Maryland Department of Transportation
State Highway Administration

Championing Traffic Incident Management in the National Capital Region

November 2, 2016

Joseph Sagal
Director
Office of CHART & ITS Development
Telephone: (410) 582-5605
E-mail: jsagal@sha.state.md.us

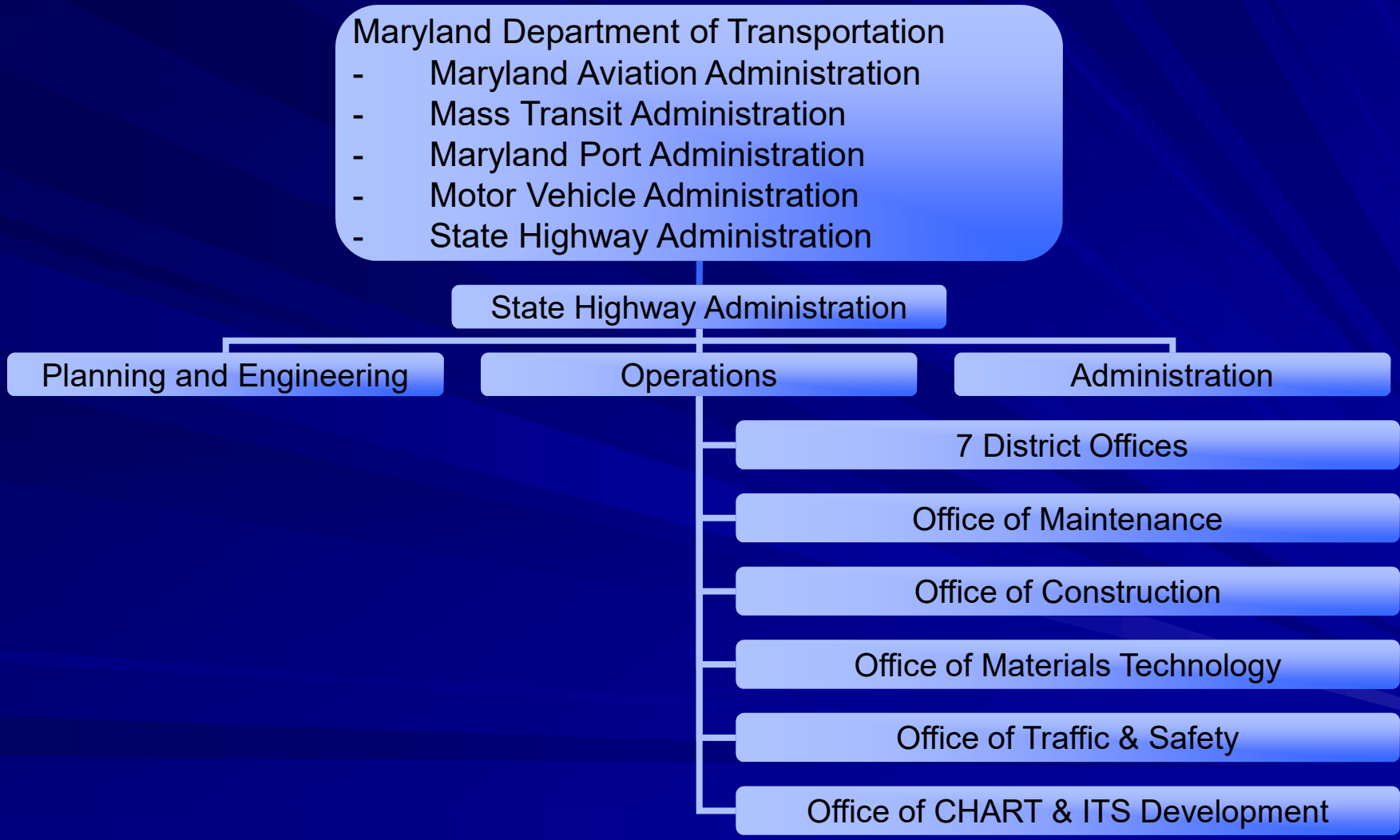
CHART Core Functions

- CHART is the Coordinated Highways Action Response Team.
- CHART is MDOT-SHA's real-world application of Transportation Systems Management and Operations.
- CHART is focused on the safety and efficient movement of people and goods on Maryland's highways.

