CTB Innovation and Technology Subcommittee
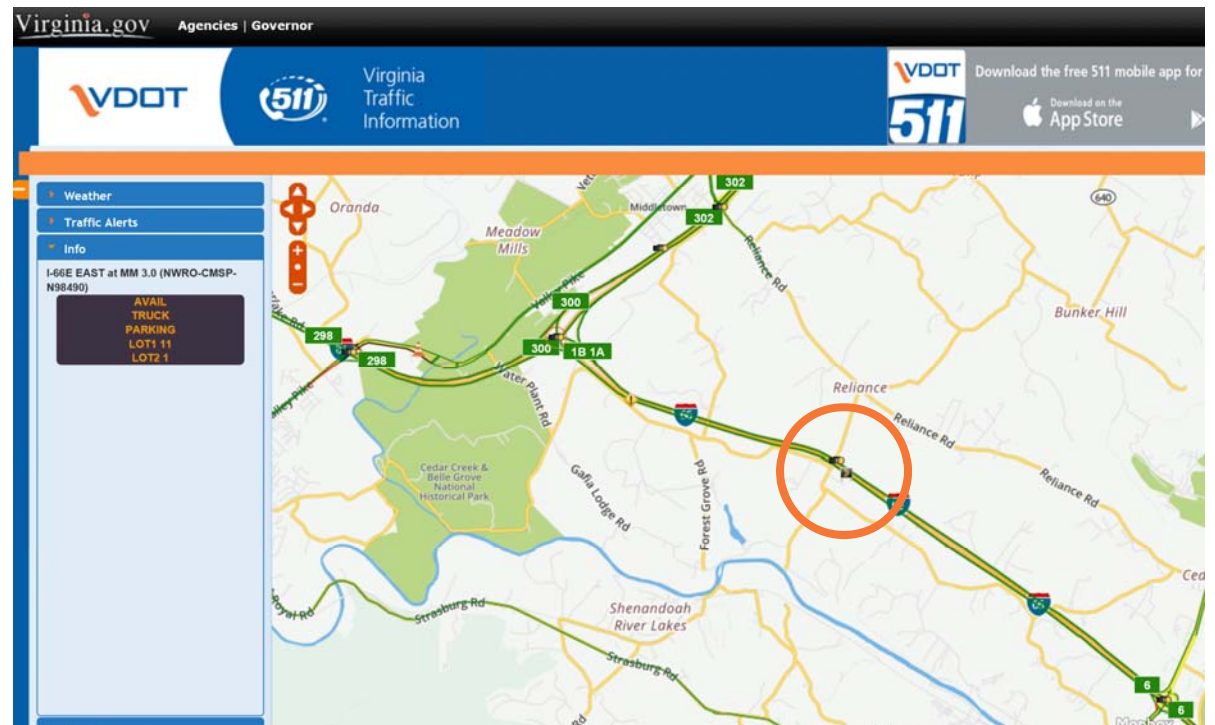# December 6, 2017
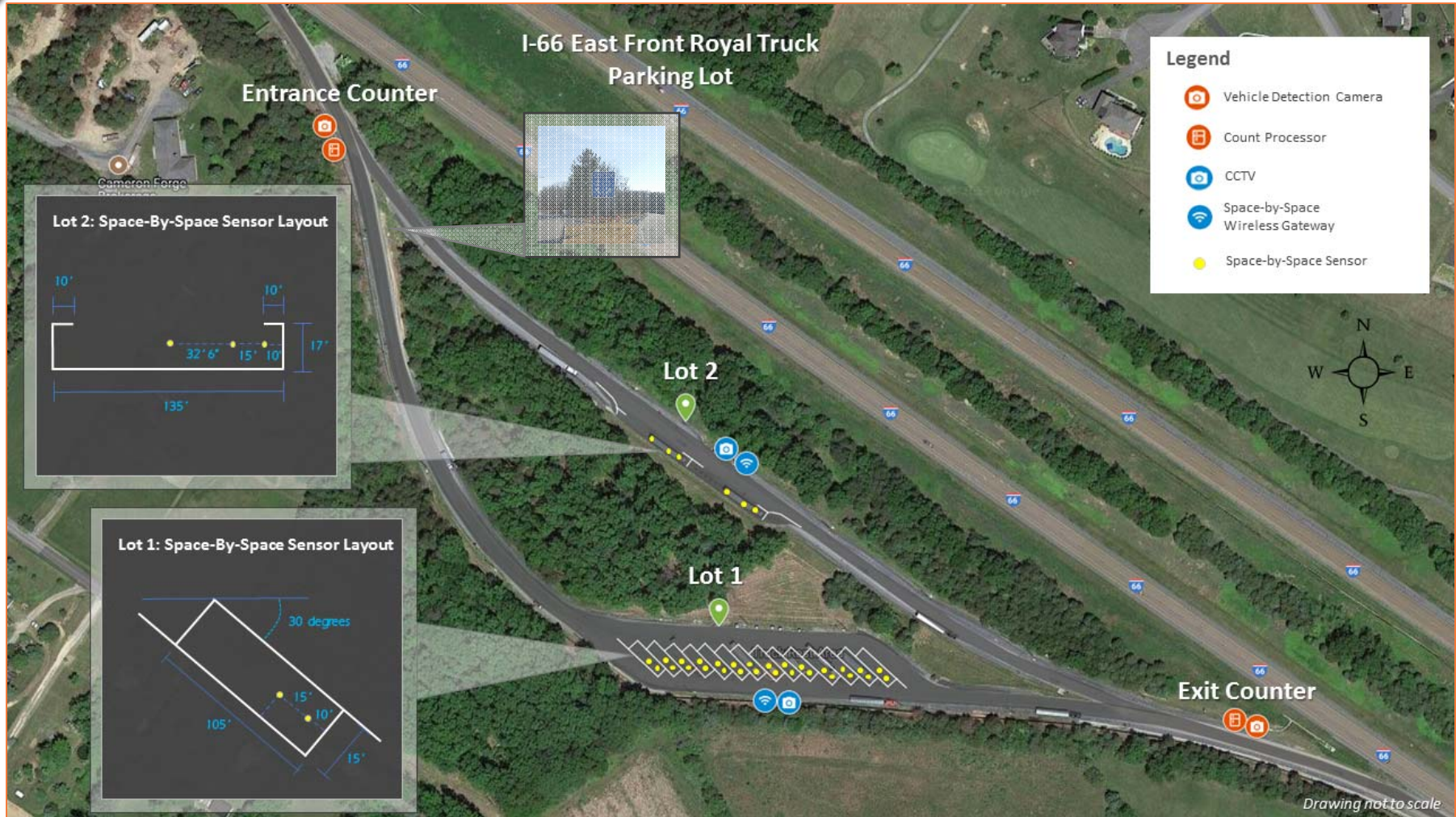
I-66 Early Deployment Truck Parking Management System

