



# Pomona Valley ITS Project

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## **Project Deliverable 4.1.2** **Final Stakeholder Operational Objectives Report**

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## PROJECT DESCRIPTION

The County of Los Angeles, in cooperation with the cities within the Pomona Valley, has determined that development of an Intelligent Transportation System (ITS) in the Pomona Valley would help to reduce congestion, enhance mobility, provide traveler information during non-recurring and event traffic congestion, and manage event traffic. The Pomona Valley Intelligent Transportation Systems (PVITS) project was conceived as a recommendation from the Pomona Valley Feasibility Study completed by the MTA in 1995. The ultimate objectives of the Project are to:

- Improve mobility by optimizing traffic management on arterials and freeways;
- Enhance Route 60 capacity by better coordinating freeway traffic with parallel arterials;
- Improve agency efficiency by coordinating management of operations and maintenance efforts among and between agencies; and
- Increase agency staff productivity by providing low-maintenance, high-quality communications and computational tools to assist in daily management and coordination activities.

Phase 1 of the PVITS project is the development of a conceptual design that defines solutions to enhance capacity, reduce congestion, and improve traveler information in the Pomona Valley.

## PURPOSE OF REPORT

This Stakeholder Operational Objectives Report identifies each project stakeholder's needs, objectives, and issues that are to be considered in the planning, design, and implementation of advanced technologies for traffic control, traffic management, and traveler information systems. The objectives will be used to define the user and system functional performance requirements and serve as a guide for the conceptual design process. This report summarizes stakeholder objectives in the following areas:

- Advanced traffic management system objectives;
- Advanced traveler information system objectives; and
- Communications objectives.

These are the primary objectives of the stakeholders and the three main components of the system(s) that this project will be conceptually designing.

### 1.0 FORUM AGENCIES OBJECTIVES

The objectives described on the following pages are a result of documenting issues discussed and considered during the stakeholder outreach efforts. The outreach efforts were conducted in



order to determine each agency's objectives that could be translated or defined as requirements that need to be considered during the conceptual design of the PVITS project.

Generally, all of the Cities want to have an advanced system, capable of improving signal operations and increasing staff productivity. All of the cities and the County would like to share data related to traffic signals, incidents, and congestion data (if and when available) with each other for improved coordination and cooperation within the subregion. Most of the Cities want to maintain control of their own signals, but some would concede to relinquishing control to a Pomona Valley ITS Project partner in certain, pre-agreed-upon scenarios such as a disaster or a significant incident (a major incident that involves many vehicles, HAZMAT materials, etc.). Only a few Cities have a need for event management, as outlined in the sections below.

Each of the forum agencies' objectives for ATMS are identified according to the following basic topics:

- ATMS
  - Want/ need for an ATMS;
  - Staffing commitment;
  - Data sharing;
  - Control (maintain or opinions on relinquishing); and
  - Event management.
- ATIS
- Communications needs

## 1.1 City of Pomona

The City of Pomona has an existing Quicknet system for traffic signal control. Because the Fairplex is located in Pomona, the city has an interest in event management.

### 1.1.1 ATMS OBJECTIVES

A. Though the City of Pomona's existing Bitrans Quicknet system is operational (currently about 80 out of 140 signals are on line) the City would like the system to be upgraded or replaced in order to provide the additional functionality that the City desires for traffic management. This increased functionality will include a Windows based system and the ability to view and control CCTV. The City wants the new system to be compatible with both the Intelligent Roadway/ Rail Interface System (IR/RIS) pilot program and the PVITS project. While the City had plans to upgrade the system, they are waiting to see what the recommendations are from the IR/RIS and PVITS projects before proceeding. Pomona sees this Forum project as an opportunity to implement this upgrade.

B. Pomona would like to upgrade their system to one that provides more advanced capabilities as described above. An upgraded system would also enable them to better manage event traffic around the Fairplex as well.

C. The City is researching adaptive traffic signal control systems. The City feels that the use of an adaptive control system (throughout the City or in selected locations) might be beneficial in timing plan generation and traffic flow improvement. The City sees the cost of system detectors, required upstream of every intersection, as a barrier to the implementation of adaptive control systems within the City.



