



REVISED

PLANNING AND PROGRAMMING COMMITTEE

January 19, 2005

SUBJECT: ~~FINAL~~- DRAFT FINAL REPORT - I-710 MAJOR CORRIDOR STUDY

ACTION: APPROVE ~~FINAL~~- DRAFT FINAL REPORT

RECOMMENDATION

- A. ~~Approve and a~~Adopt the ~~Final~~- Draft Final Report on the I-710 Major Corridor Study (Study) between the Ports of Los Angeles/Long Beach and SR-60 Pomona Freeway as summarized in Attachment A; 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 impacts to the I-710/SR-60 interchange and evaluation of alternative project delivery methods.

ISSUE

The ~~Final~~- Draft Final Report for the I-710 Major Corridor 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 Locally Preferred Strategy was recommended to the I-710 Oversight Policy Committee by the I-710 Technical Advisory Committee and two Community Advisory Committees which were formed to provide input to the study process. Staff was directed by the Board to develop a hybrid design and to form and work with advisory committees along the corridor. A separate but complementary study is the Multi-County Goods Movement Action Plan study that the MTA Board approved at its meeting in December, 2004. This broader countywide study effort will address the potential impacts of goods movement via freeway corridors beyond the I-710 corridor.

The Tier 1 and Tier 2 Community Advisory Committees (CACs) along with the I-710 Technical Advisory Committee have completed their work and have submitted their final recommendations to the I-710 Oversight Policy Committee. On November 18, 2004, the

Oversight Policy Committee voted unanimously to adopt the I-710 Major Corridor Study's Locally Preferred Strategy. In addition they adopted four recommendations providing direction and guidance on the future phase of project development and on companion actions. (Attachment B – I-710 Oversight Policy Committee Actions)

## POLICY IMPLICATIONS

The recommended action is consistent with MTA's 2001 Long Range Transportation Plan (LRTP) and the 2003 Short Range Transportation Plan (SRTP). SCAG's Regional Transportation Plan (RTP) recognizes the I-710 Transportation Corridor (SR-60 to the Port of Long Beach) as a regionally significant transportation corridor. Because of its regional and national significance, the proposed Federal Highway Bill has earmarked partial funding for its further refinement, design and implementation. The selection of a Locally Preferred Strategy will refine the I-710 project description in the LRTP and will be submitted to SCAG for inclusion in the 2004 Regional Transportation Plan (RTP).

## OPTIONS

The MTA Board could choose not to adopt and approve the Study. 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, and residents along the Corridor. Approval and adoption will allow the study to move into the environmental phase and provide input for future updates of MTA's SRTP, LRTP, and SCAG's RTP.

## FINANCIAL IMPACTS

The recommended action will have no impact on the FY05 budget. Start-up funds to begin developing the work program, **scope of work and funding plan for the environmental-scoping phase** are available within the FY05 budget in Cost Center 4340, Transportation Development and Implementation. **Staff will develop a funding plan that includes funding commitments from multiple funding partners like the Gateway Cities COG, Caltrans, SCAG, ACTA, Ports of Long Beach/Los Angeles, federal funds and other sources.** ~~Since the environmental phase of the project will span multiple fiscal years, the project manager and Executive Officer will be responsible for budgeting the cost in future years.~~ The anticipated cost of the three to four year I-710 EIR/EIS is estimated at approximately \$25 to \$30 million dollars. ~~Staff will work with Caltrans, Gateway Cities COG, SCAG, and other agencies to seek funding for the EIR/EIS.~~

## DISCUSSION

On October 26, 2000, the Board authorized staff to conduct a comprehensive study of future transportation alternatives and improvements for the I-710 Corridor. The Study was designed to identify air quality, congestion, safety, and traffic operation problems in the

Corridor and to develop mobility solutions, which are consistent with the desires of the local communities and residents. Initially, the Study considered a no-build alternative (Alternative A), a Transportation System Management / Transportation Demand Management alternative (Alternative B), and three build alternatives (Alternatives C, D, & E).

### Community Advisory Committees

In May 22, 2003, in response to public and community concerns expressed during the Alternatives Evaluation phase, particularly with respect to proposed right-of-way impacts, air quality issues, and the public involvement process, the Board approved a motion that called for staff to express their preference for Alternative B (the TSM/TDM Alternative) to the Technical Advisory Committee and the Oversight Policy Committee and to work with the various affected entities to develop a hybrid alternative using elements from the build Alternatives C, D, and E that would not require the acquisition of homes and businesses.

Additionally, the Board directed staff to form community advisory committees in key areas along the Corridor. Consistent with this directive, staff worked with local jurisdictions to identify residents and local business owners to participate directly in the identification of issues and areas of opportunity for the I-710 freeway. These Community Advisory Committees or CACs became known as the Tier 1 “grass roots” and Tier 2 “corridor-wide” committees.

In May of 2003, the Oversight Policy Committee (OPC) adopted Guiding Principles that were used to govern the conduct of the remainder of the I-710 Major Corridor Study. The OPC, consistent with the May 2003 Board action, also called for the development of community advisory committees.

To help the Corridor cities with the implementation of the community advisory committees, MTA provided staff and consultant support to facilitate a more participatory and expanded outreach effort. In turn the Gateway Cities Council of Governments retained an engineer to work closely with city public works staff and the Tier 1 CACs to provide input on community level design issues.

The Tier 1 Community Advisory Committees consisted of local citizens of cities from highly impacted neighborhoods. Six cities and the unincorporated area of East Los Angeles formed Tier 1 Committees. The City of Long Beach developed their own public involvement and engineering process to reach consensus on a freeway design within their city limits. Their design concept was integrated with the work of the rest of the Corridor.

The Tier 2 Community Advisory Committee represented a broad base of interests, including local communities, academic, environmental, health and air quality, business, and environmental justice. The charge of the Tier 2 Community Advisory Committee was to: (1) review key local issues and opportunities identified by the Tier 1 Community Advisory Committees, (2) consider issues of local and regional importance for a corridor-wide

perspective, and (3) provide recommendations to the Oversight Policy Committee on a comprehensive transportation solution for the I-710 Corridor.

The CACs met numerous times and developed a compendium of issues, concerns, and recommendations for improving the I-710 freeway and the Corridor. This input was instrumental in developing a consensus on the I-710 hybrid alternative or Locally Preferred Strategy (LPS).

The Locally Preferred Strategy that emerged from this process substantially reduces property acquisitions compared with the previously studied alternatives, improves safety by separating truck traffic from automobiles, and reduces emissions by improving operating truck speeds. It accomplishes this by: (1) using utility right-of-way, (2) maintaining the existing westerly ROW line and expanding the freeway east towards the Los Angeles River, (3) moving the freeway centerline, and (4) calling for design exceptions at selected freeway segments from established federal and state freeway design standards.

### Locally Preferred Strategy

The Locally Preferred Strategy 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 intermodal railroad yards.

In addition, consistent with the May 2003 Board action, the I-710 Technical Advisory Committee recommended on September 9, 2004 that the proposed TSM/TDM improvements previously identified in Alternative B be included in the overall Locally Preferred Strategy. Some of these near term improvements include: (1) additional ramp metering, (2) truck emission reduction programs, (3) empty container management, (4) extended port gate hours, (5) improved transit service, (6) the use of Intelligent Transportation Systems, and (7) landscaping and hardscape design elements for the I-710 (i.e., soundwalls, raised concrete median barriers, and improved signage and lighting).

The I-710 TAC recommendation also included two major transportation elements that will require feasibility studies to define their scope and specific location. These are: (1) improvement of selected arterial roadways within the Corridor, and (2) a truck inspection facility. These feasibility studies will either be done as part the EIR/EIS or as stand alone studies. The TAC also agreed to support the broad concepts in the Tier 2 CAC's Final Report: Major Opportunity/Strategy Recommendations and Conditions, while acknowledging that some of the recommendations would require legislative and/or regulatory changes. (Attachment C - Tier 2 Executive Summary)

The cost of building the Locally Preferred Strategy is estimated at approximately \$4.5 to \$5.5 billion dollars. The Study assumes that the cost of the improvements will not be exclusively funded using the existing local transportation revenue sources; funding will have to come from a variety of federal, state and new dedicated sources of revenue. The Study recognizes the economic goods movement benefits of the Ports of Long Beach and Los Angeles, as well as their contribution to the Corridors worsening congestion, health and air quality. The Draft Final Report concludes that federal funding including federal earmarks and funds

from the goods movement industry must each have a role in the development of the Locally Preferred Strategy (e.g., container fees and/or truck tolling). For example, the Study suggests that the imposition of container fees could produce up to \$1.4 billion in capital funding for improvements in the Corridor.

