

# First Quarter 2011 Performance Measures Report

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Hampton Roads  
Transportation Operations Center





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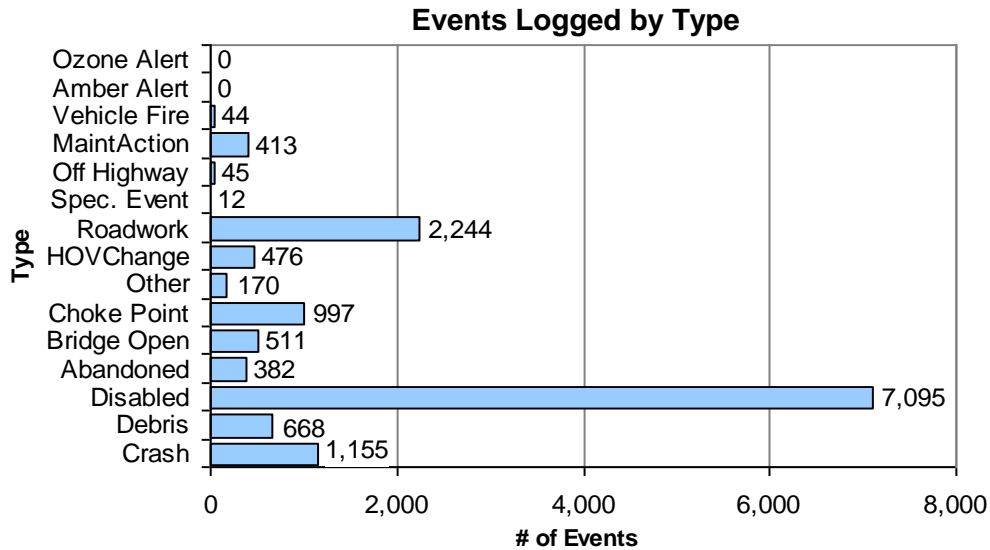
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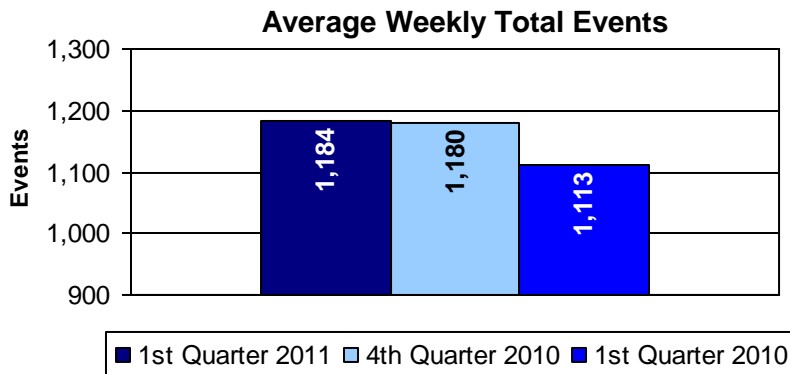
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## Control Room



This graph enumerates event counts for the first quarter of 2011 and shows the value for each type: Ozone Alert, Amber Alert, Vehicle Fire, Maintenance Action, Off Highway, Special Event (i.e. motorcade), Roadwork, HOV Change (manual change to the HOV system from the control center), Other (i.e. police emergency), Choke Point (managing tunnel congestion), Bridge Opening, Abandoned Vehicle, Disabled Vehicle, Debris (ladder, mattress, animals, etc.) and Crash.

The event type Disabled Vehicle made up 50% of the 14,212 total events logged by the HRTOC Control Room in the first quarter.

