

PLANNING AND PROGRAMMING COMMITTEE  
June 14, 2006

SUBJECT: I-710 SOUTH EIR/EIS

ACTION: APPROVAL TO INITIATE I-710 SOUTH EIR/EIS

RECOMMENDATION

- A. Adopt the *Alternative Analysis for the I-5/I-710 Interchange* (East Los Angeles Mini-Study) including Tier 1 Community Advisory Committee comments from East Los Angeles and City of Commerce as summarized in Attachment A, and incorporate into the I-710 Major Corridor Study's Locally Preferred Strategy adopted by the Board in January 27, 2005.
- B. Authorize the Chief Executive Officer to proceed with the environmental (EIR/EIS) phase of the project pursuant to the Major Corridor Study's Locally Preferred Strategy.
- C. Authorize the Chief Executive Officer or his designee to negotiate and execute funding contracts or agreements as needed with agencies that have committed to provide funds for the conduct of the EIR/EIS.

ISSUE

On January 27, 2005, the Draft Final Report on the I-710 Major Corridor Study (Study) between the Ports of Los Angeles/Long Beach and SR-60 Pomona Freeway was adopted by the Metro Board of Directors. The I-710 Study defines the Locally Preferred Strategy (LPS) for corridor improvements that was developed with extensive collaboration and input from communities and stakeholders along the corridor. The LPS consists of: (1) 10 mixed flow lanes, (2) 4 exclusive truck lanes, 2 in each direction, (3) interchange and arterial improvements, and (4) direct truck ramps into the Hobart/ICTF railroad yards – Cities of Vernon & Commerce.

Before the Board would authorize the I-710 EIR/EIS phase to move forward, it directed staff to complete four specific actions and report back with the results. These are:

- 1) Complete the East Los Angeles Mini-Study and incorporate results into the Locally Preferred Strategy prior to initiating scoping for the EIR/EIS;

- 2) Form a multi-jurisdictional entity to coordinate the appropriate aspects of the project;
- 3) Identify a funding plan with funding sources from multiple partners; and
- 4) Upon formation, task the multi-jurisdictional partnership with identifying strategies for achieving near-term improvements to the corridor's air quality.

Staff has completed all items requested by the Board and is seeking approval to initiate the EIR/EIS phase.

## POLICY IMPLICATIONS

The recommended action is consistent with the 2001 Long Range Transportation Plan's (LRTP) strategic element and the 2006 Los Angeles County Transportation Improvement Program (TIP) which programs \$5 million from FY07 to FY09 to cover Metro's commitment to the environmental analysis of the I-710 between SR60 and the Ports of Long Beach and Los Angeles.

## OPTIONS

The Metro Board could choose not to proceed with the environmental phase (EIR/EIS). Staff is not recommending this because the Study reflects a broad-based consensus of local jurisdictions, community advisory committees, the ports of Long Beach and Los Angeles, the I-5 Joint Powers Authority (JPA), and residents along the Corridor. Southern California Association of Government's (SCAG) Regional Transportation Plan (RTP) recognizes the I-710 Transportation Corridor (SR-60 to the Port of Long Beach) as a regionally significant transportation corridor and at the state and federal level it is recognized as a project of regional and national significance. Approval to proceed into the EIR/EIS phase is consistent with the actions of the I-710 Oversight Policy Committee and the multiple funding partners that have committed \$30 million to conduct the EIR/EIS.

## FINANCIAL IMPACTS

Funds to develop the work program, scope of work, and request for proposal as well as begin the EIR/EIS are available within the FY07 budget in Cost Center 4340, Transportation Development and Implementation. To conduct the estimated 3-year, \$30 million EIR/EIS, staff with the help of the multi-jurisdictional entity has developed a funding plan that includes funding commitments from multiple funding partners, including the Gateway Cities Council of Governments (GCCOG), Caltrans, SCAG, Port of Long Beach (POLB), Port of Los Angeles (POLA), I-5 JPA, and Metro. On December 15, 2005, the Metro Board of Directors adopted the 2006 Los Angeles County TIP which programs \$5 million from FY07 to FY09 to cover Metro's commitment to the I-710 South EIR/EIS.

## DISCUSSION

Metro staff with extensive collaboration and input from multi-jurisdictional partners, community advisory committees, local jurisdictions, citizens along the corridor, POLB, POLA, the I-5 JPA, and other regional stakeholders, has completed the four tasks directed by the Board on January 27, 2005.

The following discussion addresses staff's compliance with the Board action.

### **East Los Angeles I-5/I-710 Mini-Study**

The East Los Angeles I-5/I-710 Mini-Study Draft Report ("*Alternative Analysis for the I-5/I-710 Interchange*") was completed in September 2005. The study was initiated at the request of East Los Angeles and the City of Commerce Tier 1 Community Advisory Committees (CACs) to address specific freeway design issues.

The Mini-Study recommends design improvements that reduce the right-of-way requirements compared to the original design of the Study. The greatest benefits will be in the area near the on/off ramps around Olympic Boulevard and along Telegraph Road north of Atlantic Boulevard. In addition, the Mini-Study concludes that the use of an elevated HOV lane on the I-5 will reduce the cross-section of the freeway and result in less right-of-way requirements. This issue will be addressed by the I-5 EIR/EIS between the I-605 and the I-710 which will be conducted by I-5 JPA in the summer of 2006.

The City of Commerce City Council approved its Tier 1 recommendations on April 4, 2006, and the East Los Angeles Tier 1 CAC completed its review and submitted comments on April 6, 2006. The study results, as well as the comments and findings of the Tier 1 CAC's have been incorporated into the I-710 LPS by the I-710 Oversight Policy Committee on April 27, 2006. (Attachment B)

### **Multi-Jurisdictional Governance Structure**

The I-710 Project Governance Structure has been developed in close coordination with: Caltrans, GCCOG, SCAG, and Metro. It is organized around a framework consisting of (i) policy and project committees responsible for coordinating and guiding I-710 Corridor study/improvements, (ii) community input and public participation, (iii) technical committee input, and (iv) a specialized goods movement strategy advisory group. (Attachment C)

The basic responsibility of the *I-710 Executive Committee* will be to provide general direction and policy framework for I-710 Corridor decisions. This charge not only includes the EIR/EIS, but also other issues that are critical to the improvement of the I-710 Freeway Corridor. The Executive Committee's membership will include the following organizations and members:

- Metro – Los Angeles County Supervisor Don Knabe

- Gateway Cities Council of Governments – Long Beach City Councilmember Bonnie Lowenthal
- SCAG – Los Angeles County Supervisor Yvonne B. Burke
- County of Los Angeles – Supervisor Gloria Molina
- Caltrans – District 7 Director Doug Failing
- Co-Chairs of the I-710 Project Advisory Committee – Long Beach Councilmember Frank Colonna and City of Commerce Mayor Nancy Ramos
- Port of Los Angeles Commissioner – Vice President Jerilyn López Mendoza
- Port of Long Beach Commissioner –Dr. Mike Walters

The *I-710 Project Committee* composition is essentially the same as the former I-710 Oversight Policy Committee and represents all of the cities and unincorporated areas of the corridor. This committee will work in close coordination with the *I-710 Technical Advisory Committee* to provide policy, technical assistance, guidance and direction to the EIR/EIS.

Recognizing the essential need for community input and public participation, the I-710 Governance Structure ensures that the most directly affected communities are active project participants. Both the I-710 Executive Committee and the I-710 Project Committee will serve as vehicles for vital community and public input through *Advisory Community Groups* to the environmental phase of the I-710 Corridor Improvement Program.

It is also important to note that local communities will have a prominent role in the environmental scoping process for the EIR/EIS. The Metro Board and the I-710 Oversight Policy Committee, in previous actions, have required that the local communities' recommendations (Tier 2 CAC Report) arising from the development of the LPS be used as pre-scoping guidance for any EIR/EIS that results from the MCS.

Another important aspect of the Governance Structure is that the I-710 Executive Committee will be provided with specialized multi-jurisdictional expertise through a *Goods Movement Strategy Advisory Group*. This ad hoc resource group will be activated for guidance and support on legislative, regulatory, funding and other specialized issues as the need arises. As currently envisioned, prospective participation could include state and federal legislators, air quality experts, rail, trucking, shipping interests, environmental experts, and community stakeholders.

The Governance Structure is designed to provide for continuous interaction between technical analysis, community input, and policy judgment leading to final decisions. The intent is to provide a structure that utilizes the Executive Committee, Project Committee, Advisory Community Groups, Technical Committee, and the Goods Movement Strategy Advisory Group in a complementary fashion throughout the environmental process.

### Funding Plan

Metro staff, with the help of multi-jurisdictional agencies, has developed a funding plan consisting of multiple partners that will cover the estimated \$30 million cost of the expected

3-year EIR/EIS. These partners include Metro, Caltrans, GCCOG, SCAG, I-5 JPA, POLB and POLA.

Agencies and funding commitments:

<u>Agency</u>	<u>Amount (M)</u>	<u>Status</u>
Metro	\$5	Committed
Caltrans	\$5	Committed
GCCOG	\$5	Committed
I-5 JPA	\$2	Committed
POLB	\$5	Committed
POLA	\$5	(Port will agendize in June)
SCAG	<u>\$1</u>	Committed
Sub-total	<b>\$28</b>	<b>Cash</b>
SCAG	<u>\$2</u>	(In-Kind)
<b>TOTAL</b>	<b>\$30</b>	

### Near Term Air Quality Strategies

Before the EIR/EIS Request for Proposal (RFP) can be initiated, the Metro Board requested that near term strategies to achieve improvements to the corridor’s air quality be identified. To comply with this Board directive, Metro staff developed a “Compendium of Existing and Proposed Near-Term Air Quality Improvement Strategies” (Compendium). To accomplish this, Metro worked with staff of the POLA, POLB, California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), GCCOG, SCAG, and Caltrans to develop the list of air quality improvement strategies and actions contained in the Compendium.

The Compendium identifies nine public documents most relevant in the identification of near-term strategies/mechanisms/proposals for improving the air quality in the corridor. These are:

1. I-710 MCS Tier 2 Community Advisory Committee; Strategy Recommendations
2. Gateway Cities Council of Governments Clean Air Program
3. Gateway Cities Council of Governments Safety Action Initiative
4. Ports/Alameda Corridor Transportation Authority Truck Trip Reduction Program
5. Port of Long Beach Green Port Policy
6. Port of Los Angeles Clean Air Program
7. State Goods Movement Action Plan and California Air Resources Board Emission Reduction Plan for Ports and International Goods Movement
8. South Coast Air Quality Management District Chairman’s Clean Port Initiative
9. Harboring Pollution: Strategies to Clean Up U. S. Ports, Natural Resources Defense Council and Coalition for Clean Air

An overview of the Compendium has been presented to the Tier 2 Community Advisory Committee, the I-710 Technical Advisory Committee, the I-710 Oversight Policy Committee,

and the full Compendium has been received by I-710 Executive Committee. On May 3, 2006, the Executive Committee moved to forward the Compendium to the Metro Board for their information. Exhibit 2 in the Appendix of the Compendium summarizes the air quality measures/programs and corresponding implementation time frames and status.  
(Attachment D)

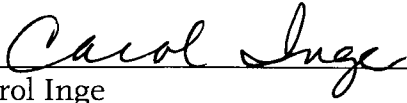
### NEXT STEPS

Upon Board approval, staff will develop a Request for Proposal(s) (RFP) for consultant services to prepare an EIR/EIS and assist with community outreach with a tentative advertisement release this fall and tentative award of contract at the end of 2006. Staff will return to the Board for approval of the contract award

### ATTACHMENTS

- Attachment A: Alternative Analysis for the I-5/I-710 Interchange (Executive Summary)
- Attachment B: Tier 1 Comments from East Los Angeles and City of Commerce
- Attachment C: I-710 Project Governance Structure
- Attachment D: Compendium of Existing and Proposed Near-Term Air Quality Improvement Strategies

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Carol Inge  
Chief Planning Officer



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Roger Snoble  
Chief Executive Officer

## ATTACHMENT A

### Alternative Analysis for the I-5/I-710 Interchange (Executive Summary)

A Major Corridor Study (MCS) was completed in 2004 for the I-710 freeway from the Ports to the SR-60 Freeway and approved by most of the local communities that border it. The exception was at the I-5/I-710 interchange where the two adjacent communities (represented by the Commerce and East Los Angeles Tier 1 CACs) requested additional analysis. This resulted in the preparation of the Draft I-5/I-710 Alternative Analysis Study which was completed in September, 2005.

The primary objectives of the study (developed with input from the two Tier 1 CACs) were to review and analyze the impacts of the following:

1. Construction of a new Slauson Ave. interchange.
2. Closing the I-710/Washington Blvd. interchange.
3. Not constructing the N/B I-710 to S/B I-5 "missing connectors".
4. Improving the Atlantic Blvd.-Bandini Blvd. interchange (including traffic impacts on Bandini Blvd.).
5. Constructing truck ramps from the proposed I-710 truck lanes directly into the rail yards.
6. I-5 HOV lanes (examination of at-grade, tunnel and elevated options), particularly for effects on adjacent properties.

With all of these options, the communities were interested in the impacts on local arterial highways and on the I-5 (particularly the Washington Blvd. and Garfield Ave. interchanges).

To address these issues and analyze the impacts a traffic study was prepared. The study included an analysis of six different options of various combinations of projects (including no-build). The traffic model was based on the SCAG regional traffic model (modified for the project area to provide more detail on the local land uses). Results of the analysis of all six options for future conditions at 111 locations (ramps and intersections) were prepared and submitted to the committees. The analysis included evaluations of both total traffic and truck traffic only.

To address the property impacts of the proposed freeway improvements, new geometric plans were prepared for both freeways. The primary reason for preparing new geometric plans was to assess potential right-of-way impacts.



The draft report (September, 2005) included the following recommendations:

1. Missing Connectors – Since the missing connectors would not serve significant volumes of traffic and would have right-of-way impacts, it was recommended that they should not be built.
2. Truck Ramps – Truck ramps provided significant benefits and should be constructed into the Railyards.
3. Washington Blvd. Interchange – The I-710/Washington Blvd. interchange was recommended to be closed as it conflicts with other proposed freeway improvements.
4. Atlantic Blvd.-Bandini Blvd. Interchange – The improved design provided significant benefits and that the proposed northbound on- and off-ramps should be built as soon as possible.
5. Slauson Ave. Interchange – This new interchange should be built if it was supported by the affected communities.
6. Bandini Blvd. – No impacts to Bandini Blvd. were expected from the proposed improvements except at the intersections. However, impacts were determined at the I-5 interchanges with Washington Blvd. and Garfield Ave.
7. East Los Angeles Improvements – No significant impacts to the arterial highways in East Los Angeles were found from any of the options but that arterial highway improvement are needed as soon as practical, regardless of the improvements to I-710.
8. I-5 HOV lanes – An elevated HOV lane would reduce property impacts as compared to an at-grade HOV lane. A tunnel option did not reduce property impacts (primarily due to construction impacts). The elevated HOV lane was recommended.
9. I-710 Improvements – The proposed improvements to I-710 from the study concluded that the residential property impacts caused by previous designs could be eliminated with the new designs included in the study.

