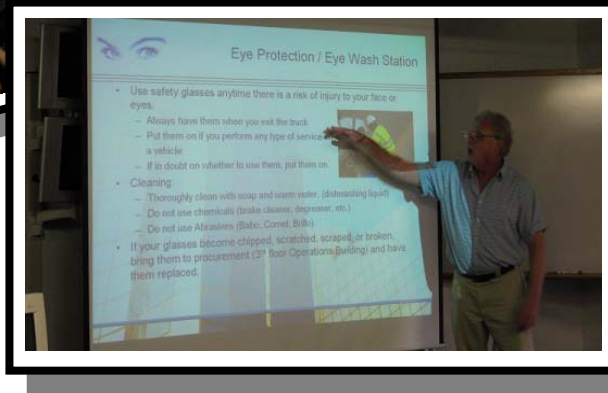
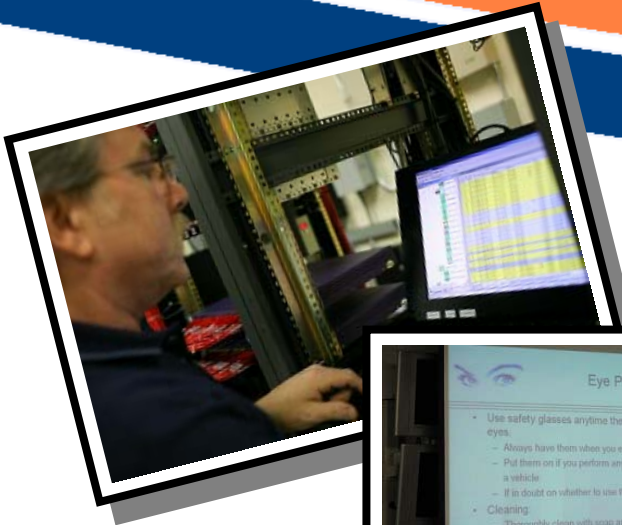




Hampton Roads TOC

# Hampton Roads Transportation Operations Center

## Second Quarter Report 2009



### Eye Protection / Eye Wash Station

- Use safety glasses anytime there is a risk of injury to your face or eyes.
  - Always have them when you exit the truck
  - Put them on if you perform any type of service on a vehicle
  - If in doubt on whether to use them, just then on
- Cleaning:
  - Thoroughly clean with soap and warm water (debriding liquid)
  - Do not use chemicals (bleach, caustic, degreaser, etc.)
  - Do not use Abrasives (Baker, Comet, Brillo)
- If your glasses become chipped, scratched, scraped, or broken, bring them to procurement (3<sup>rd</sup> floor Operations Building) and have them replaced.



## TABLE OF CONTENTS

### Control Room

Events Greater Than 30 an 60 Minutes..	2
Incident Duration.....	2
Second 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	
Repairs 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

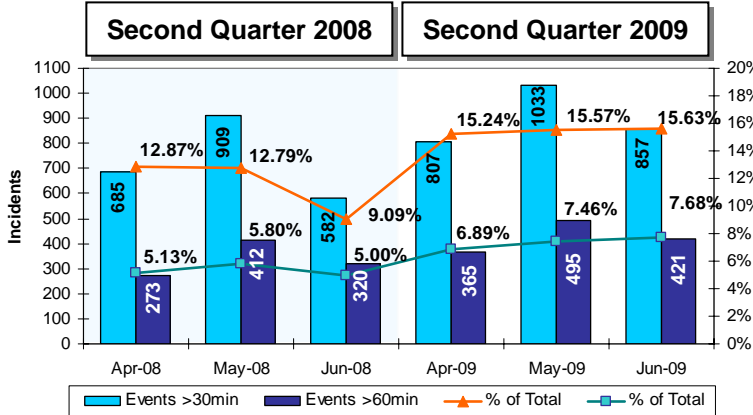
### Customer Service

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



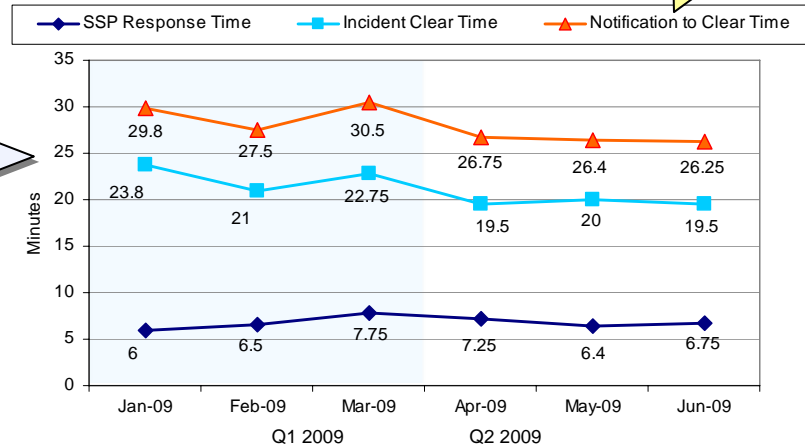
This graph totals those events which lasted more than thirty minutes and those events which lasted more than sixty minutes in duration and compares second quarter results of 2008 and 2009. Percentages of total events logged are included. The average second quarter 2009 percentage of events lasting longer than both 30 minutes and 60 minutes has increased by over 2 percentage points since the second 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 first and second quarters of 2009. Since the 1<sup>st</sup> quarter, average SSP Response has remained constant and average Clearance Time has decreased almost 3 minutes. This takes the average total incident duration down from 29.27 minutes in the 1<sup>st</sup> quarter to 26.47 minutes in the 2<sup>nd</sup> quarter of 2009.

