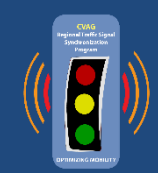




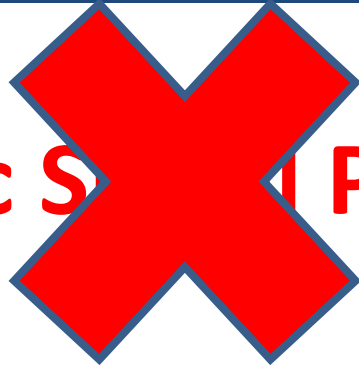
CVAG



**CVAG Regional TSSP Phase I – Construction Pre-Bid Meeting
October 27, 2020**



Traffic Signal Project



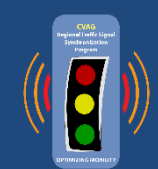
Federalized ITS and Smart Region Project

System Engineering - Advantec

System Integration

System Integrator – Not just a Contractor

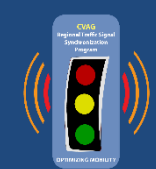




AGENDA

- Introductions and Stakeholders
- Project Overview
- Project Requirements
- Special Requirements – Certifications
- DBE
- Coordination
- Critical Dates, Submittal Requirements
- Questions





Introductions and Stakeholders

Lead Agency:

Coachella Valley Association of Governments (CVAG)

Point of Contact:

Eric Cowle, CVAG

760-346-1127 (Office)

ecowle@cvag.com

RECORDED

Design Consultant:

ADVANTEC Consulting Engineers

Construction Management and

Inspection Consultant: TKE

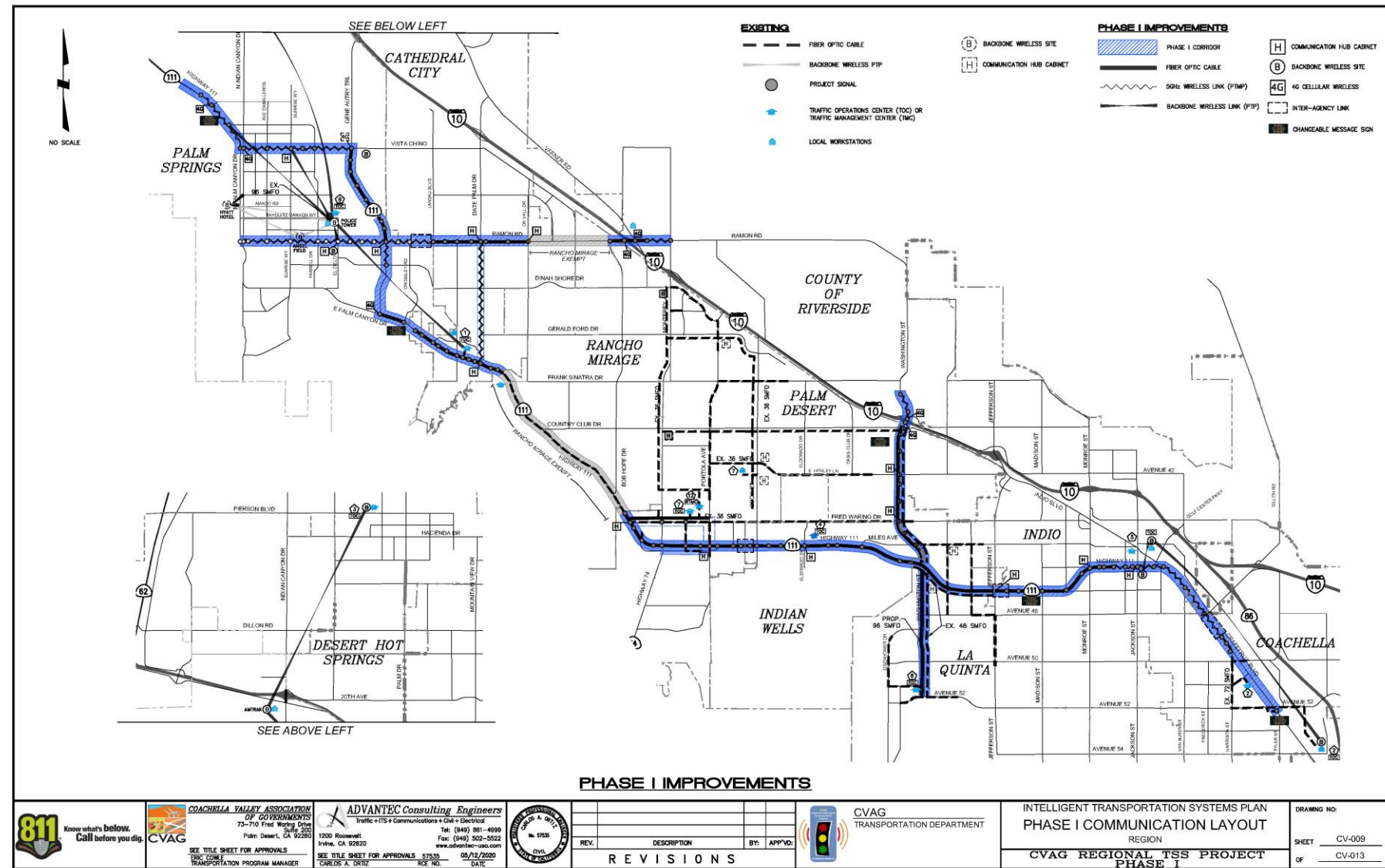
Sign-in Sheet <https://rb.gy/1vd2wi>

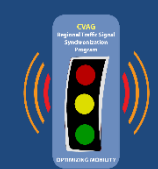
- City of Desert Hot Springs
- City of Palm Springs
- City of Palm Desert
- City of La Quinta
- City of Indio
- City of Indian Wells
- City of Coachella
- City of Cathedral City
- City of Rancho Mirage
- Caltrans
- County of Riverside



