## 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><strong>Develop Air Quality Strategies</strong></td>
<td>Task starts in 2012</td>
</tr>
<tr>
<td><strong>Analysis of New Air Quality Measures</strong></td>
<td>Task starts in 2012</td>
</tr>
<tr>
<td>Early Action Support</td>
<td>In Process</td>
</tr>
<tr>
<td><strong>Develop AQAP Report</strong></td>
<td>Task start in April 2012</td>
</tr>
<tr>
<td>Public Outreach</td>
<td>In Process</td>
</tr>
</tbody>
</table>
AQAP Six Month Outlook

July
- Compendium Update
- I-710 HIA Scope

August
- Draft Community Medical Needs Assessment
- Draft I-710 Near Roadway Modeling (Ultrafines)
- AQ/HRA Protocol
- Draft I-710 Construction Staging and Phasing Analysis

September
- Final Community Medical Needs Assessment
- Final I-710 Near Roadway Modeling (Ultrafines)
- Final I-710 Construction Staging and Phasing Analysis
- Draft I-710 HIA Report
- Early Action Projects Report

October
- Draft I-710 HIA Report
- Early Action Projects Report

November - December 2011
- Final I-710 HIA Report

2012
- New Air Quality Measures and Various AQAP Products

Note: Tasks shown in gold are scheduled to be completed in time for consideration in the I-710 EIR/EIS
AQAP Task Update

**Community Medical Needs Assessment**

- Data Analysis Complete
- Report being developed
- Discussed Findings at August Roundtables
- Draft Report being reviewed
- Results to Roundtables, EC, etc. in September
Protocol Development Process

Characterizes Health Conditions/Treatment by reviewing data re:
- Disease outcomes
- Health resources available
- The effectiveness of existing medical care

Uses data from:
- Los Angeles County Department of Public Health (LACDPH):
  - Los Angeles County Health Survey (2007)
  - Mortality in Los Angeles County (2007)
- Office of Statewide Health Planning and Development (OSHPD):
  - Hospitalization and Emergency Department Visit Data (2009)
  - Shortage Designation Data (2010)
- California Health Interview Survey (CHIS) (2009)
- U.S. Census Bureau
Geographies: Service Planning Areas
Examples of Metrics

- Asthma Prevalence, Asthma Hospitalizations & ED Visits
- Adult Diabetes Prevalence, Hospitalizations & ED Visits
- Obesity and Overweight rates
- Children – Do Not Meet PA Guidelines
- Adults Diagnosed with Depression
- Parents Could Not Afford Child Check-Up
- Could Not Afford Prescription Medication
- Parents - Difficulty Accessing Care Due to Transportation
- Uninsured
- Self Reported Fair/Poor Health
- Poor Availability of Fresh Fruits & Vegetables
- Health Professional Shortage Areas (Primary, Mental Health, Dental)
- Medically Underserved Areas and Populations
- Locations of healthcare facilities
I-710 Near Roadway Modeling Assessment

- Analyzing modeled data and comparing to monitoring (AQMD and USC) data
- Discussed Preliminary Results at August Roundtables
- Final Results to Roundtables and EC in September
Objectives

• Original purpose of this assessment (Jerry Wood)

• Assess ability of near roadway modeling to predict actual concentrations

• Compare modeled concentrations to measured concentrations
Objective

- **Modeling** was performed using AERMOD based on the methodology used in I-710 EIR/EIS
  - Except we used 2009 to match the monitored data
  - Average daily traffic volume modeled in four time intervals (6am-9am, 9am-3pm, 3pm-7pm, 7pm-6am)

- **Monitoring** data was collected by AQMD in 2009 at two sites, one located 15 meters west (labeled “West”) and 80 meters east (labeled “East”) of the I-710
Methodology

Two metrics were used for this comparison:

- **Hourly average concentration** – The hourly measured and model-predicted concentration are being statistically compared.

