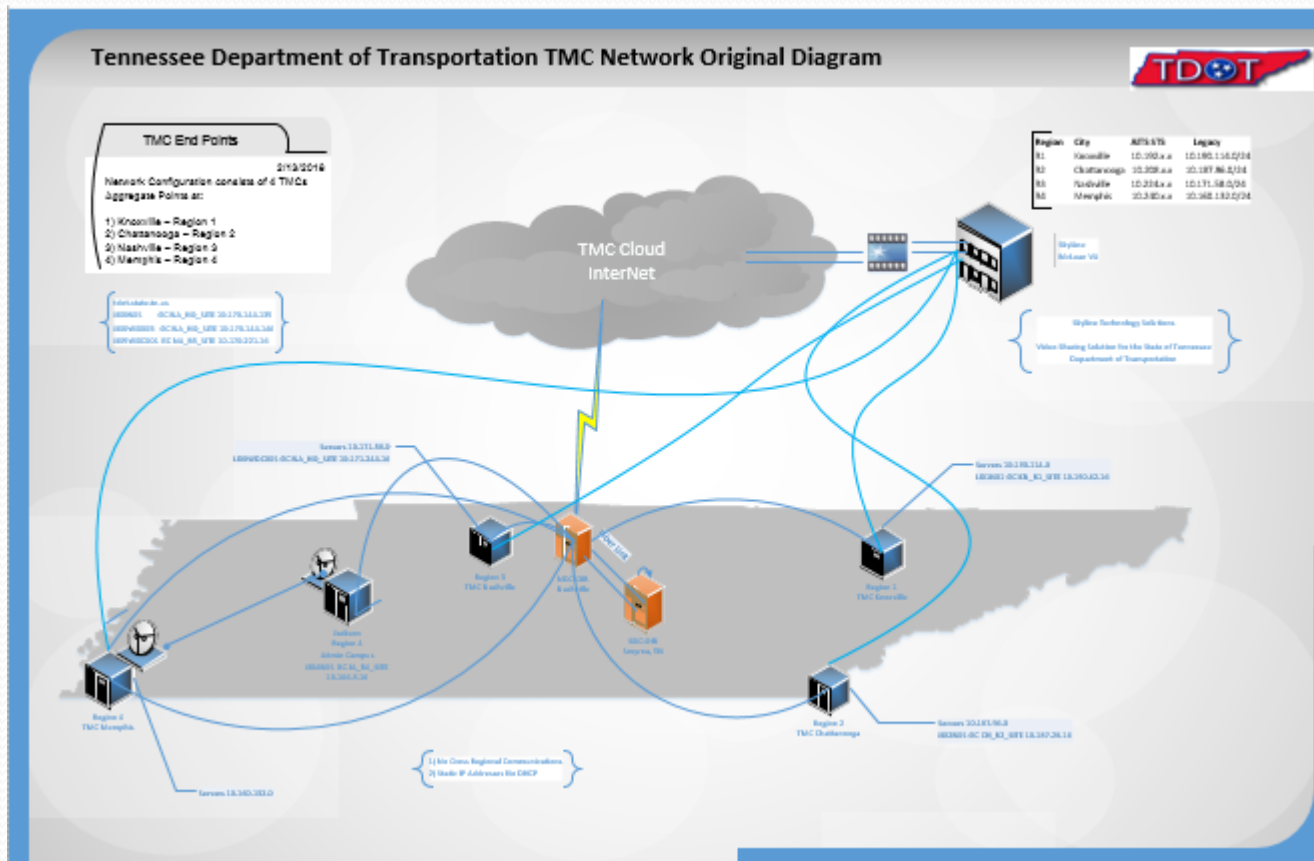


# TSITE 2018

TDOT IT - Transforming Tennessee's ITS  
Infrastructure

# Where We Were

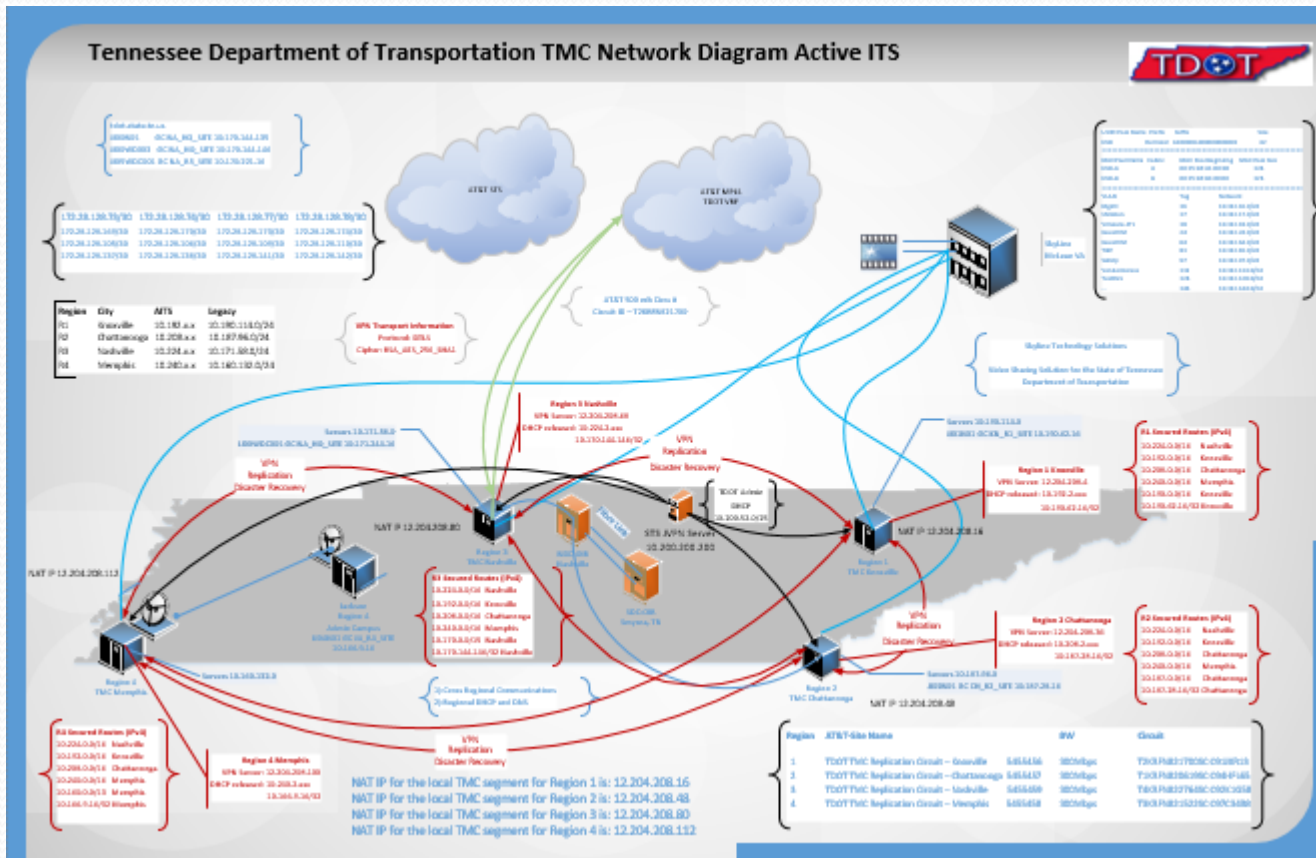




# Where We Want to Be

- Full Center-to-Center connectivity to improve site resiliency.
- Ability to test emerging ITS technology in a network that is both state and federally accredited.
- Data at the network edge
  - Sensors on vehicles and roadside connected to network devices capable of running analytics software
    - Vehicle Diagnostics from OBD-II
    - Temperature/Visibility/Reflectometry
    - DSRC/5G

