



## **I-710 Technical Advisory Committee**

Wednesday, January 20, 2010

1:30PM – 3:30 PM

*Gateway Cities Council of Government Offices*

*16401 Paramount Boulevard, 2<sup>nd</sup> Floor Conference Room*

*Paramount, CA*

### **AGENDA**

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- I. CALL TO ORDER**
  - II. ROLL CALL – BY SELF-INTRODUCTIONS**
  - III. PLEDGE OF ALLEGIANCE**
  - IV. AMENDMENTS TO THE AGENDA** – This is the time and place to change the order of the agenda, delete or add any agenda item(s)
  - V. PUBLIC COMMENTS** – Three minutes for each speaker
  - VI. CONSENT CALENDAR**
    - A. Approve Minutes of the November 18, 2009 Meeting
  - VII. REPORTS**
    - A. Zero Emission Vehicles Presentation by CALSTART  
**SUGGESTED ACTION:** Receive and File Report
    - B. I-710 Construction Staging Concepts Presentation  
**SUGGESTED ACTION:** Concur with Recommendations on Construction Staging/Phasing Concept(s) and Recommend to the Project Committee For Concurrence and/or Give Direction to Staff

- C. I-710 CAC Recommendations Continued from Project Committee Meeting of October 29, 2009

**SUGGESTED ACTION:** Receive and File Reports and/or Give Direction to Staff

- D. Status Reports on I-710 Corridor Project EIR/EIS
1. Engineering – Oral Status Report
    - a. Schedule
    - b. Completed Tasks/Studies (preceding 3 months)
    - c. Current Tasks/Studies
    - d. Traffic Modeling Reports Updated Projections Presentation
    - e. Stormwater Treatment Approach – Presentation
    - f. Utility Relocation Study – Presentation and Status
    - g. Value Analysis (VA) Study Results
    - h. 3-Month Look Ahead
  2. Environmental – Oral Status Report
    - a. Overall Status
    - b. Other Studies
    - c. 3-Month Look Ahead
  3. Community Participation – Oral Status Report
    - a. Local Advisory Committees
    - b. Subject Working Groups
    - c. Corridor Advisory Committee
    - d. Meetings Update List and Schedule
    - e. 3-Month Look Ahead

**SUGGESTED ACTION:**

1. Receive and File Reports and/or Give Direction to Staff.
2. Make the recommendations to the Project Committee that higher truck projections be used and that Alternatives 6A and 6B include maximum truck volume lane assumptions; and/or Give Direction to Staff.

**VIII. COMMENTS FROM COMMITTEE MEMBERS**

**IX. ADJOURNMENT**

IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT THE GATEWAY CITIES COG OFFICE AT (562) 663-6850. NOTIFICATION 48 HOURS PRIOR TO THE MEETING WILL ENABLE THE COUNCIL OF GOVERNMENTS TO MAKE REASONABLE ARRANGEMENT TO ENSURE ACCESSIBILITY TO THIS MEETING.

**VI. CONSENT CALENDAR**  
**Item A.**

Approve Minutes of the  
November 18, 2009 Meeting

**MINUTES OF THE MEETING OF THE  
I-710 CORRIDOR PROJECT EIR/EIS  
TECHNICAL ADVISORY COMMITTEE  
16401 Paramount Blvd., Paramount, CA  
November 18, 2009**

**I. Call to Order**

The meeting was called to order by Mark Christoffels at 1:44 p.m.

**II. Roll Call**

PRESENT: Jim Harris, City of Bell Gardens; Victor Rollinger, City of Carson; Alex Hamilton, City of Commerce; Mark Christoffels, City of Long Beach; Daniel Ojeda, City of Lynwood; Mohammad Mostahkami, City of South Gate; Phil Doudar, County of Los Angeles; Jolene Hayes, POLB; Kerry Cartwright, POLA; Ernest Morales, MTA; Garrett Damrath, Caltrans; Philip Law, SCAG; Susan Nakamura, SCAQMD; Gary Garrigue, SCE.

ABSENT: Bill Pagett, City of Paramount and City of Maywood, Chair; Carlos Alvarado, City of Bell and City of Cudahy; Ed Norris, City of Downey; Patrick Fu, City of Huntington Park; Dave Hewitt, City of Compton; Charlie Honeycutt, City of Signal Hill; Kevin Wilson, City of Vernon; Michelle Noch, FHWA & FTA; Mark Sedlacek, LADWP; Art Goodwin, ACTA; Tommi Tyler, CHP.