CHART Operations Focus Areas

- Incident Management
- Traffic and Roadway Monitoring
- Traveler Information
- Severe Weather and Emergency Operations
- Traffic Management

Organization



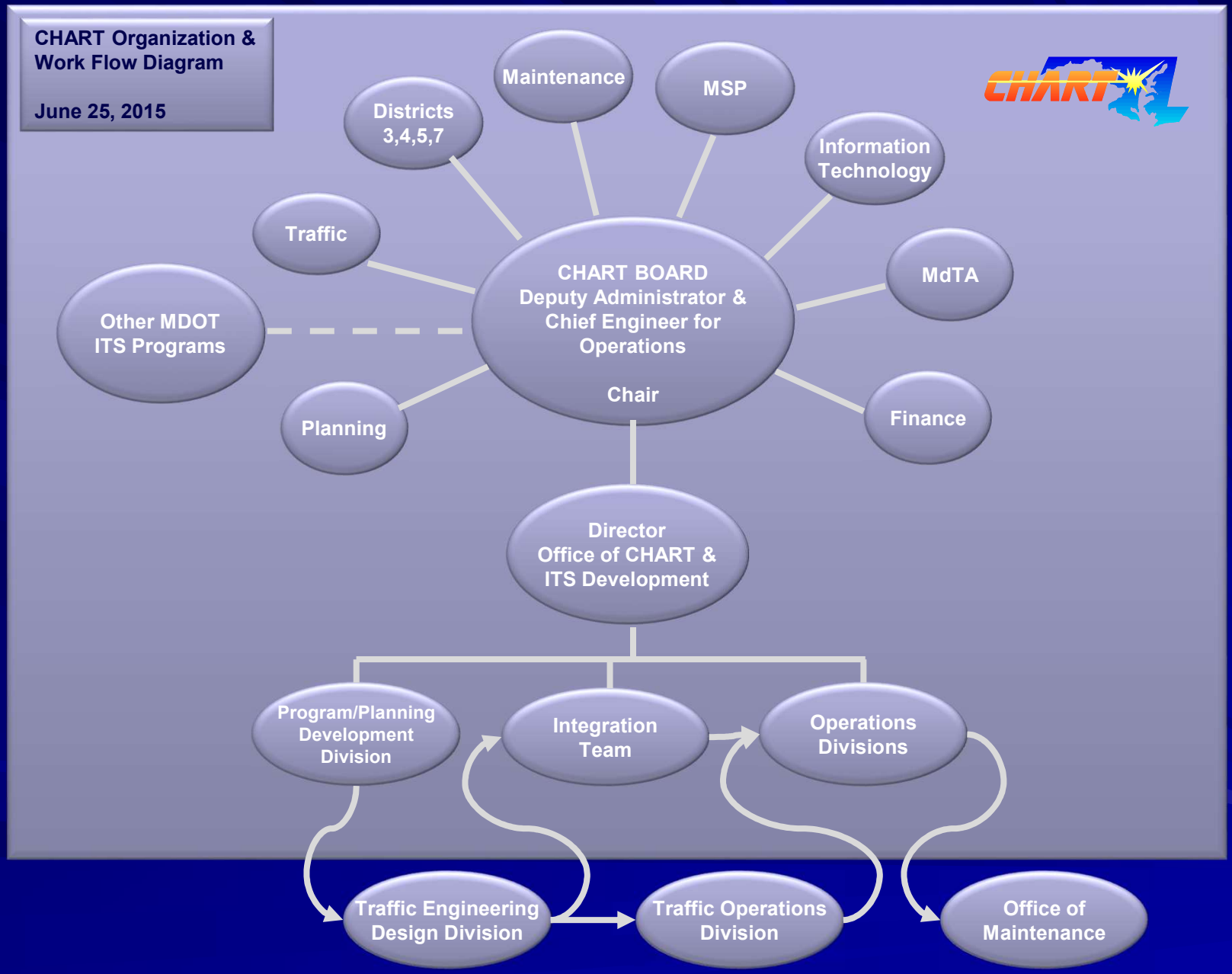


CHART Organization & Work Flow Diagram
June 25, 2015
Maintenance
MSP
Districts 3,4,5,7
Information Technology
Traffic
MdTA
CHART BOARD Deputy Administrator & Chief Engineer for Operations
Chair
Other MDOT ITS Programs
Planning
Finance
Director Office of CHART & ITS Development
Program/Planning Development Division
Integration Team
Operations Divisions
Traffic Engineering Design Division
Traffic Operations Division
Office of Maintenance