- **Hourly concentration gradient** – The ratio of concentrations at 15 m and 80 m provides a measure of concentration gradient. The observed and model-predicted concentration gradients are being statistically compared.
Methodology

• Comparison made for three-intra day periods: Morning Peak (6 – 9 AM), Evening Peak (3 – 7 PM), and Non Peak hours.
• Separate comparison winter (Feb – March) and summer seasons (July – August)
• Statistical analysis will be used to evaluate results
Data Interpretation

Model is over predicting

Model is under predicting
Scatter plots of Modeled vs Monitored CO Concentration (ppb)

Modeling is showing limited ability to predict monitored observations
Scattered Plots of Modeled vs Monitored NO\textsubscript{x} Concentration (ppb)

Model is generally over-predicting NO\textsubscript{x} concentrations
Key Findings

• Significant differences are observed between monitoring data and model predictions.

• In general, AERMOD under-predicts CO and over-predicts NO$_x$ concentrations.

• Discrepancies are likely due to uncertainties in model inputs (variations in traffic activity and fleet mix) less so weather.
Next Steps

• Conduct additional modeling to assess source of discrepancies (adjust input parameters while monitoring sensitivity)

• Prepare technical memo to be presented in September
Thank You

Questions or Comments
AQAP Participation Framework
Committees Update

Environmental Committee
August 24, 2011
Participation Framework

JULY

- AQAP Technical Working Groups
  - July 7th Briefings
  - July 13th/14th Kick-Off

- AQAP Roundtables
  - July 18th Briefing
  - July 27th Kick-Off

- I-710 Project Committee
  - July 11th; AQ/HRA, July 25th

- GCCOG Board
  - August 3rd

- Transportation Committee
  - August 3rd

- I-710 Related Elements

I-710 HIA July 11th; AQ/HRA, July 25th
Participation Framework

AUGUST

Committee Update Format:
- Participants
- Topics
- Comments
- Responses

I-710 Project Committee
I-710 Related Elements
Transportation Committee
Environmental Committee
AQAP Roundtables
GCCOG Board

AUGUST
I-710 HIA August 29th
August 10th /11th
August 24th
Sept 7th
Sept 7th

References:
AQAP Participation Framework - Update

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

- 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
Upcoming: August 29th Meeting

HIA Report: Draft Chapter on Noise Effects Pathway

Meetings

May 12th, May 26th, July 11th
AQAP Participation Framework Update

Air Quality/ Health Risk Assessment Technical Working Group (TWG)
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.
AQAP Participation Framework

AQ / HRA TWG Update

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 17th, June 21st, July 25th
• 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
All comments and concerns considered by AQAP Project Team in finalizing the AQ/HRA Protocols.

- Most concerns were addressed
- Some issues could not be addressed
- Protocol and Comment letters document actions taken
AQAP Participation Framework - Update

AQAP Technical Roundtable (TRT)
Participation Framework

- AQAP
- Technical Working Groups
- Roundtables
- AQAP
- I-710 Project Committee
- I-710 Related Elements
- Transportation Committee
- Environmental Committee
- GCCOG Board
- Sept 7th
- Aug 24th
- Aug 10th/11th
- HIA Aug 29th
AQAP Participation Framework

TRT Update

Federal
- US Environmental Protection Agency *(invited)*
- 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

JPA/TAC
- I-5 JPA; I-710, SR 91/605/405 TACs

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
AQAP Participation Framework
TRT Update

• AQAP Project Update
  o Community Medical Needs Assessment
  o Near Roadway Modeling
  o AQ/HRA Final Protocol
  o Sensitive Receptors

• Participation Framework Update

• Roundtable Discussion
  o I-710 HIA Pathways
  o Early Action Items

August 10th Meeting
I-710 HIA Pathways – General Concerns

- Economic cost information
- Construction phasing concept impacts

Air Quality Effects Pathway:
- emergency dept. visits/hospitalization data
- impact on seniors
- rail traffic

Noise Effects Pathway:
- hearing loss as a health outcome
- ensure that annoyances and sleep disturbances are included and quantified
Mobility Effects Pathway:
  • stress related outcomes – qualify findings as needed to ensure that these impacts are put in context of the many stresses of life

Traffic Safety Effects Pathway:
  • consider including how collisions on the freeway impact congestion and therefore air quality
  • include changes in vehicle size and technology – smaller, lighter, but smarter?

