

Week Ending August 3, 2012

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

- Motorist Quote of the Week about HRTOC SSP
 Brandon Greene:

"I really appreciate this service. Your employee was very nice and worked so fast that I barely realized that I needed gas! God bless him and all that work for VDOT."

Did you know...

Students at Cleveland's [Case Western Reserve University](#) have come up with an innovative alternative for pothole repair and in April they took the top prize in a competition sponsored by global materials company [Saint-Gobain](#), in which the objective was to use simple materials to create an unconventional product that solves a common problem.

To win the prize the students filled a Kevlar bag with a nontoxic goop called "[oobleck](#)". Without force, oobleck is like a sack of fluid, simply conforming to the contours of the pothole and creating a level surface, but when a vehicle adds force it acts as a solid.

The students have road-tested the solution, although tougher winter testing will be required.

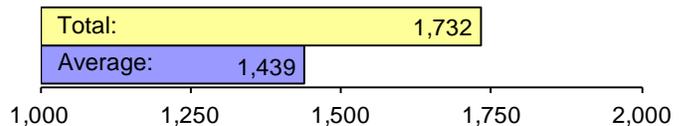
As with many new ideas, the initial upfront cost may be no less than traditional pothole repair techniques. However, the bags are reusable, so there's a potential for long-term cost savings. And because oobleck is biodegradable, it's also environmentally friendly.

Several companies have expressed interested in the students' prize-winning solution. But instead of waiting on this -- or for politicians or other officials to fill potholes on your street -- it seems any enterprising citizen could potentially mix a bag of oobleck and fix the problem themselves -- assuming they have some Kevlar bags lying around.

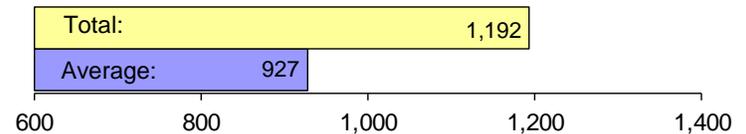
Source: http://editorial.autos.msn.com/blogs/autosblogpost-tech.aspx?post=90ccc4de-c5d7-4080-8932-e8e6819c1397&icid=autos_2933

Operations & Maintenance Summary

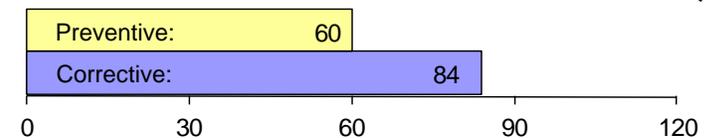
Events Responded to by the Control Room
 Last Week:



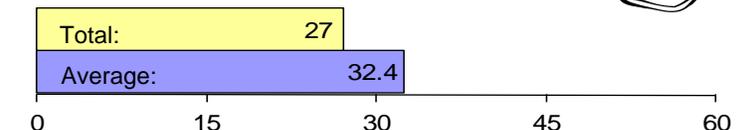
Drivers Assisted by Safety Service Patrollers
 Last Week:



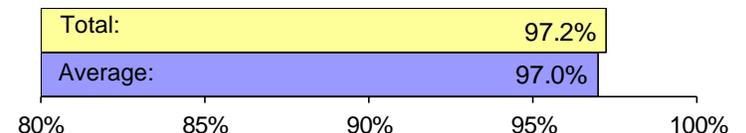
Field Equipment Corrective and Preventive
 Work Orders Completed Last Week:



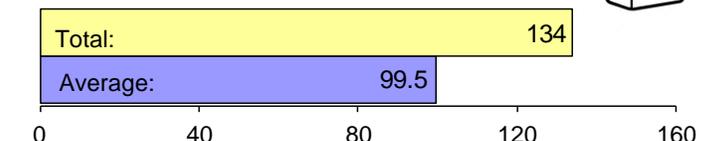
I.T. Work Orders Completed
 Last Week:



SSP Truck Availability
 Last Week:



Number of Gallons Dispensed During
 SSP Fuel Assists Last Week:

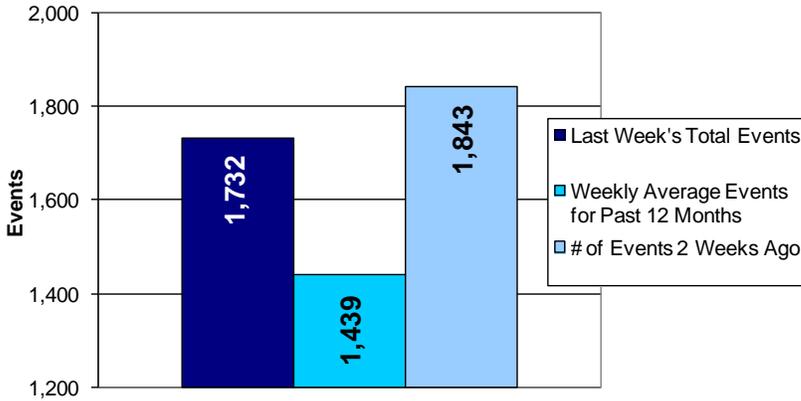


Data Key is located on pages 8-12

Control Room

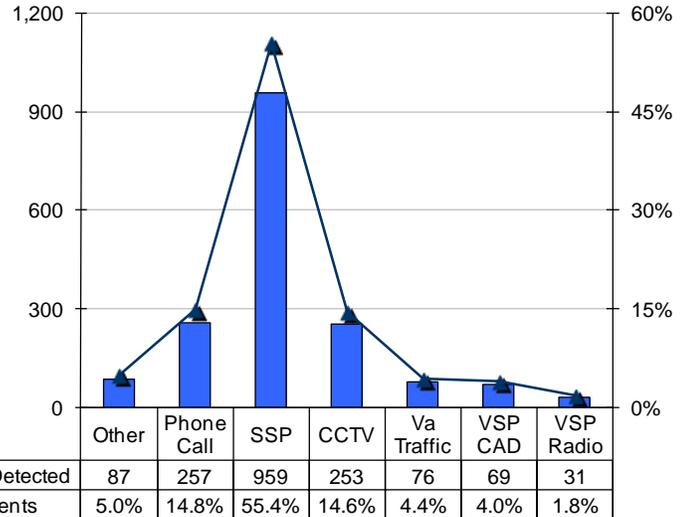


Number of Events Logged by the Control Room



Events by Detection Source

Count and percentage of total events that week

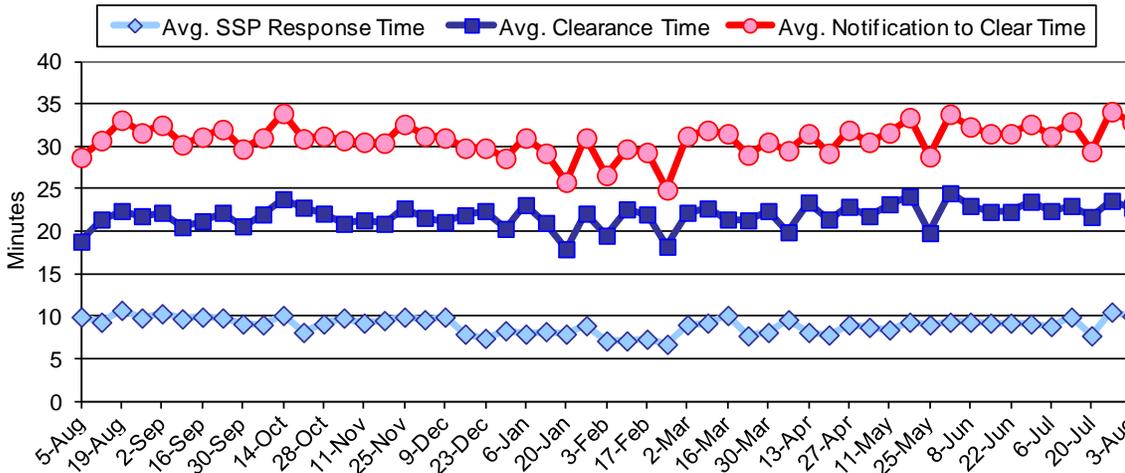


Incident Duration

Notification < SSP Response

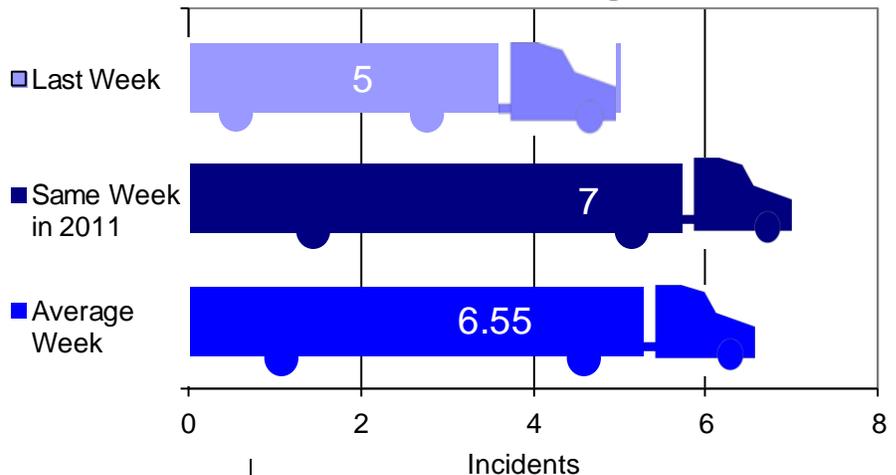
SSP Response < Incident Clear Time

Incident Clear Time < Notification to Clear Time



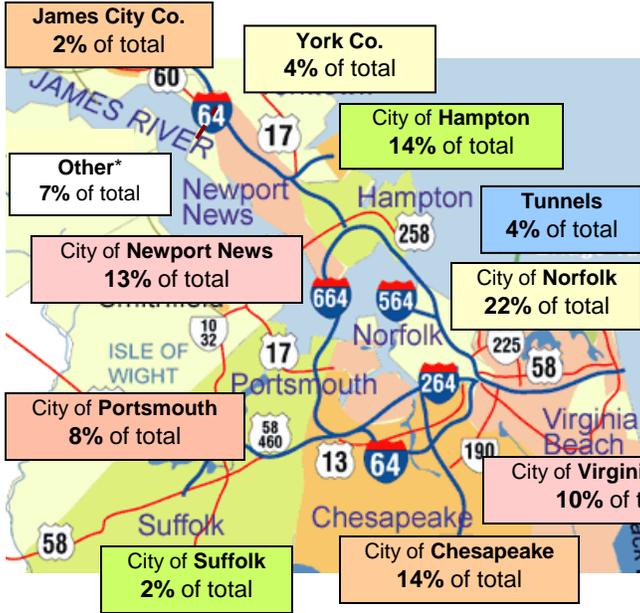
52 Week Average
 Total: 30.8 min
 Clear Time: 21.8 min
 Response Time: 9.0 min

