

Fourth Quarter 2010 Performance Measures Report

Hampton Roads
Transportation Operations Center



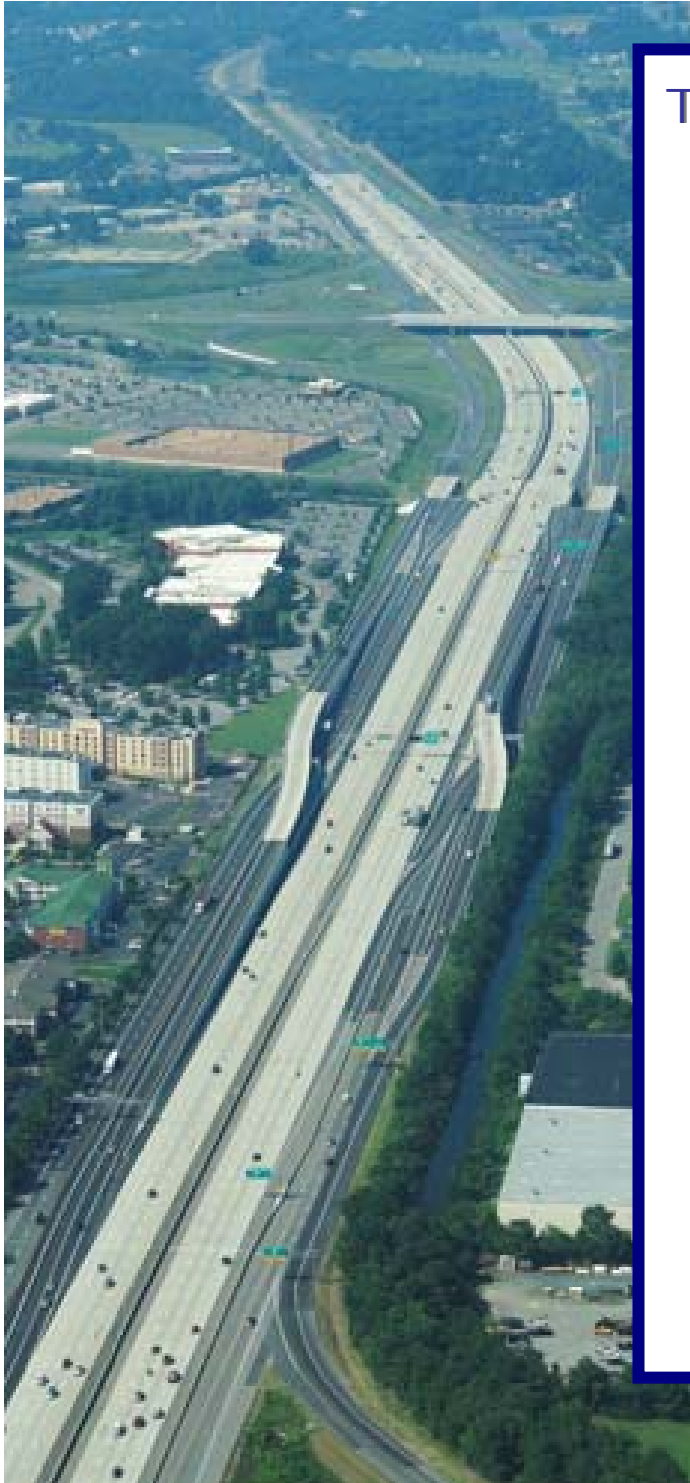


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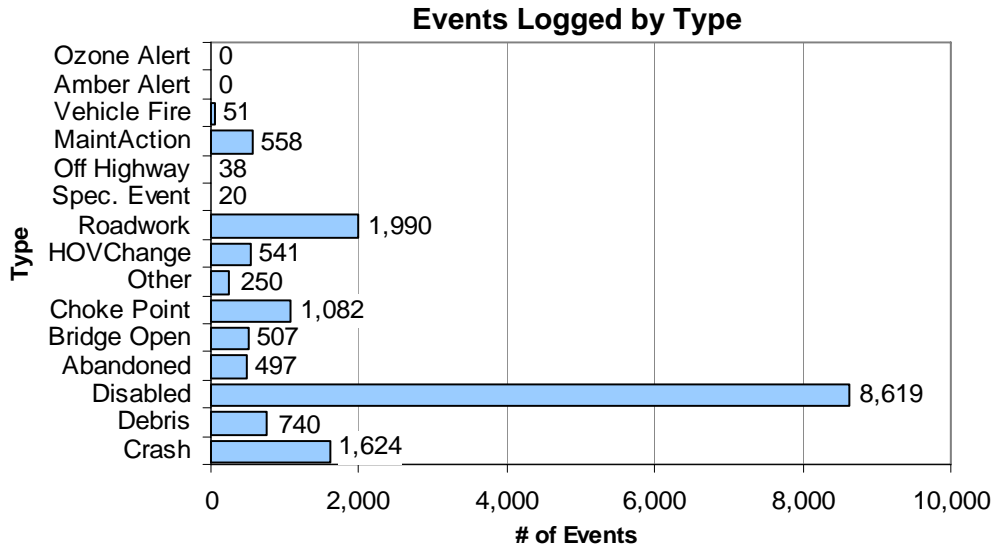
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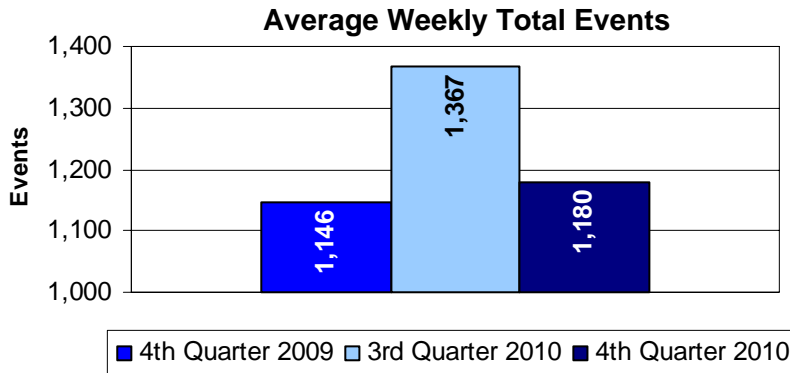
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Control Room



