

# 2019 MAASTO • INDIANAPOLIS, IN



OHIO DEPARTMENT OF  
TRANSPORTATION

# *Truck Parking Information & Management System*

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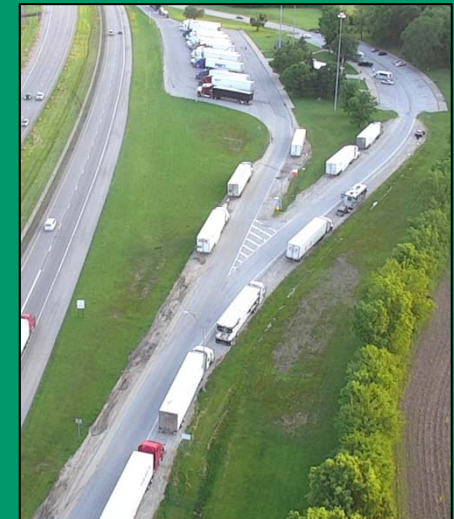
# The Vision

*“MAASTO TPIMS Partner States will strengthen America’s freight network by helping commercial truckers make safer, more efficient parking decisions through a user-focused information service that consistently provides timely, reliable parking availability information.”*



# *The Need*

- Greater driver access to safe, convenient parking.
- Actual time to acquire parking
- Results in driver's exceeding their allowed hours or causes them to park illegally/informally
- This lost time equates to \$4.4 billion annually in this country





# *The Scope*

- Focus on 9 key freight corridors
- Monitor 139 public and private sites
- Collect real-time parking availability
- Aggregate and analyze data
- Communicate parking availability to drivers
- Measure impact on truck parking and safety



# *The Capital*

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*Get the **TIGER** on your side . . .*



Transportation Investment Generating Economic Recovery (TIGER) Grant Program



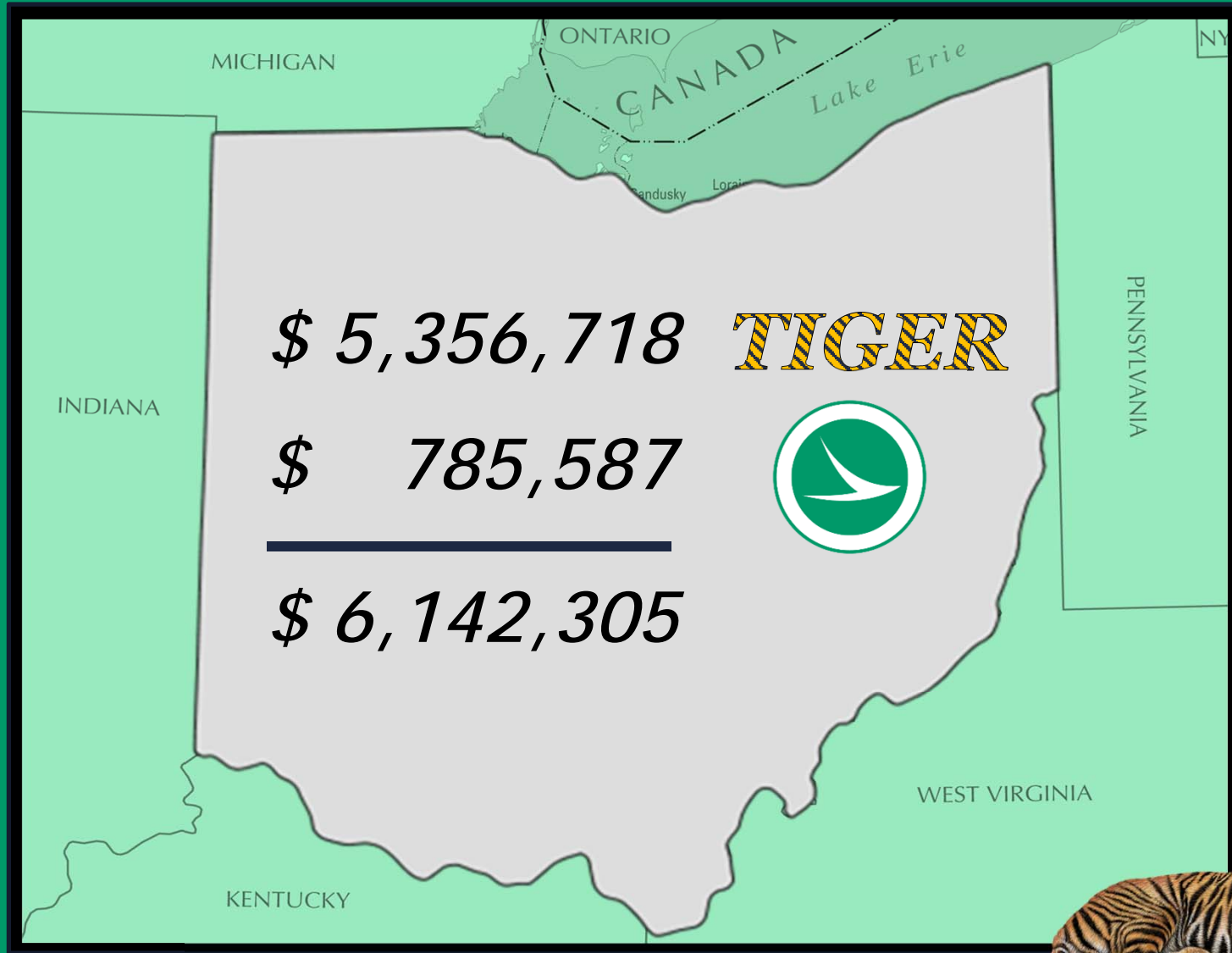
Selected out of hundreds of applications in 2015



TPIMS TIGER Grant Totaled \$25,000,000  
○ Plus State Contributions of \$3,666,364

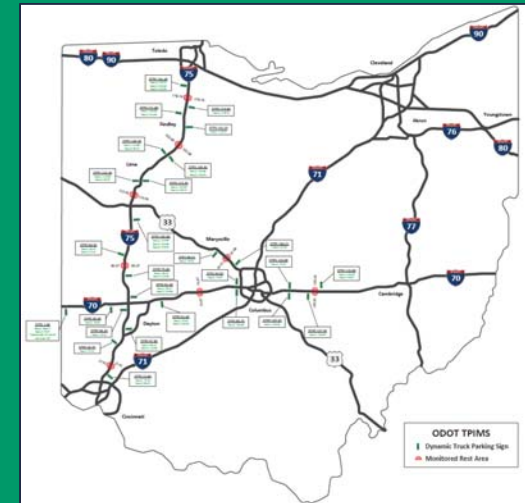


# The Capital



# Ohio's Plan . . .

- Limit to Publicly Owned Sites
- Utilize Design/Build/O&M Contract
  - Reduces time to market
  - Allows for innovation
  - Ensures functionality
- Use add alternates
  - Base Bid
    - 16 Rest Areas/30 Dynamic Signs
  - Add Alternates
    - 6 Rest Areas/6 Dynamic Signs