As the project moves into the environmental scoping process, committees like the I-710 Technical Advisory Committee, the Community Advisory Committees, and the I-710 Oversight Policy Committee will be incorporated in the environmental process. In addition, because of the regional and national significance of the I-710 Corridor, consideration should also be given to formation of a high level Interjurisdictional/Interagency Stakeholder Coalition to address the regional and national impacts of the I-710 Corridor.

### I-5/I-710 Interchange Special Study

As the East Los Angeles and Commerce Tier 1 Community Advisory Committees deliberated on their respective community freeway improvement design concepts, it became clear that the transportation problems posed by the sub-area between Atlantic-Bandini Avenues and the SR-60, which includes the I-5/I-710 interchange, are especially complex and require further detailed study and analysis.

The OPC recognized that a special study would be required to define and resolve the concerns expressed by both Commerce and East Los Angeles residents. MTA staff will work with local jurisdictions to conduct the mini-study. When the study is completed, the results will be incorporated into the Locally Preferred Strategy prior to commencing the environmental analysis phase.

### NEXT STEPS

Upon Board approval, staff will work cooperatively with the affected and interested parties to: (1) prepare a **work program**, scope of work **and a funding plan** for the environmental study phase of the I-710 Corridor improvements, and (2) develop a collaborative community participation process that builds on the strength and success of the one used to develop the Locally Preferred Strategy and the I-710 Major Corridor Study Draft Final Report.

### ATTACHMENTS

Attachment A: Executive Summary of the ~~Final~~- Draft **Final** I-710 Major Corridor Study Report

Attachment B: I-710 Oversight Policy Committee Actions

Attachment C: Executive Summary of Tier 2 Community Advisory Committee

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Prepared by: Ernest T. Morales, Transportation Project Manager  
Susan Gilmore, Community Relations Manager  
Raymond Maekawa, Director Gateway Cities/Southeast Area Team



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James L. de la Loza  
Chief Planning Officer, Countywide Planning and Development



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Roger Snoble  
Chief Executive Officer

**DRAFT FINAL REPORT  
I-710 MAJOR CORRIDOR STUDY**

**S.0 EXECUTIVE SUMMARY**

**S.1 Study Overview**

The I-710 Major Corridor Study was initiated in January 2001 to analyze the traffic congestion, safety, and mobility problems along the I-710 travel corridor and to develop transportation solutions to address these problems as well as some of the quality of life concerns experienced in the I-710 Corridor.

*Study Organization*

Daily project management and oversight of the study was provided by the Los Angeles County Metropolitan Transportation Authority in partnership with three other principal agencies: Caltrans, Gateway Cities COG, and SCAG. In addition, a policy oversight committee was established for the I-710 Study. The I-710 Oversight Policy Committee is comprised of elected officials from 14 participating cities and the County of Los Angeles; executive managers or senior staff from three of the principal partners (MTA, Caltrans, and SCAG); and appointed representatives from the Ports of Long Beach and Los Angeles.

*Study History*

During the first 24 months of the study, existing and future conditions in the I-710 Corridor were assessed, a Purpose and Need Statement was developed, and several different transportation alternatives were analyzed. By April of 2003, five alternatives had been evaluated in detail and information on their benefits, costs, and impacts were made available to the public:

- Alternative A: No Build Alternative (also called the "No Project" Alternative)
- Alternative B: Transportation Systems Management / Travel Demand Management Alternative
- Alternative C: Medium General Purpose / Medium Truck Alternative
- Alternative D: High General Purpose / High HOV Alternative
- Alternative E: High Truck Alternative

Three of the five alternatives were build alternatives that would either involve significant expansion of the I-710 freeway or would require the construction of new travel lanes next to I-710. The public did not support any of the build alternatives due to concerns about the large amount of property acquisitions and relocation impacts, environment and health issues, environmental justice, and perceived shortcomings in the public outreach for the I-710 Study.

*Revised Study Direction*

In response to the community concerns and opposition to the build alternatives, the MTA Board passed a motion on May 22, 2003 to revise the direction of the I-710 Study. Through this motion, the MTA Board directed staff to continue to work with the affected communities and other stakeholders to develop a Hybrid Strategy that would be acceptable to them, while meeting the purpose and need for transportation improvements in the I-710 Study Area. This

In order to empower the Tier 2 CAC to engage additional perspectives or interests that it deems important, the OPC delegated to the Tier 2 CAC the authority to appoint, by two-thirds vote, up to ten additional members. As a result, the Tier 2 CAC voted to add one additional member.

Employing Moore, Iacofano, Goltsman, Inc. as a resource, the Tier 2 CAC structured itself and its work based on key issue areas that were identified by the Tier 1 Community Advisory Committees. These issue areas included:

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

#### *Draft Hybrid Design Concept*

The Gateway Cities COG engineer worked with the Tier 1 Community Advisory Committees to help develop a hybrid design concept. Each of the Tier 1 CACs met numerous times and developed a list of issues, concerns, and recommendations. After reviewing these lists, preliminary design concepts for respective segments of I-710 were developed and presented to each Tier 1 CAC for review and comment. Through this feedback, adjustments and refinements to the hybrid design concept were made.

The purpose of the Draft Hybrid Design Concept was to provide infrastructure improvements to I-710 focused on improving safety; addressing heavy duty truck demand as well as general purpose traffic; improving reliability of travel times; and separating autos and trucks to the greatest extent possible while limiting right-of-way impacts. In general terms, the Draft Hybrid Design Concept is comprised of 10 general-purpose traffic lanes, 4 exclusive truck lanes, and interchange improvements from Ocean Boulevard in Long Beach to the intermodal railroad yards in Commerce/Vernon. [Note that the community consultation process to reach consensus on the Hybrid Design Concept is still underway with Commerce and East Los Angeles and therefore proposed improvements to I-710 between the Atlantic/Bandini interchange and SR-60 are yet to be defined.]









Caltrans standards were considered during the development of the Draft Hybrid Design Concept. However, the standards could not be met at all locations and Caltrans/FHWA approval of design exceptions will be needed to implement the geometric design as currently proposed. If the design exceptions are not acceptable to Caltrans/FHWA, then the geometric designs at certain locations will have to be restudied and the design modified. Any changes will be reviewed with the local community before being finalized.