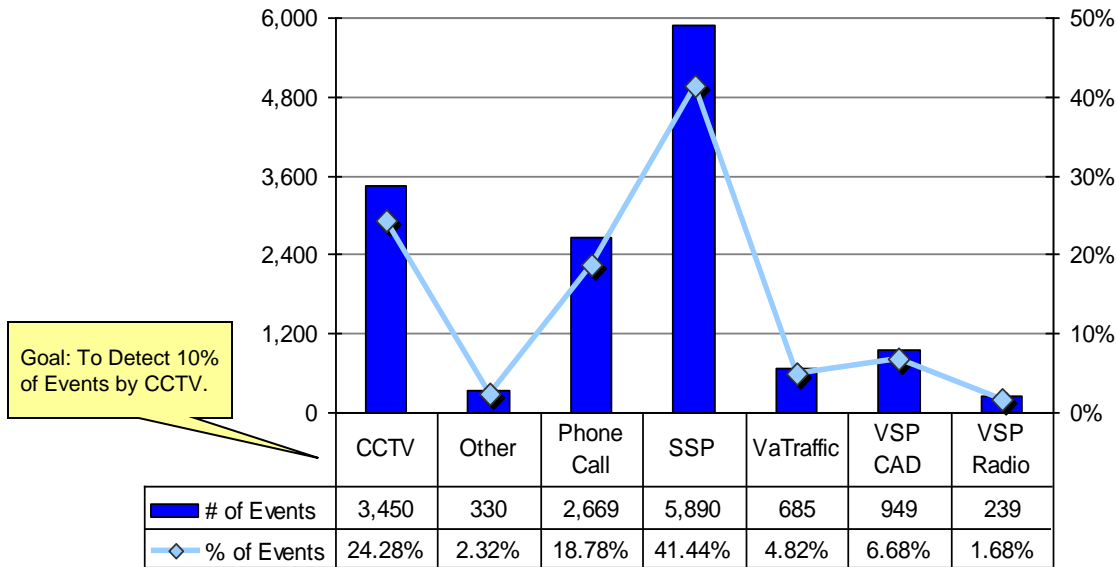


Shown above are the weekly averages for events logged by the Control Room for the first quarter of 2011, the fourth quarter of 2010, and the first quarter of 2010.

The first quarter of 2011 average of 1,184 events per week was up 6% from the first quarter of 2010, but remained virtually constant from the fourth quarter 2010 weekly average.

## Control Room (Continued)

### Events by Detection Source

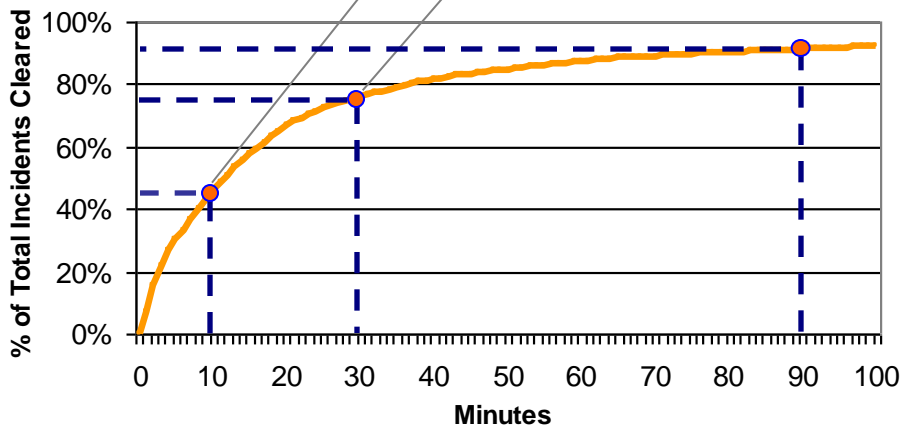


This graph provides a tally of the first quarter 2011 events, broken down by their detection source: CCTV [Closed Circuit Television], Other [i.e. field contractor, fire department, etc], Phone Call [public], SSP [Safety Service Patrol], VaTraffic [Virginia Traffic Information Management System] and Virginia State Police [VSP Radio or Computer Aided Dispatch]. Percents of total events logged are included.

### First Quarter Event Clearance

At 10 minutes, 45.7% of total events or 6,495 events were cleared in the first quarter of 2011.

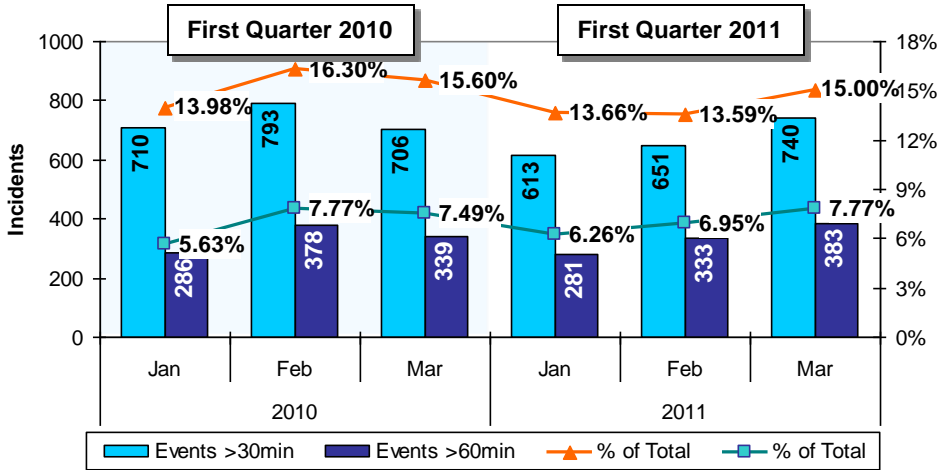
At 30 minutes, 75.9% of total events or 10,787 events were cleared in the first quarter of 2011.



There were 14,212 events logged by the Hampton Roads Transportation Operations Center in the first quarter of 2011. Of the 14,212, 91.2% (12,961 events) were cleared within 90 minutes of verification.

