



# **TRANSPORTATION TECHNICAL ADVISORY SUB-COMMITTEE AGENDA**

**WEDNESDAY, MAY 27, 2020**  
10:00 a.m.

Pursuant to Governor Newsom's Executive Order N-29-20 (March 18, 2020), the Transportation Technical Advisory Sub-Committee meeting will only be conducted via video/teleconferencing.

## **INSTRUCTIONS FOR ELECTRONIC PARTICIPATION**

**Join Zoom Meeting – from PC, Laptop or Phone**

**<https://us02web.zoom.us/j/87522581348?pwd=U2dtbm9CeFRxc1pRbk5na1JJZzFUQT09>**

**Meeting ID: 875 2258 1348 (applies to all)**  
**Password: 031448**

**Teleconference Dial In:**  
**+1 669 900 9128 US**

**If you are unable to join the meeting via Dial In, please call 760-346-1127.**

**Members of the public are encouraged to submit comments in connection with the Transportation Technical Advisory Sub-Committee meeting, by email to: [cvag@cvag.org](mailto:cvag@cvag.org) by 5:00 p.m. on the day prior to the committee meeting. Comments intended to be read aloud into the record, should be no more than 300 characters in length.**

**THIS MEETING IS HANDICAPPED ACCESSIBLE.  
ACTION MAY RESULT ON ANY ITEMS ON THIS AGENDA.**

1. **CALL TO ORDER** (Chair Joel Montalvo, City of Palm Springs)

2. **ROLL CALL**

A. **Member Roster**

**P4**

3. **PUBLIC COMMENTS ON AGENDA ITEMS**

This is the time and place for members of the public to address the Transportation Technical Advisory Sub-Committee on agenda items. At the discretion of the Chair, comments may be taken at the time items are presented. Please limit comments to three (3) minutes.

4. **CHAIR / DIRECTOR ANNOUNCEMENTS**

5. **CONSENT CALENDAR**

A. **Approve the April 13, 2020 Transportation Technical Advisory Sub-Committee Minutes**

**P5**

6. **DISCUSSION/ACTION**

A. **Regional Signal Synchronization - Pilot Program**

**P8**

**Recommendation:** Accept the results of the Advanced Traffic Controllers (ATC) and Advanced Traffic Management System (ATMS) Pilot Project and discuss the Intelight/QFree ATC units, ATMS platform, and STMP platform representing the preferred standard meeting the performance requirements of the Program and authorize the distribution of Phase I PSE to individual jurisdictions.

[CVAG Regional TSS Program Pilot Project Deployment Evaluation Report](#)

B. **Riverside County Transportation Analysis Model (RIVCOM) – Future-Year Network Approach**

**P11**

**Information Only. Receive and file.**

7. **PUBLIC COMMENTS ON NON-AGENDA ITEMS**

This is the time and place for members of the public to address the Transportation Technical Advisory Sub-Committee on items of general interest within the purview of this committee. Please limit comments to two (2) minutes.

**8. ANNOUNCEMENTS**

Upcoming Zoom Meetings:

**Transportation Committee – Monday, June 1, 2020 at 10:00 a.m.**

**Executive Committee- Monday June 1, 2020 at 4:30 p.m.**

**Transportation Technical Advisory Sub-Committee – Monday, June 22, 2020 at 10:00 a.m.**

**General Assembly – June 29, 2020 – Time to be Determined**

**9. ADJOURNMENT**

**ITEM 2A**

**TRANSPORTATION TECHNICAL  
ADVISORY SUB-COMMITTEE  
ROSTER**



<b>Transportation Technical Advisory Sub-Committee Members</b>	
City of Blythe	<b>Daniel Ojeda</b> Interim Public Works Director
City of Cathedral City	<b>John Corella</b> Public Works Director, City Engineer
City of Coachella	<b>Gabor Pakozdi</b> Contract City Engineer <b>Maritza Martinez</b> Public Works Director
City of Desert Hot Springs	<b>Daniel Porras, Vice Chair</b> Public Works Director, City Engineer <b>Nick Haecker</b> Public Works Manager
City of Indian Wells	<b>Ken Seumalo</b> Public Works Director
City of Indio	<b>Tim Wassil</b> Public Works Director <b>Eric Weck</b> Principal City Engineer
City of La Quinta	<b>Bryan McKinney</b> City Engineer, Director of Public Works <b>Dan Castro</b> Design Developer
City of Palm Desert	<b>Tom Garcia</b> Public Works Director <b>Randy Bowman</b> Senior Transportation Engineer
City of Palm Springs	<b>Joel Montalvo, Chair</b> Assistant Director of City Engineer <b>Marcus Fuller</b> Assistant City Manager/City Engineer
City of Rancho Mirage	<b>Jesse Eckenroth</b> Public Works Director
County of Riverside	<b>Mojahed Salama</b> Deputy Director of Transportation <b>Dowling Tsai</b> County Engineer Project Manager
Agua Caliente Band of Cahuilla Indians	<b>Dan Malcolm</b> Planning Manager <b>Margaret Park</b> Planning Director
SunLine Transit	<b>Rohan Anthony Kuruppu</b> Chief Planning Consultant

