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Virginia Beach, VA 23464

Mobility

Making a good program better.

Week Ending March 26, 2010

Our Mission: Traveler Services; 100% accurate, anywhere, anytime

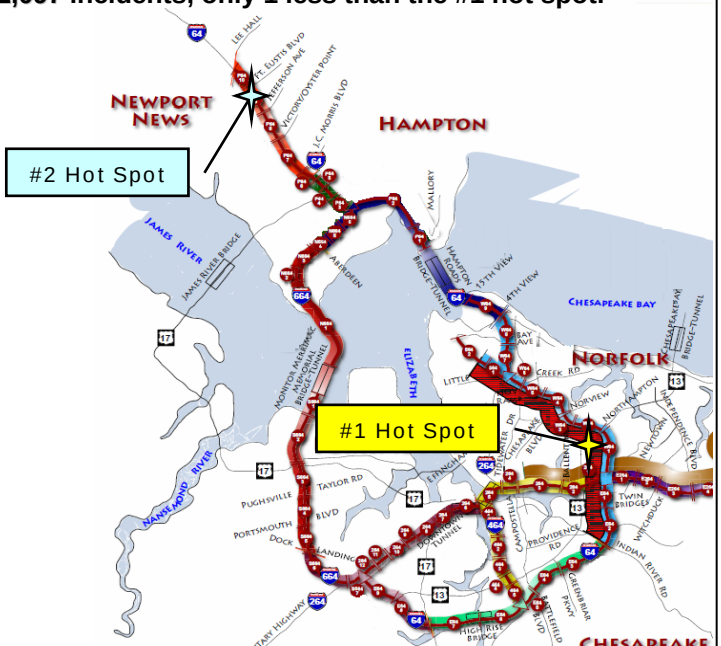
- HRTOC Motorist Quote of the Week about SSP Cleve Williams:
  "Very professional and has a very courteous way about him. He showed me where the tools are kept in my car to take off my spare tire, I didn't even know they were there! Thanks a million!"

- Please join me in welcoming the two newest members of the HRTOC team, field maintenance technicians Keith Banks and Eric Loescher. We look forward to working with you!

Did you know…

Roadway areas where the highest number of incidents occur are known as "hot spots."

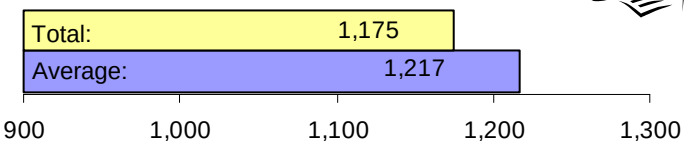
In 2009 the segment of roadway monitored by the HRTOC with the highest number of incidents (#1 hot spot) was on I-64 between Northampton Blvd. and the I-64/I-264 Interchange with 2,098 incidents. The #2 hot spot was also on I-64, but this time on the Peninsula, between Ft. Eustis Blvd. and Jefferson Ave. It had 2,097 incidents, only 1 less than the #1 hot spot.



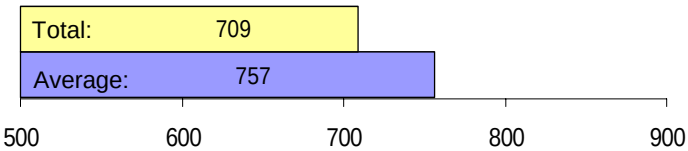
Source: Incident Database

Operations & Maintenance Summary

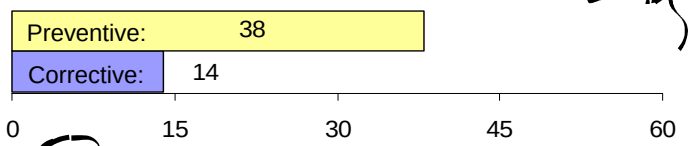
Number of events responded to from the Control Room last week:



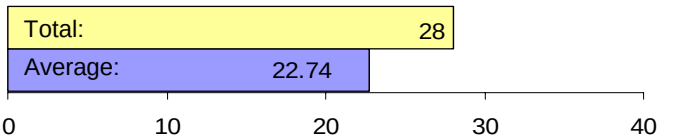
Total number of drivers assisted by Safety Service Patrollers last week:



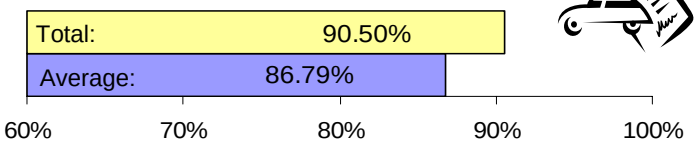
Number of field equipment responsive and preventive repairs made last week:



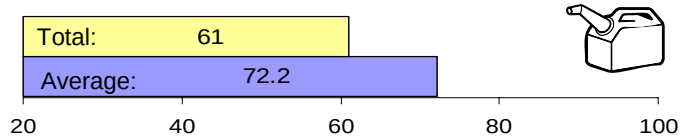
IT Work Orders completed last week:



SSP Truck Availability Last Week:



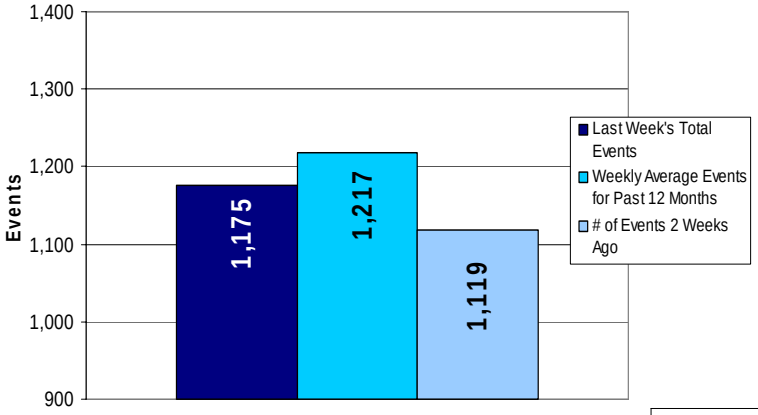
Number of Gallons Dispensed During SSP Fuel Assists Last Week:



