



Hampton Roads TOC

Hampton Roads Transportation Operations Center

Fourth Quarter Report 2009





TABLE OF CONTENTS

Control Room

Events Greater Than 30 an 60 Minutes..	2
Incident Duration.....	2
Fourth Quarter Incident Clearance.....	2
Events Logged by Type.....	3
Average Weekly Total Events.....	3
Events by Detection Source.....	4
Incidents Involving Tractor Trailers.....	4

Safety Service Patrol

Number of Assists by Roadway.....	5
SSP Assists by Type.....	5
Most Active Hotspots.....	6
Overall Incidents.....	6
Abandoned Vehicles.....	7
Crashes.....	7
Debris Removed.....	8
Disabled Vehicles.....	8

Maintenance

Number of Preventive Maintenance	
Tasks Made by Equipment Type.....	9
HRTOC Vehicle Availabilities.....	9
Work Orders Submitted/Serviced by IT..	10
IT Facility Maintenance Activity.....	10

Public Information

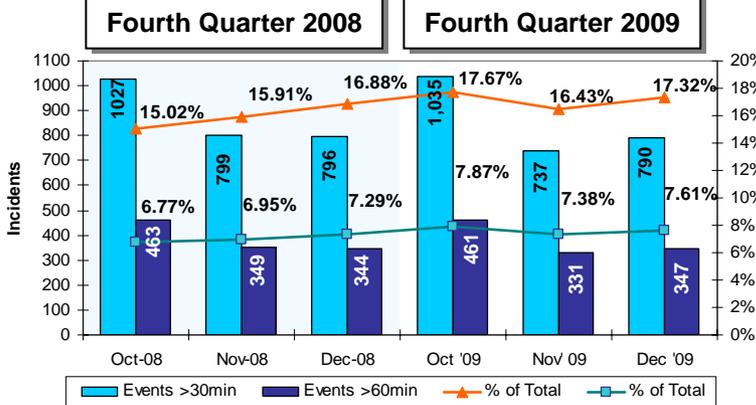
Highway Advisory Radio Updates.....	11
Hampton Roads TrafficLine Calls.....	11

Customer Service

What Value Would You Place on Services	
Received from the SSP Program?.....	12
How Long Did You Wait for the SSP	
Driver?.....	12
Overall, How Would You Rate the SSP	
Service?.....	12

Control Room

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



This graph compares the 4th quarter 2008 and 2009 totals of 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 average 4th quarter 2009 percentage of events greater than 30 minutes increased by 1.2 percentage points, and the average 4th quarter 2009 percentage of events greater than 60 minutes increased by .6 percentage points since the 4th quarter of 2008.

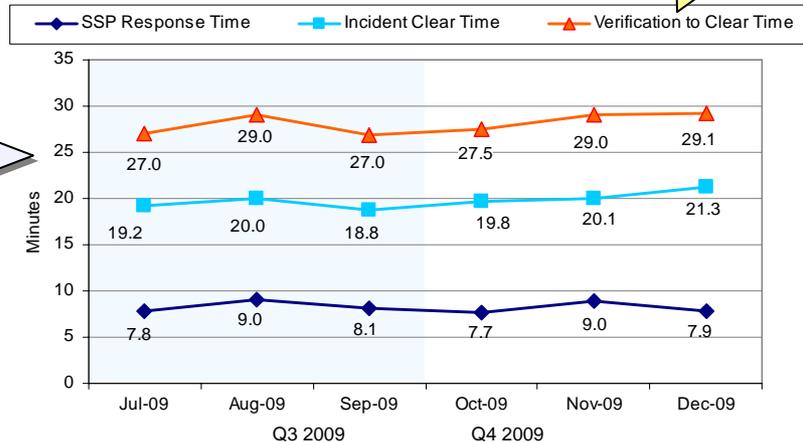
This line graph shows the average duration from the time an incident is verified (Note: SSP is *not* included as a detection source because this generally forces response time to be zero) to when a SSP truck arrives on scene; the time from SSP arrival until the incident is cleared or the SSP is relieved by an outside agency; and the total amount of time from initial verification to clearance for the 3rd and 4th quarters of 2009.

Average SSP Response remained constant and average Clearance Time increased by just over 1 minute from the 3rd quarter. This takes the average total incident duration up from 27.7 minutes in the 3rd quarter to 28.5 minutes in the 4th quarter of 2009.