Number of Incidents Involving Tractor Trailers

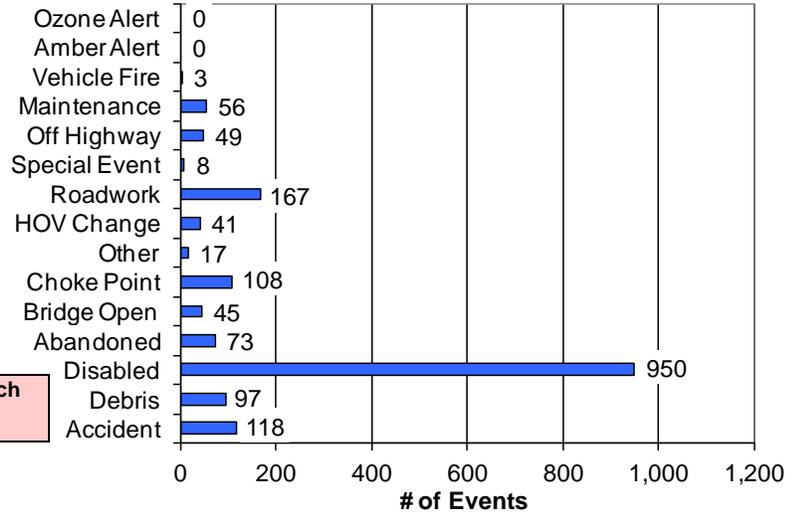


Note:
 Definitions for 'Incident' and 'Event' are located on page 11 of the Data Key

Control Room (continued)



Events Logged by Type



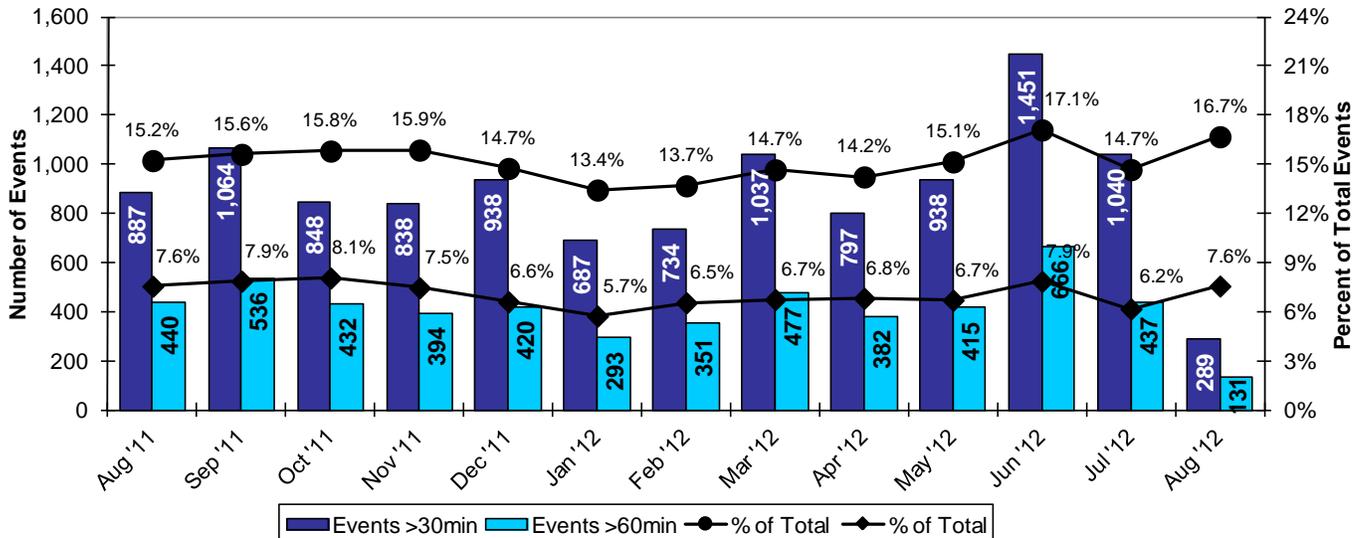
Weekly Total Events by Geographic Location

	Norfolk	Chesapeake	Virginia Beach	Newport News	Hampton	Portsmouth	Suffolk	York Co.	James City Co.	Tunnels	Other*
3-Aug	373	247	171	231	245	136	31	77	34	68	119
27-Jul	420	320	221	218	214	108	25	93	39	71	114
20-Jul	367	302	233	219	228	129	26	77	35	69	115
13-Jul	362	319	205	174	203	164	34	69	39	70	106
6-Jul	353	286	213	210	227	98	26	78	39	49	119
29-Jun	432	311	239	229	221	147	28	81	33	72	89
22-Jun	339	288	216	200	212	127	22	75	29	52	101
15-Jun	404	317	218	202	200	118	25	79	24	63	86

* Other includes Accomack, Northampton, Williamsburg, Poquoson, Surry, Isle of Wight, Franklin, Southampton, Sussex, Emporia, Greenville