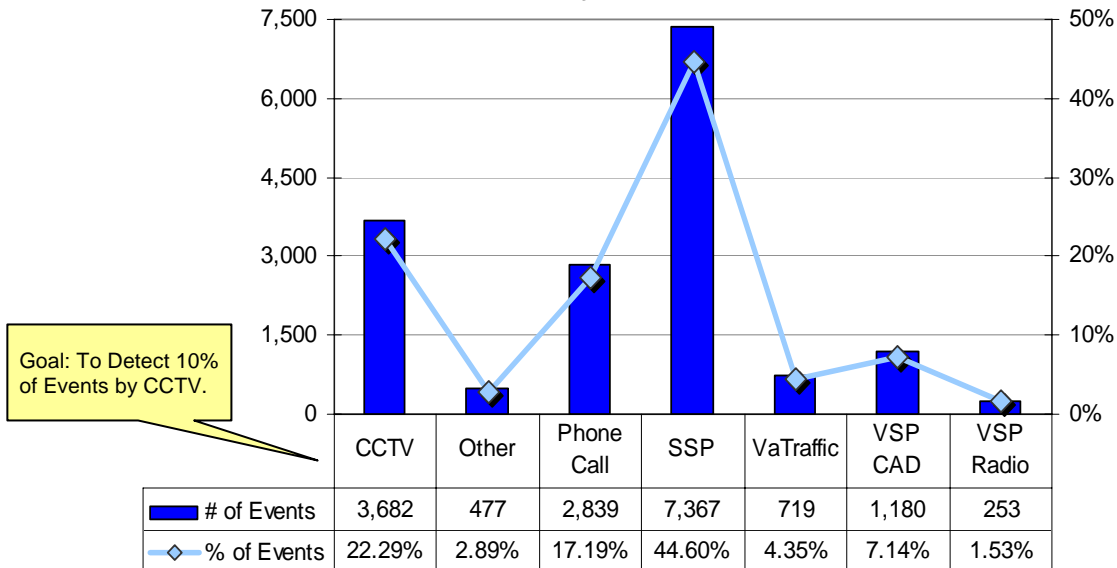
This graph enumerates event counts for the fourth quarter of 2010 and shows the value for each type: Ozone Alert, Amber Alert, Vehicle Fire, Maintenance Action, Off Highway, Special Event (i.e. motorcade), Roadwork, HOV Change (manual change to the HOV system from the control center), Other (i.e. police 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 52% of the 16,517 total events logged by the HRTOC Control Room in the fourth quarter.



Shown above are the weekly averages for events logged by the Control Room for the fourth quarter of 2010, the third quarter of 2010, and the fourth quarter of 2009. The fourth quarter of 2010 average of 1,180 events per week was up 3% from the fourth quarter of 2009, but down 16% from the third quarter of 2010 weekly average.

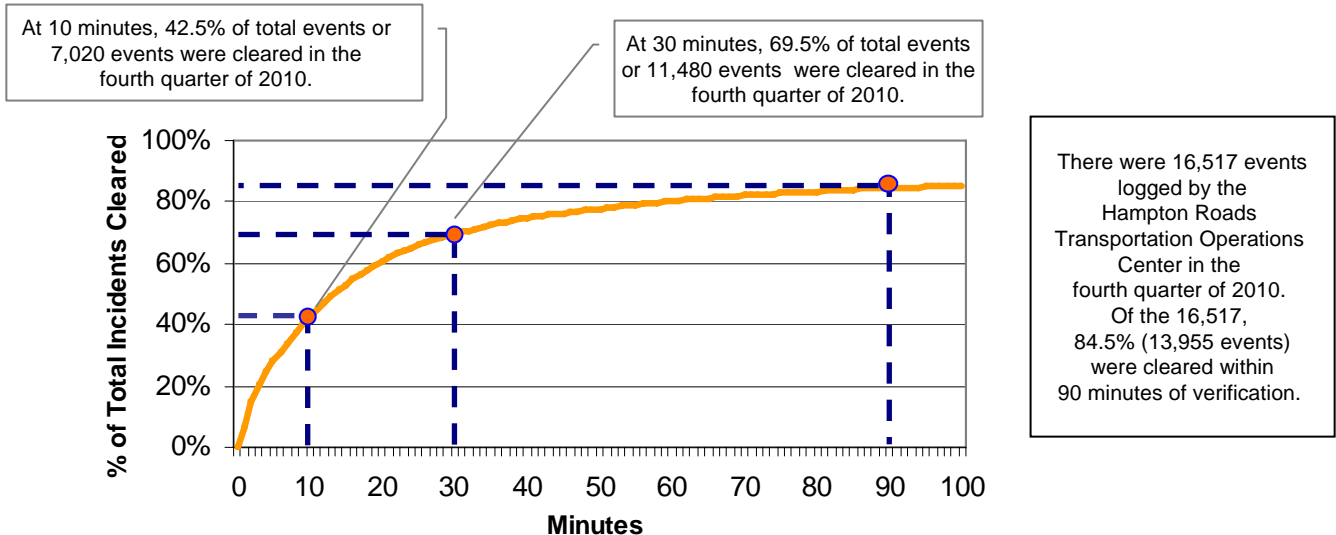
Control Room (Continued)