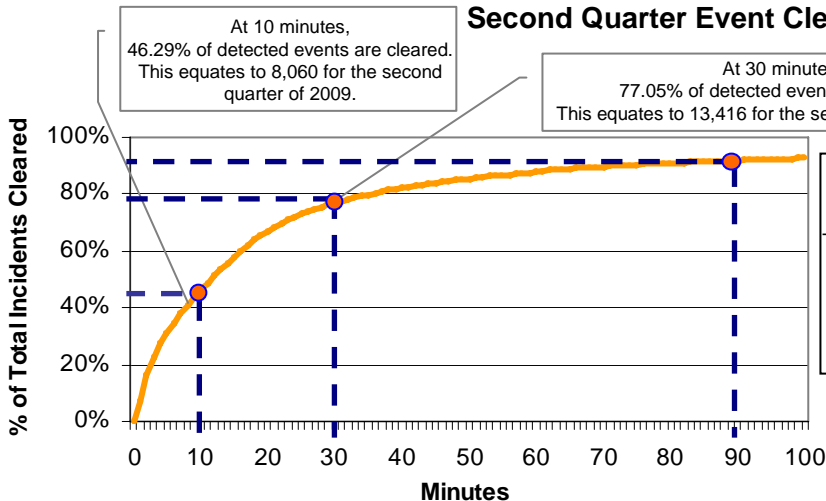
### Incident Duration

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

Goal: 26 Minutes  
(Verification to clear time)



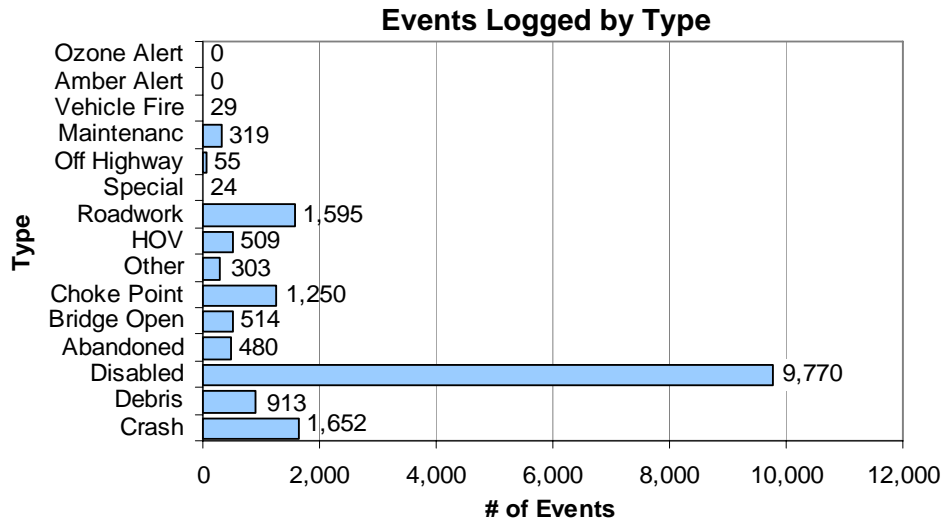
### Second Quarter Event Clearance



There were 17,413 events responded to by the Hampton Roads Transportation Operations Center in the second quarter of 2009. Of the 17,413, 91.87% (15,998 events) were cleared within 90 minutes of verification.

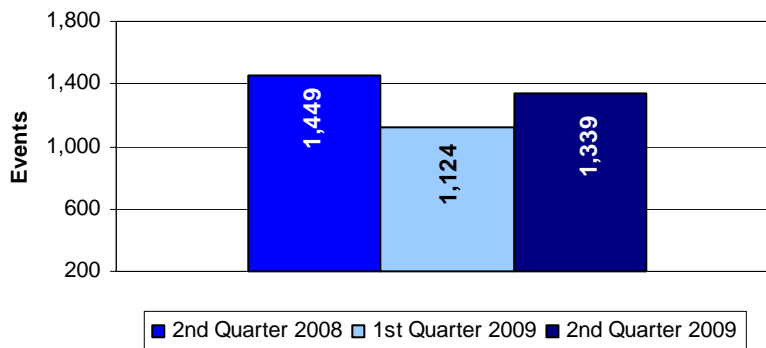
**\*\* Incidents** are defined as unplanned events adversely impacting traffic flow such as crashes, debris removed, disabled vehicles and abandoned vehicles.  
**\*\* Events** are defined as "the above defined "Incidents," as well as special events" not affecting traffic.

## Control Room (Continued)



This graph enumerates event counts for the second 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 Open, Abandoned Vehicle, Disabled Vehicle, Debris (ladder, mattress, animals, etc.) and Crash. Unfounded (cancelled call before the SSP arrived) and CBA (cleared before arrival) have been made subcategories of Crash, Debris, Disabled and Other and Medical Emergency has been made a subcategory of the type Other.