# The Award . . .



Design/Build	\$ 5,492,939
O&M	<u>\$ 1,430,000</u>
TOTAL	\$ 6,922,939

- No Alternates could be awarded

# *Money from Heaven . . .*

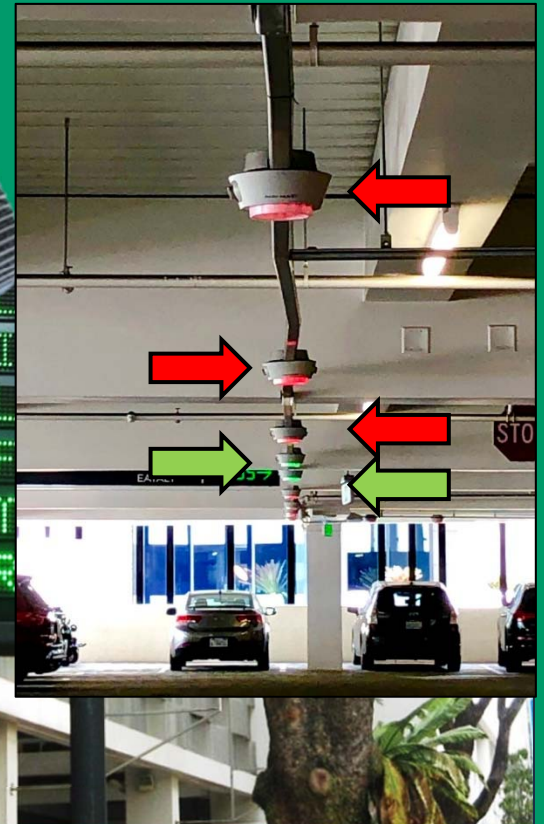
- Additional \$6.2 million obtained for overall TPIMS initiative.
  - \$1 million was allocated for Ohio
- Allowed addition of Belmont Co. sites
  - 2 Rest Areas / 2 Dynamic Signs