Events by Detection Source



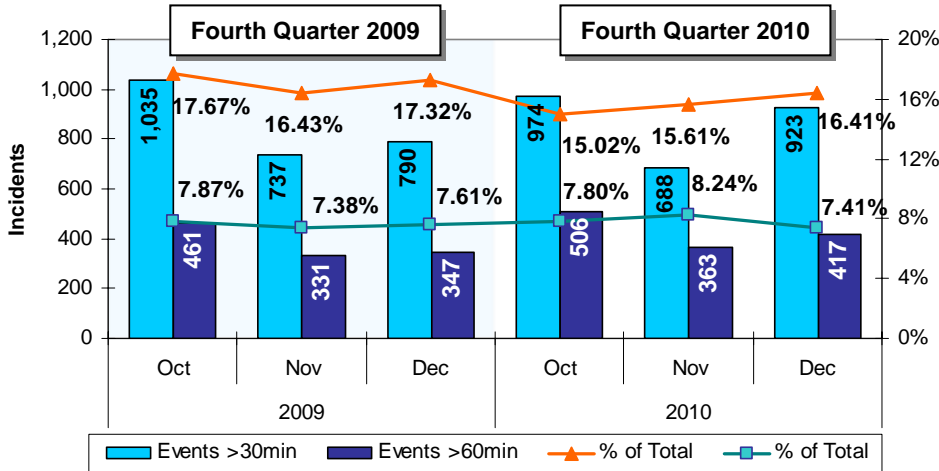
This graph provides a tally of the fourth quarter 2010 events, broken down by their detection source: CCTV [Closed Circuit Television], Other [i.e. field contractor, fire department, etc], Phone Call [public], SSP [Safety Service Patrol], VaTraffic [Virginia Traffic Information Management System] and Virginia State Police [VSP Radio or Computer Aided Dispatch]. Percents of total events logged are included.

Fourth Quarter Event Clearance



Control Room (Continued)

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



This graph compares the fourth quarter 2009 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 Q4 2010 average percentage of events greater than 30 minutes decreased from the 2009 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.

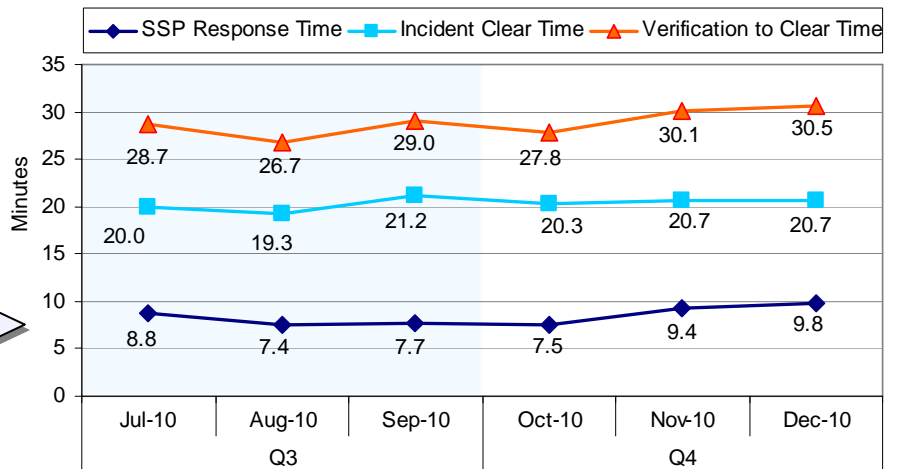
Events include the above defined Incidents, planned events (i.e. Roadwork), and special events (i.e. Amber Alerts).

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 Q3 and Q4 2010.

In Q4 the average SSP response time and average incident clear time increased over Q3 causing the average incident duration to increase to 29.5 minutes from 28 minutes in Q3.