Jobs & Economic Development Effects Pathway:
  • clarify what “benefits” means on the pathway diagram (“job benefits” e.g., health insurance”)
All comments and concerns considered by AQAP Project Team in finalizing the HIA Scope.

- Most concerns addressed
- Some issues could not be addressed e.g. quantification of health costs
- Others might not be considered a priority for analysis

- A Technical Webinar on near roadway modeling methodology will be scheduled soon. EPA and CARB will be invited.

- A standing technical webinar will be scheduled prior to the next several roundtable meetings.

Daniel Ojeda
AQAP Participation Framework - Update

AQAP Advisory Roundtable (ART)
Participation Framework

- I-710 Project Committee
- GCCOG Board
- Transportation Committee
- Environmental Committee
- AQAP Roundtables
- AQAP Technical Working Groups
- I-710 Related Elements

Events:
- August 10th/11th
- August 24th
- HIA August 29th
- Sept 7th
• **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 Project Update
  o Community Medical Needs Assessment
  o Near Roadway Modeling
  o AQ/HRA Final Protocol
  o Sensitive Receptors

• Participation Framework Update

• Roundtable Discussion
  o I-710 HIA Pathways
  o Early Action Items

August 11th Meeting
AQAP Participation Framework
ART Update

Formal Comments
Four Letters Received
• Three letters addressed HIA Scope
• One letter addressed Compendium Report.

Informal Comments
• Comments logged in:
  o Policy Comments
  o Technical Questions
  o HIA Comments
Mobility Effects Pathway:

- Prioritize changes in physical activity and social cohesion
- Add changes in nutrition
- Consider including changes in city budgets related to emergency response time

Jobs & Economic Development Effects Pathway:

- Include changes in jobs resulting from changes in vehicle technology and infrastructure (e.g., “green” jobs to build and support zero emissions trucks)
- Include changes in housing value based on proximity to freeway (based on knowledge about air quality, aesthetic issues related to seeing the freeway)
AQAP Participation Framework

ART Update

Air Quality Effects Pathway

- Include data on # of vehicles on local roads and speeds on arterials and local roads (from SCAG models)
- Include change in mode shift of freight movement (e.g., truck to rail)
- Specify types of emissions reductions technologies that are being considered
- Clarify language for “Change in other sources of pollution”
- Make sure the list of air pollutants being considered is all inclusive (e.g., add rubber, road dust)
- Clarify that change in environmental quality is related to changes to quality of life
- Include cognitive effects/neurology (e.g., autism) in health outcomes
- Include stress in health outcomes
- Include change in school recreation activities
- Include change in income to schools based on attendance
Traffic Safety Effects Pathway: Column 2, add
- Change in trucks/cars on GP lanes, FC lanes, and arterials
- Change in speeds at transitions (e.g., on/off ramps to other freeways)
- Change in speed by time of day
- Change in truck type (e.g., how will use of zero emissions trucks impact traffic safety)
- Change in freeway geometry/modernization of freeway

Traffic Safety: Column 3, add
- Change in vehicle repair (e.g., less brake wear from congestion)
- Change in infrastructure maintenance – will include in HIA
- Change in delay/congestion
- Recommend that 710 be completed through Pasadena
- Consider adding impacts of extreme weather events on collision
Noise Effects Pathway:

- Recommend different pavement options as mitigation
- Include change in number and mix of trucks/cars on weekdays and weekends
- Include analysis of noise by time of day
- Add aesthetics of soundwalls – visual impacts
- Include noise exposure by weekday/weekend
- Change “at home and school” to “for sensitive receptors”
- Ensure that Neighborhood Resources pathway considers noise health impacts
- Discuss perceptions of the noise/quality of the noise
All comments and concerns considered by AQAP Project Team in finalizing the HIA Scope.

