

# UTAH DEPARTMENT OF TRANSPORTATION

## TRAFFIC OPERATIONS CENTER

### MONTHLY REPORT **JANUARY 2004**

2060 South 2760 West, Salt Lake City, UT 84104  
 Phone: 887-3700 Fax: 887-3797 [commuterlink.utah.gov](http://commuterlink.utah.gov)



### Field Devices Summary

Freeway Closed Circuit Television (CCTV)	171
Surface Street CCTV	32
Dial-up CCTV	35
<b>Total CCTV</b>	<b>238</b>
Freeway VMS	43
Surface Street VMS	17
Portable VMS	2
<b>Total VMS</b>	<b>62</b>
HAR (6 deployed, 5 portable units)	11
TMS	243
RWIS	41
Connected Traffic Signals	623
Connected Ramp Meters	23



Utah Governor Olene Walker, Dave Kinnecom, and Kim Christensen

### Operations Summary

VMS Messages Displayed	214
Signal Timing Calls	37
Signal Maintenance Calls	275
New Work Orders	383
Incident Responses	503
Website Visitor Sessions	126,126
511 Calls	89,469
Email Alerts Sent	181
Weather Desk Calls	681
CommuterLink Questions	46

### KUDOS!

#### Traffic Management Division Receives Utah Quality Service Award

"These employees labor day and night to improve safety and to maintain free flowing traffic. From monitoring traffic cameras to coordinating signals, UDOT's employees work behind the scenes to get you to your destination as efficiently as possible."

-Utah Governor Olene Walker

### TOC Employee of the Month



Joseph Clasby – DPS Supervisor

### TOC Mission

1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
2. To Help Provide Reliable and Efficient Travel.
3. To Provide Useful and Timely Real-time Traffic Information.
4. To Work Together with Other Government Agencies to Serve the Public.
5. To Provide Excellent Customer Service.

# ACTIVITY HIGHLIGHTS

## TOC Activities

### *This Month*

1. The Traffic Management Division received the Utah Quality Service Award. The Quality Service Award recognizes groups within state agencies that create customer driven government. The key to the award is a long-term commitment to excellence in customer service by providing services to the public in a faster, better, and more cost-effective manner. Governor Olene Walker presented this award to Executive Director John Njord who said, "Our Traffic Management Team is an outstanding example of the high quality people we have working here. It is gratifying to have their hard work recognized." Some of the work that the Team was recognized for included: Updating and maintaining the 511-travel information phone line and the CommuterLink Web site, monitoring 230 CommuterLink traffic cameras, managing more than 600 traffic signals, and providing information to the Department of Public Safety to assist in managing more than 6,000 traffic incidents a year.



2. Bryan Chamberlain gave a presentation at an Institute of Traffic Engineers (ITE) Conference. He presented the current status of the state 511 system. Utah's 511 system is one of 21 active systems nationwide. The TOC began to use the 511 system in December of 2001. This was the third system in the nation to be launched. Utah's system was also the first to utilize voice activation. Nearly 13 million calls have been received by 511. The first month to exceed one million calls was in December of 2003. The goal is to reach more than half the nation's population by 2005. For more information about 511 visit <http://www.deploy511.org>.

3. Exemplary Employee of the Year for the TOC and ITS Divisions were announced in January. James Dzatlik (J.T.) from the TOC Division and Craig Wright from the ITS Division were recognized as Exemplary Employees of the Year. J.T. is an Electrical Technical Specialist and works with the ATMS Maintenance Crew. Craig is an Electrical Technical Specialist as well, and works with the installation and maintenance of the fiber optic network.



James Dzatlik



Craig Wright

## ATMS Improvement and Expansion Activities

The following is a list of many of the projects that have either been completed, or are currently underway:

### Region 1:

- IP equipment installation continued in the Ogden area. In addition to the equipment that was deployed in the field, the Region 1 Headquarters received an *i2TMS* server as well as new uninterrupted power supplies. This server is available to *i2TMS* workstations in both the Region Headquarters as well as the Traffic Signals Lab. Once the final segment of fiber is installed, from State Street in Farmington to the Legacy Hub, engineers at the TOC will have access to this new *i2TMS* server.