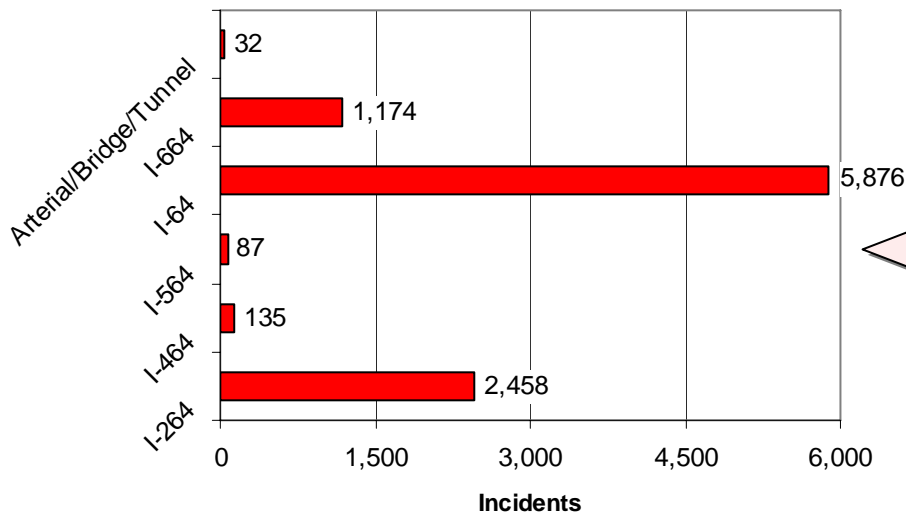
Average Incident Duration

Goal:
Average
26 Minutes



Safety Service Patrol

Number of SSP Assists by Roadway



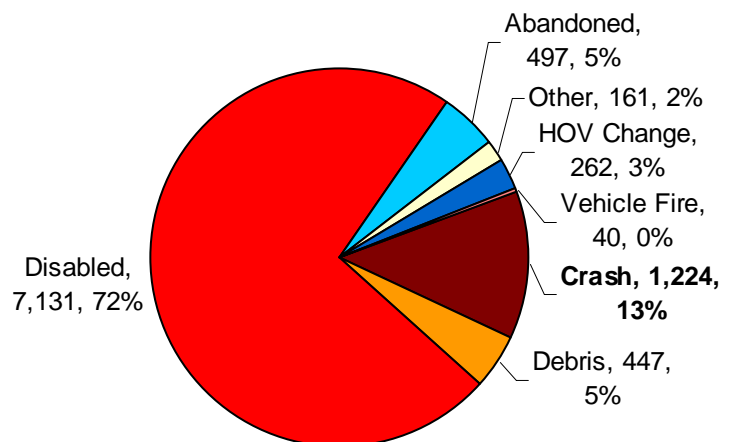
This graph shows the number of SSP assists for each freeway monitored by the HRTOC. Also included are responses on arterial roads, bridges and tunnels.

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

In the fourth quarter of 2010 SSP assists on I-64 made up 60% of the total 9,762 assists.

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

SSP Assists by Type



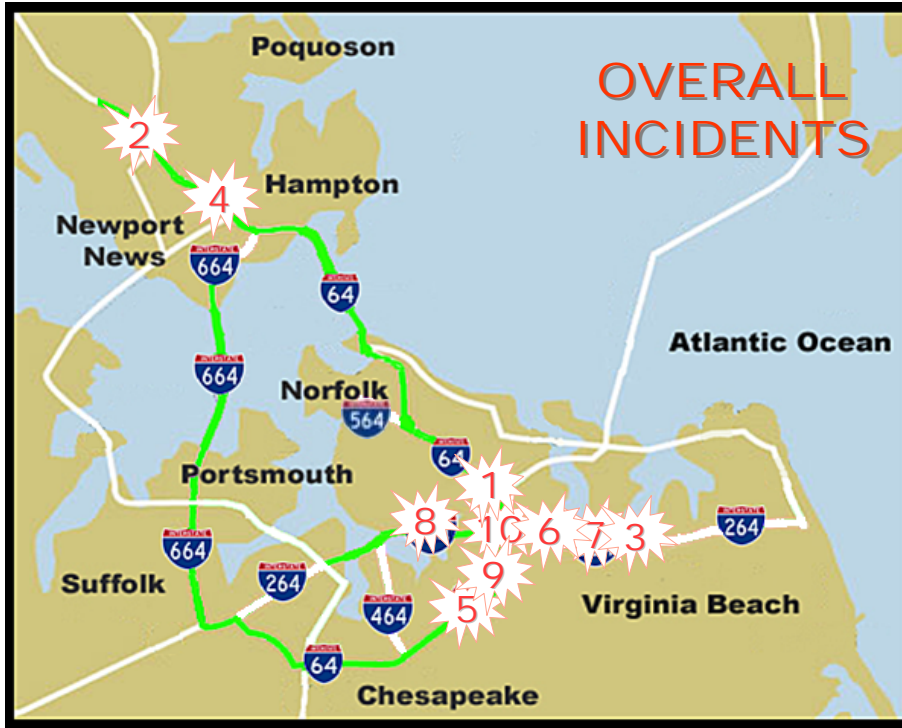
This pie chart shows the values for the major types of SSP assists. Types include Disabled Vehicles, Abandoned Vehicles, Other (i.e. traffic control for police activity), HOV Change, Vehicle Fire, Crash and Debris (i.e. ladders or animals in roadway).

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

In the fourth quarter of 2010 the Crash count was at it's highest point since Q2 2009 and the percentage of Crashes to total SSP assists was at its highest point since quarterly reporting began in 2006.