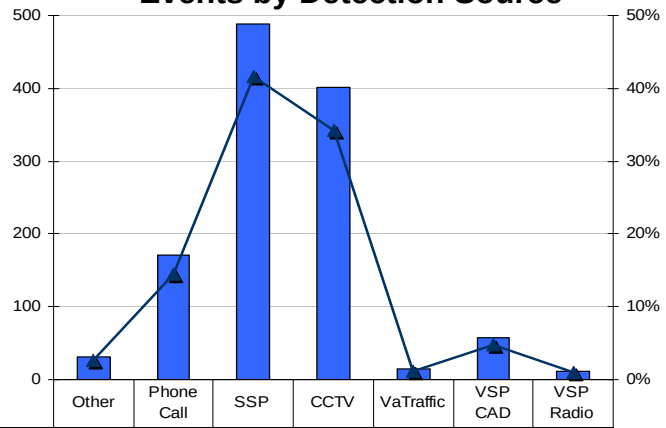
Data Key is located on pages 8-12

Operations – Control Room

Number of Events Logged by the Control Room



Events by Detection Source



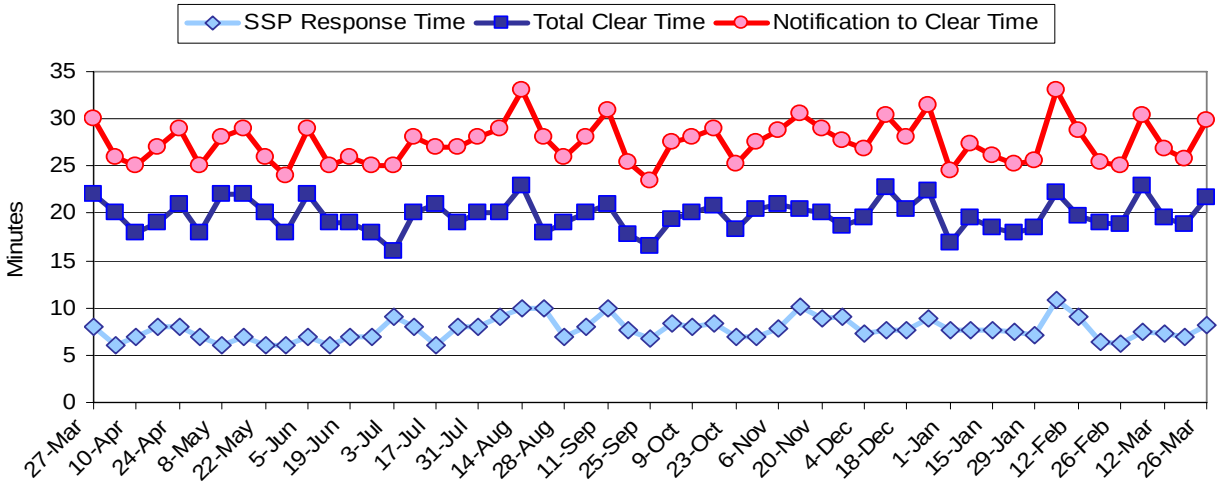
	Other	Phone Call	SSP	CCTV	VaTraffic	VSP CAD	VSP Radio
# of Events Detected by Source	31	171	489	402	14	57	11
Percentage of Total Events	2.64%	14.55%	41.62%	34.21%	1.19%	4.85%	0.94%

Incident Duration

Notification > SSP Response

SSP Response > Incident Clear Time

Notification > Incident Clear Time

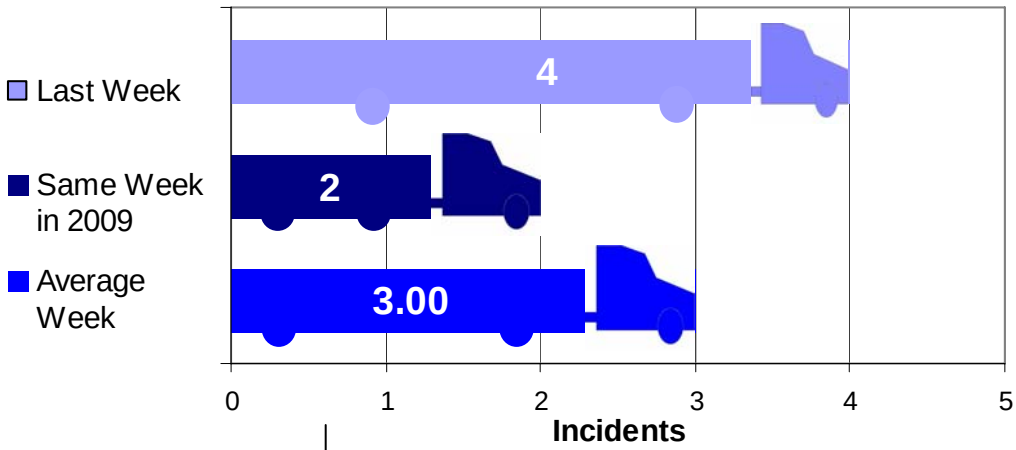


Need Clarification?

A Data Key starting on page 8 provides explanations for every chart in this report.