### Average Weekly Total Events

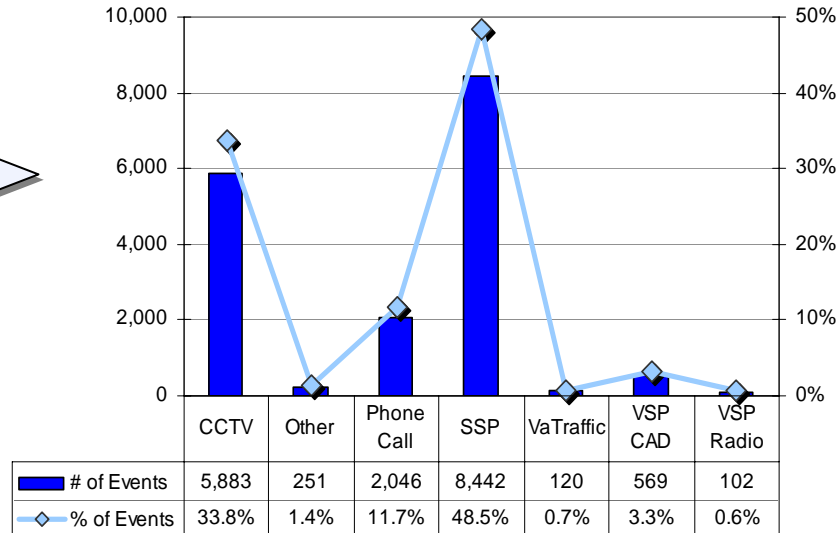


Shown here are the weekly averages for events responded to by the Control Room for the second quarter of 2008, the first quarter of 2009, and the second quarter of 2009. In the second quarter of 2009, the HRTOC staff responded to an average of 1,339 events per week. A total of 17,413 events were responded to from April through June 2009.

## Control Room (Continued)

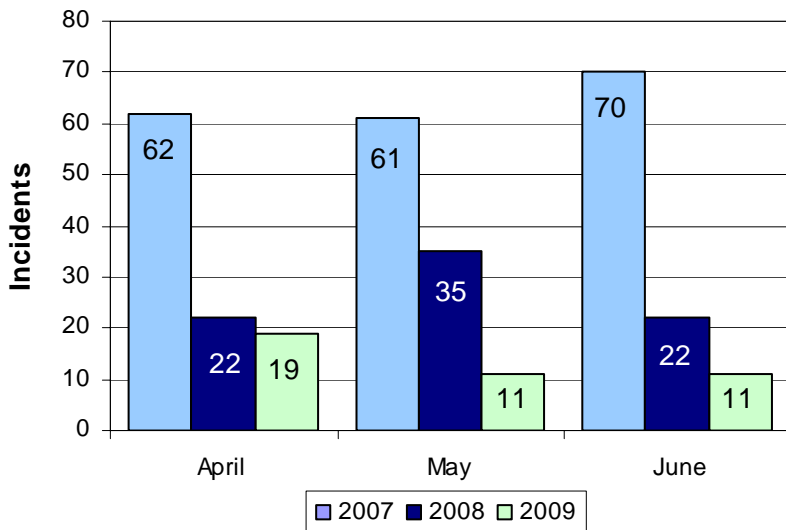
The bar graph to the right provides a tally of Q2's events, broken down by their detection source (CCTV [Closed Circuit Television], Other [i.e. field contractor, fire department, etc], Phone Call [public], SSP [Safety Service Patrol], VaTraffic [Virginia Traffic Information Management System] and Virginia State Police [VSP Radio or Computer Aided Dispatch]). Percents of total events logged are included. This identifies the sources of most of the HRTOC's incident discoveries and those sources that need to contribute greater to detection. CCTV detection has increased significantly over the last 4 quarters (from 25% to 34%). This is due to changes in Control Room Operator training processes, further emphasizing scanning cameras for incidents, and an addition to the Control Room software, Dynac. This new feature is called zone monitoring. It flips through a series of live camera images at the operator workstations in order to relieve the user from physically changing their individual camera views.

**Events by Detection Source**



Goal: To Detect 10.0% of Events by CCTV.  
Report Q Events Detected by CCTV: 34%

**Incidents Involving Tractor Trailers**

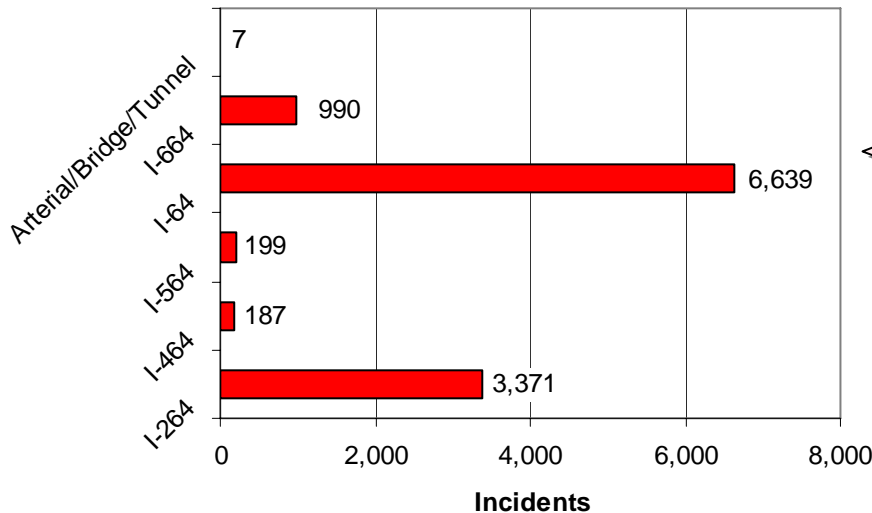


Incidents involving tractor-trailers can take considerably longer to clear and thus have the capability to cause a negative effect on traffic flow and lane clearance. A high number of tractor-trailer incidents can adversely impact the number of incidents cleared within the 30 and 60 minute benchmark (see page 3).