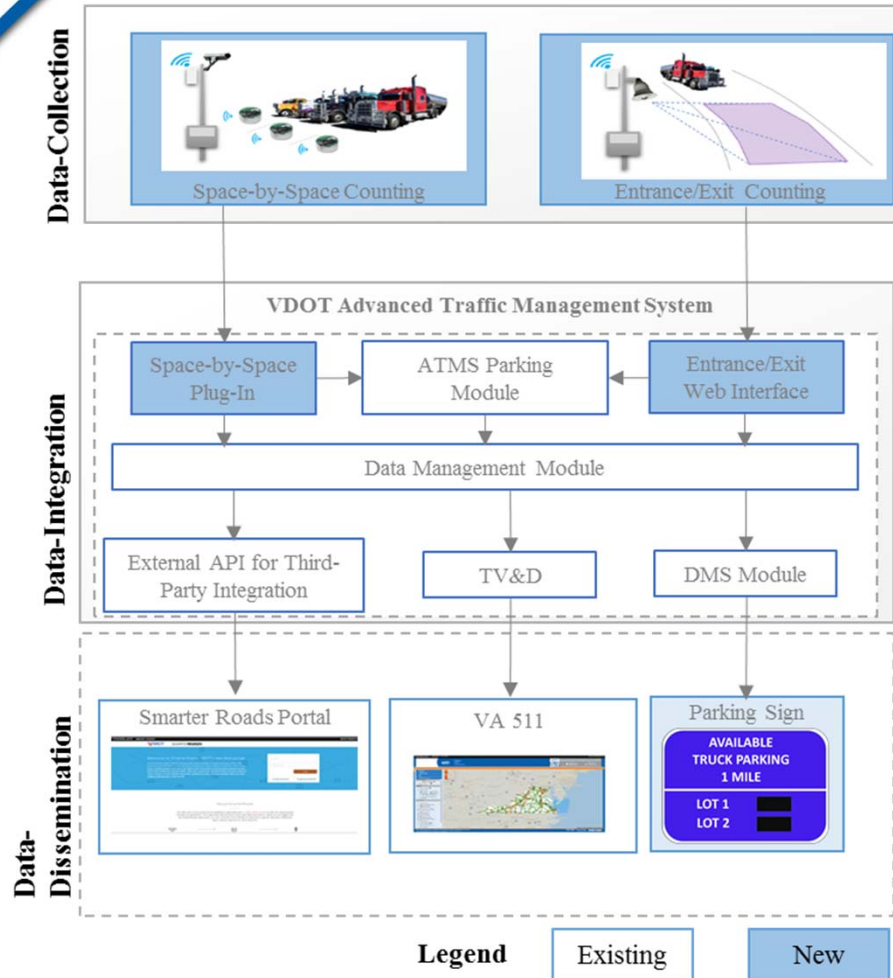VDOT Virginia Department of Transportation

