

Week Ending February 5, 2010

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

- HRTOC Motorist Quote of the Week about SSP Peter Mezzapeso:  
*"A very courteous and helpful gentleman came to our assistance after a flying object caused damage to our rear tire and rim. We couldn't be more pleased with the service he provided."*
- The following statistics were affected by the snowstorm that occurred on 1/30/2010 (these count towards February numbers because the week ending date was in February):  
 VaTraffic Reports – The 133 reports entered on 1/30 was close to previous 2010 weekly totals. With only one week of the month accounted for, the February 2010 report count is already over 50% of the 2009 monthly total.  
 Events Logged by Type, page 3 – Last week's accident total was at it's highest point since reporting began in 2006. Exactly 50% of the 274 accidents occurred on 1/30.  
 SSP Assists by Type, page 4 - As with the event type 'accident', the number of SSP assists to accidents last week was also at it's highest point since reporting began in 2006, with 46% of the 182 accident responses occurring on 1/30.

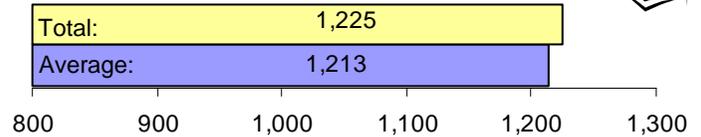
### Did you know...

VDOT is the first state transportation department to implement electronic marking intended for use by participating utilities. Computer chips placed inside buried plastic spheres store the location, ownership, placement date, orientation, and depth buried nearby with public and private utilities. The system is being developed by VDOT along with the Gas Technologies Institute, the Virginia Utility Protection Service and others to create a single repository for buried utility mapping. According to a VDOT utility construction project engineer, it costs more than \$1,000 an hour to put an excavator on hold while a buried utility question is resolved.

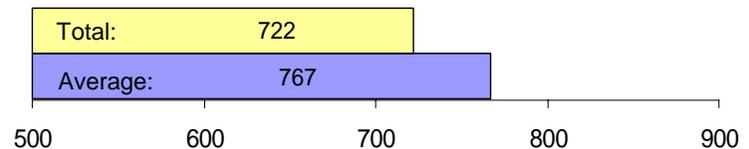
Source: VDOT Weekly Report

### Operations & Maintenance Summary

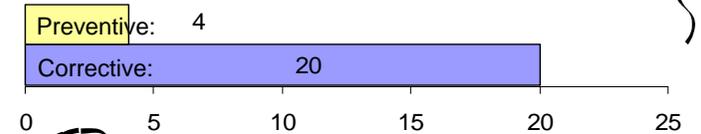
Number of events responded to from the Control Room last week:



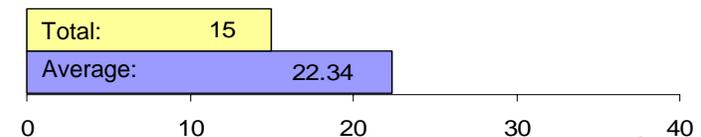
Total number of drivers assisted by Safety Service Patrollers last week:



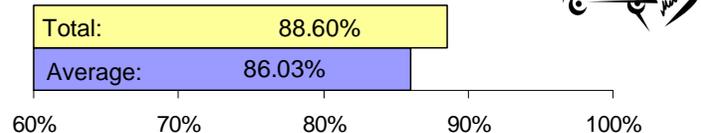
Number of field equipment responsive and preventive repairs made last week:



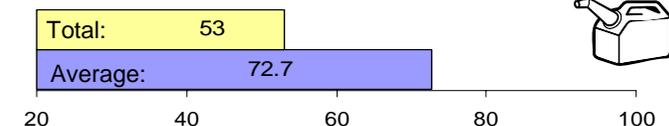
IT Work Orders completed last week:



SSP Truck Availability Last Week:



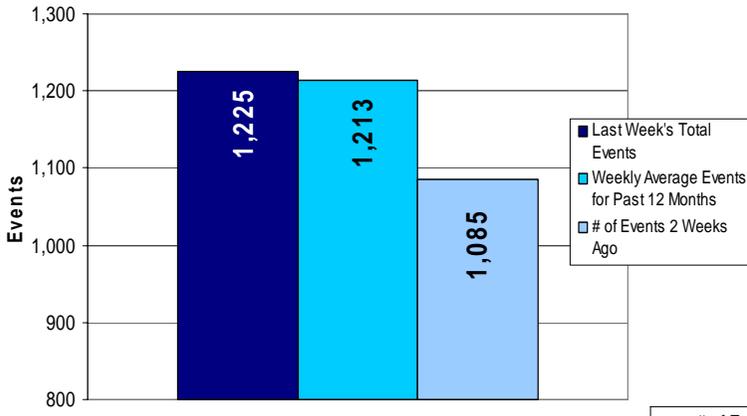
Number of Gallons Dispensed During SSP Fuel Assists Last Week:



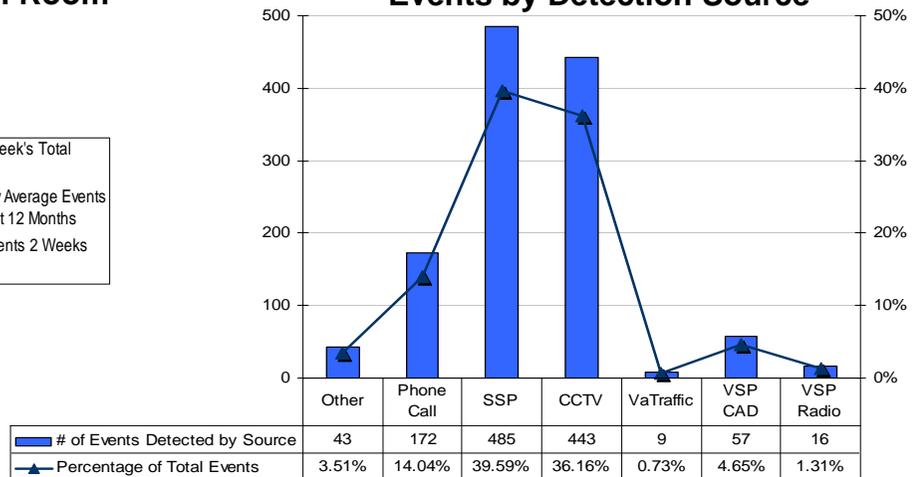


# Operations

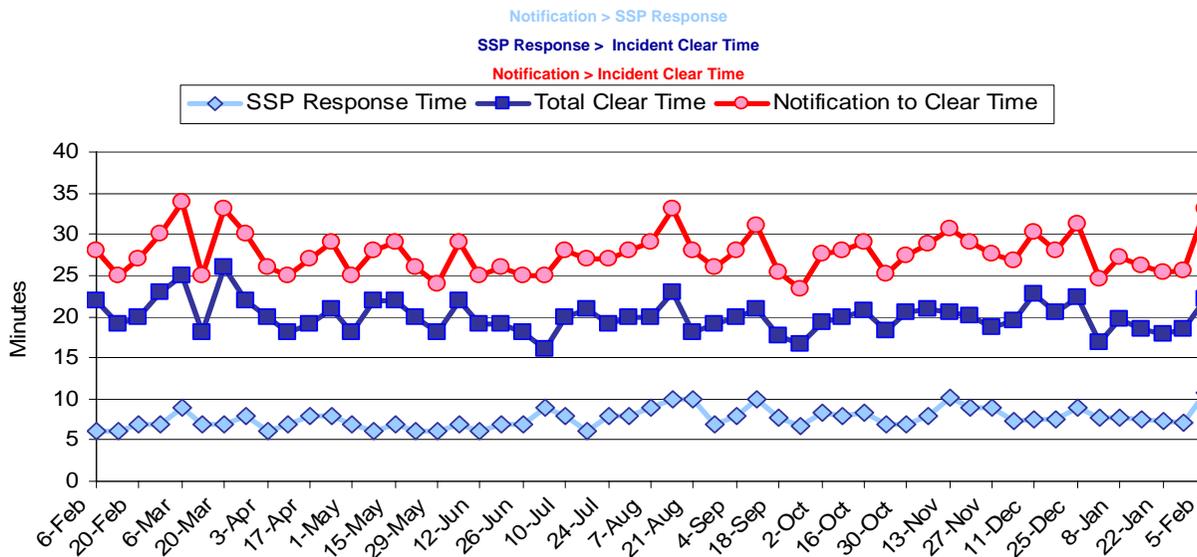
## Number of Events Logged by the Control Room



