Environmental Committee

July 27, 2011
Agenda Overview

- Item A – Status and Schedule Update
  Scott Broten, ICF

- Item B – Participation Framework Committee Reports
  Susan DeSantis, Arellano Associates

- Item C - Deliverables Overview and Schedule
  Scott Broten, ICF

- Item D – Final Compendium
  Scott Broten, ICF
Agenda Overview cont.

- Item E – I-710 Construction Staging Concept
  Jerry Wood, COG Staff

- Item F – I-710 HIA Presentation
  Jonathan Heller, Human Impact Partners

- Item G - Gateway Cities COG Engineers Report
  Jerry Wood, COG Staff
Agenda Overview

- Item A – Status and Schedule Update
  Scott Broten, ICF

- Item B – Participation Framework Committee Reports
  Susan DeSantis, Arellano Associates

- Item C - Deliverables Overview and Schedule
  Scott Broten, ICF

- Item D – Final Compendium
  Scott Broten, ICF
Participation Framework

- Technical Working Groups
- Roundtables
- Environmental Committee
- Transportation Committee
- GCCOG Board

I-710 Project Committee

I-710 Related Elements
## AQAP Task Update

<table>
<thead>
<tr>
<th>Technical Tasks</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm. Medical Needs Assessment</td>
<td>In Process</td>
</tr>
<tr>
<td>I-710 Near Roadway Modeling</td>
<td>In Process</td>
</tr>
<tr>
<td>I-710 Ultrafines</td>
<td>In Process</td>
</tr>
<tr>
<td>Air Quality Protocol</td>
<td>In Process</td>
</tr>
<tr>
<td>Compendium Update</td>
<td>In Process</td>
</tr>
<tr>
<td>Quantitative Air Quality Analysis</td>
<td>In Process</td>
</tr>
<tr>
<td>I-710 Construction Staging and Phasing Assessment</td>
<td>In Process</td>
</tr>
<tr>
<td>The I-710 Health Impact Assessment</td>
<td>In Process</td>
</tr>
<tr>
<td>Health Risk Assessment</td>
<td>In Process</td>
</tr>
<tr>
<td>Develop Air Quality Strategies</td>
<td>Task starts in 2012</td>
</tr>
<tr>
<td>Analysis of New Air Quality Measures</td>
<td>Task starts in 2012</td>
</tr>
<tr>
<td>Early Action Support</td>
<td>In Process</td>
</tr>
<tr>
<td>Develop AQAP Report</td>
<td>Task start in April 2012</td>
</tr>
<tr>
<td>Public Outreach</td>
<td>In Process</td>
</tr>
</tbody>
</table>
I-710 EIR/EIS and AQAP Scope of Work Relationship

I-710 EIR/EIS

- Technical Studies
- Noise
- AQ/HRA
- Comm. Impact Assessment
- and many more

Gateway Cities AQAP

- Emissions Inventory
- AQ/HRA
- Develop AQ Strategies
- Compendium Update
- CMNA
- I-710 HIA
- I-710 Construction Staging and Phasing
- I-710 Near Roadway Modeling (Ultrafines)
I-710 EIR/EIS and AQAP Scope of Work Relationship

**I-710 EIR/EIS**
- Technical Studies
- Noise
- AQ/HRA
- Comm. Impact Assessment
- and many more

**Gateway Cities AQAP**
- CMNA
- HIA
- Construction Staging and Phasing
- Near Roadway Modeling (Ultrafines)
- Emissions Inventory
- Develop AQ Strategies
- Compendium Update
I-710 EIR/EIS and AQAP Scope of Work Relationship

I-710 EIR/EIS

- Technical Studies
  - Noise
  - AQ/HRA
  - Comm. Impact Assessment
  - and many more

*Gateway Cities AQAP

- CMNA
- HIA
- Construction Staging and Phasing
- Near Roadway Modeling (Ultrafines)
- Emissions Inventory
- Develop AQ Strategies
- Compendium Update

*The AQAP tasks indicated are scheduled to be completed by the end of November for consideration in Draft I-710 EIR/EIS.
Project Study Areas

I-710

Gateway Cities COG Subregion
Project Study Areas

I-710
- I-710 EIR/EIS
- Numerous Technical Studies (Noise, AQ/HRA)
- I-710 HIA
- I-710 Near Roadway Modeling (Ultrafines)
- I-710 Construction Staging and Phasing