D. Pomona would like to maintain or decrease the Engineering Department's staff time spent on operating the traffic control system. Currently, system operations requires approximately 25% of staff's time. The City would not like to allocate a higher percentage of staff time to operate the system. The system requirements should account for a system that is more automated than data input intensive. The City's goal is to increase staff efficiency with an advanced system, not to increase staff time needed to operate such a system. This City goal to reduce staff time may not be met, because more functions would be added and more time would be required to fulfill these functions. However, if the system is not implemented, much more time would be needed to achieve the same level of traffic management effectiveness and efficiency than would have been the case if the system is upgraded.

E. Pomona would like the ability to share data with other agencies in the Forum, especially with ACE and the Fairplex. They would like the ability to view traffic signal and timing data from other agencies and would offer others to have the ability to view data from Pomona as well.

F. Pomona would not prefer to relinquish control of their signals, but understand that it may be necessary in certain, extreme situations, such as a natural disaster or a significant incident in order to maintain traffic flow through and within the Forum. Operational agreements would be necessary and control would be available to the operating agency only upon release by the City of Pomona.

G. Given that the Fairplex is located in Pomona, the City is interested in event management relative to the Fairplex. The City works currently with the Fairplex on event management, and while the arrangement is working well, would like to continue to improve on the working relationship. Specifically, the City would like to improve on coordination with the Fairplex during major events, such as the annual County Fair and the Immigration and Naturalization Service (INS) citizenship ceremonies that occur twice a month.

H. Pomona would like their local city control site to be located at City Hall or collocated with the Pomona Police Department substation at the Pomona Transit Center. The City is also offering to house the subregional TMC for the Pomona Valley in one of these locations. If the subregional TMC is located at the Fairplex, Pomona would support sending City staff to help operate the system at the Fairplex. Vice versa, if the subregional TMC is located at the City of Pomona, the City welcomes Fairplex staff to work there.

I. The City would like CCTV cameras at key intersections throughout the City for remote monitoring of traffic conditions and signal operations.

J. The City currently has little to no coordination with Caltrans and would like to improve on that relationship.

### 1.1.2 ATIS OBJECTIVES

A. The City of Pomona would like an ATIS consisting mainly of a web site of real-time traffic information. As described previously, the ATIS would need to be automated, operated by another jurisdiction, or staffed jointly by contributions from the Forum member agencies, as the City of Pomona is not willing to commit additional staff to operate such a system. Additionally, the City would like to see improved traffic information provided to drivers in and around the Fairplex for traffic direction and parking guidance.

B. The City is not opposed to DMS and encourages the use of them especially around the Fairplex for event management.

### 1.1.3 COMMUNICATION OBJECTIVES

A. Pomona has plans to develop a fiber-optic connection between the City's local area network (at City Hall) and Cal Poly Pomona, via Temple Avenue, for data sharing. The University is interested in monitoring and extracting data from the City's system for use in research and potentially for traveler information for students. This fiber could be sized for data collection and ITS field element communication, if necessary.

## **1.2 City of Industry**

The City of Industry does not currently have a centralized traffic signal system. The County of Los Angeles develops and implements timing plans for the City.

### 1.2.1 ATMS OBJECTIVES

A. The City of Industry would like a central system for remote operation of traffic signals within the City. Industry is especially interested in developing solutions that improve traffic flow and increase capacity on the major east-west streets that are used as freeway alternatives: Fullerton Road and Gale Avenue/ Walnut Drive. It would also be helpful to have visual confirmation of traffic conditions through CCTV cameras.

B. While the City is interested in an ATMS, there is a concern over staffing required to operate a new system. The City does not currently have any City staff for signal operations or maintenance. The City would need to identify staff positions to operate an ATMS or continue with the current arrangement with Los Angeles County. By having a central system, the City staff would be able to remotely determine where there are issues with controllers, timing, or traffic fluctuations and either make timing changes remotely or confirm remotely what the issues are that would then require a maintenance technician to go to the field.

C. The City would like to share signal and timing data with other agencies in the Forum. They would like to be able to view LA County's signal and timing data especially, given that there is a large unincorporated County area in the vicinity of the City.