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	510	4.84%	3
2	64-36	Jefferson Ave - Fort Eustis Blvd	473	4.49%	1
3	264-20	Independence Blvd - Rosemont Rd	412	3.91%	2
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd	383	3.64%	4
5	64-08	Greenbrier Pkwy - Indian River Rd	351	3.33%	5
6	264-18	Newtown Rd - Witchduck Rd	328	3.12%	6
7	264-19	Witchduck Rd - Independence Blvd	293	2.78%	7
8	264-13	Ballentine Blvd - Broad Creek Bridge	272	2.58%	8
9	64-09	Indian River Rd - Twin Bridges	265	2.52%	9
10	264-17	64 / 264 Interchange - Newtown Rd	243	2.31%	13
TOTAL INCIDENTS			10,527	33.53%	

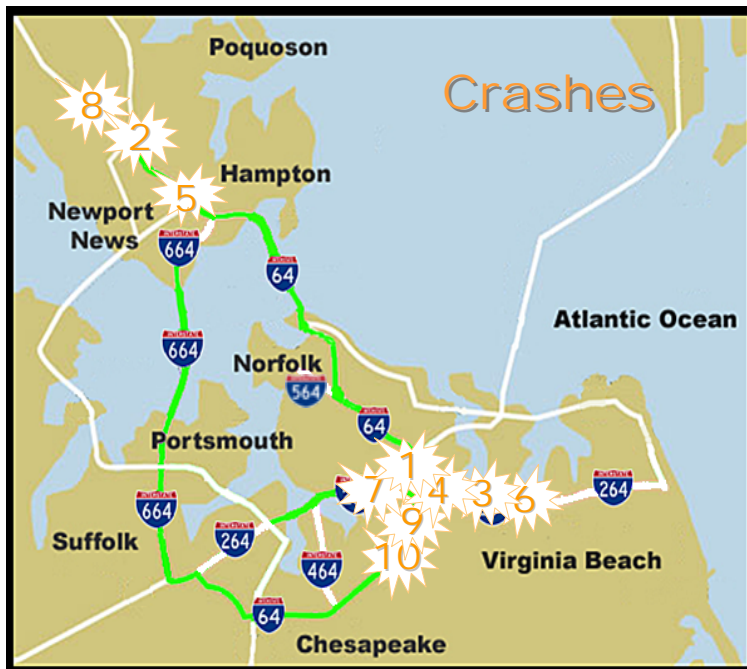
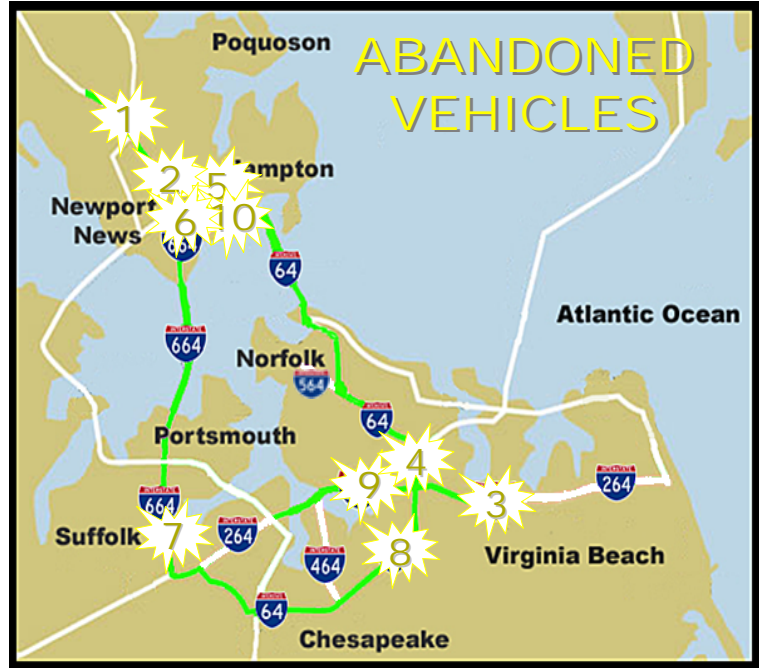
This table and accompanying map depict the highest overall incident occurrence locations for October 1, 2010 through December 31, 2010. The Hampton Roads area has been divided into 104 geographic locations. The incident types included to make up the overall most active spots include abandoned vehicles, 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 third 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	64-36	28	6.17%	1
2	64-33	23	5.07%	2
3	264-20	21	4.63%	4
4	64-11	19	4.19%	3
5	64-32	18	3.96%	13
6	64-30	16	3.52%	5
7	664-04	14	3.08%	19
8	64-08	13	2.86%	12
9	264-13	12	2.64%	8
10	64-31	12	2.64%	11
TOTAL ABANDONED		454	38.77%	

Ranking	Code	Location
1	64-36	Jefferson Ave - Fort Eustis Blvd
2	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
3	264-20	Independence Blvd - Rosemont Rd
4	64-11	64 / 264 Interchange - Northampton Blvd
5	64-32	Magruder Blvd - Hampton Roads Center Pkwy
6	64-30	64 / 664 Interchange - Mercury Blvd
7	664-04	Dock Landing Rd - Portsmouth Blvd
8	64-08	Greenbrier Pkwy - Indian River Rd
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	64-31	Mercury Blvd - Magruder Blvd



