SmarterRoads.org
Transportation Cloud Data Portal

July 19, 2017

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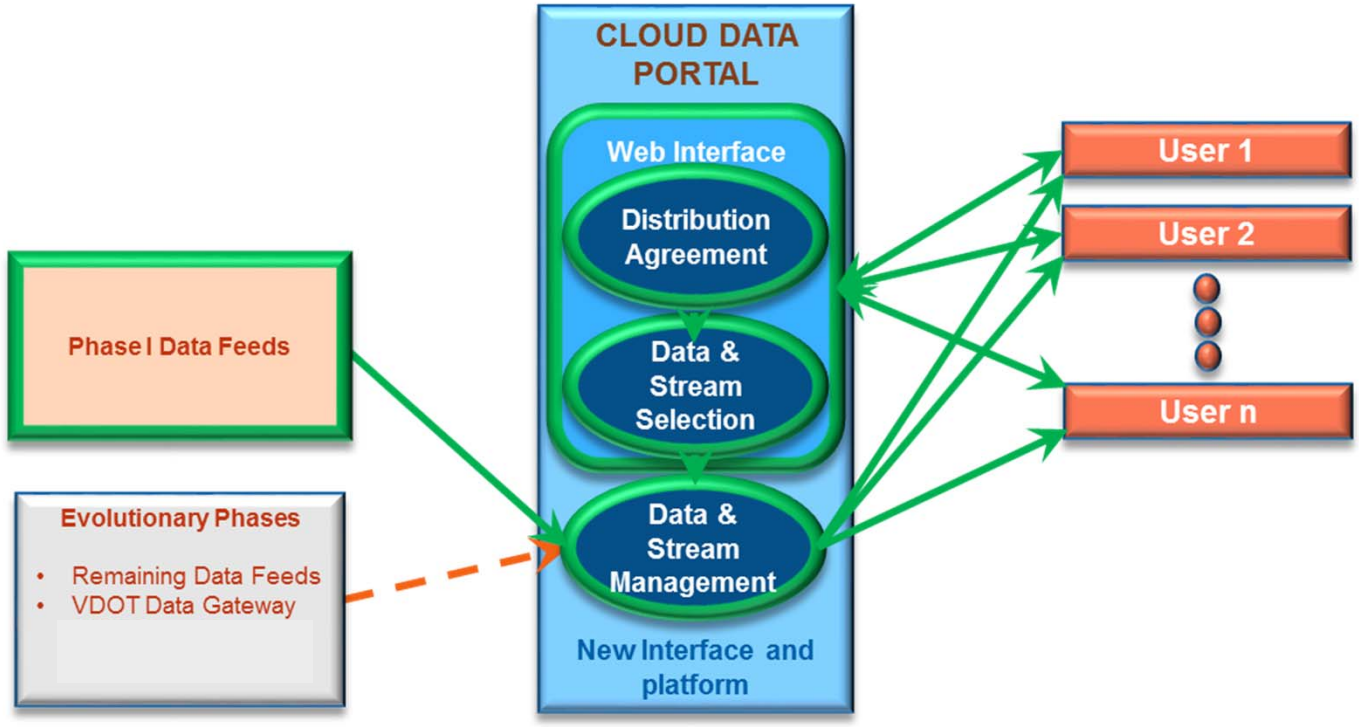
Cloud Data Portal Objectives