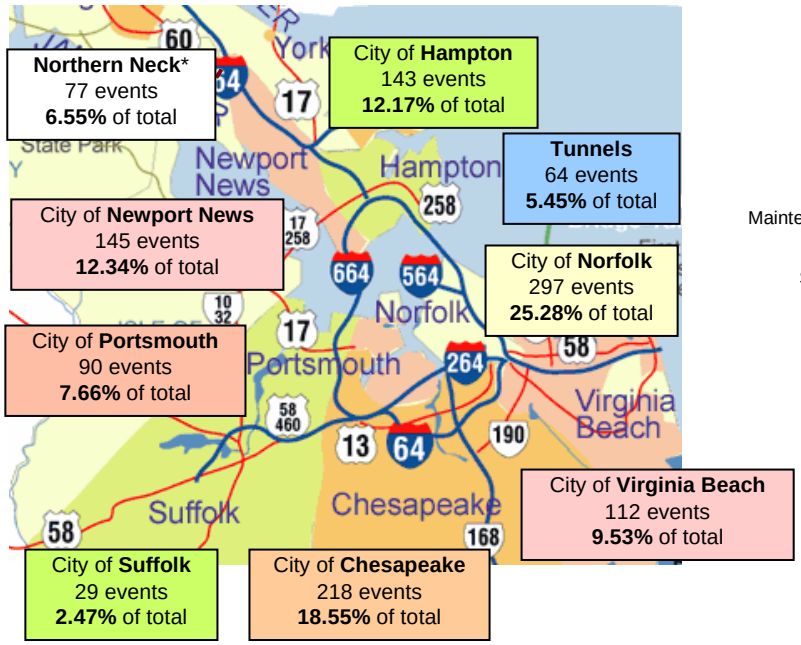
Note: Definitions for 'Incident' and 'Event' are located on page 9 of the Data Key

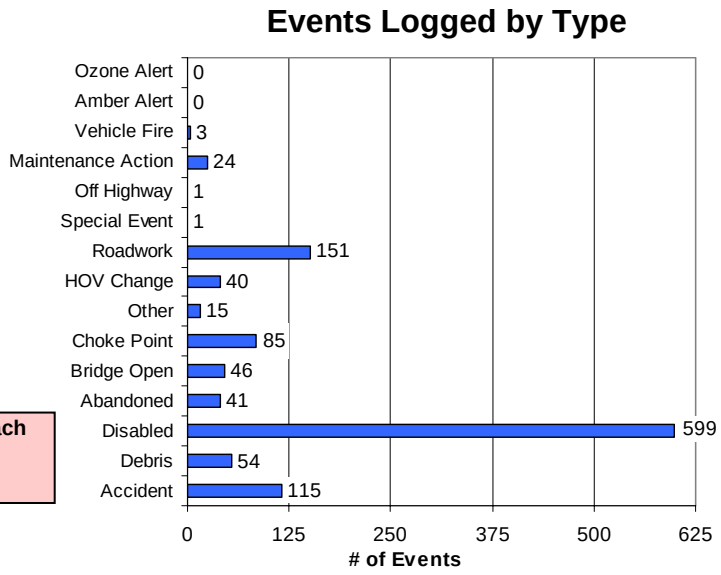
Number of Incidents Involving Tractor Trailers



Data Key is located on pages 8-12

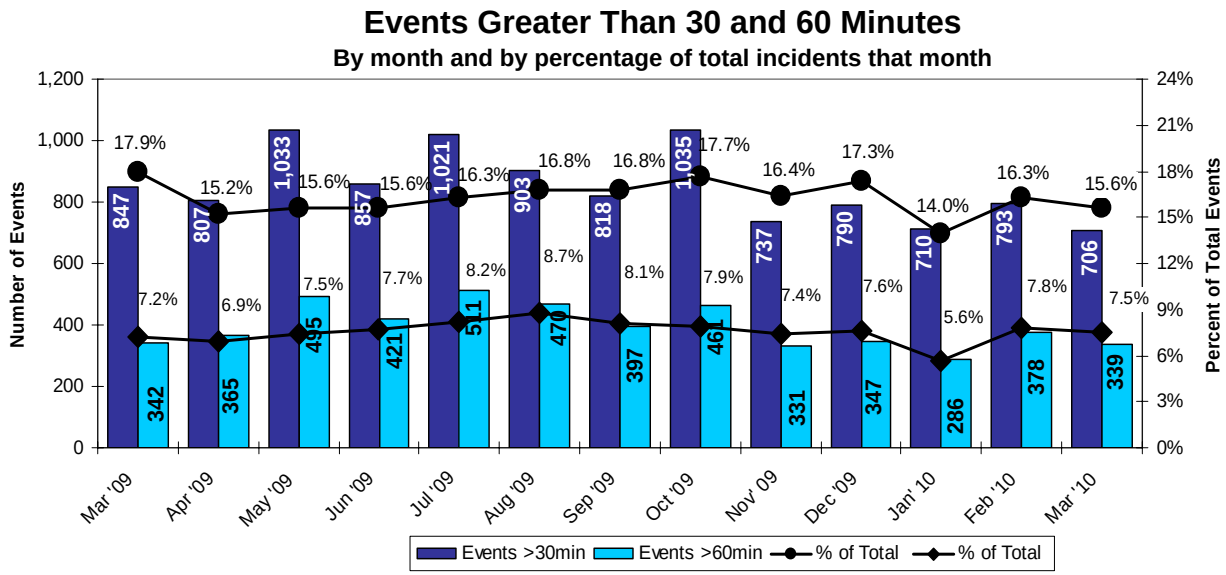
Operations – Control Room





	Norfolk	Virginia Beach	Chesapeake	Suffolk	Portsmouth	Newport News	Hampton	Tunnel	Northern Neck*
26-Mar	297	112	218	29	90	145	143	64	77
19-Mar	298	129	183	23	93	134	126	54	79
12-Mar	270	115	187	25	98	98	135	55	70
5-Mar	382	151	174	34	67	113	138	45	76
26-Feb	417	147	186	23	75	99	122	51	77
19-Feb	343	104	150	23	71	125	144	64	80
12-Feb	538	105	177	24	86	96	156	69	88

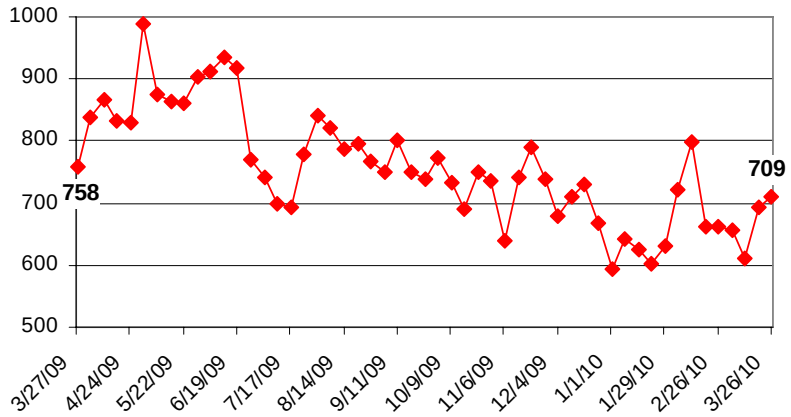
Note: Definitions for 'Incident' and 'Event' are located on page 9 of the Data Key