# Where We Want to Be





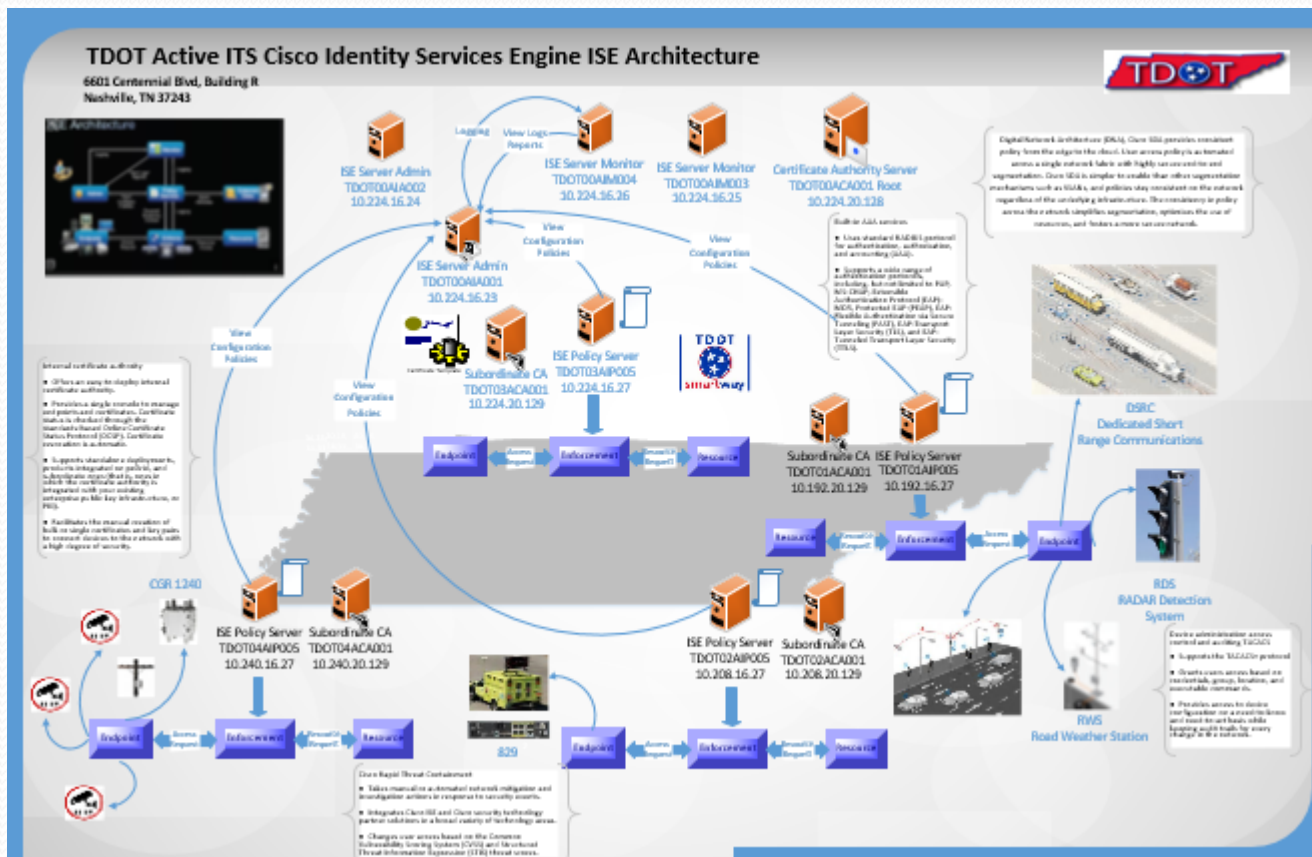




# Where We Are Now

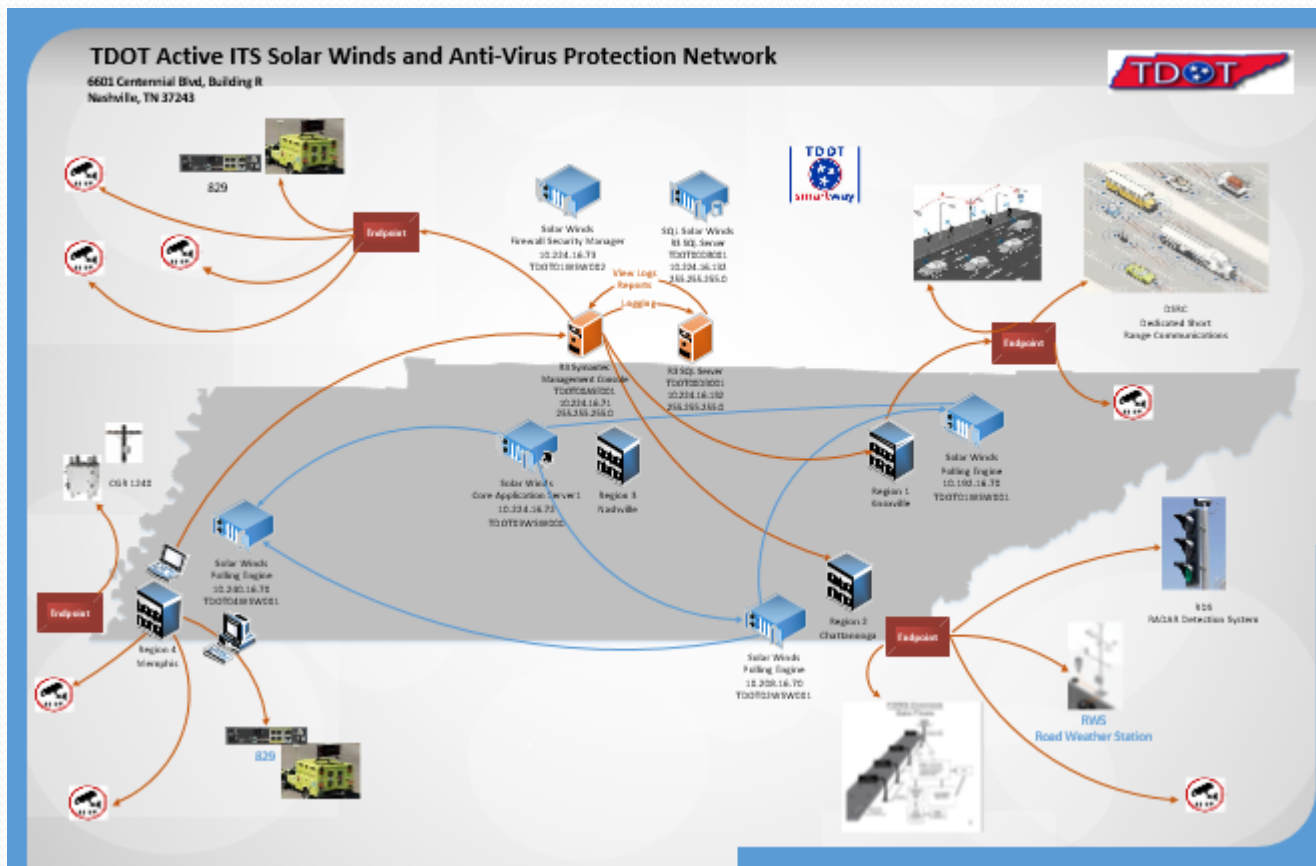
- Installing cellular routers capable of running applications into HELP trucks and RWIS stations
- Redesigning ITS networks using industry standards and best practices
- Additional features to TMC sites
  - Multicast over MPLS (CCTV control),