The second quarter of 2009 shows an overall decrease in the number of tractor trailer incidents from the same quarters in 2007 and 2008.

## Safety Service Patrol

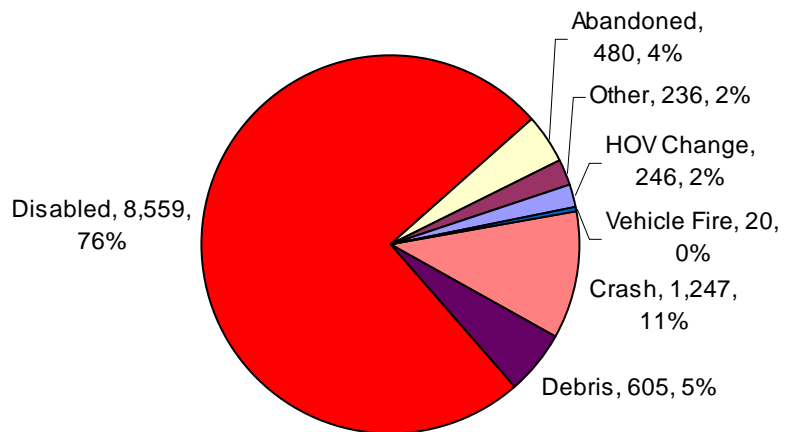
**Number of SSP Assists by Roadway**



This graph shows the number of SSP assists over Q2, displayed for each freeway that the HRTOC monitors. Also included are responses on arterial roads, bridges and tunnels. By using this information, the HRTOC is able to substantiate the number of SSP responses by freeway assignment. This information can be used to plan future patrol areas and definition, as well as staffing levels by roadway.

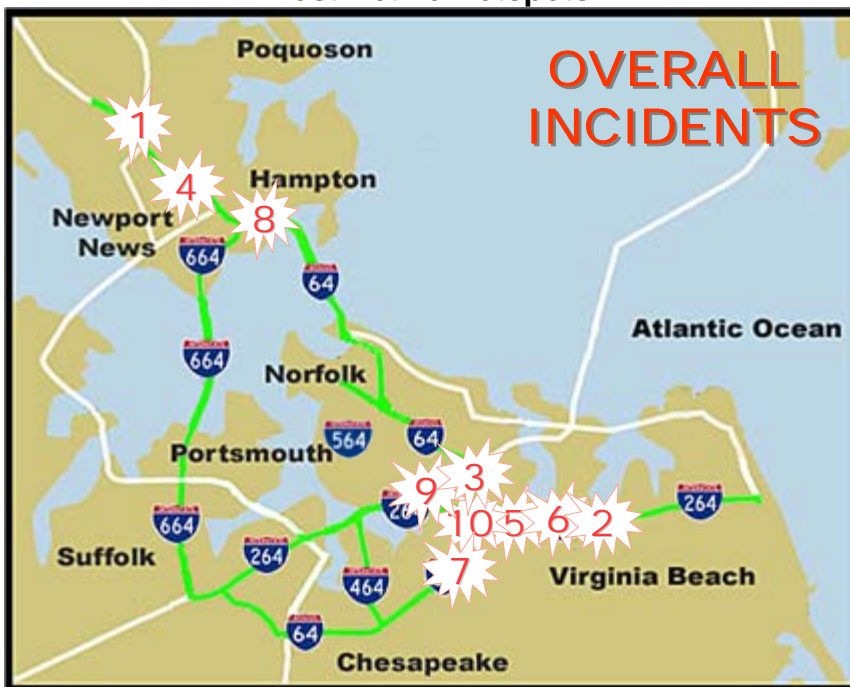
**SSP Assists by Type**

This pie chart shows the relative values for the major types of SSP assists in Q2. 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	# of Incidents	% of Total Incidents	Last Q Rank
1	64-36	Jefferson Ave - Fort Eustis Blvd	605	3.47%	1
2	264-20	Independence Blvd - Rosemont Rd	552	3.17%	3
3	64-11	64 / 264 Interchange - Northampton Blvd	548	3.15%	2
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd	515	2.96%	4
5	264-18	Newtown Rd - Witchduck Rd	392	2.25%	7
6	264-19	Witchduck Rd - Independence Blvd	347	1.99%	6
7	64-08	Greenbrier Pkwy - Indian River Rd	316	1.81%	5
8	64-27	Mallory St - Settlers Landing Rd	298	1.71%	13
9	264-13	Ballentine Blvd - Broad Creek Bridge	297	1.71%	8
10	64-09	Indian River Rd - Twin Bridges	287	1.65%	10
<b>TOTALS</b>			<b>17,413</b>	<b>23.87%</b>	

