

# Where is the IT in ITS?

FHWA Sponsored Webinar

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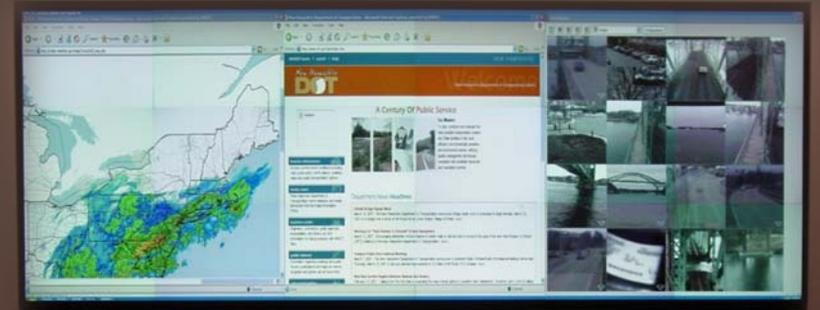


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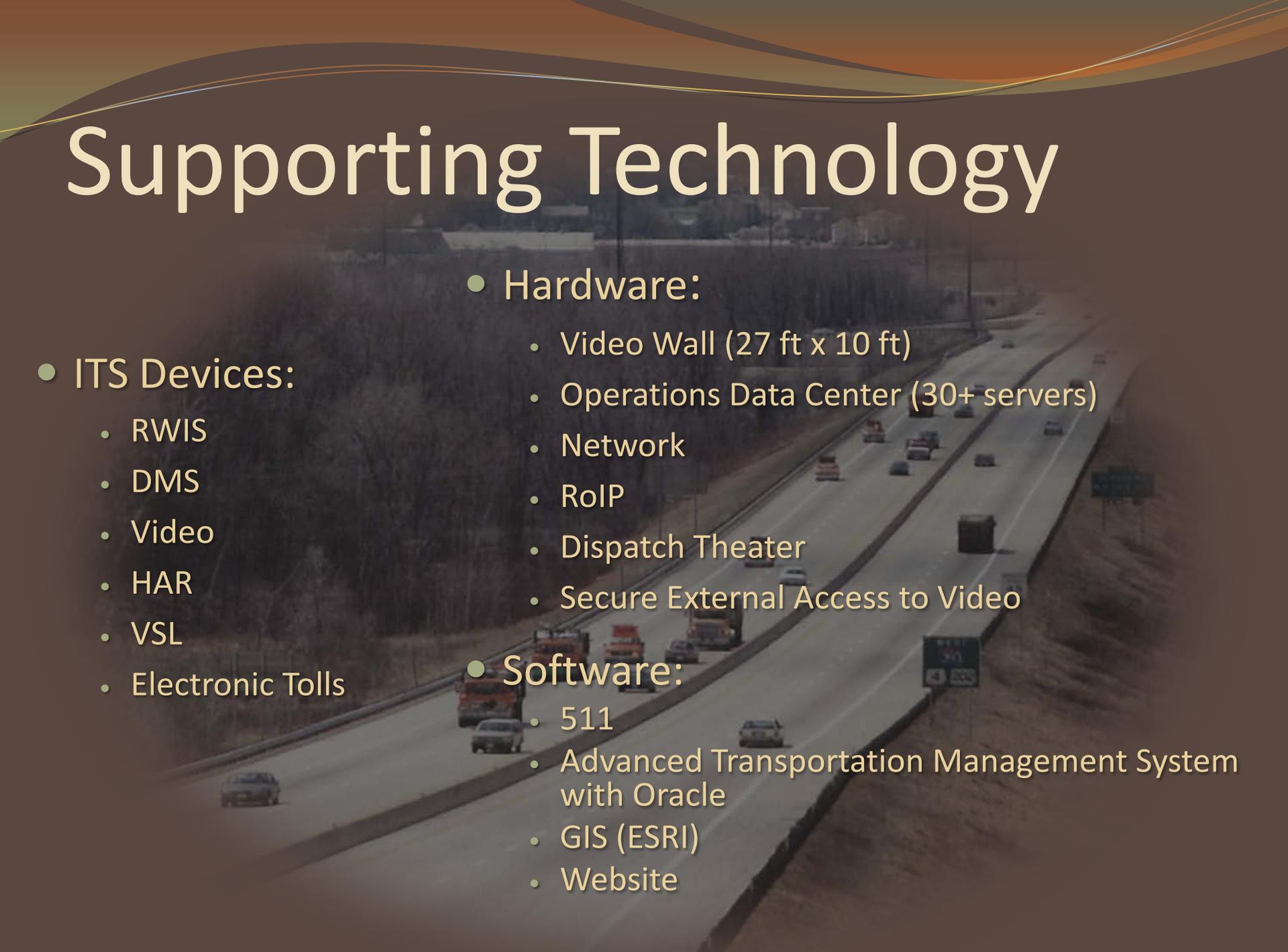
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# Background