- Most concerns addressed
- Some issues could not be addressed e.g. quantification of health costs
- Others might not be considered a priority for analysis

Angelo Logan, East Yard Communities
Luis Cabrales, Coalition for Clean Air
Gateway Cities Environmental Committee
Participation Framework

- AQAP Technical Working Groups
  - HIA August 29th
  - AQAP Roundtables
    - August 10th/11th
  - August 24th
- I-710 Project Committee
  - I-710 Related Elements
  - Sept 7th
- GCCOG Board
- Transportation Committee
  - Sept 7th
- Environmental Committee
  - Sept 7th
## AQAP Participation Framework

### Environmental Committee Update

### Participants

<table>
<thead>
<tr>
<th>Committee Member</th>
<th>Representing</th>
<th>Vice Mayor, City of South Gate</th>
</tr>
</thead>
<tbody>
<tr>
<td>William Dewitt</td>
<td>Chairman</td>
<td>Vice Mayor, City of South Gate</td>
</tr>
<tr>
<td>Jorge Rifa</td>
<td>City Managers</td>
<td>City Manager, City of Commerce</td>
</tr>
<tr>
<td></td>
<td>Supervisor Mark Ridley-Thomas</td>
<td></td>
</tr>
<tr>
<td>Karly Katona</td>
<td>LA County Board of Supervisors</td>
<td>Deputy to Second District</td>
</tr>
<tr>
<td></td>
<td>Supervisor Gloria Molina</td>
<td></td>
</tr>
<tr>
<td>Angie Castro</td>
<td>LA County Board of Supervisors</td>
<td>Deputy to First District</td>
</tr>
<tr>
<td>Ron Arias</td>
<td>City Health Department</td>
<td>Director, City of Long Beach, Department of Health &amp; Human Services</td>
</tr>
<tr>
<td>Steve Forster</td>
<td>Public Works Directors</td>
<td>Public Works Director, City of La Mirada</td>
</tr>
<tr>
<td>Steve Lefever</td>
<td>Planning Directors</td>
<td>Community Development Director, City of South Gate</td>
</tr>
<tr>
<td>Ruben Arceo</td>
<td>I-5 JPA</td>
<td>Community Development Director, City of La Mirada</td>
</tr>
<tr>
<td>Wendell Johnson</td>
<td>I-710, SR 91/605/405 TACs</td>
<td>Public Works Director, City of Compton</td>
</tr>
<tr>
<td>Daniel Ojeda</td>
<td>AQAP Technical Roundtable</td>
<td>Public Works Director, City of Lynwood</td>
</tr>
<tr>
<td>Angelo Logan</td>
<td>AQAP Advisory Roundtable</td>
<td>East Yard Communities</td>
</tr>
<tr>
<td>Luis Cabrales</td>
<td>AQAP Advisory Roundtable</td>
<td>Coalition for Clean Air</td>
</tr>
<tr>
<td>Judith Mitchell</td>
<td>SCAQMD</td>
<td>Board Member, SCAQMD representing Cities of Los Angeles County,</td>
</tr>
<tr>
<td>Commissioner Mike Walter</td>
<td>Port of Long Beach</td>
<td>Western Region; Council Member, Rolling Hills Estates City Council</td>
</tr>
<tr>
<td>Amanda Eaken</td>
<td></td>
<td>Harbor Commission, Port of Long Beach</td>
</tr>
<tr>
<td>Adrian Martinez (Alternate)</td>
<td></td>
<td>Natural Resources Defense Council</td>
</tr>
<tr>
<td>Michele Grubbs</td>
<td>Environmental Representative</td>
<td>Pacific Merchants Shipping Association</td>
</tr>
<tr>
<td>Elizabeth Warren</td>
<td>Business Representative</td>
<td>Future Ports</td>
</tr>
</tbody>
</table>
Comment:
Include education in the Jobs/Economic Development Effects pathway, given its significant role as an indicator of economic development and employment.

Response:
The Jobs/Economic Development pathway will include a discussion on education based on school test scores.
Comment:
Time boundaries need to be expanded to include full construction because of the long time line and its impact on 2 K-12 education cycles.

Response:
Construction Emissions Impacts will be analyzed in other parts of the AQAP. e.g. construction impacts in I-710 HRA will analyze emissions impacts for the entire project, and will be available in November/December. We can then see what else needs to be done for impact on school children.
Comment:
Project Team should incorporate NRDC/CBE/EYCEJ comments:
- comparisons among alternatives;
- traffic data and assumptions related to fleet composition;
- analysis of construction impacts;
- public transit access assumptions;
- jobs and economic development

Response:
*Staff analyzed the comments and brought forward recommendations in Responses to Comment Letter.*
All comments and concerns considered by AQAP Project Team in finalizing the HIA Scope.

