

# TOC STATUS REPORT January 2000

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## HIGHLIGHTS

- ◆ **145** Traffic Signals Online To The TOC
- ◆ **241** VMS Messages Displayed
- ◆ **76** CCTV Cameras With Video
- ◆ **28** Permanent VMS With Control
- ◆ **60** Signal Engineering Inquiries
- ◆ **259** Signal Maintenance Notifications
- ◆ **71** Open ATMS Device Work Orders
- ◆ **166** Incidents Response Procedures

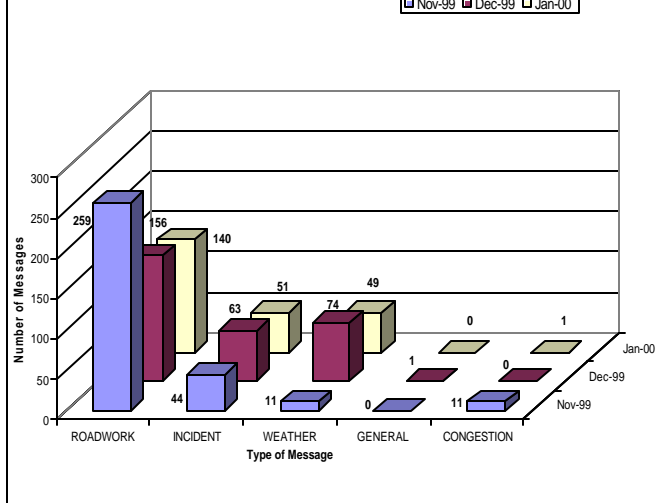
## CURRENT EVENTS

- ◆ DPS dispatchers and TOC Operators are scheduled to begin cross-training now that DPS is fully integrated.
- ◆ Testing and acceptance of the TMS sites is proceeding, with completion of the central control software anticipated in March.
- ◆ Draft functional requirements have been developed for the ATMS Map, Website, TAT and Ramp Meter software.
- ◆ Work has begun on the CAD/CTI requirements and design in conjunction with Lucent Technologies.
- ◆ Complete installation of the legacy GDOT Response Plan Management System is anticipated for February.
- ◆ Denny Simmons and Rob Abercrombie each received a 'Bravo' award for their work with Y2K.
- Elizabeth Olsen has been moved from the UDOT materials lab to be the new TOC business manager.

## DEVICE STATUS

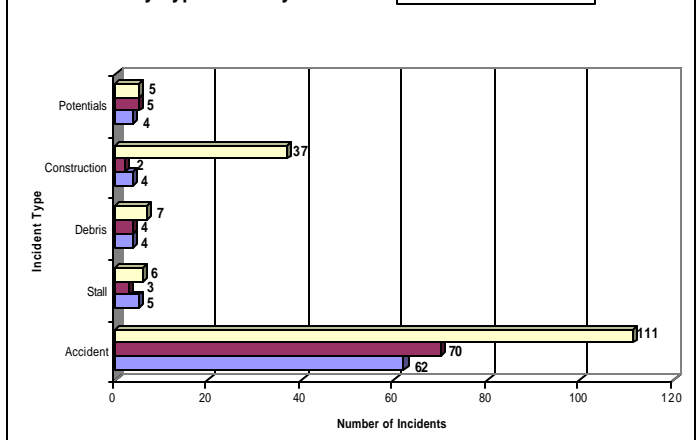
	CCTV	VMS	TMS	Signals
Operational	76	26	0	145
Website	75	30		
Installed	94	38	141	190
Under Test	33	0	3	
Accepted	46	27	114	

VMS Messages By Type - January 2000



## INCIDENTS

Incidents By Type - January 2000



## OPERATIONS

- **Hours of Operation:** 5am – 11pm, M-Sun
- **On Call:** 24 hours / 7 days
- **Operators:** (2) per shift, plus daytime supervisor (7 operators employed total).
- **Misc. Devices Controlled:**
  - (8) Portable VMS
  - (2) IMT Truck-mounted VMS
  - (4) Highway Advisory Radio sites

# DETAILED REPORT

## 1. NEW ITEMS:

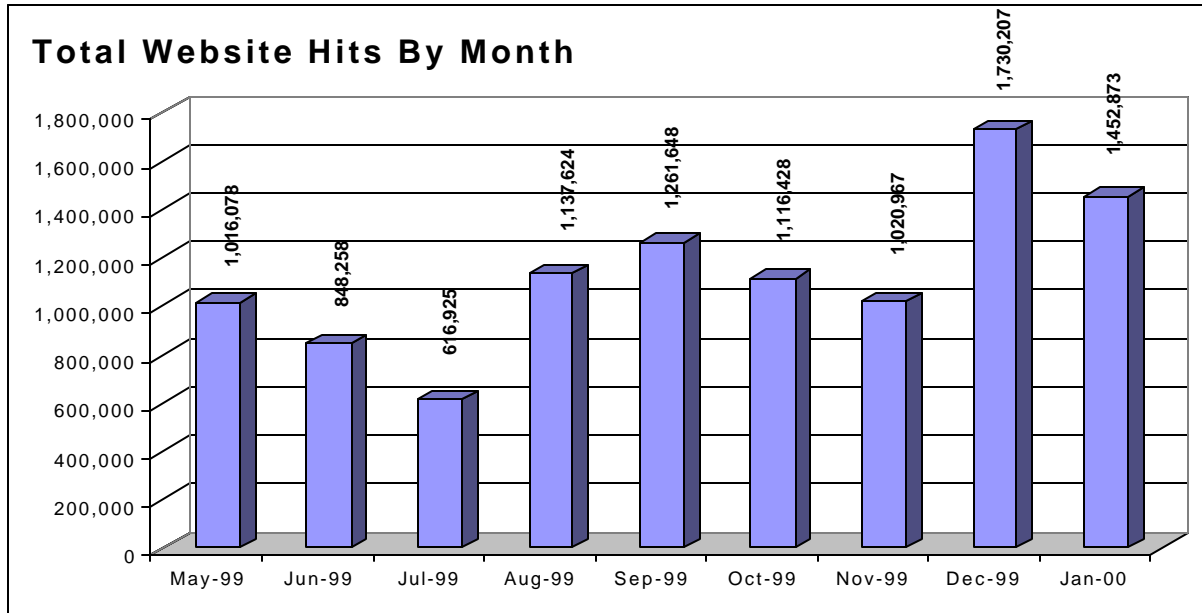
- A. DPS has fully integrated their operations into the TOC building, with all their systems operational. During February and March, cross training between dispatchers and TOC Operators and the integration of DPS and TOC systems are scheduled to begin. Eventually, this will allow DPS to monitor the ATMS operations during the 11pm to 5am time period each day.
- B. Traffic Monitoring Stations (TMS) continue to be accepted as 30-day tests are completed successfully. Testing will continue as it did with the cameras and signs until all devices have been accepted by UDOT. The DCS software used to interface with and control these sites is currently under construction by NET and is scheduled for completion in March.
- C. Draft functional requirements have been developed for the ATMS Map enhancements, ATMS Website enhancements, the Ramp Meter control system and the Traveler Advisory Telephone (TAT) system. A comment/review meeting has already been held for the Website requirements, with such meetings currently being scheduled for the other (3) sets of requirements as well.
- D. NET has aggressively pursued the integration of the last GDOT legacy system at the TOC during January; the Response Plan Management System. This is anticipated to be online for testing by the end of February.
- E. A new 'test-PC' has been put into the communications/computer room at the rear of the TOC operations area. This will enable the operators to trouble shoot device and communication problems directly on TMS, CCTV, VMS and RWIS sites.
- F. The TOC is now utilizing satellite broadcast information from the three satellites that were installed recently.
- G. TransCore now has a full staff at the TOC, with a total of (5) full-time and (2) part-time operators. All the operators are fully trained in the duties each perform, and are capable of handling all TOC operations.