D. The City does not have a preference about relinquishing control of their signals to another agency to operate, as they are currently in such an arrangement with LA County.

E. The City does not have any major event traffic generators that would warrant involvement in event management.

### 1.2.2 ATIS OBJECTIVES

A. The City of Industry would like to see an ATIS in the form of a web site in the Pomona Valley, that includes real-time information on Industry traffic as well as that of LA County and the SR 60 (Caltrans), if possible.



### 1.2.3 COMMUNICATIONS

A. The City would like to install traffic signal interconnect so that the traffic signals can remain coordinated while changing timing plans remotely. This communication interconnect would be required to operate a centralized signal system.

## **1.3 City of La Verne**

The City of La Verne does not currently have a centralized traffic signal system. Signals are operated via vehicle actuated controllers.

### 1.3.1 ATMS OBJECTIVES

A. The City would like to obtain a centralized traffic signal system. They would like to maintain the current congestion levels even with increased traffic volumes. The City does not see many traffic congestion issues, with the exception of a few days a year when Fairplex traffic adversely impacts La Verne roadways. La Verne also would like to minimize the impact of traffic from completion of the SR 210 extension.

B. The City would support the development of a system that could monitor the signals in La Verne, given that there would be no financial or additional staffing resources over and above existing staff from the City to develop, operate, or maintain it. The City would especially appreciate a system that, through remote monitoring of signals, would be able to reduce staff effort in operations and maintenance of traffic signals. The City currently contracts out traffic engineering services. Likewise, if funding were provided to the City to operate such an advanced system, they would contract out all of the services required for operations and maintenance.

C. The City is willing to share the data of such a monitoring system, if one were provided to the City. They do not see any need to view data regularly from other cities or the Fairplex, except on an as-needed basis, since there is no staff to make use of such information.

D. The City is not interested in relinquishing control of their traffic signals, yet with predetermined traffic management plans that has been agreed too between stakeholders like Fairplex, adjacent cities and LA County, some control could be relinquished.

E. The City would like to minimize the impacts of the traffic from the Los Angeles County Fair, which effects the operations of City arterials during approximately 15-20 days per year. To do so, the City would like to maintain current relations and coordination with the Fairplex. While the City doesn't see a need to be directly involved with any Fairplex-related ATIS or ATMS systems, the City supports the Fairplex, Pomona, and the County in minimizing traffic impacts through the use of such systems.

F. The City does have an interest in CCTV cameras.

### 1.3.2 ATIS OBJECTIVES

A. The City would support the development of a traveler information system that would convey real-time traffic information to travelers, especially regarding recommended routing for Fairplex events.





B. The City would like to minimize the impact of traffic from the extension of SR 210. If the ATIS would be able to contribute to this reduction, the City would be supportive.

C. If arterial-based Dynamic Message Signs (DMS) are determined to be necessary, the City would be concerned about the aesthetics of the signs in neighborhoods.

### 1.3.3 COMMUNICATION OBJECTIVES

A. The City would like to install traffic signal interconnect so that the traffic signals can remain coordinated while changing timing plans remotely. This communication interconnect would be required to operate a centralized signal system.

## **1.4 City of San Dimas**

The City of San Dimas does not currently have a centralized traffic signal system. Signals are operated via vehicle actuated controllers.

### 1.4.1 ATMS OBJECTIVES

A. The City would like to have a central traffic signal system that would enable them to remotely operate and monitor signals. They would also like the ability to visually confirm field conditions through CCTV cameras.

B. San Dimas would like to minimize City staff time and responsibilities for operation and maintenance of such a system. The City also recognizes the need for training of staff that will be working with advanced technology equipment. The City would not be able to fund operations, training, or maintenance. The City would like a system that minimizes staff time and training.

C. San Dimas would like to use the Local City Control Site to share information on traffic signal timing, incidents, and congestion with other agencies for better, more coordinated management of the network.

D. San Dimas would like to maintain control over their own traffic signals. They would not be interested in relinquishing control to another agency.

E. The City has a minimal interest in event management related to the Raging Waters site located within its boundaries because the traffic does not adversely affect the City streets.

F. The City would like to include maintenance information in the system at the local city control site. The system should enable the City to enter maintenance information and maintain it.