Other attendees included: Adrian Alvarez, MTA; Ernesto Chavez, MTA; Jack Waldron, URS; Rob McCann LSA; Pat McLaughlin, MIG; Lan Saadatnejadi, HDR; Hans Korve, Dragadus; Jerry Wood, GCCOG; Mike Keenan, POLA; Jocelyn Vivar, EYCEJ; Doug Smith, URS; Jack Joseph, GCCOG

**III. Pledge of Allegiance**

Jolene Hayes led the Pledge of allegiance.

**IV. Amendments to the Agenda**

There were no amendments to the agenda.

**V. Public Comments**

There were no public comments.

## **VI. Consent Calendar**

It was moved by Mohammad Mostahkami, seconded by Phil Doudar, to approve the minutes of October 21, 2009. The motion was approved unanimously.

## **VII. Reports**

### **A. Report on I-710 PC Meeting – Reviews and Actions**

Jerry Wood reported on the actions of the I-710 Project Committee meeting held on October 29, 2009. The CAC recommendations were adopted by the Project Committee with the following changes or actions:

- a. AQMD significance thresholds will be used but not adopted for the EIR/EIS.
- b. Construction staging and near-roadway modeling were deferred until the January 28 meeting pending analysis from the project team.
- c. The AQAP was presented and the Project Committee approved that it will include the construction staging analysis, the near-road way modeling analysis and the Health Impact Assessment analysis. The Project Committee also requested that a Community Medical Needs Assessment be included in the AQAP.
- d. The Project Committee also approved the change in wording describing Alternative 6B as recommended by the TAC.

It was moved by Victor Rollinger, seconded by Phil Doudar, to receive and file the report. The motion passed unanimously.

### **B. Gateway Cities Air Quality Action Plan Status Report**

Jerry Wood presented and reviewed the Air Quality Action Plan draft scope of work with the TAC. He also explained the status of the RFP. Susan Nakamura asked that Environ coordinate with AQMD on the report on near source modeling.

After discussion it was moved by Kerry Cartwright, seconded by Victor Rollinger, to receive and file the report. The motion passed unanimously.

C. Oral Status Reports – Engineering

Jack Waldron of URS presented and reviewed the status report for engineering. This included a discussion on the status of the geometric plan refinements, utility coordination and coordination with the I-5 project.

After some discussion, it was moved by Jolene Hayes, seconded by Victor Rollinger, to receive and file the status report. The motion was approved unanimously.

D. Oral Status Reports – Environmental Studies

Doug Smith of URS gave a presentation on the status of the traffic modeling and a discussion on the approach for the arterial highway intersections. Rob McCann of LSA gave a review of the status of the various environmental studies that are now underway. Kerry Cartwright requested that, in future reports, freeway interchanges be distinguished from arterial intersections.

After some discussion, it was moved by Phil Doudar, seconded by Victor Rollinger, to receive and file the status reports. The motion passed unanimously.

E. Oral Status Reports – Community Participation

Pat McLaughlin of MIG reviewed the status of the various community participation meetings. She also reviewed and presented the meeting schedule for the next few months and reviewed the actions of the CAC meeting held earlier in the month.

After some discussion, it was moved by Mohammad Mostahkami, seconded by Victor Rollinger, to receive and file the status report. The motion passed unanimously.

**VIII. Comments from Committee Members**

Phil Doudar asked that the December meeting be cancelled unless there is something urgent to be considered. Jerry Wood said he would evaluate 10 days before the scheduled meeting date as to whether a meeting is necessary.

**IX. Adjournment**

The meeting was adjourned by consensus at 2:57 p.m..

## **VII. REPORTS**

### **Item A.**

## **Zero Emission Vehicles Presentation by CALSTART**

**TO:** I-710 Technical Advisory Committee Members  
**FROM:** Richard Powers, Executive Director, Gateway Cities COG  
**BY:** CALSTART Representative  
**SUBJECT:** Zero Emission Vehicles Presentation by CALSTART

**Background**

Alternative 6B for the I-710 EIR/EIS is to examine the freight movement corridor using zero emission vehicles operating in it. At this time these vehicles are assumed to be electric trucks or operated by an electrical-type system in the freight corridor. There is also an option included in Alternative 6B that “the design of the freight corridor would also assume possible future conversion (or addition) to add a fixed guideway family of alternative technologies (e.g., maglev) as an option”. The current design assumes zero emission trucks.