### Region 2:

- IP equipment was installed in traffic signal cabinets along the Bangerter Highway Corridor, as well as along nearby arterial streets. Electronics equipment in Hub 10 was upgraded such that they were compatible with the new IP architecture. In addition to the IP equipment that was installed, 10 cameras were added to the Bangerter Highway Corridor on the new Video over Ethernet architecture.
- The new RWIS Server has been configured, and was installed in the TOC computer room. This new server is now archiving data, which enables meteorologists to study weather trends. These new trends will help to provide better forecasts, which will allow road crews to prepare better for snow removal efforts.
- The Big Cottonwood “Chains or 4X4 Required” Sign Project has been completed. This project included the installation of four static signs with solar powered flashers that are activated remotely from the TOC. All testing is complete and signs have been turned over to the Department. One additional sign will be installed in the spring at Cardiff.

### Region 3:

- UDOT publicly announced the expansion of CommuterLink into Utah County. Several local news stations and UDOT officials attended this media event. The announcement came at the end of the Overlay and Expansion Project on I-15 from the Point of the Mountain to the north Lehi interchange. This project included the installation of ten CCTV, seven TMS, and one VMS. The Region also installed a kiosk in their lobby to expose visitors to the CommuterLink website and 511 system.
- Full design plans for the 10600 South Widening Project were completed and submitted to UDOT in preparation for advertisement of the project this spring.



CommuterLink Kiosk in Region 1 Lobby

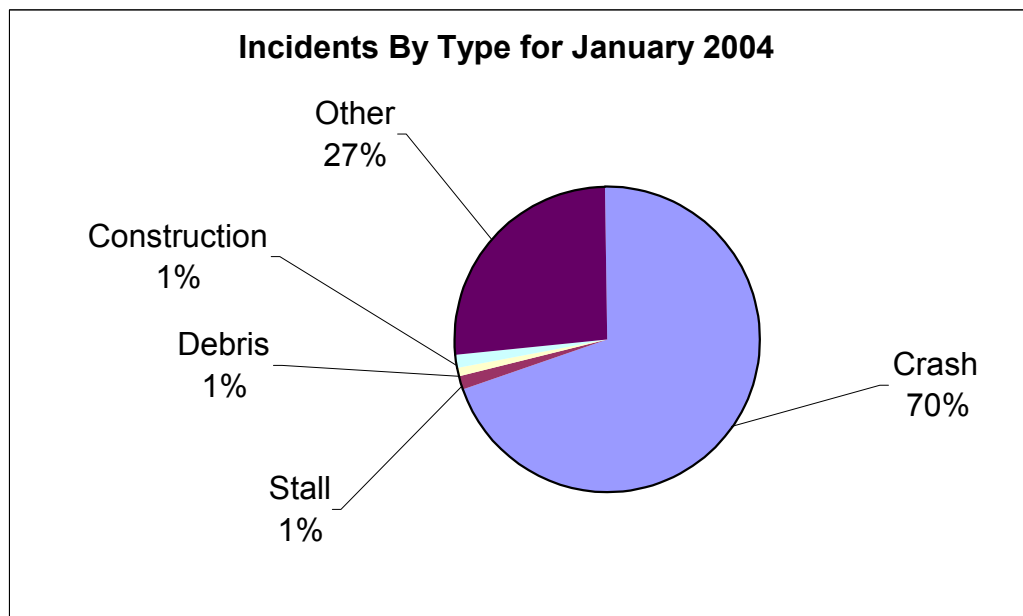
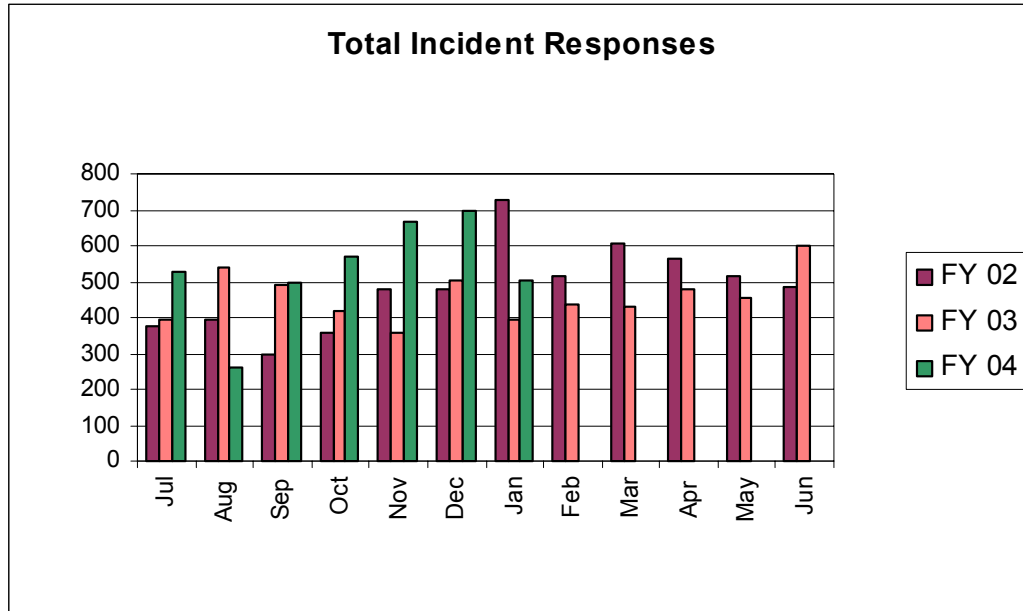
### Region 4:

- An inventory of traffic signal equipment in St. George has begun. This work is being performed in preparation for the St. George Main Street Fiber Interconnect Project. This Project will include the connection of the Main Street traffic signals to the statewide *i2TMS* system.

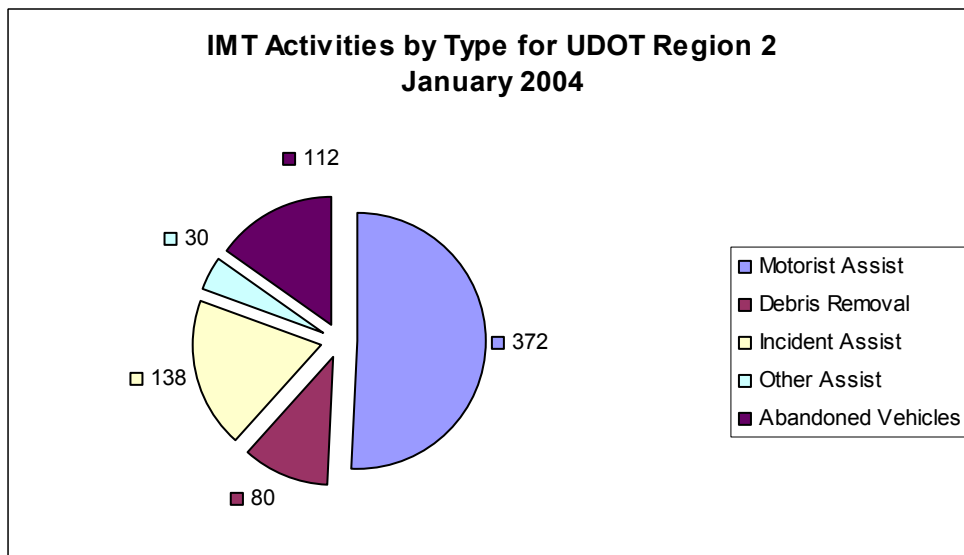
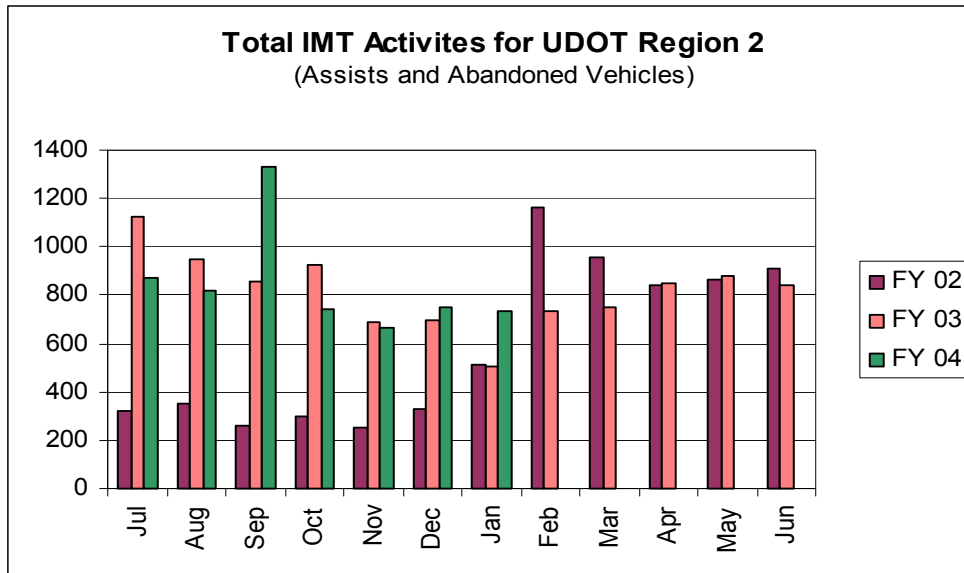
<u>Acronyms</u>	
<b>ATMS</b> Advanced Traffic Management System	<b>TMS</b> Traffic Monitoring Station (count station)
<b>CCTV</b> Closed Circuit Television	<b>TOC</b> Traffic Operations Center
<b>DPS</b> Department of Public Safety	<b>TTI</b> Travel Time Index
<b>HAR</b> Highway Advisory Radio	<b>VMS</b> Variable Message Sign
<b>RWIS</b> Road-Weather Information System	<b>i2TMS</b> Integrated Interagency Traffic Management System