This table and accompanying map depict the highest overall incident occurrence locations for April 1, 2009 through June 30, 2009. The Hampton Roads area has been divided into 104 separate 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 first quarter of 2009. 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	# of Incidents	% of Total Abandoned	Last Q Rank
1	64-36	26	5.42%	1
2	64-33	20	4.17%	4
3	64-11	18	3.75%	12
4	64-09	17	3.54%	21
5	64-32	17	3.54%	28
6	264-20	16	3.33%	3
7	64-30	15	3.13%	9
8	64-31	14	2.92%	6
9	264-19	13	2.71%	7
10	264-21	12	2.50%	5
<b>TOTALS</b>		<b>480</b>	<b>35.00%</b>	



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	64-09	Indian River Rd - Twin Bridges
5	64-32	Magruder Blvd - Hampton Roads Center Pkwy
6	264-20	Independence Blvd - Rosemont Rd
7	64-30	64 / 664 Interchange - Mercury Blvd
8	64-31	Mercury Blvd - Magruder Blvd
9	264-19	Witchduck Rd - Independence Blvd
10	264-21	Rosemont Rd - Lynnhaven Pkwy

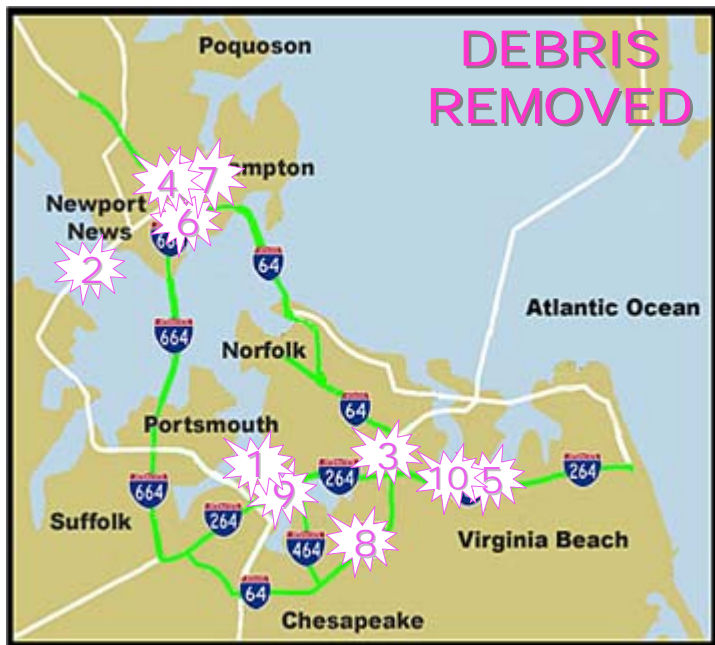


Ranking	Location	# of Incidents	% of Total Accidents	Last Q Rank
1	64-11	99	5.99%	1
2	264-18	72	4.36%	4
3	64-36	62	3.75%	3
4	264-17	53	3.21%	7
5	64-37	50	3.03%	13
6	64-38	49	2.97%	29
7	64-03	40	2.42%	31
8	264-19	38	2.30%	2
9	264-20	38	2.30%	8
10	64-20	37	2.24%	48
<b>TOTALS</b>		<b>1,652</b>	<b>32.57%</b>	

Ranking	Code	Location
1	64-11	64 / 264 Interchange - Northampton Blvd
2	264-18	Newtown Rd - Witchduck Rd
3	64-36	Jefferson Ave - Fort Eustis Blvd
4	264-17	64 / 264 Interchange - Newtown Rd
5	64-37	Fort Eustis Blvd - Yorktown Rd
6	64-38	Yorktown Rd - Rte 199
7	64-03	Rte 17 - High Rise Bridge cut through (east side of bridge)
8	264-19	Witchduck Rd - Independence Blvd
9	264-20	Independence Blvd - Rosemont Rd
10	64-20	Mason Creek Bridge - Bay Ave

## Safety Service Patrol (Continued)

### Most Active Hotspots (Continued)



Ranking	Location	# of Incidents	% of Total Debris	Last Q Rank
1	Midtown	61	6.68%	1
2	JRB	33	3.61%	3
3	64-11	32	3.50%	4
4	64-33	30	3.29%	7
5	264-20	27	2.96%	2
6	64-30	25	2.74%	11
7	64-31	23	2.52%	8
8	64-08	21	2.30%	10
9	264-08	20	2.19%	6
10	264-19	20	2.19%	41
TOTALS		913	31.98%	

Ranking	Code	Location
1	Midtown	inside the Midtown Tunnel
2	JRB	on the James River Bridge
3	64-11	64 / 264 Interchange - Northampton Blvd
4	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
5	264-20	Independence Blvd - Rosemont Rd
6	64-30	64 / 664 Interchange - Mercury Blvd
7	64-31	Mercury Blvd - Magruder Blvd
8	64-08	Greenbrier Pkwy - Indian River Rd
9	264-08	Downtown Tunnel (inside tunnel)
10	264-19	Witchduck Rd - Independence Blvd