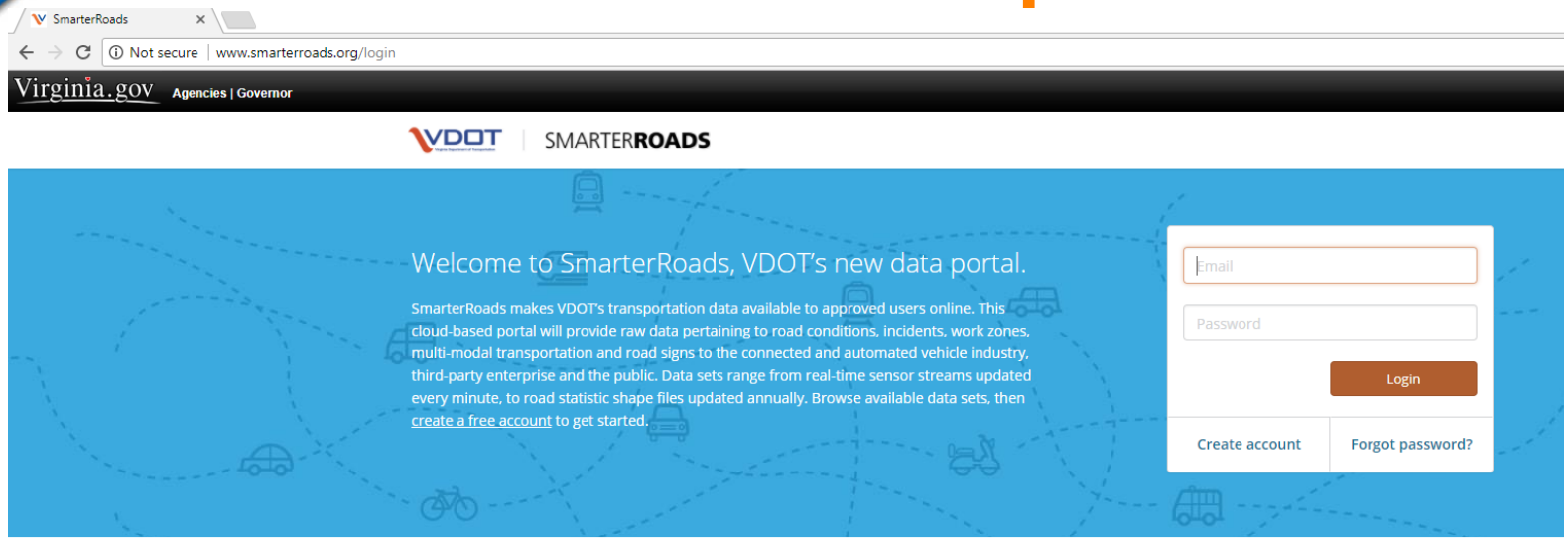
- **Accelerate the CAV technology development by exchanging transportation data and video with private sector CAV business, application developers, and university partners.**
- **Provide all relevant VDOT data beyond current traffic operations data in one portal site.**
- **Encourage auto manufacturer device, application, and business development to increase the frequency, quality, and accuracy of data shared with private sector in Virginia.**
- **Improve 2-way data exchange for VDOT to publish and obtain data for internal use.**
- **Simplify the process to add new users and manage existing users.**
- **Serve as a national model for other state DOT's.**