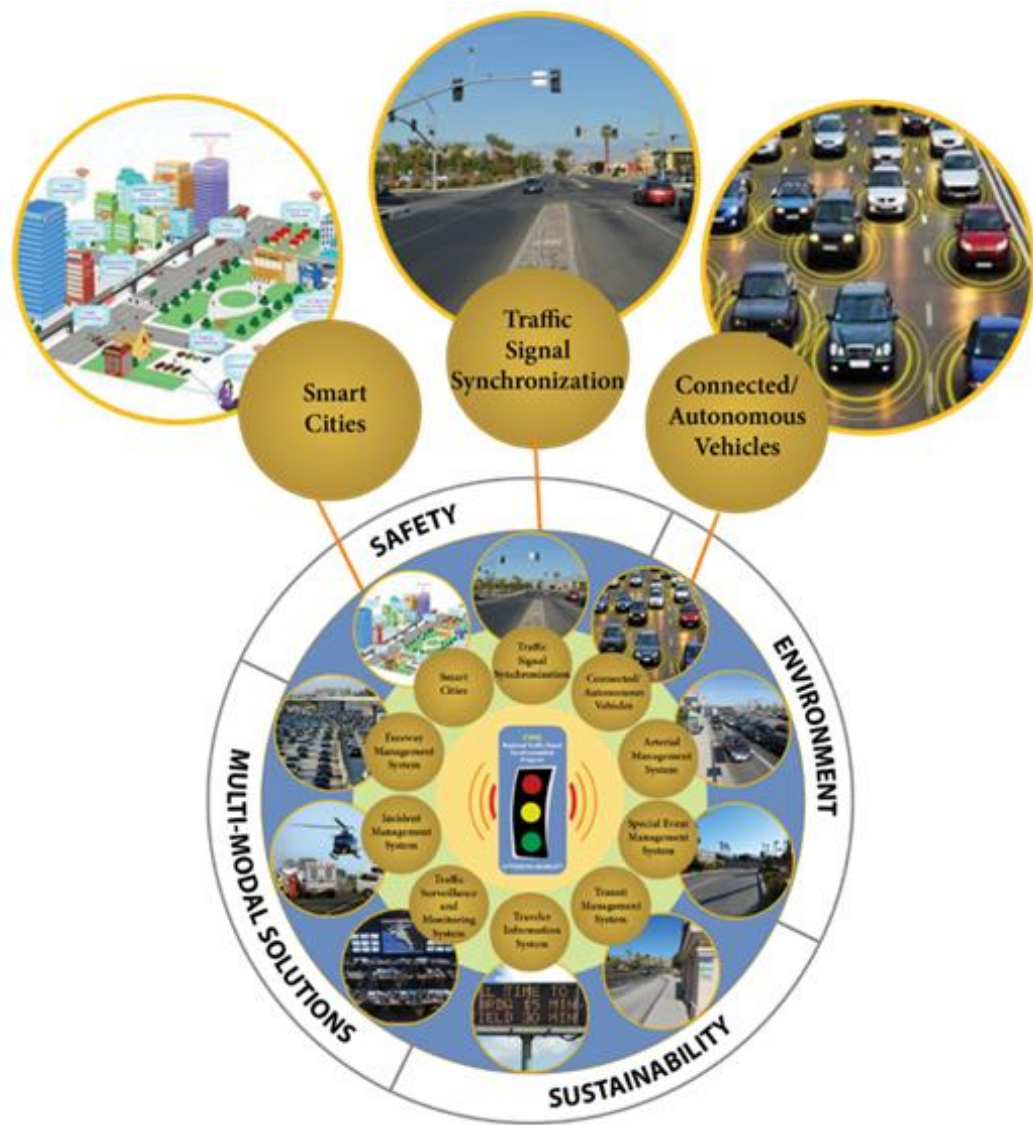


Project Overview

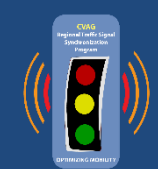




Project Overview



- This is an **"ITS and Smart Region Project"** with Other Associated Improvements
- **Regionwide "Approved" Standards**
- **Phase I (Project) - Three Major Corridors (138 signalized intersections)**
- Phase II (Future) - Twenty-Two Corridors
- Phase III (Future) - Remaining Intersections
- **Open Architecture/ Regionwide Interoperability**
- Smart Transportation System
- Preparing for the Future (CAV and Smart Cities)

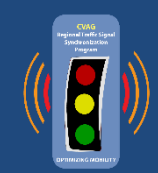


Project Overview

CVAG Regional Traffic Signal Interconnect Project ITS Improvements include:

- ✓ High-speed secured communication systems (Ethernet IP, fiber optic, wireless radio, cellular)
- ✓ Traffic Signal Modifications
- ✓ Closed Circuit Television (CCTV) Camera Systems - Bosch
- ✓ Video Management Systems (VMS) - GENETEC
- ✓ Arterial Management Systems (AMS), Bluetooth Devices - TrafficCast
- ✓ Dynamic Message Sign/Changeable Message Sign (DMS/CMS) Systems – Daktronics
- ✓ Video Detection Systems – Iteris and Econolite
- ✓ Ethernet Switches - Hirschmann
- ✓ Asset Management Systems – Eximus
- ✓ Traffic Operation Centers (TOC)
- ✓ Regional Traffic Management Center (RTMC)
- ✓ Back-up TMCs
- ✓ Regional TMC Tenant Improvements (CVAG's Office)