## Safety

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. Each time an incident is created, information is sent to the 511 system, the website, and to the public through email alerts.



## Region 2 Incident Management Team (IMT) Activities



## Freeway Traffic Level of Service

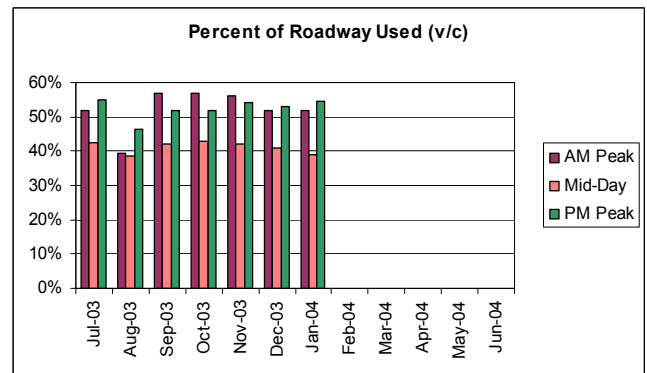
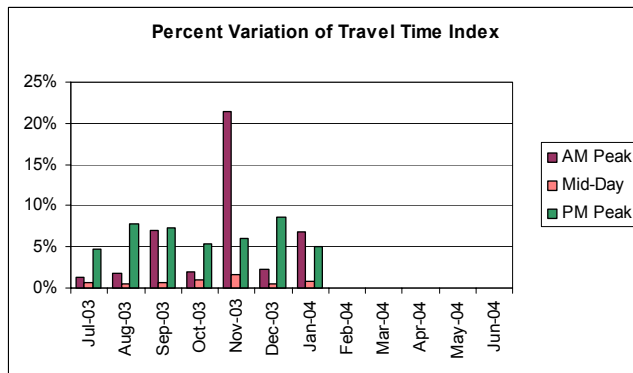
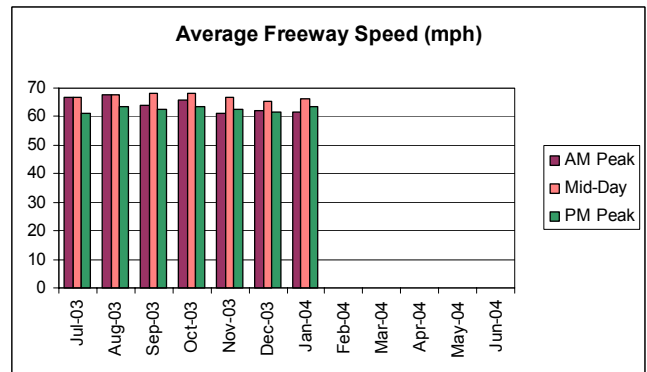
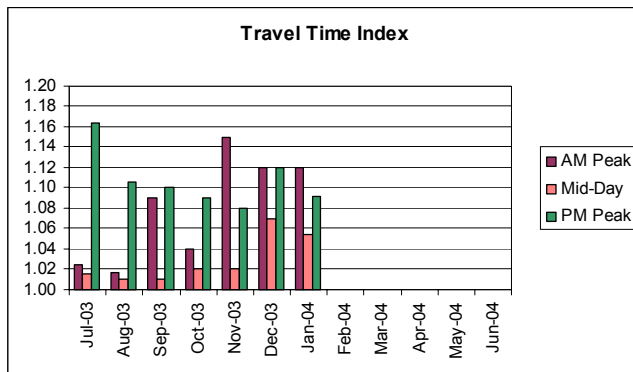
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