## 2. DEVICE STATUS:

Current numbers for each device are listed, along with the change in status (+/-) in the last month. The values include devices on I215, I15, I15 North, I80, Parleys Canyon, and SR201.

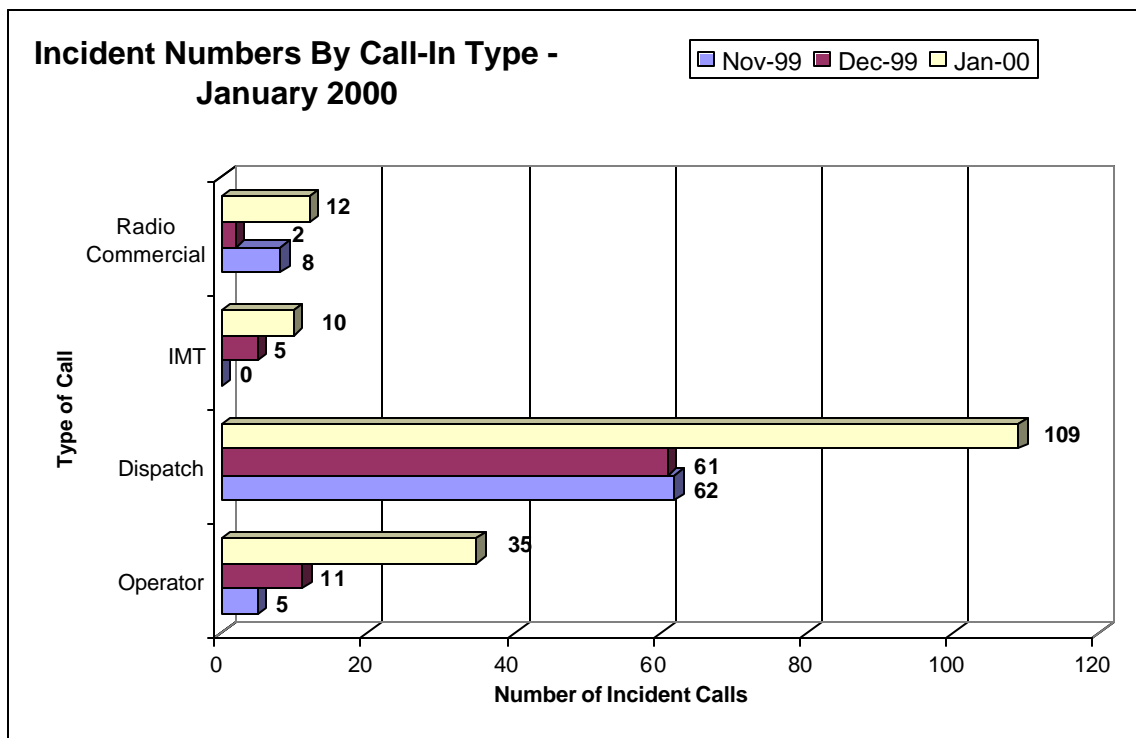
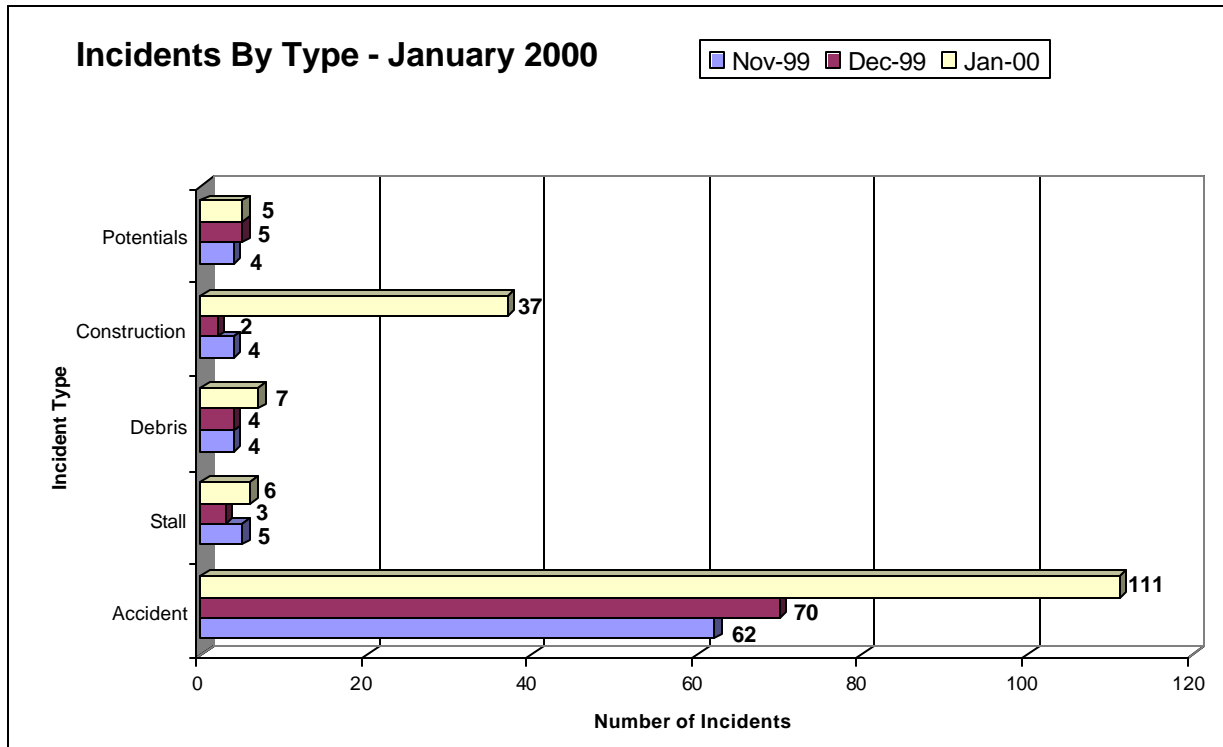
DEVICE	Video (+/-)	Control (+/-)	Website (+/-)	Installed (+/-)	Under Test (+/-)	Accepted (+/-)	Planned (Total)
Freeway CCTV	73 (-1)	47 (-11)	75 (=)	84 (=)	31 (+7)	46 (+31)	161
Surface CCTV	3 (-1)	0 (=)	0 (=)	10 (=)	2 (=)	0 (=)	10
Freeway VMS		21 (=)	20 (+1)	23	0	22	37
Surface VMS		5 (=)	10 (+3)	15	0	5	17
Portable VMS		2 (=)		8 (=)			12
TMS Stations		0		141 (+6)	3 (-90)	114 (+114)	230
Traffic Signals		145 (+20)		190 (=)			550