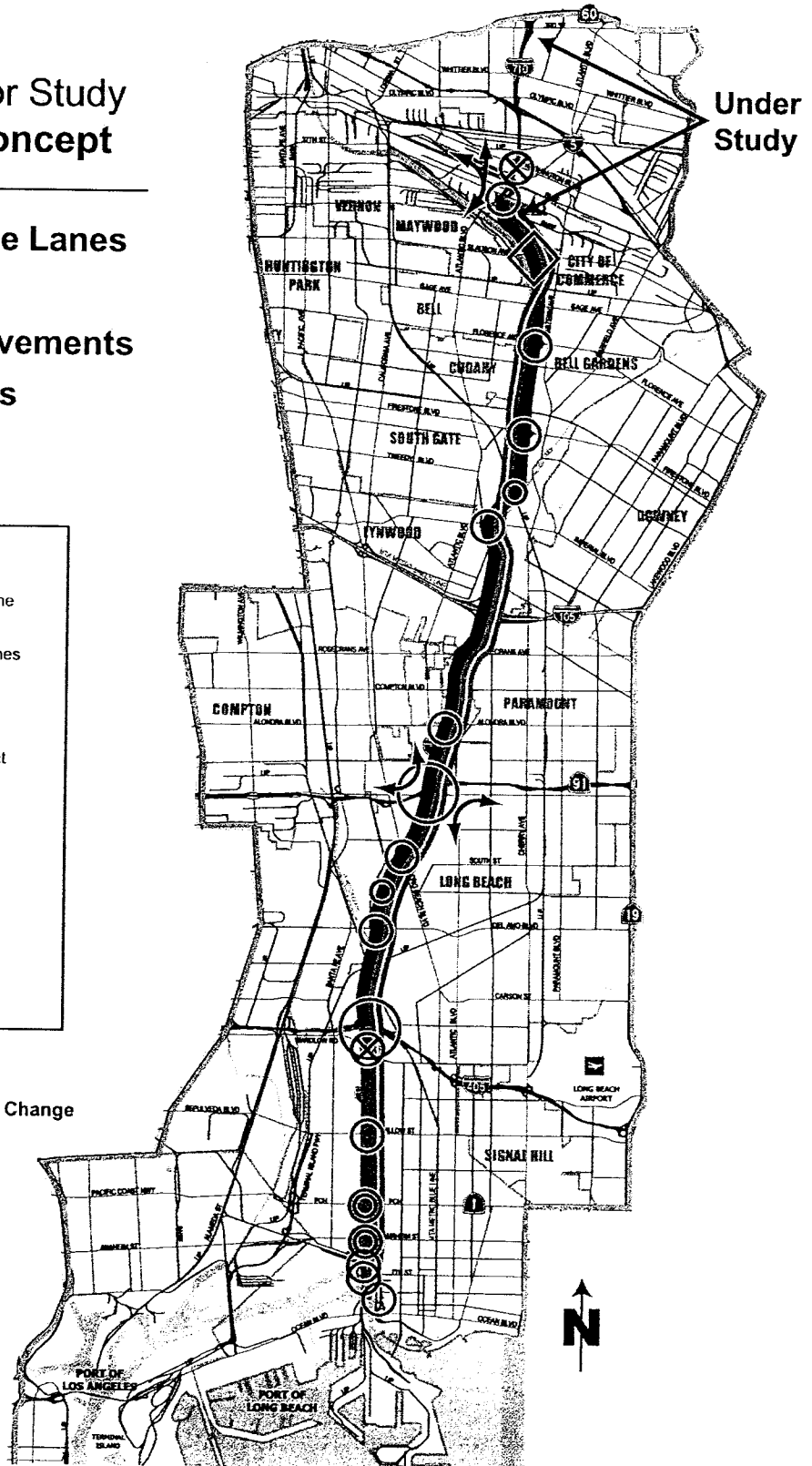
Figure S-1

# I-710 Major Corridor Study Hybrid Design Concept

- 10 General Purpose Lanes
- 4-Lane Truckway
- Interchange Improvements
- Direct Truck Ramps

LEGEND	
	Add One Mixed Flow Lane (Each Direction)
	Add Two Mixed Flow Lanes (Each Direction)
	Exclusive Truck Facility
	Interchange Improvement
	New Interchange
	Eliminate Interchange
	Truck Ramps
	Truck Ingress/Egress

Preliminary Concepts, Subject to Change



Source: Jerry Wood, Consultant, in association with MMA, Inc. and Nolan Consulting, Inc., April 2004

## **S.2 Study Background**

The I-710 Major Corridor Study was conducted according to Regionally Significant Transportation Investment Study (RSTIS) guidelines. A RSTIS is a tool for making better decisions about improving transportation in metropolitan areas. The RSTIS is necessary for major projects seeking federal funding. As such, the RSTIS is part of the federal planning process, yet decision-making takes place at the local and regional levels.

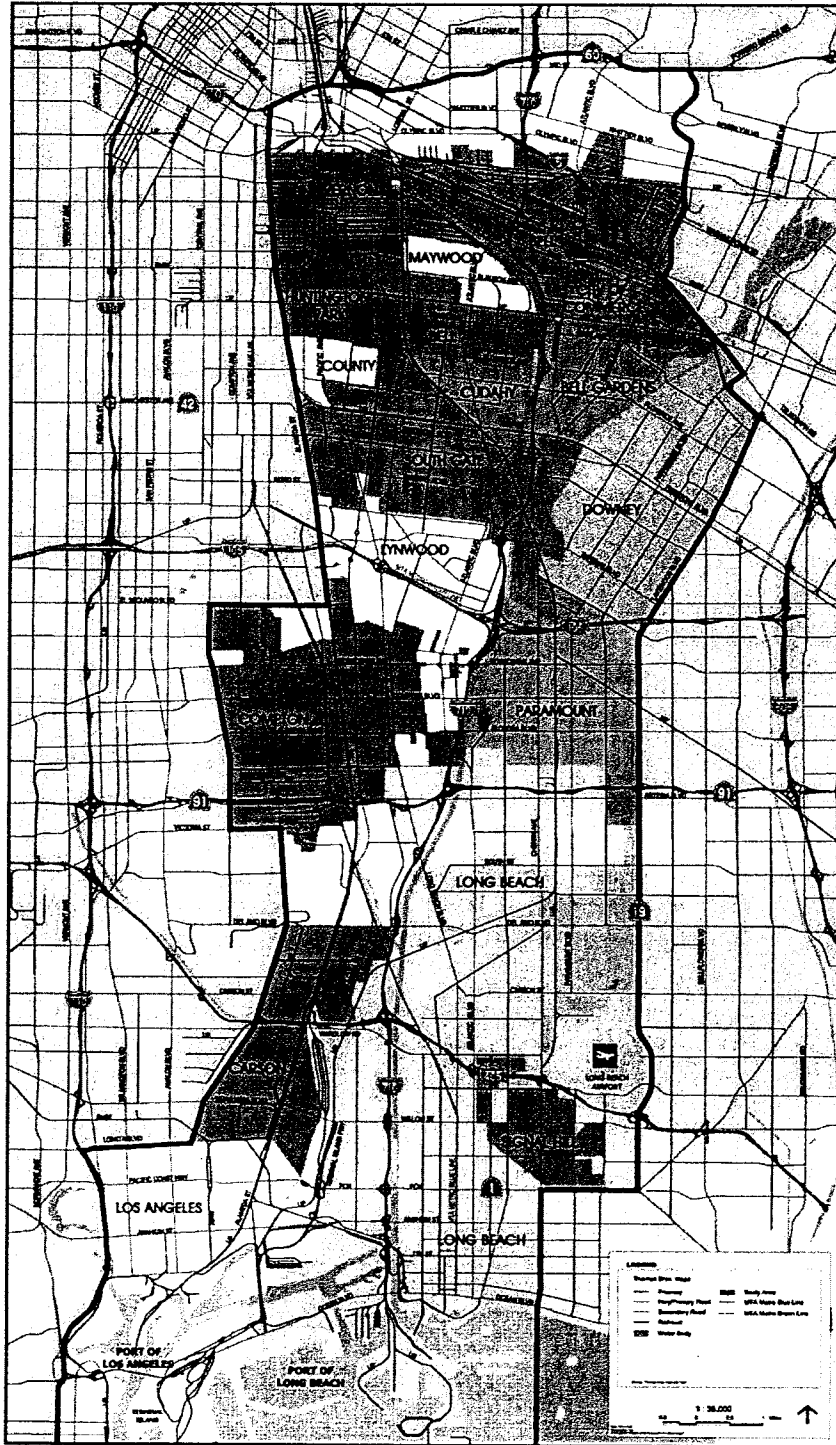
Under the Final Metropolitan Planning Rules (23 CFR Part 450.318) that guide the RSTIS, the I-710 Major Corridor Study is an integral element of a metropolitan area's long range planning process that is designed to provide decision-makers with better and more complete information on the options available for addressing identified transportation problems. The I-710 Study provides a focused analysis and evaluation of the mobility needs and related problems of a transportation corridor within a region. Specific criteria are developed to measure the benefits, costs, and impacts of various options. The RSTIS evaluation leads to a decision on a design concept and scope for transportation investments in the corridor – a Locally Preferred Strategy – that is then incorporated into a metropolitan area's transportation plan. The RSTIS is a cooperative and collaborative process that includes public agencies, local governments, and the general public.