## Events by Detection Source



## Incident Duration



## Number of Incidents Involving Tractor Trailers

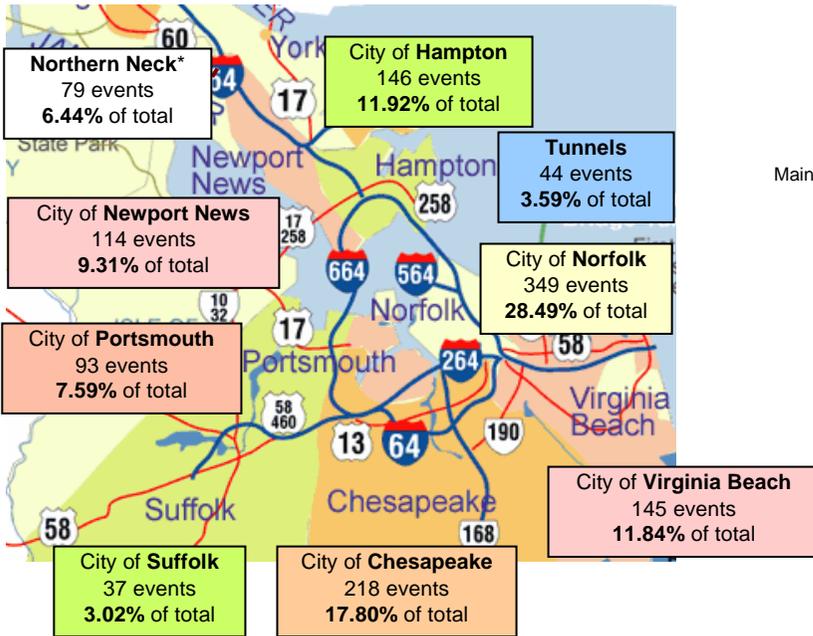


### Need Clarification?

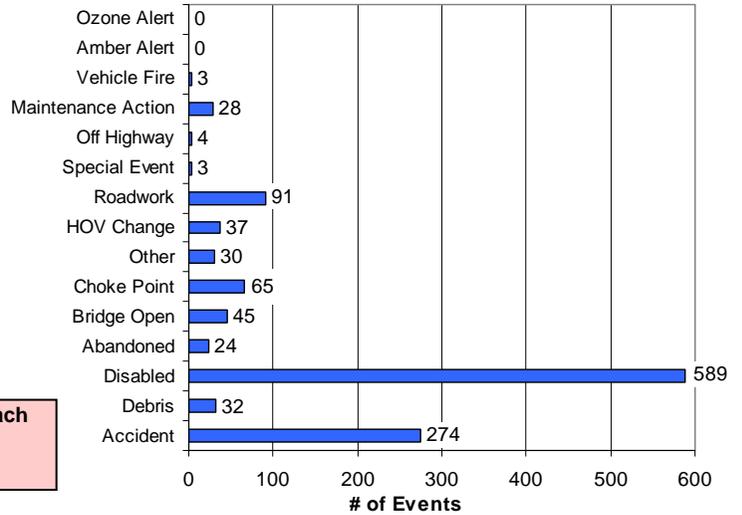
A Data Key starting on page 8 provides explanations for every chart in this report.