  - IWAN for dynamic routing for mobile routers
  - Additional internet circuit for redundancy
- Upgrading ITS network hardware
  - Field switches

# Security Model



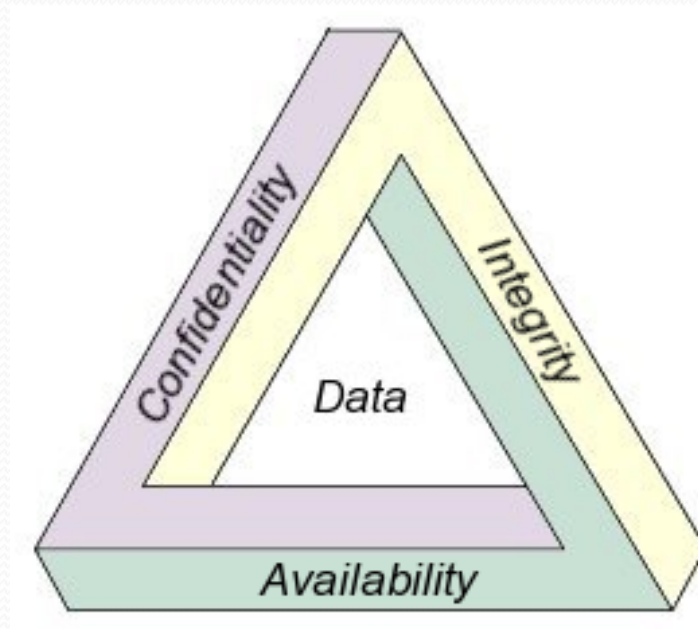


# Security Model



# Vulnerability Management

Attack on  
Confidentiality  
**Disclosure**



Attack on  
Integrity  
**Dishonesty**

Attack on  
Availability  
**Denial of Service**