# *Parking Perspective . . .*

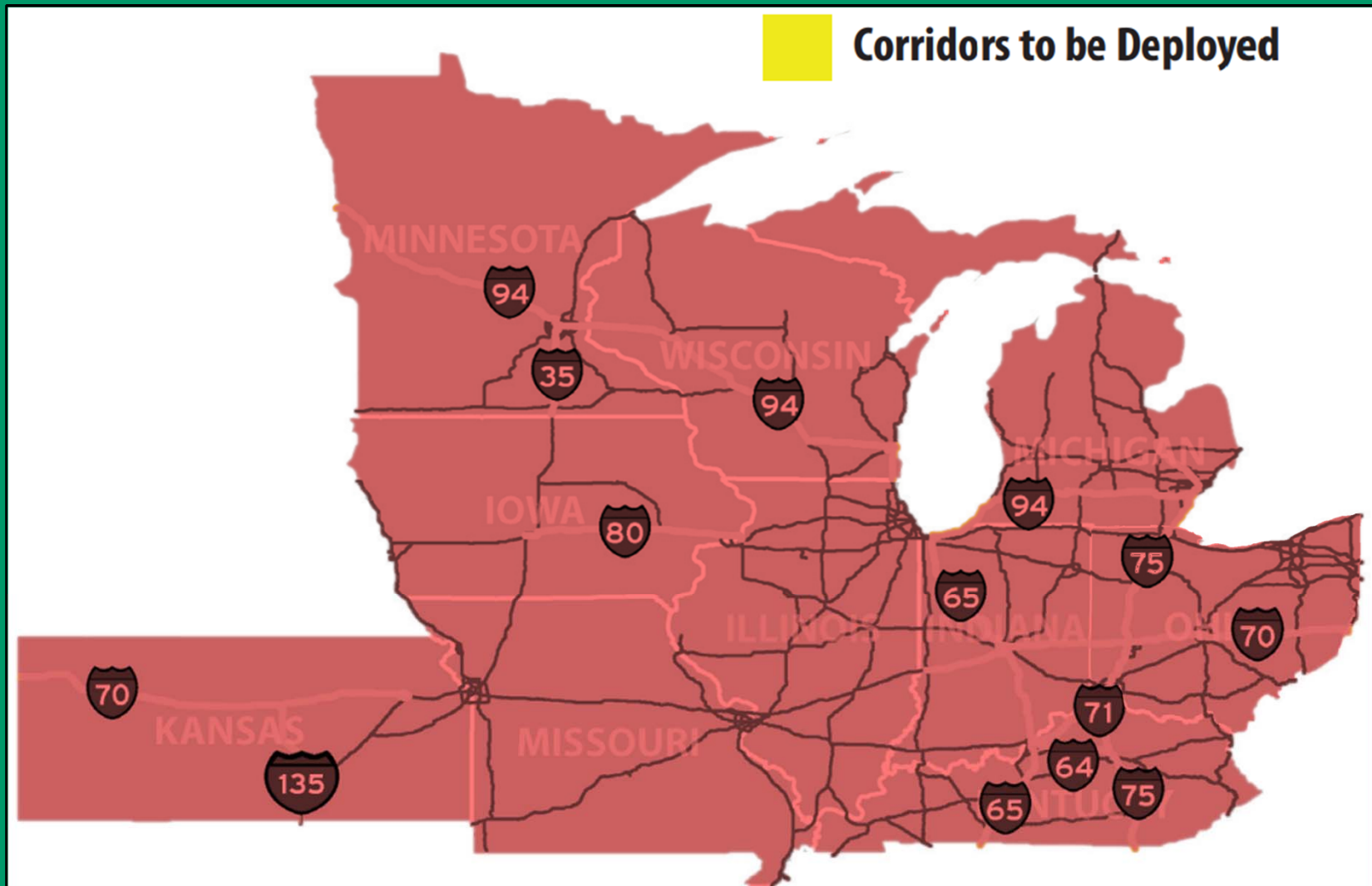


1 Lot

1 Facility



# *Parking Perspective . . .*

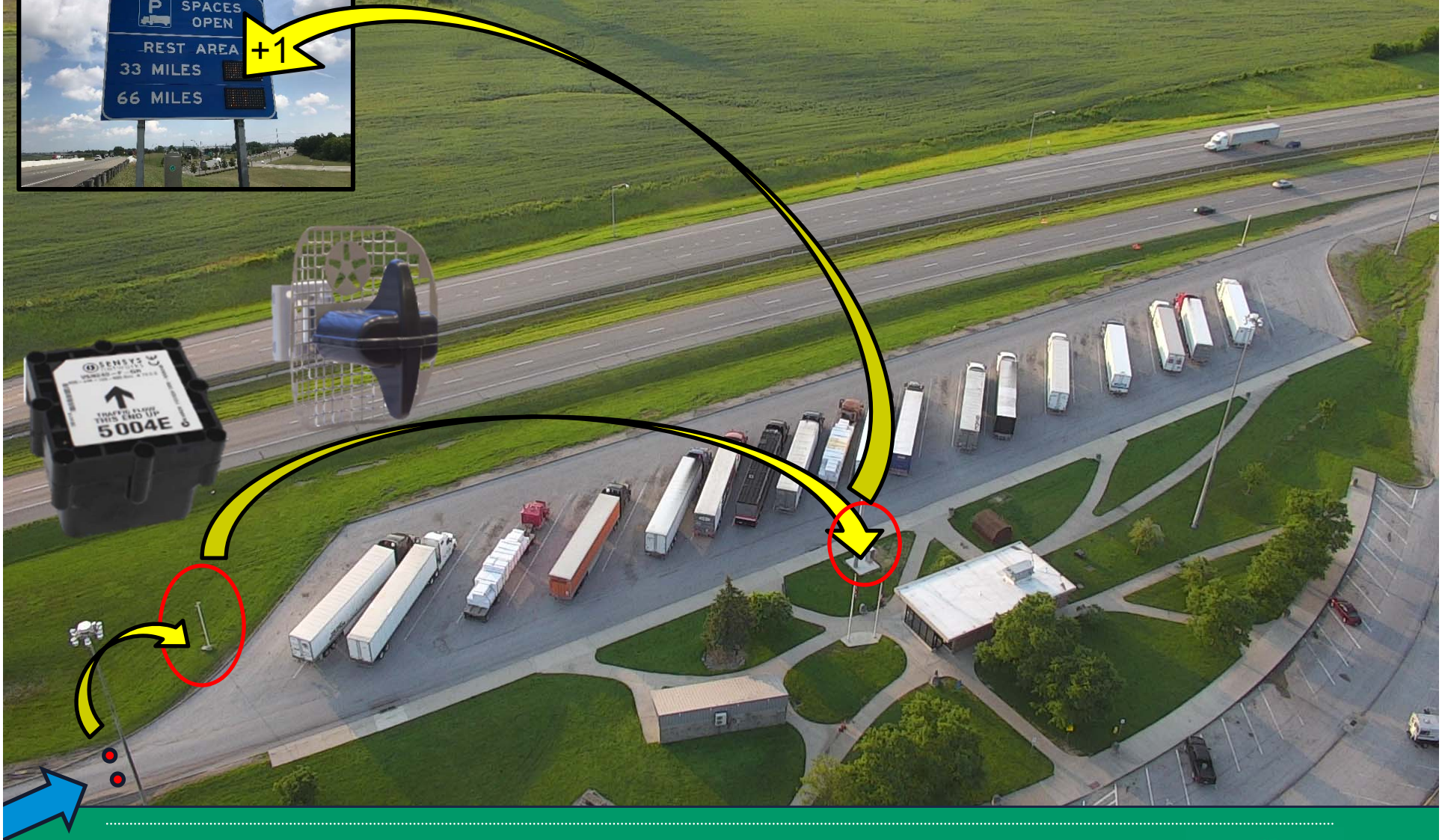




# The Concept . . .

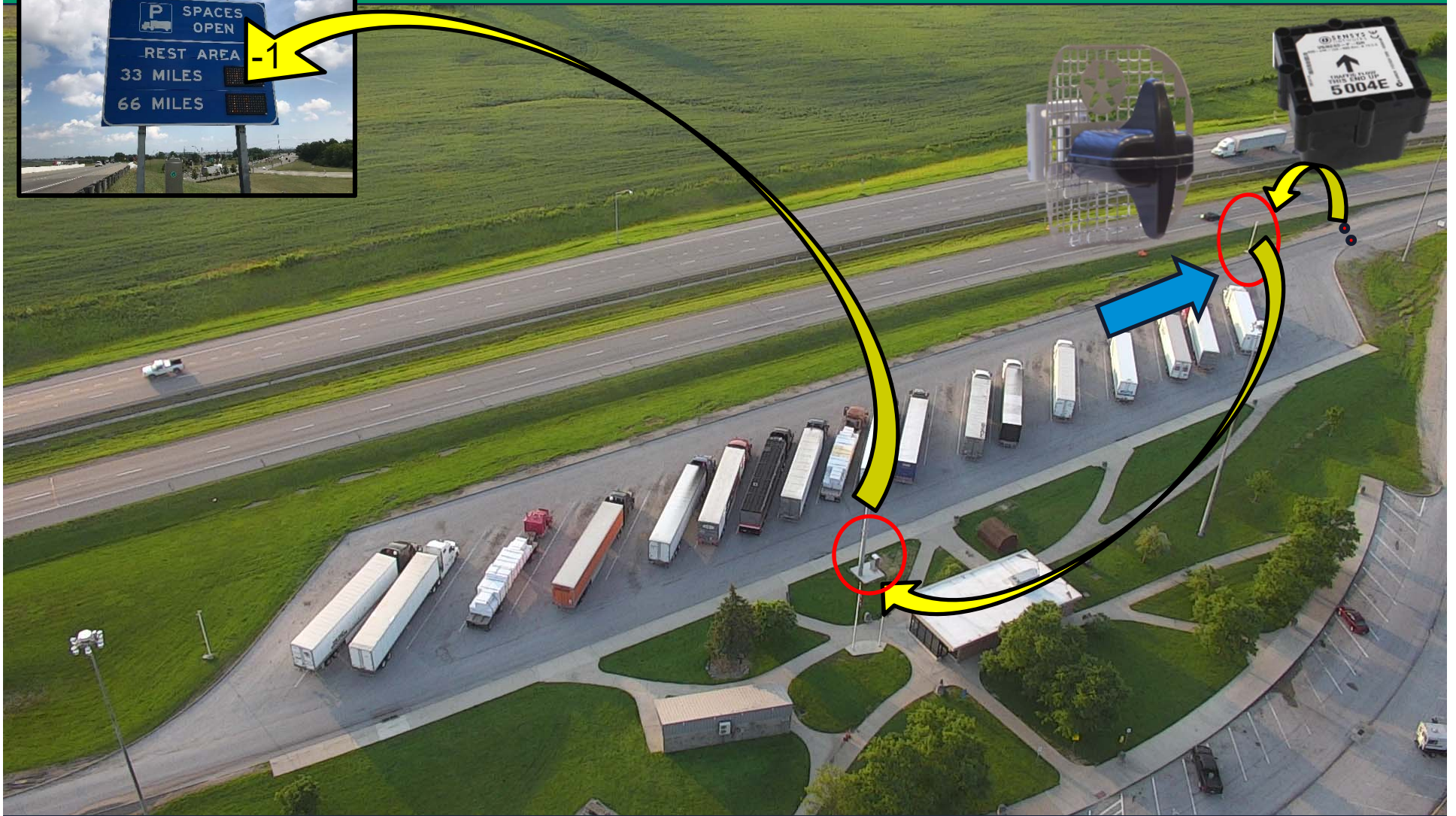


# Screen line . . .





# Screen line . . .





# Verification . . .



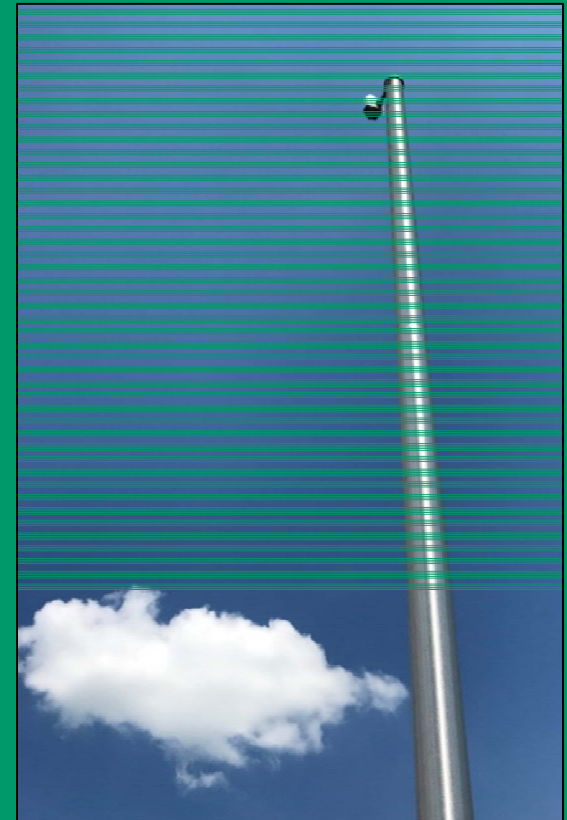


# *Is that a Camera . . .*

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Hey Point that Thing Over Here !

- ODOT by default wants them pointed toward roadway
- OSP requested to have them pointed toward buildings/car parking area
- Footage requested by private citizen's/Insurance Firms

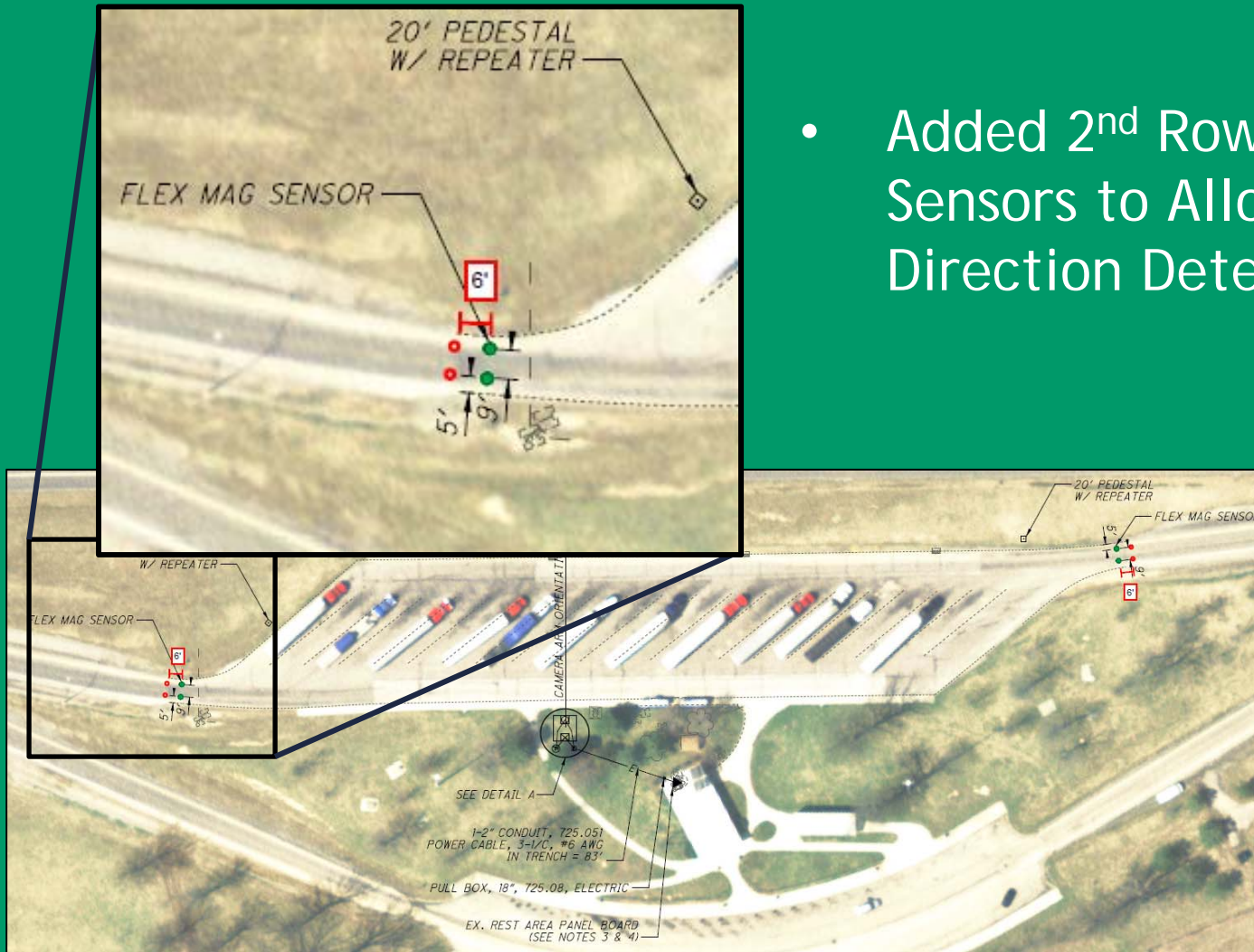


# Accuracy Issue #1 . . .

The screenshot displays a desktop environment with two primary windows. The left window is a web browser showing a security camera interface for 'network HD Camera' at 'http://tp-ohlickingeb.eairlink.com/'. The interface includes a live video feed of a parking lot with several semi-trailers. A green arrow points to a specific area in the video feed. Below the video feed are controls for video format (only MJPEG), resolution (x1, x1/2), and camera settings (Preset, Cruise, Sequence, PT Speed). A 'FlashBack Express 5 Recorder' window is open in the foreground, showing recording status (Recording: 3:00:14). The right window is a web browser showing a 'Parking Count' of 19, which is circled in red. Below this is a traffic management software interface for 'Sensys Networks TrafficDOT 2 - APCC'. The software shows a map with various camera locations and their counts: 'ExitRight' (1994), 'ExitLeft' (1848), 'Entrance' (1000, 1842, 1978), 'ceRight' (0EF5), 'idRight' (100D), 'MidLeft' (1842), 'nceLeft' (1978), '9F43', and '9F25'. Red arrows indicate the direction of traffic flow for each camera location.