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

# Operations



### Events Logged by Type

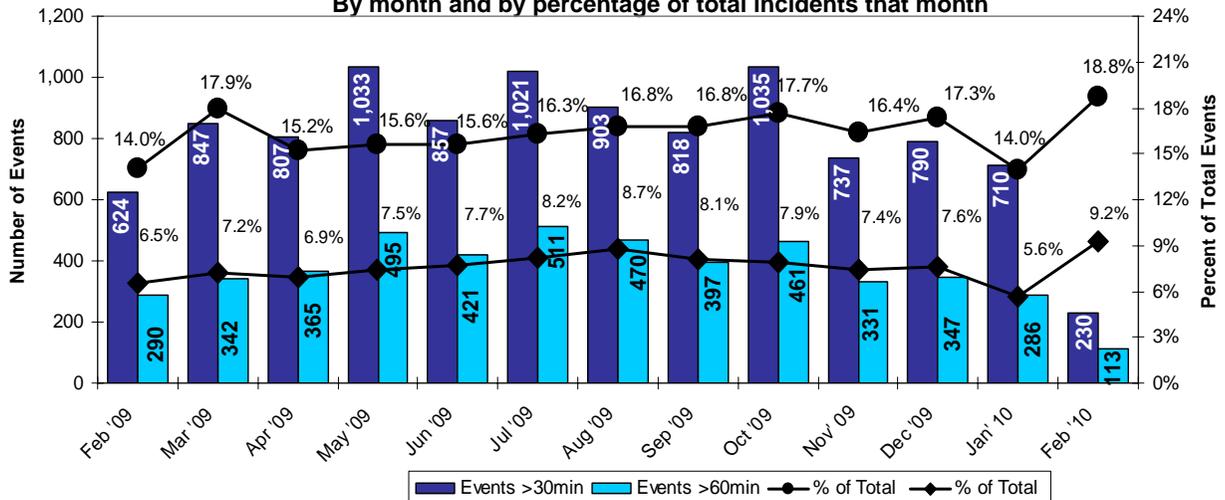


|        | Norfolk | Virginia Beach | Chesapeake | Suffolk | Portsmouth | Newport News | Hampton | Tunnel | Northern Neck* |
|--------|---------|----------------|------------|---------|------------|--------------|---------|--------|----------------|
| 5-Feb  | 349     | 145            | 218        | 37      | 93         | 114          | 146     | 44     | 79             |
| 29-Jan | 339     | 114            | 133        | 19      | 89         | 95           | 144     | 73     | 79             |
| 22-Jan | 309     | 115            | 151        | 28      | 68         | 116          | 126     | 40     | 72             |
| 15-Jan | 309     | 100            | 150        | 36      | 81         | 116          | 132     | 53     | 77             |
| 8-Jan  | 326     | 99             | 142        | 26      | 103        | 106          | 115     | 46     | 56             |
| 1-Jan  | 275     | 127            | 102        | 21      | 48         | 105          | 118     | 34     | 66             |
| 25-Dec | 286     | 145            | 159        | 27      | 73         | 114          | 133     | 41     | 75             |

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

## Events Greater Than 30 and 60 Minutes

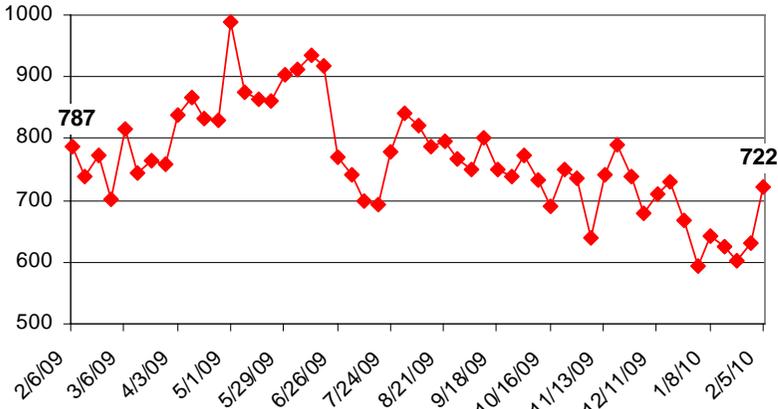
By month and by percentage of total incidents that month