**TRANSPORTATION TECHNICAL ADVISORY  
SUB-COMMITTEE  
MINUTES OF MEETING  
MONDAY, APRIL 13, 2020**



The audio file for this committee meeting can be found at <http://www.cvag.org/audio.htm>

**1. CALL TO ORDER**

The Transportation Technical Advisory Sub-Committee (TTAS) meeting was called to order on Monday, April 13, 2020 at 10:00 a.m. by Chair Joel Montalvo, via Zoom Conference Call.

**2. ROLL CALL**

A roll call was taken, and it was determined a quorum was present.

**MEMBERS/ ALTERNATES PRESENT**

John Corella  
Gabor Pakozdi  
Daniel Porras  
Ken Seumalo  
Tim Wassil  
Bryan McKinney  
Tom Garcia  
Joel Montalvo  
Jesse Eckenroth  
Dowling Tsai  
Dan Malcolm

**AGENCY**

City of Cathedral City  
City of Coachella (Arrived During Item 7A)  
City of Desert Hot Springs  
City of Indian Wells  
City of Indio  
City of La Quinta  
City of Palm Desert  
City of Palm Springs  
City of Rancho Mirage  
County of Riverside  
Agua Caliente Band of Cahuilla Indians

**NON-VOTING MEMBERS PRESENT**

Rohan Kuruppu

SunLine Transit

**MEMBERS ABSENT**

Daniel Ojeda

City of Blythe

**OTHERS PRESENT**

Anne Azzu  
Carlos Ortiz  
Johnny Dorado  
David Salgado  
John Cox  
Randy Bowman

KOA Corporation  
Advantec

SCAG

**STAFF PRESENT**

Martin Magaña  
Eric Cowle  
Bassam Al-Beitawi  
Jim Sullivan  
Erica Felci  
Joanna Stueckle  
Beverly Newton

**3. PLEDGE OF ALLEGIANCE**

Joel Montalvo led members in Pledge of Allegiance.

**4. PUBLIC COMMENTS**

Letter from Brad Anderson was read during public comments.

**5. TRANSPORTATION TECHNICAL ADVISORY SUB-COMMITTEE MEMBER/  
DIRECTOR COMMENTS**

None

**6. CONSENT CALENDAR**

**A. Approve the February 3, 2020 Transportation Technical Advisory Sub-Committee Minutes**

**IT WAS MOVED BY MEMBER TIM WASSIL AND SECONDED BY MEMBER TOM GARCIA TO APPROVE FEBRUARY 3, 2020 TRANSPORTATION TECHNICAL ADVISORY SUB-COMMITTEE MINUTES.**

**THE MOTION CARRIED WITH 10 AYES AND 2 MEMBERS ABSENT.**

<b>MEMBER OJEDA</b>	<b>ABSENT</b>
<b>MEMBER CORELLA</b>	<b>AYE</b>
<b>MEMBER PAKOZDI</b>	<b>ABSENT</b>
<b>MEMBER PORRAS</b>	<b>AYE</b>
<b>MEMBER SEUMALO</b>	<b>AYE</b>
<b>MEMBER WASSIL</b>	<b>AYE</b>
<b>MEMBER MCKINNEY</b>	<b>AYE</b>
<b>MEMBER GARCIA</b>	<b>AYE</b>
<b>MEMBER MONTALVO</b>	<b>AYE</b>
<b>MEMBER ECKENROTH</b>	<b>AYE</b>
<b>MEMBER TSAI</b>	<b>AYE</b>
<b>MEMBER MALCOLM</b>	<b>AYE</b>

**7. DISCUSSION/ACTION**

Staff requested that item 7B be discussed before 7A. Chair Montalvo invited Eric Cowle to present Regional Signal Synchronization item.

**B. Regional Signal Synchronization Update – Eric Cowle**

Mr. Cowle presented the staff report. Discussion ensued.