## Control Room (Continued)

**Events Greater Than 30 and 60 Minutes**  
By month and by percentage of total events that month



This graph compares the first quarter 2011 and 2010 events which lasted more than 30 minutes and events which lasted more than 60 minutes in duration. Percentages of total events logged are included. The Q1 2011 average percentage of events greater than 30 minutes decreased from the 2010 average while the events greater than 60 minutes average increased slightly.

**Incidents** are defined as unplanned events adversely impacting traffic flow such as crashes, debris removed, disabled vehicles and abandoned vehicles. Incidents often involve a Safety Service Patrol (SSP) response.

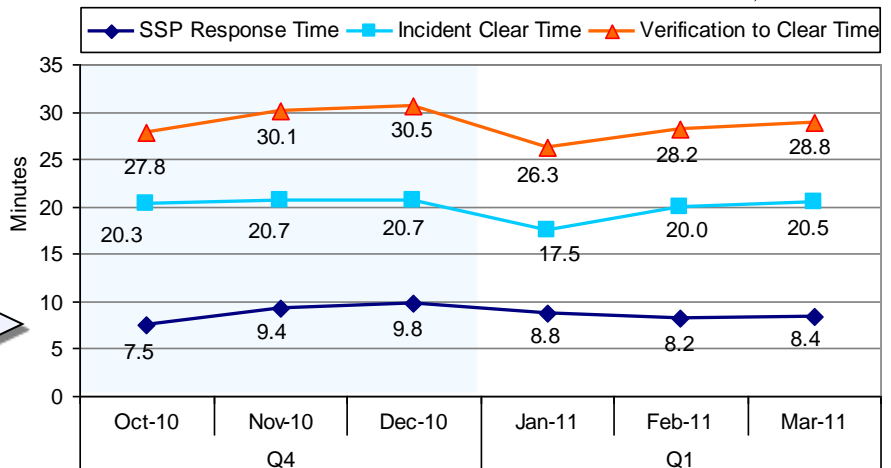
**Events** include the above defined Incidents, planned events (i.e. Roadwork), and special events (i.e. Amber Alerts).

This line graph shows the average SSP Response time - duration from the time an incident is verified to when a SSP truck arrives on scene (Note: SSP is *not* included as a detection source because this generally forces response time to be zero); the average Incident Clear Time - duration from SSP arrival until the incident is cleared or the SSP is relieved by an outside agency; and the total amount of time from initial verification to clearance for Q1 2011 and Q4 2010.

In Q1 the average SSP response time and average incident clear time decreased from Q4 causing the average incident duration to decrease to 28 minutes from 29.5 minutes in Q4.

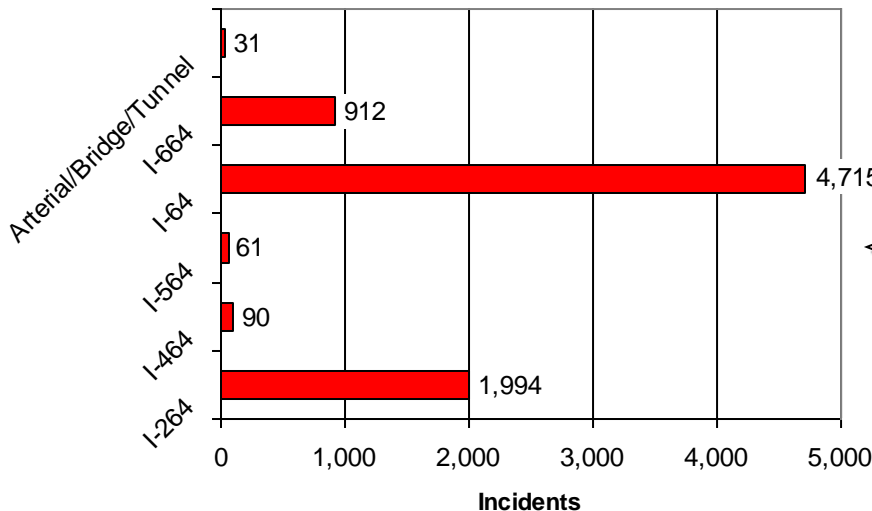
### Average Incident Duration

Goal:  
Average  
26 Minutes



## Safety Service Patrol

**Number of SSP Assists by Roadway**



This graph shows the number of SSP assists for each freeway monitored by the HRTOC. Also included are responses on arterial roads, bridges and tunnels.

This information can be used to plan future patrol areas and staffing levels.

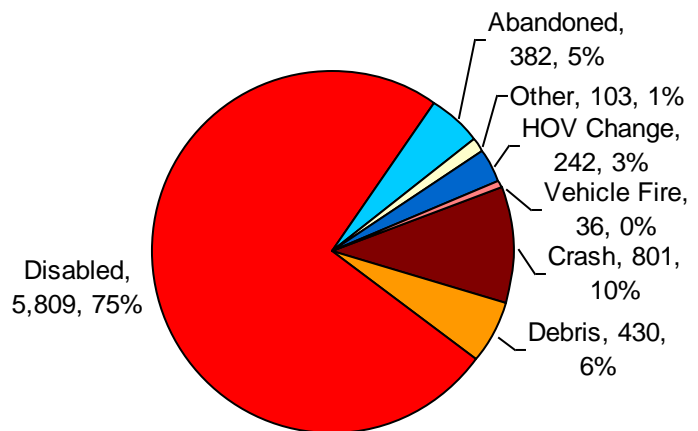
In the first quarter of 2011 SSP assists on I-64 made up 60% of the total 7,803 assists.