Scheduled to be completed in time for consideration in the I-710 EIR/EIS

Gateway Cities COG Subregion
- Emissions Inventory
- AQ/HRA
- New AQ Measures
- Compendium Update
- Community Medical Needs Assessment
Note: Tasks shown in gold are scheduled to be completed in time for consideration in the I-710 EIR/EIS.
AQAP Project Overview

Schedule

| Task 1 - Project Plans, Schedule, Management |
| Task 2 - Compendium Update |
| Comm. Medical Needs |
| Near Roadway Modeling Evaluation |
| Task 3 - Quantitative AQ Analysis |
| I-710 Construction Staging and Phasing Impacts |
| Task 4 - I-710 Health Impact Assessment |
| Task 5 - Health Risk Assessment for the AQAP Study Area |
| I-710 Construction Impacts Assessments |
| Task 6 - AQ Strategies |
| Task 7 - New AQ Measures |
| Task 8 - Early Action Support |
| Task 9 - AQAP Development |
| Task 10 - Community and Public Outreach |

1-710 Draft EIR/EIS Released
Agenda Overview

- Item A – Status and Schedule Update
  Scott Broten, ICF

- Item B – Participation Framework Committee Reports
  Susan DeSantis, Arellano Associates

- Item C - Deliverables Overview and Schedule
  Scott Broten, ICF

- Item D – Final Compendium
  Scott Broten, ICF
AQAP Participation Goals

• Develop the AQAP through the participation process

• Engage in debate to help crystallize issues

• Through informed understanding of what the choices are, help evaluate merits of each possible option, and search for answers that will be mutually advantageous
AQAP Participation Framework

Advisory and Technical Roundtables

- AQAP Advisory Roundtable
- AQAP Technical Roundtable

Recommendations and Feedback

Gateway Cities

- GCCOG Board
- Transportation Committee
- Environmental Committee

I - 710 HIA TWG

AQ/HRA TWG
AQAP Participation Roles & Responsibilities

Advisory and Technical Roundtables

- AQAP Advisory Roundtable
- AQAP Technical Roundtable

Gateway Cities COG

- GCCOG Board
- Transportation Committee
- Environmental Committee

Recommendations and Feedback

TECHNICAL WORKING GROUPS

Advise and provide input on protocols, scope and analysis of health risks and air quality

- Provide opportunity for in-depth analysis
AQAP Participation Framework

Advisory and Technical Roundtables

- AQAP Advisory Roundtable
- AQAP Technical Roundtable

Gateway Cities COG
- GCCOG Board
- Transportation Committee
- Environmental Committee

ROUND TABLES

Review reports from the Technical Working Groups

Provide input to Environmental Committee on policy (AR) or technical issues (TR)

Recommendations and Feedback
AQAP Participation Framework

Advisory and Technical Roundtables

- AQAP Advisory Roundtable
- AQAP Technical Roundtable

Gateway Cities COG

- GCCOG Board
- Transportation Committee
- Environmental Committee

Recommendations and Feedback

ENVIRONMENTAL COMMITTEE

Provide Policy Direction/Recommendations to Board through Transportation Committee

Communicate with Public
AQAP Participation Framework

Update Format

Advisory and Technical Roundtables
- AQAP Advisory Roundtable
- AQAP Technical Roundtable

Input and Recommendations

Update Format
- Participants
- Topics
- Issues
- Input

I - 710 HIA TWG
AQ/HRA TWG

20
AQAP Participation Framework

I-710 Health Impact Assessment (HIA) Technical Working Group (TWG)

I-710 HIA TWG Update
U.S. Environmental Protection Agency, Region IX
U.S. Department of Transportation (MARAD)
South Coast Air Quality Management District (SCAQMD)
Southern California Association of Governments (SCAG)
Los Angeles County Metropolitan Transportation Authority (Metro)
Los Angeles County, Department of Public Health
City of Vernon Health Department
Port of Long Beach (POLB)
Port of Los Angeles (POLA)
BP Lubricants USA
AQAP Participation Framework
I-710 HIA TWG Update

Topics

- HIA Goals
- Overarching Parameters
- Health Determinants
- Pathways
- Research Questions
- Scope of Work

Meetings

May 12th, May 26th, July 11th, August 15th, September 12th
• Data and Schedule Limitations, including use of I-710 technical studies
• Quantitative versus Qualitative Analysis
• Growth Assumptions (No Build Option)
• Residual Impacts
• Jobs and Economic Development
• PM 2.5 - Mortality and Morbidity
Recommendations

I-710 HIA TWG agreed to:

- HIA Goals (5) and Overarching Parameters
- Set of Health Determinants (6)
- Set of Pathways (based on the selected determinants) as hypotheses.
- Set of research questions and ways to measure answers (indicators).
- HIA Scope
- Forwarded package to Roundtables
Recommendation

PM 2.5 - Mortality and Morbidity

- Considerable discussion
- EPA recommended adding PM 2.5 mortality to the Air Quality pathway diagram.
- Ports noted that mortality rates generally are in port EIR reports for informational purposes only.
- Add quantification of mortality and morbidity to AQAP analysis with full disclosure of uncertainties*.