The Tier 1 CACs met with the project team many times, and conducted extensive reviews of the draft report. The City of Commerce City Council reviewed their CAC recommendations in April, 2006, approved them and forwarded them to the Gateway Cities Council of Governments without any change. Both the Commerce and East Los Angeles Tier 1 CACs concluded their work in April and presented their comments and recommendations to the regional Tier 2 CAC on April 19, 2006.

During the preparation of the study, additional contact was made with the BNSF and UP railway companies to review and discuss the conceptual design for the truck access ramps from the proposed I-710 truck lanes into the two rail yards near the I-5/I-710 interchange. Meetings and discussions were held with staff of the Army Reserve to review the impact of the proposed northbound on and off-ramp at the I-710/Atlantic Blvd.-Bandini Blvd. interchange and review their comments.

In addition, the draft study was presented to Caltrans and FHWA for review and comment.

## **FINAL REPORT COMMENTS AND RECOMMENDATIONS**

The results of the various reviews with the preceding groups and agencies are included with this final report. The draft report (September, 2005) is referenced as an attachment to this final report and was previously distributed.

The comments and recommendations of the various reviews are summarized below. The complete list of these comments and recommendations are included in the body of the report. Both Commerce and East Los Angeles Tier 1 CAC's have requested ongoing and continuing input into the planning as the transportation projects continue.

### **Commerce Tier 1 CAC Recommendations**

1. Transportation
  - (1) Do not build the N/B-710 S/B I-5 missing connectors
  - (2) Construct the improved Atlantic Blvd./Bandini Blvd. Interchange
  - (3) Build Truck Ramps into Railyards
  - (4) Continue to examine keeping Washington Blvd. Interchange on I-710 operational
  - (5) Improve Washington Blvd. and Garfield Ave interchange on I-5 freeway as part of any I-710 improvements
  - (6) Include an elevated I-5 carpool lane
  - (7) Improve all arterial highways intersections in city between I-710 and I-5
  
2. Other
  - (1) Develop Air Quality Plan and/or an Environmental Impact Report (EIR) with Community Input
  - (2) Determine termination point for I-5 carpool lane
  - (3) No position on the proposed Slauson Ave. interchange until input from affected communities is obtained
  - (4) Study designated truck routes within Commerce (city staff)
  - (5) Construct soundwalls next to I-710/Washington Blvd. ramps as soon as possible

### **East LA Tier 1 CAC Comments and Recommendations (fully funded by transportation projects)**

1. Transportation
  - (1) Keep I-710/Washington Blvd. Interchange open
  - (2) The N/B I-710/S/B I-5 missing connectors do not appear to be warranted but may need to be re-evaluated based on any new or additional traffic modeling

- (3) Olympic Blvd./I-710 Interchange requires additional traffic modeling study but recommended prohibiting large trucks exiting to Olympic Blvd.
  - (4) Further examine design, construction and impacts of I-5 HOV elevated or tunneled lanes
  - (5) Support new interchange at I-710/Slauson Ave. and improved interchange at I-710/Atlantic Blvd.-Bandini Blvd.
  - (6) Support truck lanes on I-710 with direct access into rail yards
  - (7) Study traffic calming for arterial intersections and major boulevards in East Los Angeles
2. Other
- (1) Oppose any property acquisitions in East Los Angeles for transportation improvements
  - (2) Request preparation of an “Area Wide Truck Movement Analysis” during EIR
  - (3) Support full utilization of Alameda Corridor
  - (4) Require two ports to build rail facilities at the ports (near-dock or on-dock facilities)
  - (5) Develop and incorporation “Streetscape Program” for streets in East Los Angeles
  - (6) Perform I-710 Safety Improvements immediately
  - (7) Implement aesthetic and environmental improvements (some immediately)
  - (8) Conduct a comprehensive health study and other air quality improvement suggestions
  - (9) Development of future projects should include provisions for providing economic benefits for East Los Angeles

### **Caltrans/FHWA Comments**

The major comments are summarized below:

1. Any nonstandard design features will require further analysis.
2. I-5 Improvements should be examined for both 10-lane and 12-lane options (with full standards)
3. Additional traffic modeling, micro-simulation and operational analysis will be needed in the next phase of work
4. Further studies are needed to determine need for both sets of “missing connectors” at I-5/I-710 Interchange.
5. Closure of I-710/Washington Blvd. interchange will require additional studies.
6. Further design details and options listed in letter will need to be studied in next phase of work.
7. FHWA and Caltrans will have to provide approval in the future.

**Army Reserve Comments** (Proposed I-710/Atlantic Blvd.-Bandini Blvd. N/B on and off-ramps)

1. The proposed ramps need to be further from their identified buildings.
2. The ramps will divide or isolate a small portion of the base which will have to be addressed.
3. Safety concerns were raised if the ramps are elevated.
4. Realize importance of interchange improvements and willing to work to remedy their concerns.

**Railroad Companies Comments** (BNSF and UP) (See new railroad companies concept in Figures 4 and 5)

1. Support the construction of the I-710 truck lanes
2. BNSF supports the concept of direct truck access ramps for their rail yards provided they eliminate or minimize impacts to BNSF property.
3. UP supports concept of direct truck access ramps for their rail yard and are willing to consider reorganizing their rail yard facilities or adjacent property to accommodate these ramps.
4. Significant additional work will be needed for the designs of these truck access ramps to address the concerns of the City of Commerce, BNSF, UP and Caltrans.
5. Additional truck origin/destination studies will be needed to determine how existing and future trucks access these two rail yards (location and direction.)

**ATTACHMENT B**

**Tier 1 Comments from East Los Angeles and City of Commerce**

**East Los Angeles Community Advisory Committee**

**I-5 / I-710 Alternative Analysis Study**

**April 6, 2006**

WHEREAS, the GATEWAY Cities Council of Governments (GATEWAY) has entered into an agreement with the California Department of Transportation, the Southern California Association of Governments and the Los Angeles County Metropolitan Transportation Authority (MTA) to conduct a Major Investment Study (MIS) for the Interstate 710 (I-710) Corridor to seek ways to improve conditions along the I-710 Corridor and adjacent surface streets from the State Route 60 to the Ports of Long Beach and Los Angeles.

WHEREAS, the movements of goods to and from the Ports of Long Beach and Los Angeles via rail and truck service is projected to increase in the short-and long-term future, and truck activity on the area freeways is expected to increase, especially within the I-710 Corridor; and

WHEREAS, GATEWAY has hired a consultant to prepare the MIS for the I-710 Corridor. The goal of the study is to conduct a comprehensive evaluation of the overall transportation system within the corridor; and

WHEREAS, the MIS identified five design alternatives for the improvement of the I-710 Corridor, which were not fully supported by local communities along the corridor because of their impacts on these communities; and

WHEREAS, Community Advisory Committees (CAC) from communities along the I-710 Corridor were formed to work with the consultant in developing a hybrid alternative that combines appropriate elements from the five alternatives and will result in less impacts on residential and commercial properties; and

WHEREAS, the consultant developed a design concept consisting of widening the I-710 to 10 general-purpose lanes and 4 separate truck lanes and improvements to the interchanges throughout the corridor, referred to herein as PROJECT. This design concept was approved by the local CAC's along the I-710 Corridor, except for the East Los Angeles Community Advisory Committee (ELACAC) who requested that an additional study be conducted to further evaluate various elements of the design concept and related PROJECT impacts on the East Los Angeles residents; and

WHEREAS, the I-710 Corridor Oversight Policy Committee and the MTA approved the design concept for the PROJECT with the condition that a Mini-Study be prepared to address ELACAC concerns and that the MTA cannot proceed with the Environmental Phase of the PROJECT until the Mini-Study is completed; and

WHEREAS, the consultant has prepared the Mini-Study to evaluate the specific impacts of the PROJECT on the residents of East Los Angeles. The ELACAC has held many meetings to review the additional analyses included in the study.

NOW, THEREFORE, the ELACAC in consideration of the benefits for the residents of East Los Angeles has the following comments/recommendations on the Mini-Study to be considered in the Environmental Phase of PROJECT and shall not be construed as an endorsement of PROJECT.

1. Washington Boulevard On/Off Ramps (South and North bound)

- Both on and off ramps must remain open. The northbound ramp closure would increase traffic on Olympic Blvd. The Southbound ramp will increase traffic on Eastern Ave by almost 100%.
- Other alternative designs for the connection of the truck lanes to the rail yards must be considered to avoid the closure of these ramps.

2. I-710/Interstate 5 (I-5) Missing Connectors

- Based on the findings of the 2030 model presented in the Mini-Study, It appears that the construction of these connectors is not warranted at this time. However, if a different traffic model is used in the future that will have different traffic volumes that warrant the construction of these connectors, the ELACAC must be consulted again to reevaluate its position.

3. Property Acquisition

- Further analysis is needed during the environmental process to understand the full impact of constructing High Occupancy Vehicle (HOV) lanes on the I-5 (tunnel or elevated) to the homes and businesses along Telegraph Road. Therefore, we oppose at this time any property acquisitions along Telegraph Road.
- ELACAC opposes any property acquisition in East Los Angeles as a result of the PROJECT.

4. Olympic Boulevard On/Off Ramps (I-710)

- The Mini-Study indicated an increase in truck volumes to almost 100% at the Southbound On Ramp, we recommend additional study be conducted as part of the environmental process to further evaluate this anomaly increase in traffic volumes.
- Trucks over 3 tons should not be allowed to exit at the Northbound Off Ramp. Olympic Boulevard is not wide enough to support the exiting of large trucks; traffic congestion is created causing back up on both directions of Olympic Blvd.

- We oppose any closures of any other On/Off ramps near Olympic Boulevard until an “Area Wide Truck Movement Analysis” is conducted during the environmental process and a satisfactory solution is presented for the East Los Angeles Community.

#### 5. HOV lanes on I-5

- Further analysis is needed during the environmental process to determine the full impacts of the HOV lanes (elevated and tunneling) to the East Los Angeles Community.
- Based on the information provided in the Mini-Study, tunneling an HOV lane would reduce the right of way impacts to homes and businesses along Telegraph Road. Therefore, the feasibility of tunneling must be included as an alternative in the environmental document for the I-710 and I-5 projects and the ELACAC should be involved in the development of this alternative.

#### 6. Construction of New Interchange at Slauson Ave

- We support the construction of a new interchange at Slauson Ave. We believe that this new interchange would alleviate traffic congestion in the area.

#### 7. Atlantic/Bandini Improvements

- We support the proposed improvements for this vital intersection. By improving this intersection, traffic congestion should improve within the area.

#### 8. Truck Lanes

- Obligate the utilization of the Alameda Corridor to its full capacity by providing economic incentives to promote the use.
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- Require the Ports of Long Beach and Los Angeles to build rail facilities at the ports.
- We support the design of the truck lanes coming from the ports to go directly into the rail yards in the City of Commerce if approved by the rail companies. Since the PROJECT highly depends on the implementation of the truck lanes to the rail yards, it is imperative that the lead agency start working with the rail companies to determine the feasibility of the proposed truck lane design before the environmental process.



## 9. Arterial Intersections and Major Boulevards Improvements

- As part of any mitigation study for PROJECT, a study on traffic calming measures shall be developed to improve traffic circulation in East Los Angeles.
- Incorporate and develop "Streetscape Programs" that will focus on improving, sidewalks, streets, building facades, landscaping, lighting, traffic safety and other public works improvements in any mitigation study for PROJECT with ELACAC input.

## 10. Safety Improvements

- The following improvements shall be implemented immediately along the I-710: repair pot holes, install higher concrete barriers, install security fences on overpasses, improve drainage, improve lighting and implement a more effective and frequent litter removal program.

## 11. Aesthetic & Environmental Improvements

- Sound walls, trees, plants, vines, decorative walls, tile murals within the I-710 and the On/Off ramps must be included as part of PROJECT. These improvements can be implemented immediately in some locations.

## 12. Health

- As part of the environmental process, conduct a comprehensive health study to determine the impacts of air and noise pollution on the health of East Los Angeles residents, including how the pollution affects children's learning ability. The overall air pollution in the Southeast Region of Los Angeles and the East Los Angeles area must be reduced before the beginning of any construction activities on the I-710 and I-5.
- Retrofitting of schools, home and businesses to reduce noise and air pollution must be part of the project.
- Free Health Clinics and treatment centers must be provided for illnesses caused by air and noise pollution.
- We must continue stressing the importance of building more support for the production of cleaner burning fuels and vehicle engines.
- Any new projects should not increase air and noise pollution in the area.

### 13. Economic Development (within the East Los Angeles area)

- Contracts, training and employment services shall be given preference to the residents and businesses in East Los Angeles.
- On the job training shall be offered with ample time prior to the start of any construction for PROJECT and utilize occupational centers, trade skill centers and other community agencies in East Los Angeles to provide these services.
- Impacted businesses and jobs resulting from PROJECT shall be replaced within the East Los Angeles area.

Note: The above recommendations 9-13, once all request are met, must be fully funded by PROJECT and I-5 project and not by city or county funds. In addition, the ELACAC must continue to provide input and oversight during the development of these projects.

City of Commerce  
I-710 Tier 1 Community Advisory Committee (CAC)  
March 14, 2006  
I-710 Mini-Study  
Recommendations

1. Eliminate the connectors from the I-5/I-710 interchange. The construction of these connectors would result in significant right-of-way impacts, however, they are projected to serve only about 200 vehicle/hour in the PM peak. Therefore, since they do not serve any significant traffic volumes it was recommended they not be constructed. By eliminating the connectors from the proposed improvements to the I-5/I-710 interchange, several other geometry improvements can still be made avoiding all property impacts in Commerce. In the future, any improvements that propose the missing connectors must be presented back to the I-710 Tier 1 CAC and the City of Commerce for review in order to provide an alternative recommendation, if necessary.
2. An Air Quality Plan and an Environmental Impact Report (EIR) for the project shall be developed using community input throughout their processes. For example, the Air Quality Plan would include the utilization of dedicated truck lanes as toll roads limited to trucks utilizing the best available controlled technology for trucks, such as CNG and LNG.
3. Include an elevated HOV lane on I-5 from Eastern Avenue interchange through the East L.A. interchange (SR-60/US-101/I-10). This design will minimize the right-of-way impacts to businesses and residences along the I-5 corridor.