G. The City would like to begin implementing video detection to reduce maintenance costs/issues associated with inductive loops (this can be done without bringing video back to the local city control site from the field). The City is concerned about sharing video images with other agencies due to privacy issues. Any potential privacy issues should be addressed and shared with the City prior to the sharing of video.

H. The City would like to improve the communication process and coordination with Caltrans. In doing so, they hope to improve the signal coordination between Caltrans and City signals along the I-210 corridor in particular.



1.4.2 ATIS OBJECTIVES

A. The City supports the development of an ATIS to convey traffic information to the public via a web site.

B. The City would like to implement DMS on the arterials, but not HAR. San Dimas sees DMS as more effective than HAR, a common belief in the ITS industry based on failed implementation of HAR in other areas throughout the country (especially where staffing is limited and the system is not automated).

1.4.3 COMMUNICATION OBJECTIVES

A. San Dimas would like to install full traffic signal interconnect between jurisdictions on significant arterials for better traffic signal coordination when coordinating with other jurisdictions, especially as timing plans are changes remotely.

**1.5 City of Walnut**

The City of Walnut does not currently have a centralized traffic signal system. The City’s signals operate via vehicle actuated controllers. City traffic engineering staff is contracted out. The County of LA operates and maintains the City of Walnut’s signals.

1.5.1 ATMS OBJECTIVES

A. The City of Walnut is interested in an ATMS for viewing traffic signal operation on an as needed basis. The City does not currently have a centralized system nor the staff to operate or maintain it. The City does not have the funding nor the staff to support a full time ATMS. The City would support the installation of an automated system for the County to continue the timing and maintenance of the City’s signals, as long as the City does not have to contribute additional staff or funding.

B. The City is not willing to increase staff time in order to staff an advanced system. They would find it beneficial if there were a system that would enable contracted City staff to monitor field and controller conditions remotely, thereby reducing staff time necessary to maintain their current signals. The City would support LA County continuing to maintain the signals.

C. Walnut is open to sharing traffic signal and timing data with other agencies in the Forum.

D. The City would not be willing to relinquish control of traffic signals or timing to another agency except where predetermined traffic management plans have been agreed upon.

E. Walnut has no need for event management.

1.5.2 ATIS OBJECTIVES

A. The City would like to provide traveler information to the public through a web site and potentially other media.

### 1.5.3 COMMUNICATION OBJECTIVES

A. Walnut would like to see the installation of full traffic signal interconnect for better traffic operations.

## **1.6 City of Claremont**

The City of Claremont does not currently have a centralized traffic signal system. The City's signals operate via vehicle actuated controllers at intersections.

### 1.6.1 ATMS OBJECTIVES

A. The City would like to have a centralized signal system that would enable them to monitor signals and improve on synchronization in the City, especially along Indian Hill Boulevard. The City would use the system to implement remote monitoring and control of traffic signals, and for remote data retrieval of phase indication, timing, traffic volume and speed.

B. The City is researching adaptive traffic signal control systems. The City feels that use of an adaptive control system citywide could be beneficial in timing plan generation and traffic flow improvement.

C. Claremont is willing to dedicate one-quarter of a full-time staff person's time to operate an automated traffic management system. They would continue to contract out troubleshooting and maintenance of equipment. The City would like the system to improve response time for signal maintenance. All signal maintenance work is currently contracted out, which requires a telephone call from the City (or Police Department during non-business) hours for repair work.

D. The City would like to share data such as phase indication, timing, traffic volume, speed and occupancy with other Forum jurisdictions. Claremont supports the creation of pre-determined timing strategies by a subregional entity, such as the Pomona Valley subregional TMC. The City would especially like for the system to enable coordination on Indian Hill Boulevard with the City of Pomona signals to the south. The City would like to improve daily communication among the Pomona Valley Forum cities regarding traffic issues. The City would share data collected from the traffic management system with the City's planning department, local transit operators, emergency service agencies, and the Claremont Police Department.

E. The City would be willing to implement subregional and local control of local signals under limited conditions, where such control makes sense to all agencies involved and as long as local traffic is not negatively impacted.