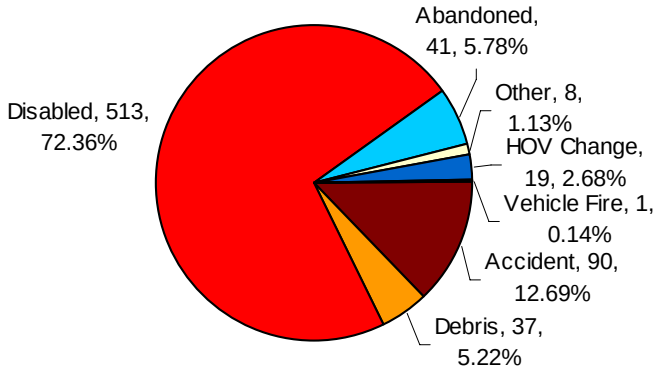
Operations – SSP

Total SSP Responses

By week for the preceding year

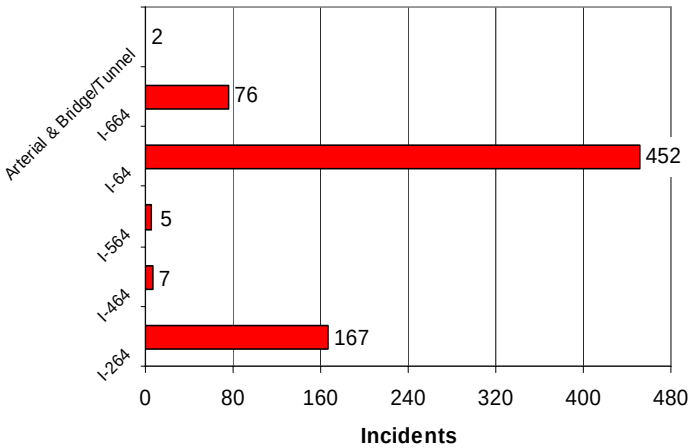


SSP Assists by Type

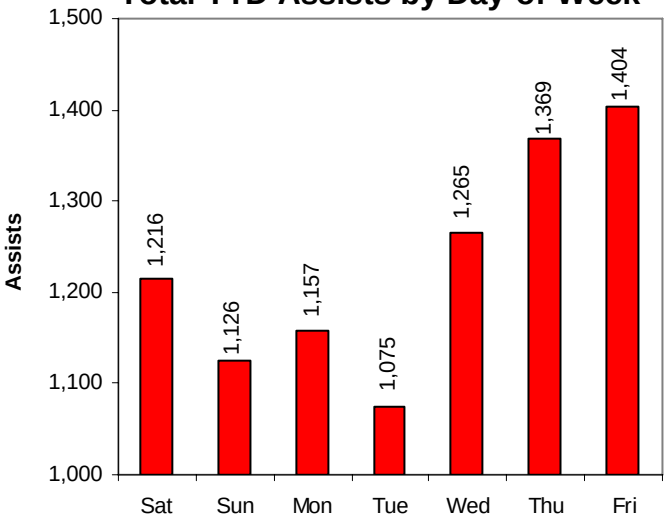


***On June 20th 2009 the number of SSP personnel and the number of covered routes were reduced by approximately 50%. ***

Number of SSP Assists by Roadway



Total YTD Assists by Day-of-Week



Most Active Hot-Spots by Incident Type

	Most Active	Interstate	Segment ID	# of Incidents	% of Incident Type
1	Abandoned Vehicles	I-64	64-14	4	9.8%
2	Accidents	I-64	64-03	9	7.8%
3	Debris Removed	I-64	64-11	7	13.0%
4	Disabled Vehicles	I-64	64-36	41	6.8%

Segment ID: Descriptions	
64-14	Robin Hood Rd - Norview Ave
64-03	Rte 17 - High Rise Bridge cut through (east side)
64-11	64 / 264 Interchange - Northampton Blvd
64-36	Jefferson Ave - Fort Eustis Blvd

Data Key is located on pages 8-12

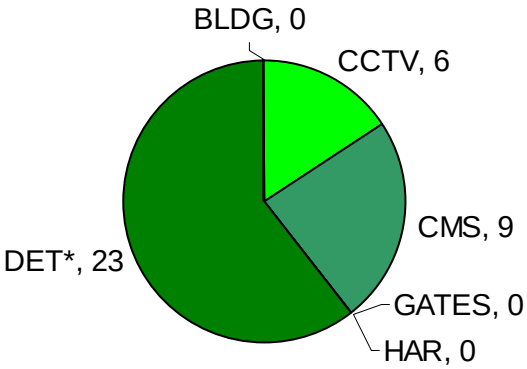
Maintenance

Current Field Device Operational Availability*

Component	Total	Not Working	Working	System Availability
CCTV	270	24	246	91.1%
CMS	192	23	169	88.0%
GATES	5	0	5	100%
HAR	6	1	5	83%
DET***	235	206	29	12%

* Represents last weeks equipment availability as of Friday @ 1400
** Represents CMS signs with legibility limitations
*** Represents individual detector stations