*Note:* I-64 responses include the assist type HOV Change.

**SSP Assists by Type**

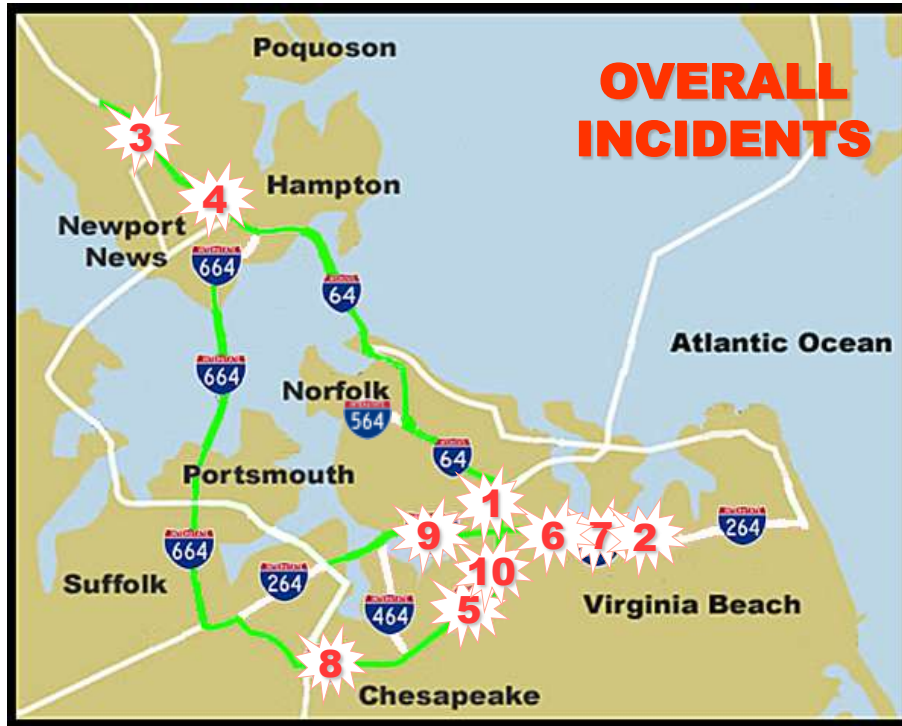
This pie chart shows the values for the major types of SSP assists. Types include Disabled Vehicles, Abandoned Vehicles, Other (i.e. traffic control for police activity), HOV Change, Vehicle Fire, Crash and Debris (i.e. ladders or animals in roadway).

This information is used for forecasting SSP vehicle equipment, future staffing requirements and short and long term consumable material (flares, batteries) needs.



## Safety Service Patrol (Continued)

### Most Active Hotspots



Ranking	Code	Location	# at Location	% of Total Incidents	Last Q Rank
1	64-11	64 / 264 Interchange - Northampton Blvd	546	5.58%	1
2	264-20	Independence Blvd - Rosemont Rd	449	4.59%	3
3	64-36	Jefferson Ave - Fort Eustis Blvd	361	3.69%	2
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd	348	3.56%	4
5	64-08	Greenbrier Pkwy - Indian River Rd	323	3.30%	5
6	264-18	Newtown Rd - Witchduck Rd	288	2.94%	6
7	264-19	Witchduck Rd - Independence Blvd	245	2.50%	7
8	64-03	Rte 17 - High Rise Bridge (east side of bridge)	238	2.43%	14
9	264-13	Ballentine Blvd - Broad Creek Bridge	236	2.41%	8
10	64-09	Indian River Rd - Twin Bridges	236	2.41%	9
<b>TOTAL INCIDENTS</b>			<b>9,782</b>	<b>33.43%</b>	

This table and accompanying map depict the highest overall incident occurrence locations for January 1, 2011 through March 31, 2011. The Hampton Roads area has been divided into 104 geographic locations. The incident types included to make up the overall most active spots include abandoned vehicles, vehicles involved in crashes, debris removed from the roadway, as well as responses to disabled vehicles. Also included in the table are the rankings of locations for the fourth quarter of 2010 (Last Q). The knowledge of active incident locations, as well as the comparison to previous active locations, will allow management to detect emerging patterns and plan SSP staffing and routes in relation to those areas requiring the most attention. The SSP routes are highlighted on the map in green.

The charts that follow contain similar information that has been separated into the four incident types (abandoned, crashes, debris and disabled).