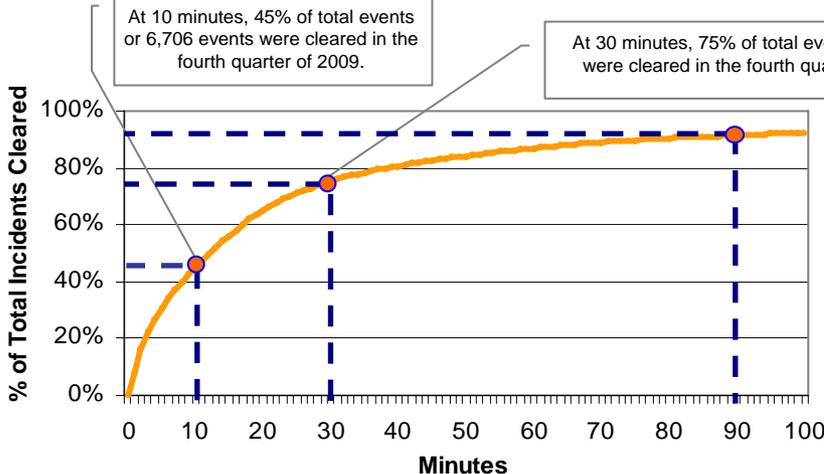
Incident Duration

Notification < SSP Response
SSP Response < Incident Clear Time
Incident Clear Time < Notification to Clear Time

Goal: 26 Minutes
(Verification to clear time)



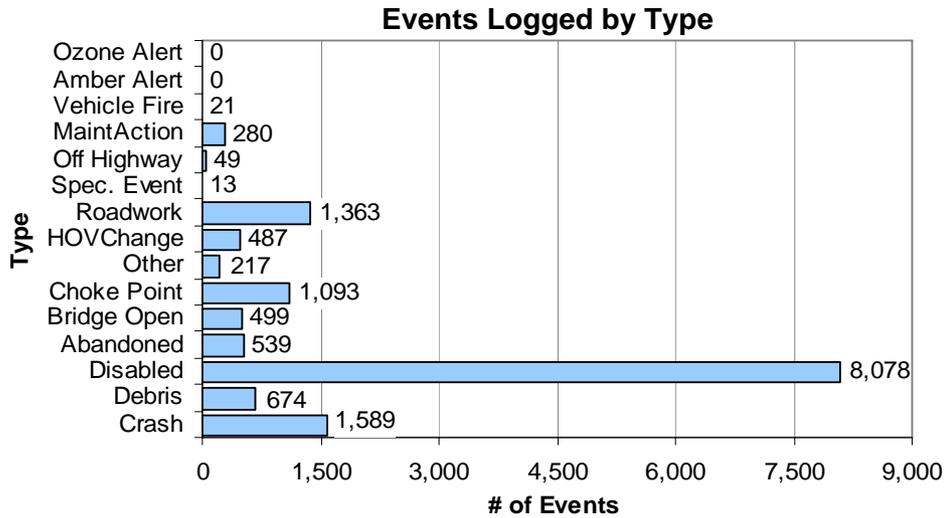
Fourth Quarter Event Clearance



There were 14,902 events responded to by the Hampton Roads Transportation Operations Center in the fourth quarter of 2009. Of the 14,902, 92% (13,710 events) were cleared within 90 minutes of verification.

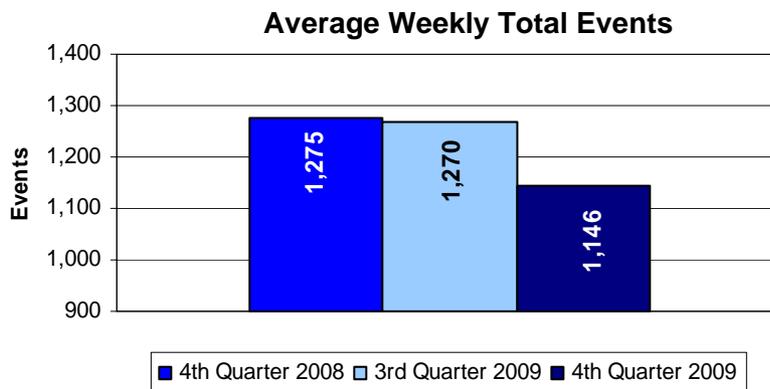
**** Incidents** are defined as unplanned events adversely impacting traffic flow such as crashes, debris removed, disabled vehicles and abandoned vehicles.
**** Events** are defined as "the above defined "Incidents," as well as special events" not affecting traffic.

Control Room (Continued)



This graph enumerates event counts for the fourth quarter of 2009 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 54% of the 14,902 total events responded to by the HRTOC Control Room in the fourth quarter.



Shown here are the weekly averages for events responded to by the Control Room for the fourth quarter of 2008, the third quarter of 2009, and the fourth quarter of 2009.