CALSTART is a nonprofit organization that works with businesses and the public sector to develop and implement clean, efficient transportation solutions. They have knowledge about all advanced fuels, technologies and vehicles and will be making a presentation on the state-of-the-art of zero emission vehicles (trucks) that might use the freight corridor in the future.

**Recommended Action**

Receive and file reports.

## **VII. REPORTS**

Item B.

I-710 Construction Staging Concepts  
Presentation

**TO:** I-710 Technical Advisory Committee Members  
**FROM:** Richard Powers, Executive Director, Gateway Cities COG  
**BY:** Project Team Representatives and Consultants  
**SUBJECT:** I-710 Construction Staging Concepts Presentation

### **Background**

At the Project Committee meeting of October 29, 2009, the CAC had recommended to the Project Committee that the air quality impacts from construction staging (phasing) be included in the Air Quality/Health Risk Assessment (AQ/HRA). The Project Committee continued this item as the construction staging plans for the project were not yet completed these plans were completed in December, 2009. The Project Committee asked that these plans be reviewed by the Technical Advisory Committee to determine if reasonable construction phasing could be “inferred” from the staging plans, and if then these phasing plans could be analyzed for construction air quality impacts in the Air Quality Action Plan (AQAP). The presentation made to the TAC will be made to the Project Committee.

Construction staging for the project was broken into six geographic segments. Staging plans to build each one of these segments were developed and reviewed and commented upon. The TAC considered various construction phasing scenarios to construct the project (all these scenarios are a function of varying assumptions regarding funding availability) based on the construction staging concepts for each segment. They concurred with the project team’s recommendation that the “worst case” for construction impacts is if all six segments were under construction at the same time. A conceptual construction schedule for this scenario was developed and was presented to the TAC and will be presented to the Project Committee. The conclusion of the TAC was that, **if funding was available**, the entire project could be constructed in an 8 to 10 year time frame. Another concept would be that funding would not be available for the entire project within the duration of physical construction and then it would take 16 to 20 years to build the entire project.

The following general conclusions for major construction staging and duration can be drawn for each segment:

1. In general, it will take 36 months (3 years) to 90 months (7.5 years) to build each segment.
2. Most of the bridges over the freeway will have to be re-built along with each interchange. Construction will have to be staged to only close

- one major interchange (and bridge) at a time for each segment. This will establish the sequence of construction but not the phasing.
3. Phasing will be determined by both the date funding for construction becomes available and the annual amounts of those funds. A final “phasing” plan cannot be developed until funding is finalized.
  4. Construction timing for improvements to the freeway will depend, for many segments, on relocating major utility lines and other physical systems. Those details cannot be determined at this time but will likely influence both phasing and duration of construction as utility lines have to be relocated before major freeway construction can be started.
  5. To minimize adjacent property impacts, the construction staging areas for major freeway construction will be very constrained in many segments. For Alternative 6, this will likely require the simultaneous construction of the general purpose lanes and the freight corridor in some segments.
  6. Before freeway construction can be started, property will have to be acquired, the sites cleared and right-of-way certified.

Based on the conceptual staging plans, a preliminary, feasible overall schedule for major construction of the entire I-710 project (if funding for the **entire** project is available at one time) is summarized below:

<u>Year</u>	<u>Project Element</u>
2011	Certified EIR/EIS completed
2015/2016	Complete Design
2016/2019	Property acquisition/utility relocations/right-of-way certification completed
2020/2029	Construction years (all six segments under construction at one time)

It appears from the preceding time line that major construction of large portions of any segments cannot be started until 2020. Analysis of each segment and its individual phases under this scenario indicates that the majority of any construction could take place between 2022 and 2024. Therefore (based on the current, conceptual staging plans), it is recommended that the AQAP evaluate and analyze the air quality impacts under the assumption that the majority of construction (with all six segments under construction at one time) would take place between 2022 and 2024. It is also recommended that those air quality impacts be reported by Gateway Cities COG to the I-710 Project Committee as the COG’s comments on the Draft Project EIR/EIS.

**Recommended Action**

It is recommended that the TAC concur with the preceding project team's recommendation and make that recommendation to the Project Committee for concurrence and/or provide direction to staff.