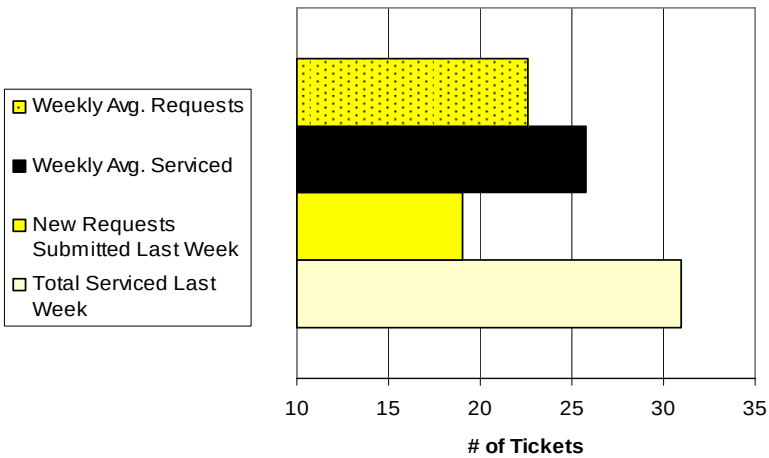
Number of PM Repairs Made by Equipment Type



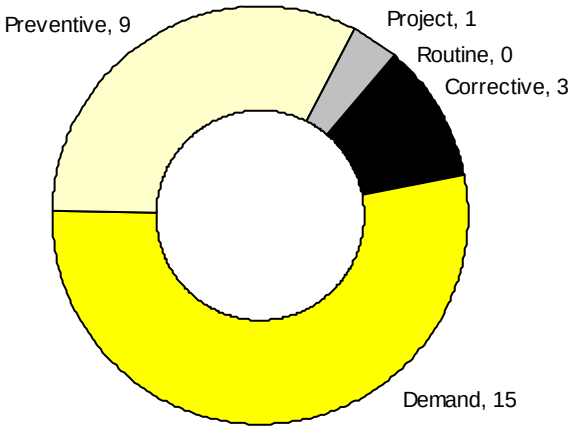
	56 Week Average
CCTV	9.7
CMS	7.6
GATES	0.6
HAR	1.2
DET	15.7
BLDG	3.7

*PMs for the category of "DET" are for Detector Cabinets, not Detector Stations

Work Orders Submitted to/Serviced by IT



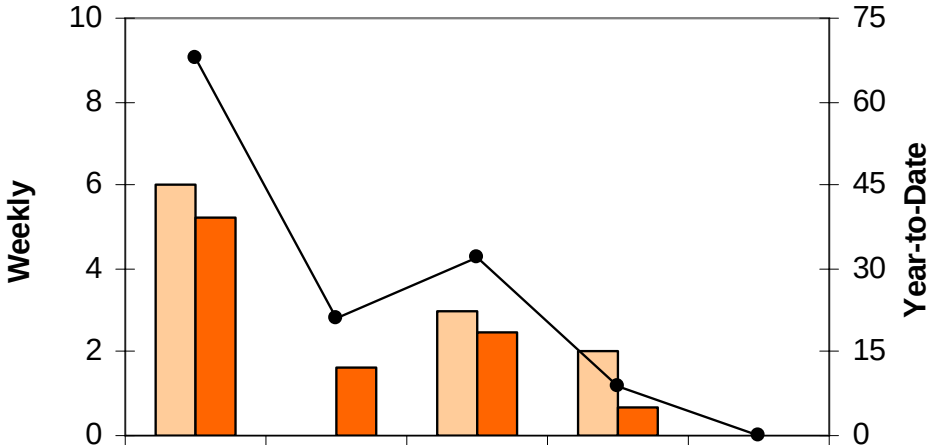
IT Facility Maintenance Activity



Data Key is located on pages 8-12

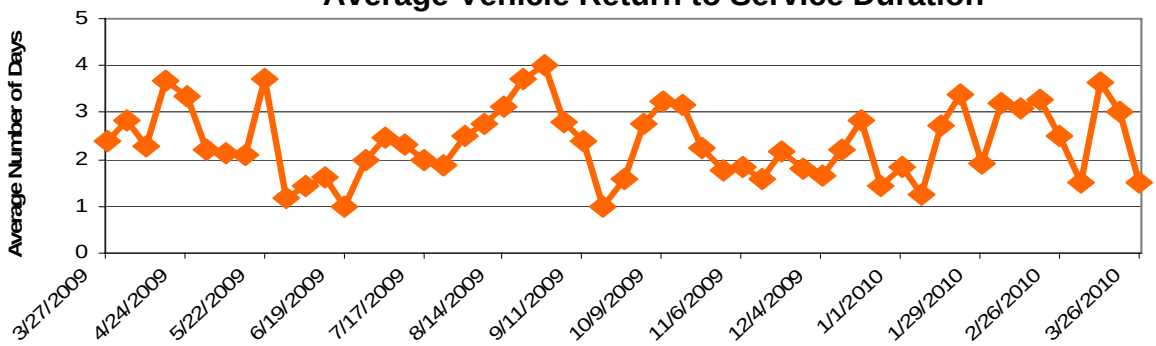
Maintenance

Completed Fleet Service Activities by Type



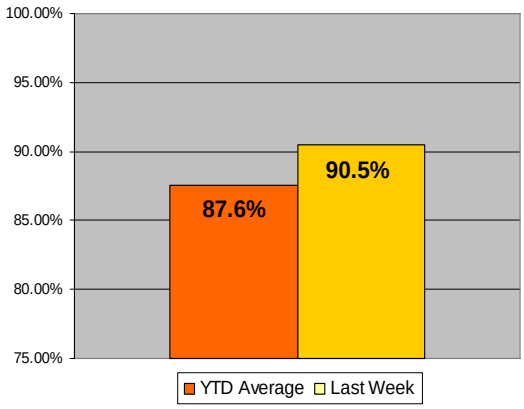
	Oil	Air	Fuel	Trans	Cabin
Last Week	6	0	3	2	0
Average	5	2	2	1	0
Total Completed YTD	68	21	32	9	0