Project Requirements

Requirements have been VETTED

CVAG Committees – Technology Assessment

Pilot Project

FHWA Approved ConOps and SEMP

Caltrans issued E-76

Caltrans Memorandum #21

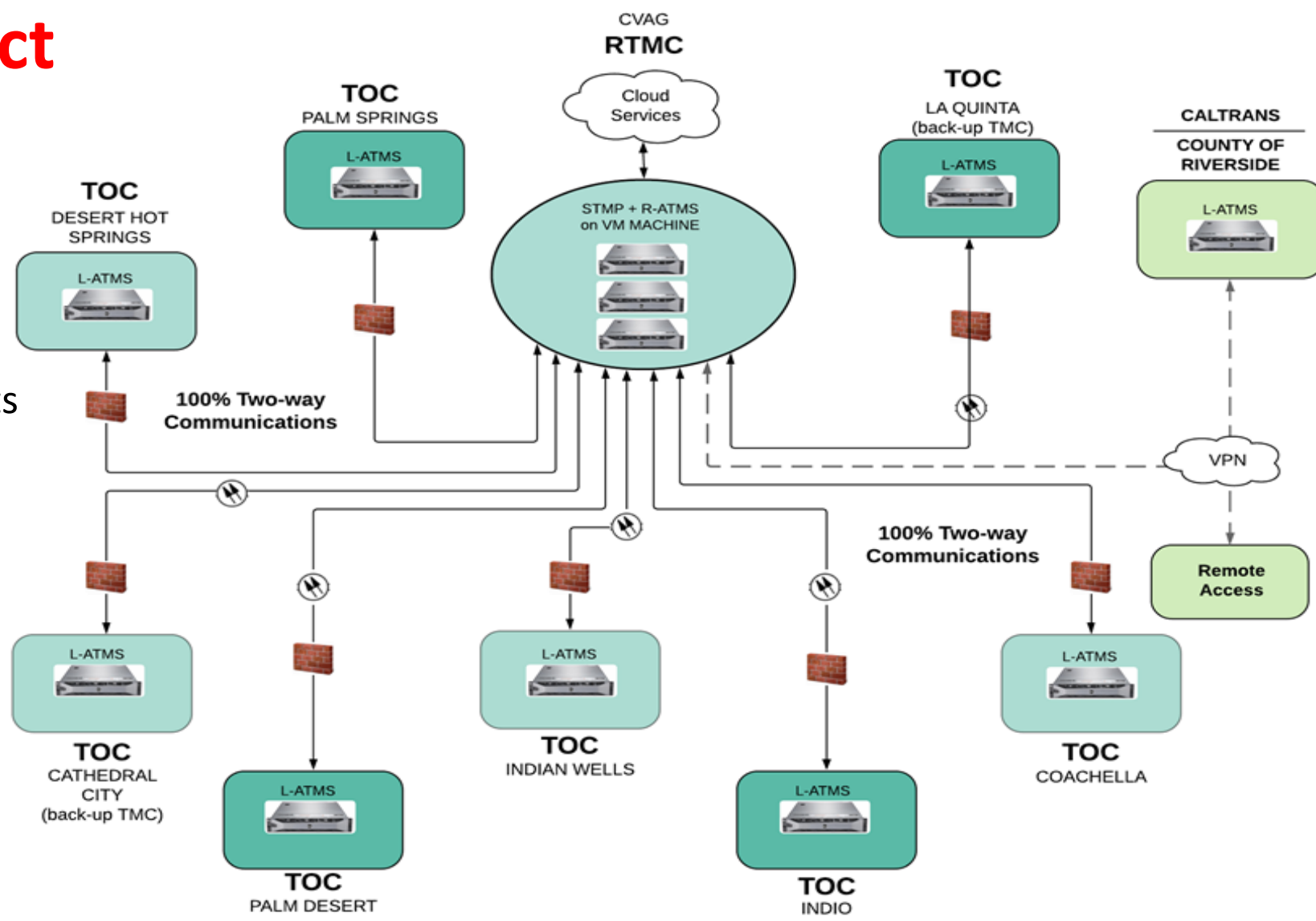


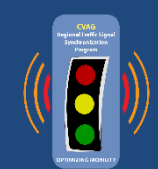


Project Overview

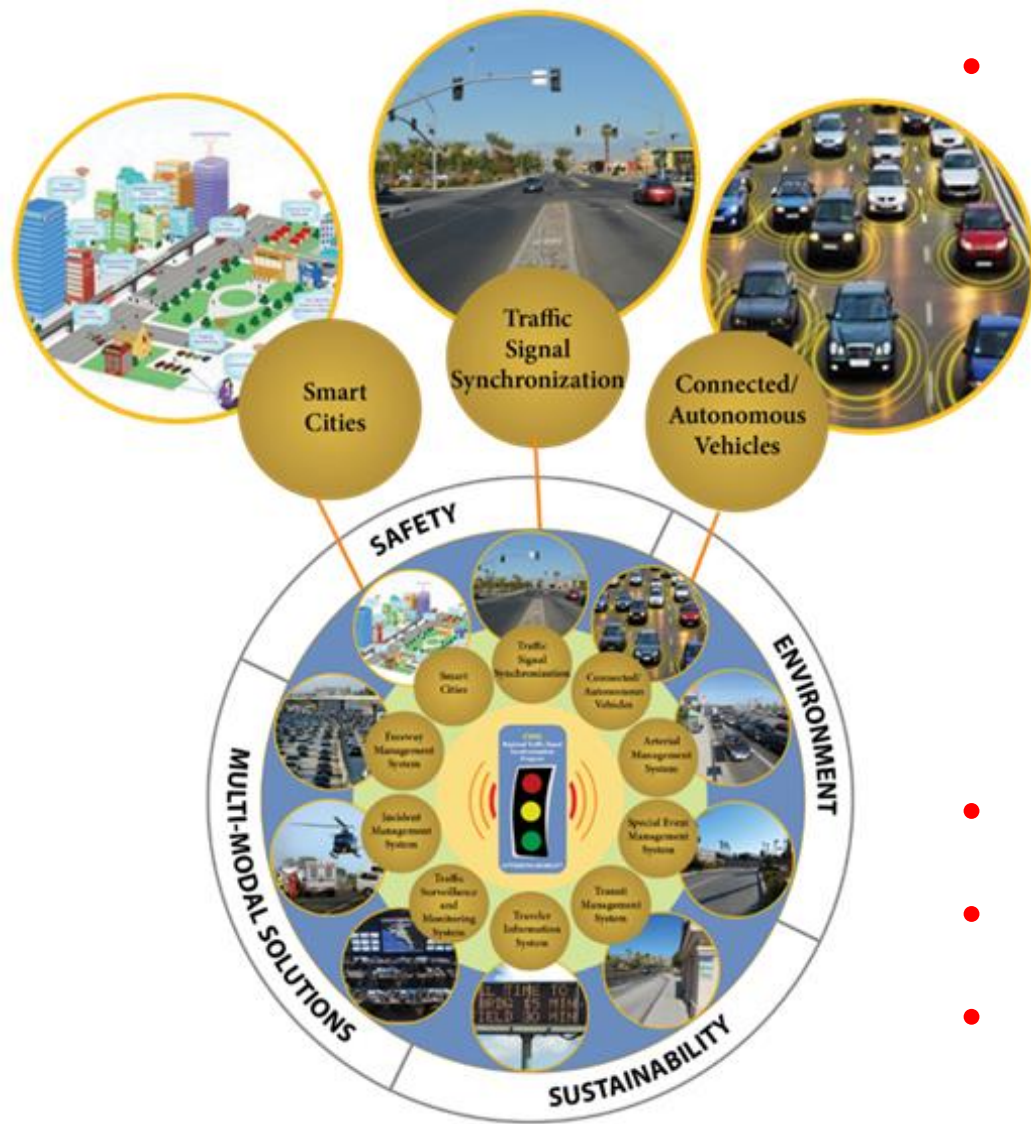
Approved Pilot Project

- ✓ 4 Agencies
- ✓ ATCs (NEMA & 2070)
- ✓ ATMS
- ✓ STMP
- ✓ Met Performance Requirements
- ✓ Intelight/Q-Free





Project Requirements



- **NO SOFTWARE DEVELOPMENT**

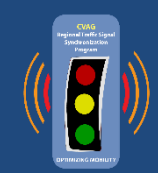
- ✓ No software development to communicate between multiple ATC units
- ✓ No center-to-center (C2C) software development between local ATMS and the Regional ATMS
- ✓ No center-to-center (C2C) software development between local ATMS, Regional ATMS, and STMP