**Action: The recommendation is not approved until it is determined where the HOV lanes will start and terminate.**

4. Include improvements to the I-5 interchanges with Washington Boulevard and Garfield Avenue for implementation as part of any improvements to the I-710 freeway. Any changes must be presented back to the I-710 Tier 1 CAC and the City of Commerce for review in order to provide an alternative recommendation, if necessary.
5. Improve the Atlantic Boulevard/Bandini Boulevard interchange as proposed with the addition of a free right-turn for the northbound off-ramp. This interchange improvement should be constructed as soon as possible to address existing congestion and safety concerns of the inadequate existing ramps.
6. Include the updated design for the truck ramp terminus into the BNSF/UP rail yards and construct the truck ramps into the rail yards. Truck entrance will be prohibited on Washington Boulevard. Any changes must be presented back to the I-710 Tier 1 CAC and the City of Commerce for review in order to provide an alternative recommendation, if necessary.

7. **The Commerce I-710 Tier 1 CAC will take no position on the Slauson interchange until such time input from the impacted communities has been received by the CAC.**
8. Improve all arterial intersections between the I-710 and I-5 freeways.
9. Have staff conduct a study and make recommendations to designate truck routes through the City of Commerce for through truck traffic. The study must insure that the truck routes will not impact the residential neighborhoods throughout the city. Once the study is completed, it will then be presented to the I-710 Tier 1 CAC and the Traffic Commission for their recommendation(s) to be presented to the City Council to be considered for final approval.
10. Priority be placed on construction of soundwalls on both sides of the I-710 freeway next to the Washington Boulevard ramps as soon as possible and prior to any right-of-way improvements for the I-710 freeway.
11. The Washington Boulevard on/off ramps should be studied to determine if they should be opened or closed. Both of these options should be analyzed as part of the Environmental Impact Report process.

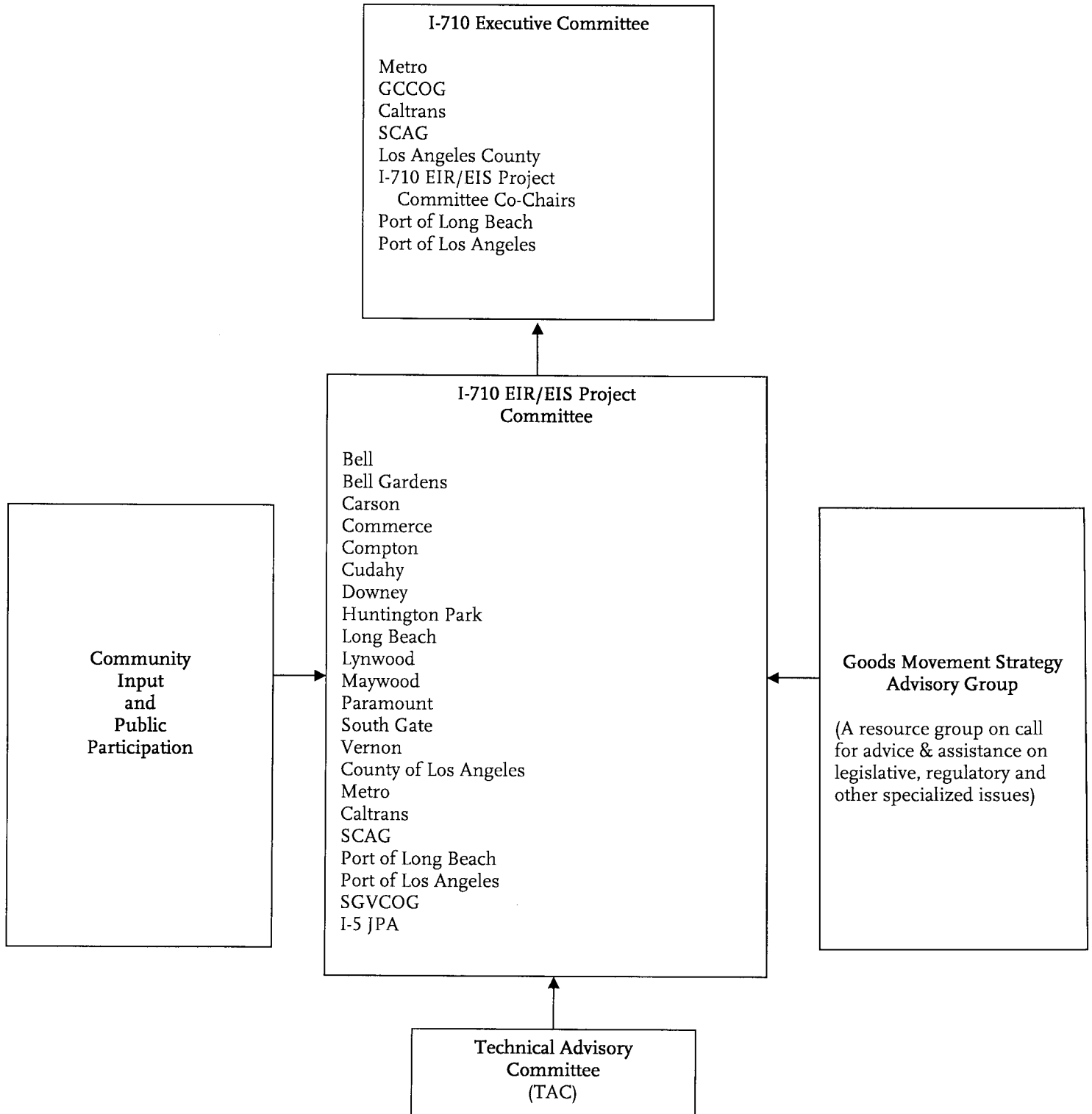
# ATTACHMENT C

## I-710 Project Governance Structure

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### Metro Board

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ATTACHMENT D

Compendium of  
Existing and Proposed Near-Term Air Quality  
Improvement Strategies  
for the  
I-710 Corridor

March 2006



# Compendium of Existing and Proposed Near-Term Air Quality Improvement Strategies for the I-710 Corridor

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# Compendium of Existing and Proposed Near-Term Air Quality Improvement Strategies for the I-710 Corridor

## 1.0 Preamble

### 1.1 Background

On January 27, 2005, the Board of Directors of the Los Angeles County Metropolitan Transportation Authority (Metro) approved a motion to adopt the Draft Final Report on the I-710 Major Corridor Study between the Ports of Los Angeles/Long Beach and the SR-60 Pomona Freeway. In addition, the Metro Board of Directors authorized the Chief Executive Officer to proceed with preparation of a scope of work and funding plan for the environmental phase of the project. Directors Burke and Molina amended the motion to include, among other things, the formation of a “multi-jurisdictional entity [which upon formation would] be tasked with identifying strategies for achieving near-term improvements to the corridor’s air quality and that the strategies be identified prior to initiation of the EIR/EIS request for proposals.” The full text of the motion is set forth in Exhibit 1 of the Appendix.

This compendium is intended to be an informational baseline to help frame the initial work of the Executive Committee of the multi-jurisdictional entity that is overseeing the EIR/EIS process.

### 1.2 Terminology

The “**corridor**” is defined as it is in the I-710 Major Corridor Study, encompassing 18 miles of freeway between the ports and SR 60 and the following jurisdictions: cities of Bell, Bell Gardens, Carson, Commerce, Compton, Cudahy, Downey, Huntington Park, Long Beach, Lynwood, Maywood, Paramount, South Gate, Vernon, County of Los Angeles, Port of Long Beach, and Port of Los Angeles.

“**Near-term**” is defined as 0 to 10 years for air quality improvement measures that could be at least partially implemented within that time frame. Further refinement divides near-term into “**short-term** (0 to 5 years)” and “**mid-term** (6 to 10 years).” A “**long-term**” program is one that takes longer than 10 years to be at least partially implemented.

For purposes of this document, “**strategies**” refer to proposed air quality measures and emission control measures. This document is not “a strategy” to improve air quality, nor is it “a plan” to improve air quality; it is an identification of strategies/measures/mechanisms that have been proposed by a number of entities, including those with jurisdictional responsibilities or mandates to improve air quality, as well as community groups and associations which may not have any legal authority to implement proposed strategies/measures to improve air quality.

### **1.3. Methodology**

Staff identified nine public documents most relevant in the identification of near-term strategies/mechanisms/proposals for improving the air quality in the corridor, as follows:

- 1) I-710 MCS Tier 2 Community Advisory Committee: Strategy Recommendations
- 2) Gateway Cities Council of Governments Clean Air Program
- 3) Gateway Cities Council of Governments Safety Action Initiative
- 4) Ports/Alameda Corridor Transportation Authority (ACTA) Truck Trip Reduction Program
- 5) Port of Long Beach (POLB) Green Port Policy
- 6) Port of Los Angeles (POLA) Clean Air Program
- 7) State Goods Movement Action Plan and California Air Resources Board Emission Reduction Plan for Ports and International Goods Movement
- 8) South Coast Air Quality Management District (SCAQMD) Chairman's Clean Port Initiative
- 9) Harboring Pollution: Strategies to Clean Up U.S. Ports, Natural Resources Defense Council and Coalition for Clean Air

Metro staff worked with staff of the Port of Los Angeles, the Port of Long Beach, California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), Gateway Cities Council of Governments (GCCOG), Southern California Association of Governments (SCAG), and Caltrans to cull the above documents and compile a list of the actions being pursued or considered to reduce emissions in the corridor and at the ports as part of other initiatives. In preparing this compendium, staff also reviewed air quality improvement programs outlined in the recently published report of the California Marine and Intermodal Transportation System Advisory Council (CALMITSAC) to the California State Legislature.<sup>1</sup>

Exhibit 2 in the Appendix broadly summarizes the air quality measures/programs and corresponding implementation time frames and status. The exhibit is formatted to facilitate periodic updates.

### **1.4. Limitations of this Compendium**

The objective of this collaborative effort was to develop a compendium of existing strategies that are currently helping to improve the air quality along the I-710 corridor, as well as those that are new or in the development stage and could conceivably be implemented within the near term. This compendium does not endorse any of the proposed measures; the document is intended to present strategies that may be analyzed as part of or in addition to the effort to reduce air quality impacts in the I-710 corridor.

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<sup>1</sup> CALMITSAC, Growth of California Ports: Opportunities and Challenges, an Interim Report to the California State Legislature, January 2006.

**This compendium does not presume to prejudge the outcome of the EIR/EIS for the I-710 project or in any way limit EIR/EIS-generated proposals for mitigating the impacts of the proposed project.** Specific mitigations for air quality impacts of the I-710 Freeway modifications will be identified through the upcoming CEQA/NEPA process for that project. The EIR/EIS will require a thorough analysis of project impacts, alternatives and mitigation measures and continued full public participation in the process. The EIR/EIS will address, among other things, estimated exposure to emissions and resulting health impacts, including impacts on schools and neighborhoods in close proximity to the freeway.

This compendium of emission reduction strategies demonstrates that a great deal of effort is being made by several agencies to reduce emissions. However, **the compendium should not create the impression that there are currently binding mechanisms in place which will fully resolve the serious local and regional air quality problems.** Upcoming air quality planning processes may identify additional or refined emission reduction strategies needed to achieve healthful air quality. The strategies in the compendium are in varying stages of development; many of them are conceptual in nature and are awaiting identification of a sponsoring agency, funding or endorsement.

**Specific benefits of the strategies included in this compendium, in terms of reduced emissions or health risk, have not been quantified.** The Gateway Cities Council of Governments will quantify benefits and costs, however, in the subsequent I-710 Corridor Air Quality Action Plan that will be developed concurrently with the EIR/EIS.

## **2.0 Major Air Quality Initiatives**

### **2.1 Tier 2 Community Advisory Committee: Strategy Recommendations**

In August of 2004, the I-710 Tier 2 Community Advisory Committee adopted a variety of recommendations related to the I-710 project. These recommendations covered the following major topics:

- Health and Air Quality
- Jobs and Economic Development
- Safety
- Noise
- Congestion and Mobility
- Community Enhancements
- Design Concepts
- Environmental Justice
- Process.

The I-710 Tier 2 Committee’s recommendations on health and air quality are shown in Table 1. Central to the Committee’s recommendations is that “air quality in the corridor must be better at the time of construction than it is today. Therefore, these steps to reduce air pollution must be taken before construction can begin on the ‘mainline’ project.”<sup>2</sup>

**Table 1**  
**Tier 2 Committee Recommendations on Health and Air Quality**

<b>1. Develop an action plan to improve air quality in the corridor, including the following steps:</b>
a. Establishing a baseline of current levels of pollution from each contributing source using the best available technology.
b. Identify the level of air quality impacts from increasing trucking, rail and shipping.
c. Determine the approximate costs of health care that can be traced to the differential levels of air pollution to be encountered by corridor community members as a result of the construction effort, if it goes forward as envisioned.
d. Study the direct and indirect health and other economic costs on communities and the region caused by global trade and its associated pollution impacts.
<b>2. Implement a corridor level action plan to improve community air quality.</b>
a. Use enforcement, truck inspections and incentives to control emissions.
b. Require air quality improvements in port operation as a condition of project approval.
c. Encourage the development and expansion of fleet modernization clean air programs.
d. Levy fees on containers to fund environmental improvements and community programs to address hidden costs attributable to goods movement impacts including:
• Health care
• Alternative fuels
• Improvements/construction of I-710 infrastructure
• Beautification of the corridor
e. Develop infrastructure that quantifies emission reductions; i.e., permanent monitoring stations to measure emissions levels in the corridor
f. Develop and implement improved air quality monitoring techniques.
<b>3. Implement local alternative fuels/electrification and/or hydrogen policies and programs to reduce diesel emissions.</b>
a. Make the use of alternative fuels a priority.
b. Discourage the use of out-of-state fuel.
c. All trucks, regardless of origin, must be subject to local, state and federal standards.
d. Require all trucks using the truck lanes on the I-710 to use alternative fuels as defined above, or pollution controls which achieve equal or better results.
e. Require all railroad locomotives servicing two ports, or any rail yards connected with port container traffic, to use alternative fuels as defined above, or pollution controls which achieve equal or better results.

<sup>2</sup> Final I-710 Tier 2 Committee Findings, Strategies, Policies and Conditions, August 2004, p. 23.

f. Require the Alameda Corridor Transportation Authority to prepare a plan to electrify all locomotives involved in its operations.
<b>4. Pursue opportunities for incremental improvements.</b>
a. Retrofit schools, homes and parks to increase protection from noise and pollution.
b. Identify location and develop facility for one-stop truck inspection.
c. Provide incentives for businesses to accept off-peak deliveries.
d. Create programs to assist truck owners with engine/equipment upgrades and retrofits.
e. Restrict port-generated traffic onto I-710 until improved fuels programs or other pollution emissions mitigation programs are implemented
f. Provide landscaping, specifically including tree planting, to improve air quality.
<b>5. Implement port-specific strategies.</b>
a. Require ports to develop plans to electrify other terminal operations as a priority.
b. Require all rubber-tired gantry cranes to be electrified.
c. Require all ships docking in the Ports of Los Angeles and Long Beach to shut down all diesel engines and use shore electric power.
d. Require the ports to expedite development of effective pollution controls for ships.
e. Make mandatory the proposal of CARB to require that ships entering the coastal waters of California switch to low sulfur diesel fuel. Require the ports to provide financial subsidy if necessary to implement this requirement.
f. Include trucks, trains and rail yards, marine vessels, and port equipment in clean air initiatives.
g. Require all terminal equipment at the ports to operate on alternative fuel as defined by CARB. This includes Liquid Petroleum Gas, Compressed Natural Gas, or Liquid Natural Gas. As an alternative, require all engines to be equipped with pollution control technology, which achieves equal or less emissions.
h. Establish a fund that shippers must pay into, that provides rebates to those who adopt the use of clean air engines for vehicles. Ensure that this program accomplishes the goals of decreasing pollution rather than a pay-to-pollute program.