Average Vehicle Return to Service Duration

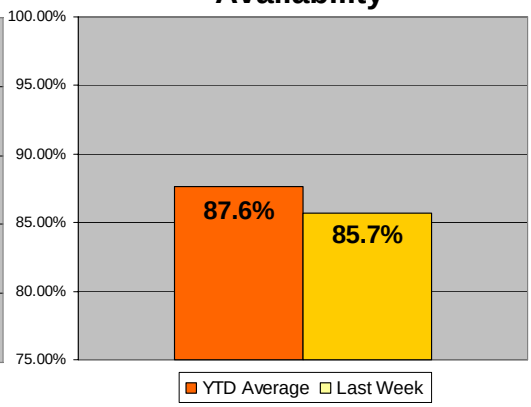


A value of 0 denotes that no vehicles were returned from the shop for that week

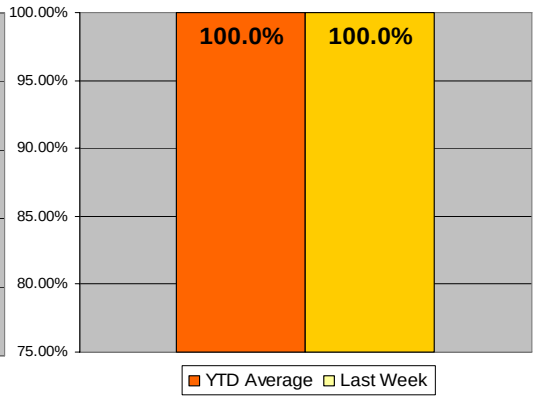
SSP Vehicle Availability



Field Maintenance Vehicle Availability

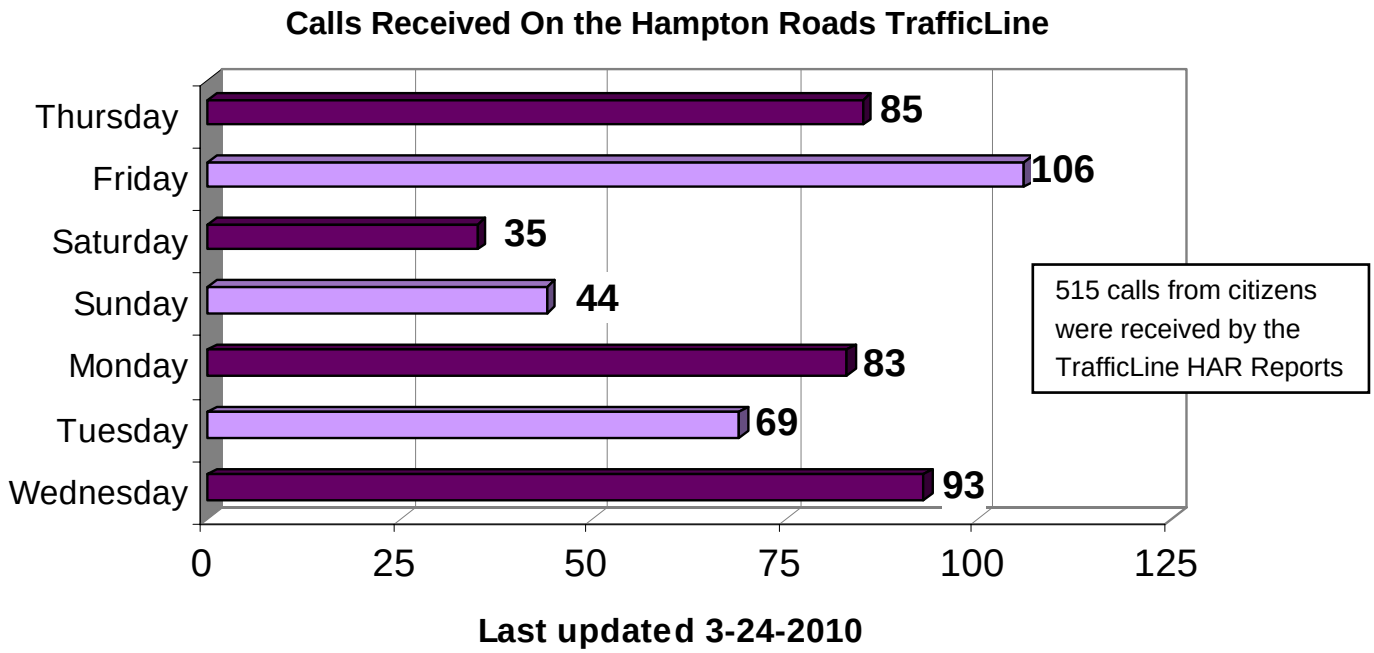


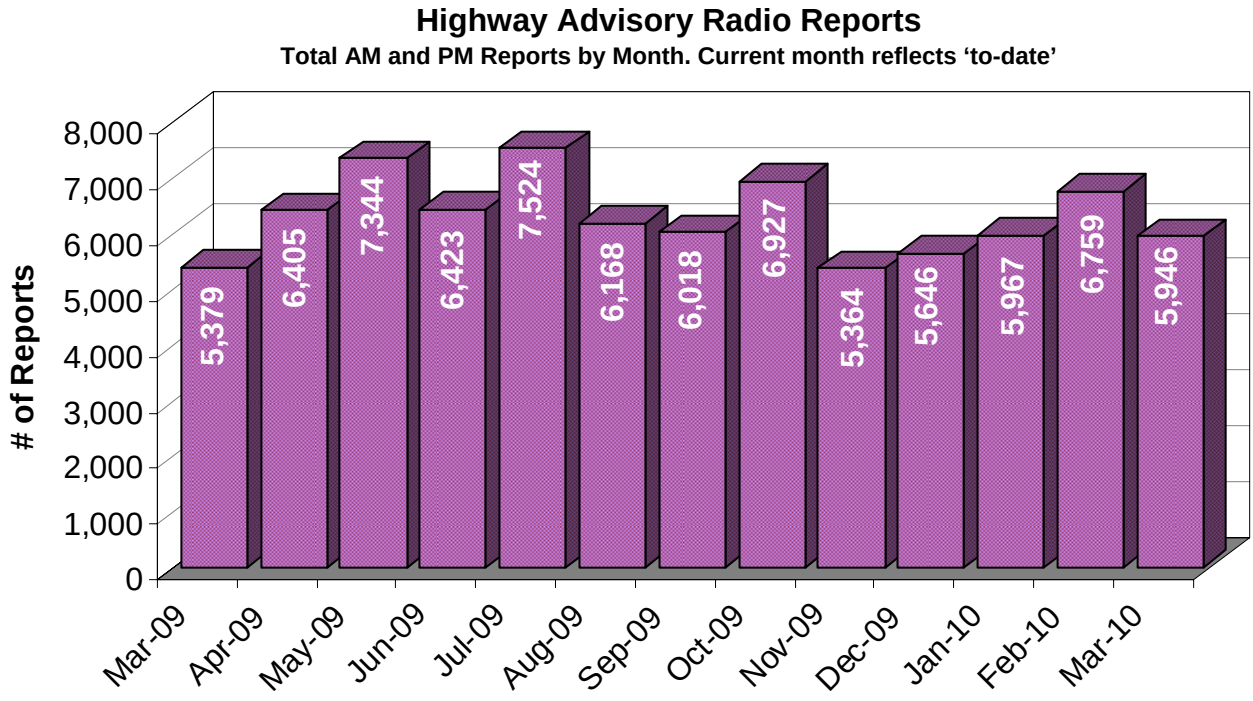
Pool Vehicle Availability



Data Key is located on pages 8-12

Public Information & Media Relations





Data Key is located on pages 8-12

Data Key

Cover Page

The Number of Events Responded to From the Control Room Last Week
Description: Shows the actual past week and yearly average event count.
Purpose: Provides a snapshot of how many events were responded to the previous Saturday through Friday. Weeks tallying many events will correlate with an increase in VOIS/511 traveler information calls.

The Number of Drivers Assisted by Safety Service Patrollers
Description: Shows the actual past week and yearly average number of SSP assists for accidents and disabled vehicles.
Purpose: Gives a snapshot view of the quantity of accident and disabled vehicle assists provided by SSP's. These assists reflect direct STC customer contact, an important part of the STC mission.

Field Equipment Responsive and Preventive Repairs Made Last Week
Description: The values shown reflect the total number of responses to field equipment corrective maintenance requests and the total number of preventive maintenance actions completed during the seven day period.
Purpose: Provides a summary view comparing the amount of corrective maintenance being completed in relation to preventative maintenance. As a general rule, a 2:1 (responsive : preventative) is a good ratio.

SSP Truck Availability Last Week
Description: The percentage of the SSP vehicle fleet that was available for use last week (versus being out of service for maintenance), and a yearly average of that availability.
Purpose: The values of these number is an indicator of vehicle repair activity and is used in support of scheduling and planning activities.

IT Work Orders Completed Last Week
Description: These values provide a summary view of help desk, software maintenance, integration support and other (non-categorized) type IT systems and software work orders closed during the past week's reporting period.
Purpose: Summarizes the level of IT effort from the previous week in comparison to same period averages.

Total Number of SSP Fuel Assists Last Week
Description: Displays the weekly number of gallons of fuel dispensed by the SSP's. Also included is the year to date average per week. This number is an estimated one gallon of gas per SSP fuel assist.
Purpose: Reflects the most tangible type of assistance provided by the SSP's. Unlike other SSP assistance types (changing a tire), fuel can be counted as a direct unit cost. Therefore, with gas prices the way they are, this particular type of assistance has a profound effect on the cost of operations.

Data Key (continued)

Operations

Number of Events Logged by the Control Room

Description: This bar graph shows values for the number of events logged in the incident database for the prior week and for two weeks ago, and includes an average of the weekly values over the past year.

