City of Arcadia

Getting off the Ground

“Success and Failures of a Small City in an ITS World”
Community of Homes – pop. approx. 50k
Arcadia Unified School District K-12
Home to the:
  Santa Anita Race Track (Events)
  Los Angeles County Arboretum
  Santa Anita Region Mall (Westfield)
  Hotels & Restaurants
72 intersections (59 city owned/controlled)
  TCS = TransSuite
  52 int. currently online (88%)
  47 connected via fiber optic cable
  5 connected via wireless radios
Received grants:  
$250,000 Federal Grant (Phase 1)  
$2,687,000 Metro Grant (Phase 2)

Los Angeles County Assistance to design our fiber optics network and provide traffic signal controller upgrades and firmware

Conduits installed as part of our annual arterial resurfacing program. (City Engineer)

City project to install fiber optic network. (City Engineer)

County-wide grant to provide assistance to cities to start or enhance their own systems – Arcadia received a wireless communications system connecting 12 ints.

Presentation(s) – Study Sessions to City Council
Assets – Wireless Radios

5 int. online – soon to be 6 (with plans for more)
Ethernet Switches

- Serial
- Ethernet
- POE

47 managed and 5 unmanaged switches
Video Detection

Camera

Comm. Module

15 intersections (13 with video feeds to TMC)
Applications

Video Detection – Quad View
CCTV

18 total (12 HD and 6 analog)
Applications

CCTV - HD Camera
Bluetooth (Travel time)

15 total (13 in the City and 2 in the County)
Traffic Controller 170 → 2070
Getting off the Ground

Vendor A

Vendor B

Arcadia
How about them apps?
Getting off the Ground

Vendor A
Consultant

Vendor B
3rd Party

Arcadia
How about them apps?
Additional ITS Benefits

• Connection to the Los Angeles County Information Exchange Network (IEN) to share data

• Conduits available for other usage – Current lease with formerly NextG for MetroPCS wireless carrier in a segment of Baldwin Avenue

• Use existing conduits to increase capacity by way of fabric innerduct

• Fiber Optics lines available for other usage – Currently used to connect City facilities on the same fiber network

• LRT extension provided the opportunity to include ITS technologies in the scope of the project (fiber, POE switch, CCTV, VID, 2070 & BBS)
How to find ITS technology?

• Arterial ITS Committee Meetings
  (Metro, LA County & local cities)
• ITS-CA Meetings
  (local luncheons/workshops & this Annual mtg)
• Local Traffic Engineers
  (Arcadia is the So. Cal. capital of TE’s)
• Google/Internet (FHWA website, webinars etc.)
• Private Sector (Sometimes they find you)
Failures (Lessons Learned)

• Communication (ex: Public Works Dept.)
  – get everyone onboard with ITS
• Serial Modems (get rid of old technology)
  – made the switch to Ethernet
• Wireless Radios (tree overgrowth, M&O)
  – Find the right company/crew with expertise (LA County)
  – Communicate with PW for tree trimming
  – We plan to install managed switches
What’s Next?

• ATC Cabinet
  – First one to be installed in 2015
• Adaptive Traffic Control System (ACDSS)
  – Installed by the end of 2014
  – Performance Measures by mid 2015
• Video Sharing
  – Police, Fire, PWS, LA County & Metro
• ITS Inventory (Metro leading)
• I-210 Connected Corridor Project
IT’S not just a pretty cabinet

“NOT IN ARCADIA, YET?”