Real Time Experience
Studying ADOT I-10 Dust Project Implementation

2020 Arizona Dust Workshop, March 3, 2020
Project Overview (who was involved)

• Designers
  – Kimley-Horn
  – WSP
• Contractors
  – Coffman Specialties
  – Sturgeon Electric
• Equipment
  – Enterprise Electronics Corporation (EEC)
  – Vaisala
• DPS
• National Weather Service
• ADOT
  TOC, TSMO, IDO, Communications and South Central District
• FHWA
Project Details

- Project award to Coffman Specialties in November of 2017, bid of $58,465,000
- 780,000 yrd$^3$ roadway ex.
- 930,000 yrd$^3$ of borrow
- 211,000 yrd$^2$ of PCCP
- 120,000 tons of asphalt
- Civil work completed in Oct.‘19

- 24 vehicles
- 16 injured
- 1 dead

October 2013 – dust storm related crash on I-10

- 19 vehicles / 7 Trucks
- 12 injured
- 3 dead
Project Goals

• Provide early warning of blowing dust approaching and within the corridor
• Measure visibility within the corridor
• Provide video to allow the ADOT TOC to have ‘eyes on the road’
• Disseminate real-time information to motorists
• Implement lowered speed limits within corridor
X-BAND RADAR (RANGE–X5)
CLOSED CIRCUIT TV (5)
SPOT DETECTOR (13)
DYNAMIC MESSAGE SIGN (4)
VARIABLE SPEED LIMIT SIGN (16)
SPEED FEEDBACK SIGNS (2)
Vaisala Equipment:
  PWD 10 (measure visibility) (13)
  RG13H (rain gauge)(1)
  WXT536 (wind, temp. and humidity)(3)
AWS310 (the brains)
Each of the three locations talks to all 13 visibility sensors
<table>
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AWS310 (the Brains)
Each of the three locations talks to all 13 visibility sensors
Integration Team: Kimley-Horn, Flir & ADOT

Testing through June and activation by first of July
Questions?

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602-712-2317

Pull Aside – Stay Alive