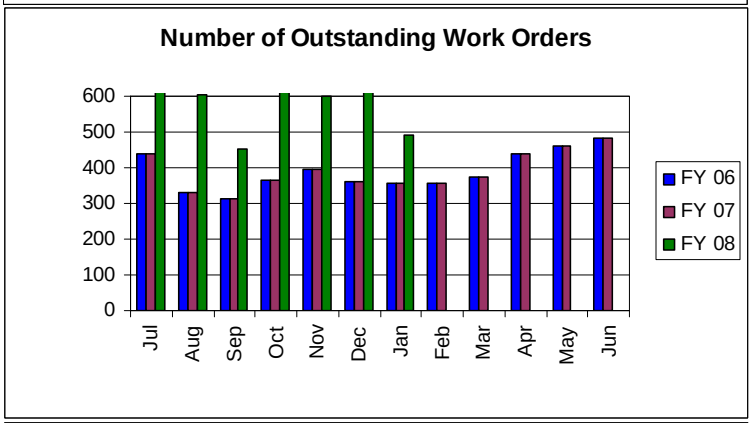
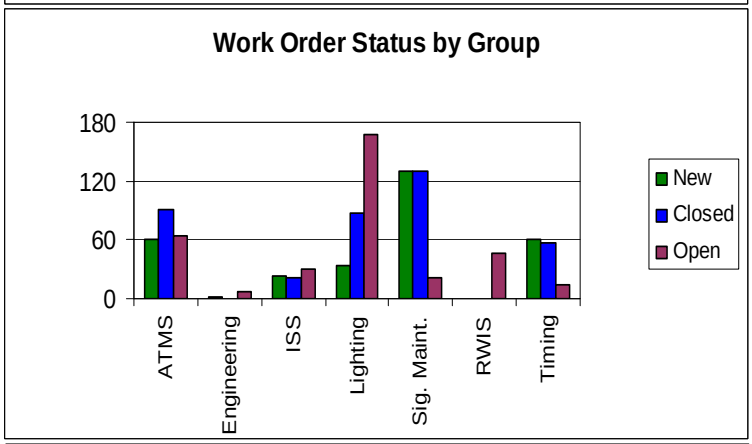
Mar
Apr
May
Jun
FY 06
FY 07
FY 08

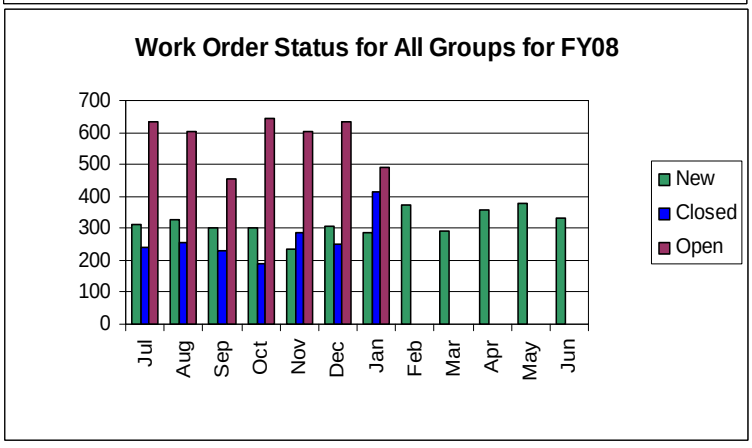

Website Visitor Sessions
Thousands of Sessions
1,000
800
600
400
200
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 06
FY 07
FY 08


Total Number of 511 Calls
Thousands of Calls
160
140
120
100
80
60
40
20
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 06
FY 07
FY 08


Number of New Work Orders
500
450
400
350
300
250
200
150
100
50
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 06
FY 07
FY 08


Number of Outstanding Work Orders
600
500
400
300
200
100
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
FY 06
FY 07
FY 08


Work Order Status by Group
180
120
60
0
ATMS
Engineering
ISS
Lighting
Sig. Maint.
RWIS
Timing
New
Closed
Open


Work Order Status for All Groups for FY08
700
600
500
400
300
200
100
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
New
Closed
Open