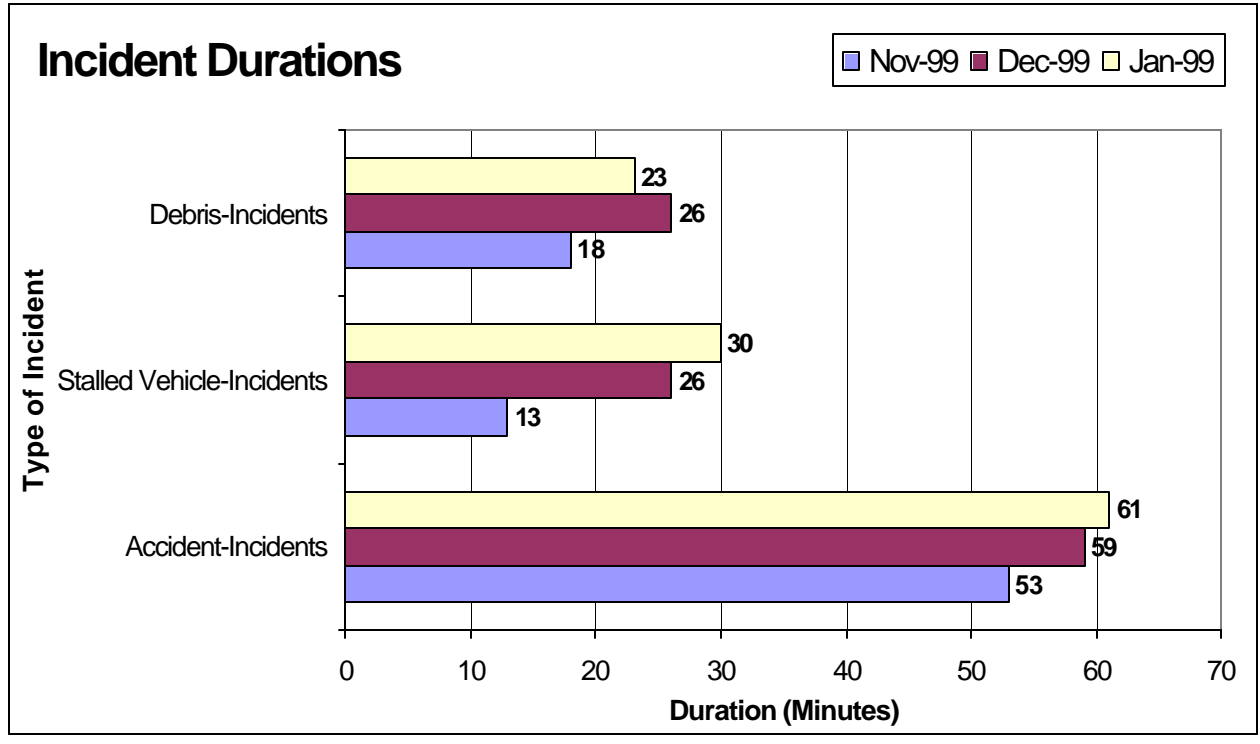
## General Website Statistics For January 2000



Statistical Item	Nov-99	Dec-99	Jan-00	History (Since 4-27-99)
Number of Hits on Home Page	8,666	13,814	12,302	91,601
Total Number of Hits On Entire Site	1,020,967	1,730,207	1,452,873	11,037,924
Number of Distinct User Sessions	16,940	26,042	25,041	150,343
Avg. Number of Total Hits Per Day	34.042	55.813	46.866	38.729
Avg. Number of User Sessions Per Day	564	840	807	527
Average User Session Length	8:01 min	8:06min	7 min	7:50min
Hits on Homepage	N/A	N/A	12,302	91,601
Hits on NSL Map Page	N/A	N/A	3,338	24,731
Hits on East SLC Map Page	N/A	N/A	4,377	33,941
Hits on West SLC Map Page	N/A	N/A	1,512	14,802
Hits on South SLC Map Page	N/A	N/A	1,292	11,421
Hits on FAQ Page	N/A	N/A	110	N/A
Hits on Commuter Poll Page	N/A	N/A	5	N/A
Hits on Virtual Tour/Info Pages	N/A	N/A	4	N/A
Hits on Alert Subscription Page	N/A	N/A	N/A	N/A
Hits on Alerts Page	N/A	N/A	2,803	N/A
Hits From Commercial Sources	55.60%	60.00%	60%	60.50%
Hits From Education Sources	7.10%	5.00%	4.52%	5.30%
Hits From Government Sites	3.40%	3.50%	3%	3.60%
Average Weekday Hits	40,289	68,867	58,837	49,869
Average Weekday User Sessions	606	935	907	618
Average Weekend Hits	33,650	36,562	43,455	29,092
Average Weekend User Sessions	901	1132	1,195	695
Most Active Day of The Week	Monday (22.4%)	Thursday (20.3%)	Monday (24.3%)	Wednesday (21.7%)
Least Active Day of The Week	Saturday (5.7%)	Sunday (3.6%)	Sunday (6.9%)	Sunday (5%)
Most Active Hour of The Day	4-5:00pm	4-5:00pm	4-5:00pm	4-5:00pm
Least Active Hour of The Day	2-3:00am	2-3:00am	3-4:00am	3-4:00am