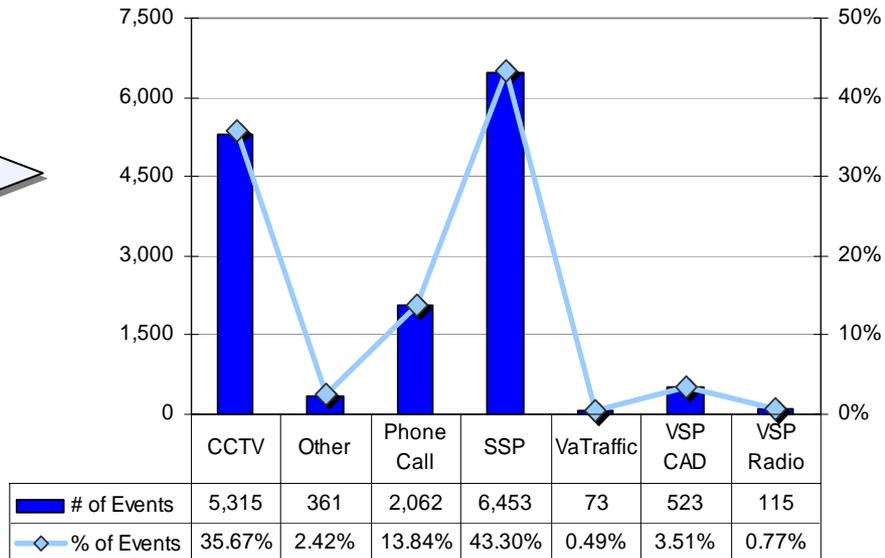
The fourth quarter of 2009 average of 1,146 events per week was down 10% from both the fourth quarter of 2008, the third quarter of 2009 weekly averages.

Control Room (Continued)

The bar graph to the right provides a tally of Q4's 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.

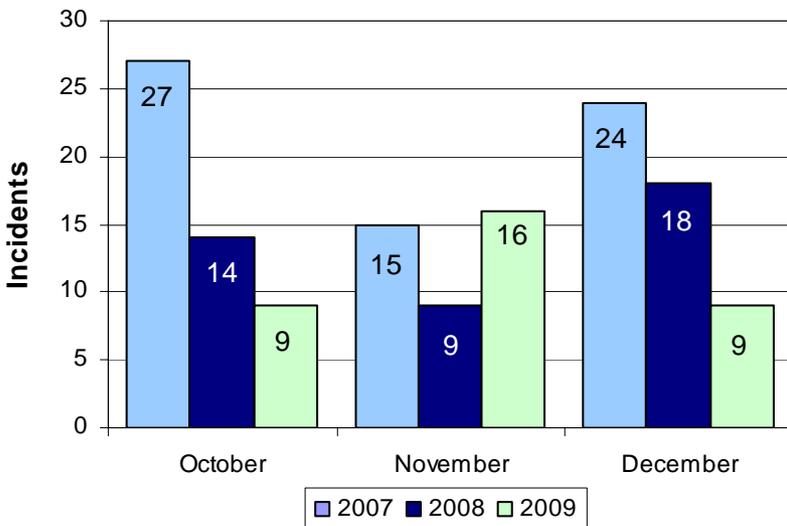
CCTV detection has increased significantly over the last 4 quarters (from 27% to 36%) while SSP detection has fallen. This is due in part to changes in Control Room Operator training processes and the reduction in SSP personnel at the end of Q2 09.

Events by Detection Source



Goal: To Detect 10% of Events by CCTV.

Incidents Involving Tractor Trailers

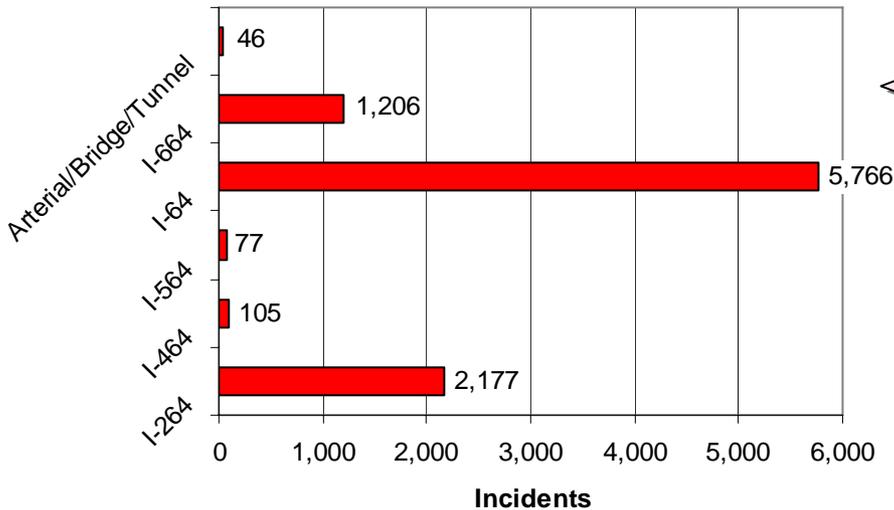


Incidents involving tractor-trailers can take considerably longer to clear and thus have the capability to cause a negative effect on traffic flow and lane clearance.

The fourth quarter 2009's total of tractor-trailer incidents was 34; below the 2007 and 2008 fourth quarter totals of 66 and 41 respectively. However, the month of November 2009 had a higher number of incidents involving tractor trailers than the same month in 2007 and 2008. November was the only month in 2009 where this occurred.