Events Greater Than 30 and 60 Minutes

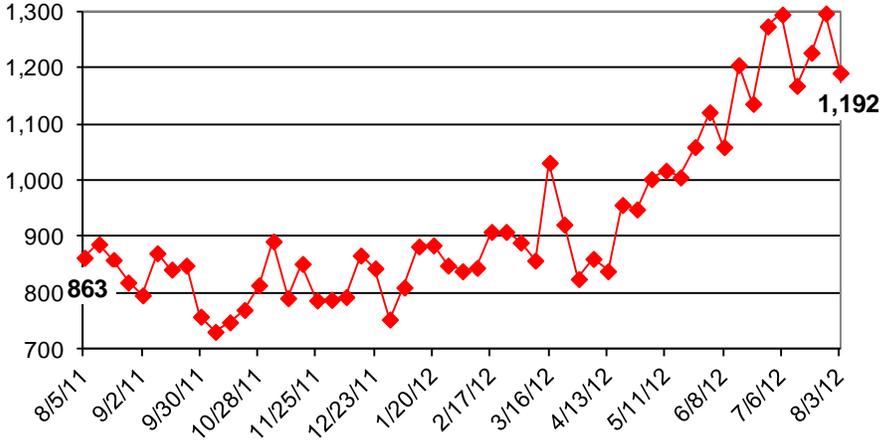
By month and by percentage of total events that month (current month is month to date)



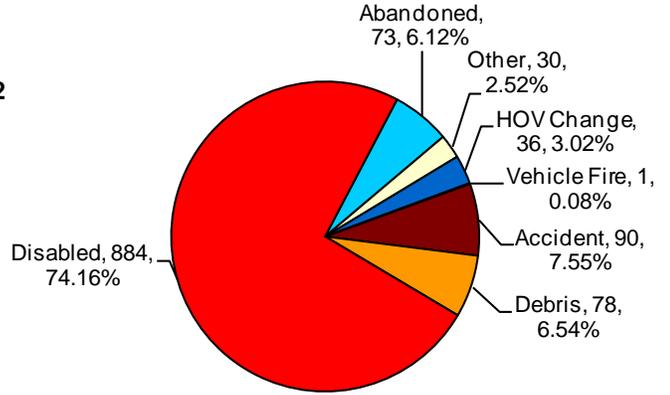
Safety Service Patrol



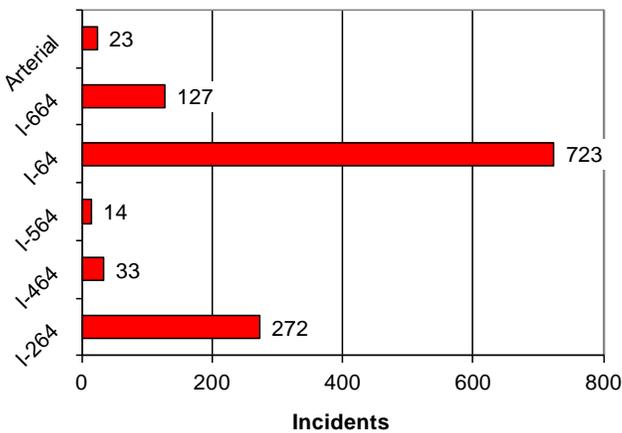
Total SSP Responses
By week for the preceding year



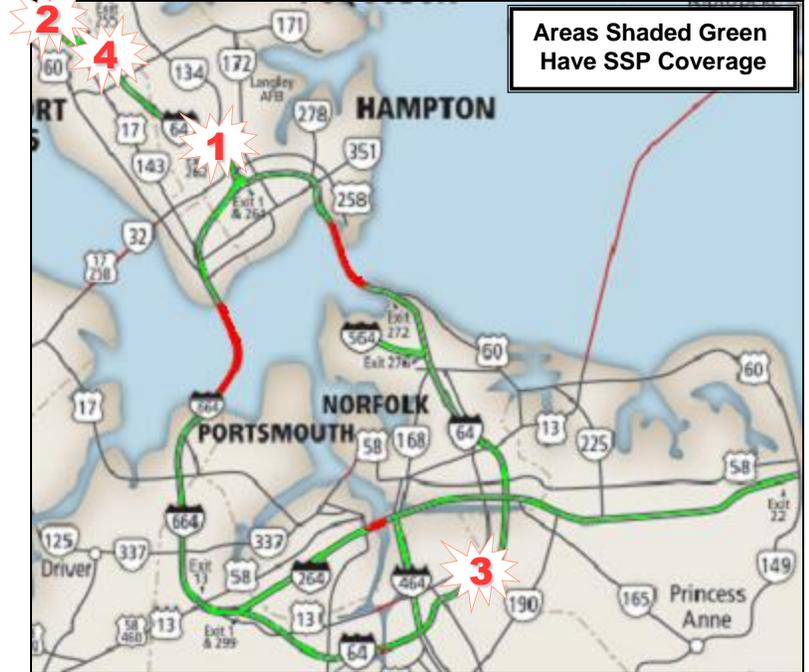
SSP Assists by Type



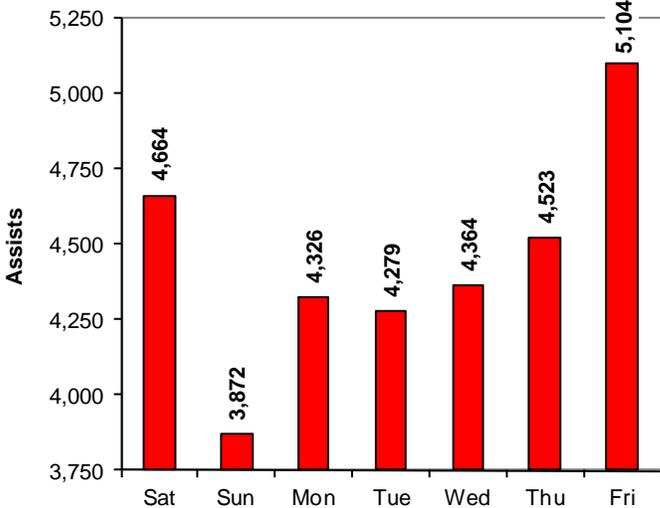
Number of SSP Assists by Roadway



Most Active Hot-Spots by Incident Type



Total YTD Assists by Day-of-Week



Most Active	Interstate	Segment ID	# of Incidents	% of Incident Type
1 Abandoned Vehicles	I-64	64-33	5	6.8%
2 Accidents	I-64	64-38	11	9.3%
3 Debris Removed	I-64	64-08	6	6.2%
4 Disabled Vehicles	I-64	64-36	49	5.2%