Once the purpose and need, design concept, scope, and other elements have been adopted into the Southern California Regional Transportation Plan (RTP) and the transportation improvement program (TIP), the Locally Preferred Strategy can then be advanced into environmental review and preliminary engineering. Consideration of more detailed design issues and completion of National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements occur in this next phase.

The I-710 Major Corridor Study was sponsored by the Los Angeles County Metropolitan Transportation Authority (MTA) in partnership with the Gateway Cities Council of Governments (Gateway Cities COG), the California Department of Transportation (Caltrans), and the Southern California Association of Governments (SCAG).

The I-710 Study was governed by a policy oversight committee comprised of elected officials from 14 participating cities and the County of Los Angeles; executive managers or senior staff from three principal partners (MTA, Caltrans, and SCAG); and appointed representatives from the Ports of Long Beach and Los Angeles. The I-710 Oversight Policy Committee (OPC) was advised by a set of committees made up of concerned citizens, stakeholder groups, and technical and engineering staff from participating municipalities and public agencies: (a) the Tier 2 Community Advisory Committee; (b) the Tier 1 Community Advisory Committees; and (c) the Technical Advisory Committee. During the I-710 Study, public input was sought and technical analysis was performed to support decisions that lead to the identification of a Locally Preferred Strategy for the I-710 Corridor. An important aspect of this process was adherence to a set of *Guiding Principles* (Figure S-2) established for the I-710 Corridor by the I-710 Oversight Policy Committee in May 2003.

**Figure S-3**  
**I-710 Corridor Study Area**



Source: Parsons Brinckerhoff, June 2001.

The planning horizon for the I-710 Study is 2025. Both population and employment within the Study Area are expected to grow by about 20 percent between now and 2025. According to demand projections produced by the Ports of Long Beach and Los Angeles, container traffic will more than double during that same time period. These figures indicate that the existing transportation problems on I-710 and other study area roadways will get much worse and will affect the competitive position of the Los Angeles region, as well as other U.S. businesses and industries, unless corrective action is taken.

Finally, there is a significant percentage of mobility-constrained and minority populations within the I-710 Study Area. Improvements to transit services are needed to better serve those without access to autos for their travel needs and to attract drivers from their cars to help reduce traffic congestion. Future transportation improvements also need to be sensitive to the distribution of their benefits and impacts, so as not to disproportionately affect any one ethnic group or community.

Analysis of these current and projected conditions in the I-710 Study Area, as well as public input, has led to the identification of several key problem areas for the I-710 Corridor, which was approved in December 2001 by the I-710 Oversight Policy Committee. Many of these problems and needs are interrelated. Figure S-4 on the following pages lists and describes these problem issue areas in no particular order of importance:

**Figure S-4  
I-710 Corridor Problem Statements**

<b>Problem/Need</b>	<b>Problem Statement</b>
Recurrent Traffic Congestion	Traffic demand is overwhelming the existing design capacity of I-710 and related interchanges in the peak periods. Under current conditions, high volumes of both trucks and cars have led to peak spreading and traffic congestion throughout most of the day (6 a.m. to 7 p.m.) on the mainlines of I-710 as well as approaching arterials. This pattern is projected to worsen over the next twenty years.
Non-Recurrent Traffic Congestion	The frequent occurrence of traffic incidents and constraints associated with quickly clearing those incidents causes bouts of traffic congestion on I-710 that cannot be predicted or avoided. Serious incidents can shut down the freeway for an hour or more, with its attendant spillover effects on the local arterial system. These unexpected delays and resulting economic consequences to freight carriers, employers, manufacturing, and business interests in the region are severe. The unexpected nature of traffic congestion on I-710 is also inconvenient and highly disruptive to commuters and residents that depend upon it for their daily travel.

Source: Purpose and Need Statement, Parsons Brinckerhoff, Adopted by the OPC in December 2001.

**Figure S-4 Continued**  
**I-710 Corridor Problem Statements**

<b>Problem/Need</b>	<b>Problem Statement</b>
Air Quality/Public Health	As shown by recent Air Quality Management District (AQMD) studies, populations within the I-710 Study Area are regularly exposed to toxic air contaminants that increase carcinogenic risk. A major source of these air toxins is diesel particulates, which is considered to be a local source air pollutant. About half of the diesel particulate matter in the South Coast Air Basin as reported by AQMD (1998) is caused by emissions from vehicles using the freeway and roadway system. Heavy-duty diesel trucks are the leading contributor to on-road sources of diesel particulates.
Environmental Justice/Equity	The I-710 Study Area contains a high number of minority and low-income populations that require special consideration under federal environmental justice guidelines. Proposed transportation improvements should be equitable and should distribute benefits and burdens fairly.
Aesthetics/Noise	The I-710 freeway is unattractive, which affects the perception that visitors, residents, and potential customers have of the Gateway Cities area. In addition, residents and other sensitive receptors located close to I-710 experience high levels of traffic noise, particularly in locations where noise barriers do not presently exist.
Cost-Effectiveness	There are limited financial resources and high competition for transportation dollars within Los Angeles County over the next 25 years. Transportation improvements identified in the I-710 Corridor must compete for these available funds with other worthy projects within the county. To be successful, proposed improvements must be cost-effective, generating the maximum transportation benefits for the dollars invested. In addition, proposed transportation improvements should be realistic and achievable, based on known physical, operational, social, and institutional parameters.
Transit	There is a need to better serve the populations in the I-710 Study Area with transit. Existing transit services warrant solutions to improve the mobility of those who currently use public transit, as well as to make these services more competitive with the automobile so as to attract new riders to help reduce traffic congestion.

Source: Purpose and Need Statement, Parsons Brinckerhoff, Adopted by the OPC in December 2001.

study and evaluation in the I-710 Study. Public outreach during alternatives screening took place during the months of February, March, April, and May of 2002 and consisted of elected official briefings, agency briefings, community presentations, and roundtable discussions. No one alternative as it was presented was favored by the majority of the participants. Rather, certain elements of the different alternatives were noted as being favorable or unfavorable. Truckers, auto drivers, and community members all agreed that trucks and cars must be separated. Several participants stated that the alternative chosen at the end of the study must meet this criterion in order to truly address the problems of the I-710 freeway. In addition, many participants felt that the ports are directly responsible for the volume of trucks on the freeway and that they should work with the local agencies to identify ways to change the way they operate, especially if they plan on expanding. Community members were particularly negative towards the ports, believing that industry is being accommodated at the expense of the local communities. They stated that the amount of traffic, pollution and other negative health impacts in the I-710 Corridor is increasing.

As a result of the screening analysis, including public commentary, and after extensive review and scrutiny by the I-710 TAC, five alternatives were approved by the OPC for detailed evaluation in the I-710 Major Corridor Study. Alternatives that were determined to have little or no chance of becoming the Locally Preferred Strategy were eliminated during the screening process. At the same time, the most competitive elements of the initial alternatives were carried forward, and in some cases re-combined, to form the final set of five alternatives. For clarity and to avoid confusion with the initial alternatives, the five remaining alternatives were relabeled "A" through "E" as follows:

Alternative A	No Build Alternative
Alternative B	Transportation Systems Management / Transportation Demand Management (TSM/TDM) Alternative
Alternative C	Medium General Purpose / Medium Truck Alternative
Alternative D	High General Purpose / High HOV Alternative
Alternative E	High Truck Alternative

The following discussion provides a summary description of the five alternatives that were selected to undergo detailed study in the I-710 Major Corridor Study.

### ***Alternative A - No Build Alternative***

Also called the "No Project" Alternative, the No Build Alternative examines what travel conditions will be like by 2025, the future planning horizon year for the I-710 Study. It is also the baseline against which other transportation alternatives proposed for the I-710 Study are assessed. The No Build Alternative encompasses future improvements to the existing transportation system that are expected to be in place by 2025. Major transportation projects that are already under construction or that are already planned to occur are folded into the No Build. Examples of these projects include the construction of the Alameda Corridor, replacement of all of the pavement on I-710 by Caltrans, added bus service throughout the I-710 Study Area, and improvements to truck-impacted intersections, as well as other future transportation projects that are already funded and committed.