Project Overview

- **Early Deployment System**

- **Front Royal Truck-Only Rest Area**
  - **I-66 Eastbound – Milemarker 5**
  - **Near I-81 interchange**
  - **2 sub-lots:**
    - Lot 1 (14 spaces)
    - Lot 2 (2 spaces)

- **Testing 2 Approaches:**
  - **Space-by-Space Sensors**
  - **Entry/Exit Counting**

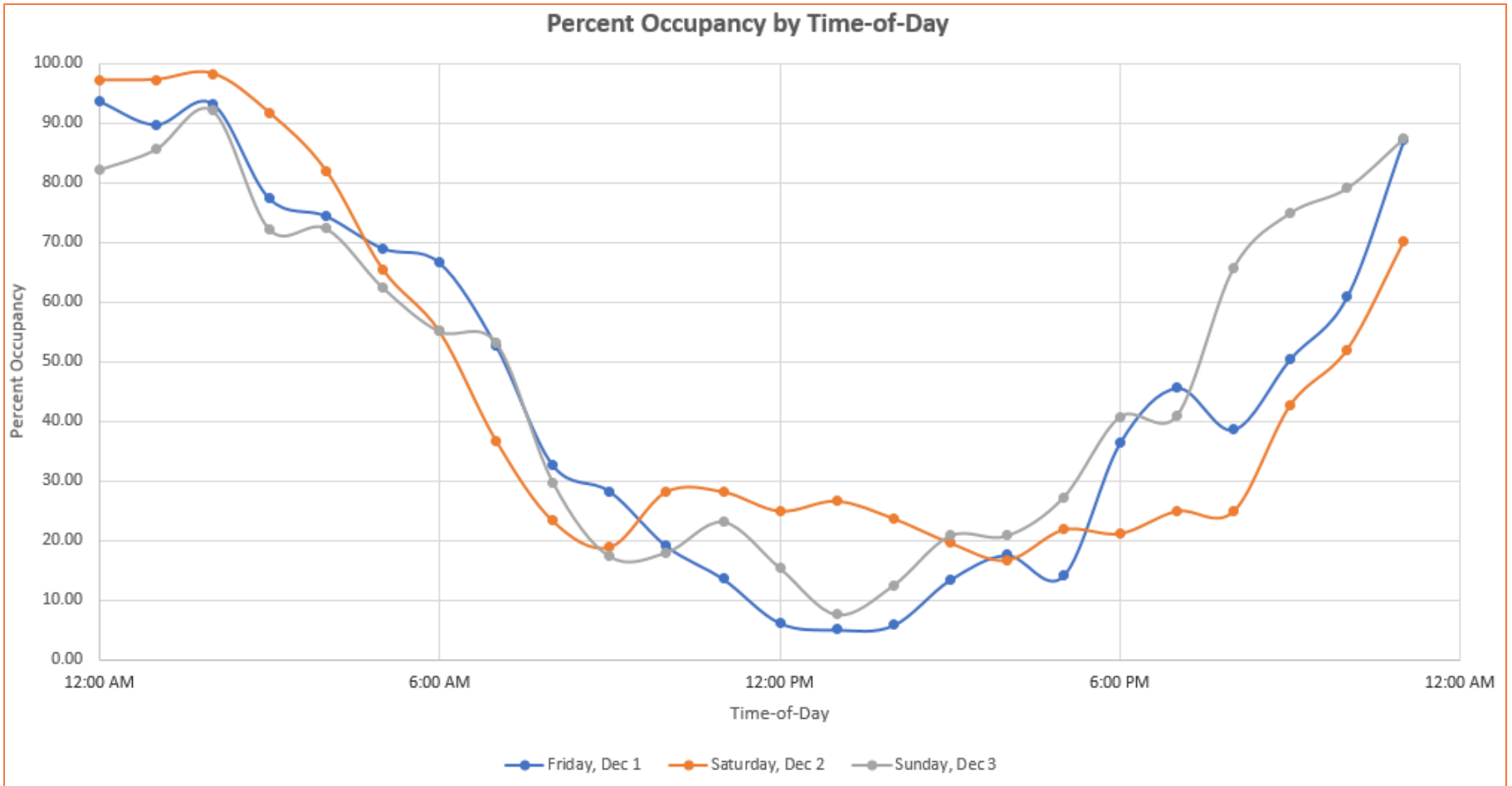- **Cellular (Wireless) Communications**

Site Plan

I-66 East Front Royal Truck Parking Lot

Entrance Counter

Lot 2: Space-By-Space Sensor Layout

10'   10'
32'6"   15' 10'   17'
135'

Lot 2

Lot 1: Space-By-Space Sensor Layout

30 degrees

15'
10'
105'
15'

Lot 1

Exit Counter

Legend

- Vehicle Detection Camera
- Count Processor
- CCTV
- Space-by-Space Wireless Gateway
- Space-by-Space Sensor

N
W — E
S

Drawing not to scale

System Concept

Preliminary Observations

Percent Occupancy by Time-of-Day

Truck Parking Demonstration