Segment ID: Descriptions

64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
64-38	Yorktown Rd - Rte 199
64-08	Greenbrier Pkwy - Indian River Rd
64-36	Jefferson Ave - Fort Eustis Blvd

Maintenance



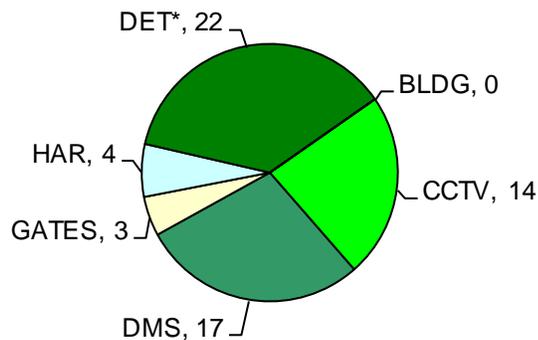
Current Field Device Operational Availability

Component	Total	Average Not Working	Average Working	Average System Availability
CCTV	276	50.8	225.2	81.6%
DMS*	168	13.4	154.6	92.0%
GATES	5	0.0	5.0	100.0%
HAR	6	0.3	5.8	95.8%

Detector stations (DET) have been removed from the list while a Detector Replacement Project is underway until October 2012.

*DMS that are unavailable due to the ongoing DMS Retrofit Project have been temporarily removed from the total count (196). There are currently 28 signs unavailable due to the retrofit project.

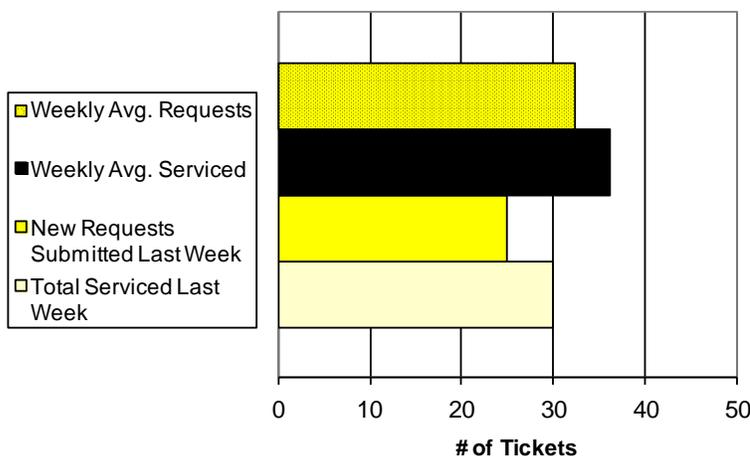
Number of Preventive Tasks Completed by Equipment Type



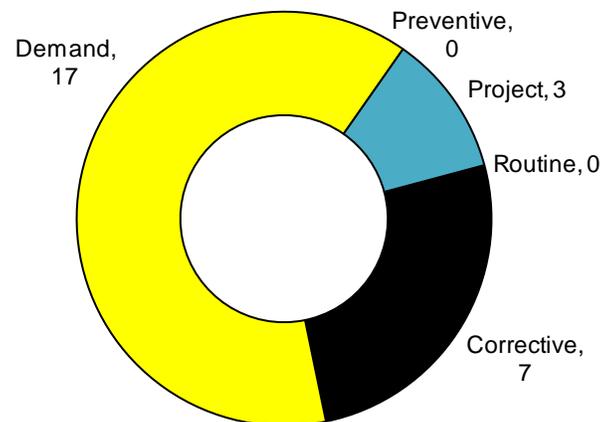
	56 Week Average
CCTV	10.1
DMS	7.6
GATES	0.6
HAR	1.4
DET	16.1
BLDG	1.1

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

Work Orders Submitted to/Service by I.T.