*Note: Required emission data will not be available for analysis in the I-710 HIA, but will be included in the AQ/HRA Assessment
I-710 HIA does the best job possible with the limited data available; process is up against real constraints (data and schedule).
AQAP Participation Framework

Air Quality/ Health Risk Assessment Technical Working Group (TWG)

AQ / HRA TWG Update
AQ/ HRA TWG Purpose

- Methods used to assess air quality impacts and human health risks differ among the agencies.

- TWG will:
  - Ensure transparency and allow communication on technical issues among various stakeholders; and
  - Facilitate consensus on the technical tools and methodologies to be employed and utilized through this process.
Participants

U.S. Environmental Protection Agency, Region IX
Office of Environmental Health Hazards Administration (OEHHA)
California Air Resources Board (CARB)
South Coast Air Quality Management District (SCAQMD)
Los Angeles County Metropolitan Transportation Authority (Metro)
City of Vernon Health Department
Port of Long Beach (POLB)
Port of Los Angeles (POLA)
AQ/HRA Protocol and related issues

Meetings

May 17\textsuperscript{th}, June 21\textsuperscript{st}, July 25\textsuperscript{th}
Use of the AQ and HRA in decision making
Pollution Sources to be analyzed in AQAP
Construction Staging Concept / Emissions Analysis
Study Area
Hotspot Analysis Methodology
List of Air Toxics and pollutants to be modeled
Model Options
  • Estimating emissions from on-road vehicles/mobile sources (*EMFAC Model 2007 vs. 2010*)
  • Air Quality Modeling (*AERMOD vs. CALPUFF*)
Model Options Off-road and Nonpoint Stationary Sources
Recommendations

**Construction Staging Concept**

Comment: **Construction Impacts** should be included in the I-710 EIR HRA

Response: The construction emission analysis for this possible staging plan will be provided to the I-710 EIR/EIS team in mid-August and with adequate time to estimate the construction impacts in the Health Risk Assessment as requested by the Corridor Advisory Committee and concurred with by the I-710 Project Committee.
Recommendations

Construction Staging Concept
Comment: Traffic during Freeway Construction-re-routing of traffic may have considerable air quality impacts due to increased congestion or altering of traffic patterns. These impacts should be evaluated in the I-710 EIR HRA and the AQAP HRA.

Response: The speculative construction phasing and staging plan does not include the level of detail required to estimate possible changes in traffic patterns during construction.
Recommendations

Construction Staging Concept
Comment: **Cumulative Construction Impacts** - potential cumulative impact of major construction on multiple freeways should be evaluated if there is a possibility of overlapping construction.

ICF Response: Other construction projects will be included to the extent that their emissions are incorporated into SCAQMD’s MATES III emission inventories, which will be used in the AQAP AQ/HRA.
Recommendations

Construction Staging Concept
Comment: “On the Ground” Spot Checking of Emission Sources

ICF Response: Spot-checking grid cells with high emissions using land use maps will be considered, depending on time and resource availability.
Mitigation Measures

Comment: An adequate framework for conceiving and implementing mitigation measures should be provided. As the mitigation measures are the most important part of the AQAP, care should be taken to ensure that adequate resources are made available to evaluate their effectiveness and to ensure public and stakeholder input.

Response: AQAP includes 2 tasks addressing identification and evaluation of air quality improvement strategies and measures.
Recommendations

Hot Spot Analysis of “Average” Area
Comment: AQAP may consider performing a hot spot analysis on the two highest freeway areas, and one “average” freeway area. In this way, the public could see a typical risk associated with proximity to freeways in comparison to background and hot spot levels.

Response: Selection of an “average” freeway hot spot will be considered. If hot spots not proximate to a freeway are found, they will also be considered for selection.
Recommendations

Study Area Expansion
Comment: AQAP Study Area should be expanded beyond the Gateway Cities geographic boundaries to include areas that may have significant impacts from goods movement and Port-related activities.

