Digital Roadway Architecture

Roadway Crews
- Body Worn Sensors
- GPS
- Outdoor/Indoor Wireless
- Private Cell/WiFi/MANET
- Wearable Small Form Factor

Operations Center
- Hub Router
- ASA 5500-X with FirePOWER
- Root Certification Authority for Authentication

4G/LTE Secure Metro Network
- Access Hub Node
- Cisco ASR920

Hybrid Cloud
- Private Cloud
- Public Cloud

Roadside Cabinet
- Cisco IR829

Intersection
- Automatic Passenger Counter
- Signal Priority Request Server
- DSRC Roadside Unit

Video Acoustic Weather Sensors

Transportation Enterprise Network
- Cisco Nexus 2000 Series Fabric Extenders
- Cisco UCS C-Series Rack Servers
- Ether Channel SAN
- Applications
  - Enterprise Applications
    - CAD, RMS, SAR, Video Mgt, Email, Time, Expenses, Finance, Purchasing
  - Cisco Enterprise Applications/Services
    - CUCM, Unity, T1 Interface, IP/PCS, VSM, Prime, Wireless LAN MGT, CSM, IDS, ISE

City/State/Federal Enterprise Network
- Cisco Intelligent Switch Stacks
- Access Layer
- Cisco Nexus 5000
- Unified Computing System
- Cisco Nexus 2000 Series Fabric Extenders
- Cisco UCS B-Series Blade Chassis
- Cisco MDS 9000 Series Multilayer SAN Switch
- Ethernet SAN
- Applications
  - Enterprise Applications
    - CAD, RMS, SAR, Video Mgt, Email, Time, Expenses, Finance, Purchasing
  - Cisco Enterprise Applications/Services
    - CUCM, Unity, T1 Interface, IP/PCS, VSM, Prime, Wireless LAN MGT, CSM, IDS, ISE

Data Center Service Layers
- Intrusion Wide Area Monitoring Acceleration
- Cisco FirePOWER Services Probes
- Cisco WAAS
- Site-to-Site VPN Hubs
- Remote Access VPN Hubs
- Cisco ASA-X

Highway Node
- Conditions
- Video, Acoustic, Weather, Speed, Real-time Status

Roadside Cabinet
- Cisco IR829

Intersection
- Automatic Passenger Counter
- Signal Priority Request Server
- DSRC Roadside Unit

Connected Trackside
- Ruggedized Access Switch
- Cisco IR829

Onboard Vehicle
- Computer Aided Dispatch/Auto Vehicle Locator
- Vehicle Logic Unit

Network Components
- Riser and Wiring Closets
- Cisco Nexus 5000 Series Fabric Extenders
- Cisco UCS B-Series Blade Chassis
- Cisco MDS 9000 Series Multilayer SAN Switch
- Ether Channel SAN