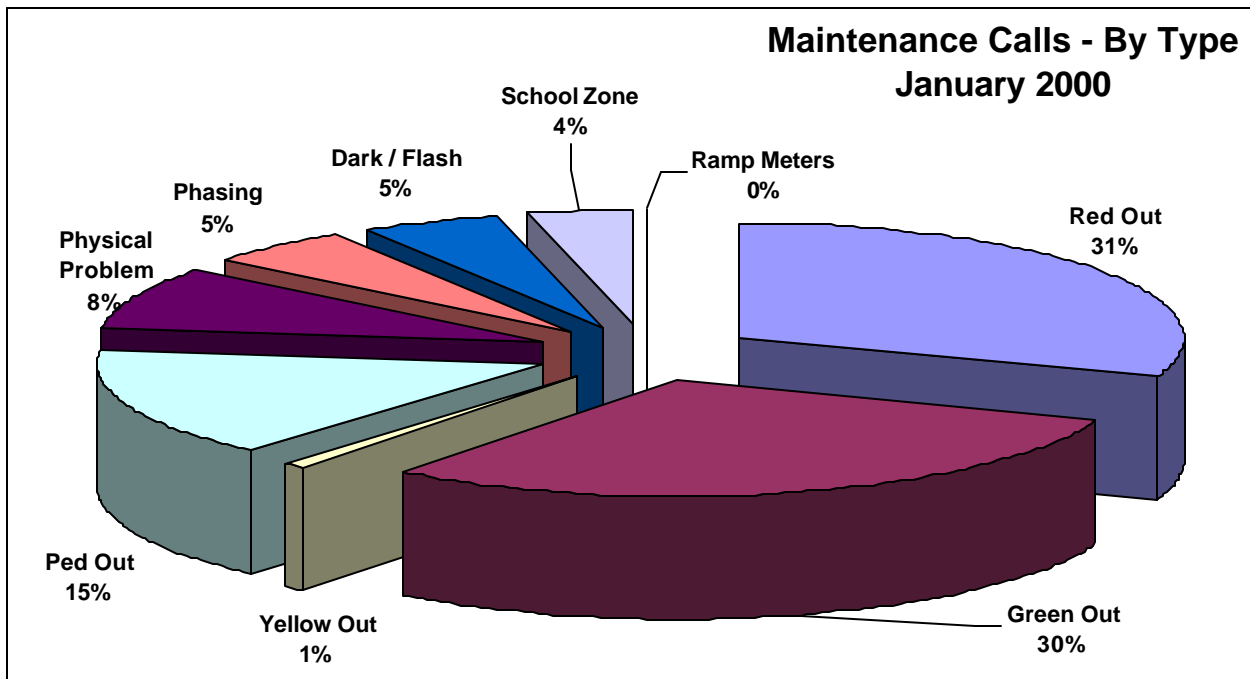
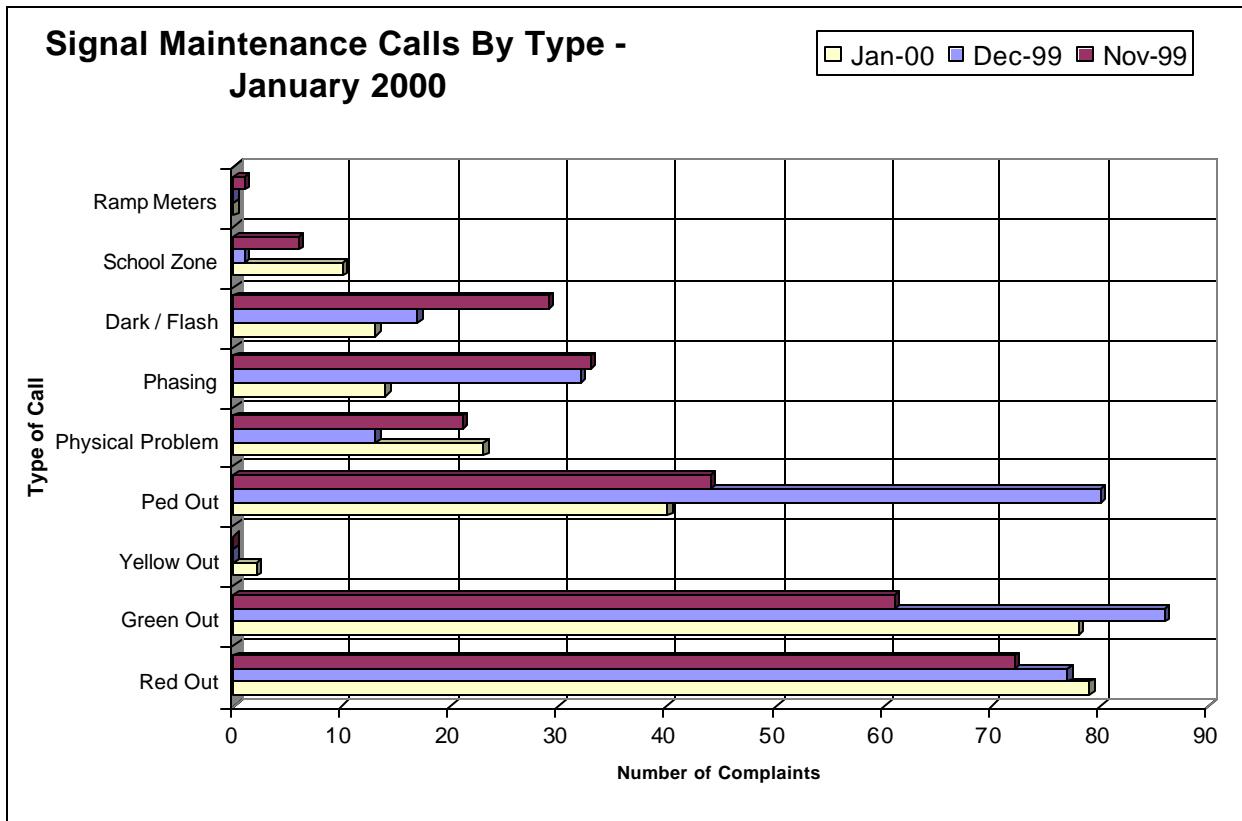
## General Incident Statistics For January 2000