Response: The AQAP Study Area has been expanded to include Wilmington and Carson.
AQAP Participation Framework

AQAP Technical Roundtable (TRT)

TRT Update
Participants

Federal  US Environmental Protection Agency
         US Department of Transportation, MARAD

Regional  SCAQMD, SCAG

Public Works/Planning
         Cities of La Mirada and South Gate Community Development
         Cities of La Mirada, Compton, Lynwood Public Works
         Cities of Long Beach and Los Angeles Planning Departments

Ports  Ports of Los Angeles and Long Beach

Public Health  City of Long Beach Health & Human Services
               City of Vernon Health & Environmental Control Department
               Los Angeles County Department of Public Health

At-Large  TIAX, BNSF Railway
Compendium Update of Existing/Proposed Near-Term Air Quality Improvement Strategies

I-710 Construction Staging and Phasing Concept

I-710 HIA Goals, Parameters, Health Determinants, Pathways, Research Questions and Scope

July 7th Briefing, July 13th Kick-Off Meeting
Issues

• Role of HIA in identifying potential mitigation measures for I-710 EIR/EIS
• Water Quality
• Assumptions used to assess Health Determinants, including full port build-out
• Potential community concern surrounding the exclusion of construction emissions
• Types of data that would be analyzed quantitatively and qualitatively
• Distinguishing between carrot-style and stick-style measures.
• Potential concerns over the credibility of the references
• PM 2.5 morbidity/mortality issues
• Process for providing feedback
• Use of standard language to communicate magnitude of impacts
• Keeping informed of results from I-710 EIR/EIS technical reports that have not become public information
• Incremental vs residual changes in health outcomes
Recommendations

• Allow comments to be submitted following each ART Meeting.

• Agreement on HIA Goals and Overarching Parameters as presented.

• Traffic Safety Effects Pathway: HIA should consider likely changes in passenger vehicle size and technology, especially as vehicles become smaller and lighter.

Daniel Ojeda was selected to serve as Technical Roundtable Liaison to the Environmental Committee.
AQAP Participation Framework

AQAP Advisory Roundtable (ART)

ART Update
• **Academic & Educational** – USC; UCLA; Cal State University, Long Beach; Tri-Cities Occupational

• **Community Representatives** - Mothers of East LA, Our Lady of Lourdes Church (East LA), Port of LA CAC, West Long Beach, Downey

• **Environmental Community** - NRDC, CCA, East Yard Communities, CBE, CSE

• **Public Health Advocates** - legal aid foundation, city and county health departments, Breathe LA, LABACA

• **Private Sector** - chambers of commerce, WSPA, PMSA, Future Ports

• **Public Sector** - ports, SCAQMD, CARB, Metro, utilities
AQAP Participation Framework

ART Update

Topics

- Compendium Update of Existing/Proposed Near-Term Air Quality Improvement Strategies
- I-710 Construction Staging and Phasing Concept
- I-710 HIA Goals, Parameters, Health Determinants, Pathways, Research Questions and Scope

Meetings

July 7th Briefing, July 14th Kick-Off Meeting
• Process for formulating new air quality improvement strategies
• Indirect effects of freeway expansion on affordable housing
• Enumerating externalities such as tax subsidies for transportation and health care
• Evaluating of water quality impacts
• Assessing construction effects
• Expanding vulnerable population definition to include pregnant women
• Role of the Draft EIR/EIS schedule in driving the I-710 HIA process
• Expanding Goal 5 to include other data if it becomes available in time for DEIR submission
• Adding Goal 6 to specifically address the role of the HIA in identifying mitigation measures.
• Assumptions regarding Ports’ operating hours, port build-out and population projections
Recommendations

- Allow comments to be submitted following each ART Meeting.
- ART Members value the ability to discuss ideas with fellow Members; reschedule roundtable discussion on the I-710 HIA to the August 11th ART Meeting.