Ranking	Code	# of Incidents	% of Total Disabled	Last Q Rank
1	64-36	501	5.13%	1
2	264-20	471	4.82%	2
3	64-33	436	4.46%	4
4	64-11	399	4.08%	3
5	264-18	296	3.03%	6
6	264-19	276	2.82%	7
7	64-08	270	2.76%	5
8	64-27	249	2.55%	14
9	264-13	242	2.48%	8
10	64-09	235	2.41%	10
TOTALS		9,770	34.54%	

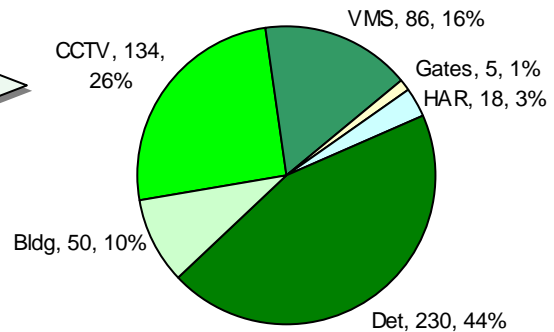
Ranking	Code	Location
1	64-36	Jefferson Ave - Fort Eustis Blvd
2	264-20	Independence Blvd - Rosemont Rd
3	64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
4	64-11	64 / 264 Interchange - Northampton Blvd
5	264-18	Newtown Rd - Witchduck Rd
6	264-19	Witchduck Rd - Independence Blvd
7	64-08	Greenbrier Pkwy - Indian River Rd
8	64-27	Mallory St - Settlers Landing Rd
9	264-13	Ballentine Blvd - Broad Creek Bridge
10	64-09	Indian River Rd - Twin Bridges



## Field Maintenance

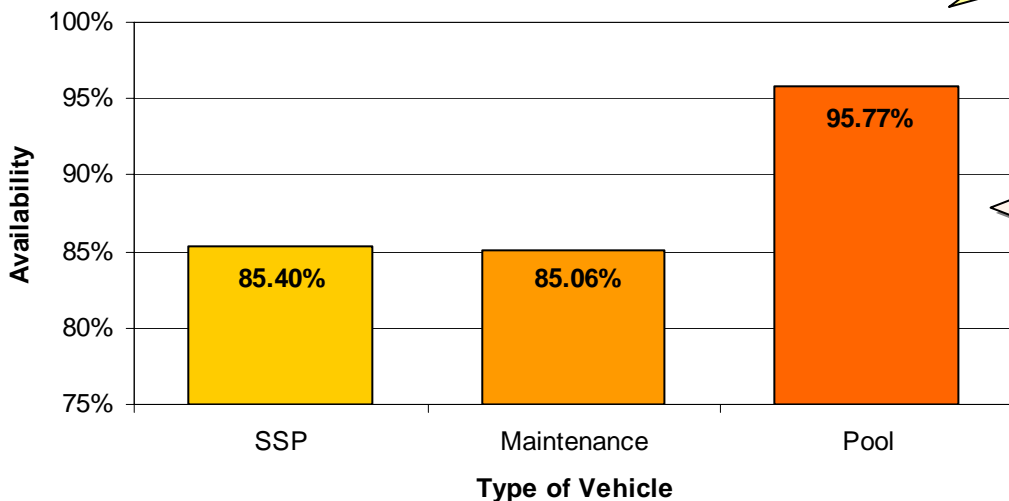
### Number of PM Repairs Made by Equipment Type

This chart and the accompanying table show the preventive maintenance (PM) tasks completed during the second quarter of 2009. In addition to the five main equipment categories, HRTOC buildings are included. Information pertaining to detectors in the pie chart and in the table below refer to preventive maintenance for detector cabinets. This information helps management allocate PM resources (equipment) and keep to the established preventive maintenance schedule.



## Fleet and Asset Management

### HRTOC Vehicle Availabilities

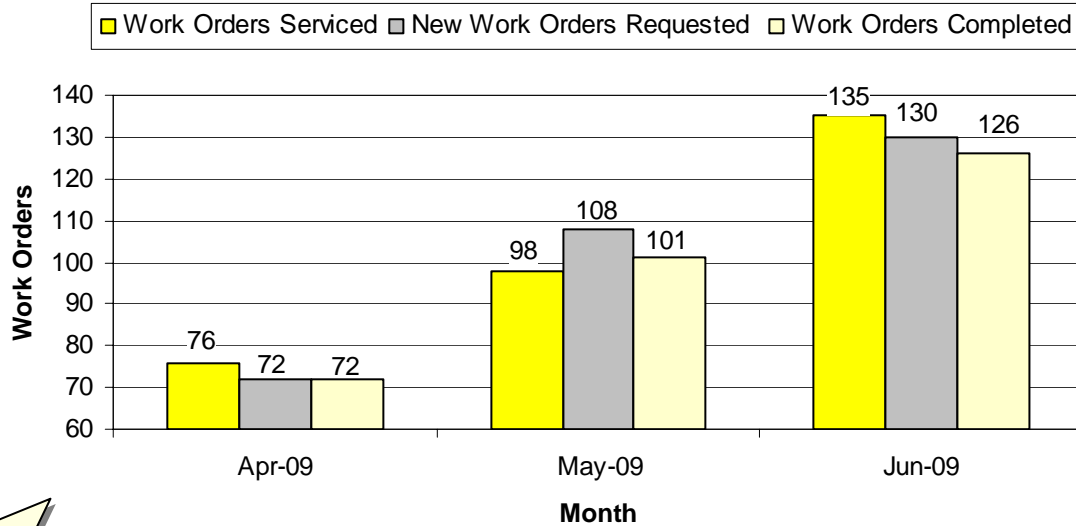


Goal: To Maintain 100% Availability for all Vehicle Types.