Safety Service Patrol

Number of SSP Assists by Roadway

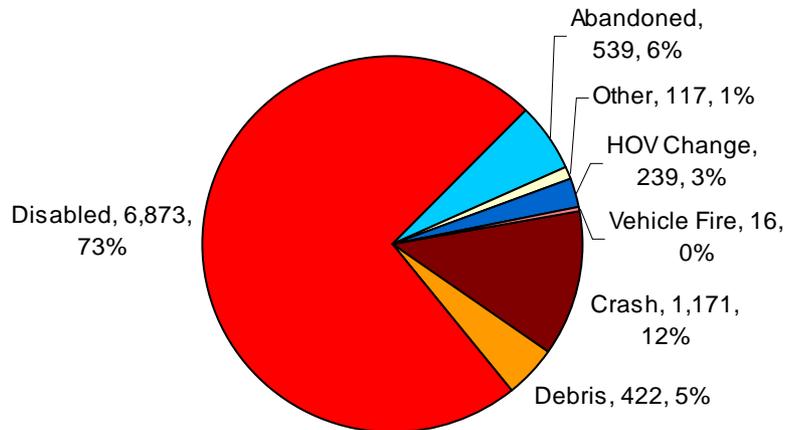


This graph shows the number of SSP assists for each freeway monitored by the HRTOC. Also included are responses on arterial roads, bridges and tunnels.

This information can be used to plan future patrol areas as well as staffing levels by roadway. The number of SSP assists on I-64 made up 62% of the total 9,377 assists in the fourth quarter of 2009.

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

SSP Assists by Type



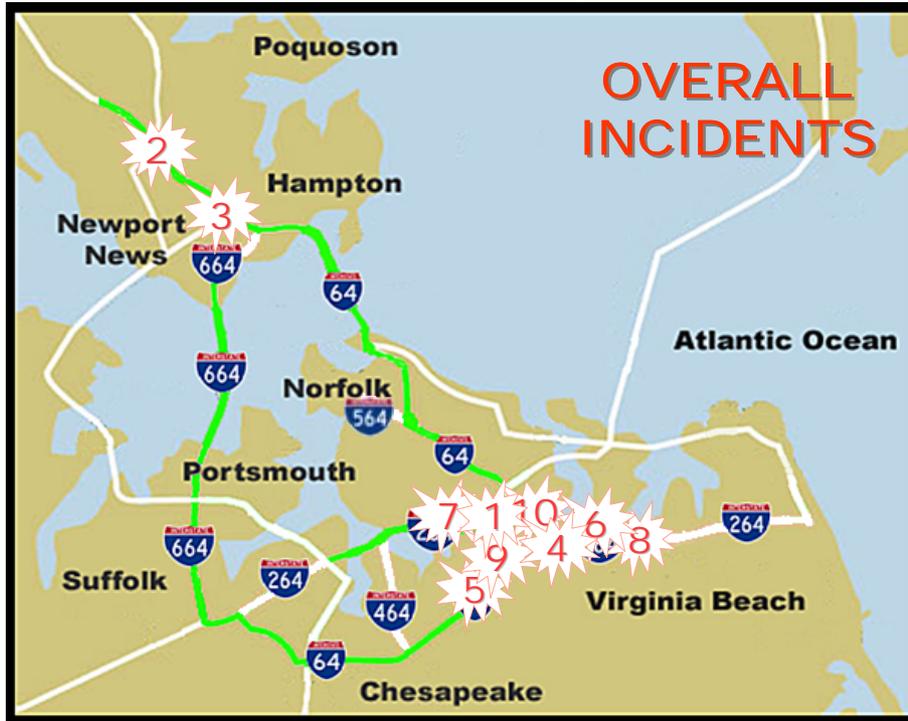
This pie chart shows the relative values for the major types of SSP assists in Q4. Types include Disabled Vehicles, Abandoned Vehicles, Other (i.e. traffic control for police activity), HOV Change, Vehicle Fire, Crash and Debris (i.e. ladders or animals in roadway).

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

In Q4, the percentage of the assist type Crash (12%) was at it's highest point in the past 8 quarters.

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	509	4.33%	1
2	64-36	Jefferson Ave - Fort Eustis Blvd	428	3.64%	2
3	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd	394	3.35%	3
4	264-18	Newtown Rd - Witchduck Rd	366	3.12%	5
5	64-08	Greenbrier Pkwy - Indian River Rd	352	3.00%	4
6	264-19	Witchduck Rd - Independence Blvd	299	2.55%	10
7	264-13	Ballentine Blvd - Broad Creek Bridge	294	2.50%	6
8	264-20	Independence Blvd - Rosemont Rd	282	2.40%	7
9	64-09	Indian River Rd - Twin Bridges	274	2.33%	9
10	264-17	64 / 264 Interchange - Newtown Rd	237	2.02%	11
TOTAL INCIDENTS			10,707	29.24%	

