

# Deploying SPAT Data for Connected Vehicles: What You Need to Know

Formerly  
WSP | PARSONS BRINCKERHOFF



Presented by  
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ITS Midwest Annual Meeting  
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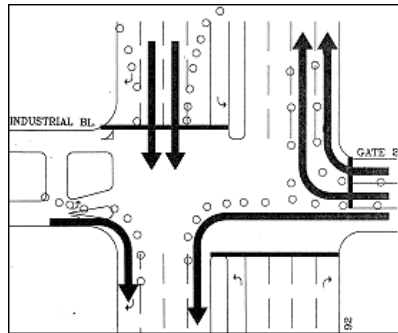
# What is SPAT?

- Intersection Status Message
- Includes:
  - Lane Set / Movements
  - Current State
  - Time until Change

# Why SPAT?

- NHTSA NPRM
- AASHTO Challenge
- Safety and Mobility Benefits

# What is Needed?



# What is Important?

- Over-the-Air messages **HAVE** to be Interoperable – Nationwide
  - SAE J2735, IEEE 802.11p and IEEE 1609.x support that
- But What Else?

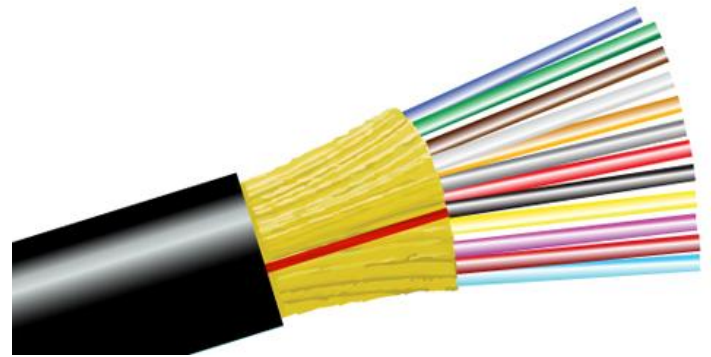
# Upgrade v. New

- ATCs are No-Brainer
- What about older controllers?
  - Ethernet capable?
  - NTCIP compliant?
- Difference is where you do the



# Communications

- How <X> is <X> enough?
  - Insert for <X>
    - Fast or
    - Big or
    - Robust or
    - Secure...
- It Depends...



# Communications...

- CV Data in real time, 24/7?
- Remote Rural Curve?
- Not everything has to be Fiber or even LTE to be CV enabled!



# Security

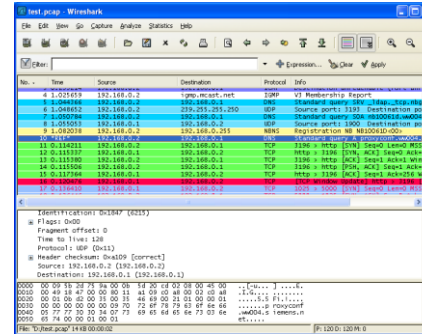
- Private Network is now Public
  - SCMS Addresses Over-the-Air but...
  - Legacy Network Security?
  - Physical Security?



E-Bay - \$5

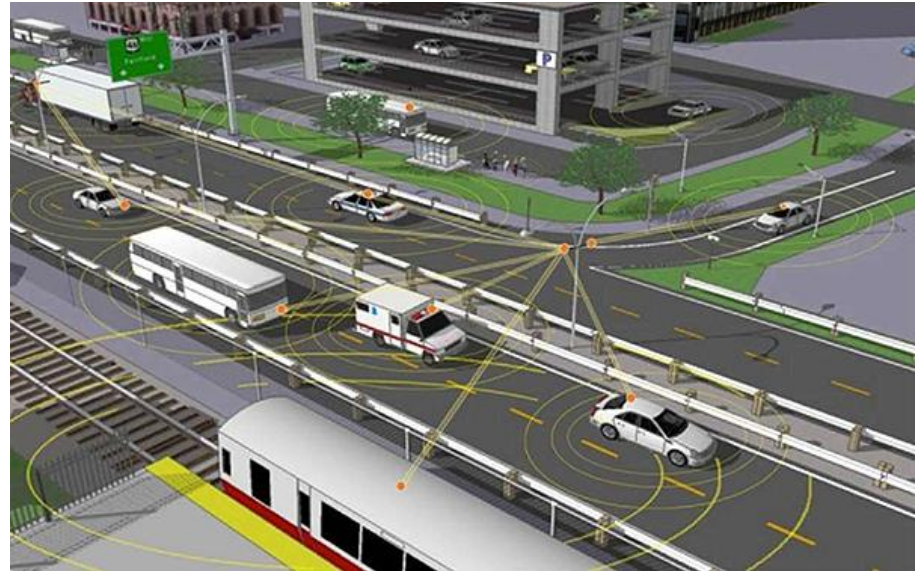
# Health and Status Monitoring

- DSRC Sniffer
- CV Conflict Monitor
- DSRC Management Tools



# Day 1 Benefits

- Transit Signal Priority
- Emergency Vehicle Preempt
- Vehicle Data for Traffic Operations



# Other Considerations

- Fixed-Time vs. Actuated
- Adaptive & Coordinated
- Complimentary Technologies
- Competing Technologies

Questions?

# Contact Info

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