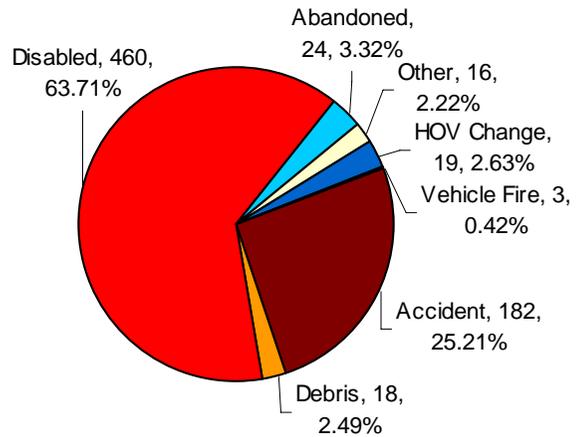
# Operations



**Total SSP Responses**  
By week for the preceding year

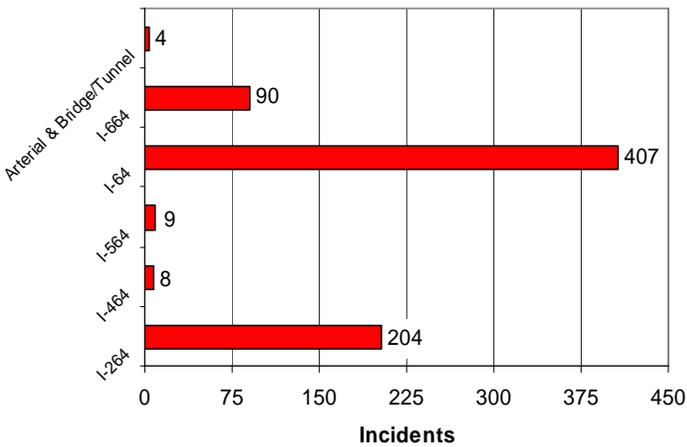


**SSP Assists by Type**



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

**Number of SSP Assists by Roadway**



**Most Active Hot-Spots**

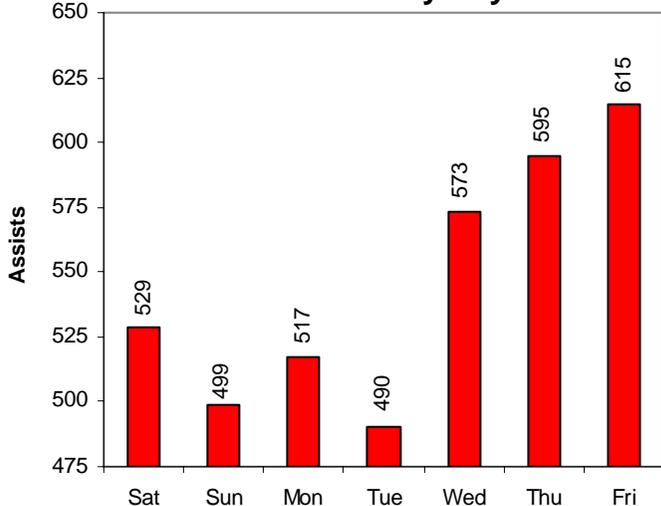


| Most Active          | Interstate | Segment ID | # of Incidents | % of System wide |
|----------------------|------------|------------|----------------|------------------|
| 1 Abandoned Vehicles | I-64       | 64-36      | 3              | 12.5%            |
| 2 Accidents          | I-64       | 64-11      | 18             | 6.6%             |
| 3 Debris Removed     | Rte 58     | Midtown    | 3              | 9.4%             |
| 4 Disabled Vehicles  | I-64       | 64-08      | 27             | 4.6%             |

**Segment ID: Descriptions**

|         |   |
|---------|---|
| 64-36   | Jefferson Ave - Fort Eustis Blvd        |
| 64-11   | 64 / 264 Interchange - Northampton Blvd |
| Midtown | Inside the Midtown Tunnel               |
| 64-08   | Greenbrier Pkwy - Indian River Rd       |

**Total YTD Assists by Day-of-Week**





# Maintenance

## Current Field Device Operational Availability\*

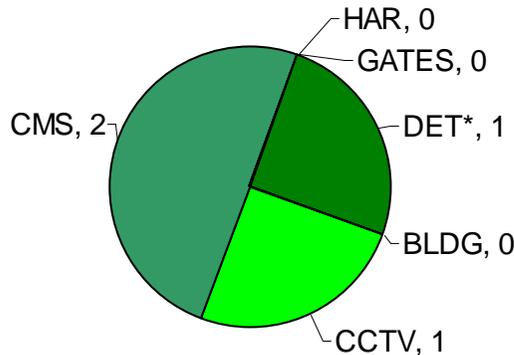
| Component | Total | Not Working | Working | System Availability |
|-----------|-------|-------------|---------|---------------------|
| CCTV      | 270   | 19          | 251     | 93.0%               |
| CMS       | 192   | 20          | 172     | 89.6%               |
| GATES     | 5     | 0           | 5       | 100%                |
| HAR       | 6     | 1           | 5       | 83%                 |
| DET***    | 235   | 200         | 35      | 15%                 |