- **NO RESEARCH & DEVELOPMENT**

- **NO TESTING ON NEW TECHNOLOGIES**

- **NO PILOT PROJECTS**

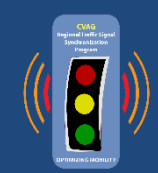




Project Requirements

**MANUFACTURERS NOT SPECIFIED IN BID
DOCUMENTS AND NOT MEETING THE
PERFORMANCE REQUIREMENTS
WILL NOT BE ACCEPTED**



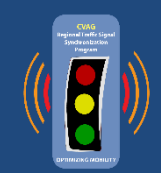


Project Requirements



Project Requirements



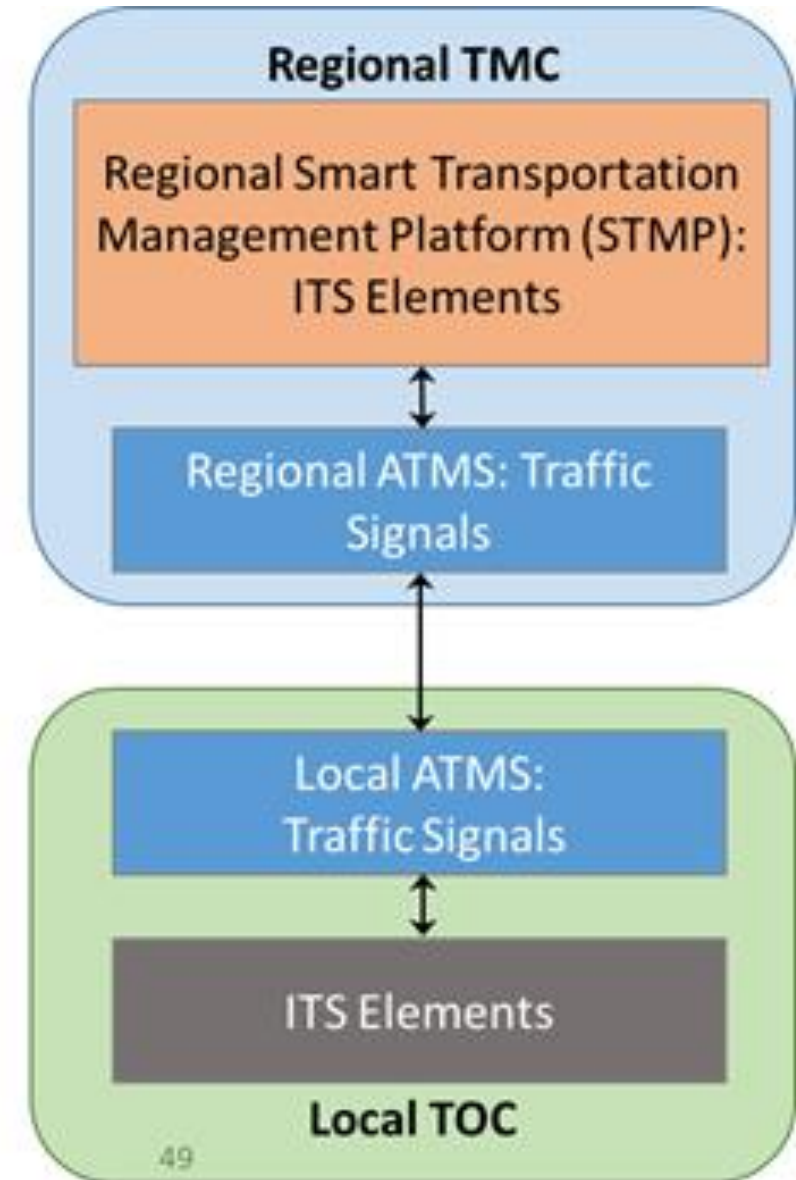


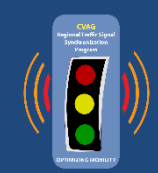
Project Requirements - ATC

➤ Advanced Traffic Control (ATC)

“SHALL” Meet ALL Performance Requirements

- ✓ **ATC, ATMS, and STMP – Same Manufacturer**
- ATC compliant (ATC 5201, V6.2.4 or better)
- ATC 5401 v02A, Application Programming Interface (API)
- **Openly sharing Management Information Base (MIBs) at NO cost**
- Next generation controller meeting the latest NTCIP national specs
- **Available in both NEMA and 2070 configurations**
- **Runs an Open-source Linux OS**
- **The ATC API shall allow multiple applications to run concurrently on a single ATC unit:**
 - ✓ Extended Features – Adaptive Control/Automated Traffic Signal, Performance Measures (ASPTMs), Future Connected Vehicle Applications