## **VII. REPORTS**

### **Item C.**

**I-710 CAC Recommendations  
Continued from Project Committee  
Meeting of October 29, 2009**

**TO:** I-710 Technical Advisory Committee Members

**FROM:** Richard Powers, Executive Director, Gateway Cities COG

**BY:** Project Team Representatives and Consultants

**SUBJECT:** I-710 CAC Recommendations Continued from Project Committee  
October 29, 2009 Meeting

### **Background**

At the October 29, 2009 I-710 Project Committee meeting, the committee extended the recommendations from the I-710 CAC for construction phasing analysis and near-source modeling to its January 28 meeting. The project team and the consultants have been following up on these two items and will present recommendations to the Project Committee at the meeting. Attached to this staff report are three Exhibits (A, .B and C) on these two issues that describe the project team's analysis for these two items. Another item to be followed up from the previous Project Committee meeting generated as a result of the CAC recommendations was a motion to "link" the AQAP to the I-710 Corridor Project EIR/EIS and have it address many of the CAC recommendations. The follow-up analysis of these items is presented herein.

### **Near-Roadway Modeling**

Exhibit IX.A (attached) presents the project team's analysis of this item.

### **Construction Staging**

With respect to the impacts of construction staging ("staging" is defined as how the project would be built, while "phasing" describes when the project would be built and is mostly a function of construction funding). Exhibit C (from 10/1/09) states that the air quality impacts from the construction of the **entire** project have always been part of the environmental analysis and will be analyzed in the environmental document. As described in Exhibit C, this analysis will identify the total quantity of emissions to be generated from construction.

Draft construction staging concepts were completed for the project at the end of 2009. The results of that construction staging analysis will be presented to the Project Committee. That analysis analyzed **how** to build six different segments along the corridor. It, however, did not develop **when** those segments might be built or phased between each segment. Absent a project funding plan, it would be highly speculative to develop a phasing plan describing when each segment would be built. However, Gateway Cities COG proposes to conduct an air quality/health impact analysis of a "worse case" construction phasing scenario in

the AQAP. That scenario was previously presented to the Project Committee for concurrence. The results of this analysis, from the AQAP, will be provided in a report to the I-710 Project Committee by the Gateway Cities COG in their comments on the I-710 Corridor Project Draft EIR/EIS.

### Air Quality Action Plan

The Project Committee approved the other recommendations from the CAC which included a Health Impact Assessment (HIA). The direction, as indicated in the minutes, is to incorporate the HIA analysis, the construction phasing options analysis and the near-roadway modeling analysis into the AQAP. Gateway Cities has been meeting with representatives of the Environmental Subject Working Group to finalize the approach and detail for the HIA. Per the direction of the Project Committee, AQAP being developed by the Gateway Cities COG is to be "linked" to the I-710 EIR/EIS. In consultation with the I-710 Corridor Project Funding Partners, Gateway Cities COG recommends that the best way for this linkage to occur while still keeping the I-710 Corridor Project EIR/EIS on schedule is to complete these analyses as part of the AQAP, report the results of these analyses to the I-710 Project Committee by the Gateway Cities COG in providing their comments on the I-710 Corridor Project Draft EIR/EIS. Direction by the Project Committee to the Gateway Cities COG staff also was to prepare a community medical needs assessment as part of the AQAP. A presentation on the status of the AQAP and these additional elements will be presented to the Project Committee at its meeting.

### **Recommendations:**

The following are the recommended actions for the Project Committee from the project team:

#### Near-Roadway Modeling

1. Near-roadway criteria and air toxic pollutant modeling at a level smaller than the TAZ will be done, recognizing that it may be necessary to describe technical limitations when discussing the results.
2. Near-roadway modeling results and near-roadway monitoring information will be reported in the EIR/EIS. The analysis will include combining the two only as described in applicable regulatory conformity guidance and practice.
1. The I-710 Project Team will continue to monitor current research on both emissions and dispersion modeling of ultrafines and will incorporate that information, as appropriate, into the qualitative ultrafine particulate assessment (the first ever proposed for a freeway project).

2. The Air Quality Action Plan (AQAP) should incorporate a review and analysis of the latest near-roadway models and monitoring as an element of that study and the up-to-date research information (and possible analysis) of ultrafines as these issues can be considered and evaluated outside the regulatory constraints of a formal environmental document. The results of the review and analysis will be reported to the I-710 Project Committee by the Gateway Cities COG in their comments on the I-710 Corridor Project Draft EIR/EIS.

#### Construction Staging

1. Conduct the AQ/HRA analysis of overall construction emissions of the I-710 Corridor Project as specified in the March 2009 AQ/HRA protocol (per Exhibit C).
2. Include qualitative discussion of construction staging plans and identify measures that would minimize health-related construction impacts by minimizing exposure of sensitive receptors (such as schools) to construction-related emissions.
3. The Air Quality Action Plan (AQAP) is the appropriate venue to consider the cumulative health impacts of major construction projects, such as the I-710 and other projects, in the Corridor communities and that study should consider the possible phasing concepts (with the recommended estimate of the years of construction) and provide the results in a report to the I-710 Project Committee by Gateway Cities COG from the AQAP in their comments on the I-710 Corridor Project Draft EIR/EIS.

