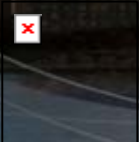




ADDRESSING RURAL ITS  
NEEDS WHEN DEVELOPING  
STATEWIDE ITS  
OPERATIONS STRATEGIES

# PROJECT APPROACH

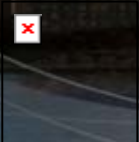
- Where are we now?
- Where do we need to go?
- What are the gaps?
- How do we get there?





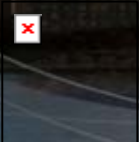
# EXISTING CONDITIONS

- Only one of 11 Districts has 24/7 capability
  - 83% of ITS field devices inefficiently used overnight and on weekends and holidays
  - 57% of ITS field devices ineffectively used during rush hours
- District based ITS Implementation
  - Large gaps in ITS field devices, especially in rural areas
- Unutilized existing sources of information
  - Within PennDOT and from other sources



# REQUIRED FUNCTIONS

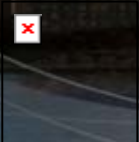
- Amber Alert
- General Road Closure Information
- Maintenance and Construction Closures
- Weather Information
- Snow Plow Operations
- Traffic and Incident Management Capabilities
- Statewide/Interstate Corridor Management
- Data Gathering, Analysis and Distribution
- Traveler Information System
- Proactive Planning Activities
- Technology Testing, Evaluation and Training





# OPERATIONAL ENVIRONMENTS

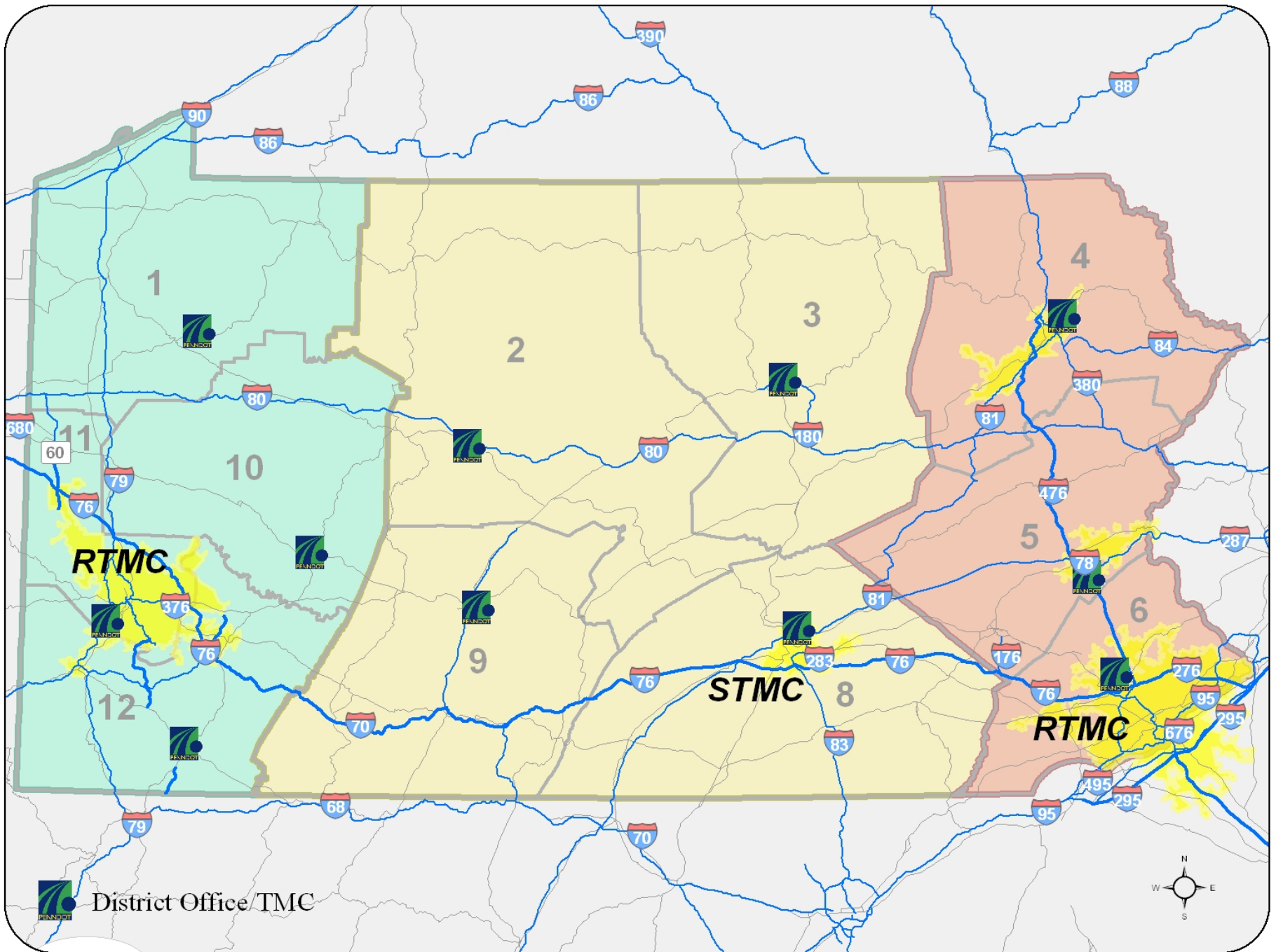
- Existing
- Formal On-Call
- One STMC
- Two RTMCs
- Three RTMCs
- .....
- Each District 24/7
- Combinations