**A. Regional Signal Synchronization Pilot Program – Eric Cowle**

Mr. Cowle presented the staff report. Carlos Ortiz from Advantec gave a PowerPoint presentation. Discussion ensued.

8. **PUBLIC COMMENTS ON NON-AGENDA ITEMS**

None

9. **ANNOUNCEMENTS**

Upcoming Meetings at 73-710 Fred Waring Drive, Suite 119, Palm Desert:

**Transportation Committee – Monday, May 4, 2020 at 10:00 a.m.**

**Transportation Technical Advisory Sub-Committee – To Be Announced**

10. **ADJOURNMENT**

There being no further business, the TTAS meeting adjourned at 11:17 a.m.

Respectfully Submitted,

*Beverly Newton*  
CVAG Office Assistant

**ITEM 6A**

Coachella Valley Association of Governments  
Transportation Technical Advisory Subcommittee  
May 27, 2020



**Staff Report**

**Subject:** Regional Signal Synchronization – Pilot Project

**Contact:** Eric V. Cowle, Transportation Program Manager ([ecowle@cvag.org](mailto:ecowle@cvag.org))

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**Recommendation:** Accept the results of the Advanced Traffic Controllers (ATC) and Advanced Traffic Management System (ATMS) Pilot Project and discuss the Intelight/QFree ATC units, ATMS platform, and STMP platform representing the preferred standard meeting the performance requirements of the Program and authorize the distribution of Phase I PSE to individual jurisdictions.

**Background:** In its July 15, 2019 meeting, the Transportation Committee discussed the merits of a change in the design approach. Instead of just assuming that the two current controller vendors deployed throughout the Coachella Valley would remain in place, the signal synchronization project would develop a performance-based standard for the valley's specific needs that would result in one controller for the entire region. A key benefit to selecting one performance-based standard is that the project could be expanded to include the new controllers in *all* signalized intersections in the Coachella Valley. By replacing all the controllers within Phase I and II construction, cities will not be left with "legacy systems" to operate on top of the new regional synchronization project.

The Executive Committee ultimately approved this approach in their December 2019 meeting.

In developing the performance-based standard, the following considerations clarified CVAG's needs:

- The ability for all components of the network to be able to communicate with each other in real time, including the latest federal standards with respect to controller software applications
- The desire to utilize off-the-shelf hardware and software and eliminate the need for expensive, customized software; and
- The proven ability for the controller to run multiple transportation applications concurrently.

As construction plans for Phase I of the regional signal synchronization project were nearing completion in November 2019, the TTAS recommended that, given the new standards and technologies that the project would be introducing to the Coachella Valley, a pilot project should be completed prior to start of construction to demonstrate and validate the performance of traffic signal controllers reflecting the proposed new performance-based standard paired with the corresponding software. The pilot project was undertaken between multiple jurisdictions and



included some of the corridors contained within Phase I of the project. This pilot project has been completed.

TTAS also requested that the pilot be completed prior to distributing the project's plans and specifications to the cities for approval. CVAG's Executive Committee authorized this pilot project at its December 2019 meeting.

CVAG staff met with FHWA and Caltrans staff in December 2019. Jesse Glazier of FHWA commented that such a pilot project should not be conducted by the project's construction contractor, and that the pilot project should take place outside of the actual project's construction. FHWA also pointed out that federal regulations changed in 2019 to allow for individual technology manufacturers to be identified in the bid package for federally funded ITS projects.

Working with Advantec, the engineering consultant for the regional signal synchronization project, CVAG set up an agreement to purchase the necessary equipment with local funds for the pilot project and have a third-party install the equipment and software in three cities: Palm Springs, Cathedral City and La Quinta. One additional communication link was established with a signalized intersection (Ramon Road and Da Vall Drive) that Cathedral City and Rancho Mirage share. The total cost of procuring the hardware and software along with the installation in the three cities cost under \$50,000, within the Executive Director's signature authority for this project.

Installation of the 10 advanced traffic controllers (ATCs) in the three cities took place over a two-week period in March prior to morning peak hour traffic, typically between the hours of 5 a.m. and 7 a.m. Field installation of the traffic controllers went very well.

Installation of the Advanced Transportation Management System (ATMS) software at the City Halls in the three pilot project cities and the Regional ATMS software and the Smart Transportation Management Platform software (STMP) at CVAG's Office were more complicated. As the pilot project was not connecting via fiber optic cable as the actual project will, a public wireless cellular account had to be established to allow for communication between the field equipment, the cities, CVAG, and ADVANTEC. The wireless connection still had to come into the cities'/CVAG networks through their server and behind their firewalls. This turned out to be complicated and a bit different for each city/CVAG, but overall, the process went well.