Angelo Logan, East Yard Communities and Luis Cabrales, Coalition for Clean Air, were selected to serve as Advisory Roundtable Liaisons to the Environmental Committee.
Agenda Overview

- **Item A – Status and Schedule Update**
  Scott Broten, ICF

- **Item B – Participation Framework Committee Reports**
  Susan DeSantis, Arellano Associates

- **Item C - Deliverables Overview and Schedule**
  Scott Broten, ICF

- **Item D – Final Compendium**
  Scott Broten, ICF
AQAP Project Overview

Two Groups of Activities:

- AQAP
- I-710 Related Studies
Community Medical Needs Assessment

- Data collection complete
- Discuss Findings at August Roundtables
I-710 Near Roadway Modeling Assessment

- Modeling is complete
- Analyzing modeled data and comparing to monitoring (AQMD and USC) data
- Discuss Findings at August Roundtables
I-710 Ultrafines

- Literature review complete
- Report preparation initiated
- Discuss Findings at August Roundtables
AQAP Task Update

Air Quality Protocol

- Final Protocol being prepared
- Discuss Findings at August Roundtables
Compendium Update

- Draft Compendium presented at July Technical and Advisory Roundtables
- Proceeding to Environmental Committee
Quantitative Air Quality Analysis

- This task will implement the AQ/HRA Protocol (previous slide)
- Initiating Data Collection.

AQAP Task Update

Develop Protocol
Collect Data
Prepare Model Inputs
Run Model
Evaluate Model Performance
Evaluate Change in AQ
Prepare Report
Framework Discussion
Impacts from I-710 Construction Staging and Phasing

- Completed Draft Modeling
- Expect revised population data for construction equipment (age, hp, qty.) from CARB in late July
- Update model
- Discuss Findings at August Roundtables
I-710 Health Impact Assessment

- Conducted 3rd HIA TWG
- Draft Scope Considered during recent Technical and Advisory Roundtables (feedback by 7/27)
- Draft Scope Proceeding to Environmental Committee
- Discuss Findings at August Roundtables
Health Risk Assessment

- Finalizing AQ/HRA Protocol
- Starting Model Input Preparation
Early Action Support

- Reviewing Early Action Items (9) from the 2007 AQAP Development Plan Report.
- Initiated Research on Measure Implementation.
Agenda Overview

- Item A – Status and Schedule Update
  Scott Broten, ICF

- Item B – Participation Framework Committee Reports
  Susan DeSantis, Arellano Associates

- Item C - Deliverables Overview and Schedule
  Scott Broten, ICF

- Item D – Final Compendium
  Scott Broten, ICF
Compendium Update
Review of 2006 measures

Methodology

- Review 2006 compendium update
- Review regulations and other documents created over last 5 years
- Interviews with Port of Long Beach and Port of Los Angeles staff

For each of 154 measures

- Brief status update
- Identify as Implemented, Partially Implemented, or Not Implemented
- Identify responsible agency and relevant regulation(s)
Compendium Update

• In 2006:
  • I-710 MCS Tier 2 Community Advisory Committee: Strategy Recommendations
  • Gateway Cities COG Clean Air Program
  • Gateway Cities COG Safety Action Initiative
  • Ports-ACTA Truck Trip Reduction Program
  • Port of Long Beach Green Port Policy
  • Port of Los Angeles Clean Air Program
  • NRDC and CCA Recommendations to Ports
  • CARB strategies
Compendium Update

- Measures with significant emissions benefits adopted since 2006
  - ARB On-Road Heavy-Duty Diesel Vehicles In-Use Regulation ("Truck and Bus Rule") (2008)
  - ARB Drayage Truck Regulation (2009)
  - SPB Ports Clean Air Action Plan and Clean Truck Program (2006 and 2010)
## Summary of Findings

<table>
<thead>
<tr>
<th>Sector (Emissions Source)</th>
<th>Partially Implemented</th>
<th>Not Implemented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trucks</td>
<td>24</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>Rail</td>
<td>12</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Ocean Going Vessels</td>
<td>25</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Harbor Craft</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Cargo Handling Equipment</td>
<td>13</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Various</td>
<td>27</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>106</strong></td>
<td><strong>31</strong></td>
<td><strong>154</strong></td>
</tr>
</tbody>
</table>
Examples of measures **Partially Implemented**

- Identify the level of air quality impacts from increasing trucking, rail and shipping
- Require all rubber-tired gantry cranes to be electrified
- Require all ships to shut down all diesel engines and use shore electric power
- Develop new near-dock rail yard
- Implement on-road heavy duty truck alternative fuels program
- Repower or replace all switching locomotives that do not meet EPA Tier 0 Standards with electric-hybrid or alternative-fuel engines
Examples of measures **Not Implemented**

- Require all trucks using the truck lanes on the I-710 to use alt fuels or other pollution controls.
- Electronic screening of commercial vehicles
- Virtual container yard
- Alameda Corridor electrification
- Shuttle trains
- Graduated harbor fee system for ships
- Biofuels for harbor craft
- Install LNG terminal within the port