F. Claremont would like to develop a special event management system for the coordination of seasonal traffic (related to school schedules), emergency management and disaster operations.

G. The City would like to install CCTV for monitoring traffic queues, incident verification, congestion monitoring, equipment status monitoring, and occasional manual traffic counting at Indian Hill Blvd./Arrow Highway, the Indian Hill Blvd./I-10 ramps, and unspecified signals near the downtown village area.



H. Claremont would like for their Local City Control Site to be connected to the Local Area Network that currently connects City Hall with the Police Department. They would like to locate the Local City Control Site within the engineering department, with an additional workstation at the police department for monitoring intersection congestion.

#### 1.6.2 ATIS OBJECTIVES

A. The City would like an ATIS in the subregion that conveys real-time traffic information via a web site and kiosks (at least one located at City Hall).

B. The City would like to install DMS upstream of the Arrow Highway/Claremont Blvd., Indian Hill Blvd./ Arrow Highway, and Indian Hill Blvd./I-10 ramp intersections. The City has concerns about the aesthetics of arterial-based DMS.

#### 1.6.3 COMMUNICATION OBJECTIVES

A. The City is in the process of developing a city-wide communication master plan that would identify the existing communication as well as the needs within the City.

B. The City would like to establish a high-speed internet link at City Hall which could be utilized for a kiosk as well.

### 1.7 **City of Diamond Bar**

The City of Diamond Bar does not currently have a centralized traffic signal system. The City's signals operate via vehicle actuated controllers at intersections.

#### 1.7.1 ATMS OBJECTIVES

A. The City of Diamond Bar would like to develop a traffic signal control system and incident management system for all signals in the City. They are especially concerned about monitoring and remote control of intersections that serve bypass traffic from the SR 57/SR 60 interchange. They would also like to provide access for the Sheriff to the incident management system for documentation and control of detours and major incidents.

B. The City would like the system design to take into account the City's limited staff resources. Diamond Bar would not be able to increase staffing to support an ATMS, and would like to see a system that improves staff efficiency.

C. The City is open to sharing information with other Forum agencies and particularly would like to coordinate across county lines on arterials such as Grand Avenue (with the City of Chino which utilizes NEMA-type signal controllers). The City recognizes that this could require additional equipment, and may need to be coordinated as part of a future phase of the PVITS project to include adjacent traffic signals outside of Los Angeles County.

D. The City would like to retain control of local signals. The City recognizes that there may be instances where control by a subregional or local entity would be more beneficial, and as such recommends informal sessions or presentations during each phase of the PVITS project to educate the City Council, since local control of signals is currently a priority of the City.

E. The City of Diamond Bar has no need for event management.



F. The City has plans to install new traffic signals by 2006 at the following locations:

- Diamond Bar Boulevard and Crestview Drive
- Gateway Center and Valley Vista
- Gateway Center and Bridgegate (lot 16)

G. The City would like this PVITS study to consider Brea Canyon Road and Pathfinder Road as regionally significant arterials, because they serve as routes for SR 60 bypass traffic to and from the west.

H. Diamond Bar would like the study to consider space available at the AQMD Headquarters in Gateway Center for use as a subregional TMC and/or the Diamond Bar Local City Control Site. The City would like this study to include the AQMD as a project stakeholder because they are an agency involved in air quality improvement and attainment, including Transportation Systems Management (TSM) and ITS projects.

I. The City would like to establish a new method of communication between the City and Caltrans to identify freeway/ramp signal problems in a timely manner.

#### 1.7.2 ATIS OBJECTIVES

A. The City of Diamond Bar would like to see an ATIS that would convey real-time traffic information to travelers via a web site.

#### 1.7.3 COMMUNICATION OBJECTIVES

A. The City would like to close the gaps that exist in the current interconnect conduits of all signals on the regionally significant arterials.

B. The City plans to delay the development of a citywide communication master plan until recommendations are made during the PVITS Conceptual Design process.

### 1.8 Los Angeles County Public Works – Local Perspective

The County has two roles in this Forum project. They act as the contract administrator and provide oversight for the project and its direction on a regional level, and the County operates and maintains traffic signals in unincorporated areas in the subregion and for the Cities of Industry and Walnut. As such, the County has two stakeholder roles. The latter perspective, as one of the local agencies with signal operation and maintenance responsibilities, is described here. The regional perspective is described in the following section.