## Safety Service Patrol (Continued)

### Most Active Hotspots (Continued)

Ranking	Location	# at Location	% of Total Abandoned	Last Q Rank
1	64-11	26	6.31%	4
2	64-36	20	4.85%	1
3	264-20	20	4.85%	3
4	64-33	19	4.61%	2
5	64-08	16	3.88%	8
6	664-04	14	3.40%	7
7	264-18	14	3.40%	15
8	64-31	13	3.16%	10
9	264-13	12	2.91%	9
10	64-03	12	2.91%	11
<b>TOTAL ABANDONED</b>		412	40.29%	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	64-36	Jefferson Ave - Fort Eustis Blvd
3	264-20	Independence Blvd - Rosemont Rd
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
5	64-08	Greenbrier Pkwy - Indian River Rd
6	664-04	Dock Landing Rd - Portsmouth Blvd
7	264-18	Newtown Rd - Witchduck Rd
8	64-31	Mercury Blvd - Magruder Blvd
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	64-03	Rte 17 - High Rise Bridge (east side of bridge)



Ranking	Location	# at Location	% of Total Accidents	Last Q Rank
1	64-11	97	7.93%	1
2	264-18	42	3.43%	3
3	264-20	42	3.43%	14
4	264-17	40	3.27%	4
5	264-08	38	3.11%	12
6	264-19	34	2.78%	6
7	264-11	34	2.78%	17
8	64-15	33	2.70%	19
9	264-13	32	2.62%	23
10	264-22	28	2.29%	11
<b>TOTAL ACCIDENTS</b>		1,223	34.34%	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	264-18	Newtown Rd - Witchduck Rd
3	264-20	Independence Blvd - Rosemont Rd
4	264-17	64 / 264 Interchange - Newtown Rd
5	264-08	Downtown Tunnel (inside tunnel)
6	264-19	Witchduck Rd - Independence Blvd
7	264-11	Waterside Dr - Brambleton Ave / Campostella Ave
8	64-15	Norview Ave - Chesapeake Blvd
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	264-22	Lynnhaven Pkwy - Laskin Rd

## Safety Service Patrol (Continued)

### Most Active Hotspots (Continued)



Ranking	Location	# at Location	% of Total Debris	Last Q Rank
1	Midtown	55	8.49%	1
2	264-20	32	4.94%	4
3	64-11	30	4.63%	6
4	264-19	24	3.70%	5
5	264-22	19	2.93%	16
6	JRB	17	2.62%	2
7	64-07	17	2.62%	15
8	264-08	16	2.47%	7
9	64-08	16	2.47%	10
10	264-18	15	2.31%	3
TOTAL DEBRIS		648	37.19%	

Ranking	Code	Location
1	Midtown	Inside the Midtown Tunnel
2	264-20	Independence Blvd - Rosemont Rd
3	64-11	64 / 264 Interchange - Northampton Blvd
4	264-19	Witchduck Rd - Independence Blvd
5	264-22	Lynnhaven Pkwy - Laskin Rd
6	JRB	On the James River Bridge
7	64-07	Battlefield Blvd - Green Brier Pkwy
8	264-08	Downtown Tunnel (inside tunnel)
9	64-08	Greenbrier Pkwy - Indian River Rd
10	264-18	Newtown Rd - Witchduck Rd

Ranking	Location	# at Location	% of Total Disabled	Last Q Rank
1	64-11	393	5.24%	1
2	264-20	355	4.73%	3
3	64-36	315	4.20%	2
4	64-33	294	3.92%	4
5	64-08	272	3.63%	5
6	264-18	217	2.89%	6
7	64-03	197	2.63%	12
8	64-09	194	2.59%	9
9	264-19	183	2.44%	8
10	264-13	181	2.41%	7
TOTAL DISABLED		7,499	34.68%	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	264-20	Independence Blvd - Rosemont Rd
3	64-36	Jefferson Ave - Fort Eustis Blvd
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
5	64-08	Greenbrier Pkwy - Indian River Rd
6	264-18	Newtown Rd - Witchduck Rd
7	64-03	Rte 17 - High Rise Bridge cut through (east side)
8	64-09	Indian River Rd - Twin Bridges
9	264-19	Witchduck Rd - Independence Blvd
10	264-13	Ballentine Blvd - Broad Creek Bridge

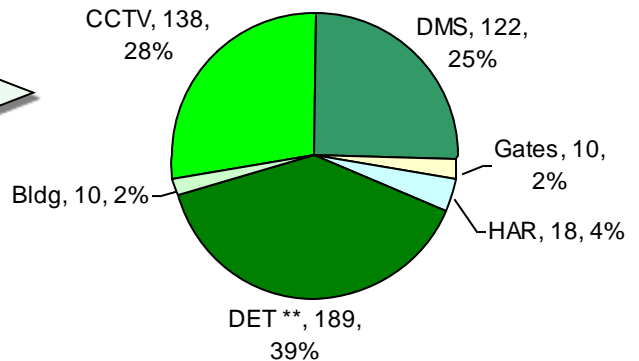


## Field Maintenance

### Number of PM Tasks by Equipment Type

This chart and the accompanying table show the preventive maintenance (PM) tasks completed during the first quarter of 2011. In addition to the five main equipment categories shown in the table, the chart includes HRTOC building PM tasks. These figures do not include other PM tasks related to electronics, safety inspections, fiber & communication equipment and utility locating.