Ranking	Location	# at Location	% of Total Accidents	Last Q Rank
1	64-11	91	6.36%	1
2	64-36	57	3.98%	3
3	264-18	49	3.42%	2
4	264-17	49	3.42%	5
5	64-33	47	3.28%	14
6	264-19	46	3.21%	8
7	264-16	43	3.00%	10
8	64-37	38	2.66%	6
9	64-09	38	2.66%	12
10	64-08	33	2.31%	23
TOTAL ACCIDENTS		1,431	34.31%	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	64-36	Jefferson Ave - Fort Eustis Blvd
3	264-18	Newtown Rd - Witchduck Rd
4	264-17	64 / 264 Interchange - Newtown Rd
5	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
6	264-19	Witchduck Rd - Independence Blvd
7	264-16	Military Hwy - 64 / 264 Interchange
8	64-37	Fort Eustis Blvd - Yorktown Rd
9	64-09	Indian River Rd - Twin Bridges
10	64-08	Greenbrier Pkwy - Indian River Rd

Safety Service Patrol (Continued)
Most Active Hotspots (Continued)



Ranking	Location	# at Location	% of Total Debris	Last Q Rank
1	Midtown	62	10.13%	1
2	JRB	30	4.90%	2
3	264-18	26	4.25%	5
4	264-20	25	4.08%	3
5	264-19	23	3.76%	8
6	64-11	16	2.61%	12
7	264-08	16	2.61%	15
8	64-04	16	2.61%	22
9	264-13	14	2.29%	30
10	64-08	13	2.12%	4
TOTAL DEBRIS		612	39.38%	

Ranking	Code	Location
1	Midtown	Inside the Midtown Tunnel
2	JRB	On the James River Bridge
3	264-18	Newtown Rd - Witchduck Rd
4	264-20	Independence Blvd - Rosemont Rd
5	264-19	Witchduck Rd - Independence Blvd
6	64-11	64 / 264 Interchange - Northampton Blvd
7	264-08	Downtown Tunnel (inside tunnel)
8	64-04	High Rise Bridge (on bridge)
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	64-08	Greenbrier Pkwy - Indian River Rd

Ranking	Location	# at Location	% of Total Disabled	Last Q Rank
1	64-11	384	4.78%	3
2	64-36	376	4.68%	1
3	264-20	337	4.20%	2
4	64-33	301	3.75%	4
5	64-08	292	3.64%	5
6	264-18	244	3.04%	6
7	264-13	223	2.78%	8
8	264-19	214	2.67%	7
9	64-09	207	2.58%	9
10	64-32	181	2.25%	13
TOTAL DISABLED		8,030	34.36%	

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	264-18	Newtown Rd - Witchduck Rd
7	264-13	Ballentine Blvd - Broad Creek Bridge
8	264-19	Witchduck Rd - Independence Blvd
9	64-09	Indian River Rd - Twin Bridges
10	64-32	Magruder Blvd - Hampton Roads Center Pkwy

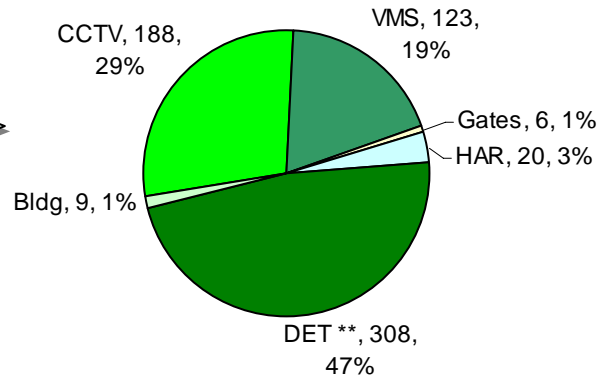


Field Maintenance

Number of PM Tasks by Equipment Type

This chart and the accompanying table show the preventive maintenance (PM) tasks completed during the fourth quarter of 2010. 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.

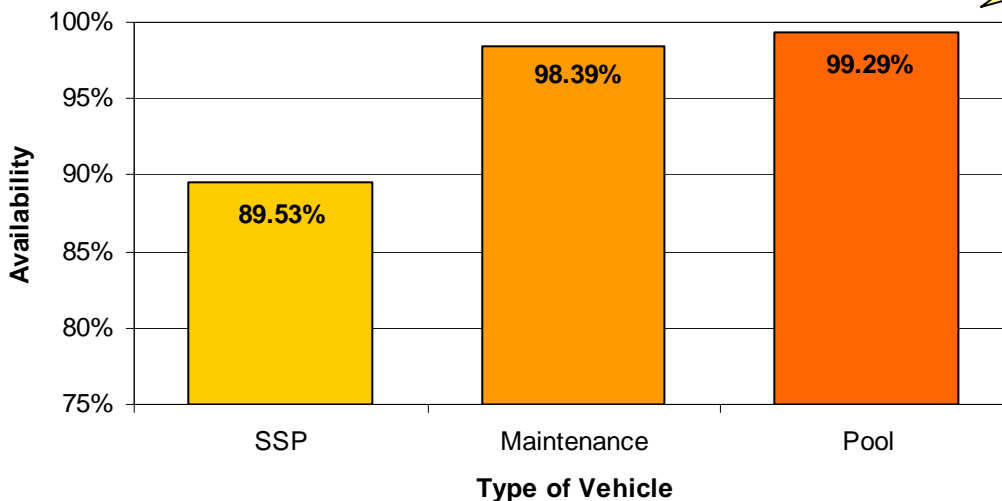
This information helps management allocate PM resources (equipment) and keep to the established preventive maintenance schedule.