\* Represents last weeks equipment availability as of Friday @ 1400

\*\* Represents CMS signs with legibility limitations

\*\*\* Represents individual detector stations

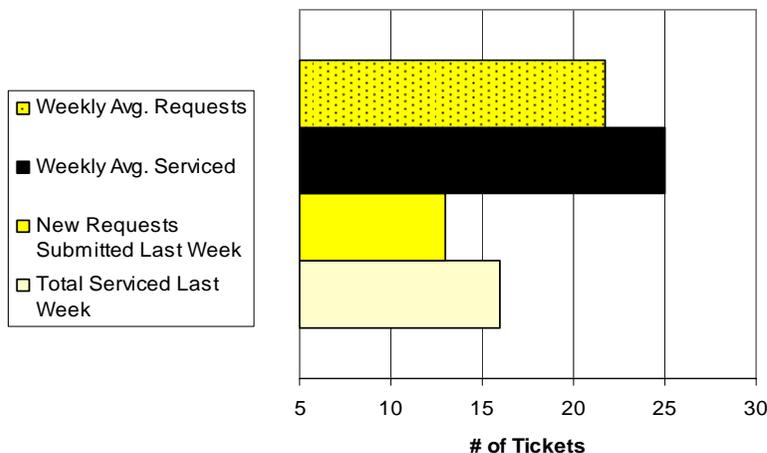
## Number of PM Repairs Made by Equipment Type



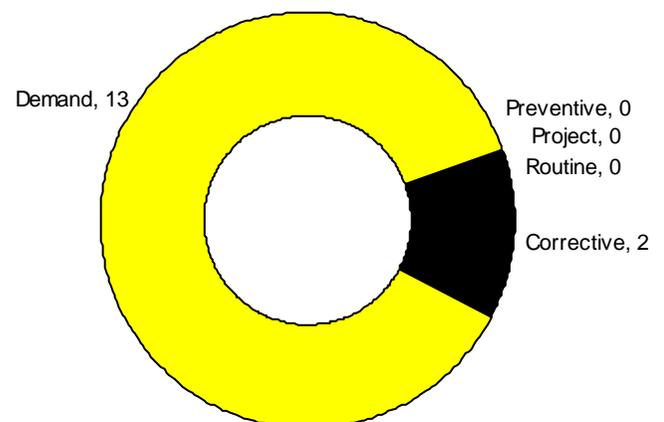
|       | 56 Week Average |
|-------|-----------------|
| CCTV  | 9.4             |
| CMS   | 7.1             |
| GATES | 0.6             |
| HAR   | 1.3             |
| DET   | 15.2            |
| BLDG  | 3.8             |

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

## IT Facility Maintenance Activity



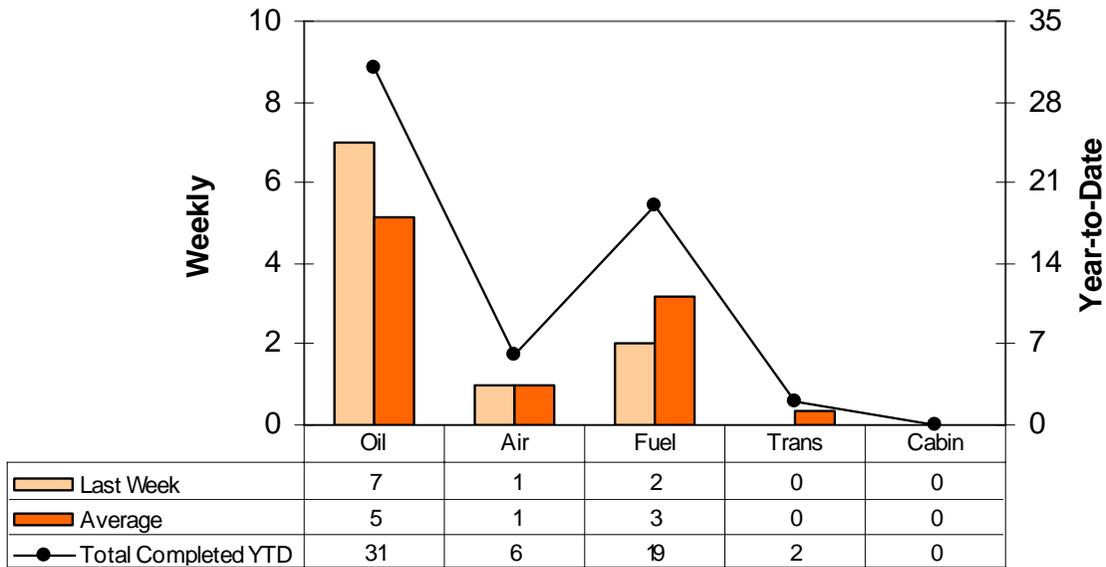
## Work Orders Submitted to/Service by IT