***Alternative C - Medium General Purpose / Medium Truck Alternative***

Alternative C would entail a major capital investment to the I-710 Corridor and is focused on improving safety and eliminating operational bottlenecks on I-710 for all vehicle types as well as selected improvements to manage the flow of heavy-duty trucks within the corridor. Alternative C also emphasizes capacity improvements to the most deficient arterials serving as feeders or alternate routes to I-710. By definition, Alternative C incorporates all of the operational and policy improvements proposed in the TSM/TDM Alternative. In addition, Alternative C includes the following physical elements:

***I-710 Mainlines***

- add one mixed flow lane in each direction for selected I-710 segments
  - Shoemaker Bridge Complex to I-405 (I-710 becomes 4 lanes in each direction)
  - Imperial Hwy. to Atlantic Blvd. (I-710 becomes 5 lanes in each direction)
- improve mainlines to design standards
  - 12' travel lanes
  - 12' right shoulder
- add a continuous collector-distributor system between Atlantic Blvd. and I-5
- add a truck inspection facility adjacent to NB I-710 between Del Amo Blvd. and Long Beach Blvd.
- add truck bypass facilities at three freeway-to-freeway interchanges: I-405/I-710; SR-91/I-710; I-105/I-710
- add truck ramps to selected interchanges with high truck volumes: WB Pacific Coast Highway and WB Washington Blvd.

***I-710 Interchanges***

- add a right-side freeway connector ramp at the I-5/I-710<sup>a</sup> interchange to be used primarily by trucks and retain the left-side connector to be used primarily by autos (NB I-710 to NB I-5)
- eliminate design deficiencies at the I-405/I-710 freeway-to-freeway interchange
- eliminate design deficiencies at eight local interchanges<sup>b</sup>
- add one new interchange (Slauson)

***Terminal Island Freeway (SR-47/SR-103)***

- extend the Terminal Island Freeway (SR-103) to I-405, by adding an elevated, four-lane facility (two lanes in each direction) that would be used primarily by trucks

***Arterials***

- arterial capacity enhancements to 10 major arterials<sup>c</sup> by adding one lane in each direction
  - consists of either spot widenings to eliminate chokepoints/bottlenecks, restriping, and removal of on-street parking; or roadway widening
  - provision of off-street parking, as needed, to replace loss of on-street parking due to restriping
  - includes access management improvements (raised medians, elimination/consolidation of driveways and smaller streets)

Notes for Alternative C

a. Would require coordination with I-5 Corridor Improvements

b. Anaheim; Pacific Coast Highway; Willow; Del Amo; Imperial; Florence; Atlantic/Bandini; Washington

### Arterials

- arterial capacity enhancements to four major arterials<sup>d</sup> by adding one lane in each direction to those parallel arterials close to I-710
  - consists of either spot widenings to eliminate chokepoints/bottlenecks, restriping, and removal of on-street parking; or roadway widening
  - provision of off-street parking, as needed, to replace loss of on-street parking due to restriping
  - includes access management improvements (raised medians, elimination/consolidation of driveways and smaller streets)

#### Notes for Alternative D

- a. The exclusive 4-lane HOV facility would be designed and constructed so as to not preclude its future development as a high speed rail line between Long Beach and downtown Los Angeles.
- b. Would require coordination with I-5 Corridor Improvements
- c. Anaheim; Pacific Coast Highway; Willow; Del Amo; Long Beach Blvd; Rosecrans; Imperial; Florence; Atlantic/Bandini; Washington
- d. Atlantic Blvd., Cherry Ave./Garfield Ave., Eastern Ave., Long Beach Blvd.

### **Alternative E - High Truck Alternative**

Alternative E would entail a high level of capital investment in the I-710 Corridor focused on: improving safety; increasing capacity for growing heavy duty truck demand; improving reliability of travel times; and reducing points of conflict between autos and trucks to the greatest extent possible. As with the other build alternatives, Alternative E includes the TSM/TDM strategies recommended in Alternative B. Specific transportation improvements associated with Alternative E are listed as follows:

#### Mainline Facility

- construct an exclusive truck facility
  - 4 lanes (2 in each direction) between SR-91 and SR-60
  - 6 lanes (3 in each direction) between Ocean and SR-91
- proposed truck facility would be generally elevated, however, the profile would ultimately be determined based on need to minimize grades and best fit to minimize need for additional right-of-way
- provide dedicated ingress/egress points for trucks at selected locations (approximately every 3-4 miles)
- horizontal alignment of truckway could be in the median or adjacent to I-710 in state, LA River, or power line right-of-way depending upon best fit
- consider a tolling suboption for users of the truck facility
- provide extensive auxiliary lane improvements along existing I-710 travel lanes
- improve existing I-710 travel lanes to design standards
  - 12' travel lanes
  - 12' right shoulder

#### I-710 Interchanges

- eliminate design deficiencies at I-5/I-710<sup>a</sup>; SR-91/I-710; and I-405/I-710
- add one new interchange (Slauson)



**Table S-1**  
**I-710 Mainline Lane Configurations**

Segments on I-710		Number of General Purpose Lanes and Special Purpose Lanes (SP, HOV, TR)										
From	To	Existing	Alt A		Alt B		Alt C		Alt D		Alt E	
		GP	GP	GP	GP + SP	GP	GP + SP	GP + HOV	GP + HOV	GP + TR	GP + TR	
SR-60	I-5	8	8	8	8	8	8	8	8 + 2	8	8	8
I-5	Washington	10	10	10	10	10	10 + 4 <sup>a</sup>	10 + 4	12 + 2	10 + 4	10 + 4	10 + 4
Washington	Atlantic/Bandini	10	10	10	10	10	10 + 4 <sup>a</sup>	10 + 4	12 + 2	10 + 4	10 + 4	10 + 4
Atlantic/Bandini	Florence	8	8	8	8	8	10	8 + 4	12 + 4	8 + 4	8 + 4	8 + 4
Florence	Firestone	8	8	8	8	8	10	8 + 4	12 + 4	8 + 4	8 + 4	8 + 4
Firestone	Imperial	8	8	8	8	8	10	8 + 4	12 + 4	8 + 4	8 + 4	8 + 4
Imperial	I-105	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
I-105	Rosecrans	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
Rosecrans	Alondra	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
Alondra	SR-91	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
SR-91	Artesia	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
Artesia	Long Beach	8	8	8	8	8	8 + 4 <sup>b</sup>	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
Long Beach	Del Amo	8	8	8	8	8	8	8 + 4	10 + 4	8 + 4	8 + 4	8 + 4
Del Amo	I-405	8	8	8	8	8	8	8	10 + 4	8 + 4	8 + 4	8 + 4
I-405	Wardlow	6	6	6	6	6	8	8	10 + 2	6 + 4	6 + 4	6 + 4
Wardlow	Willow	6	6	6	6	6	8	8	10 + 2	6 + 4	6 + 4	6 + 4
Willow	Pacific Coast Highway	6	6	6	6	6	8	8	10 + 2	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>
Pacific Coast Highway	Anaheim	6	6	6	6	6	8	8	10 + 2	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>
Anaheim	9th	6	6	6	6	6	8	8	6	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>	6 + 4 <sup>c</sup>
9th	Ocean	4	4	4	4	4	4	4	4	4	4	4

Source: Parsons Brinckerhoff, Inc. and Cambridge Systematics, Inc., April 2003.

Notes: Mainline lane configurations show the total number of through lanes for both directions of I-710. Auxiliary lanes are not counted.

General purpose (GP) lanes are travel lanes that are used by all vehicle types. Special purpose (SP) lanes are lanes devoted to a specific purpose (i.e., collector-distributor lanes, high occupancy vehicle lanes (HOV), truck bypass lanes, truckway (TR), and roadway).