** DET refers to maintenance for detector cabinets.

Fleet and Asset Management

HRTOC Vehicle Average Availabilities

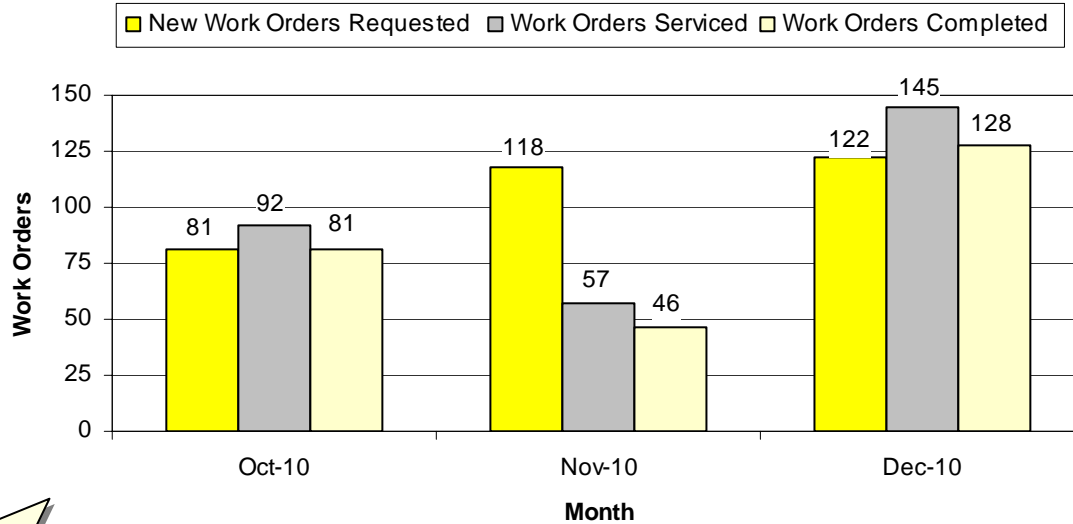


Goal: To Maintain 100% Availability for all Vehicle Types.

These three bars show what percentage of the total SSP, Maintenance and Pool vehicles were available for use during the fourth quarter of 2010. These numbers measure fleet service effort and success rates.

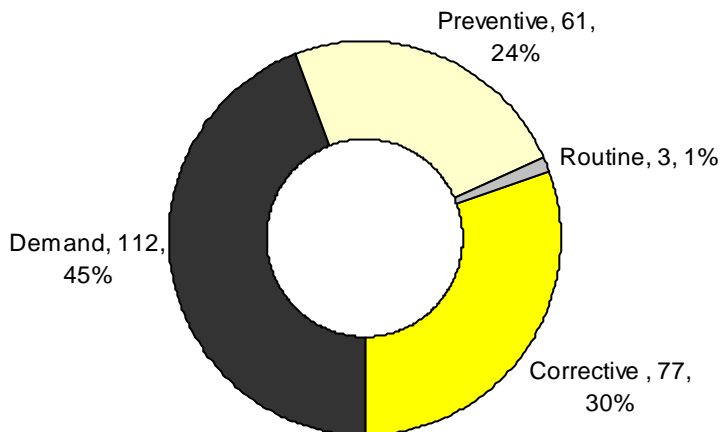
Information Technology

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 fourth quarter of 2010. This metric helps track IT Department workloads, in support of staff/resource allocation and scheduling.

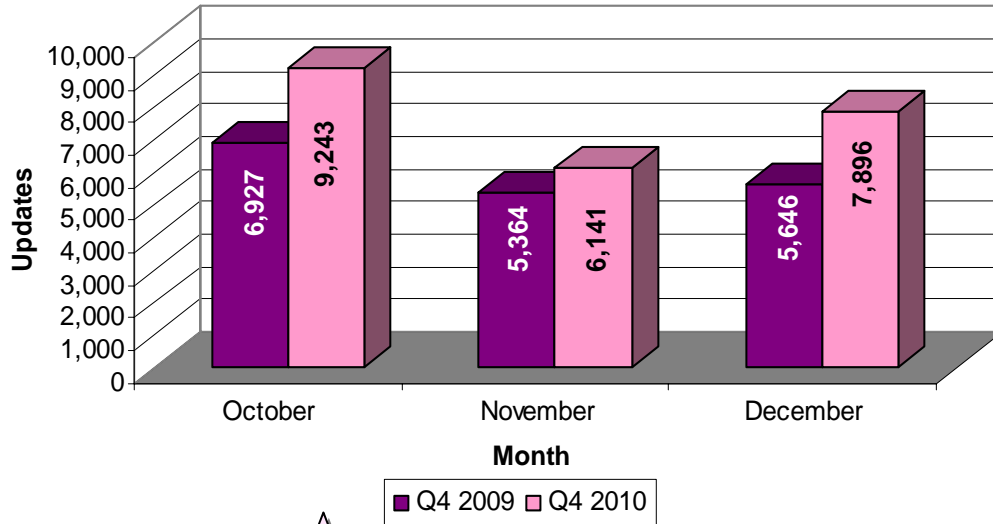
IT Facility Maintenance Activity



This donut graph shows IT Department tasks completed during Q4 for work types: corrective - "My printer is not working, please fix it"; demand - "I need a new printer"; preventive - 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.