These three bars show what percentage of the total SSP, maintenance and pool vehicle fleet were available for use during the second quarter of 2009. These numbers measure fleet service effort and success rates.

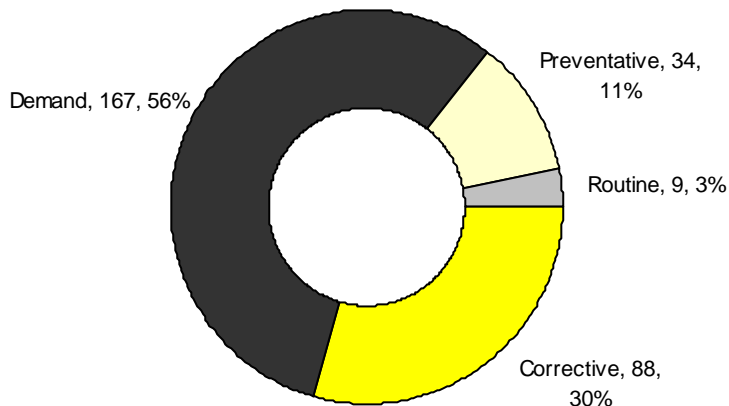
## Information Technology

### Work Orders Submitted to/Service by IT



These bar graphs show the number of new work orders submitted, serviced and closed (completed) by the IT Department for the second quarter of 2009. The metric helps track IT Department workloads, in support of IT staff/resource allocation and scheduling.

### IT Facility Maintenance Activity



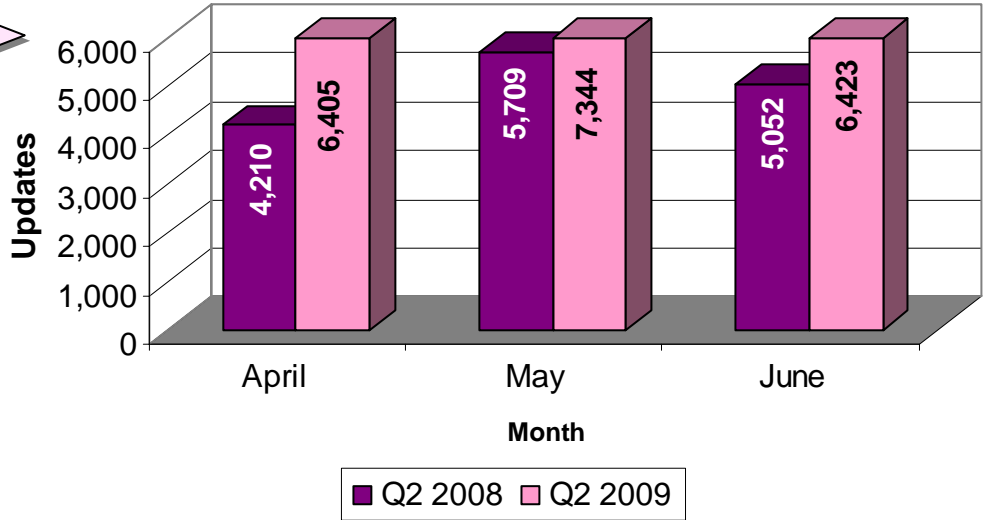
This donut graph shows IT Department tasks completed during Q2 for work types: corrective - "My printer is not working, please fix it"; demand - "I need a new printer"; preventive - regular PM on a schedule; and routine - a replacement printer every three years, for example. The breakout supports management in the allocation of staff, equipment and budget resources at the HRTCOC.

## Public Information

Highway Advisory Radio (HAR) messages are updated several times during the day in order to advise the public of current traffic conditions on the Hampton Roads highways. This graph tallies the number of updates made to the HAR system during the second quarters of 2008 and 2009.

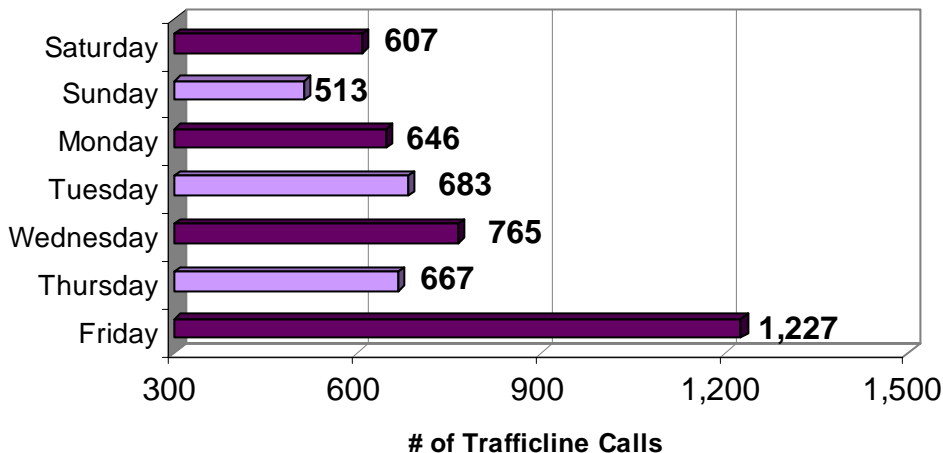
An average day during the second quarter of 2009 registered about 222 updates to the HAR system (57 more per day than during the same period of 2008).

