Connected Transportation Sectors
Digital Transformation

The use of technology to radically improve performance.
Changing Trends Are Driving Changing Priorities

- How can I reduce operation risks?
- How can innovation drive profits?
- How do I improve workforce productivity?
- How can I reduce downtime?
- How can I better manage my global supply chain?
- I need to achieve real-time visibility
- I need to improve process times
- How can I achieve real-time visibility?
_ _ _ _ is the New Oil.
Business and IT must work together

Must come together to respond to digital disruption
Vision of USDOT For Urban Automation

1. Traffic Signal Controller
2. SPaT Black Box
3. Roadside Unit
4. Onboard Unit
5. Onboard Computer with Automated Longitudinal Control Capabilities
6. Backhaul: Communications back to TMC
7. Back Office: A local TMC processes data from roads and vehicles

Reference: USDOT’s Vision for a Smart City
Proposed Architecture
Architecture
Converged IT/OT Architecture
Cisco IoT Architecture

Applications
- Enterprise IT Apps
- Enterprise OT Apps
- Customer Experience Apps

Analytics & Automation
- Process Integration
- Automation & Integration
- Energy & Asset Optimization
- Streaming Analytics
- Big Data Analytics
- Location-Based Analytics

IoT Data Delivery Platform
- Security
- Device Services
- Security Services
- Data Services
- Deployment Services
- Application Enablement
- Connectivity Management
- Infrastructure and Support

Physical Infrastructure
- Edge Compute
- Industrial Switching
- Industrial Routing
- Industrial Wireless
- Embedded Networks