<sup>a</sup>Collector-Distributor System, <sup>b</sup>Truck Bypass Lanes, <sup>c</sup>Autoway Lanes

**Table S-2  
I-710 Average Daily Traffic Volumes (in Passenger Car Equivalent units)**

Segments on I-710		Alt A	Alt B	B - A	Alt C	C - A	Alt D	D - A	Alt E	E - A
From	To	Volumes	Volumes	% Diff.	Volumes	% Diff.	Volumes	% Diff.	Volumes	% Diff.
SR-60	I-5	280,300	280,900	0.2%	289,900	3.4%	313,400	11.8%	297,900	6.3%
I-5	Washington	280,100	281,300	0.4%	321,700	14.9%	329,000	17.5%	320,400	14.4%
Washington	Atlantic/Bandini	294,300	294,000	-0.1%	325,100	10.5%	342,800	16.5%	338,000	14.8%
Atlantic/Bandini	Florence	298,400	296,100	-0.8%	339,600	13.8%	345,600	15.8%	364,200	22.1%
Florence	Firestone	305,100	302,800	-0.8%	341,600	12.0%	349,300	14.5%	355,800	16.6%
Firestone	Imperial	306,000	303,400	-0.8%	342,000	11.8%	355,100	16.0%	350,400	14.5%
Imperial	I-105	325,700	322,700	-0.9%	344,900	5.9%	363,000	11.5%	366,400	12.5%
I-105	Rosecrans	250,200	247,400	-1.1%	266,500	6.5%	272,700	9.0%	284,400	13.7%
Rosecrans	Alondra	441,500	437,700	-0.9%	468,200	6.0%	451,300	2.2%	486,800	10.3%
Alondra	SR-91	431,900	427,800	-0.9%	458,100	6.1%	434,700	0.6%	479,200	11.0%
SR-91	Artesia	312,300	304,400	-2.5%	339,300	8.6%	371,600	19.0%	358,000	14.6%
Artesia	Long Beach	322,000	314,300	-2.4%	350,200	8.8%	383,100	19.0%	373,200	15.9%
Long Beach	Del Amo	306,500	298,600	-2.6%	331,000	8.0%	352,200	14.9%	350,100	14.2%
Del Amo	I-405	311,100	303,800	-2.3%	342,300	10.0%	356,200	14.5%	358,700	15.3%
I-405	Wardlow	290,000	281,400	-3.0%	281,000	-3.1%	334,500	15.3%	307,000	5.9%
Wardlow	Willow	302,000	293,100	-2.9%	299,400	-0.9%	350,700	16.1%	328,600	8.8%
Willow	Pacific Coast Hwy.	291,400	279,600	-4.0%	279,400	-4.1%	335,800	15.2%	308,100	5.7%
Pacific Coast Hwy.	Anaheim	268,300	254,100	-5.3%	244,200	-9.0%	277,300	3.4%	278,200	3.7%
Anaheim	9th	251,700	237,000	-5.8%	245,500	-2.5%	250,400	-0.5%	200,500	-20.3%
9th	Ocean	166,900	151,300	-9.3%	144,600	-13.4%	154,100	-7.7%	158,300	-5.2%

Source: Cambridge Systematics, Inc. and Kaku Associates, Inc, Electronic Data File, April 2003.

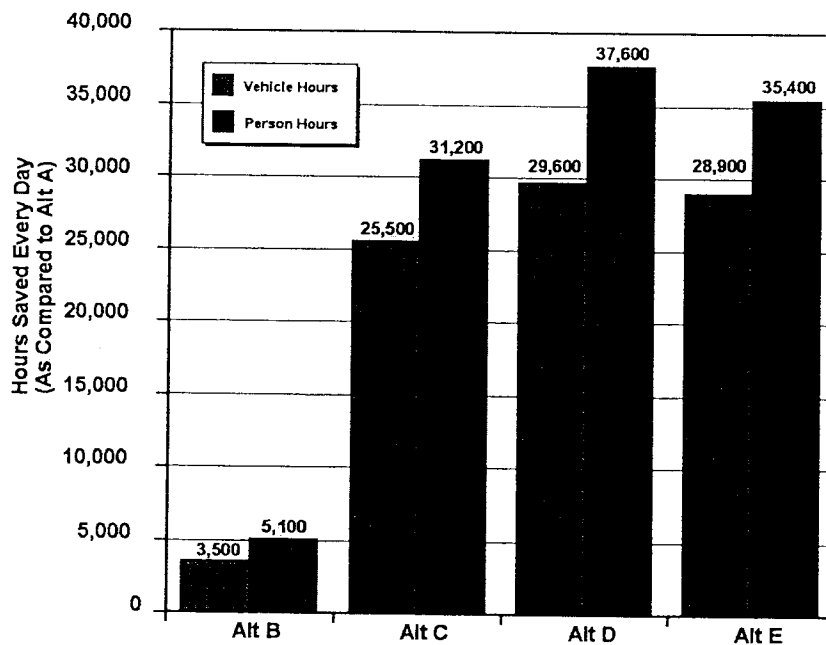
Notes: Average daily traffic volumes are shown for each alternative for the Year 2025 for vehicles using I-710 mainline travel lanes, including general purpose lanes, collector-distributor lanes, high occupancy vehicle lanes, truck bypass lanes, truckway lanes, and autoway lanes.

Percentage difference compares each alternative to the No Build Alternative (Alt. A).

In Figure S-5, a distinction is made between the general purpose travel lanes and the lanes that would be used either exclusively by carpools or by trucks depending upon the alternative. Alternatives B, C, D and E are all forecast to improve travel speeds on the I-710 as compared to the future no build condition, Alternative A. Mainline general purpose lanes average p.m. peak period speeds are forecast to be the highest with Alternative D, followed by E and C respectively. The proposed HOV and truck lanes in the build alternatives are forecast to all have average speeds above 55 mph, providing time savings to their users. The overall forecast improvement in p.m. peak period average speeds will save time for users of I-710 and contribute to reduced pollutant emissions and fuel consumption compared to the future no build alternative.

Figure S-6 shows how better speeds on I-710 translates to delay reductions for all travelers throughout the I-710 Study Area, including motorists on major street arterials as well as those vehicles using I-710. Vehicle hours of travel measures the total travel time spent by all vehicles on the roadway system during a given time period, such as an average weekday. Person hours of travel measures the total travel time spent by the people riding in each of the vehicles on the roadway system during a given time period. For example, if a car carrying two people (driver and passenger) spent one hour traveling from home to work in the Study Area, it would compute as one vehicle hour of travel and two person hours of travel.

**Figure S-6**  
**Delay Reductions (Vehicle Hours, Person Hours Saved)**

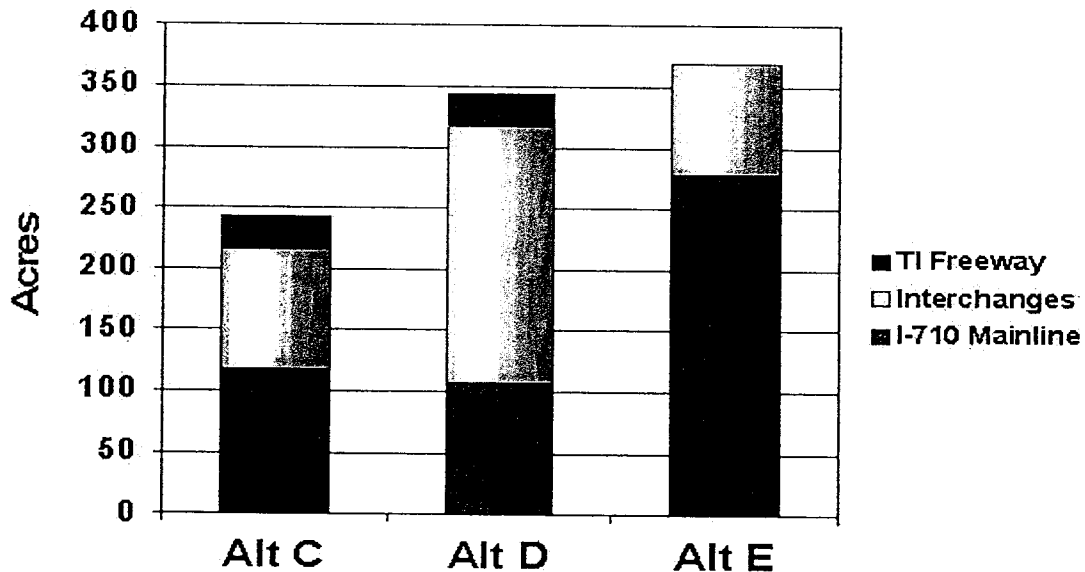


In 2025, Alternatives D and E are forecast to produce the greatest reductions in overall average weekday travel time (measured both in terms of vehicle hours traveled and person hours traveled) in the Study Area as compared to the No Build alternative. This is because these two alternatives add the most capacity to the transportation system in the I-710 Study Area. Both Alternative D and Alternative E are forecast to save travelers over 35,000 hours of travel time per day in the year 2025 as compared to the No Build, Alternative A.

alternatives to provide comparative information on the alternatives so that the general public, the advisory committees, and the Oversight Policy Committee could learn about the right-of-way acquisition implications of each of the alternatives. The right-of-way analysis also presented information on expected impacts associated with specific transportation elements within the alternatives to better inform decision-making on what transportation improvements might be most desirable to recommend for further study.