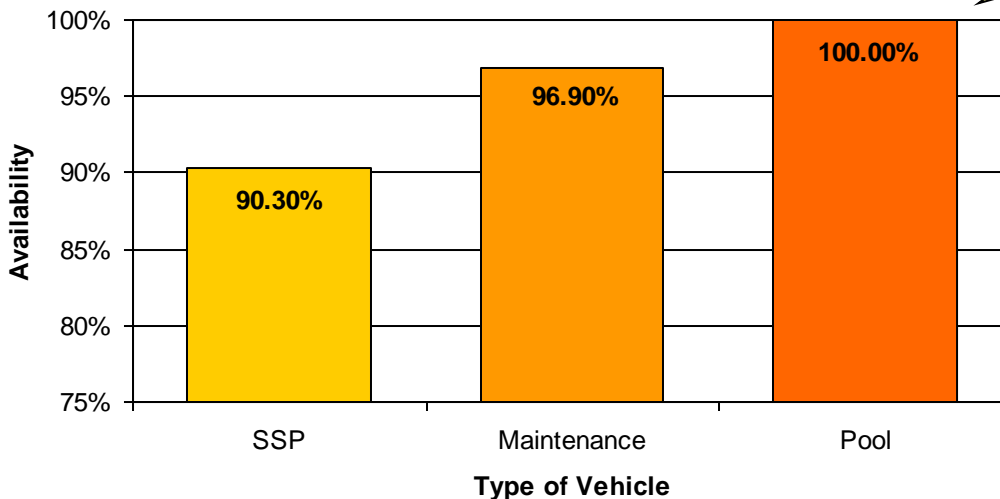
This information helps management allocate PM resources (equipment) and keep to the established preventive maintenance schedule.



\*\* DET refers to maintenance for detector cabinets.

## Fleet and Asset Management

### HRTOC Vehicle Average Availabilities



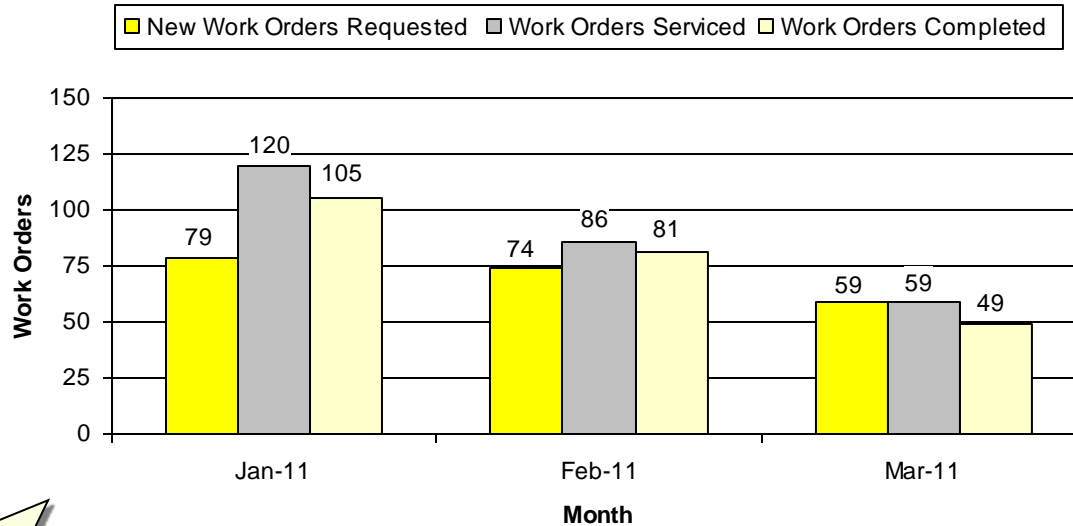
Goal: To Maintain 100% Availability for all Vehicle Types.

These three bars show what percentage of the 59 total SSP, Maintenance and Pool vehicles were available for use during the first quarter of 2011.

These numbers measure fleet service effort and success rates.