"Burning-in" the 10 new controllers proved to be a challenge due mostly to the new COVID-19 working conditions. Some IT staff were on vacation, and others were working from home. The public cellular lines were overloaded and keeping all the new controllers live to view with the software was a challenge. However, the team persevered and moved forward with the pilot project.

The pilot project has been successfully completed, and the final report has been shared with this staff report. For now, the regional signal synchronization project schedule anticipates going out to bid by the end of June 2020. Depending on any changes or delays that may take place, the schedule may get pushed back to allow time for the plans to be revised and finalized. Critical path elements are currently tied to FHWA's completion of their review, the 3<sup>rd</sup> party review recommendations or changes and approval of the pilot project.

At this point, CVAG has not yet received FHWA's comments, which should be forthcoming any day. The 3<sup>rd</sup> Party Review will be completed by the end of May.

Based on the overall ATC, ATMS, STMP evaluation and results of the Pilot Project, ADVANTEC recommends selecting Intelight/QFree ATC units, ATMS platform, and STMP platform as the preferred manufacturer that meets the performance requirements of the Program.

The evaluation of the Pilot Project ATC, ATMS, and STMP provides the following: “Open Architecture”, MIBs at no cost to the agencies, Application Programming Interface (API), and Extended Features – Adaptive Control/Automated Traffic Signal Performance Measures (ASPTMs); and meets the overall project goals, objectives and performance requirements.

As previously indicated, a major objective of the project is to avoid special software development to communicate between the proposed signal controllers, the Traffic Operations Centers (TOCs) and the Regional Traffic Management Center (TMC). The Intelight/QFree ATC units, ATMS platform, and STMP platform meets such requirements. **While Advantec has recommended going with the specific manufacturer, the TTAS needs to discuss whether to go to bid with the standard that Intelight represents, or with the Intelight itself.**

Through the Technology Assessment, TTAS has identified several technologies where any ambiguity was eliminated, and a specific manufacturer selected (i.e. Bosch cameras). There is risk in specifying a standard that may be difficult to determine adherence in a bid package.

**ITEM 6B**

**Coachella Valley Association of Governments  
Transportation Technical Advisory Sub-Committee  
May 27, 2020**



**Staff Report**

**Subject:** Riverside County Transportation Analysis Model (RIVCOM) - Future-Year Network Approach

**Contact:** Martin Magaña, Director of Transportation ([mmagana@cvag.org](mailto:mmagana@cvag.org))

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**Information Only. Receive and file.**

**Background:**

Development of the RIVCOM kicked-off in August 2018. The project team lead consultant is WSP with assistance for Fehr & Peers. The project team has been developing the base-year model and is in the process of validating the model. The project team is also in the process of beginning to develop the future-year model. Prior to these efforts, an approach is being proposed on how the future-year roadway network will be developed.

RIVCOM is using base year data from 2018 and a future year of 2045. For both model years, the adopted Southern California Association of Governments (SCAG) 2020 RTP/SCS model inputs (tier 2 Traffic Analysis Zone (TAZ) boundaries, socio-economic data, and fiscally constrained roadway networks) will be used as a starting point. The consultant has reached out to the Coachella Valley cities to ensure they agree with the TAZ boundaries, base year and future year population and employment allocations, and base year and future year networks.

The current RIVTAM from 2019 used data from the SCAG Regional Transportation Model, which utilized Base Year Data for 2008 and Forecast Year Data for 2035. When applying this model in projects it was found that that the future year network includes a number of unfunded roadway improvements which makes the model unqualified for CEQA assessment without making significant changes. In addition, inconsistencies of the RIVTAM data with SCAG's current regional travel model and the 2020 RTP/SCS raises concerns that cities could be open to legal challenges.

Therefore, the consultant is proposing an approach on how the future-year roadway network will be developed. Attached is a technical memorandum from Fehr & Peers that will be presented to the Public Works Committee on May 14, 2020. A representative from WRCOG has requested to present this memo as well to the TTAS to discuss the memorandum.

**Attachment**

RIVCOM Future Year Network Assumptions memo.