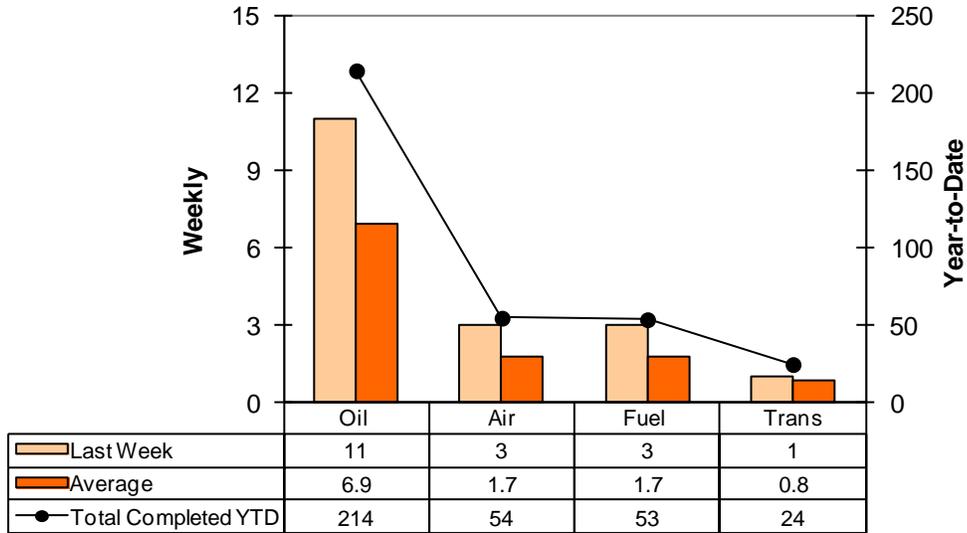
I.T. Facility Maintenance Activity



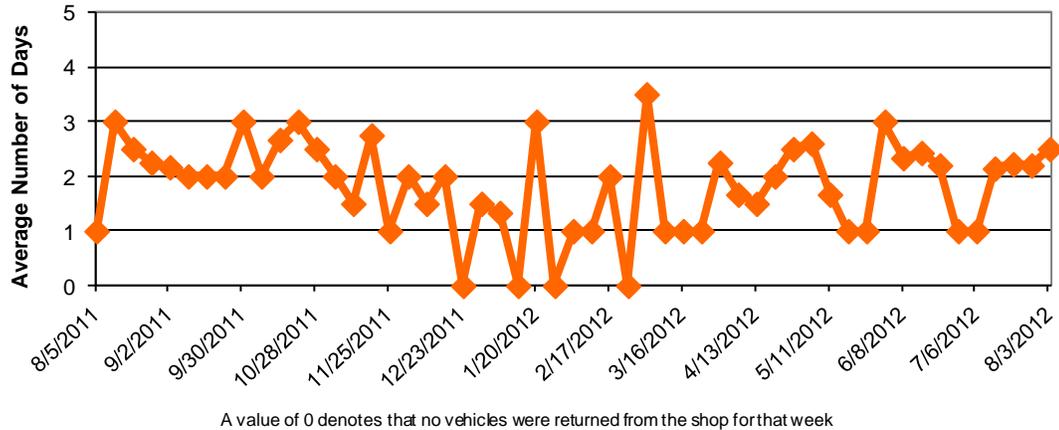
Fleet Management



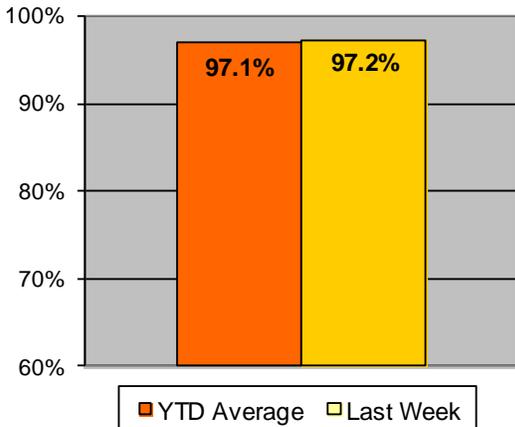
Completed Fleet Service Activities by Type



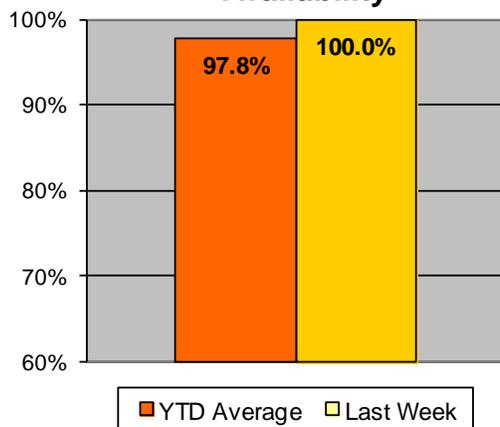
Average Vehicle Return-to-Service Duration