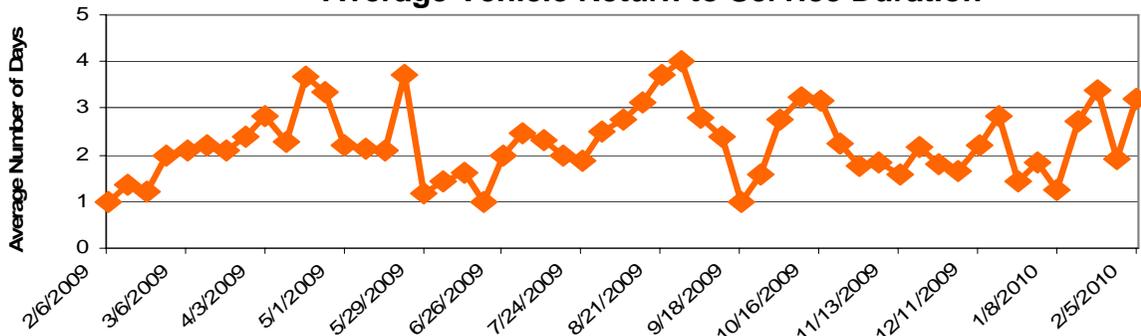
# Maintenance



### Completed Fleet Service Activities by Type

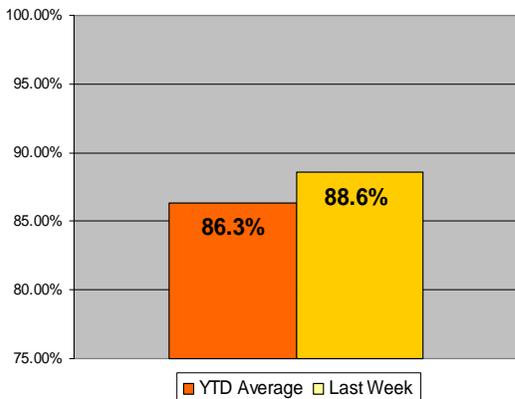


### Average Vehicle Return to Service Duration

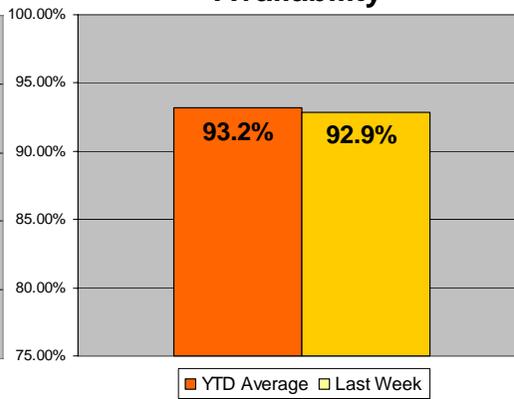


A value of 0 denotes that no vehicles were returned from the shop for that week

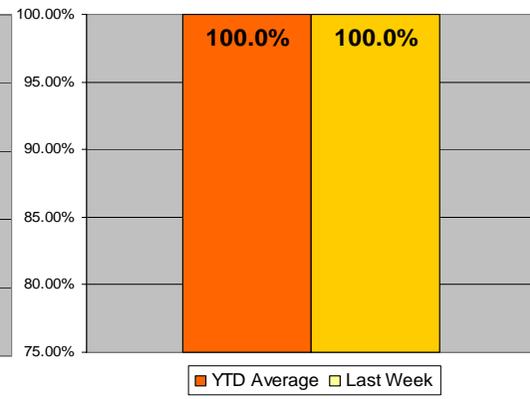