#### Air Quality Action Plan

Recommend that the Air Quality Action Plan include the preceding CAC and project team recommendations for analysis and also include the HIA and Community Medical Needs Assessment analyses. It is further recommended that the results be reported to the I-710 Project Committee by the Gateway Cities COG in their comments on the I-710 Corridor Project Draft EIR/EIS.

#### **Recommended Action:**

Receive and file and/or give direction to staff.

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### **EXHIBIT A – Near-Roadway Modeling**

**TO:** I-710 Corridor Project EIR/EIS Project Committee

**FROM:** I-710 Corridor Project Team

**BY:** ENVIRON International Corporation (AQ/HRA Consultant)

**SUBJECT:** Staff Report on Deferred Corridor Advisory Committee (CAC) Recommendations to the Project Committee - Near Roadway Modeling

#### **Introduction**

The CAC submitted recommendations to the Project Committee at its October 29, 2009 meeting; the Project Committee took action on some recommendations but deferred action on three items. One of those deferred items was near-roadway modeling in the Air Quality / Health Risk Assessment (AQ/HRA).

The near-roadway modeling recommendation was originally formulated by the Environmental Subject Working Group (ESWG). At their October 15<sup>th</sup> meeting, the CAC finalized the following near-roadway modeling recommendation for the October 29<sup>th</sup> Project Committee. The CAC recommendation was in three parts:

- Near-roadway modeling at a level smaller than the analysis unit of Traffic Analysis Zone<sup>1</sup> (TAZ) should be done as part of the air quality impact analysis.

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<sup>1</sup> A traffic analysis zone or TAZ is an area commonly used in transportation planning models by state and/or local transportation officials for tabulating traffic-related data—especially journey-to-work and place-of-work statistics. In addition, socio-economic data can be reported for these zones. A TAZ usually consists of one or more census blocks, block groups, or census tracts. Zones can vary in size, but in this context, they are in the range of around 3,000 people and a couple of city blocks.

- For near-roadway analysis, consider ambient air quality data that reflect near-roadway concentrations.
- Continue to monitor current research on modeling ultrafines, and incorporate as appropriate.

(The October 29<sup>th</sup> CAC presentation on this recommendation to the Project Committee is included in Attachment B of this January 28<sup>th</sup> Agenda.) The Project Committee deferred action on this recommendation until their January 28, 2010 meeting.

### **Background**

The AQ/HRA analysis of the I-710 Corridor Project contains multiple elements, as described in detail in the March 2009 AQ/HRA Protocol.

Elements in the I-710 AQ/HRA protocol that are **typically included** in an EIR/EIS for freeway projects include:

- ✓ Carbon Monoxide (CO) quantitative assessment and local “hotspot” dispersion modeling of CO concentrations for conformity analysis
- ✓ PM<sub>2.5</sub>/PM<sub>10</sub> (particulate matter/dust) qualitative assessment for conformity analysis
- ✓ Diesel Exhaust qualitative assessment (identify sensitive receptors)
- ✓ Mobile Source Air Toxics (MSAT) qualitative assessment
- ✓ Construction impacts (identify standard emission/dust control measures)
- ✓ Greenhouse Gases qualitative assessment
- ✓ Construction emissions quantification (total project)

Elements in the I-710 AQ/HRA protocol that **have not been included in previous projects beyond** the typical analyses in an EIR/EIS for freeway projects include:

- ✓ Full dispersion modeling of ambient concentrations of criteria pollutants
- ✓ Full dispersion modeling for estimating concentrations of the six Priority MSATs
- ✓ Full dispersion modeling health risk assessment for the six Priority MSATs
- ✓ Quantification of operational (e.g., on-road mobile source, electric generation) greenhouse gas emissions
- ✓ Qualitative PM mortality impact assessment (based on ESWG/CAC recommendations)
- ✓ Ultrafine Particulates qualitative assessment (based on ESWG/CAC recommendations)

### **I-710 Project Team Analysis of CAC Near-Roadway Modeling Recommendation**

The I-710 Project Team has reviewed the CAC recommendation on near-roadway modeling and prepared the following assessment.