Right-of-way impacts are included for those improvements that would entail acquisitions beyond what is already planned and committed for the I-710 Corridor. Since Alternative A, the No Build Alternative, represents the “no action” option, this alternative would not result in any acquisitions beyond what is already planned for implementation by 2025. Alternative B does not include any elements on I-710 that require right-of-way acquisition, so this alternative is not included in the following analysis. Therefore, estimates for the build alternatives in Figure S-8 reflect the right-of-way acquisitions of these three alternatives over and above the No Build Alternative.

**Figure S-8  
Right-of-Way Impact Analysis**



As indicated in Figure S-8, Alternatives C and D include improvements associated with the Terminal Island Freeway, which is why these two alternatives show right-of-way impacts attributable to this component. Alternative D would result in more right-of-way impacts in the vicinity of the interchanges along I-710 due to the amount of mainline freeway width that would affect the existing configuration of these interchanges and also due to the types of geometric changes proposed at the SR-91/I-710 freeway-to-freeway interchange for Alternative D. Alternative E appears to require the most right-of-way in total as this alternative involves the construction of a new truck facility along the entire length of the I-710 Corridor. However, a good portion of Alternative E would utilize Southern California Edison and Los Angeles Department of Water & Power property adjacent to I-710.

The key issues and themes identified throughout this phase of the public involvement process were: concerns about the large amount of proposed property acquisitions and relocation related to the proposed build alternatives, environmental and health concerns, environmental justice, and perceived shortcomings in the public outreach for the I-710 Study.

*Property Acquisition/Relocation*—The majority of residents, business leaders, and elected officials along the Corridor expressed strong dissatisfaction with the amount of residential and commercial property that would need to be acquired for the implementation of several of the alternatives. Some of the property that would be lost would include homes, businesses, parks, schools, and churches. There was also a pervasive feeling among the public that property owners would not receive adequate compensation for their properties in an acquisition process. There were also significant concerns regarding the impacts to their communities of the magnitude of the proposed property acquisitions.

*Environmental/Health Concerns*—Nearly all community residents were concerned that construction of any of the alternatives and the additional truck traffic that is expected on I-710 between now and the future will lead to increases in dust, smog, noise, and diesel emissions in the communities adjacent to the freeway. Increased cancer risks from diesel toxins and increased incidence of other respiratory diseases were also a major concern of stakeholders throughout the I-710 Study Area.

*Environmental Justice*—Many of the residents living along the I-710 freeway are minorities, and as such, feel that their communities will be unfairly impacted by any of the build alternatives (Alternatives C, D, and E). They would prefer to see further studies conducted to ensure that all potential negative impacts to their communities can either be avoided or sufficiently mitigated.

*Public Outreach*—Some of the stakeholders did not like the open house format used to disseminate information to the public regarding the final set of five alternatives, and would have preferred that formal meetings be held instead. The open house format was intended to provide members of the public with the opportunity to view project maps and displays and to speak with project team members one-on-one. In response to these concerns, formal meetings were later held in each of the potentially impacted cities, at which point, stakeholders were able to receive a presentation regarding the I-710 Study, as well as formally interact with study staff in a group setting.

As a consequence of the high level of public and community concern voiced about the Final Set of Alternatives, the MTA Board and the I-710 Oversight Policy Committee (OPC) directed agency staff to undertake a revised community consultation process. The goal of this revised process was to develop a community consensus for a Hybrid Strategy for the I-710 Major Corridor Study.

## **S.7 Development of a Hybrid Strategy**

In response to the community concerns and opposition to the build alternatives (C, D, and E) of the final set of alternatives, the MTA Board passed a motion on May 22, 2003 to revise the direction of the I-710 Study. Through this motion, the MTA Board directed staff to continue to work with the affected communities and other stakeholders to develop a Hybrid Strategy that

### *Tier 2 – Corridor Level Committee*

The Tier 2 Community Advisory Committee (CAC) was formed to provide community representation via a broad based corridor-wide body. The initial membership consisted of:

- The Chair of each Tier 1 CAC
- For each community that does not have a Tier 1 CAC, a member appointed by the City Council or County Supervisor
- No more than 15 members appointed by the OPC to provide representation from the environmental community, business, labor, institutions, and academia
- The Chair of the I-710 Technical Advisory Committee
- The Chair of the Gateway Cities COG Enhancement Committee

In order to empower the Tier 2 CAC to engage additional perspectives or interests that it deems important, the OPC delegated to the Tier 2 CAC the authority to appoint, by two-thirds vote, up to ten additional members. As a result, the Tier 2 CAC voted to add one additional member.

Employing Moore, Iacofano, Goltsman, Inc. as a resource, the Tier 2 CAC structured itself and its work based on key issue areas that were identified by the Tier 1 Community Advisory Committees. These issue areas included:

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

The Tier 1 Community Level Committees provided direct input to the Tier 2 Corridor Level Committee, which in turn was charged with providing input directly to the OPC. The Corridor Level Tier 2 Committee was also charged with providing feedback to the Community Level Tier 1 Committees

### *Draft Hybrid Design Concept*

The community consultation phase of the development of the Hybrid Strategy generated a significant number of comments on a number of physical features that were viewed as providing future improvement on I-710. These physical features were combined and coordinated to develop the overall I-710 Draft Hybrid Design Concept.

The purpose of the I-710 Draft Hybrid Design Concept is to provide infrastructure improvements to I-710 focused on improving safety; increasing capacity for growing heavy duty truck demand; increasing capacity for high general-purpose traffic demand; improving reliability of travel times; and separating autos and trucks to the greatest extent possible while limiting direct and indirect right-of-way impacts.

- eliminate freeway access at 9 locations:
  - entrance from 7<sup>th</sup> Street to SB Shoreline Drive (1 ramp)
  - connection from Shoemaker Bridge to Pico Avenue (1 ramp)
  - connection from Pico Avenue to Shoemaker Bridge (1 ramp)
  - SB exit to and NB entrance from Wardlow Road at I-710 (2 ramps)
  - NB and SB I-710 to Santa Fe Avenue (1 ramp)
  - exit from WB SR-91 to Alondra Boulevard (1 ramp)
  - exit from EB SR-91 to Cherry Avenue (1 ramp)
  - WB exit to and EB entrance from Atlantic Boulevard at SR-91 (2 ramps)
  - all ramps at Washington Boulevard (4 ramps)

Caltrans standards were considered during the development of the Draft Hybrid Design Concept. However, the standards could not be met at all locations and Caltrans/FHWA approval of design exceptions will be needed to implement the geometric design as currently proposed. If the design exceptions are not acceptable to Caltrans/FHWA, then the geometric designs at certain locations will have to be restudied and the design modified. Any changes will be reviewed with the local community before being finalized.

Note that the community consultation process to reach consensus on the I-710 Draft Hybrid Design Concept north of Atlantic/Bandini is still underway with Commerce and East Los Angeles and therefore proposed improvements to this segment are yet to be defined.

#### *Right-of-Way Impact Analysis*

As right-of-way impacts are of great concern to the public, MTA Board, and OPC, right-of-way impacts were assessed for the I-710 Draft Hybrid Design Concept. The precision of this right-of-way impact analysis is governed by the general level of engineering design of the Draft Hybrid Design Concept, which is highly conceptual at this stage of project planning.