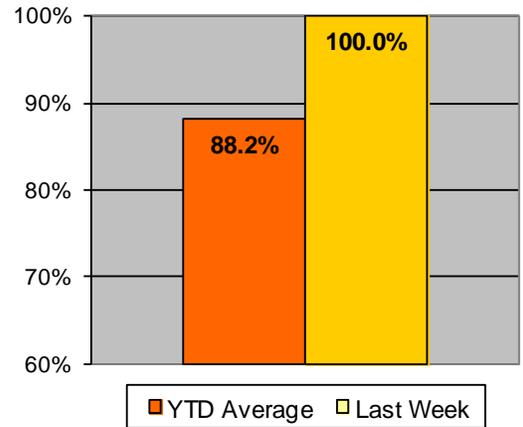
SSP Vehicle Availability

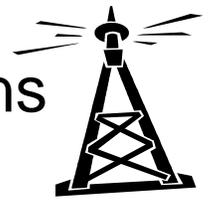


Field Maintenance Vehicle Availability



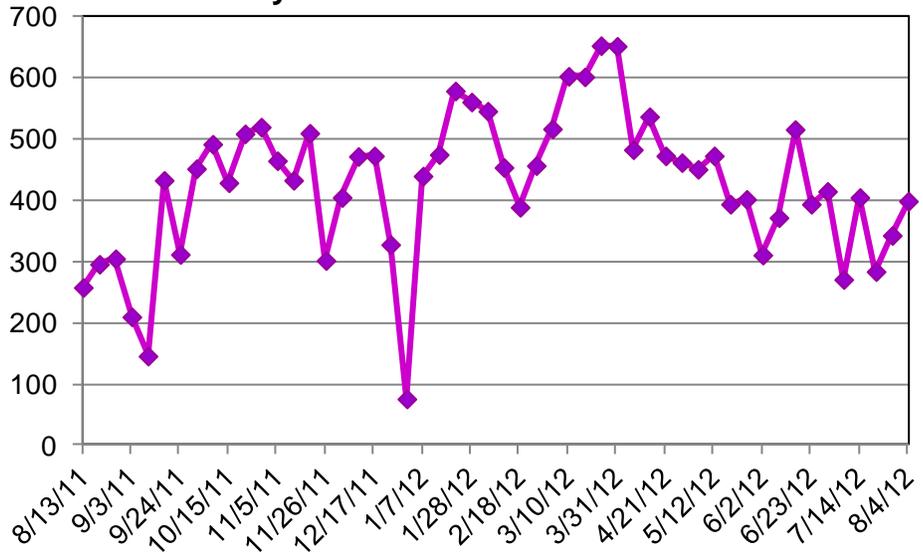
Pool Vehicle Availability



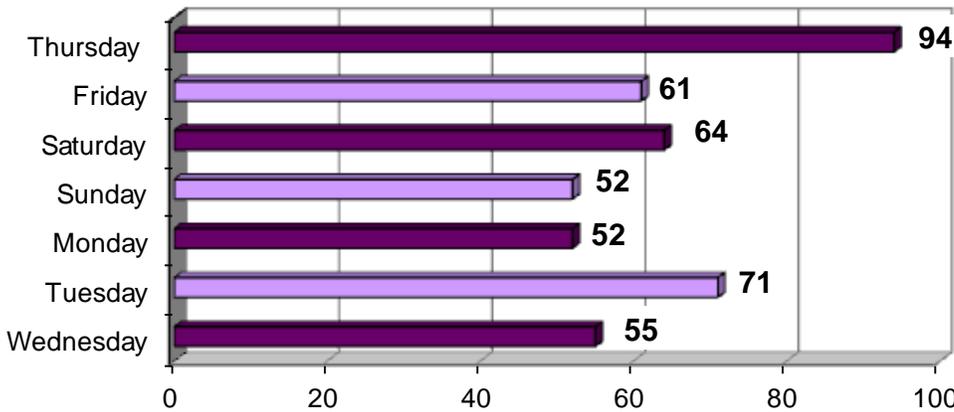


Weekly Lane Closures Entered into LCAMS

Visit <http://vdot.openlcams.com> to view current and scheduled lane closures throughout the state.



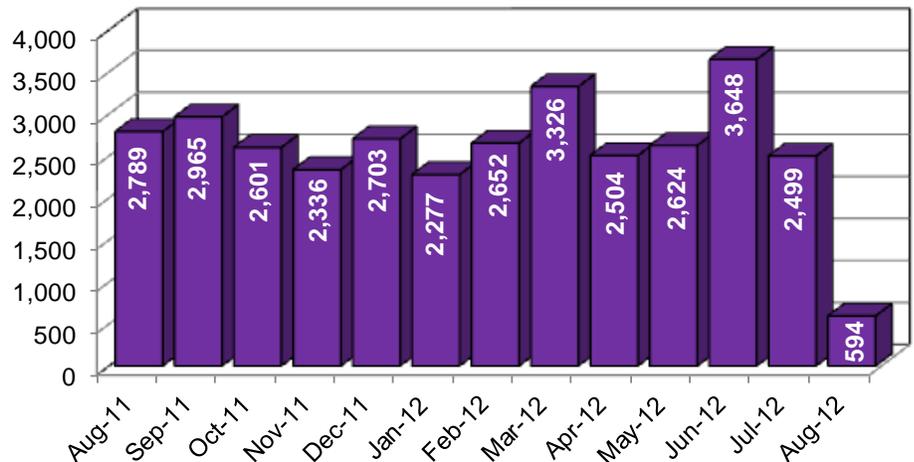
Calls Received On the Hampton Roads TrafficLine



449 calls from motorists were received on the TrafficLine between Thursday 7/26 and Wednesday 8/1.

Highway Advisory Radio (HAR) Counts

Current month reflects 'to-date'



There were 594 events associated HAR messages last week.

Data Key



Cover Page

Events Responded to by the Control Room Last Week

Description: Shows the actual past week and the weekly average event count for the rolling year.

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 VaTraffic/511 traveler information calls.

Drivers Assisted by Safety Service Patrollers Last Week

Description: Shows the actual past week and the weekly average number of SSP assists for the rolling year.

Purpose: Gives a snapshot view of the quantity of SSP assists. These assists reflect direct HRTOC customer contact, an important part of the HRTOC mission.

Field Equipment Corrective and Preventive Work Orders Completed Last Week

Description: The values shown reflect the total number of responses to field equipment corrective maintenance repairs and the total number of preventive maintenance tasks completed during the seven day period.

Purpose: Provides a summary view comparing the amount of corrective maintenance being completed in relation to preventive maintenance. A 2:1 ratio (corrective : preventive) of man hours is considered successful.

I.T. Work Orders Completed Last Week

Description: These values provide a summary view of I.T. work orders closed during the past week's reporting period and the average number of work orders closed each week for the last year.

Purpose: Summarizes the level of I.T. effort from the previous week in comparison to the average for the last year.

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 weekly average of that availability for the rolling year.

Purpose: The values of these numbers are indicators of vehicle repair activity and are used in support of scheduling and planning activities.