The Hampton Roads area is divided into 104 separate geographic locations for the purpose of tracking incident location. This table and accompanying map depict the highest overall incident occurrence locations for October 1, 2009 through December 31, 2009. 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. The updated SSP routes (reduced June 20th 2009) are highlighted on the map in green. Also included in the table are the rankings of locations for the third quarter of 2009 (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 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	31	5.78%	1
2	64-33	28	5.22%	2
3	64-11	23	4.29%	6
4	64-32	19	3.54%	7
5	664-04	19	3.54%	8
6	264-18	16	2.99%	37
7	64-03	16	2.99%	10
8	64-08	14	2.61%	3
9	264-13	14	2.61%	4
10	64-14	13	2.43%	21
TOTAL ABANDONED		523	36.01%	

Ranking	Code	Location
1	64-36	Jefferson Ave - Fort Eustis Blvd
2	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
3	64-11	64 / 264 Interchange - Northampton Blvd
4	64-32	Magruder Blvd - Hampton Roads Center Pkwy
5	664-04	Dock Landing Rd - Portsmouth Blvd
6	264-18	Newtown Rd - Witchduck Rd
7	64-03	Rte 17 - High Rise Bridge cut through
8	64-08	Greenbrier Pkwy - Indian River Rd
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	64-14	Robin Hood Rd - Norview Ave



Ranking	Location	# at Location	% of Total Accidents	Last Q Rank
1	264-18	81	5.21%	4
2	64-11	80	5.15%	3
3	264-19	70	4.50%	5
4	64-36	69	4.44%	2
5	264-17	56	3.60%	6
6	264-16	47	3.02%	13
7	64-38	40	2.57%	7
8	64-33	40	2.57%	39
9	64-37	37	2.38%	1
10	264-20	37	2.38%	15
TOTAL ACCIDENTS		1,592	35.84%	

Ranking	Code	Location
1	264-18	Newtown Rd - Witchduck Rd
2	64-11	64 / 264 Interchange - Northampton Blvd
3	264-19	Witchduck Rd - Independence Blvd
4	64-36	Jefferson Ave - Fort Eustis Blvd
5	264-17	64 / 264 Interchange - Newtown Rd
6	264-16	Military Hwy - 64 / 264 Interchange
7	64-38	Yorktown Rd - Rte 199
8	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
9	64-37	Fort Eustis Blvd - Yorktown Rd
10	264-20	Independence Blvd - Rosemont Rd

Safety Service Patrol (Continued)

Most Active Hotspots (Continued)



Ranking	Location	# at Location	% of Total Debris	Last Q Rank
1	Midtown	38	5.76%	1
2	264-08	29	4.39%	3
3	JRB	28	4.24%	2
4	64-11	28	4.24%	6
5	264-20	25	3.79%	5
6	264-13	19	2.88%	21
7	64-33	17	2.58%	11
8	64-08	15	2.27%	4
9	64-07	15	2.27%	23
10	64-10	14	2.12%	14
TOTAL DEBRIS		609	34.55%	

Ranking	Code	Location
1	Midtown	inside the Midtown Tunnel
2	264-08	Downtown Tunnel (inside tunnel)
3	JRB	on the James River Bridge
4	64-11	64 / 264 Interchange - Northampton Blvd
5	264-20	Independence Blvd - Rosemont Rd
6	264-13	Ballentine Blvd - Broad Creek Bridge
7	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
8	64-08	Greenbrier Pkwy - Indian River Rd
9	64-07	Battlefield Blvd - Greenbrier Pkwy
10	64-10	Twin Bridges (Norfolk Side) - 64 / 264 Interchange

Ranking	Code	# at Location	% of Total Disabled	Last Q Rank
1	64-11	378	4.20%	1
2	64-36	316	3.51%	2
3	64-33	309	3.43%	3
4	64-08	288	3.20%	4
5	264-18	260	2.89%	6
6	264-13	237	2.63%	5
7	64-09	217	2.41%	9
8	264-20	212	2.36%	7
9	264-19	208	2.31%	13
10	64-30	172	1.91%	21
TOTAL DISABLED		7,982	28.87%	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	64-36	Jefferson Ave - Fort Eustis Blvd
3	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
4	64-08	Greenbrier Pkwy - Indian River Rd
5	264-18	Newtown Rd - Witchduck Rd
6	264-13	Ballentine Blvd - Broad Creek Bridge
7	64-09	Indian River Rd - Twin Bridges
8	264-20	Independence Blvd - Rosemont Rd
9	264-19	Witchduck Rd - Independence Blvd
10	64-30	64 / 664 Interchange - Mercury Blvd

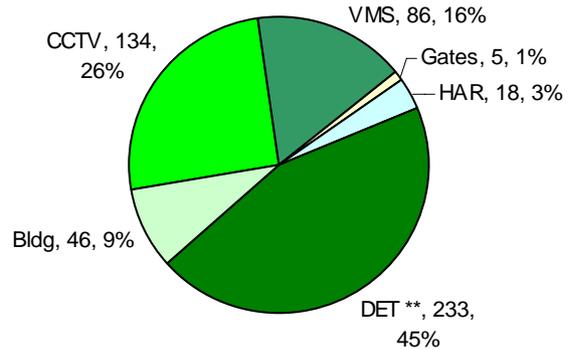


Field Maintenance

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 2009. In addition to the five main equipment categories shown in the table, the chart includes HRTOC buildings (Bldg) PM tasks. These figures DO NOT count 'other' PM types related to electronics, safety inspections, fiber & communication equipment and utility locating.

