SMART TRAFFIC SIGNALS
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OUTLINE

- Traffic Signal Basics
- Defining Buzzwords—From 2070 to ATC
- Safety/Operation Benefits
- Data Analytics
Why did the traffic signal cross the road?
Signal Cabinet

Vehicles Not Detected

Locations of Loop Detectors for This Lane
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ATC’s have the POTENTIAL to:

• React to Detector Failure
• Safety features such as:
  • Lead Pedestrian Interval
  • Gap Dependent FYA
  • Red light running extension
• Advanced operations like:
  • Traffic Responsive Coordination
  • Communication with Connected Vehicles
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DATA GENERATION
DATA PIPELINES

Signal Controllers

SQL

Analytics in the Cloud

Insights help prioritize work

Probe Data

GPS

Bluetooth