Project Requirements



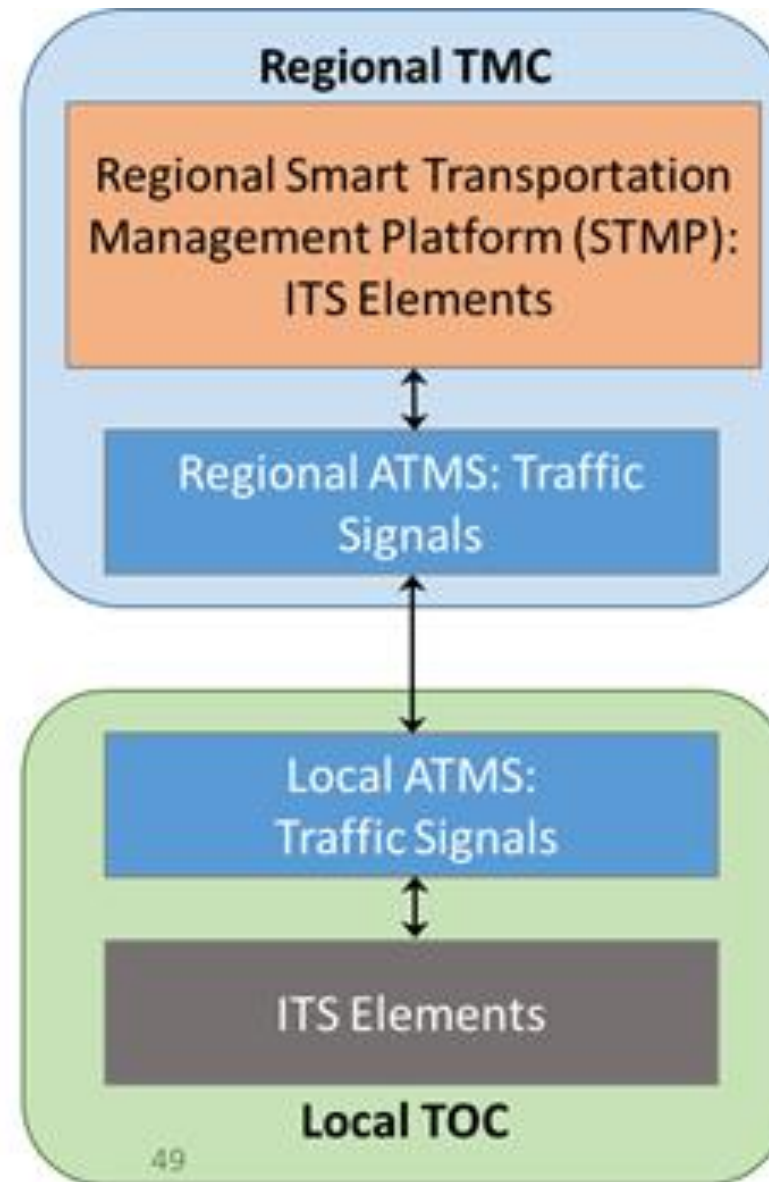
Project Requirements

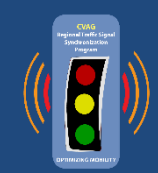




Project Requirements - ATMS

- **Advanced Traffic Management System (ATMS)**
 - **“SHALL” Meet ALL Performance Requirements**
 - ✓ **ATC, ATMS, and STMP – Same Manufacturer**
 - Open Architecture
 - Compliance to the latest NTCIP standards
 - Capability to run Server-to-Server (S2S) communications
 - Release ATC Management Information Base (MIBs) to other manufacturers at no cost
 - Interface with ATC units manufactured by others at no cost





