

US 1 Innovative Technology Deployment Corridor

Presented By:

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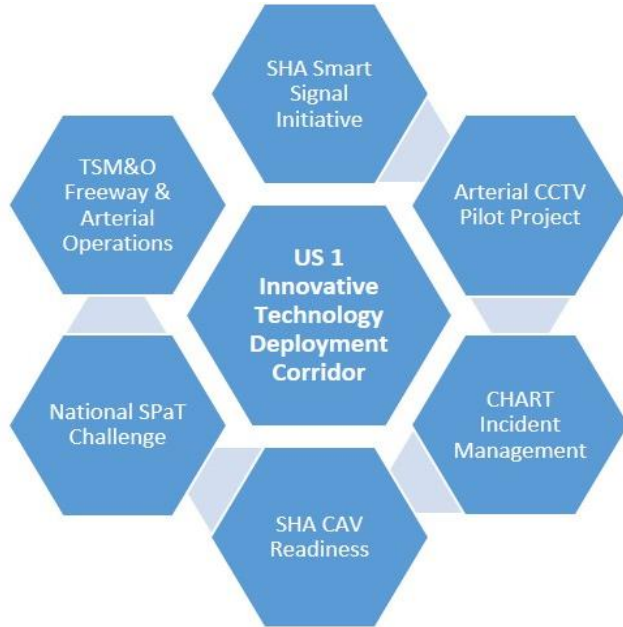
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November 7, 2017

Project Scope



- Upgraded **signal controllers** to support adaptive control and future CV applications
- Arterial **CCTV** to support incident and traffic management
- **Detection** to support arterial travel times
- **DSRC deployment** at intersections for CAV readiness and National SPaT Challenge
- Enhanced high-bandwidth **communication** connectivity to support future needs
- Additional **tools** (arterial DMS, localized RWIS deployment, etc)

14 Smart Signal Corridors

- MD 2 Anne Arundel County – Annapolis – Annapolis Harbor Center to Tarragon Lane
- MD 2 Anne Arundel County – Brooklyn Park – Hammonds Lane to 11th Avenue
- MD 3 Anne Arundel County – Crofton – MD 450 to St. Stephens Church Road
- MD 139 Baltimore County – Towson – Kenilworth Avenue to I-695 Outer Loop Ramp
- US 40 Baltimore County – Catonsville – Coleridge Road to Nuwood Drive
- MD 5 Business Charles County – Waldorf – Post Office Drive to US 301
- MD 228 Charles County – Waldorf – Western Parkway to US 301
- US 301 Charles County to Prince George’s – Waldorf Area – Chadds Ford Drive to MD 227
- US 1 Business Harford County – Belair – Tollgate Road to Atwood Road
- MD 22 Harford County – Aberdeen -Technology Way to North Rogers Street/US 40 Ramp
- **US 1 Howard County – Jessup/Elkridge – Montgomery Road to MD 175**
- US 301 Prince George’s County – Bowie – Excalibur Road to Governor’s Bridge Road
- MD 202 Prince George’s County – Landover – McCormick Drive to Arena Drive
- MD 108 Montgomery County – Olney – MD 182 to Volunteer Drive

US 1 Howard County

- Next generation Econolite Cobalt controllers
- Adaptive control
- High definition data to enable signal performance measures
- Connected Vehicle card to enable future applications
- Enhancements to signal interconnectivity and communications back-haul

The screenshot shows a news article from The Baltimore Sun. The headline is "Hogan announces \$50 million signal upgrade on Maryland highways to improve traffic flow". Below the headline is a photograph of Governor Larry Hogan and two other men standing behind a podium. The podium has a sign that reads "TRAFFIC RELIEF PLAN" and "14 State Highway Corridors". The Governor is identified as "Larry Hogan, Governor of Maryland". The article is dated "OCTOBER 25, 2017, 12:05 PM" and is written by "Michael Dresser, Contact Reporter". The text of the article states that drivers in 14 state highway corridors in Maryland will see their travel times cut over the next year as a result of a \$50 million upgrade to traffic signals. The new system will use artificial intelligence to better synchronize signals and improve traffic flow, replacing technology that is more than 20 years old.

THE BALTIMORE SUN

SEARCH

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Hogan announces \$50 million signal upgrade on Maryland highways to improve traffic flow

Larry Hogan
Governor of Maryland

Hogan announces \$50 million signal upgrade on Maryland highways to improve traffic flow. (Michael Dresser / Baltimore Sun video)