** ***Incidents*** *are defined as unplanned situations adversely impacting traffic flow such as accidents, debris, disabled vehicles, and abandoned vehicles.*

** ***Events*** *are defined as 'special events' not affecting traffic, as well as the above defined 'Incidents' .*

Purpose: Shows how the current value compares to a two-week prior and an annual average value. For comparison and analysis, reveals the past week's numbers relative to "normal" levels and aids in forecasting activity levels based on seasonality, weather, holidays and/or other events.

Events by Detection Source

Description: The bar graph provides a tally of last week's events, broken down by their detection source (Virginia State Police [VSP radio or computer aided dispatch], Control Room [CCTV], public [phone call], SSP detection [SSP], and other entity [other – i.e. field contractor, fire department, etc]).

Purpose: Permits a comparison of incidents counts sorted by the various means of incident discovery, and a historical perspective when compared with previous reports. Identifies the sources of most our incident discoveries and those sources that need to contribute greater to detection.

Incident Duration

Description: The graph shows the average time duration from incident detection by a source (CCTV, Phone Call, VOIS, VSP CAD, VSP Radio, and Other) to when an SSP truck arrives on scene; the time from SSP arrival until the incident (Abandoned, Accident, Debris, Disabled) is completely cleared; and the total amount of time from initial detection to complete clearance.

Purpose: This information is used for extemporaneous audits. Allows management to review incident durations in relationship to pre-determined goals and provide a benchmark for incident response.

Incidents Involving Tractor-Trailers

Description: This bar graph shows the number of incidents involving tractor-trailers last week, for the same week last year, and the average for all weeks in the past year.

Purpose: 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 have a negative effect on the number of incidents cleared within the 30 and 60 minute benchmark (see later in this report).

Event by Geographic Location

Description: This graph shows the number of events logged per locale by SSP drivers. Certain categories of events are not included in this tally because they are not defined by municipality. These categories include Bridge/Tunnel, Reversible Gates, TEOC, and VMS.

Purpose: This will aid in determining areas of high demand for SSP services and help to adjust scheduling and routes accordingly.

Data Key (continued)

Operations (continued)

Events by Type

Description: This graph enumerates event counts for the past week, and shows the value for each type: Amber and Ozone Alert (i.e. the HRTMC displayed a message on the VMS alerting public of the current situation), vehicle fire, special event (e.g. concert or college graduation), maintenance action, roadwork (i.e. stationary work zone, emergency maintenance, mobile lane closure), HOV change (manual change made to the HOV system from the control center), other** (i.e. police or medical emergency), choke point and bridge open (i.e. the HRTMC was involved in managing congestion at the HRBT, MMBT, Downtown Tunnel, or during a bridge opening), disabled** (disabled vehicle), debris** (i.e. ladder, mattress, road kill, etc..), accident**, and abandoned (abandoned vehicle).