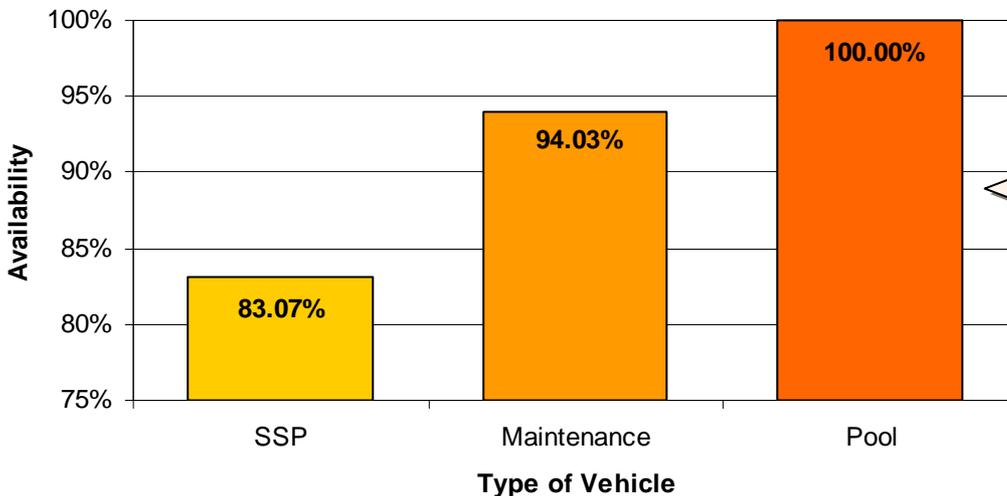
This information helps management allocate PM resources (equipment) and keep to the established preventive maintenance schedule.



Fleet and Asset Management

HRTOC Vehicle Average Availabilities

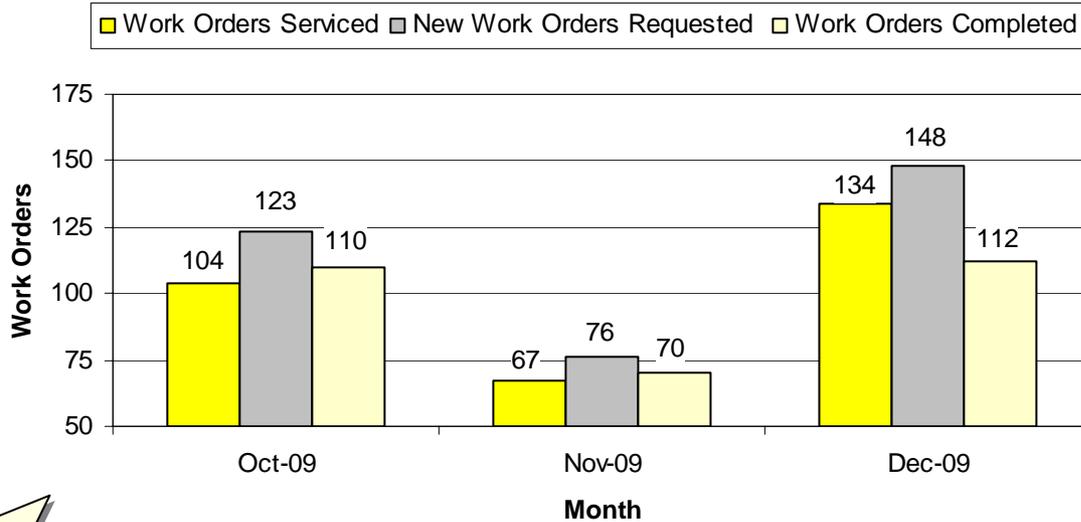
Goal: To Maintain 100% Availability for all Vehicle Types.



These three bars show the average percentage of availability for the SSP, maintenance and pool vehicle fleets during the fourth quarter of 2009. These numbers measure fleet service effort and success rates.