*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).



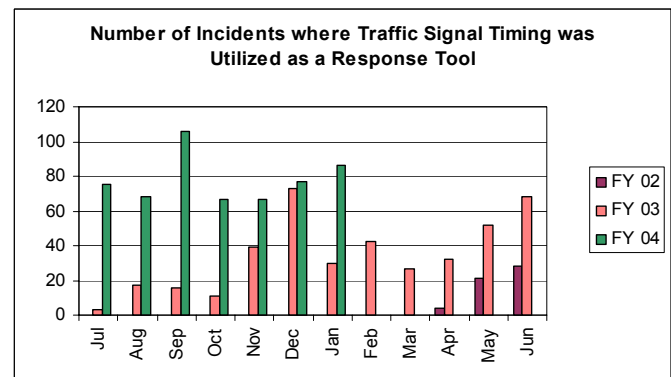
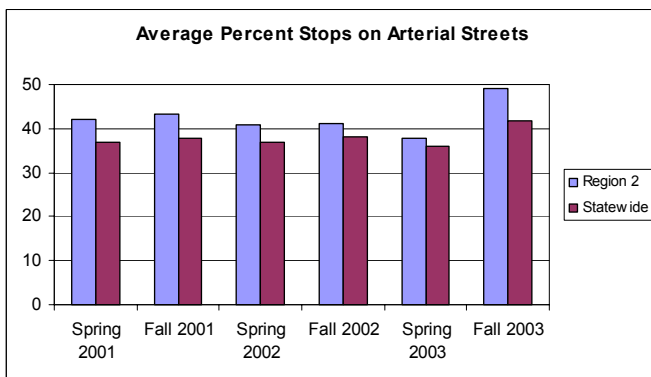
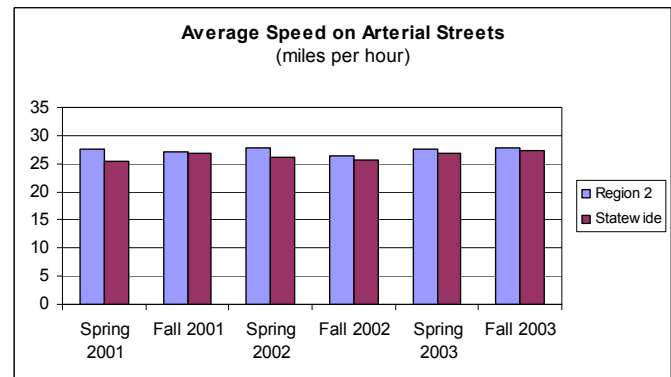
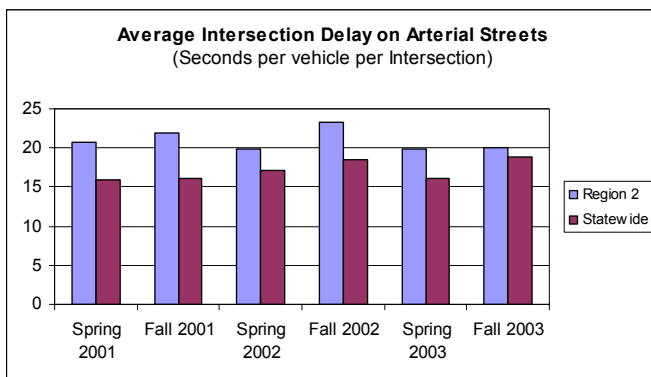
The 5 links with the highest average Travel Time Index for the month are:

Segment	Period	Avg Of TTI
I-15 NB from Point of the Mountain to 10600 S	AM Peak	1.88
I-15 NB from 600 N to I-215 W	PM Peak	1.43
I-15 SB from 600 N to 600 S	PM Peak	1.31
I-15 SB from 600 N to 600 S	AM Peak	1.27
SR-201 WB from I-215 W to 7000 W	AM Peak	1.23

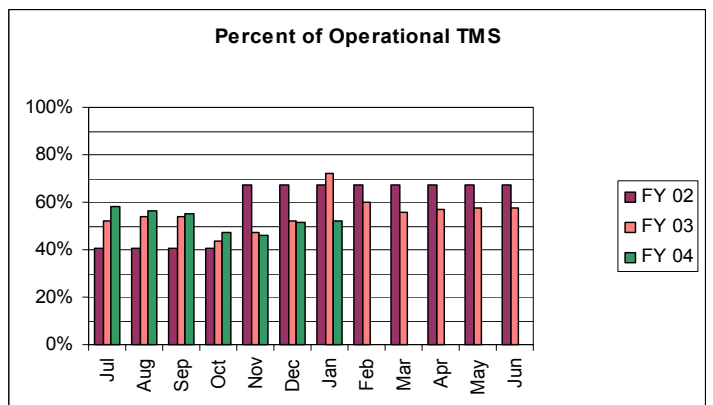