### SSP Vehicle Availability



### Field Maintenance Vehicle Availability



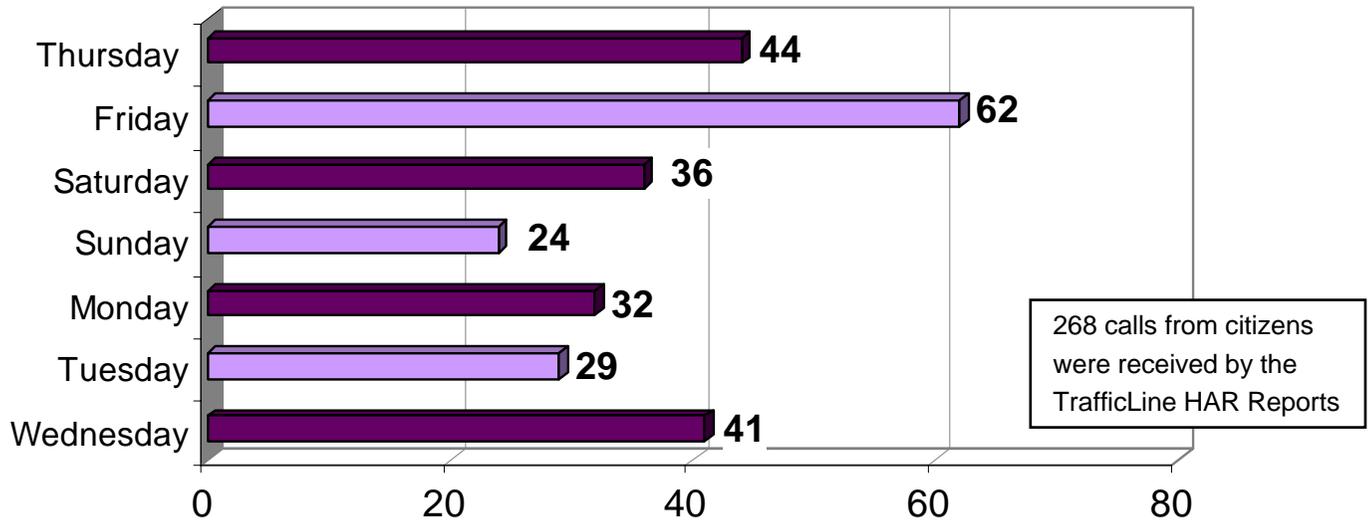
### Pool Vehicle Availability





# Public Information & Media Relations

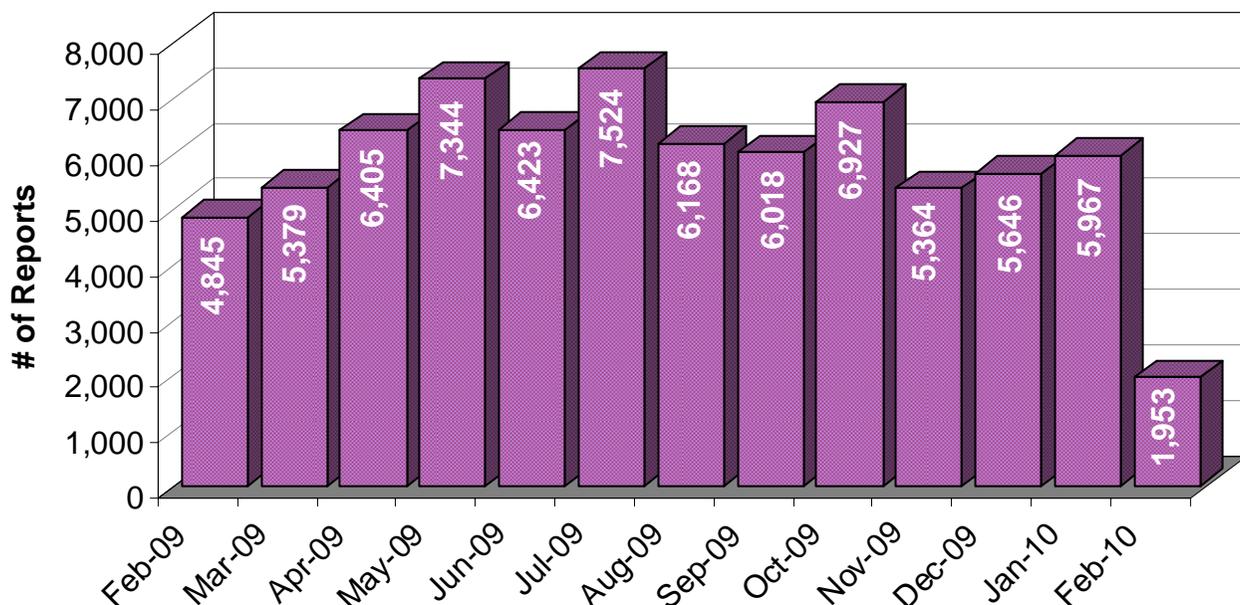
### Calls Received On the Hampton Roads TrafficLine



Last updated 2-3-2010

### Highway Advisory Radio Reports

Total AM and PM Reports by Month. Current month reflects 'to-date'



# 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.