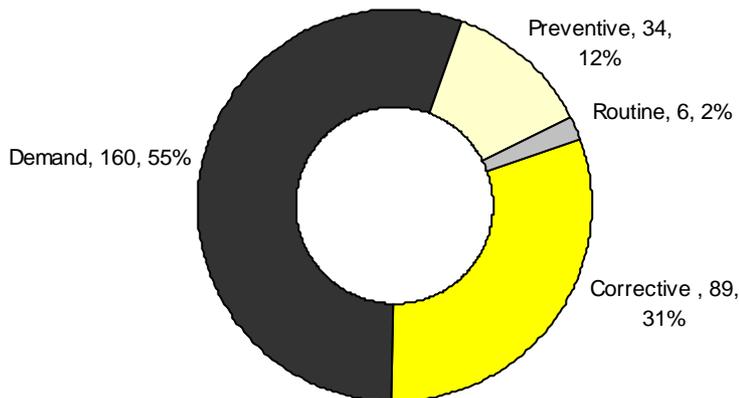
Information Technology

Work Orders Submitted to/Service by IT



The above bar graph shows the number of work orders submitted, serviced and closed (completed) by the IT Department for the fourth quarter of 2009. This metric helps track IT Department workloads, in support of staff/resource allocation and scheduling.

IT Facility Maintenance Activity

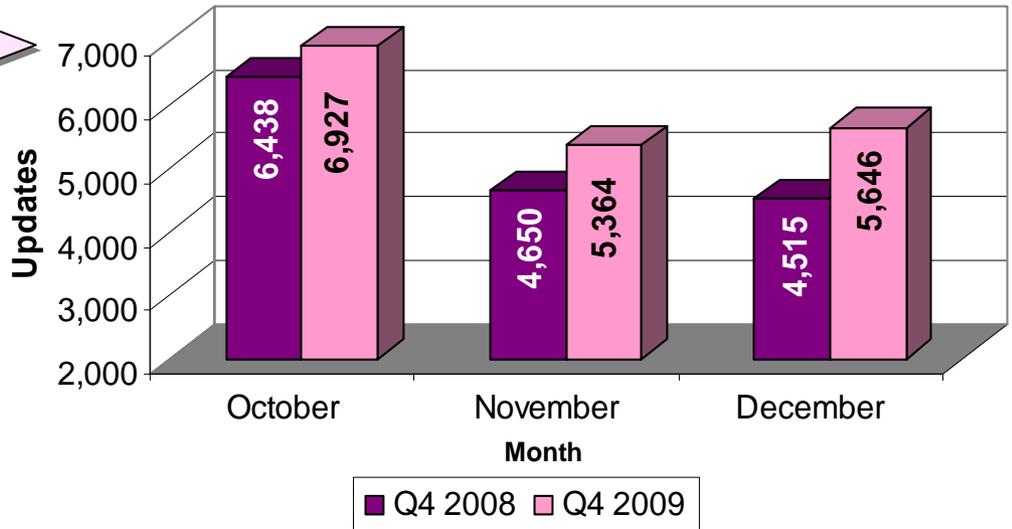


This donut graph shows IT Department tasks completed during Q4 for work types: corrective - "My printer is not working, please fix it"; demand - "I need a new printer"; preventive - regular PM on a schedule; and routine - a replacement printer every three years, for example. The breakout supports management in the allocation of staff, equipment and budget resources at the HRTOC.

Public Information

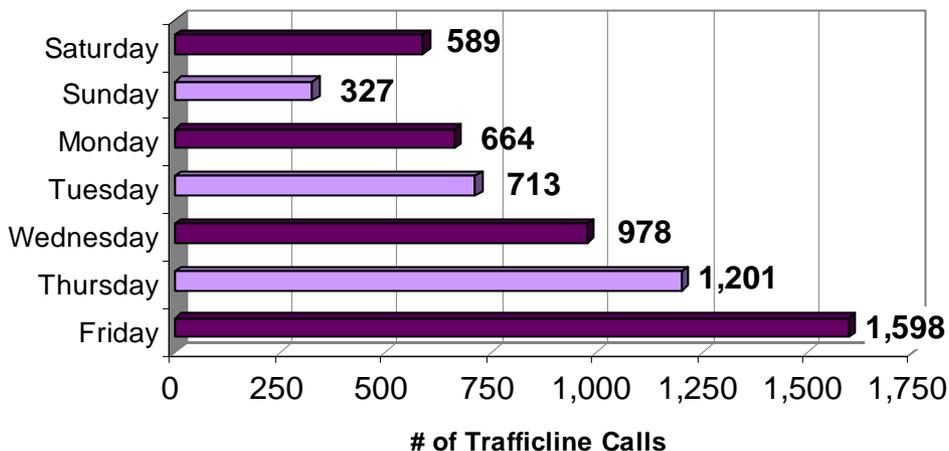
In order to advise the public of current traffic conditions on the Hampton Roads highways Highway Advisory Radio (HAR) messages are updated several times during the day. This graph tallies the number of updates made to the HAR system during the fourth quarters of 2008 and 2009. An average day during the fourth quarter of 2009 registered about 195 updates to the HAR system, 25 more per day than the same period of 2008.