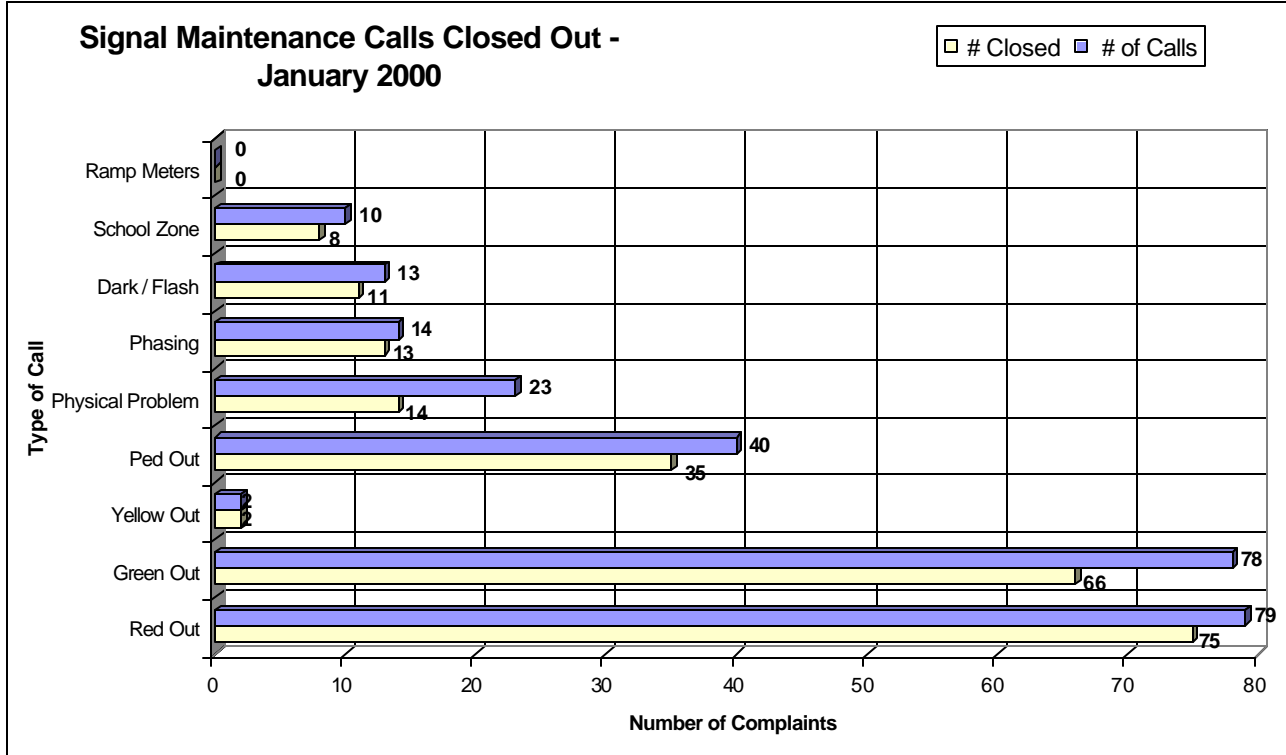




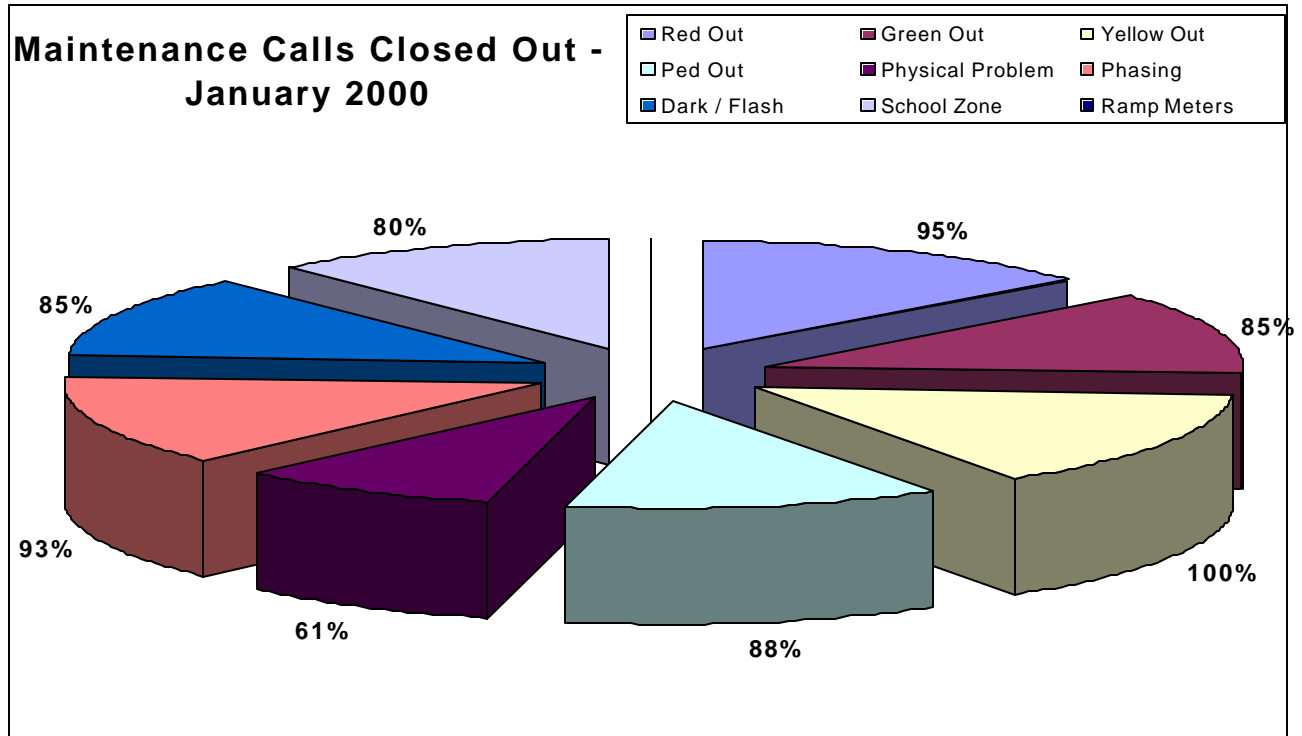
\*\* Incident durations are calculated as an average value for all incidents of each type responded to by the TOC Operators during the month indicated. In all cases, out-lying values, which are defined as incidents of any type lasting longer than 4 hours, were ignored in the averaging calculations. This involved deletion of no-more than (2) incident duration values for any given averaging calculation.