Near-roadway modeling at a level smaller than a TAZ: The Project team wants to clarify for the Project Committee that near-roadway modeling is in fact being conducted for the I-710 AQ/HRA. Per USEPA/FHWA requirements and Caltrans Standard Environmental Reference (SER) guidance, carbon monoxide (CO) impacts at identified intersections will be modeled using the approved CAL3QHC line model, consistent with conformity requirements for “hot-spot” modeling. For the freeway mainline, dispersion modeling using the SCAQMD/EPA approved AERMOD model will be conducted for CEQA purposes. Other models, particularly line models, were also considered by the Project Team and AATWG but AERMOD was chosen, in part, for its ability to calculate impacts over a larger study area. (As noted above, this type of modeling for both criteria and air toxic impact assessments has not been proposed for freeway/roadway projects previously.) AERMOD calculates air quality impacts at gridded receptor points (or locations). The assessment will include calculated impacts at receptor points (or locations) near the 710 freeway. However, as noted by the AATWG and ESGW technical members, there are some recognized technical concerns about the accuracy/validity of AERMOD results when the receptors are right next to the freeway (for example, within 25 to 125 meters) as traffic emissions are modeled as “volume” sources along the freeway.

The I-710 Project Team’s analysis of this part of the CAC recommendation is as follows:

- The use of CAL3QHC (conformity “hot-spot” CO modeling) and AERMOD (CEQA analysis of incremental criteria and air toxic impacts among the Project Alternatives) was reviewed and approved by the Agency Air Technical Working Group (AATWG).
  - No alternative models have been proposed by the ESGW – the concern has been that AERMOD may have technical limitations very close to the freeway but will be used nonetheless since other potential models have their own limitations.
- ⇒ Near-roadway modeling at a level smaller than the TAZ will be done as part of the I-710 AQ/HRA, but caveats may be necessary when discussing the results (with respect to accuracy and appropriateness).

For the near-roadway analysis, consider near-roadway ambient air quality data: The existing setting section of the EIR/EIS will include a description of current air quality, based on available ambient air quality data. Where near-roadway ambient data are available, it will be described. The AQ/HRA Report and EIR/EIS will include the results of the CAL3QHC “hot-spot” CO modeling and

AERMOD modeling of the alternatives, including near-roadway results (possibly subject to technical caveats described above). Based on discussion during ESWG meetings, it is the understanding of the project team that some ESWG members would like near-roadway AERMOD modeling results to be combined with near-roadway monitoring data as part of the conformity analysis for the Project.

The I-710 Project Team's analysis of this part of the CAC recommendation is as follows:

- Conformity analysis is subject to specific federal and state laws, requirements and guidance. Caltrans also has guidance on the conformity analysis in its SER.
- Interpreted broadly as suggesting that monitoring data from right next to the freeway should be combined with modeling results (based on discussions by some ESWG members), this recommendation is not consistent with FHWA/EPA guidance and practice, particularly as it concerns any quantitative conformity analysis.
  - As such, the Consultant Team cannot recommend implementing this recommendation in the current AQ/HRA study or in the EIR/EIS. Neither the AQ/HRA Report nor the EIR/EIS will include the combination of near-roadway ambient air quality data to model results except as described in applicable regulatory conformity guidance and practice.
    - Near-roadway modeling results and near-roadway monitoring information will be reported in the EIR/EIS.
  - This type of monitoring and analysis may be more appropriate in the context of the AQAP where it can be considered outside the regulatory constraints of a formal environmental document.

Monitor ultrafines modeling research and incorporate as appropriate:

The health effects of ultrafines (particulate matter less than 0.1 microns) have been discussed extensively by the ESWG. Research on the creation and fate (i.e., emissions and dispersion modeling) of ultrafines from roadways is underway; ESWG members have provided recent scientific technical papers to the Consultant Team, which is also independently tracking this research.

The I-710 Project Team's analysis of this part of the CAC recommendation is as follows:

- ⇒ The I-710 Project Team agrees that keeping up with current developments is important. The Team has been monitoring and will continue to monitor current research on both emissions and dispersion modeling of ultrafines.

- ⇒ The I-710 Project Team will incorporate that information, as appropriate, into the **qualitative** ultrafine particulate assessment (the first proposed for a freeway project).
- ⇒ The AQAP may provide an additional venue for this issue outside the regulatory constraints of a formal environmental document.