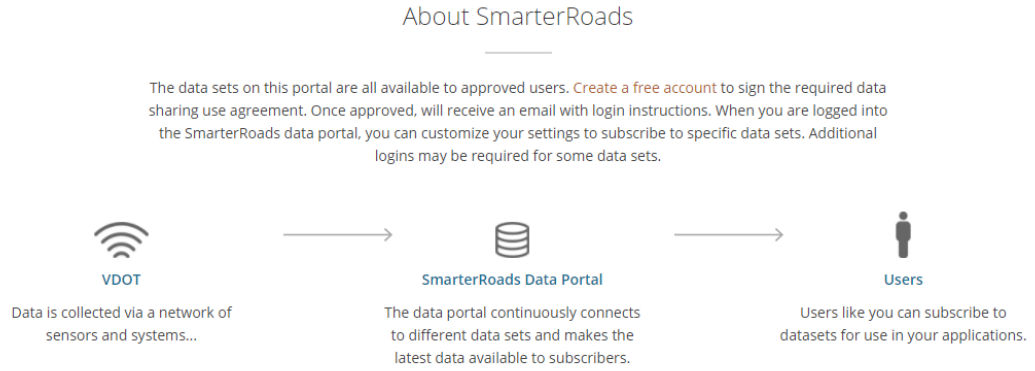
Cloud Data Portal Concept



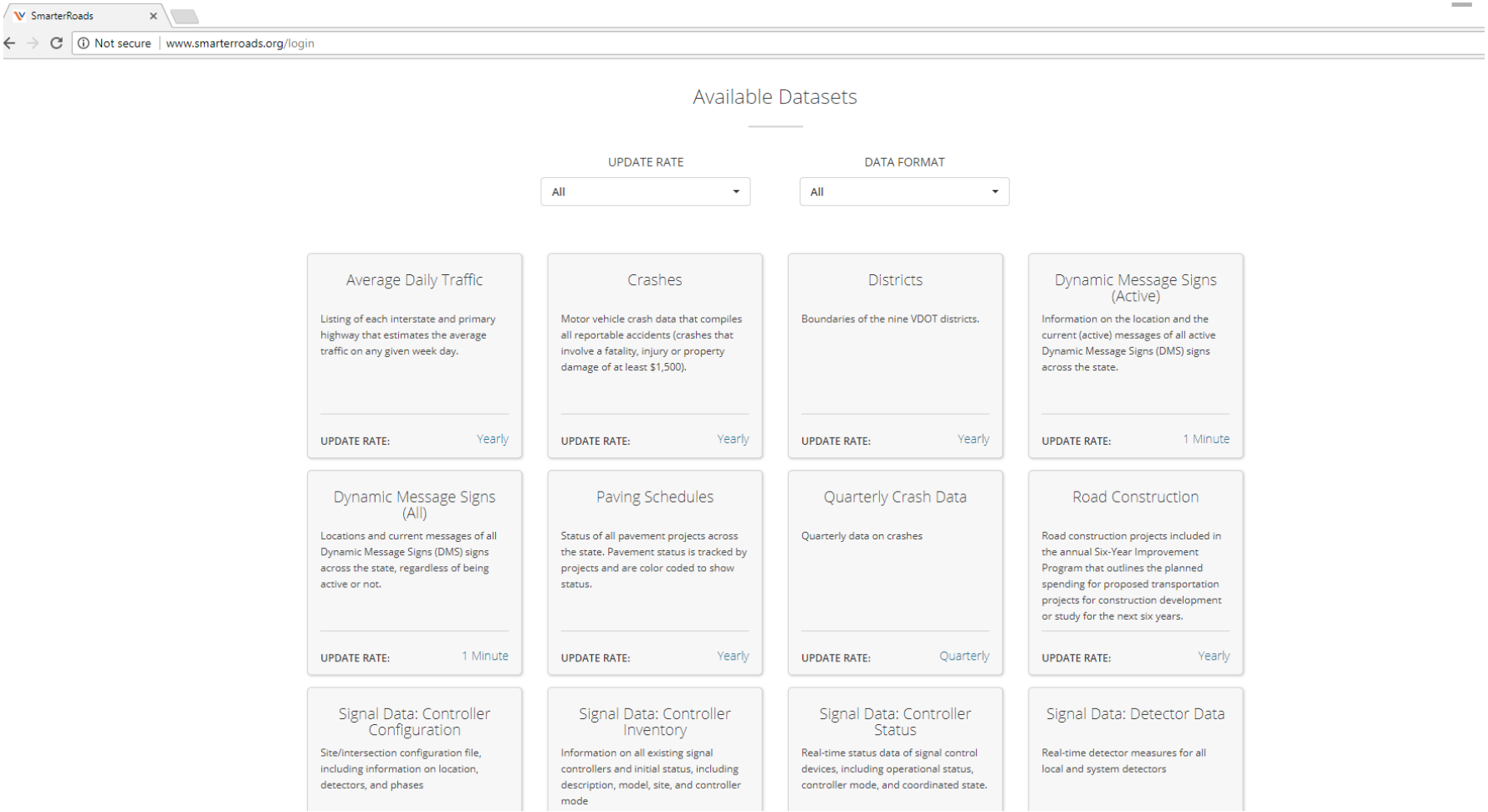
Data Portal User Agreement filled out and accepted by User	User Agreement received by Data Portal	Data Portal accepts User info into DP Management System	Data Portal Access granted to User
Manual Data Entry Online	Electronically	Electronically	Electronically