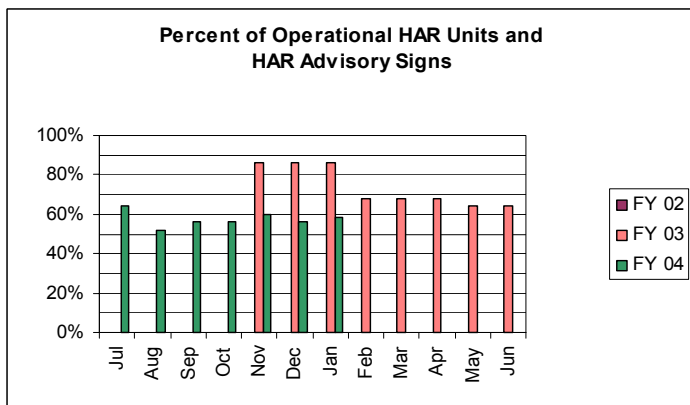
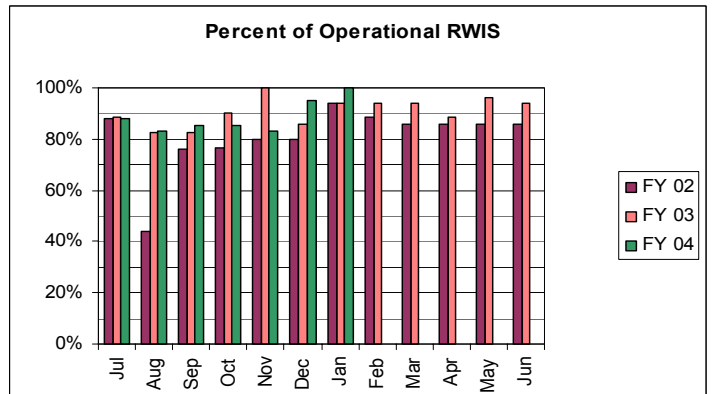
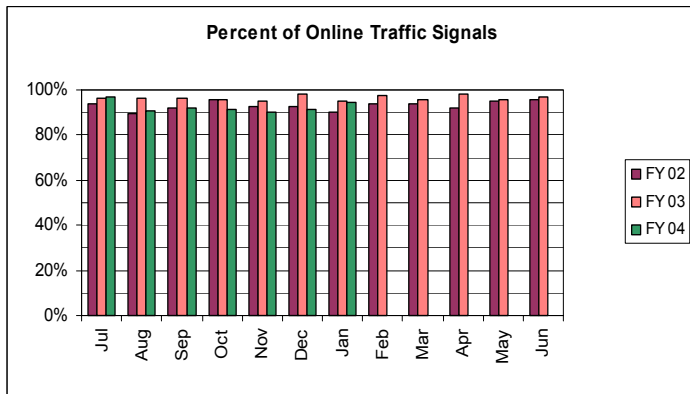
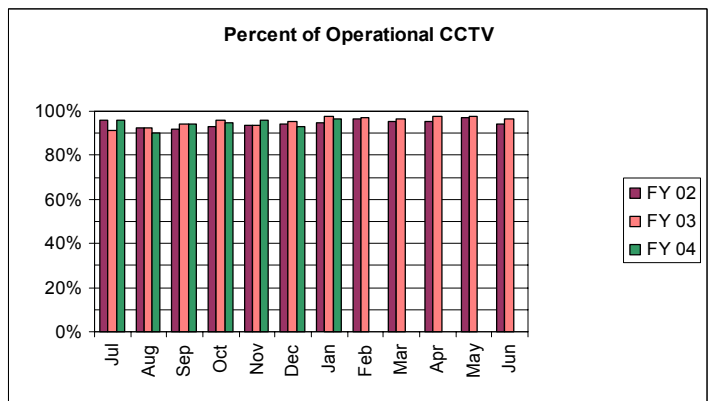
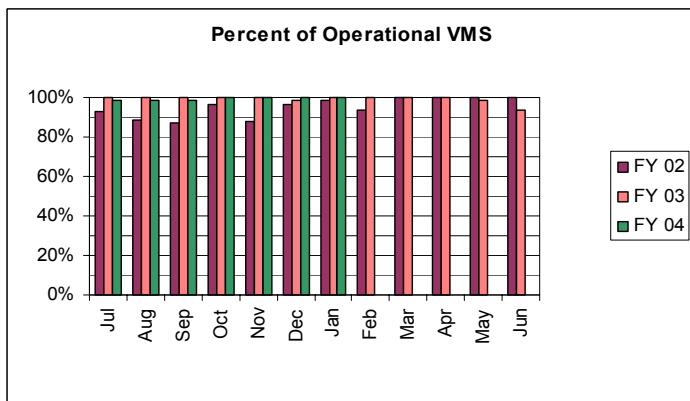
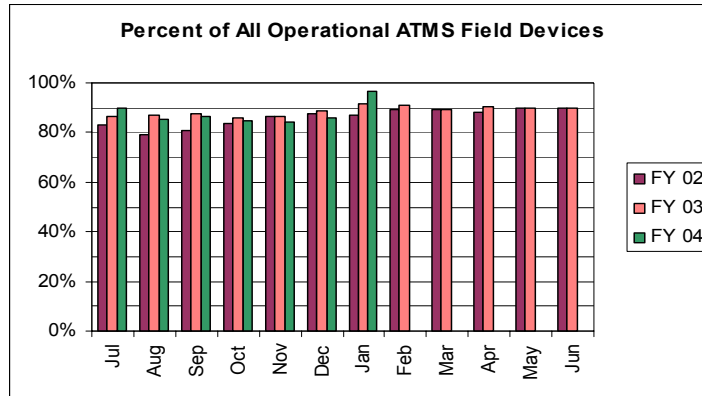
## Surface Street Traffic Level of Service