#### 1.8.1 ATMS OBJECTIVES

A. The County would like the central system, currently being selected for the entire county, to centrally monitor and operate the traffic signals on regionally significant arterials in the unincorporated areas in the Pomona Valley Forum as well as in the City of Industry, whose signals the County operates and maintains.

B. The County has plans to staff the County TMC, to be located in the City of Alhambra, which will cover the operations of the signals in the Pomona Valley Forum.

C. The County would like to share data with other agencies within the Forum for improved traffic signal coordination on regionally significant arterials. Data would be collected for the purposes of identifying problem areas and developing new timing plans.



D. The County is not interested in relinquishing control of County signals.

1.8.2 ATIS OBJECTIVES

A. The County would like to provide the general public and public agencies with pre-trip and en-route information on roadway traffic conditions through devices such as DMS, HAR, the Internet, kiosks and in-vehicle navigation devices.

1.8.3 COMMUNICATION OBJECTIVES

A. The County would like to improve traffic signal interconnect on all of the regionally significant arterials in the unincorporated areas for improved traffic signal coordination and remote monitoring and timing plan implementation.

## 2.0 OTHER STAKEHOLDER OBJECTIVES

The objectives identified in the following paragraphs provide a summary of stakeholder outreach efforts with other agencies and organizations that will have or may have a role in the PVITS project. These outreach efforts were conducted in order to define specific requirements of non-forum agency stakeholders that need to be considered during the conceptual design process of the PVITS project. As the involvement of these stakeholders varies, and is not as integral as that of the forum agencies, the sections below describe the objectives of these stakeholders in less detail than the preceding sections. These other stakeholders' objectives are not grouped into the same categories as the forum agencies.

### 2.1 Los Angeles County Department of Public Works – Regional Perspective

To help in the on-going effort to improve mobility on congested local highways and streets throughout the County, the Department of Public Works began administering numerous multi-jurisdictional Intelligent Transportation Systems projects. The Pomona Valley Forum is one of these projects.

2.1.1 ATMS OBJECTIVES

A. The County would like to assist local agencies with the design and deployment of technologies that will enable each local agency to monitor and control traffic signal operations from a remote location on a real-time basis.

B. The County would like to provide local agencies with technologies that allow for the immediate notification of signal malfunctions and provide closed circuit television cameras that enable a jurisdiction to visually monitor roadway incidents and congestion resulting in more efficient maintenance responses where desired by the local agencies.

C. The County would like for local agencies to determine how to fund operations and maintenance in the early stages of project conceptual design as the MTA has precluded operational funding from being provided for ITS projects.

D. The County would like to share data with other agencies, and would especially like to ability to monitor the signals in all of the Forums, including the Pomona Valley. Data would be collected for the purposes of identifying problem areas and developing new timing plans.



- E. The County is in the process of developing a County traffic management center (TMC) that will house a centralized traffic signal system for operation of traffic signals in unincorporated areas in the County. Cities will be able to select their own traffic signal management system or the County selected one.
- F. The County would like to assist in the development of an Event Traffic Management Plan for the Fairplex.
- G. The County would like to develop a subregional traffic management center that serves as the central clearinghouse for the collection, storage and dissemination of traffic data in the Forum. The location of such a subregional TMC would be determined through discussions with local Forum agencies.
- H. The County would like to improve communication and cooperation between Los Angeles County and the Forum cities.

**2.1.2 ATIS OBJECTIVES**

- A. The County would like to provide the general public and public agencies with pre-trip and en-route information on roadway traffic conditions through devices such as Dynamic Message Signs, Highway Advisory Radio, the Internet, kiosks and in-vehicle navigation devices where desired by the local agencies.

**2.1.3 COMMUNICATION OBJECTIVES**

- A. The County would like to improve traffic signal communications on all of the regionally significant arterials in the County for improved traffic signal coordination and remote monitoring and timing plan implementation.