Highway Advisory Radio Updates



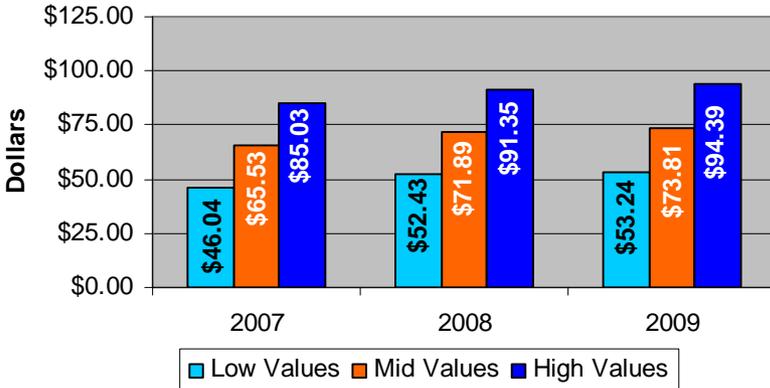
In December 2006, VDOT launched Hampton Roads TrafficLine, (757) 361-3016, to inform motorists of road conditions and traffic delays. Callers were able to hear information pertaining to tunnels, bridges, lane closures and the current message on the Highway Advisory Radio, 610 AM. In October of 2008, the information was changed to include only the current messages being played on the Highway Advisory Radio. Since this change, TrafficLine has experienced a decrease in the amount of calls it receives. However, the number of calls began to increase again in 2009. The below graph depicts the total number of TrafficLine calls in the quarter by day of the week. 6,070 calls were routed to the TrafficLine HAR Menu in the fourth quarter of 2009.

Hampton Roads TrafficLine Calls



Customer Service*

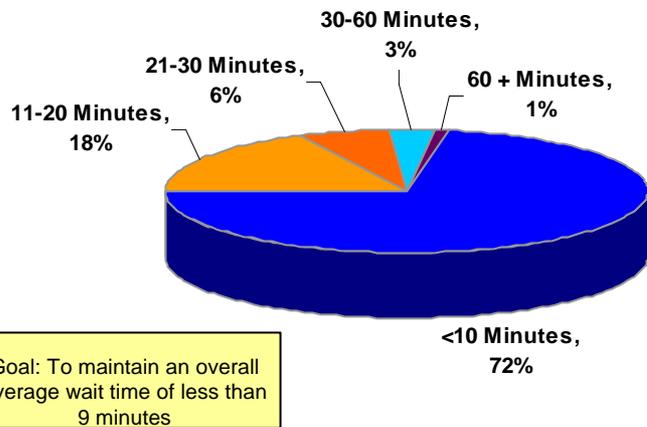
What Value Would You Place on the Services Received from the SSP Program?



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 \$53.24 and \$94.39 for 2009.

How Long Did You Wait For the SSP Driver?

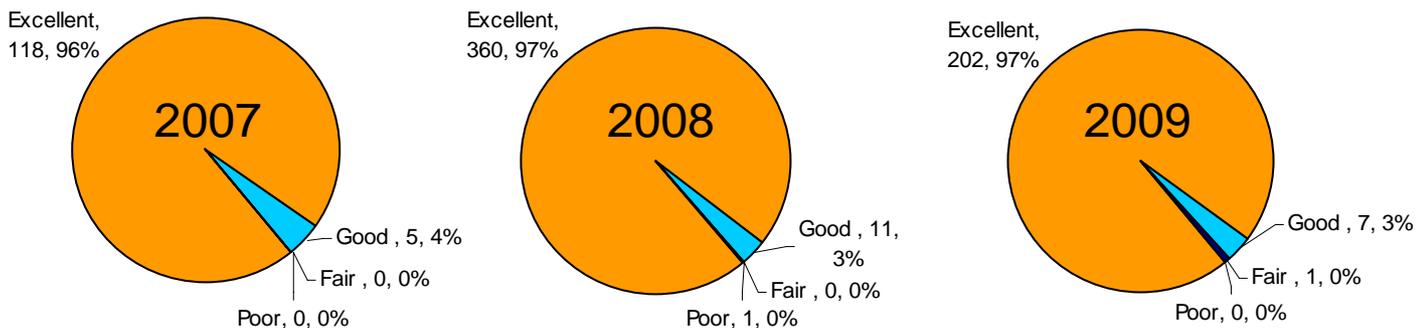


The numbers depicted in this pie chart show the length of time a motorist waited before a SSP driver arrived. This information goes beyond what is in our database, as we are typically unaware of how long a motorist has been waiting when the control room verifies the incident.

210 valid responses were collected over Q4. Using the midpoint for each range of time, the overall average wait time before SSP arrival was 9.7 minutes for the fourth quarter of 2009.

These pie charts compare the overall SSP service rating for the fourth quarters of 2007, 2008 and 2009. Over 95% of motorists that returned a comment card felt they received excellent service 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.