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.

Since the data is gathered semi-annually, each month this report will provide charts for a Region compared to the Statewide Average. The charts below represent Region 2 compared to the Statewide Average.

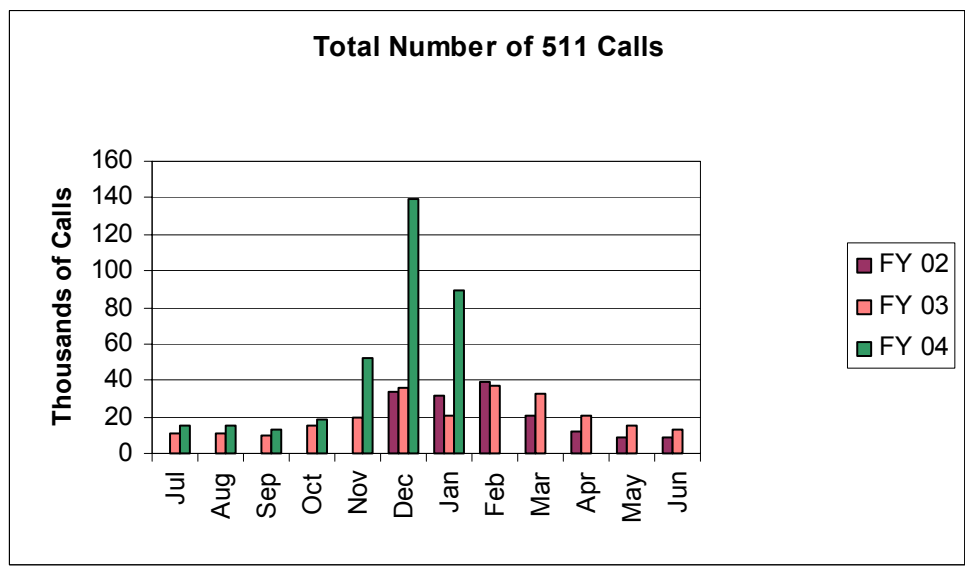
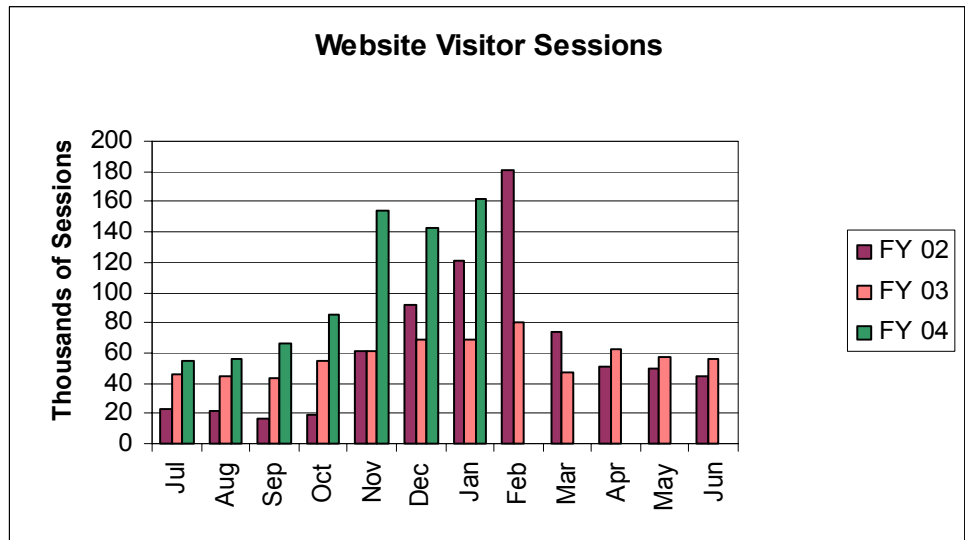
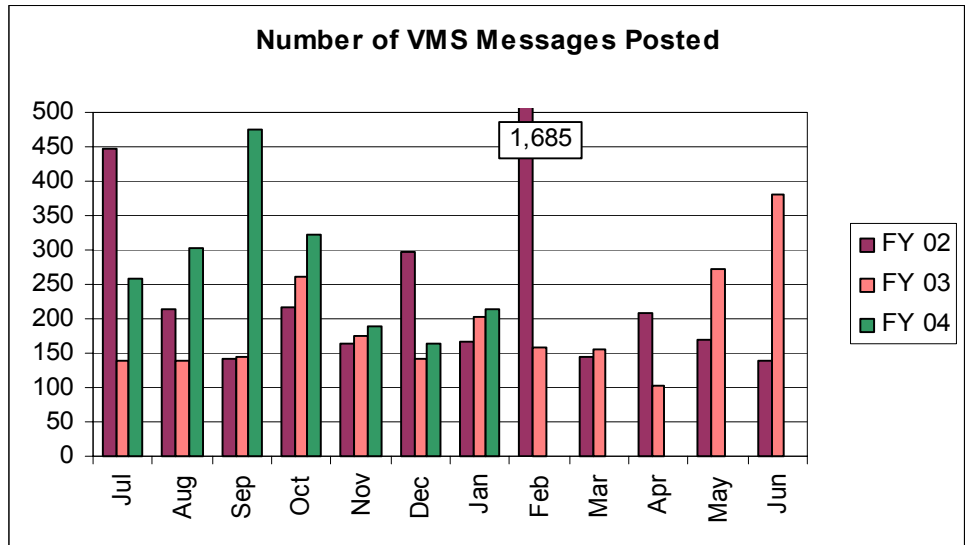


# Maintenance





# Traveler Information



# Customer Service