**Note: The types unfounded (i.e. cancelled call before the SSP arrived), CBA (cleared before arrival – before an SSP arrived on the scene) are considered subcategories of these types. VMS Change, and TEOC (service request submitted to the District's Transportation Emergency Operations Center) are no longer types.

Purpose: This chart is used to quantify which categories of incidents most severely impact the roadways. Over time and by season comparisons are possible by examination of previous reports.

Events of Duration Greater Than Thirty/Sixty Minutes

Description: This graph totals those events which lasted more than thirty minutes and those events which lasted more than sixty minutes in duration. Percentages of total events are included.

(Note: Event types changed during the November 2007 Incident Database upgrade, see Data Key – 'Number of Events Logged by the Control Room' to view types and definitions)

Purpose: This information is used to compare the activity levels of 'serious events' that take longer than the normal clearance time. Results can spotlight contributing factors as short staffing, inter-agency communication, and patrol route inefficiencies.

Total SSP Responses

Description: The accompanying line graph displays SSP assist counts by the week.

Purpose: The graph can be used to substantiate the number of SSP responses for recent weeks. The information can be used to plan future route expansion and staffing levels.

SSP Assists Count by Type

Description: This pie chart shows the relative values for the major types of SSP assists last week. Types include disabled (disabled vehicles), debris (i.e. trash in roadway), accidents, unfounded (cancelled call out of an SSP), CBA (cleared before arrival), and other (i.e. traffic control for police activity).

Purpose: Provides information used for forecasting SSP vehicle equipment, tool, and consumable material (flares, batteries) needs short term and long term, and, to an extent, future staffing requirements.

SSP Assists for Each Roadway

Description: This graph shows the number of SSP assists over the past week, displayed for each freeway that the STC oversees. Also included are infrequent responses on arterial roads, bridges, and tunnels.

Purpose: Used to substantiate the number of SSP responses by freeway assignment. This information can be used to plan future patrol area expansion and definition, as well as staffing levels by roadway.

Data Key (continued)

Operations (continued)

Total Year-To-Date Assists by Day-of-Week
Description: This chart depicts the number of SSP assists rendered for each day, for this year to date.
Purpose: Helps in planning daily staffing levels based on year-to-date activity levels by day.

Most Active Hotspots
Description: This table shows, for four incident categories, the identifier for the most active section, last week's incident count for that section, and the percentage of the system-wide incident total that count represents.
Purpose: Review of these values permit management to detect emerging patterns and plan SSP staffing and routes in relation to those areas requiring the most attention.

Maintenance

Current Operational Availability List
Description: This table shows the total number of units of each equipment type (CCTV, CMS, gate, and HAR), how many are working and how many are not. The number of working units expressed as a percentage of the total units is also included.
Purpose: This information provides maintenance a clear view of the percentage of working equipment, provides operations a notion of system "eyes and ears" limitations, and provides management information as to current levels of equipment unit functionality.

Number of Preventive Maintenance Repairs Made by Equipment Type
Description: This chart and the accompanying table show the preventive maintenance tasks completed during the past week, and weekly averages for the last year. In addition to the five main equipment categories, buildings are included.
Purpose: Helps management allocate PM resources (equipment) and keep to schedule.

IT Facility Maintenance Activity
Description: This donut graph shows IT Department tasks completed during the past week for work types: corrective - "My printer is not working, please fix it"; demand – "I need a new printer"; preventive – regular PM on a schedule; transferred – "This printer is not an STC asset"; routine – a replacement printer every three years, for example.
Purpose: The breakout supports management in the allocation of staff, equipment, and budget resources at Hampton Roads STC.

Work Orders Submitted to / Serviced by IT
Description: These bar graphs show the number of new work orders submitted to the IT Department last week, and the number that were closed (completed). Weekly average values are also graphed.
Purpose: The metric helps track IT Department workloads, in support of IT staff/resource allocation and scheduling.

Data Key (continued)

Maintenance (continued)

Completed Fleet Service Activities by Type

Description: The chart shows weekly, average, and year to date counts for vehicle maintenance services. “Cabin” denotes replacement of passenger compartment air filters; “Bio-con” denotes treatment of diesel vehicle fuel systems for algae; “Therapy” denotes a gasoline or diesel vehicle fuel treatment. Oil, air filter, fuel filter, and transmission fluid services are also represented.
Purpose: Helps to account for labor and dollars expended for vehicle service and to plan for future contract and material expenditures.

Average Vehicle Return to Service Duration

Description: These numbers are an average time value representing a “return-to-service” duration; the elapsed time from arrival at the vehicle repair location until the vehicle returns to service. Values for SSP, Field Maintenance, and pool vehicles are included.
Purpose: These values also measure the performance of the repair effort and are used in scheduling SSP vehicle service and Patroller/Maintenance Staff resources.

STC Vehicle Availability

Description: The three bar graphs show what percentage of the total SSP, maintenance, and pool vehicle fleet was available last week, and also provide an annual average for comparison.
Purpose: These numbers measure fleet service effort and success rates.

Public Information

Calls Received on the Hampton Roads TrafficLine (757-361-3016)

Description: The Hampton Roads TrafficLine was launched on Friday, December 15. This bar graph depicts the number of citizen phone calls to the TrafficLine in order to receive information about Hampton Roads traffic conditions at different locales.
Purpose: This information depicts the use of the TrafficLine and will indicate if further promotion of the program is necessary.

HAR Reports

Description: Highway Advisory Radio (HAR) messages are created and updated several times during the day. This item tallies the number of HAR updates made month-to-date, and includes the values for previous months for comparison.
Purpose: The graph shows how the current value compares to past months; the count mirrors event activity on STC monitored roadways. The count is also an indicator for the effort expended in keeping the HAR message up-to-date, in order to maximize the public’s usability of the HAR resource.