- NH ITS was very limited until the formation of the Transportation Management Center (TMC) in 2007.
- TMC collocated with State Police Dispatch in new Incident and Operations Management Center.
- NH DOT Statewide Communication Architecture.
- Department of IT partners with NHDOT providing dedicated and shared resources.



# Supporting Technology



- ITS Devices:

- RWIS
- DMS
- Video
- HAR
- VSL
- Electronic Tolls

- Hardware:

- Video Wall (27 ft x 10 ft)
- Operations Data Center (30+ servers)
- Network
- RoIP
- Dispatch Theater
- Secure External Access to Video

- Software:

- 511
- Advanced Transportation Management System with Oracle
- GIS (ESRI)
- Website

# Footprint

**TMC**

**Weather**

**Security**

**Highways**

**Smart Work  
Zones**

**Travel  
Times**

**Permanent  
Deployment**

# Weather

- 12 Road and Weather Systems Stations (RWIS)
  - Atmospheric Sensors
  - Pavement Sensors
  - Cellular Modem Connectivity



# Security



- Over 100+ Cameras
- Secure External Access to Video
- Enterprise Video Platform
  - Transit Centers & Bridges
  - Highways
- DMS Hacking Prevention Procedures

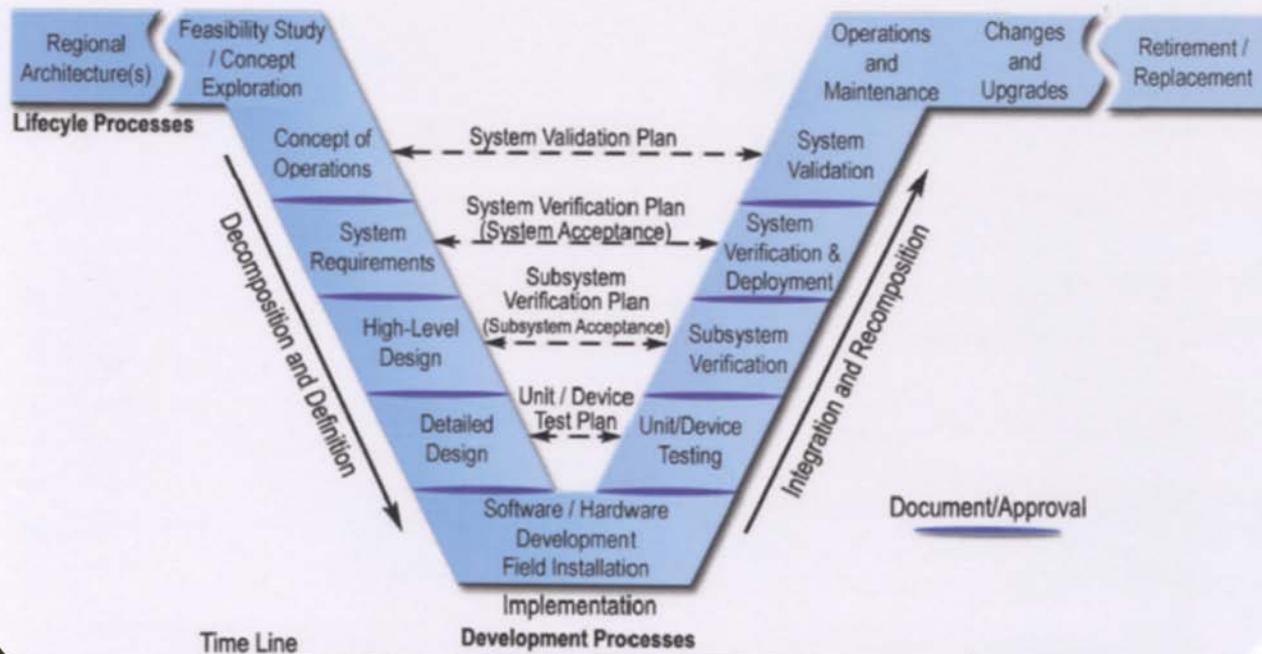
# Highway ITS

- I-93 and I-95 Corridors
  - Wireless Point-to-Point Microwave Backbone
  - DMS
  - CCTV
  - HAR
  - VSL