Number of Gallons Dispensed During SSP Fuel Assists Last Week

Description: Displays the weekly number of gallons of fuel dispensed by the SSPs. 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 SSPs. Unlike other SSP assistance types (e.g. 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 the number of events logged in the incident database for the prior week, for two weeks ago, and the weekly average for 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 the value two-weeks ago and an annual weekly average value. For comparison and analysis purposes, it 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 (VSP Radio and VSP CAD [Virginia State Police radio or computer aided dispatch], VaTraffic, CCTV, SSP, Phone Call and Other [i.e. field contractor or fire department]).

Purpose: Identifies the sources of most our incident discoveries and those sources that need to contribute greater to detection.

Incident Duration

Description: This graph shows the average duration in minutes from incident detection by a source (CCTV, Phone Call, VaTraffic, 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.

Note: Only includes incidents responded to by a SSP where the Response & Clear Times were recorded in the Incident Database.

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.

Number of 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.

Weekly Total Events by Geographic Location

Description: This table and accompanying map shows the number of events logged per locale by the Control Room. Rarely, certain events are not included in this tally because they are not defined by municipality.

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 Logged 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 HRTOC displayed a message on the DMS alerting the public of the current situation), Vehicle Fire, Maintenance Action, Off Highway, Special Event (i.e. concert or college graduation), Roadwork, 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 (HRTOC involved in managing congestion at area bridges and tunnels due to heavy traffic or a bridge opening), Abandoned (abandoned vehicle), Disabled (disabled vehicle), Debris (i.e. ladder, mattress or road kill disrupting the flow of traffic), and Accident.

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 Greater Than 30 and 60 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. Purpose: This information is used to compare the activity levels of 'serious events' that take longer than the average clearance time. Results can spotlight contributing factors such as short staffing, inter-agency communication, and patrol route inefficiencies.

Total SSP Responses

Description: The line graph displays SSP assist counts by week for the past year.

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

SSP Assists by Type

Description: This pie chart shows the relative values for the major types of SSP assists last week. Types include Disabled (disabled vehicle), Debris (i.e. ladders or dead animals in roadway), Accident, Vehicle Fire, HOV Change (i.e. an SSP was involved in an HOV Change), Abandoned (abandoned vehicle), and Other (i.e. traffic control for police activity, medical emergencies).

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.

Number of SSP Responses by Roadway

Description: This graph shows the number of SSP assists over the past week, displayed for each freeway that the HRTOC oversees. Also included are 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 YTD (Year-to-Date) Assists by Day-of-Week

Description: This chart depicts the number of SSP assists rendered for each day of week, for the current year-to-date.

Purpose: Helps in planning daily staffing levels based on year-to-date activity levels by day.

Most Active Hot-Spots

Description: This table shows, for four incident categories (Abandoned Vehicles, Accidents, Debris Removed, and Disabled Vehicles), the Segment ID and Interstate of the most active section of roadway, last week's incident count for that section, and the percentage of the total incident type 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 Field Device Operational Availability

Description: This table shows the total number of units of each equipment type (CCTV, DMS, Gates, HAR, and DET [detector stations]), 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.

Note: A DMS asset is considered not working if it is illegible

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 Tasks Completed 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.

Work Orders Submitted to / Serviced by I.T.

Description: This bar graph shows the number of new work order requests submitted to the I.T. Department last week, and the number that were serviced (worked on, but may not have been completed). Weekly averages for the past year are also graphed.

Purpose: The metric helps track I.T. Department workloads, in support of I.T. staff/resource allocation and scheduling.

I.T. Facility Maintenance Activity

Description: This donut graph shows I.T. 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; Routine - a replacement printer every three years.

Purpose: The breakout supports management in the allocation of staff, equipment, and budget resources at HRTOC.

Data Key (continued)



Maintenance (Continued)

Completed Fleet Service Activities by Type

Description: This chart shows weekly, average, and year-to-date counts for vehicle maintenance services. Oil (oil change), Air (air filter), Fuel (fuel filter), and Trans (transmission fluid services) are represented here.

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 in days; 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 in the average.

Purpose: These values also measure the performance of the repair effort and are used in scheduling SSP vehicle service and Patroller/Maintenance Staff resources.

HRTOC Vehicle Availability

Description: The three bar graphs show what percentage of the total SSP, Field Maintenance, and Pool fleets were available last week, and also provide a year-to-date (YTD) average for comparison.

Purpose: These numbers measure fleet service effort and success rates.

Public Information

Weekly Lane Closures Entered into LCAMS

Description: The HRTOC began using LCAMS (Lane Closure Advisory and Management System) on May 1st 2011. LCAMS is a program that allows users in Hampton Roads to quickly add and modify planned lane closures or determine if a lane closure conflicts with any existing entries.

Purpose: This information shows the efforts associated with managing lane closures throughout Hampton Roads. The Lane Closure Technician, Public Information Officer and Control Room operators are all impacted by increasing lane closure counts.

Calls Received On the Hampton Roads TrafficLine (361-3016)

Description: The Hampton Roads TrafficLine was implemented in December of 2006 in order to assist motorists with their travel information needs. Motorists can dial a number and hear traffic conditions relating to the Highway Advisory Radio reports. This bar graph shows number of calls received by day of the week. Due to the way TrafficLine data is updated, the previous week’s data is only available through Wednesday.

Purpose: This information will help public affairs become aware of what days of the week are of interest to Hampton Roads commuters as well as ensure additional dissemination of timely traffic information to the public.

HAR Counts

Description: Highway Advisory Radio (HAR) messages are created and updated several times during the day. This graph tallies the number of events that have a HAR message associated 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 HRTOC 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.