(It is noted that proposals above for container fees are funding measures rather than independent air quality strategies.)

## 2.2 Gateway Cities Council of Governments' (COG) Clean Air Program

The COG's Clean Air Program is premised on the belief that investing in cleaner trucks would be one of the quickest and most tangible methods to achieve meaningful emissions reductions in the I-710 Corridor. In operation since September 2002, the Clean Air Program's main focus is to reduce emissions from in-use heavy-duty vehicles (HDVs) in the Gateway Cities sub-region and around the Port of Los Angeles and Port of Long Beach. The Program has received national recognition and awards for efficiency in achieving a significant reduction in harmful emissions from in-use heavy-duty diesel vehicles and equipment.

The Clean Air Program has two primary components – The Fleet Modernization Program (FMP) and the Port of Long Beach Diesel Emissions Reduction Program (DERP). The FMP provides grants to replace 1986 and older diesel HDVs with a 1999 or newer,

cleaner burning model. The older trucks are scrapped and never used again. The newer truck emits about 40% less NOx and 90% less PM than the old truck it replaces. At the funding agency's discretion, many of the trucks are also retrofitted with a diesel oxidation catalyst (DOC), further reducing PM emissions. To date, the program has spent about \$8 million to replace approximately 373 trucks, resulting in significant, immediate decreases in both diesel PM and NOx.

While replacing 373 trucks is significant, there are thousands of older port drayage trucks that could be replaced. Additional funding and incentives -- as well as a firm schedule -- would be needed to increase the rate of replacement and to discourage them from entering the port drayage market. Additional useful analyses would include an economic analysis to determine the costs to replace all of the older trucks within 10 years and an analysis of the operating costs for newer trucks versus older trucks.

More aggressive Level III after-treatment could be performed on all replacement trucks as soon as ultra-low sulfur diesel fuel becomes widely available. The COG expects Level III devices to become viable in late 2006 or early 2007. The COG is currently implementing a pilot project on a small fleet of 4 to 5 trucks under EPA grant funding. In addition, the newly adopted Fleet Modernization category will require replacement trucks under Carl Moyer Program Moyer funding to be retrofitted with a diesel emissions control system that meets "Best Available Control Technology"; i.e., a DOC now and a Level III device as soon as practicable.

The Port of Los Angeles has expressed an interest in developing a progressive LNG truck program within the larger Gateway Cities program. This program would encourage the switch from diesel trucks to alternative fuel trucks in addition to the existing model of diesel fleet modernization... The Port of Los Angeles's proposed plan would be based on performance standards and would follow both clean diesel and alternative fuel paths to achieve such standards. The Port of Los Angeles's goal is to encourage diesel particulate emissions reductions by accelerating the turnover of the existing Port fleet to cleaner diesel (certified at or below 0.01 g/hp-hr PM and 0.20 g/hp-hr NOx) and alternative fuel (including LNG and CNG) engines. The Port of Los Angeles, through Gateway Cities, would continue funding clean diesel technology as well as the alternative fuel technology. Additional funding for both paths may also be available directly from the Port. Through its Air Quality Program, the Port of Los Angeles would also invest in research and development, and demonstration programs to test new truck technologies including hybrids, and alternative fuels.

As part of the Gateway Cities Clean Air Program, the Port of Long Beach has taken a leadership role by facilitating efforts to install new emissions reduction technology on off-road heavy-duty vehicles operated within port boundaries. This Diesel Emissions Reduction Program introduces "clean diesel technology" to port terminal operators by retrofitting their cargo-handling equipment with devices such as diesel oxidation catalysts (DOCs), which replace mufflers and can provide cost-effective emissions reductions. On nearly 200 off-road HDVs, Port of Long Beach tenants are using a DOC and emulsified diesel fuel (a diesel-water blend) combination that has been verified by the California Air Resources Board to provide a 50% reduction in diesel PM emissions and a 20% reduction

in NOx emissions. On approximately 400 off-road pieces of cargo-handling equipment, POLB tenants are using a DOC combined with a crankcase emissions filtration system that has been verified by CARB to reduce diesel particulate emissions by 25% (actual reductions are believed to be higher). Of those, approximately 100 are fueled with an ethanol-blended diesel fuel verified by CARB to further reduce PM emissions by 20%.

The Port of Long Beach's efforts through the Diesel Emission Reduction Program, coupled with the efforts of terminal operators to modernize equipment and transition to cleaner on-road equipment, has resulted in total cargo-handling equipment emissions declining. From 2002 to 2005, cargo-handling NOx emissions declined by approximately 570 tons per year and cargo-handling PM emissions by approximately 70 tons per year.

### **2.3 Gateway Cities Council of Governments Safety Action Initiative**

Gateway Cities Council of Governments has adopted a number of Safety Action Initiatives. Some of these contribute to near-term air quality improvement. These include constructing one or more truck inspection and weighing facilities in the I-710 corridor and/or near the ports. The ability to inspect trucks at such facilities would address pollution control equipment and encourage better maintenance of trucks.

Also, the deployment of advanced traffic management and logistics technologies could contribute to improved air quality. These Intelligent Transportation System (ITS) programs would improve air quality by allowing the highways to operate more efficiently, by reducing congestion on the freeways and local arterial highways, and by reducing truck idling times. The application of ITS could also reduce the number of truck trips and result in other operational efficiencies that would result in air quality improvements. These Intelligent Transportation System (ITS) improvements would include but not be limited to:

1. Tracking of trucks that are registered in the Gateway Cities clean air program to ensure that they stay in the region. All trucks modified by Gateway Cities since mid-2005 are being equipped with GPS tracking devices for this very purpose.
2. Electronic screening of commercial vehicles that have good safety inspection records, allowing them to bypass roadside inspection and weigh facilities.
3. Optimization of freeway routes leading to less congestion and improved air quality.

### **2.4 Ports/ACTA Truck Trip Reduction Program**

In a collaborative effort, the Port of Los Angeles, Port of Long Beach and the Alameda Corridor Transportation Authority (ACTA) have evaluated six alternative strategies for addressing the growth in truck traffic to and from the ports. Those strategies that reduce the number or length of trips reduce truck emissions directly proportional to miles driven. Those strategies that alleviate congestion reduce emissions by improving speeds and reducing idling. The strategies and their primary impacts are listed in Table 2.

**Table 2**  
**Truck-Related Impact by Strategy**

<b>Strategy</b>	<b>Impact</b>
Virtual Container Yard	Reduces # of empty container truck trips
Extended Gate Hours	Spreads truck traffic over more hours
Increased On-Dock Rail	Reduces # of truck trips to rail yards
New Near-Dock Rail Yard	Shortens truck trips to rail yards
Shuttle Trains	Reduces # of truck trips to local warehouses
SR-47 Viaduct	Provides alternative truck route

*Virtual Container Yard (VCY)*

A virtual container yard would be an Internet-based matching service for empty containers. The VCY could assist in reducing the number of unproductive trips of empty containers to and from the ports. The ports and ACTA have contributed \$1.2 million towards the development of the VCY, which will be operational by mid-2006.

A local import container load is transported to a warehouse or distribution center. Once that container is unloaded it is typically hauled back empty to the port terminal. If that empty container could meet the needs of an exporter in the region, the container could be transported to the export location and then sent back loaded to the port. This would also avoid the necessity of dispatching an empty container from the port to pick up an export load. The intent of the VCY is to reduce the number of empty containers trucked to and from the ports and to reduce vehicle miles of travel (VMT) associated with the movement of empty containers. It has been estimated that approximately 2% of the import containers are currently used for export. The goal of the VCY would be to increase the level of reuse to 10% by 2010.

*Extended Gate Hours (PierPASS)*

The intent of extending gate hours is to make more efficient use of existing roadway capacity by scheduling more pickups and deliveries at night or on the weekend. PierPass became operational on July 23, 2005. Since July, off-peak use has increased from about 15% of all weekly gate moves to about 35%. PierPass reached its 1 million off-peak truck milestone on December 10, 2005.

*Increased Use of On-Dock Rail*

In 2004, about 18% of all containers through the ports were loaded or unloaded at on-dock rail facilities. On-dock rail use increased to 21% in 2005. A goal of the work program is to accelerate use of on-dock rail and to make better use of underutilized capacity. Through the implementation of the port's Rail Master Plan (RMP), the ports hope to increase on-dock use to 30% to 35% of all containers handled. The RMP calls for approximately \$1.3 billion of rail infrastructure investment in the harbor districts to accommodate increased use of on-dock rail. The ports are also working closely with the



railroads, container terminals and steamship lines to improve communication and coordination, leading to more efficient on-dock operations

*New Near-Dock Rail Yard (Southern California International Gateway)*

The BNSF Railway has proposed a major new near-dock yard north of Pacific Coast Highway. It is expected to be operational by 2010. The project would significantly reduce truck trips to BNSF’s Hobart Yard located near downtown Los Angeles. Communities near the proposed new yard, however, are concerned about a localized increase in emissions (even if there is a net reduction in the region) as well the traffic impacts of trucks accessing the new yard. Alternative access routes and regional and localized emissions impacts will be evaluated in the EIR/EIS for the project.

*Local Shuttle Trains*

ACTA has proposed a shuttle train pilot project to haul local import containers to Colton rail yard, and then to truck them to warehouses in the Inland Empire. This project is on indefinite hold while the UPRR evaluates the potential impact of the proposed system on mainline capacity and service levels for the railroad’s core customers.

*SR-47 Project*

ACTA has proposed a freeway viaduct between the Heim Bridge on the south and Pacific Coast Highway at Alameda Street on the north. This project would divert about 6% of trucks from the southern end of the Long Beach Freeway. This project would be implemented by 2010.

Table 3 shows the estimated impacts of all of the strategies combined on the I-710 relative to the baseline or “do-nothing” scenario. The two ports handled 14.2 million Twenty-foot Equivalent Units (TEUs) in 2005. The traffic figures in Table 3 assume that containerized cargo through both ports would reach 19.7 million TEUs and 44.7 million TEUs in 2010, and 2030, respectively.

**Table 3  
Impact of Truck Trip Reduction Strategies on I-710**

<b>Scenario</b>	<b>I-710 Truck Trips (24 hrs.)</b>	<b>% Change from 2005 Base</b>
Base 2005	22,704	
Base 2010	27,009	+19.0%
Combined Scenario 2010	20,337	- 10.4%
Base 2030	65,238	+187.3%
Combined Scenario 2030	44,847	97.5%

Even with all six of the truck reduction strategies in place, 24-hour port truck traffic on the I-710 is forecast to nearly double by 2030 relative to the 2005 case. Without these strategies in place, forecasted truck traffic could nearly triple.

## 2.5 The Port of Long Beach Green Port Policy

The Port of Long Beach’s Green Port Policy calls for a reduction in emissions per ton of cargo handled. The Port has established an initial \$100 million reserve fund to meet the objectives of the Green Port Policy.

Adopted in January 2005, the Green Port Policy established the following guidelines for port operations and future development:

- Protect the community from the harmful environmental impacts of port operations.
- Distinguish the port as a world leader in environmental stewardship.
- Employ the best technology to avoid and reduce environmental impacts.
- Promote sustainability in all aspects of port operations and development.
- Engage and educate the community about port environmental programs.

Within its authority as a landlord through new or renegotiated leases, the Port of Long Beach is implementing aggressive programs to eliminate or significantly reduce harmful air emissions. The port’s strategies include:

- For vessels at berth: cold-ironing, exhaust control technologies, cleaner fuels and other advanced technologies.
- For cargo-handling equipment: accelerated fleet replacement, clean alternative diesel fuels, alternative fuels and new technologies such as exhaust cleanup devices.
- For locomotives: accelerated fleet replacement, hybrid technologies, alternative fuels and improved operating practices such as idling limitation devices.
- For trucks: accelerated fleet replacement, new aftermarket technologies, and operational improvements such as PierPASS’ Offpeak gate program.

Air quality elements of the POLB Green Port Policy are listed in Table 4.

**Table 4  
Port of Long Beach Green Port Policy**

<b>Control Measures for Ocean-Going Vessels</b>
Vessel Speed Reduction (Green Flag Program) – voluntary, incentivised program requiring ships to slow to 12 knots at a distance of 20 miles from Point Fermin.
Shore Power – the Port has committed to a goal of providing shore power to all new and existing container terminals; The Port’s ultimate goal is to have 100% of vessels at container terminals plug in once the infrastructure has been retrofitted and the world’s

fleet has been made shore power capable; in the interim, shore power is being incorporated into new leases that specify targets for vessel compliance and selected existing berths are being retrofitted with shore power.
Retrofit/Re-power Requirements for Infrequent Callers – Port lease language will require the use of exhaust controls or clean fuels in the auxiliary engines of vessels that do not use shore power.
Main Engine Fuel Improvement – the Port is considering incentives as part of the Green Flag Program for the use of low-sulfur (initially 1.5%) diesel or equivalent.
Auxiliary Engine Fuel Improvement – lease language will require the use of fuel with 0.2% or lower sulfur content or equivalent, or exhaust gas treatment, in auxiliary engines while ships are at berth.
Vessel Smoke Stack Emission Reduction – POLB Security will continue to issue warnings and citations to vessels in order to eliminate excess smoke and reduce vessels emissions while at berth.
West Coast Sulfur Emission Control Area (SECA) – in January 2005, the Long Beach Board of Harbor Commissioners adopted a resolution urging the United States to ratify Annex VI of the International Convention for the Prevention of Marine Pollution From Ships (MARPOL). Annex VI, adopted in 1997, entered into force on May 19, 2005 and sets limits on sulfur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances. Annex VI calls for a global cap of 4.5% m/m on the sulfur content of fuel oil and calls on IMO to monitor the worldwide sulfur content of fuel.
<b>Control Measures for Harbor Craft</b>
The Port will replace or re-power, or convert to cleaner fuels, survey boats and other Port-owned harbor craft.
<b>Control Measures for Cargo Handling Equipment</b>
Yard Tractor Modernization & Alternative Diesel Fuel Programs – lease language will commit tenants to meet contemporary CARB and EPA emission standards in new equipment, use clean fuels in existing equipment and retire older equipment.
Enhanced Cargo Handling Modernization – lease language will require accelerated replacement of terminal equipment with equipment meeting future off-road standards for diesel engines.
Diesel Emissions Reduction Program – container terminal cargo handling equipment has been converted to exhaust controls and clean diesel fuel.
<b>Control Measures for Railroad Locomotives</b>
PHL Switcher Locomotive Modernization & Emulsified Diesel Program – PHL rail locomotives are being replaced in 2007; use idle limiting devices; test DOCs.
Ultra-Low Emission Switcher Locomotives – requires PHL to deploy Green Goat and LNG switchers.
Idling Controls on Switcher & Line Haul Locomotives – install controls on PHL equipment; Ports cannot install equipment on Class 1 line haul locomotives.
ARB Diesel Fuel for Class 1 Locomotives - support of this measure would be part of the Green Port legislative agenda.