# Accuracy Issue #1 . . .

- Added 2<sup>nd</sup> Row of Sensors to Allow Direction Detection



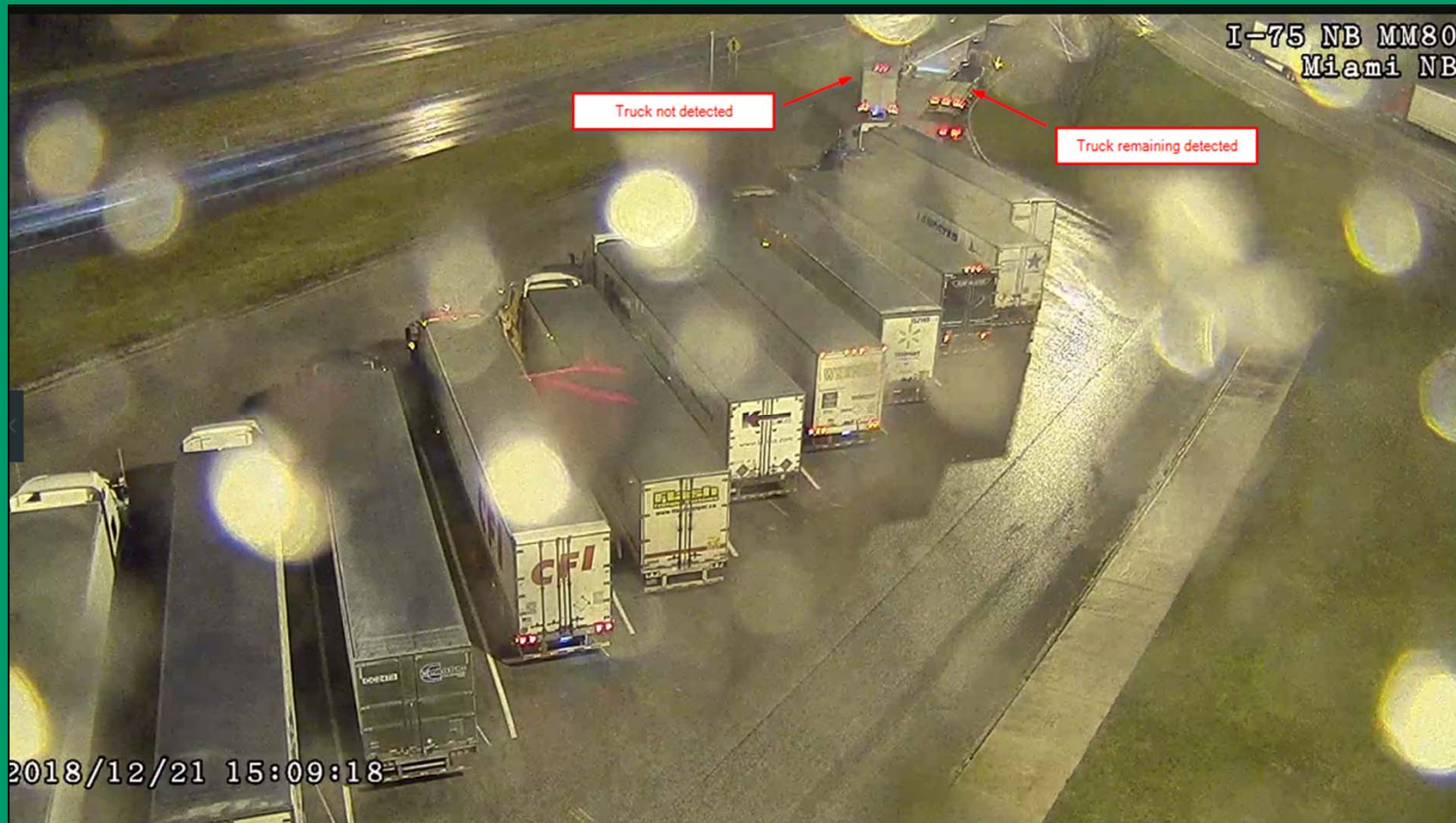


# *Accuracy Issue #2 . . .*



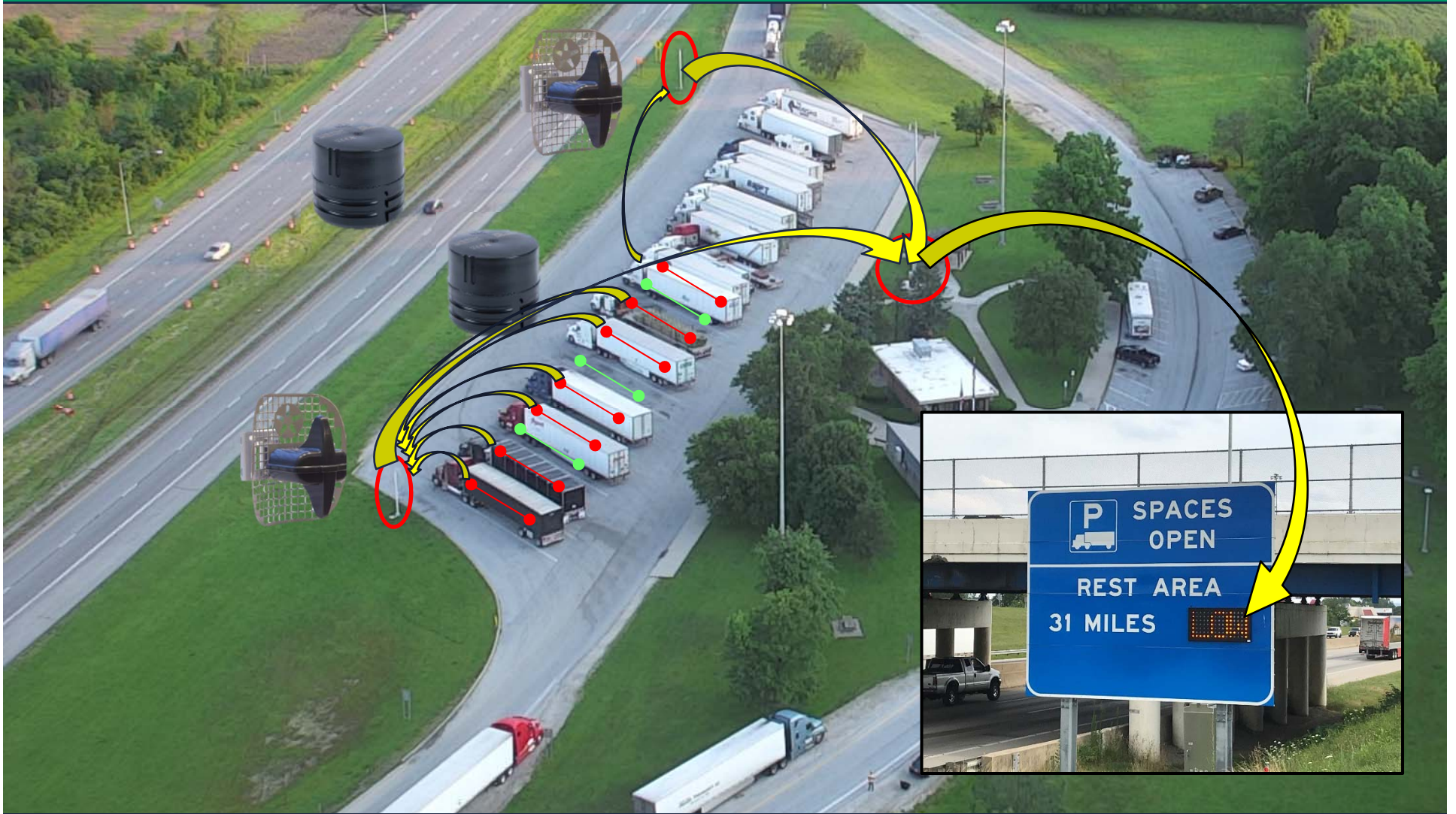