Website is operational

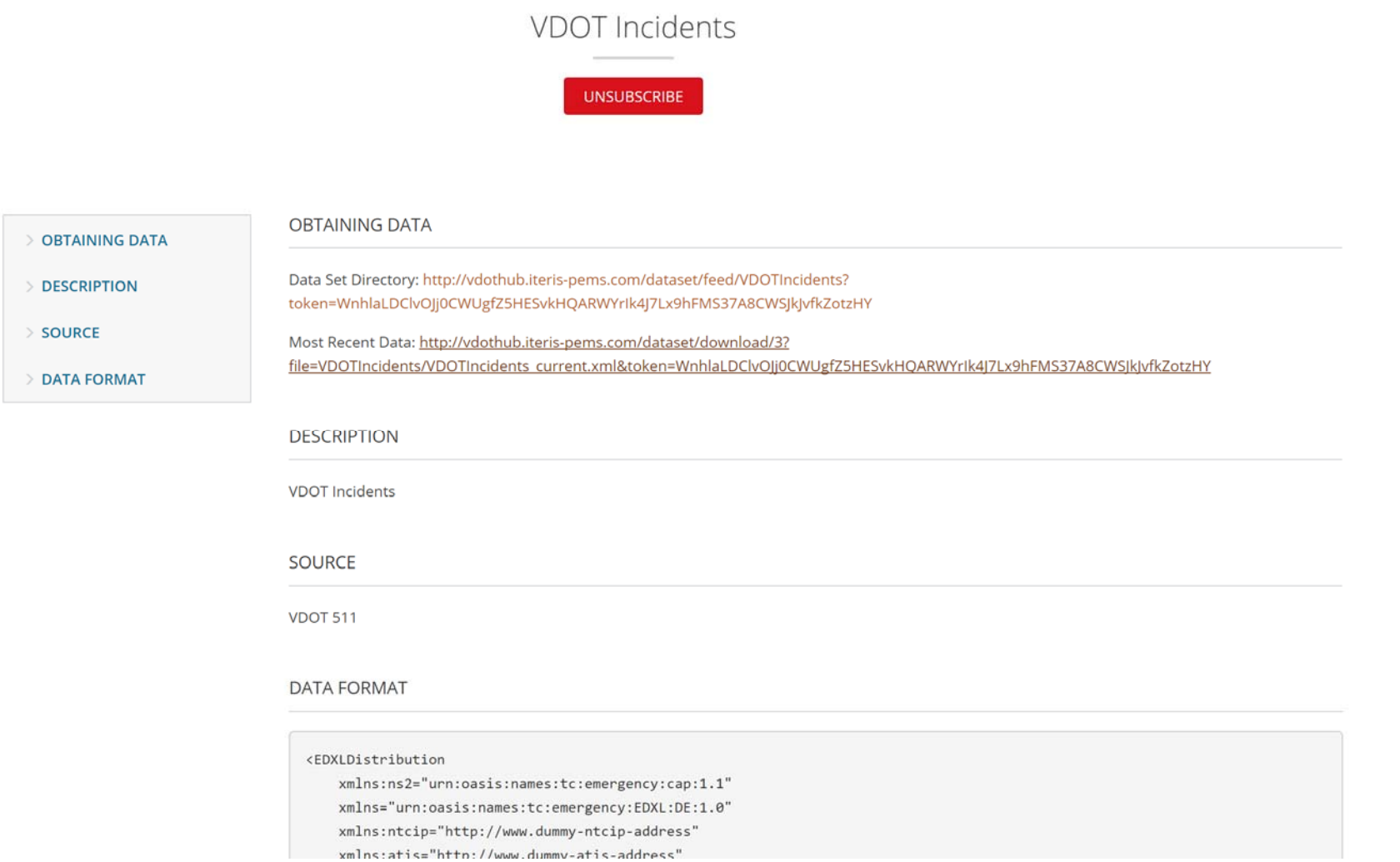




Website is operational



Website is operational



Users can integrate into websites

Average Daily Traffic
https://vdot.maps.arcgis.com/home/webmap/viewer.html?webmap=bff29e1bc0fd4908b2c035fe67695088

Districts
https://services.arcgis.com/p5v98VHDX9Atv3l7/ArcGIS/rest/services/VDOTAdministrativeBoundaries/FeatureServer

Paving Schedules
https://vdot.maps.arcgis.com/home/webmap/viewer.html?webmap=b7453f1f371f441bbb70ce4bfa371763

Road Construction
https://vdot.maps.arcgis.com/home/webmap/viewer.html?webmap=6f3e6b1e9b0b4ed689794482f8854ab8

Speed Limits
https://vdot.maps.arcgis.com/home/webmap/viewer.html?layers=100852a0d612419b8dd40aab7dbe9335