<b>Control Measures for Heavy-Duty Vehicles</b>
Gateway Cities Truck Modernization – subsidies are being considered by POLB to commercial truck owners that trade in their diesel trucks with older engines for models with newer, cleaner-burning engines.
Retrofit Heavy-Duty Diesel Vehicles with Diesel Oxidation Catalysts (DOCs) or Diesel Particulate Filters (DPFs) – for future container terminal projects, the Port will require installation of exhaust controls on older trucks serving the terminal
Truck Idling Reduction Measures – the Port will require truck idling limits for on-road trucks within Port boundaries.
<b>Miscellaneous Controls</b>
Petroleum Coke Dust Control – the Port will continue to implement the Rule 1158 program aimed at reducing fugitive dust from petroleum coke operations.
Electric Dredging – additional electrical receptacles will be placed around the Port to facilitate the switch to electric dredging; beginning in 2008, the Port will require all non-maintenance dredging to be conducted with electric equipment.
Port Ride Share Program – the SCAQMD, under Rule 2202, requires employers of 250 or more employees to establish rideshare programs; the City of Long Beach developed a program in response to this requirement and the Port participated in the program; the City, as a result of budget issues, eliminated their program in 2003; since then, approximately 20 Port employees have continued to rideshare in an informal program; the Port is now exploring the formal re-establishment of its own rideshare program.

Because ships are a major source of emissions, one of the strategies promoted in the POLB Green Port Policy is a Sulfur Emission Control Area (SECA). The SECA would require ships to use 1.5% sulfur fuel (15,000 parts per million). Lowering the sulfur content of ship fuel has significant benefits in terms of PM and NOx emissions as well as SOx. California can also play an important role in promoting the adoption by the U.S. Senate of Annex VI of the International Convention for the Prevention of Marine Pollution From Ships, 1973, as Modified by the Protocol of 1978 (MARPOL).<sup>3</sup> This is

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<sup>3</sup> <http://www.imo.org/home.asp>

From President Bush’s message on May 15, 2003 to the U.S. Senate for the advice and consent of the Senate to the ratification of Annex VI (<http://www.whitehouse.gov/news/releases/2003/05/20030515-12.html>) “The MARPOL Convention is the global agreement to control pollution from ships. MARPOL Annex VI regulates the emission into the atmosphere of specified pollutants from ships. It complements the other annexes to the MARPOL Convention, which relate to the transport of oil (Annex I), harmful substances carried in bulk (Annex II), harmful substances in packaged form (Annex III), ship-generated sewage (Annex IV) and garbage (Annex V). The United States is a party to all of these annexes with the exception of Annex VI.

MARPOL Annex VI regulates the prevention of air pollution from ships by limiting the discharge of nitrogen oxides from large marine diesel engines, governing the sulfur content of marine diesel fuel, prohibiting the emission of ozone-depleting substances, regulating the emission of volatile organic compounds during the transfer of cargoes between tankers and terminals, setting standards for shipboard incinerators and fuel oil quality, and establishing requirements for platforms and drilling rigs at sea.”

the international treaty regulating emissions from ships. The International Maritime Organization (IMO) cannot adopt a SECA for the West Coast or for North America until the U.S. adopts Annex VI. Starting in May 2006 there will be a SECA in effect for the Baltic Sea. The SECA will be extended to the North Sea and English Channel in 2007. It is recommended that the Metro Board join with the ports and State of California in urging the U.S. Senate to adopt Annex VI of MARPOL.

Many of the programs included in the Green Port Policy are in-place and currently generating “green” benefits. The Port of Long Beach is developing a fully integrated, resource-loaded master schedule, which will continue to evolve as the number of environmental programs expands. The port provides quarterly progress reports to the Long Beach City Council and the Board of Harbor Commissioners including details on each program’s goals/benefits and status of implementation. The port has also identified specific metrics so that progress can be quantified and tracked over time. In order to ensure that the policy is implemented throughout the terminals, the port’s leasing policy will be amended. As stated in the port’s White Paper on the Green Port Policy, “Negotiating with tenants requires flexibility; however, the leasing policy must have as a key agenda the ‘greening’ of the port.”<sup>4</sup>

The Maritime Goods Movement Coalition, of which the Port of Long Beach is a member, has proposed the “Goods Movement Attainment Plan.” Current members of the Coalition include representatives of the Port of Long Beach, terminal operators and fuel and energy providers. The Coalition seeks to design an integrated, market-based program to reduce goods-movement related emissions in a cost-effective manner.

As initially envisioned, the Goods Movement Attainment Plan would set phased performance targets designed to enable the South Coast Air Basin to attain the national ozone standard as required by 2021 (or 2024)<sup>5</sup> and the fine particulate standard by 2015. To achieve these air quality goals at the lowest cost, the plan would permit regulated sources to design solutions tailored to their own operations. The plan would also allow sources to generate and trade emission reduction credits to help finance emission reductions and to reward early actions. The plan would also include an investment fund financed by sources unable to meet the performance targets that would be invested in pollution control.

Under a market program, regulated sources can select the most cost-effective means of reducing emissions. They also can tailor controls to match their own unique operations in ways that often cannot be anticipated by regulators. Furthermore, under a market program, sources can time their expenditures to coincide with other investments. The

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<sup>4</sup> Long Beach Harbor Department, *Green Port Policy – “White Paper”*, August 15, 2005.

<sup>5</sup> EPA designates areas that do not meet the National Ambient Air Quality Standards (NAAQS) as “nonattainment” for that pollutant. Based on current ozone readings in the South Coast Air Basin, EPA has designated the South Coast Air Basin as a “Severe-17” nonattainment area. Under EPA’s regulations, the South Coast Air Basin has until the year 2021 (or 17 years from the June 15, 2004 effective designation date) to attain the current ozone standard. See 69 Fed. Reg. 23858, 23863, 23882 (April 30, 2004); 40 CFR § 81.305. This deadline would become 2024 if the region were designated an “Extreme” area, as currently contemplated by the SCAQMD.

market would also be structured to provide incentives for emission reductions from sources closest to communities exposed to disproportionately high health risk from goods movement sources by only allowing the generation of credits (i.e., achieving emission reductions) from those sources. A market program enhances environmental effectiveness by creating economic value for reducing emissions. In this circumstance, it also creates an opportunity to overcome potential legal impediments to regulation.<sup>6</sup>

## **2.6 The Port of Los Angeles Clean Air Program**

The Port of Los Angeles has had a Clean Air Program in place since 2001 and began monitoring and measuring air quality in surrounding communities in 2004. Through the 2001 Air Emissions Inventory, the Port has been able to identify emission sources and relative contributions in order to develop effective emissions reduction strategies. The Port's Clean Air Program has included progressive programs such as alternative maritime power (AMP), use of emulsified fuel and diesel oxidation catalysts (DOCs) in yard equipment, alternative fuel testing, and the Vessel Speed Reduction Program (VSRP). The Port is actively developing a new Clean Air Action Plan to expand upon existing and develop new emissions reductions strategies. The plan also focuses primarily on reducing diesel particulate matter (DPM), along with nitrogen oxides (NOx) and sulfur oxides (SOx), with two main goals, (1) to reduce Port-related air emissions in the interest of public health, and (2) to disconnect cargo growth with emissions increases. The draft plan will include near-term measures implemented largely through new leases at the Port. Port-wide measures are also part of the draft plan.

The plan focuses on new technology, cleaner fuels and accelerated equipment turnover to reduce emissions from ocean going vessels, harbor craft, cargo handling equipment, railroad locomotives, and heavy-duty trucks at the Port. Ocean going vessel measures include AMP, increased VSRP, phasing-in the use of low sulfur fuels (0.5% to 0.1% S) in both auxiliary and main engines, and technology modifications to new and existing engines. Other technologies are also being tested to encourage further emissions reductions while ships are under transit and at berth.

Cargo handling equipment measures focus on new and alternative technology, alternative and clean diesel fuels (such as PuriNox), and technology add-ons such as DOCs and filters. The yard tractor modernization program, in particular accelerates existing yard tractor turnover to the cleanest engines available while also encouraging the use of ultra low sulfur fuel.

Heavy-duty truck measures focus on both fleet turnover and research and development. As discussed previously, the Port will continue to fund Gateway Cities and encourage accelerated turnover to both clean diesel and alternative fuel engines. Through its air quality program, the Port of Los Angeles would also invest in research and development, and demonstration programs to test new truck technologies including hybrids, and alternative fuels.

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<sup>6</sup> Robert Wyman, Latham & Watkins LLP, "Maritime Goods Movement Coalition," November 22, 2005.

Together with the Port of Long Beach, the Port of Los Angeles has entered into an agreement with Pacific Harbor Lines (PHL) to replace sixteen of PHL's existing switcher engines with newer Tier 2 rail load locomotives. PHL will also be testing a hybrid and a LNG locomotive.

The plan also includes a monitoring network to provide a feedback mechanism on air quality measures. The program will monitor ambient PM and meteorological conditions to ensure the larger Clean Air Action Plan achieves air quality goals.

As part of plan development, the Port is working closely with AQMD and CARB to ensure draft measures meet local and regional air quality and public health goals. The Port expects to present the draft plan to the Board for approval in late Spring 2006.

Details of the proposed Port of Los Angeles plan are listed in Table 5.

**Table 5  
Port of Los Angeles Clean Air Program**

<b>Control Measures for Ocean-Going Vessels</b>
Vessel Speed Reduction – A voluntary program under which vessels are slowed within an agreed-upon distance from the port, reducing emissions of NOx.
Alternative Maritime Power – a program for ships to use shore power instead of fuel-burning auxiliary engines while at berth (also known as cold-ironing).
Auxiliary Engine Fuel Improvement Program – a program to encourage or require the use of progressively lower sulfur fuel (i.e., marine diesel oil) in auxiliary engines of ocean-going vessels at they approach the port.
Main Engine Fuel Improvement Program – a program to encourage or require the use of lower sulfur fuel in main engines of ocean-going vessels at they approach the port. This measure may be superseded by the implementation of a Sulfur Emission Control Area (SECA) by the U.S. EPA and the IMO.
Low Emission Main Engines – a program to encourage the development and use of low emission main propulsion engines (i.e., Blue-Sky series/Category 3 engines) for marine vessels calling at the port.
Reroute cleanest ships – a program to encourage or require ship operators to use their newest/lowest emitting vessels calling at the port.
<b>Control Measures for Harbor Craft</b>
Biofuels for Harbor Craft – a program to encourage or require the use of biofuels in harbor craft operating in Los Angeles Harbor.
China Shipping Settlement Air Quality Mitigation Measures for Harbor Craft – Existing measures recommended by the Technical Advisory Committee (TAC) and implemented by the port, including repowering/retrofitting harbor craft main and auxiliary engines. Funding for these measures comes from the China Shipping Settlement.

<b>Control Measures for Cargo Handling Equipment</b>
Alternative-Fuel Equipment – a program to replace existing diesel-fueled cargo handling equipment with equipment powered by alternative fuels or electricity.
China Shipping Air Quality Mitigation Measures for Cargo Handling Equipment – Existing measures recommended by the Technical Advisory Committee (TAC) and implemented by the port, including replacing cargo handling equipment with low emission alternatives. Funding for these measures comes from the China Shipping Settlement.
Alternative Fuel Infrastructure for Cargo Handling Equipment – Installation of liquefied natural gas (LNG) refueling terminal within the port to support the use of LNG-powered cargo handling equipment.
<b>Control Measures for Railroad Locomotives</b>
Pacific Harbor Line (PHL) Modernization – a voluntary program initiated by the port (in conjunction with the PHL and the Port of Long Beach) to modernize PHL switcher locomotives and initiate the use of ultra-low sulfur diesel (ULSD) fuel.
Idling Controls for Switcher and Line Haul Locomotives – a program to encourage or require the installation of idling controls on switcher and line haul locomotives operating in the port. Idling controls automatically shut off engines after pre-set lengths of time at rest.
Electrification of Alameda Corridor and Alameda Corridor East – a measure to encourage and facilitate the conversion of the Alameda Corridor and related rail infrastructure from diesel power to electric.*
Locomotive Technology Replacements – a measure to research and encourage the development of low emission alternatives to diesel locomotive power, including magnetic levitation*, alternative fuels, fuel cells, and fueled/electric hybrids.
<b>Control Measures for Heavy-Duty Vehicles</b>
On-Road Heavy Duty Truck Alternative Fuels Program – a program to encourage and facilitate replacement of diesel trucks with alternative fueled trucks (i.e., LNG and hydrogen). The primary mechanisms will be through the existing Gateway Cities truck modernization program, a fleet-based program, and support of the California Hydrogen Highway program. The fleet-based program may include recruitment of existing fleet operators to switch to LNG, recruitment of a company that owns trucks to lease LNG vehicles, or purchase of the LNG trucks by the port, which would then lease them directly to operators.
Alternative Fuel Infrastructure for Heavy Duty Vehicles (HDVs) – installation of LNG refueling stations within the port and greater Los Angeles area to support the use of LNG-powered on-road trucks. In addition, installation of a hydrogen fueling station within the port to support the implementation of the California Hydrogen Highway program.

*\* For purposes of this document, these strategies are considered “long term” proposals, i.e., longer than ten years.*



## 2.7 The State Goods Movement Action Plan and the California Air Resources Board Emission Reduction Plan

The Schwarzenegger Administration is developing a statewide plan for goods movement capacity expansion, environmental and community mitigation, and goods movement-related homeland security and public safety enhancements. This effort is based on the concepts that “the state’s economy and quality of life depend upon the efficient, safe delivery of goods to and from our ports and borders. At the same time, the environmental impacts from goods movement activities must be reduced to ensure protection of public health.”<sup>7</sup>

The mission of the state’s goods movement plan is to improve and expand California’s goods movement industry and infrastructure in a manner that will:

- Generate jobs.
- Increase mobility and relieve traffic congestion.
- Improve air quality and protect public health.
- Enhance public and port safety.
- Improve California’s quality of life.<sup>8</sup>

The Plan is being developed in two phases with a broad cross-section of stakeholders, including industry, environmental and community public health groups, and governmental organizations. Phase 1 of the Plan, entitled Goods Movement Action Plan (GMAP), Phase I: Foundations,<sup>9</sup> was released in September 2005. It identifies growth trends, illustrates four “port-to-border” transportation corridors, inventories infrastructure projects being planned or underway, estimates environmental and community impacts, describes general mitigation approaches, and raises key aspects of public safety and homeland security issues.