- Most concerns addressed
- Some issues could not be addressed e.g. quantification of health costs
- Others might not be considered a priority for analysis

Angelo Logan, East Yard Communities
Luis Cabrales, Coalition for Clean Air
Thank You

Questions or Comments
Gateway Cities Transportation Committees AQAP 101 Briefing Agenda

Environmental Committee
August 24, 2011
What: AQAP 101 Briefing (1 hour)
When: September 7th, 4:30 pm – 5:30 pm
Where: Gateway Cities COG

Topics:
• What are we doing?
• Why are we doing it?
• What is the AQAP “Toolkit”?
• What is foundation for AQAP “Toolkit”?
• How will we implement measures in “Toolkit”?
What are we doing?
  • Building the Clean Air Advocacy Toolkit

Why are we doing it?
  • AQAP Purpose and Objectives from the Community input and I-710 Project Committee
What is the AQAP “Toolkit”? 

- Compendium – laid the foundation for identifying the New AQ Measures

- Early Action Items - proposed by the environmental and community representatives in 2005

- New AQ Measures – examples of types of measures at various levels
What is the AQAP “Toolkit”? 

• Includes measures that could be directly implemented by local governments (i.e. local ordinances, permitting decision, incentive programs, etc) 

• also include measures that would require implementation by state or regional partners, including the
What is the foundation for the AQAP “Toolkit”?

- Technical research studies and analysis underway
- I-710 tasks inform work
- Briefing Package one-page task summaries
How will we implement the measures in the “Toolkit”?  

- Through Advocacy  
- Partnerships and constituency development underway as part of the AQAP works together to implement measures
Thank You

Questions or Comments

Environmental Committee
August 24, 2011
Air Quality Protocol

- Final Protocol being prepared
- Discussed Findings at August Roundtables
Scope of Protocol

Study Area

- All Gateway Cities
- Wilmington
- Carson
Scope of Protocol

4 Scenarios

• 2009:
  • Current conditions

• 2023 (construction ongoing, AQMD inventory available):
  • All “booked” AQ improvement strategies
  • I-710 construction staging and phasing concept

• 2035 (I-710 construction completed):
  • All “booked” AQ improvement strategies
  • Includes I-710

• 2035:
  • All “booked” AQ improvement strategies plus
  • Any Additional strategies (AQAP)
Scope of Protocol

Technical Assessments

- Quantifications of emissions
  - Criteria pollutants, toxic air contaminants (TACs), greenhouse gases
  - For both general activity and I-710 construction
- Identification of additional AQ improvement strategies
- Air dispersion modeling
  - Criteria Pollutants and TACs
Scope of Protocol

Technical Assessments cont.

• Hotspot assessment
  • Criteria Pollutants and diesel particulate matter
  • Specific locations and/or a representative

• Human health risk assessment
  • TACs and PM2.5 mortality and morbidity
Protocol Development Process

- AQ/HRA TWG – 1: May 17th
- AQ/HRA TWG – 2: June 21st
- Technical Roundtable – 1: July 13th
- Advisory Roundtable – 1: July 14th
- AQ/HRA TWG – 3: July 25th
- Technical Roundtable – 2: August 10th
- Advisory Roundtable – 2: August 11th
Key Issues and Resolution

1. Use of the AQ and HRA in decision making
   - Provided to the COG membership

2. Construction staging concept / emissions analysis
   - Emission analysis to be provided to I-710 EIR/EIS team for further consideration.
   - AQ/HRA of Construction Concept emissions will be conducted as part of larger AQAP AQ/HRA.