**2.2 California Department of Transportation (Caltrans District 7)**

- A. Through coordination efforts with various Caltrans departments and staff, existing and proposed Caltrans equipment that may be considered for use in the conceptual design of the PVITS project have been documented.
- B. There are some areas where Caltrans signals are part of synchronized corridors where Los Angeles County has completed timing projects. There are no written agreements for this cooperative effort.
- C. Caltrans would like to improve communication and cooperation between the Forum Cities and Caltrans.

**2.3 Alameda Corridor East Construction Authority (ACE)**

- A. The ACE Construction Authority is currently developing recommendations for a traffic signal system to apply to several signals in a demonstration project for a highway-rail interface within the City of Pomona. This recommendation, along with the recommendation of the County for the County-wide system should be taken into consideration in recommending, designing, or choosing other ATMS in the Forum. If not the same system, at a minimum the recommended system(s) should be compatible with one another for ease of signal synchronization and data sharing throughout the Forum.



B. ACE will develop a traffic operations center (TOC) for the IR/RIS project. This could be coordinated with subregional and local city control site recommendations as well.

#### **2.4 California Polytechnic University at Pomona**

A. There are no existing or planned traffic signals on campus property, so coordination is not a concern.

B. Three new electronic information marquees installed on campus for information dissemination should be considered when developing recommendations for the PVITS project. These marquees could be tied in to PVITS system and used to provide real-time traveler information on study area roadways.

C. Cal Poly Pomona would like to improve coordination of campus events with the City of Pomona and Pomona Police Department. The University suggests that the PVITS project may want to implement remote monitoring and control capabilities of specific traffic signals to allow the City of Pomona and the Pomona Police Department to better manage traffic impacts during large campus events, such as graduation ceremonies.

#### **2.5 Foothill Transit District**

A. The Foothill Transit District would like to see signal priority implemented as a part of the PVITS project.

B. Foothill Transit would like to collect traffic congestion information, in the form of speed data, back to the Foothill dispatch center from other agencies' ATMS. In other words, they would like to monitor other agencies' ATMS for speed data.

C. Foothill Transit would like to improve information dissemination methods between agencies.

D. Foothill Transit would like to provide transit information at the Fairplex to provide travelers with transit options. Foothill transit is currently developing a system of kiosks.

#### **2.6 Los Angeles County Metropolitan Transit Authority (MTA)**

A. The MTA would like to investigate opportunities for cost-savings because of automated traffic management.

B. The MTA would like to see the ACE operations center utilized as a joint facility with the PVITS subregional TMC.

C. The MTA envisions the subregional TMC as a monitoring location rather than as a control center.

D. The MTA envisions that the Local City Control Sites would be more specific, local agency monitoring location.

E. The MTA would like to see the County's TMC established as the primary coordination location for the project area.





## 2.7 Mount San Antonio College

A. Mount SAC would like to resolve the conflict between northbound right turns and northbound through bicycle movements at the Grand Avenue and Temple Avenue/Amar Road intersection.

## 2.8 Raging Waters

A. Raging Waters would like to install a CCTV camera system that monitors the queue at the main ticketing gate, near the roadway split at the Puddingstone Reservoir.

B. Raging Waters would like to monitor video images from any existing or future Caltrans camera installations near the Via Verde and I-210 interchange to benefit on-site traffic operations.

C. Raging Waters would like the study team to consider the traffic congestion on the I-210/Via Verde ramps that occurs on high attendance days at both Frank G. Bonelli Regional Park and Raging Waters.

D. Raging Waters would like to continue the operational coordination that is provided by the Los Angeles County Parks and Recreation staff, who manage the Frank G. Bonelli Regional Park.

E. Raging Waters would like to continue to have the Parks and Recreation staff alert Raging Waters staff to adjacent roadway traffic issues.

## 3.0 CONCLUSIONS

All the cities in the Pomona Valley ITS stakeholders support the efforts to establish intelligent transportation system infrastructure on the road network in the project area. There is agreement that the installation of this equipment may improve traffic operations in general and assist in incident and event traffic management.

The cities do not have staff to operate the system on a full time basis and staff will probably be used on an as needed basis.

All cities would prefer that ATIS is installed to exchange traveler information between each other and the general public.

All the cities support the installation of a centralized signal control system.