# Accuracy Issue #2 . . .





# Occupancy . . .





# *Accuracy Issue #3 . . .*



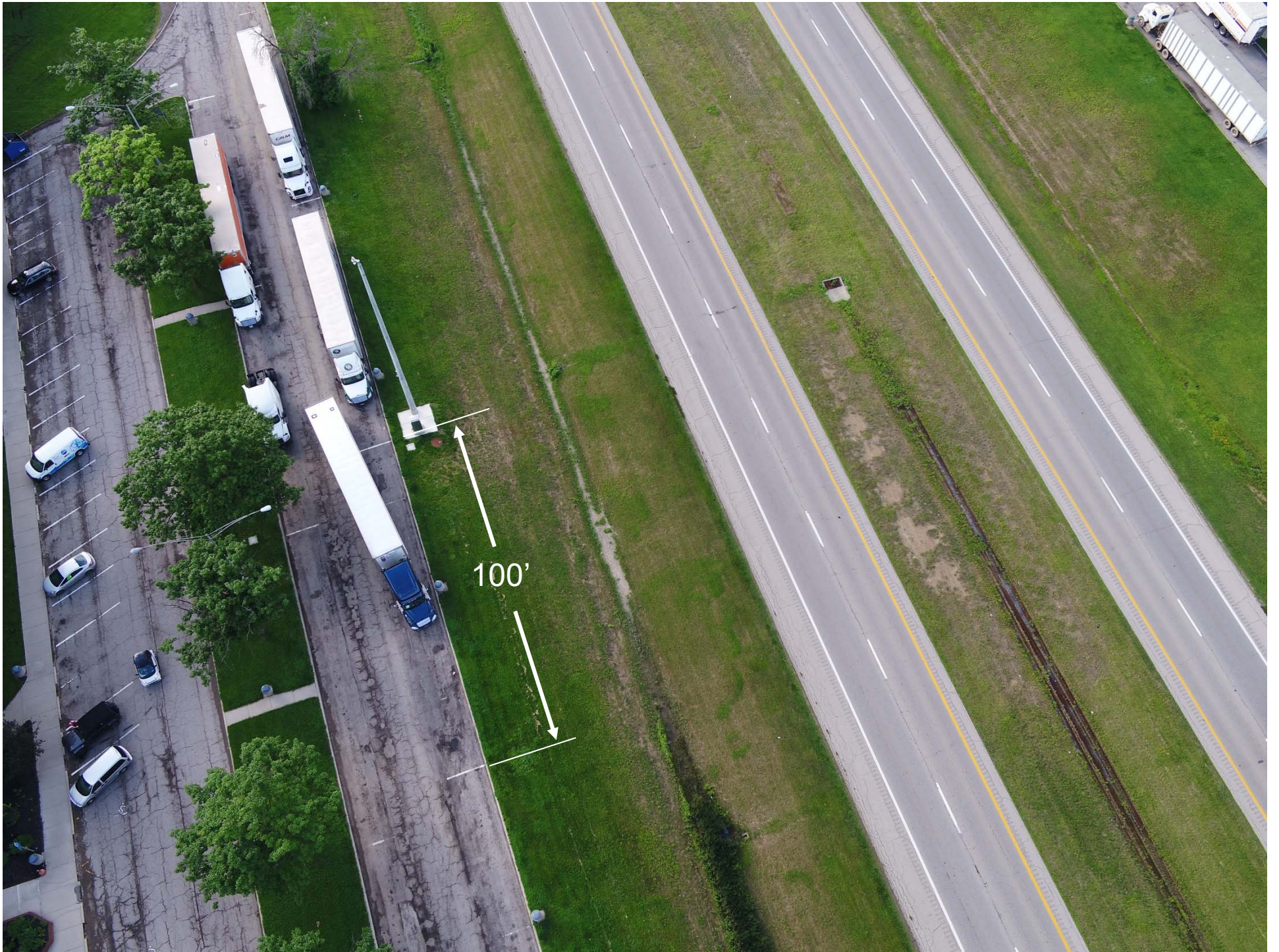


# *Accuracy Issue #3 . . .*



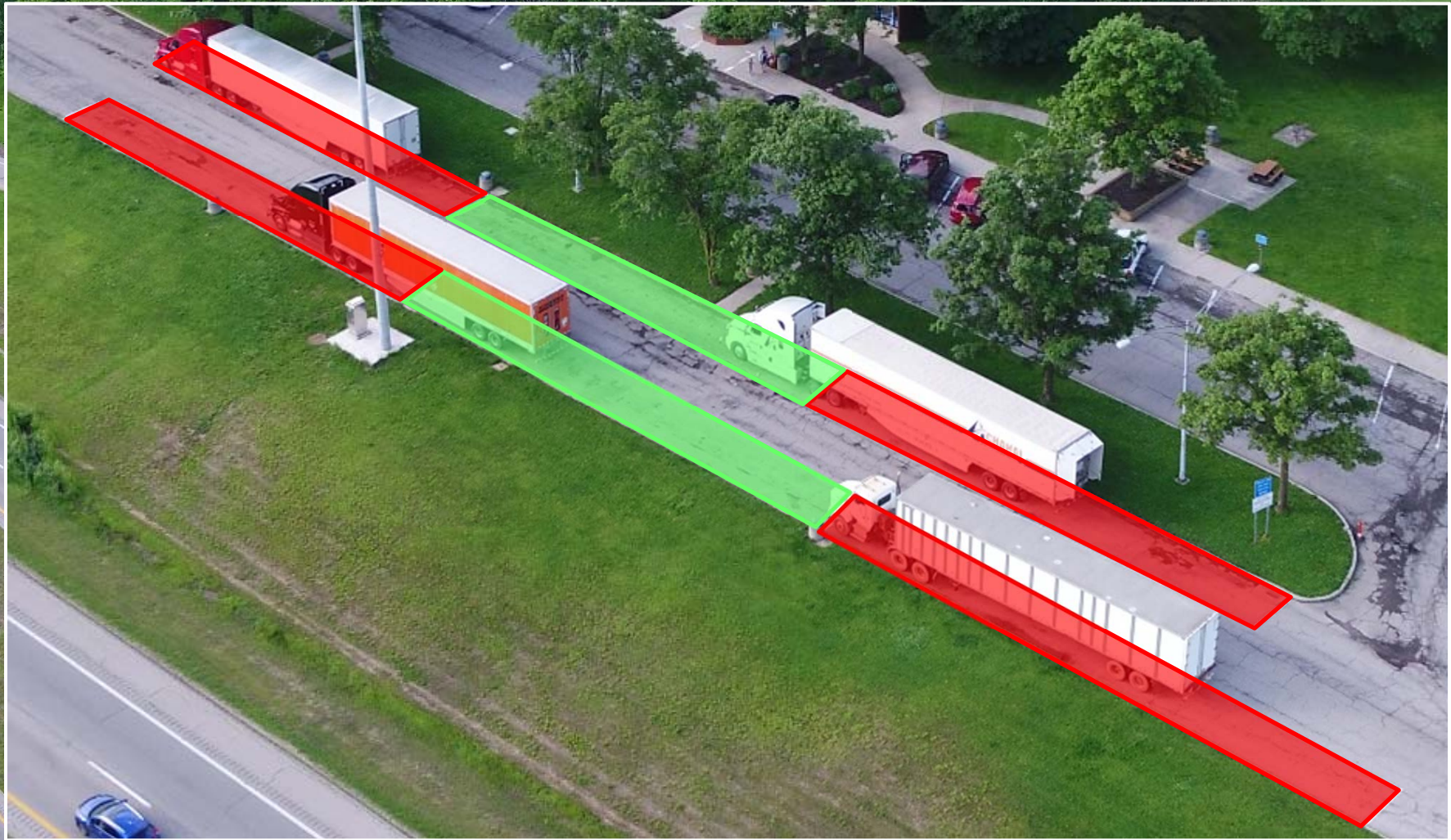
- Originally laid out for 12 spaces 60' each
- Modified to be 7 spaces 100' each