### **Recommendations**

Recommendations from the I-710 Project Team are:

- ⇒ Near-roadway criteria and air toxic pollutant modeling at a level smaller than the TAZ will be done, recognizing that it may be necessary to describe technical limitations when discussing the results.
- ⇒ Near-roadway modeling results and near-roadway monitoring information will be reported in the EIR/EIS. The analysis will include combining the two only as described in applicable regulatory conformity guidance and practice.
- ⇒ The I-710 Project Team will continue to monitor current research on both emissions and dispersion modeling of ultrafines and will incorporate that information, as appropriate, into the qualitative ultrafine particulate assessment (the first proposed for a freeway project).
- ⇒ The AQAP should incorporate a review and analysis of the latest near-roadway models and monitoring as an element of that study and the up-to-date research information (and possible analysis) of ultrafines as these issues can be considered and evaluated outside the regulatory constraints of a formal environmental document. The results of the review and analysis will be reported to the I-710 Project Committee and will be used by the Gateway Cities COG in their comments on the I-710 Corridor Project Draft EIR/EIS.

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### **EXHIBIT B – Construction Phasing**

**TO:** I-710 Corridor Project EIR/EIS Project Committee

**FROM:** I-710 Corridor Project Team

**BY:** LSA Associates, Inc. (EIR/EIS Consultant)

**SUBJECT:** Staff Report on Deferred Corridor Advisory Committee (CAC)  
Recommendations to the Project Committee – Construction  
Impacts

#### **Introduction**

The CAC submitted recommendations to the Project Committee at its October 29, 2009 meeting; the Project Committee took action on some recommendations but deferred action on three items. One of those deferred items was the evaluation of construction impacts based on construction phasing in the Air Quality / Health Risk Assessment (AQ/HRA).

The recommendation on additional analysis of construction impacts was originally formulated by the Environmental Subject Working Group (ESWG). At their October 15<sup>th</sup> meeting, the CAC finalized the following recommendation on construction impacts analysis for consideration by the Project Committee at its meeting of October 29, 2009. The CAC recommendation was in two parts:

- Develop a staging plan with adequate time to quantify construction impacts in the Health Risk Assessment.
- Address full construction impacts from a health perspective.

The October 29<sup>th</sup> CAC presentation on this recommendation to the Project Committee was included in the Project Committee Agenda. The Project Committee deferred action on this recommendation until their January 28, 2010 meeting.

## **Background**

As described in detail in the March 2009 AQ/HRA Protocol, the AQ/HRA analysis of the I-710 Corridor Project contains multiple elements, including analysis of construction impacts from the entire project. As shown in Exhibit XI.C, the evaluation of construction impacts from the entire project has always planned to consider:

**Construction Equipment:** The AQ/HRA Protocol (Section 3.1.1) states that emissions of criteria pollutants from construction equipment will be estimated using the emissions factors derived from the California Air Resources Board's (CARB's) OFFROAD 2007 emissions model. Similar to the Emission Factors Model (EMFAC), OFFROAD currently does not account for some regulations that have been adopted since the last release of the model. Therefore, OFFROAD factors will be adjusted by the AQ/HRA consultant (ENVIRON) to account for the impact of the CARB's more recent regulation for offroad in-use diesel vehicles (i.e., that these vehicles will generate lower emissions than currently assumed in the 2007 emission model).

**Material Handling:** Emissions from various construction activities in construction will be calculated using the methods and equations available in the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Analysis Handbook. This will provide an estimate of construction emissions that would occur over the duration of project construction.

**Control Measures:** To address construction air quality impacts, Caltrans has developed an extensive set of Best Available Control Measures that are required to be incorporated into the project construction plans and specifications. Caltrans will work closely with SCAQMD and other agencies to determine the best control measures to be applied during I-710 construction.

The issue of concern to the CAC is that the AQ/HRA protocol does not include an evaluation of construction impacts based upon project phasing. The I-710 Project Team has consistently maintained that a more detailed analysis of phase-specific emissions or a dispersion modeling analysis of criteria and/or air toxic pollutants is not possible with the funding and related information that is available now or in the foreseeable future (see Exhibit XI.C).

## **I-710 Project Team Analysis of CAC Construction Impacts Recommendation**

The I-710 Project Team has reviewed the CAC recommendation on construction impacts and believes that further discussion of expanded construction impact analysis is possible, particularly as more information on staging becomes available. However, even with more information, construction-related impacts will

only be assessed based on estimated emissions from construction of large, phased projects for purposes of general conformity review of the I-710 Corridor Project. ***Without sufficiently detailed projections of construction activity and timing, information that is extremely difficult or impossible to obtain from the construction staging information available at this stage of project development (or would be very speculative), calculating detailed emissions that can be input into the AERMOD model and then performing a full AQ/HRA modeling analysis of construction impacts as described by ESWG members is not technically feasible.***

As more information becomes available, the I-710 Project Team will **qualitatively** discuss construction staging plans and identify measures that would minimize health-related construction impacts by minimizing exposure of sensitive receptors (such as schools) to construction-related emissions.