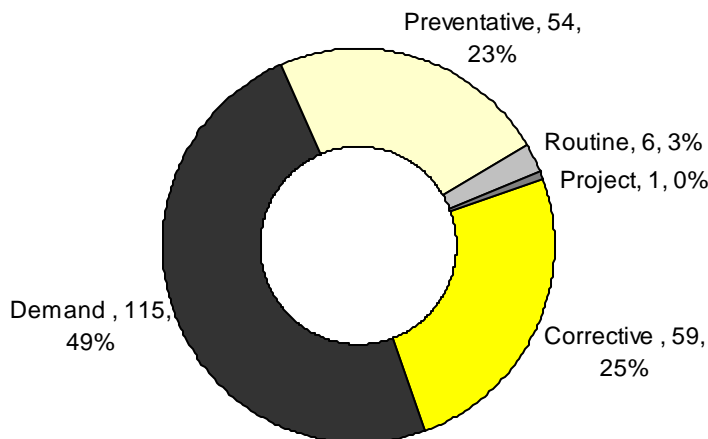
## Information Technology

### Work Orders Submitted to/Service by IT



The above bar graph shows the number of work orders requested, serviced and completed by the IT Department for the first quarter of 2011. The majority of the 235 completed work orders were related to 'Applications' (such as installing, modifying, uninstalling and resolving issues with software) and were completed with in 51 hours from the time a work order was entered into the system by a HRTOC employee. This metric helps track IT Department workloads, in support of staff/resource allocation and scheduling.

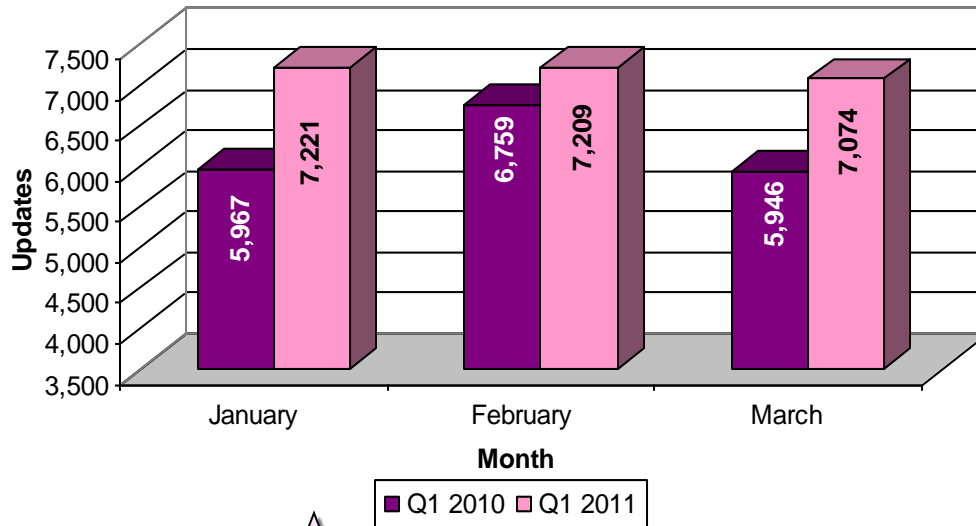
### IT Facility Maintenance Activity



This donut graph shows IT Department tasks completed during Q1 for work types: corrective - "My printer is not working, please fix it"; demand - "I need a new printer"; preventative - regular PM on a schedule; and routine - a replacement printer every three years, for example. The breakout supports management in the allocation of staff, equipment and budget resources at the HRTOC.

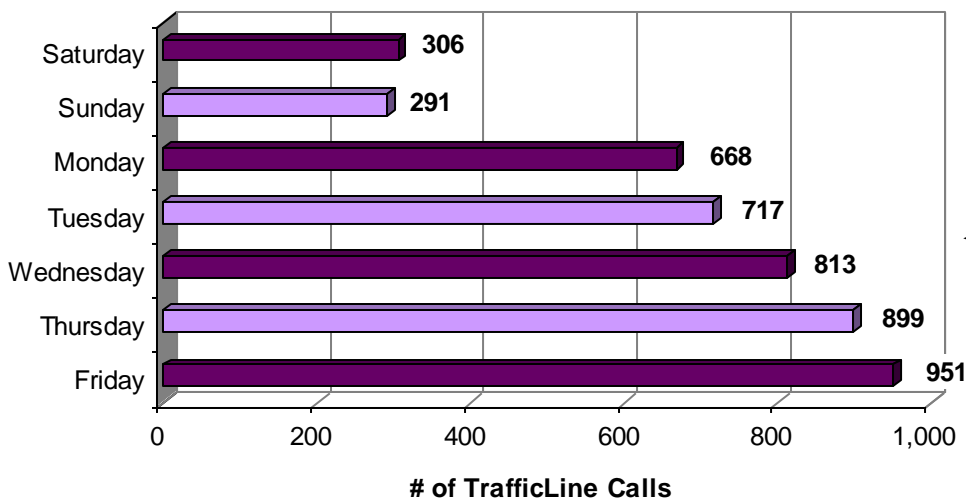
## Public Information

### Highway Advisory Radio Updates



In order to advise the public of current traffic conditions on Hampton Roads highways the Highway Advisory Radio (HAR) messages are updated several times during the day. The above graph tallies the number of updates made to the HAR system during the first quarter of 2010 and 2011 by month. An average day during the first quarter of 2011 registered about 256 updates to the HAR system, 51 more per day than the same period of 2010. The HAR increased over 2010 counts follows the trend of the total event count increase in Q1 2011 over 2010.