# *Accuracy Issue #3 . . .*



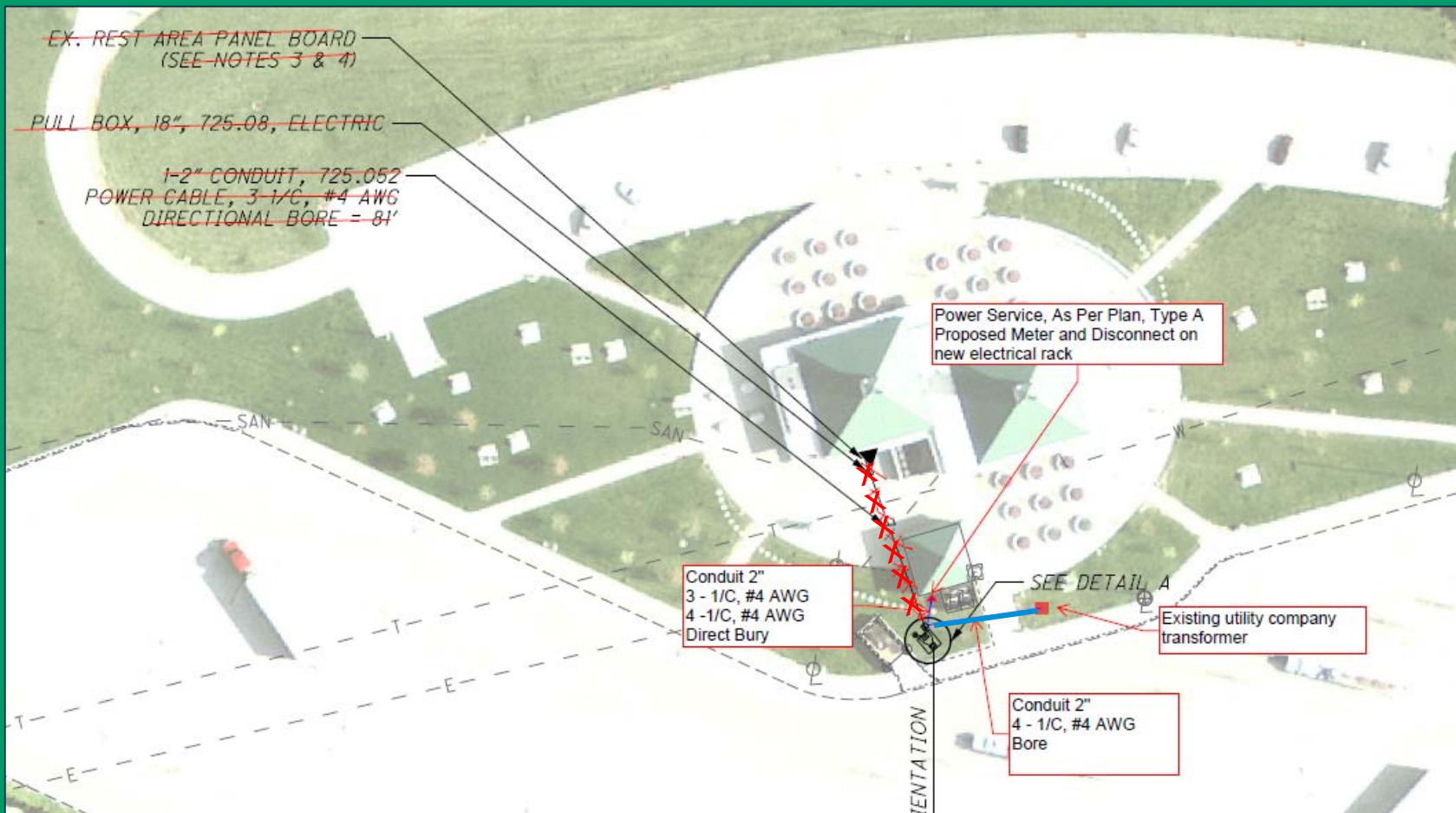


# *New Meets Old . . .*





# New Meets Old . . .





# *Still Open for Business . . .*



# *Still Open for Business . . .*





# *Still Open for Business . . .*





# Power . . . From Where?

**Ohio Edison**<sup>®</sup>  
A FirstEnergy Company



**Midwest Electric, Inc.**  
A Touchstone Energy<sup>®</sup> Cooperative

**LV** Licking Valley  
Rural Electric  
A Touchstone Energy Cooperative



**PIONEER**  
electric cooperative  
A Touchstone Energy<sup>®</sup> Cooperative

Members First!  
  