3. Study Area
   - Expanded study area to include Wilmington and Carson per US EPA suggestions
Key Issues and Resolution

4. Offroad and nonpoint stationary source emissions
   - Spatial resolution to be refined per AQMD suggestion

5. Hotspot Analysis Methodology
   - Hotspot selection criteria modified per AQMD suggestion
   - Analysis refinements added per US EPA and ARB suggestions
6. List of air toxics to be modeled
   • Acrolein omitted per ARB suggestion (US EPA did not concur)

7. Air dispersion model options
   • Simulation period expanded from 1 year to 3 years per AQMD suggestion

8. Air dispersion model
   • CALPUFF selected per ARB suggestion
9. Exposure and health risk assessment methodology
   • OEHHA approach selected per OEHHA, ARB and PoLB suggestions
   • PM2.5 mortality and morbidity analysis added per OEHHA, ARB, and US EPA suggestions

10. Presentation of results
    • Stratification of health risk by source category, pollutant, and demographics added per US EPA suggestions
Key Issues and Resolution cont.

Next Steps

• Utilize the protocol to develop the emissions inventory and AQ/HRA

• Results will be presented in Spring 2012
Compendium Update

- Draft Compendium presented at July Technical and Advisory Roundtables
- Presented to Environmental Committee

COMPLETED
Recommended Action

Staff Recommends

• The Environmental Committee
  • Receive and file the AQ/HRA Protocol and the Compendium Report
  • Acknowledge their completion
  • Forward this action to the Transportation Committee for their information
Alternatives to be considered:
  • Alternative 1 (no build)
  • Alternative 5A (10 lanes)
  • Alternative 6A (5A + 4 lane freight corridor)
  • Alternative 6B (6A + zero emissions)
  • Alternative 6C (6A/B + tolling on the freight corridor)
  • Alternative 6D (6A/B + tolling trucks on the FC and in the GP lanes)

Time boundaries:
  • Consider 2035 impacts only (other analysis covering construction impacts)

Geographic boundaries:
  • Vary by issue area (e.g., AQ vs noise vs jobs)

In addition to the general population, the following vulnerable populations will be considered:
  • Age (0-5; 6-17; 65+)
  • Race/ethnicity (African American; Hispanic; non-English speakers)
  • Income (poverty; 200% of poverty)
  • Pre-existing conditions (asthma; cardiovascular disease; diabetes)
Overarching Scoping Parameters

- EIR has all necessary data
- EIR has most necessary data
- EIR has some necessary data
- EIR does not have necessary data
1. Air Quality Effects

I-710 Corridor Project alternatives

AQ1
Δ in vehicle emissions due to technology

CQ4, AQ3
Δ in public transit access and ridership

CQ2
Δ in # of vehicles (by type) on freeways and arterials

CQ1
Δ in # of vehicles (by type) on local roads

CQ2
Δ in vehicle speeds on freeways

CQ2
Δ in vehicle speeds on arterials and local roads

AQ2
Δ in air pollution due to Δ in use of goods movement facilities

CQ5, AQ10
Δ in proximity of sensitive uses to freeway/air pollutants

AQ1, AQ2, AQ12
Δ in air pollutants: (PM 2.5, PM 10, NO2, NOx, Ozone, SOx, Benzene, Diesel PM, Acrolein, other mobile air toxics, ultrafines, greenhouse gases, road dust)

AQ1, AQ2, AQ10, AQ11
Δ in exposure to air pollutants

(see Neighborhood Resources)

AQ1, AQ2, AQ12
Climate change (change in rainfall, sea-level rise, marine life)

AQ13
Δ in heat related illness, water-, food-, vector-, or rodent-borne disease

AQ4, AQ5, AQ6, AQ7, AQ8, AQ9
Δ in health outcomes:
- Asthma/other respiratory diseases
- Cardiovascular disease
- Cancer
- Mortality
- Low birth weight, pre-term birth
- Reproductive health
- Children’s lung development
- Cognitive effects/neurology (e.g., autism)

AQ4
Δ in attendance at school or work

AQ4
Δ in education, employment, and incomes & associated health outcomes

August 24, 2011 – Environmental Committee
I-710 Corridor Project alternatives (including proposed mitigations)

- CQ1: Δ in # of vehicles (by type) on freeways and arterials
- CQ2: Δ in vehicle speeds on freeways
- CQ2: Δ in vehicle speeds on arterials and local roads
- N2: Δ in noise due to Δ in use of goods movement facilities
- CQ5, N7: Δ in proximity of sensitive uses to freeway/noise sources