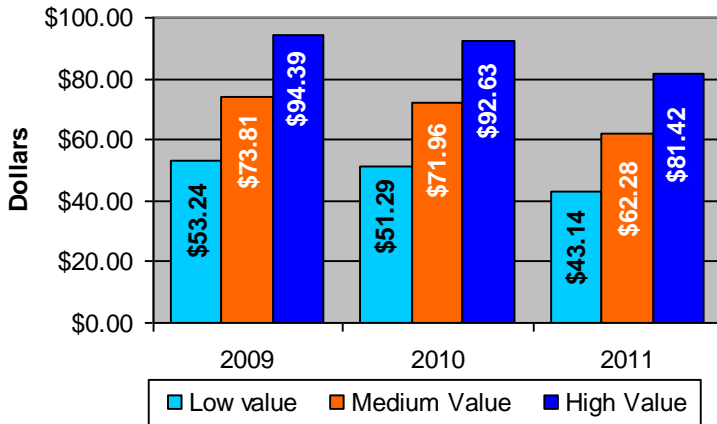
### Hampton Roads TrafficLine Calls



In December 2006, VDOT launched Hampton Roads TrafficLine, (757) 361-3016, as another method to inform motorists of road conditions and traffic delays. The graph depicts the 4,645 TrafficLine calls in the first quarter of 2011 by day of the week.

## Customer Service\*

### What Value Would You Place on the Services Received from the SSP Program?

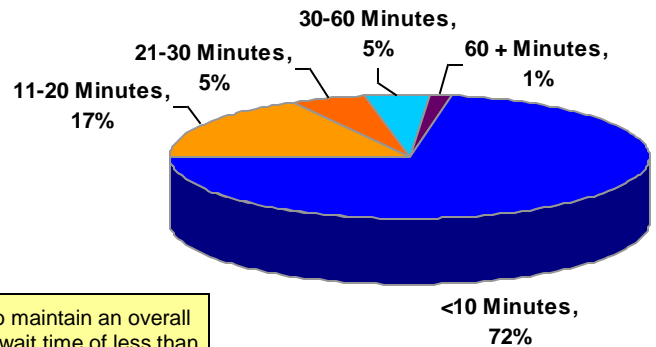


This graph depicts the perceived value that assisted motorists place on SSP services. Because the survey asks participants to choose a value within a monetary range (e.g. \$50-\$100), a range of values has also been shown here. After adjusting for inflation, the average survey participant values each assist between \$43.14 and \$81.42 through the first quarter of 2011.

The numbers depicted in this pie chart show the length of time a motorist waited before a SSP driver arrived. This information goes beyond what is in our database, as we are typically unaware of how long a motorist has been waiting when the control room verifies the incident.

155 valid responses were collected in Q1. Using the midpoint for each range of time, the overall average wait time before SSP arrival was 10 minutes for the first quarter of 2011.

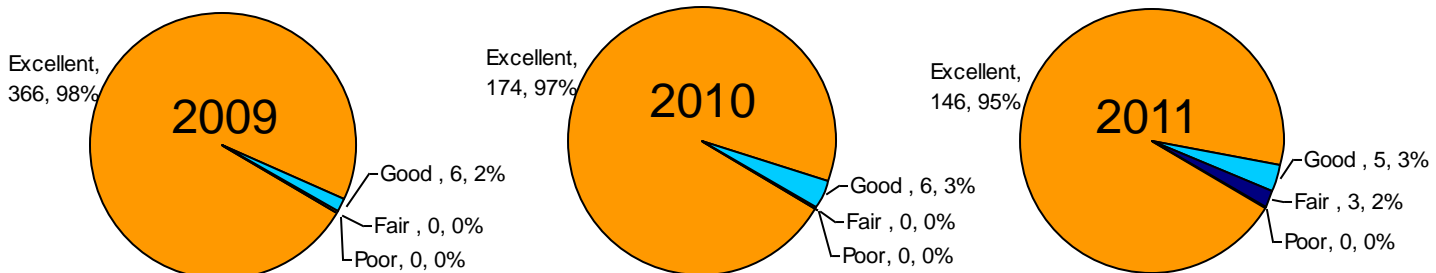
### How Long Did You Wait For the SSP Driver?



Goal: To maintain an overall average wait time of less than 9 minutes

These pie charts compare the overall SSP service rating for the first quarters of 2009, 2010 and 2011. The majority (95% or better) of ratings were Excellent in all 3 quarters.

### Overall, How Would You Rate the SSP Service?



\* All of the information on this page was gathered from the SSP comment cards given to assisted motorists.