To expand stakeholder participation in developing the Goods Movement Action Plan – Phase II, the Administration created a broad-based Integrating Working Group, co-chaired by the Agency Secretaries from the Business, Transportation & Housing Agency (BT&H) and the California Environmental Protection agency (Cal/EPA). The Phase II Plan will address capacity expansion, environmental and community mitigation, goods movement-related homeland security and public safety, and funding for these efforts.

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<sup>7</sup> BT&H/Cal/EPA, “Policy Statement on Goods Movement in California,” January 27, 2005. <http://www.arb.ca.gov/gmp/policy.pdf>.

<sup>8</sup> Ibid.

<sup>9</sup> BT&H/Cal/EPA, Goods Movement Action Plan, September 2005.

GMAP development includes the input of five supporting working groups and a separate CARB Emission Reduction Plan development effort described below. The five working groups are:

- 1) Infrastructure
- 2) Innovative Finance and Alternative Funding
- 3) Community Impact Mitigation and Workforce Development
- 4) Public Health and Environmental Mitigation, and
- 5) Homeland Security and Public Safety.

BT&H and Cal/EPA released the latest version of a Progress Report on the Phase II Plan on March 24, 2006.<sup>10</sup> The report incorporates input from each of the working groups – as well as from the draft CARB Emission Reduction Plan – to provide a framework for future actions the Governor and the legislature can take to enhance California’s position as a goods movement and environmental leader. There will be additional opportunities for public comment and revisions during 2006.

The CARB staff has released a Proposed Emission Reduction Plan for Ports and International Goods Movement in California<sup>11</sup> that identifies statewide strategies to further reduce emissions and the associated health risk. CARB staff expects to release a revised draft in late March 2006 and present it to the CARB Board for approval in April 2006.

The draft CARB plan provides an assessment of the health impacts from ports and international goods movement, emission inventory, emission reduction targets and strategies, and an assessment of benefits, costs, and funding needs. The plan describes new emission reduction strategies for ocean-going ships, commercial harbor craft, and cargo handling equipment used at ports and intermodal rail yards, as well as trucks and locomotives used to move imports and exports. The basic strategies to reduce emissions include regulatory actions, incentive programs, lease agreements, careful land use decisions, and voluntary actions. Since authority over port-related sources is not concentrated at any single level of government, the plan also discusses the need for local, state, federal and international cooperation – particularly with respect to transforming the ocean-going ship fleet to cleaner technology and lower emitting fuels.

The goals of the plan are: to cut port and international goods movement-related emissions back to 2001 levels no later than 2010, to continuously reduce emissions thereafter until ambient air quality standards are met and community impacts are mitigated, and to reduce the statewide health risk from diesel particles 85 percent by 2020. Table 6 provides a list of strategies identified in the draft CARB report to reduce emissions from ports and international goods movement operations. It should be noted that in Table 6, a status of “new” indicates that the suggested strategy has not yet been adopted or implemented.

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<sup>10</sup> <http://www.arb.ca.gov/gmp/gmp.htm>.

<sup>11</sup> California Air Resources Board, Proposed Emission Reduction Plan for Ports and International Goods Movement in California, March 21, 2006.

**Table 6**  
**ARB List of Strategies to Reduce Emissions**  
**From Ports and International Goods Movement**

Strategy	Status (Adopted or New Strategy)	Implementation Could Begin By		
		2010	2015	2020
<b>SHIPS</b>				
Vessel Speed Reduction Agreement for Southern California	2001	✓		
U.S. EPA Main Engine Emission Standards	2003	✓		
U.S. EPA Non-Road Diesel Fuel Rule	2004	✓		
ARB Rule for Ship Auxiliary Engine Fuel	New (2005)	✓		
Cleaner Marine Fuels	New	✓	✓	✓
Emulsified Fuels	New	✓	✓	✓
Expanded Vessel Speed Reduction Programs	New	✓	✓	✓
Install Engines with Emissions Lower than IMO Standards in New Vessels	New	✓	✓	✓
Dedicate the Cleanest Vessels to California Service	New	✓		
Shore Based Electrical Power	New	✓		
Extensive Retrofit of Existing Engines	New		✓	✓
Highly Effective Controls on Main Engines and Existing Engines	New		✓	✓
Sulfur Emission Control Area (SECA)	New		✓	
Expanded Use of Cleanest Vessels in California Service	New		✓	
Expanded Shore Power and Alternative Controls	New		✓	
Full Use of Cleanest Vessels in California Service	New			✓
Maximum Use of Shore Power or Alternative Controls	New			✓
<b>COMMERCIAL HARBOR CRAFT</b>				
Incentives for Cleaner Engines	2001-2005	✓		
ARB Low Sulfur Diesel Fuel Rule	2004	✓		
ARB Rule to Clean Up Existing Engines	New	✓		
Shore Based Electrical Power	New	✓		
New Engine Emission Standards	New		✓	

**Table 6 (Continued)**  
**ARB List of Strategies to Reduce Emissions**  
**From Ports and International Goods Movement**

Strategy	Status (Adopted or New Strategy)	Implementation Could Begin By		
		2010	2015	2020
<b>CARGO HANDLING EQUIPMENT</b>				
ARB Low Sulfur Diesel Fuel Rule	2003	✓		
ARB/U.S. EPA Tier 4 Emission Standards	2004	✓		
ARB Stationary Diesel Engine Rule	2004	✓		
ARB Portable Diesel Equipment Rule	2004	✓		
Incentives for Cleaner Fuels	2001-2005	✓		
ARB Rule for Diesel Cargo Handling Equipment	New (2005)	✓		
ARB Rule for Gas Industrial Equipment	New	✓		
Upgrade to 85% Diesel PM Control or Better	New		✓	
Zero or Near Zero Emission Equipment	New			✓
<b>TRUCKS</b>				
ARB/U.S. EPA 2007 New Truck Emission Standards	2001	✓		
Vehicle Replacement Incentives	2001-2005	✓		
ARB Low Sulfur Diesel Fuel Rule	2003	✓		
ARB Smoke Inspections for Trucks in Communities	2003	✓		
Community Reporting of Violators	2005	✓		
ARB Truck Idling Limits	2002-2005	✓		
ARB Low NO <sub>x</sub> Software Upgrade Rule	2005	✓		
ARB International Trucks Rule	New (2006)	✓		
ARB Private Truck Fleets Rule	New	✓	✓	
Port Truck Modernization	New	✓	✓	
Enhanced Enforcement of Truck Idling Limits	New	✓		
<b>LOCOMOTIVES</b>				
ARB Low Sulfur Diesel Fuel Rule	2004	✓		
ARB 2005 Agreement with Railroads to Cut PM Statewide	2005	✓		
Upgrade Engines in Switcher Locomotives	New	✓		
Retrofit Diesel PM Control Devices on Existing Engines	New	✓		
Use of Alternative Fuels	New	✓		
More Stringent National Requirements	New		✓	
Concentrate Tier 3 Locomotives in California	New		✓	

<b>OPERATIONAL EFFICIENCY</b>				
Efficiency Improvements	New	✓	✓	✓
Transport Mode Shifts	New	✓	✓	✓
<b>LAND USE DECISIONS</b>	New	✓	✓	✓
<b>PROJECT AND COMMUNITY SPECIFIC MITIGATION</b>	New	✓	✓	✓

## 2.8 South Coast Air Quality Management District's Clean Port Initiative

In 2005 Dr. William A. Burke, Chairman of the SCAQMD Governing Board, announced his Clean Port Initiative, which includes seven major recommendations, as shown below:

1. I am calling for a Clean Port Summit meeting between myself, Los Angeles Board of Harbor Commissioners President S. David Freeman and Port of Long Beach Commission President Doris Topsy-Elvord to discuss development and coordination of fast-track measures that we can pursue now to reduce air pollution.
  
2. I am calling on the ports to accelerate their efforts to reduce their air pollution, using their clear legal authority and technical knowledge of their operations. However, if the ports do not act aggressively and in a timely, coordinated manner to significantly reduce their emissions, I will ask AQMD staff to develop regulations to the maximum extent of its authority to control port sources, including ocean-going ships.
  
3. In recent months the AQMD has used its authority under the California Environmental Quality Act to ensure that air quality impacts of goods movement projects are fully analyzed and mitigated. A prime example of this was AQMD's comments last year on the proposed expansion of Pier J here in Long Beach. As a result of AQMD's analysis, the project is being thoroughly re-examined with an eye to reducing its diesel emissions. Starting next year, I am directing staff to prepare a monthly report to the public describing environmental impact reports and other CEQA documents for projects related to goods movement. I want the public and decision-makers to have a clear picture of the cumulative effect of all such projects that may lead to greater use of diesel engines. Finally, I request the AQMD staff to make full use of the CEQA process for such projects to ensure that their impacts are thoroughly mitigated.
  
4. I would like AQMD staff to work with the ports to conduct air quality monitoring, not only outside of the boundaries of the ports, but also within port terminals. Considerable numbers of truckers, dock workers and others breathe the air within the ports. They are the closest to many emissions sources and we should assess the pollution impacts they face.

5. I am calling on the U.S. Environmental Protection Agency to adopt strict emission standards for marine vessels. If EPA fails to do so, AQMD will ask California's Congressional delegation to sponsor legislation or take other action to force EPA to take aggressive action.

6. Focusing on the top three busiest ports in Asia, I would like AQMD staff to develop a proposal for corresponding emission reduction measures here and at those Asian ports. I would then like AQMD to coordinate an international summit with Asian port officials to discuss how to implement these measures.

7. Finally, I would like AQMD to call on the state Legislature in 2006 to adopt a shipping-container fee or some other mechanism that is sufficient to fund cleanup at the ports.

At its January 2006 meeting the SCAQMD Board approved a work plan of actions to implement the Clean Port Initiative. The SCAQMD staff has begun the process of developing rules and taking other actions to implement the work plan. Staff expects full implementation by mid 2007.

Air quality monitoring in the harbor area is one specific recommendation that is already being implemented by the two ports; the Port of Los Angeles has been conducting air quality monitoring for one year, and the Port of Long Beach Board of Harbor Commissioners gave approval for a three-year program in December 2005. Only one air quality monitoring station is currently in operation along the entire I-710 Corridor.

## **2.9 Natural Resources Defense Council and Coalition for Clean Air: Recommended Strategies**

In August of 2004, the Natural Resources Defense Council (NRDC) and the Coalition for Clean Air (CCA) published a report called Harboring Pollution: Strategies to Clean Up U.S. Ports.<sup>12</sup> The report discusses solutions to port pollution problems and provides additional information on the health and environmental impacts of port operations. The report also provides recommendations to port operators, regulatory agencies, and community-based environmental and health advocates. Air quality-related recommendations to ports are listed in Table 7. Air quality-related recommendations to policymakers and regulators are listed in Table 8.

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<sup>12</sup> <http://www.nrdc.org/air/pollution/ports/ports2.pdf>

**Table 7**  
**Natural Resources Defense Council (NRDC) and the Coalition for Clean Air (CCA)**  
**Recommendations to Ports**

<b>Marine Vessels (Oceangoing Vessels and Harbor Craft)</b>
Clean up harbor craft, such as tugboats, through engine repower and retrofit programs.
Limit idling of oceangoing vessels and tugboats by providing electric power at docks and requiring ships and tugboats to “plug in” to shoreside power while at berth.
Require ships, including oceangoing vessels, to use the cleanest grade of diesel fuel possible, with a sulfur content of 15 to 2,000 parts per million.
Where possible, create incentives for, or otherwise promote the use of, emission controls on oceangoing vessels.
<b>Cargo Handling Equipment</b>
Retire equipment that is ten or more years old and replace it with the cleanest available equipment and fuel choices, preferably alternative fuels.
Retrofit existing equipment less than ten years old to run on the best available control technology, including diesel particulate filters (DPFs) with lean NOx catalysts (LNCs) and, if not feasible, with diesel oxidation catalysts (DOCs).
Switch to cleaner diesel fuels, such as low-sulfur fuel with sulfur content less than 15 parts per million and diesel emulsions.
<b>Locomotives</b>
Repower or replace all switching locomotives that do not meet the Environmental Protection Agency (EPA) Tier 0 Standards with electric-hybrid or alternative-fuel engines.
Install engine emissions controls where possible.
Require automatic engine shutoff controls to minimize unnecessary idling.
Commit to using cleaner fuels, such as on-road grade diesel.
<b>On-Road Trucks</b>
Create incentive programs that encourage fleet modernization, the retirement of older trucks, and their replacement with modern lower-emitting trucks.
Offer incentives for the installation of pollution controls, including DPFs with LNCs or, if not feasible, with DOCs.
Make cleaner fuels, such as diesel emulsions or low-sulfur diesel, available to off-site trucks.
Minimize truck idling by enforcing idling limits or by installing idle shutoff controls.

**Table 8**  
**Natural Resources Defense Council (NRDC) and the Coalition for Clean Air (CCA)**  
**Recommendations to Policymakers and Regulators**

<b>Marine Vessels</b>
The U.S. government should officially ratify MARPOL Annexes IV and VI (an international treaty that prevents sewage pollution and sets emissions standards for ships) and the Antifouling Systems Convention, which bans toxic chemical coatings on ship hulls.
The EPA should expedite efforts to establish the entire East, West, and Gulf coasts as control zones subject to stricter emission standards until MARPOL VI.
The EPA should implement a graduated harbor fee system similar to a program in Sweden that requires more polluting ships to pay higher fees upon entering a port.
The EPA should expedite implementation of stricter emission standards for all marine vessels within two years.
States and regional authorities should create financial incentives for the cleanup and replacement of older marine vessels.
States and regional authorities should require ships to plug in to shoreside power while docked.
States should require that ships use low-sulfur diesel while in coastal waters and at berth (until electric power is made available). In the absence of state action, regional authorities should require this.
Regional authorities should monitor and enforce ship speed limits.
<b>On-road and Non-road vehicles</b>
The EPA must follow through with full implementation of its 2007 emissions standards for on-road, heavy-duty trucks, its 2008 emissions standards for nonroad vehicles and equipment; and the related lower sulfur diesel requirements.
The EPA should adopt a series of diesel retrofit rules, similar to those proposed in the California risk reduction program, to establish a cleanup schedule for existing polluting diesel engines. In the absence of federal action, states or local authorities should adopt these programs.
The EPA should set uniform federal idling limits for all diesel engines. In the absence of federal action, state or local authorities should require idling limits.
States should provide incentive programs to reduce pollution from heavy-duty diesel engines, similar to programs such as California's Carl Moyer and Gateway Cities; in the absence of state action, regional authorities should sponsor such programs.
Regional authorities should adopt fleet rules to clean up and require new, cleaner purchases of all heavy-duty engines, similar to those in place in the Los Angeles area.
<b>Inland Cargo Transport</b>
The EPA and individual states should consider fees on each container entering a port to provide funding for mitigation of the environmental impacts of moving those containers.
The U.S. government should adopt and support a sustainable transportation system program, similar to the European Union program facilitating the shift of cargo transport from more polluting modes (such as trucking) to cleaner locomotive and barge transport.