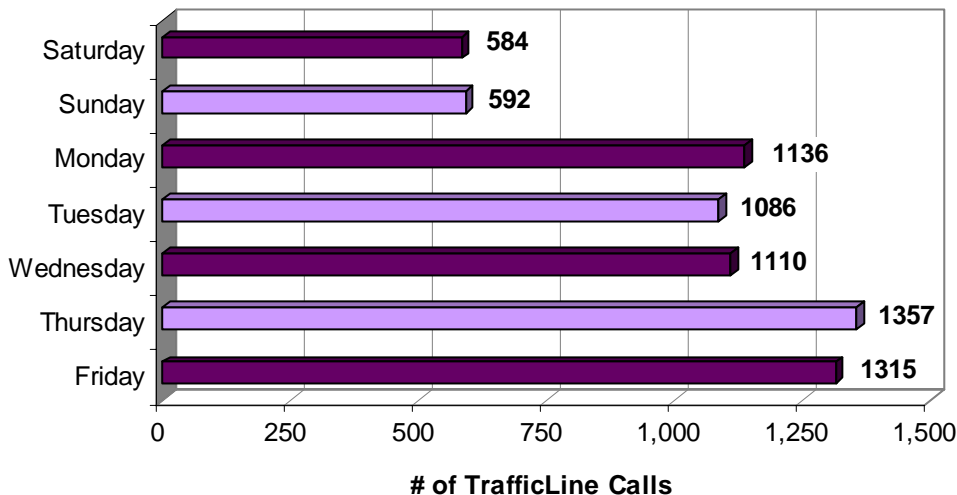
Public Information

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 fourth quarter of 2009 and 2010 by month. An average day during the fourth quarter of 2010 registered about 253 updates to the HAR system, 58 more per day than the same period of 2009. The large increase over 2009 counts follows the trend of the total event count increase in Q4 2010 over 2009.

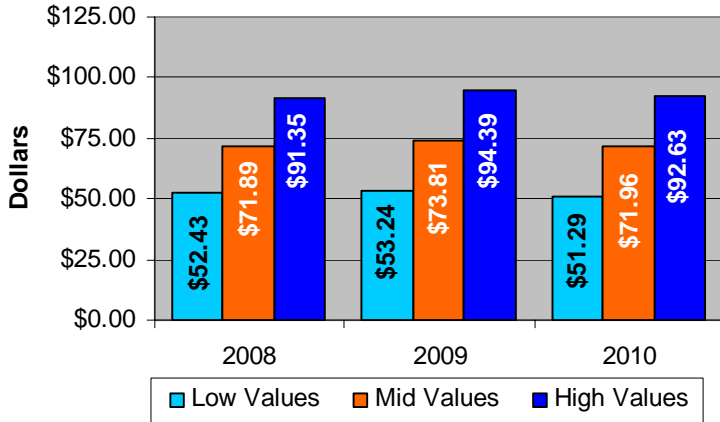
Hampton Roads TrafficLine Calls



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 7,180 TrafficLine calls in the fourth quarter of 2010 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.

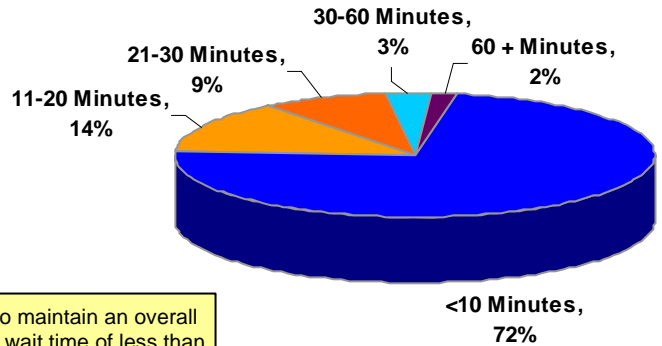
After adjusting for inflation, the average survey participant values each assist between \$51.29 and \$92.63 for 2010.

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.

256 valid responses were collected in Q4. Using the midpoint for each range of time, the overall average wait time before SSP arrival was 10 minutes for the fourth quarter of 2010.

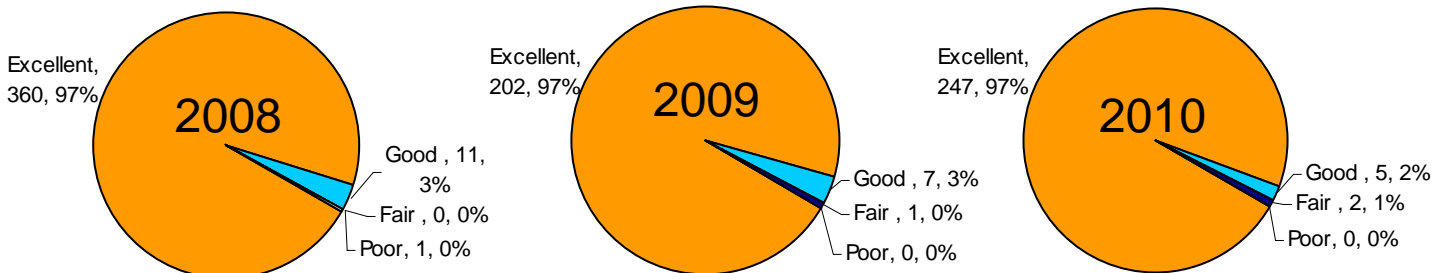
Goal: To maintain an overall average wait time of less than 9 minutes

How Long Did You Wait For the SSP Driver?



These pie charts compare the overall SSP service rating for the fourth quarters of 2008, 2009 and 2010. 97% 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.