Signal, Phase and Timing Data

Official Government Source

VDOT Virginia Department of Transportation

Private Sector Redistributors

TRAFFIC TECHNOLOGY SERVICES

Connected Signals

ECONOLITE

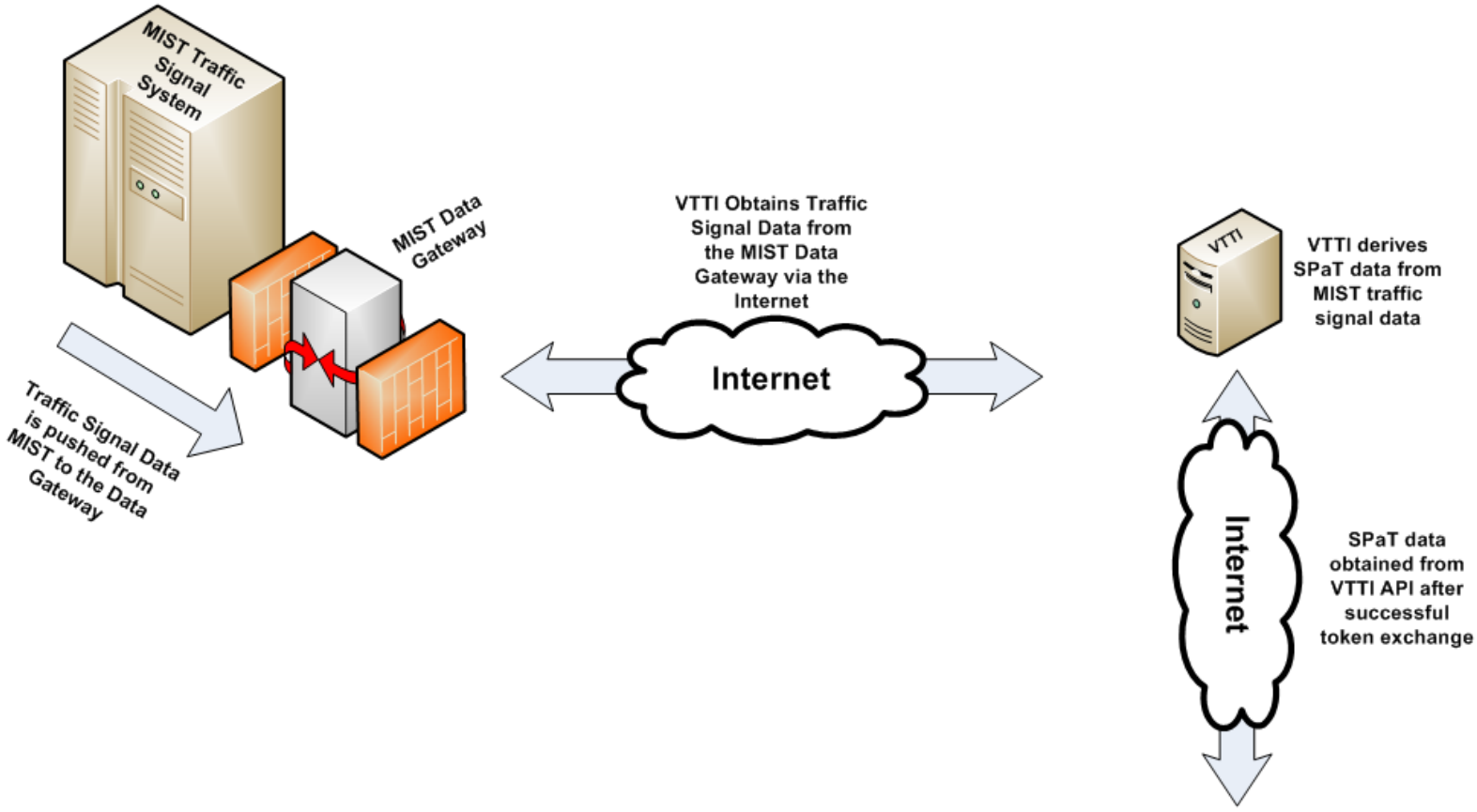
SIEMENS

End Users

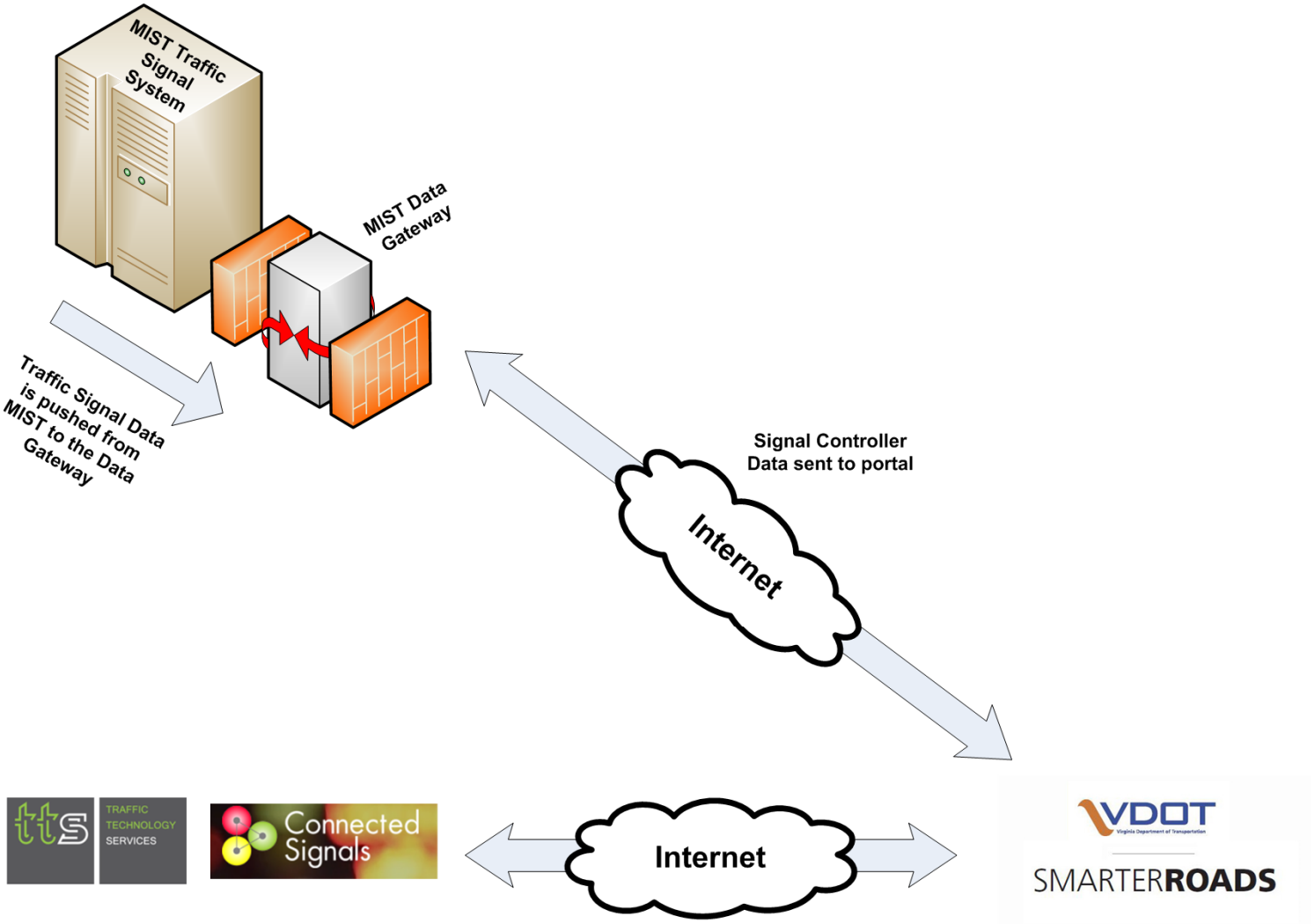
Audi

BMW

Signal, Phase and Timing Data Architecture



Signal Controller Data Architecture



Signal, Phase and Timing Data Update

- VDOT will have 1,400 signals available through SmarterRoads.com that have signal data (NTCIP 1201 compliant) for consumption by private sector companies for application development.
- VDOT has 6 signals available that are part of the Virginia Connected Corridor (VCC) on Route 7 conforming to SAE J2735 format SPaT data for consumption by an automated test vehicle, if equipped by a DSRC receiver.
- VDOT will add 24 signals on various corridors by September 2017.
- 50 vehicles are equipped with DSRC radios by VTTI.

Outreach Plan

- VDOT will issue a Press Release to announce SmarterRoads.org Launch with website and social media outreach.
- VDOT announced at Automated Vehicle Symposium availability of SmarterRoads.org
- VDOT plans to hold an industry day in July or August with auto manufacturers and third party application developers.
- VDOT will highlight SmarterRoads.org at SASHTO 2017 Annual Meeting and Governor's Transportation Conference.
- VDOT will develop an inspirational marketing and how-to video targeted to auto manufacturers and app developers.