<b>Locomotives</b>
The EPA should implement stricter emission standard for locomotives within one year.
States and regional authorities should also create financial incentives for the cleanup and replacement of older locomotives.
States should negotiate memorandums of understanding that create incentives for cleaner locomotives. In the absence of state action, regional authorities should pursue this.

(It is noted that proposals above for container fees are funding measures rather than independent air quality strategies.)

**3.0 Next Steps**

Once the Request for Proposals for the I-710 EIR/EIS has been issued and a team of consultants is selected, the detailed planning and design can move forward. This work, including identification of detailed mitigation strategies for cleaning the air, will be undertaken concurrently with the development by the Gateway Cities COG Air Quality Action Plan.

The Air Quality Plan will draw upon the compendium of strategies identified in this report, but will include detailed implementation strategies and funding arrangements for the most promising high-priority strategies for reducing emissions in the corridor.

Exhibit 1

Action of the Los Angeles County Metropolitan Transportation Authority at its Regular Board Meeting of January 27, 2005 with Regard to the I-710 Major Corridor Study

- A. Adopt the Draft Final Report on the I-710 Major Corridor Study between the Ports of Los Angeles/Long Beach and SR-60 Pomona Freeway; and
- B. Authorize the Chief Executive Officer to proceed with the preparation of a scope of work and funding plan that will include funding commitments from multiple partners for the environmental phase of the project pursuant to the Major Corridor Study's Locally Preferred Strategy and use input from the I-710 Community Advisory Committees in the environmental scoping process. The scope of work should also include assessment of impact to the I-710/SR-60 interchange and evaluation of alternative project delivery methods.

**As amended by Burke-Molina motion:**

- 1) Adopt the Draft Final Report on the I-710 Major Corridor Study;
- 2) Direct MTA staff to report back to the Board with the results of the East Los Angeles Mini-study and that results be included into the Locally Preferred Strategy prior to initiating scoping for the EIR/EIS;
- 3) Receive the Tier II Report to be accepted and utilized as pre-scoping guidance for the EIR/EIS; and
- 4) Direct the MTA CEO, with the assistance of our state and federal advocates, to work with the appropriate governmental and non-governmental agencies to form a multi-jurisdictional entity to coordinate the appropriate aspects of the project, including identification of a funding plan with funding sources from multiple partners; and upon formation, the multi-jurisdictional partnership be tasked with identifying strategies for achieving near-term improvements to the corridor's air quality and that the strategies be identified prior to initiation of the EIR/EIS request for proposals.

EXHIBIT 2  
I-710 FREEWAY CORRIDOR  
SUMMARY  
OF EXISTING AIR QUALITY PROGRAMS

Air Quality Program		Implementation Time Frame	Status
		0-5 yr.	5-10 yr.
<b>Tier 2 CAC Recommendations Health and Air Quality</b>			
<i>Develop an action plan to improve air quality in the corridor, including the following steps:</i>			
<ul style="list-style-type: none"> <li>Establishing a baseline of current levels of pollution from each contributing source using the best available technology.</li> </ul>		✓	AQMD-AQMP (2007)
<ul style="list-style-type: none"> <li>Identify the level of air quality impacts from increasing trucking, rail and shipping.</li> </ul>		✓	GCCOG-AQAP (Not initiated)
<ul style="list-style-type: none"> <li>Determine the approximate costs of health care that can be traced to the differential levels of air pollution to be encountered by corridor community members as a result of the construction effort, if it goes forward as envisioned.</li> </ul>		✓	GCCOG-AQAP (Not initiated)
<ul style="list-style-type: none"> <li>Study the direct and indirect health and other economic costs on communities and the region caused by global trade and its associated pollution impacts.</li> </ul>		✓	GCCOG-AQAP (not initiated) & GCCOG Economic Analysis (Not initiated)
<i>Implement a corridor level action plan to improve community air quality.</i>			
<ul style="list-style-type: none"> <li>Use enforcement, truck inspections and incentives to control emissions.</li> </ul>		✓	GCCOG & CT/CHP (Initiated COG Safety Initiative but no progress due to lack of funding)
<ul style="list-style-type: none"> <li>Require air quality improvements in port operation as a condition of project approval</li> </ul>			No Program
<ul style="list-style-type: none"> <li>Encourage the development and expansion of fleet modernization clean air programs.</li> </ul>		✓	GCCOG Clean Air Program (373 trucks replaced)
<ul style="list-style-type: none"> <li>Levy fees on containers to fund environmental improvements and community programs to address hidden costs attributable to goods movement impacts including:                             <ul style="list-style-type: none"> <li>Health care</li> <li>Alternative fuels</li> <li>Improvements/construction of I-710 infrastructure</li> <li>Beautification of the corridor</li> </ul> </li> </ul>			No Program
<ul style="list-style-type: none"> <li>Develop infrastructure that quantifies emission reductions:                             <ul style="list-style-type: none"> <li>Permanent monitoring stations to measure emissions levels in the corridor</li> </ul> </li> </ul>		✓	POLB/POLA establishing additional air monitoring/stations with in ports (2007/08)-no other programs established along I-710
<ul style="list-style-type: none"> <li>Develop and implement improved air quality monitoring techniques.</li> </ul>			No Program
<i>Implement local alternative fuels/electrification and/or hydrogen policies and programs to reduce diesel</i>			
<ul style="list-style-type: none"> <li>Make the use of alternative fuels a priority.</li> </ul>			No Program
<ul style="list-style-type: none"> <li>Discourage the use of out-of-state fuel.</li> </ul>			No Program
<ul style="list-style-type: none"> <li>All trucks, regardless of origin, must be subject to local, state and federal standards.</li> </ul>			No Program
<ul style="list-style-type: none"> <li>Require all trucks using the truck lanes on the I-710 to use alternative fuels as defined above, or pollution controls which achieve equal or better results.</li> </ul>			No Program
<ul style="list-style-type: none"> <li>Require all railroad locomotives servicing two ports, or any rail yards connected with port container traffic, to use alternative fuels as defined above, or pollution controls which achieve equal or better results.</li> </ul>		✓	CARB Programs underway (no particular fuel required)
<ul style="list-style-type: none"> <li>Require the Alameda Corridor Authority to prepare a plan to electrify all locomotives involved in its operations</li> </ul>			No Program
<i>Pursue opportunities for incremental improvements.</i>			
<ul style="list-style-type: none"> <li>Retrofit schools, homes and parks to increase protection from noise and pollution.</li> </ul>		✓	I-710 EIR (2006-09)
<ul style="list-style-type: none"> <li>Identify location and develop facility for one-stop truck inspection.</li> </ul>		✓	GCCOG COG Initiative (underway) (no progress due to lack of funding)
<ul style="list-style-type: none"> <li>Provide incentives for businesses to accept off-peak deliveries.</li> </ul>		✓	PIER-PASS (started '05)
<ul style="list-style-type: none"> <li>Create programs to assist truck owners with engine/equipment upgrades and retrofits.</li> </ul>		✓	GCCOG Clean Air Program (underway) (373 trucks replaced to date)

**I-710 FREEWAY CORRIDOR  
SUMMARY  
OF EXISTING AIR QUALITY PROGRAMS**

Air Quality Program	Implementation Time Frame		Status
	0-5 yr.	5-10 yr.	
<ul style="list-style-type: none"> <li>Restrict Port-generated traffic onto I-710 until improved fuels programs or other pollution emissions mitigation programs are implemented</li> <li>Provide landscaping, specifically including tree planting, to improve air quality.</li> </ul>	✓		No Program
<i>Implement Port-specific strategies.</i>			I-710 EIR (2006-09) (Caltrans currently re-landscaping sections of I-710 freeway)
<ul style="list-style-type: none"> <li>Require ports to develop plans to electrify other terminal operations as a priority.</li> <li>Require all rubber tired gantry cranes to be electrified.</li> </ul>			See POLA/POLB See POLA/POLB
<ul style="list-style-type: none"> <li>Require all ships docking in the Ports of Los Angeles and Long Beach to shut down all diesel engines and use shore electric power</li> </ul>			See POLA/POLB
<ul style="list-style-type: none"> <li>Require the ports to expedite development of effective pollution controls for ships.</li> </ul>			See POLA/POLB
<ul style="list-style-type: none"> <li>Make mandatory the proposal of CARB to require that ships entering the coastal waters of California switch to low sulfur diesel fuel. Require the ports to provide financial subsidy if necessary to implement this requirement.</li> </ul>			See POLA/POLB
<ul style="list-style-type: none"> <li>Include trucks, trains and rail yards, marine vessels, and port equipment in clean air initiatives.</li> </ul>			AQMD/CARB addressing (in progress)
<ul style="list-style-type: none"> <li>Require all terminal equipment at the ports to operate on alternative fuel as defined by CARB. This includes Liquid Petroleum Gas, Compressed Natural Gas, or Liquid Natural Gas. As an alternative, require all engines to be equipped with pollution control technology, which achieves equal or less emissions.</li> </ul>			CARB Initiative (working on regulations)(no particular fuel required)
<ul style="list-style-type: none"> <li>Establish a fund that shippers must pay into, that provides rebates to those who adopt the use of clean air engines for vehicles. Ensure that this program accomplishes the goals of decreasing pollution rather than a pay-to-pollute program.</li> </ul>			No Program
<b>Gateway Cities Council of Governments</b>			
<i>Clean Air Program</i>			
<ul style="list-style-type: none"> <li>Eliminate any additional older (pre-1994) diesel trucks into the Gateway Cities area</li> </ul>	✓		GCCOG Truck Replacement Program (373 Trucks to date)
<ul style="list-style-type: none"> <li>Incorporate Level III PM retrofit devices on all replacement trucks as soon as ultra-low sulfur diesel fuel becomes widely available</li> </ul>			1. Level I DOC'S are retrofitted (at the discretion of the funding agency) 2. GCCOG has an EPA grant to do a pilot program of trucks with Level III devices.
<i>Safety Action Initiatives</i>			
<ul style="list-style-type: none"> <li>Truck Inspection and Weighing Facilities</li> </ul>	✓		GCCOG Safety Initiatives- (Underway)Lack of Funding
<ul style="list-style-type: none"> <li>Intelligent Transportation Systems (ITS) - Technology</li> </ul>	✓		GCCOG ITS Master Plan (awaiting funding)
<b>Ports/ACTA Truck Trip Reduction Program</b>			
Virtual Container Yard - Reduces # of empty container trucks	✓		Implemented '06
Extended Gate Hours - Spreads truck traffic over more hours	✓		PIER-PASS initiated
Increased On-Dock Rail - Reduces # of truck trips to rail yards			On-dock usage has increased from 16% to 21% from 2003 to 2005. Ports are completing Rail Master Plan in '06
New Near Dock Rail Yard - Shortens truck trips to Rail yards			BNSF & UP initiated planning and environmental process ('06)
Shuttle Trains - Reduces # of truck trips to local warehouses			ACTA studied (on hold)
SR-47 Viaduct - Provide Alternative truck route			ACTA performing studies & preparing environmental documents

OF EXISTING AIR QUALITY PROGRAMS

Air Quality Program	Implementation Time Frame	Status
<b>Port of Long Beach (Green Port Policy)</b>		
<i>Control Measures for Ocean-Going Vessels</i>		
<ul style="list-style-type: none"> <li>Vessel Speed Reduction (Green Flag Program) – voluntary, incentivised program requiring ships to slow to 12 knots at a distance of 20 miles from Point Fermin.</li> </ul>	✓	Program began in 2001. Board approved Green Flag Program in late 2005. Green Flags to be distributed in early 2006 to vessels that were 100% compliant through calendar year 2005; Carriers to receive 15% dockage rebate based upon 2006 program compliance
<ul style="list-style-type: none"> <li>Shore power – The Port has committed to a goal of providing shore power to all new and existing container terminals; The Port's ultimate goal is to have 100% of vessels at existing container terminals plug in once the infrastructure has been retrofitted and the world's fleet has been made shore power capable; in the interim, shore power is being incorporated into new leases that specify targets for vessel compliance and selected existing berths are being retrofitted with shore power.</li> </ul>	✓	To be included in new lease negotiations; First lease which includes this requirement to be concluded in 2006. Shore side construction on Berth T121 to be completed July 2007
<ul style="list-style-type: none"> <li>Retrofit/Re-power Requirements for Infrequent Callers – Port lease language will require the use of exhaust controls or clean fuels in the auxiliary engines of vessels that do not use shore power.</li> </ul>	✓	The port is working with the Maritime Air Quality Working Group, a coalition of agencies and maritime interests, to test emission reduction technologies for cargo vessel main engines. The group is seeking to retrofit a vessel with in-line fuel emulsifier and slide valves.
<ul style="list-style-type: none"> <li>Main Engine Fuel Improvement – the Port is considering incentives as part of the Green Flag Program for the use of low-sulfur (initially 1.5%) diesel or equivalent</li> </ul>	✓	The port supports the ratification of Annex VI through which a sulfur Emission Control Area can be created.
<ul style="list-style-type: none"> <li>Auxiliary Engine Fuel Improvement – lease language will require the use of fuel with 0.2% or lower sulfur content or equivalent, or exhaust gas treatment, in auxiliary engines while at berth.</li> </ul>	✓	Through new and amended leases, require low sulfur distillate fuels in auxiliary engines while at Berth.
<ul style="list-style-type: none"> <li>Vessel Smoke Stack Emission Reduction - POLB Security will continue to issue warnings and citations to vessels in order to eliminate excess smoke and reduce vessels emissions while at berth.</li> </ul>		
<ul style="list-style-type: none"> <li>West Coast Sulfur Emission Control Area (SECA) – in January 2005, the Long Beach Board of Harbor Commissioners adopted a resolution urging the United States to ratify Annex VI of the International Convention for the Prevention of Marine Pollution From Ships (MARPOL). Annex VI, adopted in 1997, entered into force on May 19, 2005 and sets limits on sulfur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances. Annex VI calls for a global cap of 4.5% m/m on the sulfur content of fuel oil and calls on IMO to monitor the worldwide sulfur content of fuel.</li> </ul>	✓	Dependant on ratification of Marpol Annex VI and approval of subsequent application for SECA designation; SECA amendment to enter into force 26 months after adoption; POLB has expressed support for adoption of Marpol Annex VI.
<i>Control Measures for Harbor Craft</i>		
<ul style="list-style-type: none"> <li>The Port will replace or re-power, or convert to cleaner fuels, survey boats and other Port-owned harbor craft.</li> </ul>	✓	Currently 2 fire boats running on ULSD, 1 survey boat operating on gasoline.
<i>Control Measures for Cargo Handling Equipment</i>		
<ul style="list-style-type: none"> <li>Yard Tractor Modernization &amp; Alternative Diesel Fuel Programs – lease language will commit tenants to meet contemporary CARB and EPA emission standards in new equipment, use clean fuels in existing equipment and retire older equipment.</li> </ul>	✓	Through new and amended leases, the Port requires accelerated turnover of cargo-handling equipment. The port supports the adoption of alternative diesel fuels with over 300 pieces of equipment operating on alternative diesel fuels.
<ul style="list-style-type: none"> <li>Enhanced Cargo Handling Modernization – lease language will require accelerated replacement of terminal equipment with equipment meeting future off-road standards for diesel engines.</li> </ul>	✓	Through new and amended leases, the Port requires accelerated turnover of cargo-handling equipment. The Port supports the adoption of alternative diesel fuels with over 300 pieces of equipment operating on alternative diesel fuels.
<ul style="list-style-type: none"> <li>Diesel Emissions Reduction Program – container terminal cargo handling equipment has been converted to exhaust controls and clean diesel fuel.</li> </ul>	✓	\$2.1 million program to retrofit approximately 600 pieces of cargo handling equipment with diesel oxidation catalysts (DOCs)