### Highway Advisory Radio Updates



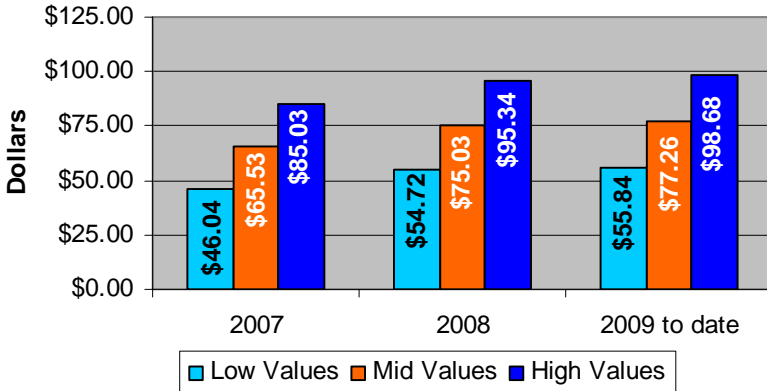
In December 2006, VDOT launched Hampton Roads TrafficLine, (757) 361-3016, to inform motorists of road conditions and traffic delays. Callers were able to hear information pertaining to tunnels, bridges, lane closures and the current message on the Highway Advisory Radio, 610 AM. In October of 2008, the information was changed to include only the 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 TrafficLine calls began to increase again in 2009. The below graph depicts the total number of calls in the second quarter that were directed to the HAR Menu by day of the week. 5,108 calls were routed to the TrafficLine HAR Menu in the second quarter of 2009, up from 3,119 calls in the first quarter of 2009 and down from the second quarter 2008, which totaled 7,266.

### Hampton Roads TrafficLine Calls



## Customer Service\*

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



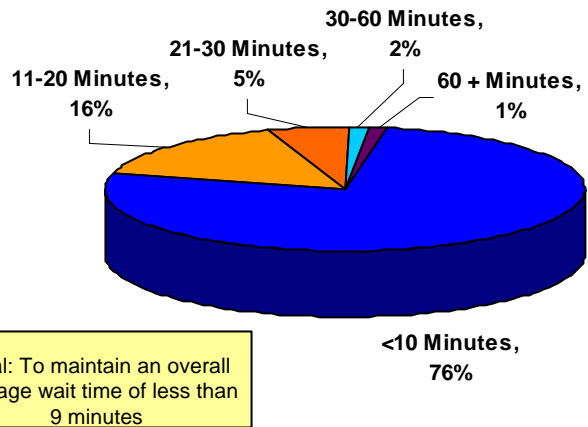
This graph depicts the perceived value that assisted motorists place on SSP services. Because the survey asks participants to choose a value within a monetary range (e.g. \$50-\$100), a range of values has also been shown here.

After adjusting for inflation, the average survey participant values each assist between \$55.84 and \$98.68 for 2009 to date.

The numbers depicted in this pie chart show the length of time a motorist waited before an 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.

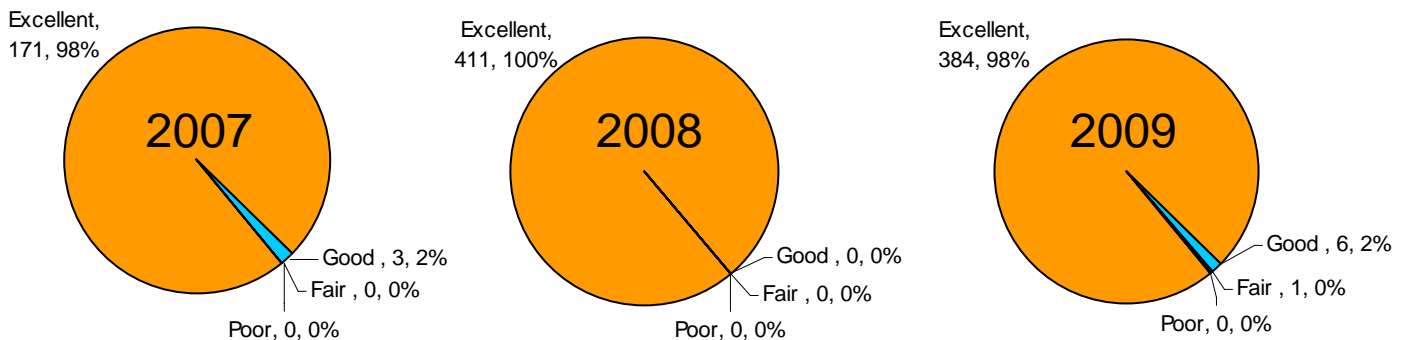
391 valid responses were collected over Q2. Using the midpoint for each range of time, the overall average wait time before SSP arrival was 8.8 minutes for the second quarter of 2009.

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



These pie charts compare the overall SSP service rating for the second quarters of 2007, 2008 and 2009. No responses during those times have received a rating of "poor."

### 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.