## FUNCTIONS

# ENVIRONMENTS

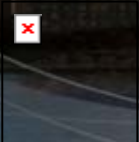
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# PROPOSED OPERATIONAL ENVIRONMENT

- Two RTMCs and STMC
- Implement ATMS software in each District
- Deploy Information Exchange Portal





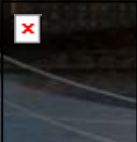
# ITS DEVICE GAP DEPLOYMENT GOALS

## ● Rural Applications

- Cover all Interstate to Interstate interchanges
- Cover all Interstate to Interstate-like interchanges
- Install additional weather stations

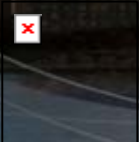
## ● Urban Applications

- Full coverage for urban interstates
- HAR “envelope”



# RURAL ITS DEPLOYMENTS

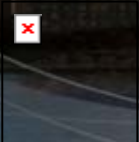
- Interchange elements
  - CCTV and HAR at each interchange
  - Two VMS at each interchange approach
    - One at 5 miles from interchange
    - One at 2 mile from interchange
  - T-1 connection to TMC
- Weather stations
  - Approximately every 20 miles



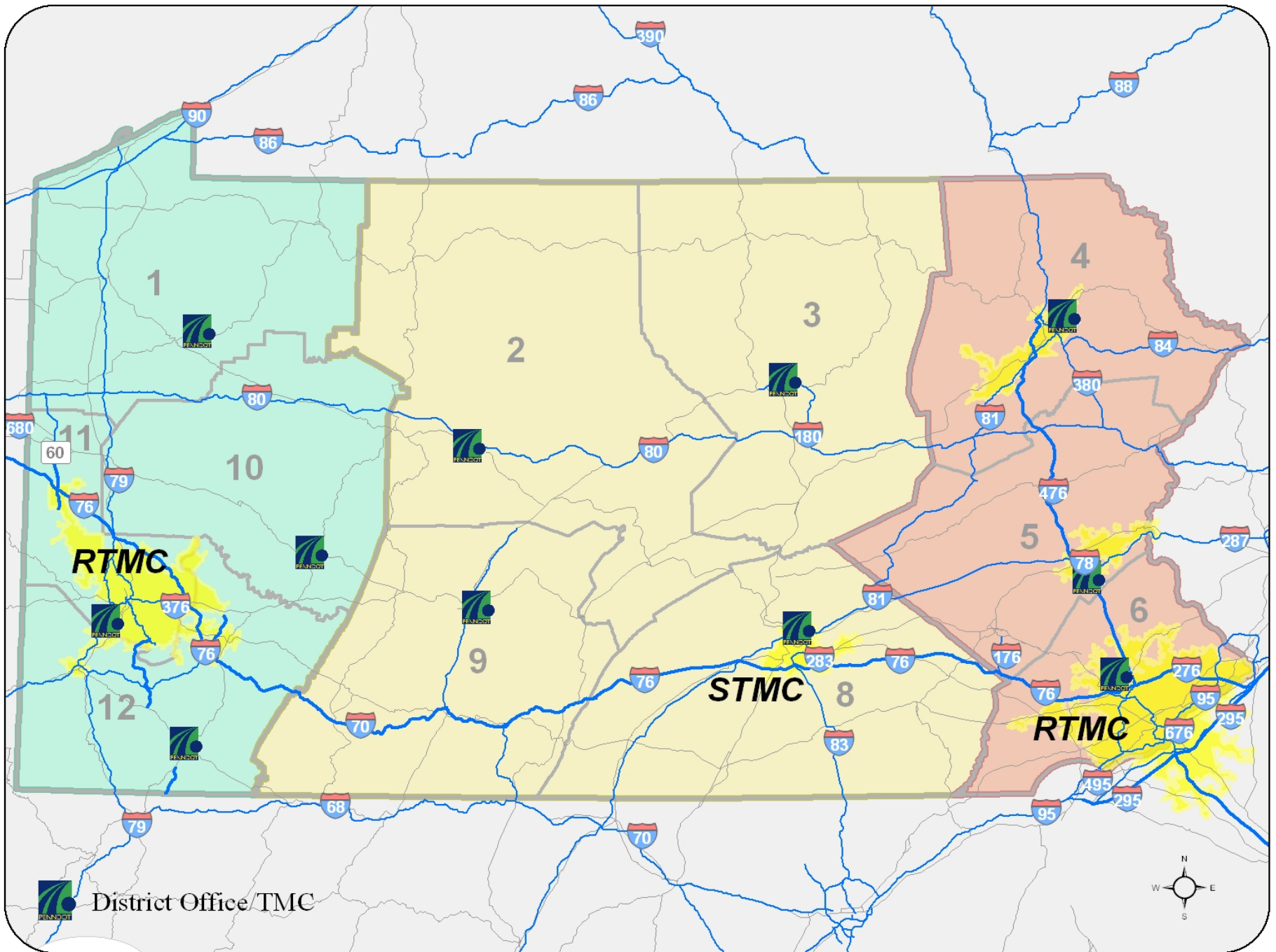


# IMPLEMENTATION PLAN

- Execute 18-month implementation plan
  - \$2 million
- Deliver effective operations framework
  - Build STMC and upgrade two RTMCs
  - Implement ATMS in every District
  - Deploy Information Exchange Portal
  - Integrate portal with other stakeholders
  - \$46 million
- Deploy ITS device to fill the gaps
  - About \$500 million









# QUESTIONS?





# CONTACT INFORMATION

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