## Signal Maintenance Call-Statistics For January 2000

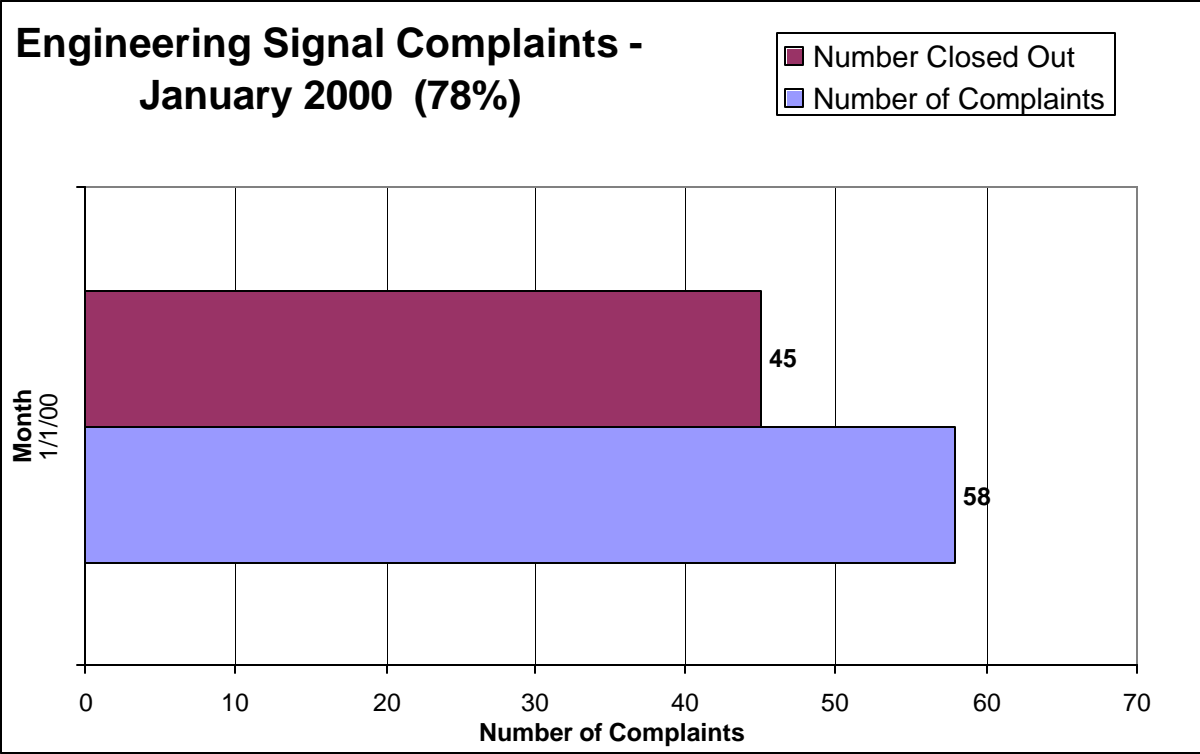




\*\* These graphs show the number of maintenance calls which the TOC Operators have received information on regarding investigation and resolution (if possible) of the problem. Those which are not closed out may or may not have been dealt with, but no information was returned to the Operators for tracking. The "Monthly Signal Maintenance Calls" sheet attached to the back of this report details each call received during January and outlines which agency/tech was given the call, what was done, and the date of work completion.



**Signal Engineering Call-Statistics For January 2000**



\*\* This graph shows the number of signal engineering calls which the TOC Operators have received information on regarding investigation and resolution (if possible) of the problem. Those which are not closed out may or may not have been dealt with, but no information was returned to the Operators for tracking. The "Monthly Signal Engineering Calls" sheet attached to the back of this report details each call received during January and outlines which agency/tech was given the call, what was done, and the date of work completion.



## Operator Time Usage By Time of Day – January 2000

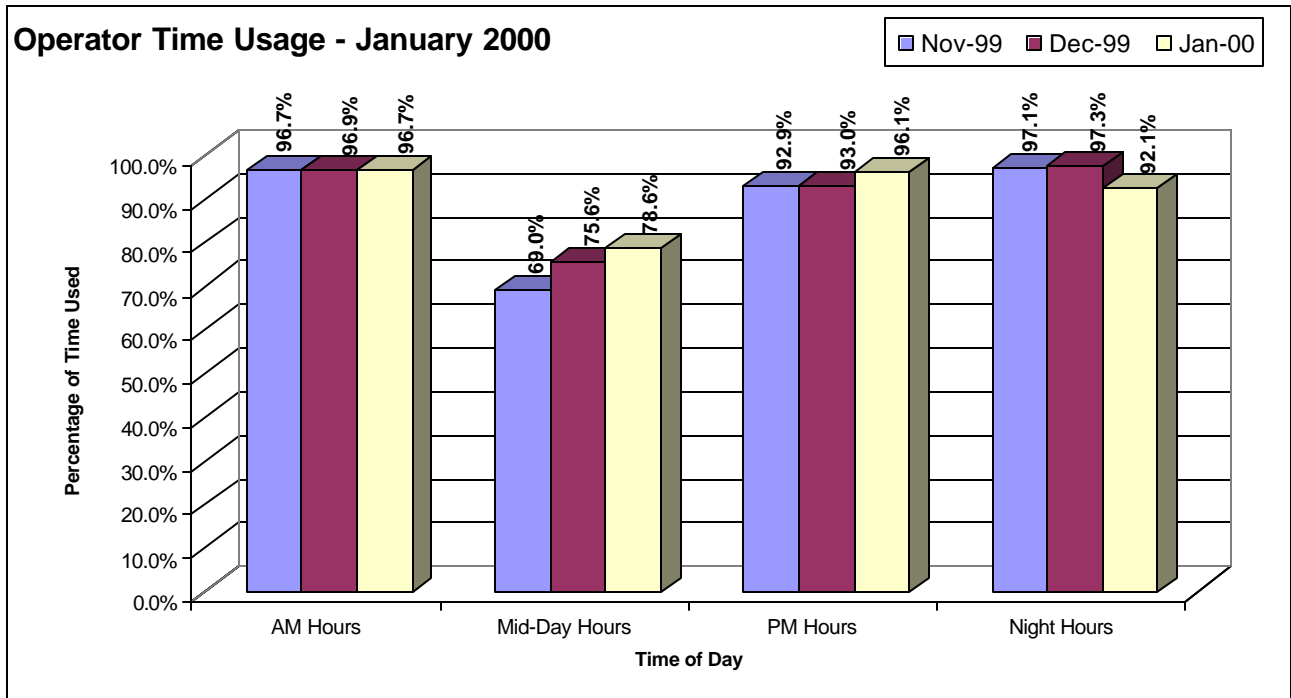
These values illustrate the average daily time usage by the TOC Operators, based on the tasks performed by them each day and the average length of time required for each task.

<b>AM Hours</b>		(0500 - 1000)	
# of Operators:	2		
Total Hours:	<b>9</b>		
Incident Time:	1.1	12.2%	(~2 Incidents @ 45min per)
Phone Calls:	0.8	8.9%	(~15 Calls @ 2min per)
Work Orders:	0.3	3.3%	(~4 Work Orders @ 15min per)
Signal complaints:	0.3	3.3%	(~4 @ 3min per)
VMS Posting:	0.2	2.2%	(~2 @ 2min per)
Systems Work:	1.5	16.7%	
UDOT Staff Work:	2.1	23.3%	
Activity Monitoring:	1.4	15.6%	(~4 events per hour @ 5min per)
ATIS Updates:	1	11.1%	(~2 per hour @ 10min per)
I-15 Closures:	0	0.0%	
<b>Total:</b>	<b>8.7</b>	<b>96.7%</b>	~ Used <b>3%</b> ~ Unused