CHART TMC Operations

The Statewide Operations Center

- 24/7/365
- 3 – TOC's M-F
  - NCR
    - College Park Bk
  - Baltimore
    - Golden Ring Bk
  - Western
    - Frederick Bk
- Maryland State Police staffing (peak rush hours/emergency only)

Opened August 30, 1995

Incident Management

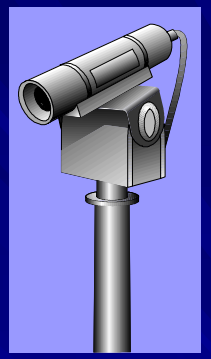
- 24 Hours / 7 Days per Week Operation
- “Clear the Road Policy”
- Close Coordination with State Police
- Emergency Traffic Patrols (ETP’s)
- Emergency Response Units (ERU’s)
- Approximately 43 units on the Road

CHART

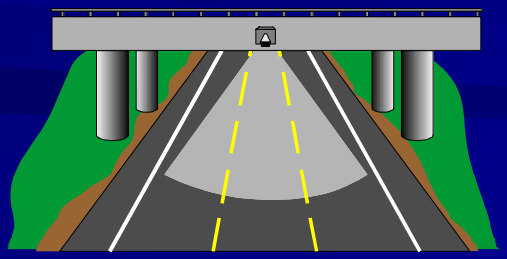
CHART Incident Management Performance Measures & Recent Results

- Annual User Cost Savings - $1.356 Billion
- Number of Patrol Hours Logged - Over 97,000 Hours
- Reduction in Delay - 39.2 Million Vehicle-Hours
- Average Incident Duration - 23.54 minutes
- Total Number of Responses (Incidents & Assists) - Over 77,000
- 2014 – a CHART unit assisted a motorist every *14min*, handled an incident every *22min*
- 2015 – a CHART unit assisted a motorist every *15min*, handled an incident every *19min*