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## TECHNICAL MEMORANDUM

**Date:** 04.22.2020

**To:** Chris Gray, Chris Tzeng, WRCOG

**From:** Jason D. Pack, P.E., Jinghua Xu, Ph.D., P.E., Fehr & Peers

**Subject:** RIVCOM Future Year Network Assumptions

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Fehr & Peers, as a subconsultant to WSP, is assisting WRCOG in the development of the updated travel demand forecasting model (which will be known as RIVCOM). Part of our effort is developing the 2045 future year roadway network for inclusion into the travel demand model that will provide a baseline for long-range planning and analyses. This future year network will not preclude model users from developing scenario- or project-specific networks; rather, it will be the "no-build" or "baseline" network that the scenario- or project-specific networks will be built from. The purpose of this memorandum is to document the approach to developing the 2045 future year roadway network and kick-off a discussion between WRCOG and CVAG member agencies.

It is WRCOG's anticipation that the main uses of the RIVCOM model will be:

- TUMF updates
- Local agency planning assessment:
  - General Plans
  - Specific Plans
  - Mobility Planning
  - Climate Action Plans
- Local agency development projects
  - Estimating VMT for CEQA assessments
  - Estimating traffic volumes for traffic studies
- Infrastructure studies

Most of the applications noted above include CEQA-level assessment. One major concern associated with the previous model is that it included unfunded roadway improvements that were included in an agency's General Plan Circulation Element. Although this can be used to do buildout-scale planning for local agencies, it is not an appropriate tool for use in CEQA assessment. Specifically, CEQA requires all

assumptions to be reasonably foreseeable, and inclusion of unfunded roadways does not pass the typical test for inclusion in CEQA-level assessment. Given the application of the model for use in CEQA-level assessment, it is the consultant's team recommendation that the network be based on a fiscally constrained roadway network (e.g. only including roadways that have some level of assured funding) to maximize the defensibility of the model results and to ensure that the base model assumptions are appropriate for most applications.

The remainder of this memorandum provides additional information related to this approach.

## **Background**

RIVTAM, the current model in use, was completed in May 2009. It used data from the SCAG Regional Transportation Model, which utilized Base Year Data for 2008 and Forecast Year Data for 2035. It was observed when applying the model in projects that the future year network included a number of unfunded roadway improvements (many of which were consistent with General Plan designations), which makes the model not qualified for CEQA assessment without significant updates. Furthermore, the inconsistency of the RIVTAM data with SCAG's current regional travel model and the soon-to-be-adopted 2020 RTP/SCS creates concern that agencies could be susceptible to CEQA challenges. As such, the current RIVTAM model network data are outdated and will not be carried forward.

RIVCOM, which will replace RIVTAM, will have a base year of 2018 and a future year of 2045. For both model years, the adopted SCAG 2020 RTP/SCS model inputs (tier 2 boundaries, socio-economic data, and fiscally constrained networks) will be used as a starting point but considerable outreach is being done to ensure that local jurisdictions are in agreement with the RIVCOM-specific TAZ boundaries, the base year and future year population and employment allocation, and the base year and future year networks.

It should be noted that it is standard practice to use a fiscally constrained plan or set of committed projects when forecasting travel demand for long-range transportation plans or as the "no build" comparison when performing alternative analyses for infrastructure improvements and is the appropriate assumption set when doing any CEQA-level assessment.

It should also be noted that the 2045 network that will be part of the RIVCOM model package can be modified by any of the agencies to include any or all projects in a city's General Plan Circulation Element or for applications where CEQA considerations are not part of the analysis (e.g. when it makes sense to model a financially unconstrained scenario). Model users will have the flexibility within the model interface to designate the appropriate network for their study and build from the "base" network assumptions, but it is the goal of the model development team to make the model useful for the most common applications of the model.

## Recommended Approach

The consultant team, when developing the future roadway network, will follow this approach:

1. Utilize the SCAG 2020 RTP/SCS fully funded project list to identify network improvements that will be coded into the 2045 future year network.  
[https://connectsocal.org/Documents/Proposed/pfConnectSoCal\\_Project-List.pdf](https://connectsocal.org/Documents/Proposed/pfConnectSoCal_Project-List.pdf)
2. For any local improvements NOT identified in the RTP/SCS where the local agency would like the network improvement included in the model, the local agency will need to demonstrate a funding commitment for the project. This could include:
  - a. Identified in the City's CIP and is fully funded
  - b. Fully funded through TUMF or a local traffic impact fee program
  - c. Conditioned to be implemented by a project that has been approved by the local agency

While we will try to determine projects that fall into category 2 above, local jurisdictions, during their review of the proposed 2045 network, should bring those projects to our attention.