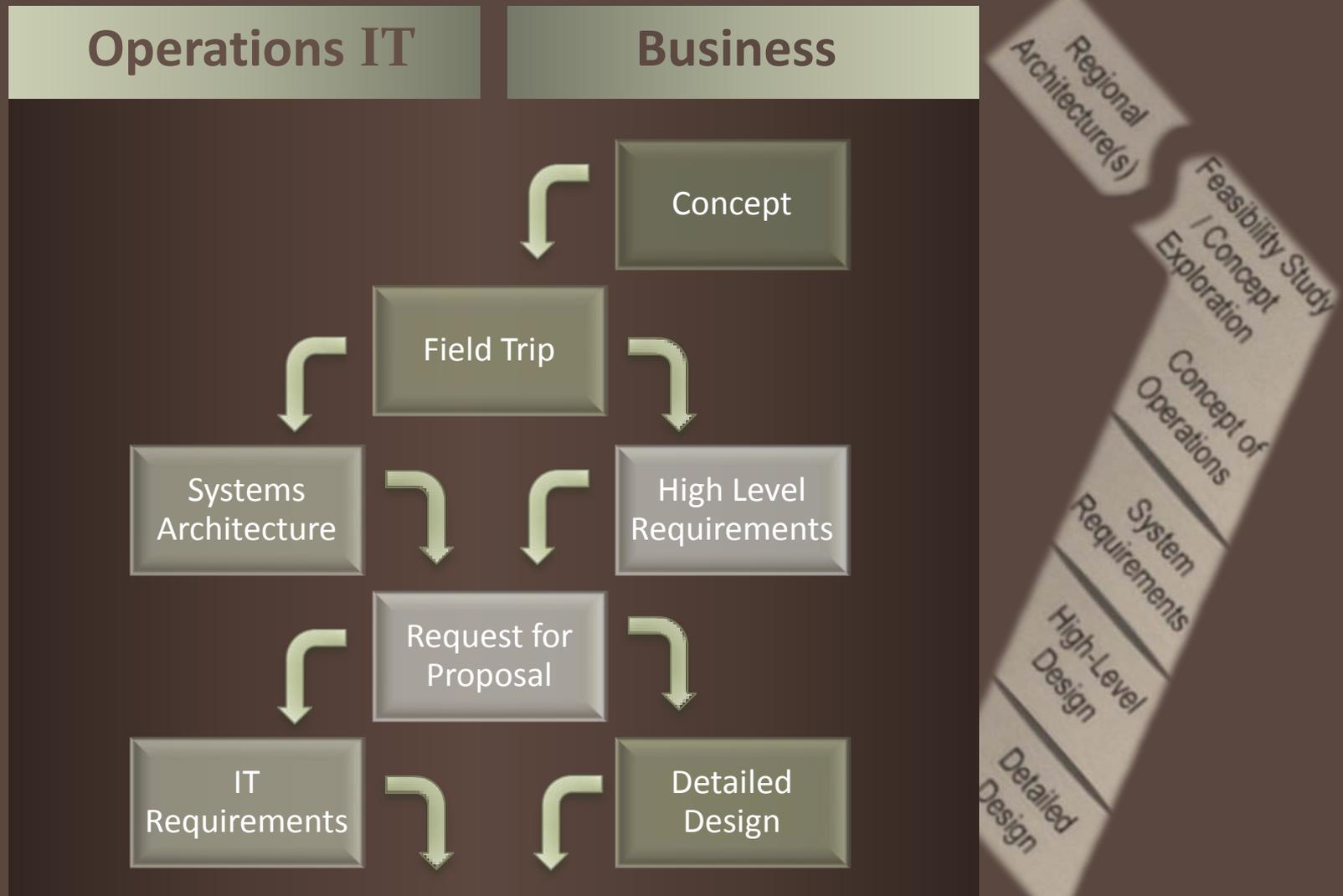


# Traditional Developmental Process

The “V” Systems Engineering Project Lifecycle



# Proposed Developmental Process



# Proposed Developmental Process (cont.)



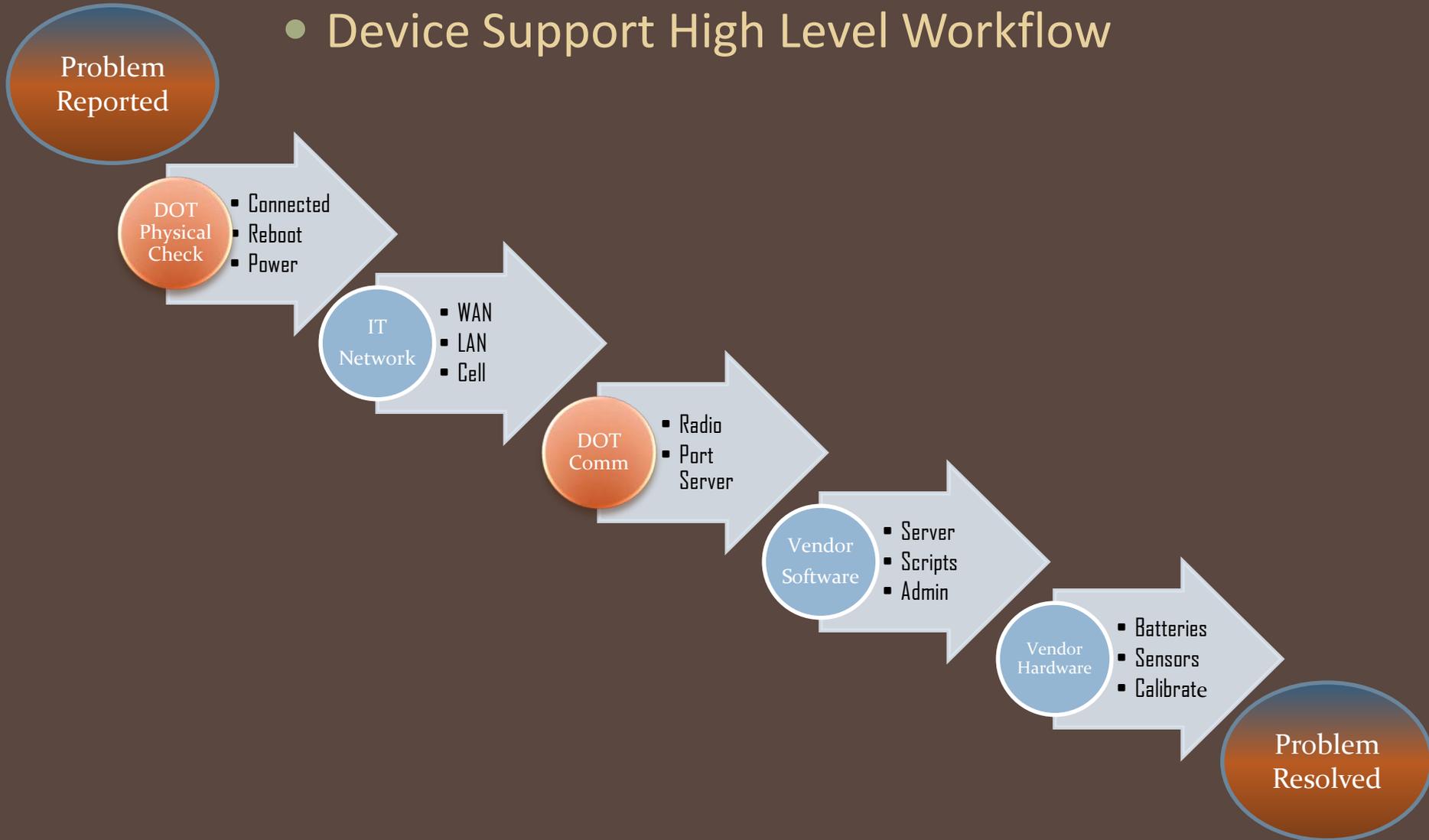
# IT Maintenance Program

- License Renewal Maintenance
- Equipment Replacement Plans
- Consumable Replacement Schedule



# Maintenance

- Device Support High Level Workflow



# Future Initiatives

- Enterprise Video Solution
- Statewide Communications Network
  - Wireless Point to Point Microwave Infrastructure
  - Shared Resource Fiber Optic Program
- Partnerships in ITS Asset Management
- Performance Measurement Reporting

# Lessons Learned

- IT Resources Required

- Full-time Server System Administrator
- Full-time Network Administrator
- Desktop Intense for Dispatch Stations
- Security
- Video Expert

- Business

- Determination of functional requirements early on provides better solutions in less time.
- Partnering with IT at conception provides an optimal solution and limits delays.
- IT and Business commitment and participation at all levels is required to be successful.

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