Traffic and Roadway Monitoring

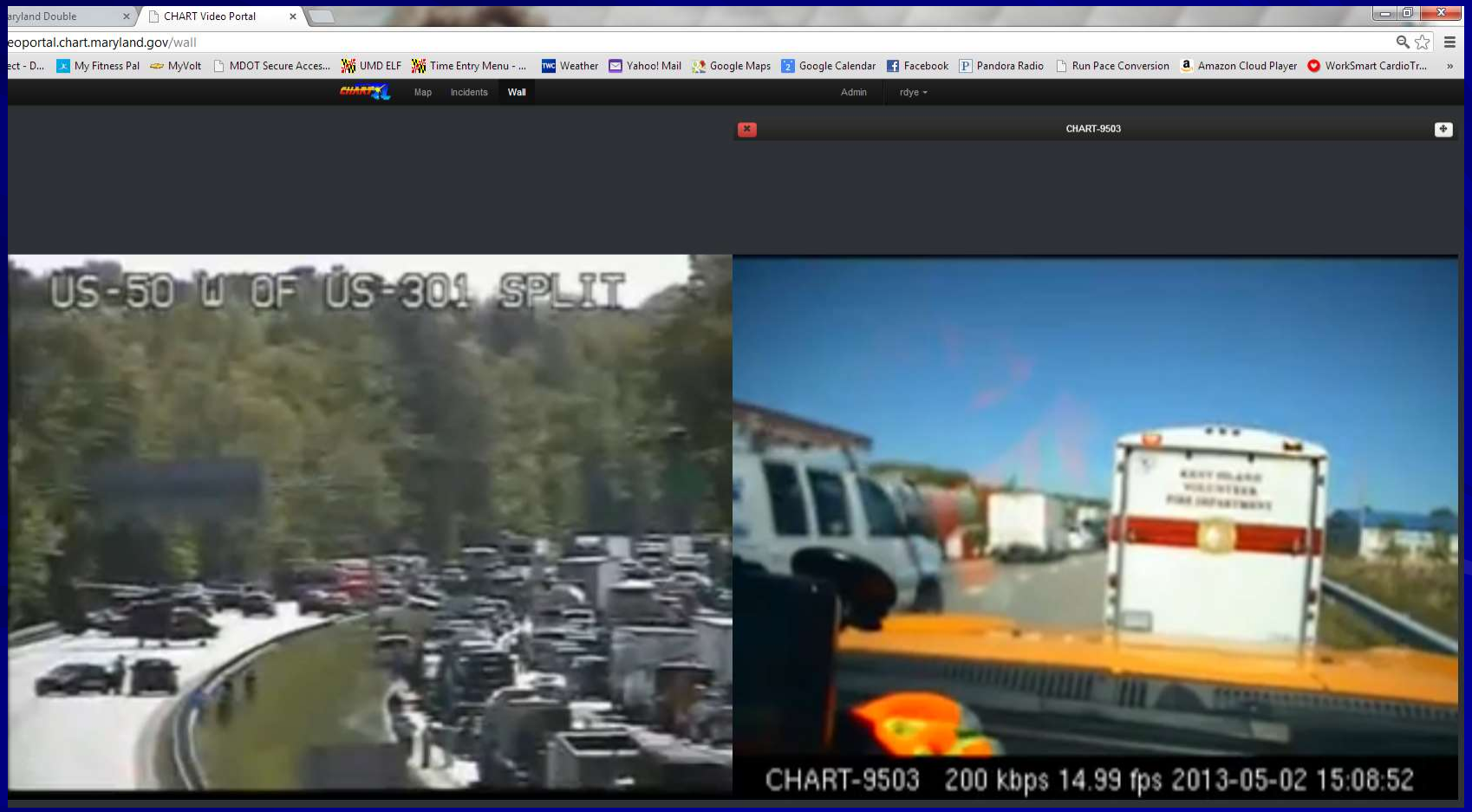


- Cellular Telephone - #77
- Maryland State Police Reports
- 300+ Speed Detectors including PPTA
- 180+ Closed-Circuit Television Cameras (owned and controlled by CHART)
- 800+ Closed-Circuit Television Cameras (owned by, partially owned by, or viewable by CHART)
- Traffic Probe Data