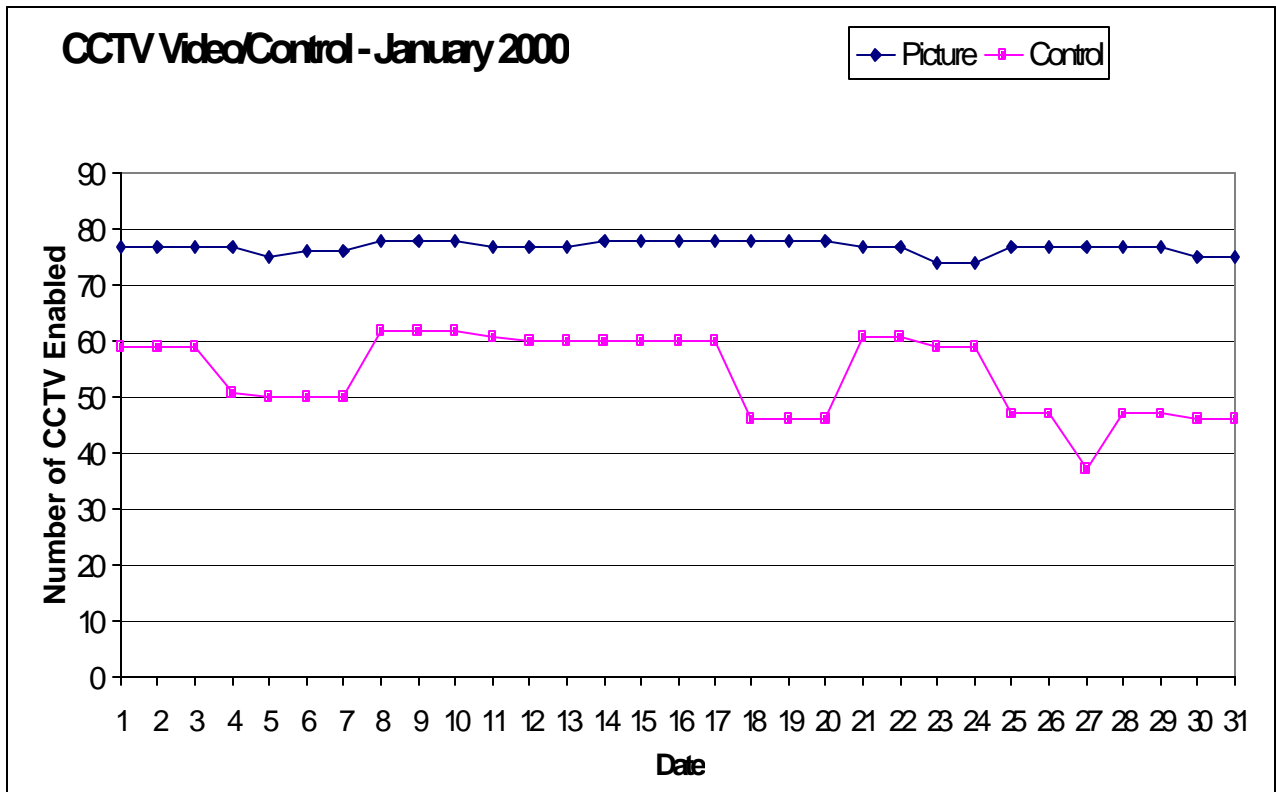
<b>PM Hours</b>		(1530 - 1900)	
# of Operators:	2		
Total Hours:	<b>7</b>		
Incident Time:	1.25	17.9%	(~2 Incidents @ 45min per)
Phone Calls:	0.5	7.1%	(~5 Calls @ 2min per)
Work Orders:	0.33	4.7%	(~1 Work Orders @ 15min per)
Signal complaints:	0.15	2.1%	(~4 @ 3min per)
VMS Posting:	0.5	7.1%	(~3 @ 2min per)
Systems Work:	0.75	10.7%	
UDOT Staff Work:	0.5	7.1%	
Activity Monitoring:	0.75	10.7%	(~4 events per hour @ 5min per)
ATIS Updates:	1.5	21.4%	(~2 per hour @ 10min per)
I-15 Closures:	0.5	7.1%	
<b>Total:</b>	<b>6.73</b>	<b>96.1%</b>	~ Used <b>4%</b> ~ Unused

<b>Mid-Day Hours</b>		(1000 - 1530)	
# of Operators:	2		
Total Hours:	<b>11</b>		
Incident Time:	1.5	14.3%	(~2 Incidents @ 45min per)
Phone Calls:	1.1	10.5%	(~20 Calls @ 2min per)
Work Orders:	0.25	2.4%	(~1 Work Orders @ 15min per)
Signal complaints:	0.5	4.8%	(~4 @ 3min per)
VMS Posting:	0.2	1.9%	(~2 @ 2min per)
Systems Work:	1.3	12.4%	
UDOT Staff Work:	0.8	7.6%	
Activity Monitoring:	1.5	14.3%	(~4 events per hour @ 5min per)
ATIS Updates:	1.1	10.5%	(~1 per hour @ 10min per)
I-15 Closures:	0	0.0%	
<b>Total:</b>	<b>8.25</b>	<b>78.6%</b>	~ Used <b>21%</b> ~ Unused