By Michael Dresser • Contact Reporter
The Baltimore Sun

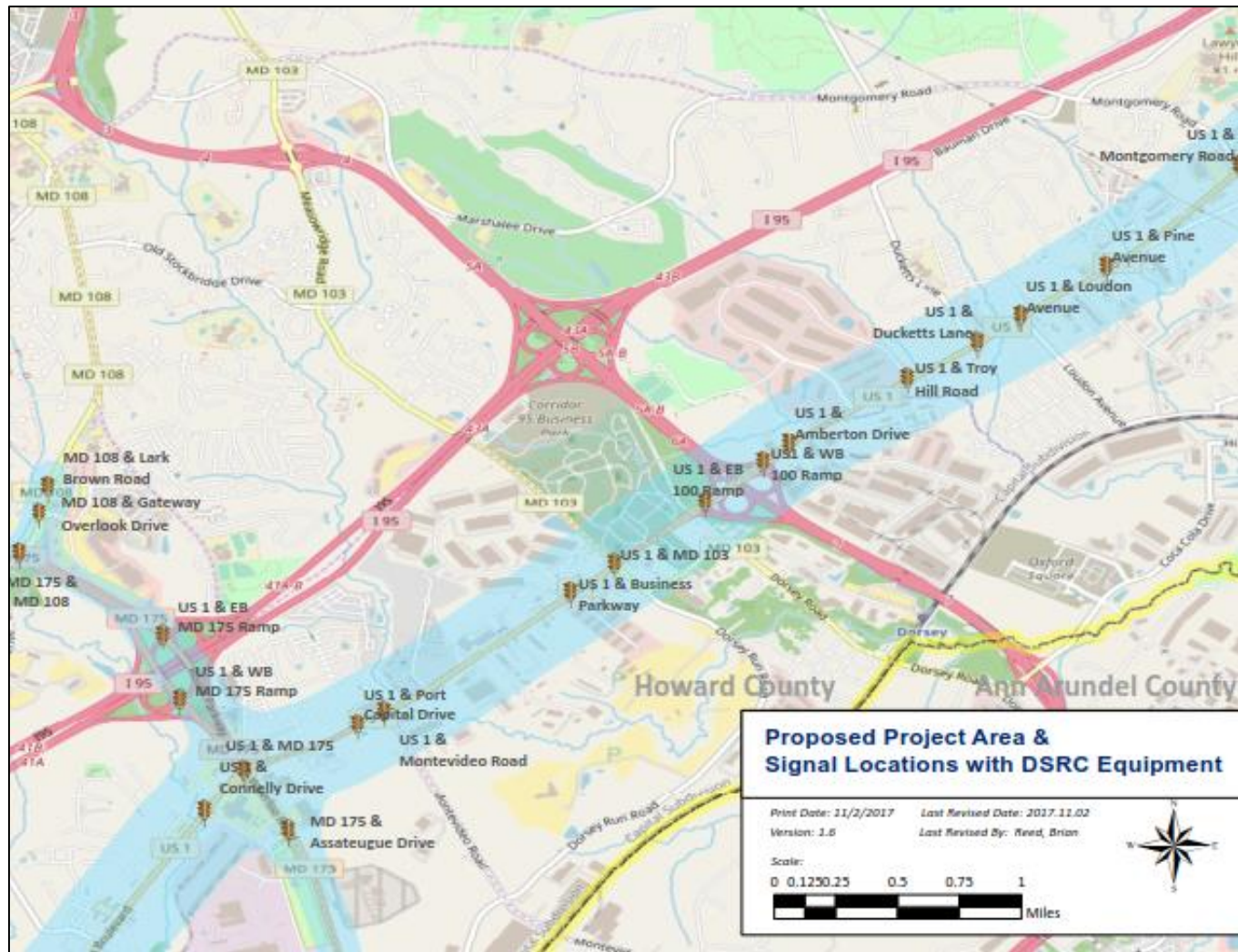
OCTOBER 25, 2017, 12:05 PM

Driver in 14 state highway corridors in Maryland will see their travel times cut over the next year as a result of a \$50 million upgrade to traffic signals, Gov. **Larry Hogan** said Wednesday.

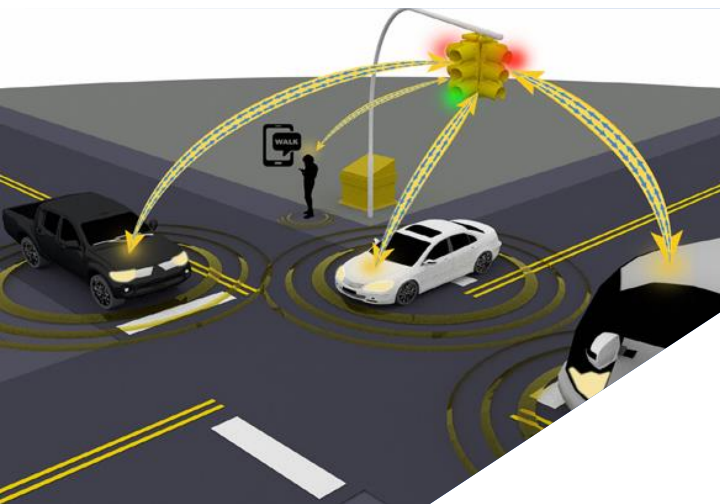
The new system, billed as the second phase of Hogan's program to relieve highway traffic congestion, will use artificial intelligence to better synchronize signals and improve traffic flow, officials said. The governor said the adaptive signal control system replaces technology that is more than 20 years old.