Lastly, the I-710 Project Team recognizes that construction-related air quality and health risk impacts are a concern to the local communities. There may be an opportunity in the Gateway Cities COG Air Quality Action Plan (AQAP) to consider the cumulative health impacts of major construction projects, such as the I-710 and other projects, in the Corridor communities.

### **Recommendations**

Recommendations from the I-710 Project Team are:

- ⇒ Conduct the AQ/HRA analysis of overall construction emissions of the I-710 Corridor Project as specified in the March 2009 AQ/HRA protocol (per Exhibit XI.C)
- ⇒ Include qualitative discussion of construction staging plans and identify measures that would minimize health-related construction impacts by minimizing exposure of sensitive receptors (such as schools) to construction-related emissions.
- ⇒ The AQAP is the appropriate venue to consider the cumulative health impacts of major construction projects, such as the I-710 and other projects, in the Corridor communities and that study should consider the possible phasing concepts approved by the TAC (with the recommended years) as a “worse-case” scenario and provide the results in a report to the I-710 Project Committee by Gateway Cities COG in their comments on the I-710 Corridor Project Draft EIR/EIS.



## EXHIBIT C – Construction Impacts

10/1/09

### **Evaluation of Air Quality Construction Impacts**

**Construction Equipment:** The AQ/HRA Protocol (Section 3.1.1) states that emissions of criteria pollutants from construction equipment will be estimated using the emissions factors derived from the California Air Resources Board's (CARB's) OFFROAD 2007 emissions model. Similar to the Emission Factors Model (EMFAC), OFFROAD currently does not account for some regulations that have been adopted since the last release of the model. Therefore, OFFROAD factors will be adjusted by the AQ/HRA consultant (ENVIRON) to account for the impact of the CARB's more recent regulation for off-road in-use diesel vehicles.

**Material Handling:** Emissions from various material handling activities in construction will be calculated using the methods and equations available in the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Analysis Handbook. This will provide an estimate of construction emissions that would occur over the duration of project construction.

**Control Measures:** To address construction air quality impacts, Caltrans has developed an extensive set of Best Available Control Measures that are required to be incorporated into the project construction plans and specifications. Caltrans will work closely with SCAQMD and other agencies to determine the best control measures to be applied during I-710 construction.

**Phase Specific Emissions:** A more detailed analysis of phase-specific emissions or a dispersion modeling analysis of criteria and/or air toxic pollutants is not possible with the funding and related information that is available now or in the foreseeable future. Once staging concepts are developed toward the end of 2009, these may provide the information needed to develop a phasing plan. At that time, the ability to conduct an analysis of construction impacts by phase will be assessed.

## **VII. REPORTS**

### **Item D.**

### **Status Reports on I-710 Corridor Project EIR/EIS**

1. Engineering – Oral Status Report
2. Environmental – Oral Status Report
3. Community Participation – Oral  
Status Report

**TO:** I-710 Technical Advisory Committee Members

**FROM:** Richard Powers, Executive Director, Gateway Cities COG

**BY:** Project Team Representatives and Consultants

**SUBJECT:** Status Reports on I-710 Corridor Project EIR/EIS  
Engineering (1)  
Environmental (2)  
Community Participation (3)

### **Background**

An up-to-date status report on the work initiated to date will be presented. This includes engineering, environmental and community participation. The project has been underway for about two years and is currently on schedule. The schedule will also be discussed along with a 3-month look ahead for each of these areas. Material and reports that summarize the various tasks and studies that have been completed to date will be distributed at the meeting. The project is moving into the environmental analysis phase of the work. Detailed presentations on some critical studies will be made at the meeting for information purposes and updates. These presentations include:

- ❖ Stormwater treatment approach
- ❖ Utility Relocation Study
- ❖ Value Analysis Study results
- ❖ Traffic Projections update

### **Summary Reports**

1. Engineering
2. Environmental
3. Community Participation

### **Recommended Action**

1. Receive and File Status Reports and also,
2. Recommend to the Project Committee that the higher truck projections be used and that Alternatives 6A and 6B include maximum truck volume lane assumptions.