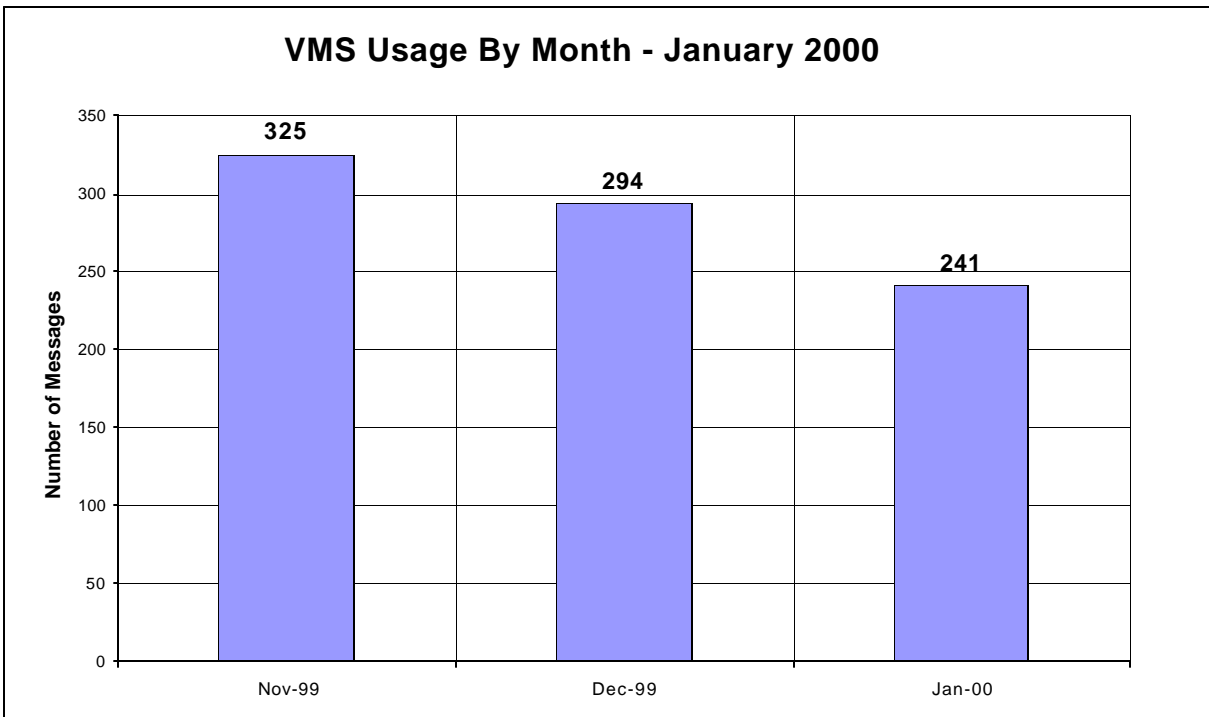
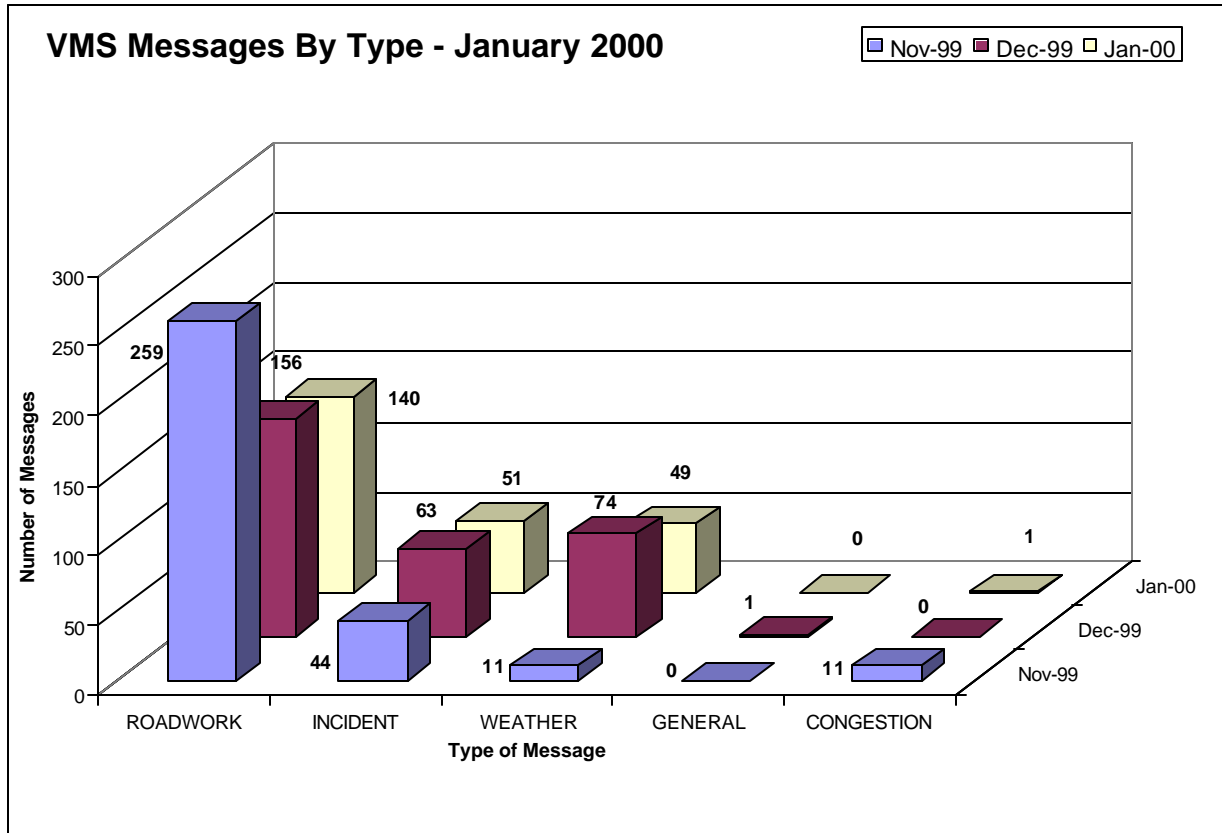
<b>Night Hours</b>		(1900 - 2300)	
# of Operators:	2		
Total Hours:	<b>7</b>		
Incident Time:	0.2	2.9%	(@ 45min per)
Phone Calls:	0.2	2.9%	(~2 Calls @ 2min per)
Work Orders:	0.2	2.9%	(1 Work Order @ 15min per)
Signal complaints:	0.15	2.1%	(~1 @ 3min per)
VMS Posting:	1.75	25.0%	(~10 @ 2min per)
Systems Work:	0.75	10.7%	
UDOT Staff Work:	0.1	1.4%	
Activity Monitoring:	0.5	7.1%	(~1 event per hour @ 5min per)
ATIS Updates:	0.6	8.6%	(~1 per hour @ 10min per)
I-15 Closures:	2	28.6%	
<b>Total:</b>	<b>6.45</b>	<b>92.1%</b>	~ Used <b>8%</b> ~ Unused



## CCTV Video & Control Status – January 2000

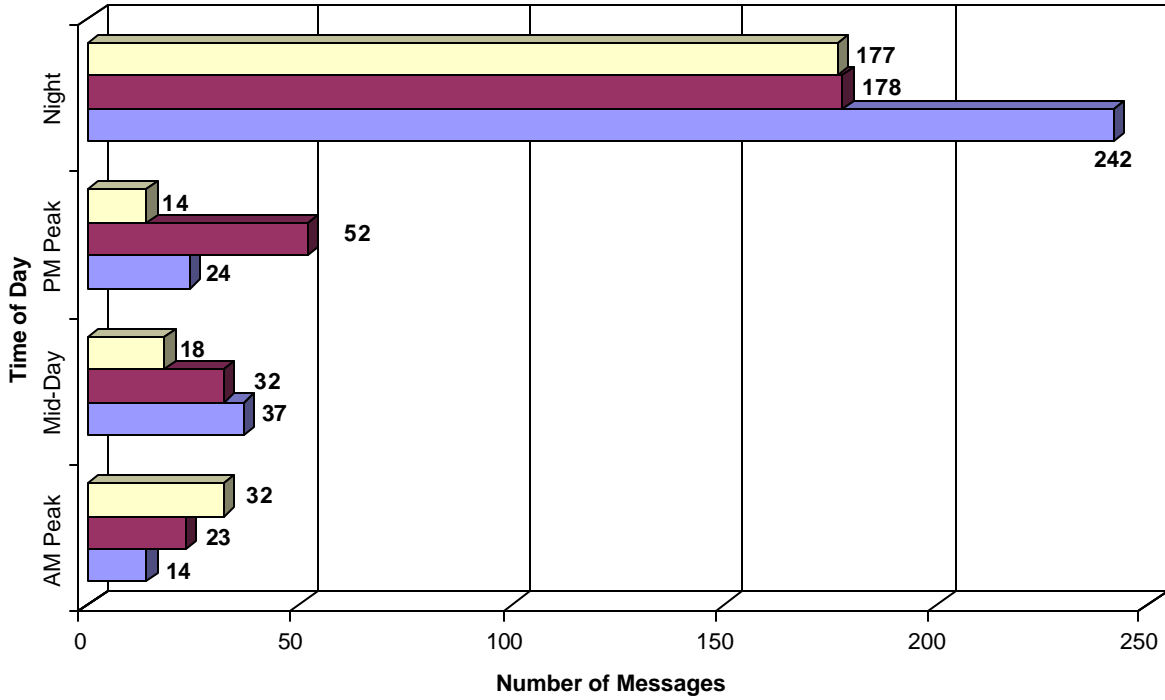


## General VMS Usage Statistics For January 2000



**VMS Messages - Time of Day Use  
January 2000**

■ Nov-99 ■ Dec-99 ■ Jan-00



**VMS Time of Day Usage -  
January 2000**