N1: Δ in vehicle noise due to technology

- CQ1: Δ in # of vehicles (by type) on local roads

N3, N4, N5, N6: Δ in health outcomes:
- Hypertension
- Annoyance
- Sleep disturbance
- Cardiovascular disease
- Education outcomes (reading, recall, recognition, and attention)
- Hearing loss

N1, N2, N8: Δ in noise/vibration levels near local roads and freeways

N1, N2, N7, N8: Δ in exposure (modeled/measured at different times of day/week) for sensitive receptors

Δ in environmental quality

(see Neighborhood Resources)
Health impacts of stress include: poor mental health, increased inflammatory response, decreased immune response.
Health impacts of chronic disease includes: heart disease, diabetes, hypertension.
Health impacts of delayed emergency response times include: stress, potential for survival and recovery.
4. Traffic Safety Effects

I-710 Corridor Project alternatives (including separating cars and trucks, intersection improvements, and changes in freeway geometry)

- **TSS3** \( \Delta \) in vehicle technology
  - CQ1 \( \Delta \) in # of vehicles (by type) on freeways and arterials
    - CO2 \( \Delta \) in vehicle speeds on freeways and ramps
      - CQ3 \( \Delta \) in vehicle miles traveled
  - CQ1 \( \Delta \) in # of vehicles (by type) on local roads
    - CO2 \( \Delta \) in vehicle speeds on arterials and local roads
      - CQ3 \( \Delta \) in vehicle speeds on arterials and local roads

- **TS1** \( \Delta \) in # of truck related motor vehicle collisions on freeways, on ramps, and on local roads
  - **TS1, TS4** \( \Delta \) in # of non-truck related motor vehicle collisions on freeways, on ramps, and on local roads
    - **TS1, TS4** \( \Delta \) in # of non-truck – pedestrian/ bicycle collisions on local roads
      - **TS1, TS4** \( \Delta \) in severity of collisions on freeways and on ramps (due to speed changes and separated lanes)

- **TS2** \( \Delta \) in # hazardous materials spill incidents
  - **TS2** \( \Delta \) in exposure to hazardous materials & associated health outcomes

- **TS5** \( \Delta \) in traffic related injuries & fatalities
  - **TS6** \( \Delta \) in stress & stress-related illness

August 24, 2011 – Environmental Committee
Health impacts of mental health include: stress-related illness, crime, substance abuse, domestic abuse, change in lifespan.

Health impacts of chronic disease includes: heart disease, diabetes, hypertension.
6. Neighborhood Resources Effects

- Environmental hazards refers to air pollution, noise, odors, congestion, traffic safety
- Health outcomes include: injury and morbidity from crime; stress-related illness; effects from lack of social cohesion; and effects from lack of access to neighborhood resources
Previously Proposed Early Action Items

#1 – Develop funding plan for AQAP
#2 – Maximize use of cleaning transportation technology
#3 – Container fee legislation
#4 – Partner with SCAQMD on air monitoring system improvement
#5 – Restrictions on truck idling
#6 – Conditional Use Permit conditions on warehouse/distribution facilities
#7 – Requirements on construction equipment
#8 – Exposure reduction for sensitive receptors from diesel exhaust
#9 – Policies to encourage communities to buy locally
Historical Perspective

- **Development of the Air Quality Action Plan for the I-710 Corridor (May 2007)** provided the basis for the scope of work

- Key representatives from environmental community indicated strong desire for measures that would result in near-term air quality improvement

- Many of the measures are based on concepts that were originally proposed in the Tier 2 report

- Some measures result in direct emission reductions while others provide foundations for successful development and implementation of the AQAP
Items Already Implemented

#1  Develop funding plan for AQAP
    Completed

#2  Maximize use of cleaner transportation technology for I-710 corridor communities

  • I-710 EIR/EIS includes clean transportation technology alternative
  • CALSTART “state of the industry” analysis to be released shortly
  • MTA developing collaborative clean technology business plan
Items Already Implemented

#3  Support legislation establishing container fees
    • Gateway Cities on record for container fees and other funding mechanisms