Dash Mounted CCTV - 2011

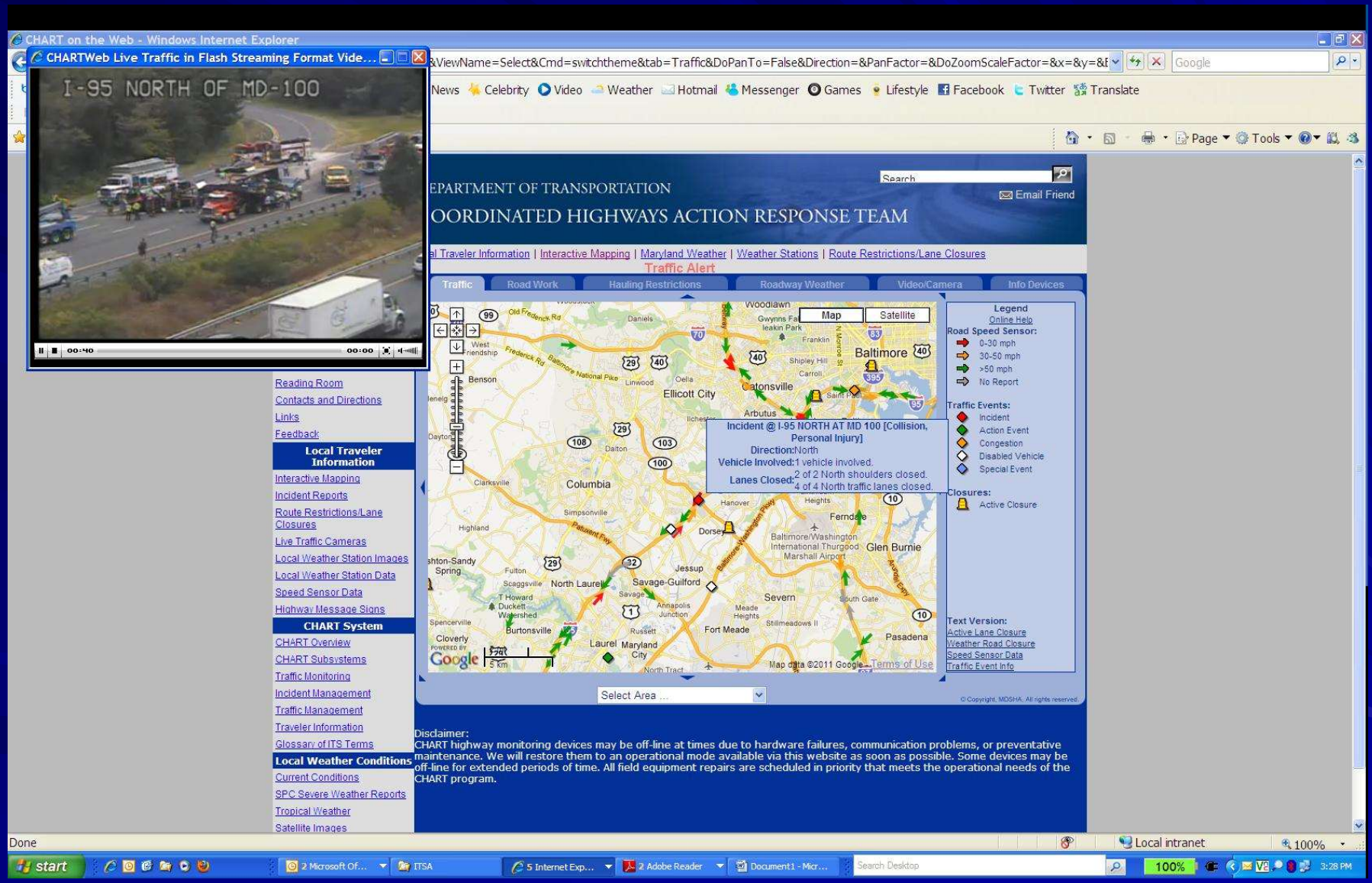
- We found the things you needed to see were not where our Emergency Patrol was pointed!



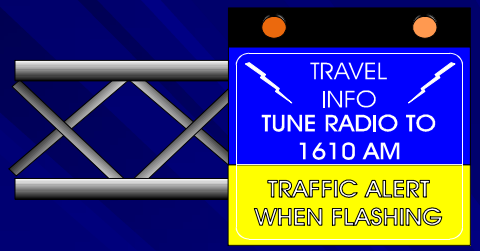
New generation CCTV MV-2101 resolved the issues

- Approximately $17K per camera
- Available on State Contract
- Full Pan – Tilt – Zoom camera controlled by central software at TOC/TMC
- Video rides “secure” APN across AT&T 3G Network

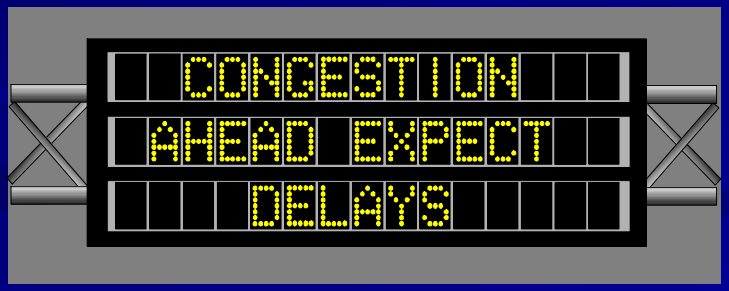
The public receives a “real-time” map showing the incidents and streaming video from nearby cameras



Traveler Information



- 85+ Dynamic Message Signs
- 35+ Traveler's Advisory Radio Stations
- Internet: http://traffic.maryland.gov
- Travel Times On DMS
- 511 Traveler Information Service



CHART

Getting ready for what is next

- I-270 Corridor Project
- US 1 Pilot Corridor
- Strategic TSM&O Implementation Plan

Regional Integrated Transportation Information System (RITIS)
A Real-Time and Archived Repository of Highway Conditions and Events