Connected Vehicle Readiness

- Co-Locate DSRC at 20 Smart Signal locations
- Broadcast SPaT and MAP messages
- Receive BSM messages



Connected Vehicle Pilot



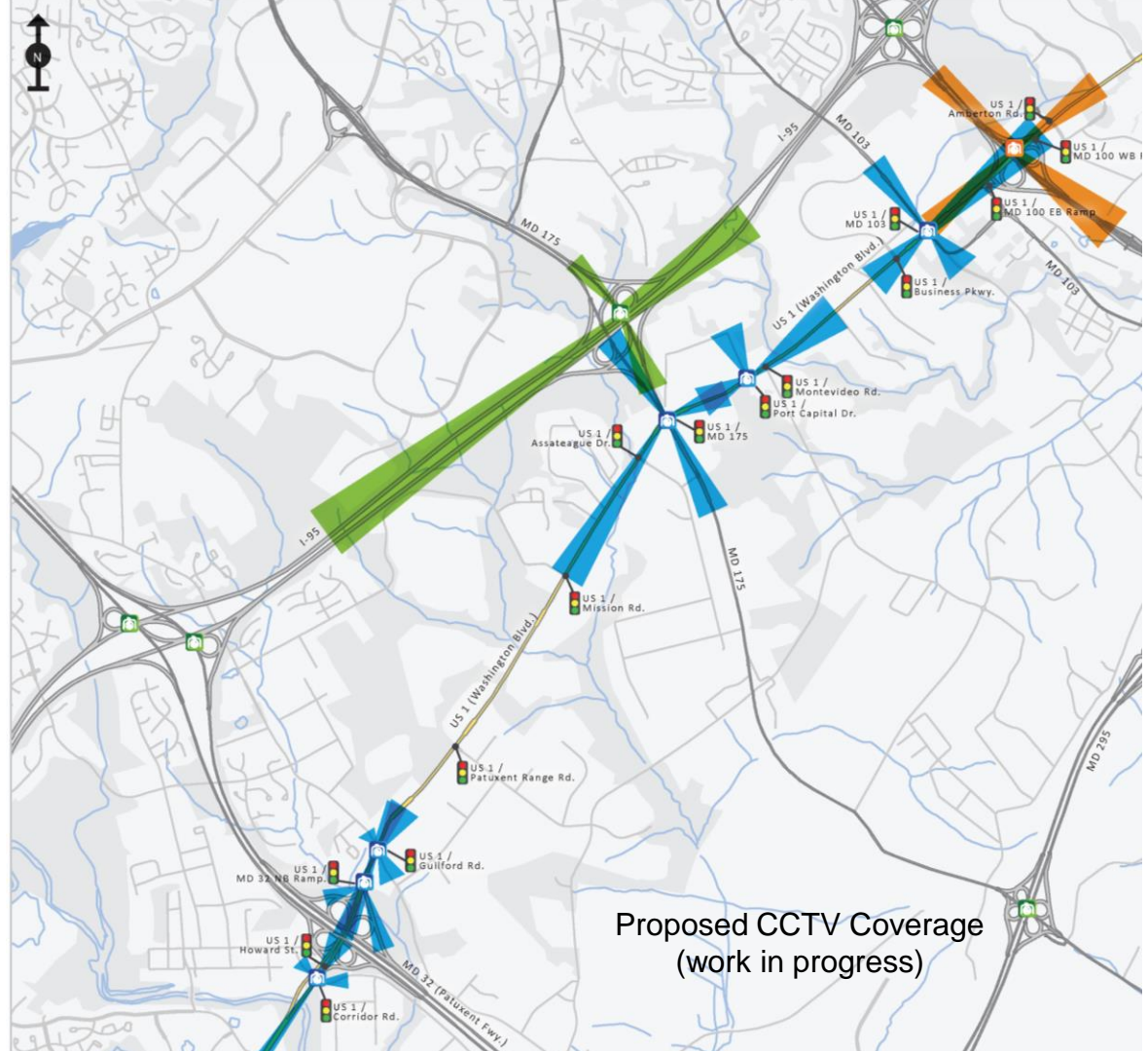
- Lessons Learned in Technology, Communications, Procurement, and Workforce Development
- National SPaT Challenge
- Future Readiness for Network Architecture
- Partnership Opportunities for CAV Testing in Maryland

Incident Management Enhancements

- Improve corridor operations - important component of Integrated Corridor Management
- Frequent spill-over from I-95 and MD 295/BW Parkway during recurring and non-recurring situations
- Safety needs, truck accidents, rear-end crashes along US 1
- Freeway-Arterial coordination, TSM&O culture/philosophy
- Arterial travel time estimates

US 1 ITS Deployment

- Arterial CCTV
- Additional Detection
- Arterial DMS at key decision points
- Enhanced Operational Coordination



Future Exploration

- Long-Term Telecommunications Needs
- CV Applications Desired, SHA Fleet Vehicle Impacts
- Differences in Planning for CV compared to traditional ITS devices
- Network Management, Configuration, and Maintenance



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QUESTIONS?