**I-710 FREEWAY CORRIDOR  
SUMMARY  
OF EXISTING AIR QUALITY PROGRAMS**

Air Quality Program	Implementation Time Frame		Status
	0-5 yr.	5-10 yr.	
<i>Control Measures for Railroad Locomotives</i>			
<ul style="list-style-type: none"> <li>PHL Switcher Locomotive Modernization &amp; Emulsified Diesel Program – PHL rail locomotives are being replaced in 2007; use idle limiting devices; test DOCs.</li> <li>Ultra-Low Emission Switcher Locomotives – requires PHL to deploy Green Goat and LNG switchers.</li> <li>Idling Controls on Switcher &amp; Line Haul Locomotives – install controls on PHL equipment; Ports cannot install equipment on Class 1 line haul locomotives.</li> <li>ARB Diesel Fuel for Class 1 Locomotives - support of this measure would be part of the Green Port legislative agenda.</li> </ul>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>Operating agreement with PHL requires replacement of 16 locomotives with Tier 2 engines; replacement locomotives expected to arrive 2006 to 2007. Locomotives to be fueled with emulsified diesel fuel; conversion should occur 1st quarter 2006. DOC retrofits will be tested and implemented if feasible; test to begin within 6 months after arrival of first replacement locomotive.</p> <p>PHL operating agreement requires minimum one year test for a diesel hybrid locomotive and a LNG locomotive;</p> <p>Operating agreement with PHL requires 15 minute idling limits installed on new switcher locomotives. ARB railroad MOU requires elimination of non-essential idling and phase-in of 15 minutes idle limiting devices by June 30, 2008</p> <p>ARB has issued a regulation requiring ARB diesel fuel in all intrastate locomotives.</p>	
<i>Control Measures for Heavy-Duty Vehicles</i>			
<ul style="list-style-type: none"> <li>Gateway Cities Truck Modernization – subsidies are being considered by POLB to commercial truck owners that trade in their diesel trucks with older engines for models with newer, cleaner-burning engines.</li> <li>Retrofit Heavy-Duty Diesel Vehicles with Diesel Oxidation Catalysts (DOCs) or Diesel Particulate Filters (DPFs) – for future container terminal projects, the Port will require installation of exhaust controls on older trucks serving the terminal</li> <li>Truck Idling Reduction Measures – the Port will require truck idling limits for on-road trucks within Port boundaries.</li> <li>Infrastructure improvements for On-Dock Rail and Grade Separations</li> </ul>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>POLB was founding partner and continues to serve on steering committee. (373 Trucks replaced to date)</p> <p>New trucks offered through the Gateway Cities Truck Modernization program are also retrofitted with DOCs (DPFs proposed) to further reduce emissions.</p> <p>In 2006, the POLB will be recommending queuing restrictions on various Port roads as part of the tariff. Approval by the Board of Harbor Commissioners will be required.</p> <p>The POLB/POLA Truck Trip Reduction Program addresses the issue- which is included in the overall AQ plan.</p>	
<i>Miscellaneous Controls</i>			
<ul style="list-style-type: none"> <li>Petroleum Coke Dust Control – the Port will continue to implement the Rule 1158 program aimed at reducing fugitive dust from petroleum coke operations.</li> <li>Electric Dredging – additional electrical receptacles will be placed around the Port to facilitate the switch to electric dredging. beginning in 2008, the Port will require all non-maintenance dredging to be conducted with electric equipment.</li> <li>Port Ride Share Program – the SCAQMD, under Rule 2202, requires employers of 250 or more employees to establish rideshare programs; the City of Long Beach developed a program in response to this requirement and the Port participated in the program; the City, as a result of budget issues, eliminated their program in 2003; since then, approximately 20 Port employees have continued to rideshare in an informal program; the Port is now exploring the formal re-establishment of its own rideshare program.</li> </ul>	<p>✓</p> <p>✓</p> <p>✓</p>	<p>Previously implemented</p> <p>Program to be implemented</p> <p>Program initiated</p>	
<b>Port of Los Angeles Clean Air Program</b>			
<i>Control Measures for Ocean-Going Vessels</i>			
<ul style="list-style-type: none"> <li>Vessel Speed Reduction – A voluntary program under which vessels are slowed within an agreed-upon distance from the port, reducing emissions of NOx.</li> <li>Alternative Maritime Power – a program for ships to use shore power instead of fuel-burning auxiliary engines while at berth (also known as cold-ironing).</li> <li>Auxiliary Engine Fuel Improvement Program – a program to encourage or require the use of progressively lower sulfur fuel (i.e., marine diesel oil) in auxiliary engines of ocean-going vessels at they approach the port.</li> <li>Main Engine Fuel Improvement Program – a program to encourage or require the use of lower sulfur fuel in main engines of ocean-going vessels at they approach the port. This measure may be superseded by the implementation of a Sulfur Emission Control Area (SECA) by the U.S. EPA and the IMO.</li> </ul>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>20 miles from shore in effect; 40 mile rule will be phased in over five years and will be an ongoing program.</p> <p>There are currently three facilities equipped with AMP. Additional terminals will be phased in as leases are renewed. 217 vessel calls using AMP expected within five years.</p> <p>This is an ongoing incentive program. In future, program will rely on new CARB rule</p> <p>This program will be required through lease provisions over the next five years.</p>	

**1-710 FREEWAY CORRIDOR  
SUMMARY  
OF EXISTING AIR QUALITY PROGRAMS**

Air Quality Program	Implementation Time Frame		Status	
	0-5 yr.	5-10 yr.		
<ul style="list-style-type: none"> <li>Low Emission Main Engines – a program to encourage the development and use of low emission main propulsion engines (i.e., Blue-Sky series/Category 3 engines) for marine vessels calling at the port.</li> <li>Reroute cleanest ships – a program to encourage or require ship operators to use their newest/lowest emitting vessels calling at the port.</li> </ul>	✓		This is a long term program; feasibility is being evaluated. Staff is meeting with engine manufacturers.	
<i>Control Measures for Harbor Craft</i>				
<ul style="list-style-type: none"> <li>Biofuels for Harbor Craft – a program to encourage or require the use of biofuels in harbor craft operating in Los Angeles Harbor.</li> </ul>	✓		Part of Port Clean Air Program	
<ul style="list-style-type: none"> <li>China Shipping Settlement Air Quality Mitigation Measures for Harbor Craft – Existing measures recommended by the Technical Advisory Committee (TAC) and implemented by the port, including repowering/retrofitting harbor craft main and auxiliary engines. Funding for these measures comes from the China Shipping Settlement.</li> </ul>	✓		First round of solicitations completed. Second round has started.	
<i>Control Measures for Cargo Handling Equipment</i>				
<ul style="list-style-type: none"> <li>Alternative-Fuel Equipment – a program to replace existing diesel-fueled cargo handling equipment with equipment powered by alternative fuels or electricity.</li> <li>China Shipping Air Quality Mitigation Measures for Cargo Handling Equipment – Existing measures recommended by the Technical Advisory Committee (TAC) and implemented by the port, including replacing cargo handling equipment with low emission alternatives. Funding for these measures comes from the China Shipping Settlement.</li> </ul>	✓		LNG pilot underway. Modifying diesel plan to phase in alternative fuel.	
<ul style="list-style-type: none"> <li>Alternative Fuel Infrastructure for Cargo Handling Equipment – Installation of liquefied natural gas (LNG) refueling terminal within the port to support the use of LNG-powered cargo handling equipment.</li> </ul>	✓		See harbor craft above.	
<i>Control Measures for Railroad Locomotives</i>				
<ul style="list-style-type: none"> <li>Pacific Harbor Line (PHL) Modernization – a voluntary program initiated by the port (in conjunction with the PHL and the Port of Long Beach) to modernize PHL switcher locomotives and initiate the use of ultra-low sulfur diesel (ULSD) fuel.</li> </ul>	✓		Part of Port Clean Air Program in conjunction with AQMD	
<ul style="list-style-type: none"> <li>Idling Controls for Switcher and Line Haul Locomotives – a program to encourage or require the installation of idling controls on switcher and line haul locomotives operating in the port. Idling controls automatically shut off engines after pre-set lengths of time at rest.</li> </ul>	✓		Agreement approved. 16 new locomotives to be purchased in 2006	
<ul style="list-style-type: none"> <li>Electrification of Alameda Corridor and Alameda Corridor East – a measure to encourage and facilitate the conversion of the Alameda Corridor and related rail infrastructure from diesel power to electric.*</li> <li>Locomotive Technology Replacements – a measure to research and encourage the development of low emission alternatives to diesel locomotive power, including magnetic levitation*, alternative fuels, fuel cells, and fueled/electric hybrids.</li> </ul>	✓		Part of PHL agreement for switch engines. Part of CARB rail MOU. Will be required at new rail facilities at Port.	
<i>Control Measures for Heavy-Duty Vehicles</i>				
<ul style="list-style-type: none"> <li>On-Road Heavy Duty Truck Alternative Fuels Program – a program to encourage and facilitate replacement of diesel trucks with alternative fueled trucks (i.e., LNG and hydrogen). The primary mechanisms will be through the existing Gateway Cities truck modernization program, a fleet-based program, and support of the California Hydrogen Highway program. The fleet-based program may include recruitment of existing fleet operators to switch to LNG, recruitment of a company that owns trucks to lease LNG vehicles, or purchase of the LNG trucks by the port, which would then lease them directly to operators.</li> <li>Alternative Fuel Infrastructure for Heavy Duty Vehicles (HDVs) – installation of LNG refueling stations within the port and greater Los Angeles area to support the use of LNG-powered on-road trucks. In addition, installation of a hydrogen fueling station within the port to support the implementation of the California Hydrogen Highway program.</li> </ul>	✓		Involves re-evaluation of electrification study. Staff may also consider competing technologies. (long-term program)	
				See previous comment above.
	✓			Involves modification of Gateway Cities truck replacement program to phase in alternative fuel. With approval of Clean Air Program, would implement LNG truck fleet program.
	✓			See LNG truck fleet comment above. May collaborate with AQMD on fueling status.

OF EXISTING AIR QUALITY PROGRAMS

Air Quality Program	Implementation Time Frame		Status
	0-5 yr.	5-10 yr.	
<b>Natural Resources Defense Council (NRDC) and the Coalition for Clean Air (CCA) Recommendations to Ports</b>			
<i>Marine Vessels</i>			
<ul style="list-style-type: none"> <li>The U.S. government should officially ratify MARPOL Annexes IV and VI (an international treaty that prevents sewage pollution and sets emissions standards for ships) and the Antifouling Systems Convention, which bans toxic chemical coatings on ship hulls.</li> <li>The EPA should expedite efforts to establish the entire East, West, and Gulf coasts as control zones subject to stricter emission standards until MARPOL VI.</li> <li>The EPA should implement a graduated harbor fee system similar to a program in Sweden that requires more polluting ships to pay higher fees upon entering a port.</li> <li>The EPA should expedite implementation of stricter emission standards for all marine vessels within two years.</li> </ul>			with U.S. Senate
<ul style="list-style-type: none"> <li>States and regional authorities should create financial incentives for the cleanup and replacement of older marine vessels.</li> <li>States and regional authorities should require ships to plug in to shoreside power while docked.</li> <li>States should require that ships use low-sulfur diesel while in coastal waters and at berth (until electric power is made available). In the absence of state action, regional authorities should require this.</li> <li>Regional authorities should monitor and enforce ship speed limits.</li> </ul>			Supported by both ports
<i>On-road and nonroad vehicles</i>			
<ul style="list-style-type: none"> <li>The EPA must follow through with full implementation of its 2007 emissions standards for on-road, heavy-duty trucks, its 2008 emissions standards for nonroad vehicles and equipment; and the related lower sulfur diesel requirements.</li> <li>The EPA should adopt a series of diesel retrofit rules, similar to those proposed in the California risk reduction program, to establish a cleanup schedule for existing polluting diesel engines. In the absence of federal action, states or local authorities should adopt these programs.</li> <li>The EPA should set uniform federal idling limits for all diesel engines. In the absence of federal action, state or local authorities should require idling limits.</li> <li>States should provide incentive programs to reduce pollution from heavy-duty diesel engines, similar to programs such as California's Carl Moyer and Gateway Cities; in the absence of state action, regional authorities should sponsor such programs.</li> <li>Regional authorities should adopt fleet rules to clean up and require new, cleaner purchases of all heavy-duty engines, similar to those in place in the Los Angeles area.</li> </ul>			No Program
<i>Inland cargo transport</i>			
<ul style="list-style-type: none"> <li>The EPA and individual states should consider fees on each container entering a port to provide funding for mitigation of the environmental impacts of moving those containers.</li> <li>The U.S. government should adopt and support a sustainable transportation system program, similar to the European Union program facilitating the shift of cargo transport from more polluting modes (such as trucking) to cleaner locomotive and barge transport.</li> </ul>			Supported by both ports
<i>Locomotives</i>			
<ul style="list-style-type: none"> <li>The EPA should implement stricter emission standard for locomotives within one year.</li> <li>States and regional authorities should also create financial incentives for the cleanup and replacement of older locomotives.</li> <li>States should negotiate memorandums of understanding that create incentives for cleaner locomotives. In the absence of state action, regional authorities should pursue this.</li> </ul>			No Program
			EPA needs to implement - no program
			BNSF/UP purchasing new locomotives (06-07)
			See previous comment