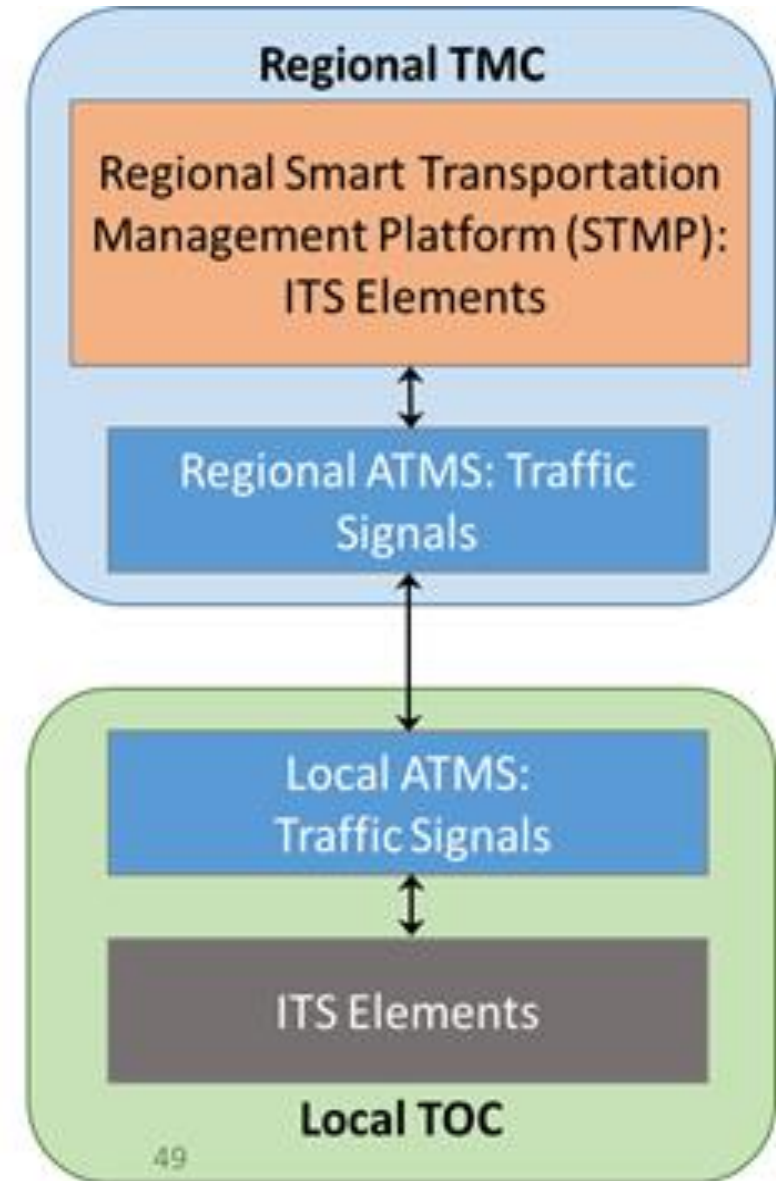
Project Requirements – TMC, TOC, SMTP

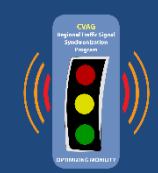
➤ Regional TMC

- **Regional Smart Transportation Management Platform (STMP): ITS Elements**
 - ✓ Interface with Various ITS Management Systems
 - ✓ Management Platform
 - ✓ **Previously Deployed at a State or Regional Level**
- **Regional ATMS: Traffic Signals**
 - ✓ Interface with Local ATMS
 - ✓ **Previously Deployed at a State or Regional Level**

➤ Local Traffic Operations Center (TOC)

- **Local ATMS: Traffic Signals**
 - ✓ Interface to Traffic Signals (Locally)
 - ✓ Interface to Other Traffic Management Systems (the Regional ATMS)



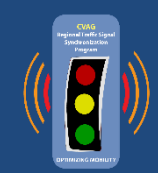


Special Requirements - Certifications

It is **REQUIRED** that the Contractor possess a Class A and Class C10 License and the Contractor's **SYSTEM INTEGRATOR SHALL POSSESS** the following certifications:

1. VMWare Certified Associate or Microsoft Certified Solutions Associate: Windows Server 2016
2. Hirschmann Network Certification, Cisco CCNA or equivalent
3. Genetec Security Center Mission Control Certification
4. Genetec Security Center Certification
5. Bosch Video Management System Professional Level
6. Bosch Video Management System Master Certification
7. Bosch Video Analytics Technical Certification
8. Education equivalent to graduation from a college accredited by the Accreditation Board for Engineering and Technology with major work in electrical or electronic engineering or equivalent degree approved by the Council for Private Postsecondary and Vocational Education under the provisions of California Education Code Chapter 3, Part 59, Division 10.
9. 5 years Bosch Analytics City / DOT experience w/ References and manufacture's confirmation
10. 2 years Bosch Smart City Applications design/implementation/support
11. 5 years Hirschmann architecture, programming, maintenance and support, Layer 2 and
12. Layer 3 city / traffic operations environment with references



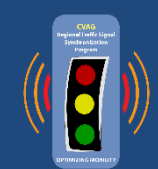


Project Requirements



Project Requirements



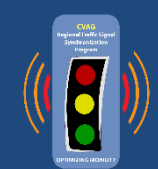


Coordination

CVAG Regional Traffic Signal Interconnect Project – Project Coordination

- CVAG, Cities, County, and Caltrans
 - Traffic Engineering/Public Works Staff
 - Traffic Signal/ITS Agency Inspectors
 - IT Staff
 - Building Inspectors
- Utility Companies
- Other On-Going Construction Projects
- Phase I and Phase II Design Team (ADVANTEC)
- Phase I CM/CI Team (TKE)
- Special Events





DBE

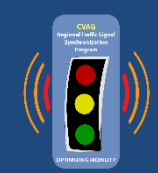
The DBE Contract goal is **14 percent**

Contractors are advised that the Disadvantaged Business Enterprise (DBE) Program is separate and distinct from a variety of business programs such as Disabled Veterans Business Enterprise (DVBE), Minority Business Enterprise (MBE), Small Business Enterprise (SBE), Women Business Enterprise (WBE), and others. DBE firms must be certified as such in order to qualify under the DBE program

It is your responsibility to verify that the DBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to:

<https://ucp.dot.ca.gov/licenseForm.htm>

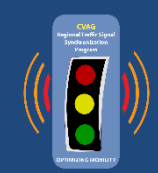




Critical Dates, Submittal Requirements

- Bids will be received at CVAG Offices at:
73-710 Fred Waring Drive, Suite 200
Palm Desert, CA 92260
On or before 3:00 p.m. on November 23, 2020
- All questions shall be put in writing and shall be received by the CVAG
No later than 3:00 p.m., November 16, 2020
- Addenda will be posted to PlanIT Reprographics' website:
www.planitplanroom.com





QUESTIONS, COMMENTS, & OTHER ITEMS

Questions: ecowle@cvag.org



Responsible, Responsive



Reminder: Please fill out Sign-in Sheet!

<https://rb.gy/1vd2wi>