#4  Formal partnership with SCAQMD for improvement of AQ monitoring along corridor
    • SCAQMD is partnering in AQAP preparation and is I-710 TAC member
Comment – The Advisory Roundtable felt recommendations 1 through 4 deserved a second look, particularly with regard to clean technology and availability of additional funding through the Transportation Reauthorization Bill.
Purpose of Briefing

• Analyze status of recommendations for early action initially developed by local communities
• Present analysis and obtain input from Technical and Advisory Roundtable meeting attendees
• Focus is on recommendations 5 through 9, the early action items within the direct (or indirect) jurisdiction of local cities
#5 – Restrictions on Truck Idling

- CARB has limited truck idling to 5 minutes through regulation since 2006; enforcement has been limited due to lack of resources.
- Many cities have adopted anti-idling ordinances (NYC, Chicago, Philadelphia, City of Auburn, Sacramento, Cupertino).
  - *Recommend cities in GC adopt similar ordinances.*
- Proposal would be to facilitate enforcement of existing CARB regulation through local police departments (Chicago PD issues citations).
- Enforcement could be funded through citation revenue.
- Cities also to implement training/education programs for police, warehouses, and distribution centers.
Previously Proposed Early Action Items

#5 – Restrictions on Truck Idling

Comment – Feedback from Cities was that police enforcement resources are unavailable and a more effective approach would be to establish regional truck centers with full amenities that could also provide inspection services.
Previously Proposed Early Action Items

#6 – Additional CUP Conditions for Warehouse and Distribution Facilities

• Focus would be on further reducing air pollution
• Types of conditions could include:
  • On-site signage regarding truck idling
  • Provision of electric hookups for hybrid vehicles
  • Signage/other restrictions on truck routes through neighborhoods
  • Locate driveways/loading docks away from residential or other sensitive receptors or city streets.
  • Restrictions on auxiliary power units
  • Use of alternate-fuel cargo handling equipment
#7 – Construction Equipment Requirements

- Metro’s adopted green construction policy
- Local cities will collaborate to develop and adopt a similar policy
- Future restrictions could limit small/local contractors’ ability to complete
- Consideration should be given to a clean construction equipment upgrade or buy-back program for local contractors (SCAQMD indicated that they have funding sources available e.g., SOON)
Previously Proposed Early Action Items

#8 – Diesel Exhaust Exposure Reduction to Sensitive Receptors

- Consider banning trucks from traveling certain routes or within sensitive neighborhoods
- Use state/federal energy efficiency funds (PACE) to partially support a HEPA filter retrofit program for HVAC systems (*SCE indicated they have additional resources for energy efficiency*)
- Pass ordinance requiring new sensitive receptors to evaluate proximity to high-emitting locations (freeways, warehouses, rail yards, ports); use landscaping for pollution and sound walls for noise/vibration
Previously Proposed Early Action Items

#8 – Diesel Exhaust Exposure Reduction to Sensitive Receptors (cont.)

• Develop new land use/zoning restrictions that minimize conflicts between sensitive receptors and high-emitting sources

• Evaluate the retrofit of school buses and senior transport vehicles to reduce exposure in cabins (some programs may be in place) – Cities indicated more retrofit opportunities exist; investigate LAUSD existing programs
Previously Proposed Early Action Items

#9 – Buy-Local Policies

- Develop local municipal procurement policies that favor local vendors and contractors
- Develop procurement policies that limit goods and services to L.A. County and USA providers
- Encourage/promote venues such as farmer’s markets and street fairs that provide consumers an opportunity to buy local
- Provide tax incentives/other inducements for small entrepreneurs serving local neighborhoods
- Establish milestones and measure effectiveness
- **Comment** - Cities feedback is that although these programs are worthwhile, the emissions benefit may be limited and it not be given high priority in terms of resources
Next Steps

• Recirculate the Early Action Presentation materials with feedback incorporated
• Continue research to finalize recommendations (benchmark with other communities, implementation strategy, funding mechanisms, timeline)
• Develop draft memo summarizing each recommendation
• Consider other ideas for early implementation
• Present detailed findings in early fall (mid-September)