**HANCOCK-WOOD**  
ELECTRIC COOPERATIVE  
A Touchstone Energy<sup>®</sup> Cooperative



**Darke Rural Electric**  
Cooperative, Inc.  
Your Touchstone Energy<sup>®</sup> Partner

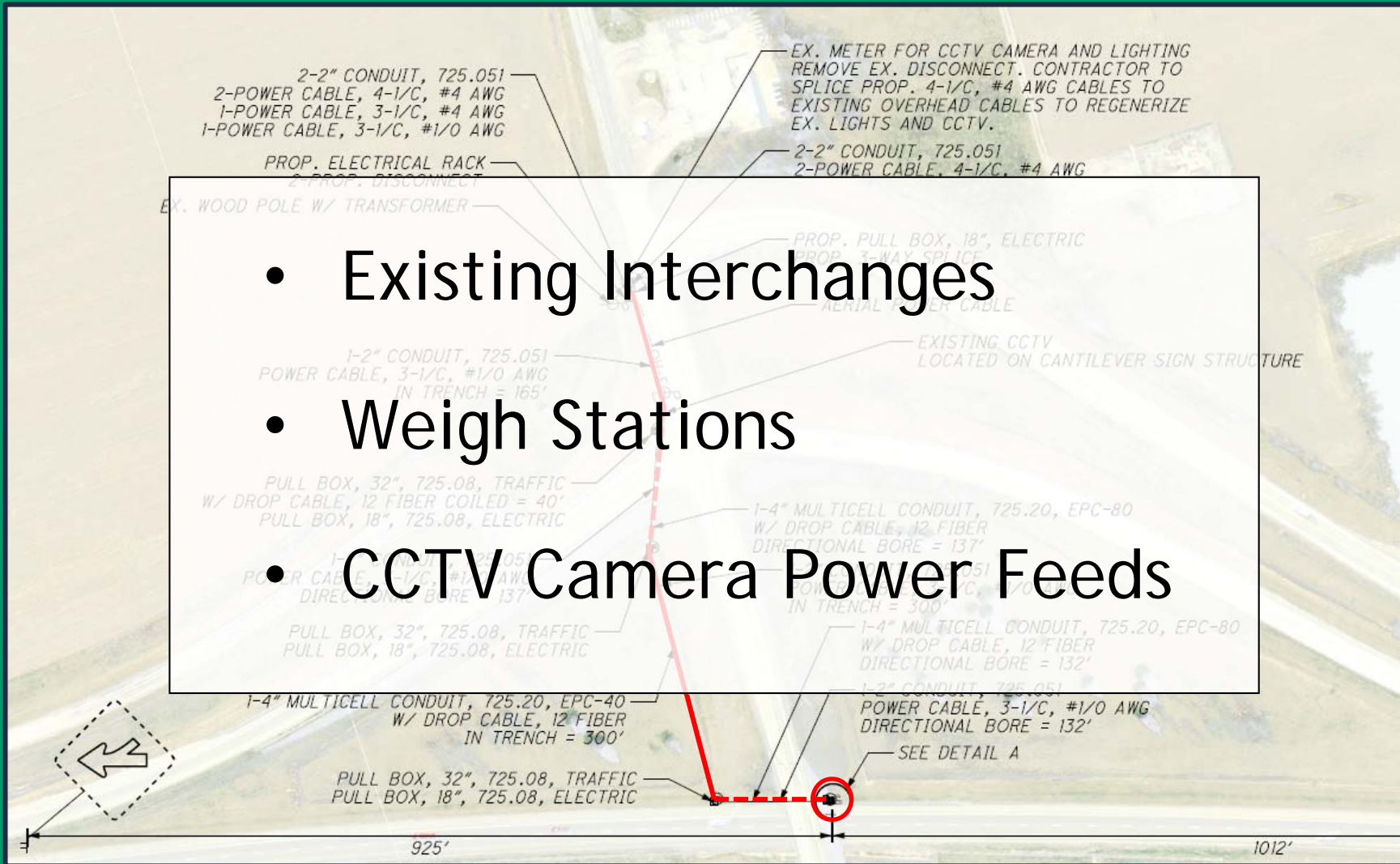
**South Central**  
Power Co.  
A Touchstone Energy<sup>®</sup> Cooperative

**Toledo Edison**<sup>®</sup>  
A FirstEnergy Company



**DUKE**  
**ENERGY**<sup>®</sup>

# Power . . . From Where?



- Existing Interchanges
- Weigh Stations
- CCTV Camera Power Feeds



# *Power . . . From Where?*

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# Power . . . From Where?



# *How Low is Low . . .*

- Used to Set
- Range of spaces
- Keep "Bar"
- Main Trust





# *So Now What . . .*

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- 36 Month Maintenance Period
- Monitoring program
- Data Feed being analyzed by Mid-Atlantic Freight Coalition (MAFC)
- Sharing Data



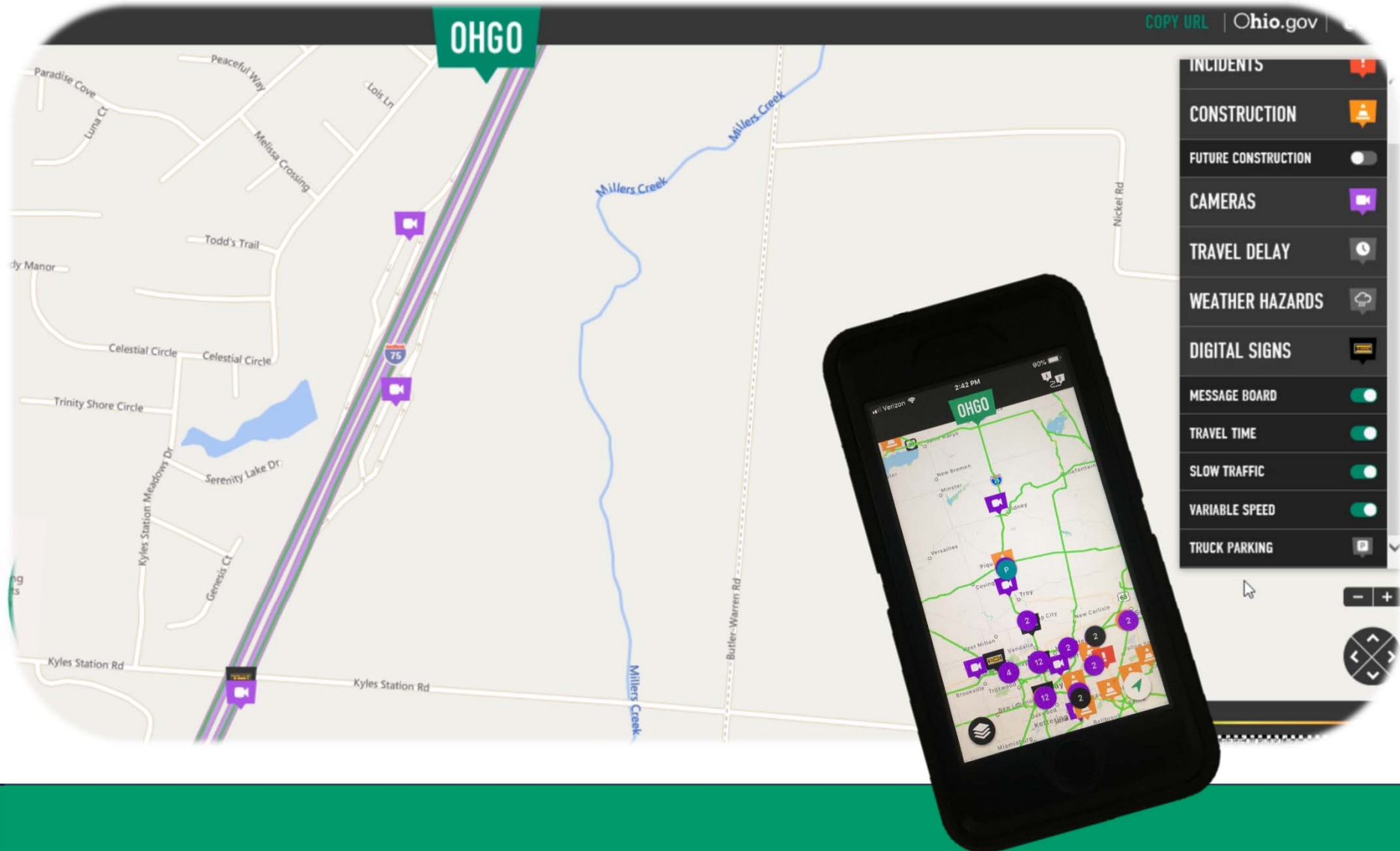


OHGO



OHIO DEPARTMENT OF  
TRANSPORTATION





# *So Now What . . .*

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- Continue the Partnerships
- Leverage the Data
- Expand the System
- Educate the Public
- Share Your Successes



# *Questions . . .*