Based on aerial photography and topographic information, the approximate number of structures that would be impacted was assessed, as well as the total acreage that would be impacted by the Draft Hybrid Design Concept. Each potentially impacted structure was assigned to a specific land use category to provide an understanding of what kind of structures were being impacted. The land use categories are residential, commercial/industrial, railroad, power/utility, environmentally sensitive, or undeveloped land uses. The estimated number of impacted structures in each affected city is shown in Table S-4.

Right-of-way impacts were also assessed on an acreage basis, again utilizing aerial photographs, topographic mapping, and GIS database mapping. Table S-5 displays the impacted acreage stratified by city and by land use type. The same land use categories were used as in the structure impact analysis. The City of Long Beach, by virtue of the fact that the City stretches from the southerly project limit at Ocean Boulevard northward to near the SR-91/I-710 interchange, would have the greatest acreage impact of any jurisdiction, 91.2 acres out of a total of 241.4 acres. However, almost half of the impacted acreage in Long Beach is in the Power/Utility land use category. This is an intentional by-product of the design concept, which attempts to maximize use of existing utility owned land adjacent to the I-710 for improvements and hence minimize impacts to residential and commercial properties.

**Table S-4  
Acreage Impacts by Land Use Type by City  
Draft Hybrid Design Concept**

City/Land Use Type	Long Beach	County - Rancho Dominguez	Carson	Compton	Paramount	Lynwood	South Gate	Bell	Bell Gardens	Commerce	Vernon	Total
Residential Acreage	1.0									0.5		1.5
Commercial/Industrial Acreage	5.5		2.9	18.1	0.5		19.0	20.6		29.0	9.9	105.5
Railroad Acreage										17.3		17.3
Power/Utility Acreage	45.5						0.4	11.9				57.8
Sensitive Land Use Acreage	12.6			3.0	1.6			4.3	0.3			21.8
Undeveloped Acreage	26.6					3.1	6.2	1.6				37.5
<b>Total Acreage by City</b>	<b>91.2</b>		<b>2.9</b>	<b>21.1</b>	<b>2.1</b>	<b>3.1</b>	<b>25.6</b>	<b>38.4</b>	<b>0.3</b>	<b>46.8</b>	<b>9.9</b>	<b>241.4</b>

Source: Jerry Wood, Consultant, in association with MMA, Inc. and Nolan Consulting, Inc., April 2004.

Note: Does not include right-of-way impacts between I-710/Washington Boulevard and I-710/SR-60, including I-5/I-710 interchange improvements.



The estimated cost for the Draft Hybrid Design Concept is \$4.5 billion for mainline and interchange improvements with \$3.9 billion of the total for infrastructure construction and \$0.6 billion for right-of-way acquisition. This design concept does not currently include any improvements north of Washington Boulevard in the City of Commerce, nor does it currently include:

- a truck inspection station,
- any arterial improvements, or
- any TSM/TDM/Transit elements.

The cost estimates for Alternatives C, D, and E have been escalated to 2004 dollars and modified to exclude elements that are not included in the Draft Hybrid Design Concept for purposes of comparison. Table S-5 displays the cost estimates for the various alternatives.

**Table S-5**  
**Comparison of Capital Cost Estimates**  
**(2004 dollars in millions)**

	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>	<b>Draft Hybrid Design Concept</b>
<b>Construction</b>	\$1,787.5	\$2,709.3	\$2,992.3	\$3,902.8
<b>Right-of-Way</b>	\$627.1	\$692.9	\$900.7	\$584.8
<b>Total</b>	<b>\$2,414.6</b>	<b>\$3,402.2</b>	<b>\$3,893.0</b>	<b>\$4,487.6</b>

The Draft Hybrid Design Concept has the highest estimated construction cost, but the lowest right-of-way cost. One of the goals of the Draft Hybrid Design Concept was to reduce residential right-of-way impacts, which would commensurately reduce right-of-way acquisition costs. The measures taken to reduce right-of-way impacts included constructing more of the alignment on structure or building other features that resulted in higher construction costs – the Draft Hybrid Design Concept has a construction cost that is almost one billion dollars higher than Alternative E, the alternative with the next highest construction cost.

## **S.8 Tier 2 Community Advisory Committee Recommendations**

The Tier 2 Community Advisory Committee first convened on February 3, 2004 and met a dozen times over a period of seven months between February 2004 and August 2004 in order to develop their recommendations for the I-710 Study.

The charge of the Tier 2 Committee was to review key local issues and opportunities identified by the Tier 1 Community Advisory Committees, consider issues of local and regional importance from a corridor-wide perspective, and provide recommendations to the Oversight Policy Committee on a comprehensive transportation solution for the I-710 Corridor.

The Tier 2 Committee covered a number of issue areas, including: health, jobs and economic development, safety, noise, congestion and mobility, community enhancements, design concepts, environmental justice, and organization and process. Consequently, the Tier 2 Committee recommendations are wide ranging in scope and encompass not only transportation improvements, but also policy proposals, strategies to improve the current environment, specific items for further study, and conditions for future implementation. The

**Table S-6 Continued**  
**Tier 2 CAC Summary Recommendations**

<b>Topic Area</b>	<b>Tier 2 CAC Recommended Strategies</b>
Safety	<ol style="list-style-type: none"> <li>1. Continue support and implementation of safety programs.</li> <li>2. Increase enforcement of traffic and vehicle safety laws and regulations.</li> <li>3. Increase public and truck education on safety and neighborhood issues.</li> <li>4. Implement infrastructure improvements.</li> <li>5. Separate trucks and cars.</li> </ol>
Noise	<ol style="list-style-type: none"> <li>1. Provide appropriate and effective sound walls to reduce noise impacts to neighborhoods and schools adjacent to the freeway.</li> <li>2. Implement noise mitigation programs.</li> <li>3. Conduct a study to assess how truck traffic from extended gate hours for trucks and 24/7 port operations will impact communities, and assess what mitigations may be appropriate.</li> </ol>
Congestion and Mobility	<ol style="list-style-type: none"> <li>1. Maximize use of existing infrastructure.</li> <li>2. Implement expanded public transit solutions.</li> <li>3. Provide a comprehensive bicycle and pedestrian network with connectivity throughout the area.</li> <li>4. Develop a consistently implemented plan with cities and residents to mitigate construction impacts and maintain access.</li> <li>5. Support cooperative planning among all ports along the West Coast.</li> </ol>
Design Concepts	<ol style="list-style-type: none"> <li>1. Endorse the specific Tier 1 CAC recommendations included in the Appendix of this Tier 2 Report.</li> <li>2. Support capacity enhancement improvements for the I-710 Freeway upon meeting the conditions recommended in this Tier 2 Report, including those recommended by both Tier 1 and Tier 2 CACs.</li> <li>3. If economic and environmental studies show that expansion of the freeway is necessary, develop new transportation infrastructure for I-710 that separates cars from trucks.</li> <li>4. If economic and environmental studies show that expansion of the freeway is necessary, locate the new truck lanes in such a way as to minimize community impacts.</li> <li>5. Redesign unsafe and congested interchanges on I-710.</li> <li>6. Consider future needs and requirements in implementing any new I-710 design.</li> <li>7. If economic and environmental studies show that expansion of the freeway is necessary, upgrade of the existing freeway must satisfy criteria detailed in this Tier 2 Report.</li> </ol>

preserving existing housing stock, yet work together as an integrated strategy consistent with adopted guiding principles. The following month, June 2003, the TAC formally adopted the OPC's guiding principles to guide the next phase of their effort in developing a technical recommendation for a Hybrid Strategy. [The Guiding Principles are listed in Section S.1 of this report.]

For a period of several months, individual TAC members met with their communities and with the Gateway Cities COG's engineer to develop a community-based design that incorporated the most appropriate elements for a Hybrid Design Concept for I-710. This community-based design process looked at exceptions to federal and state highway design standards as well as other opportunities to avoid residential property takes. TAC members from potentially impacted cities actively participated in their respective Tier 1 community advisory committees to help identify and resolve technical issues for each of their cities. The TAC Chair served as an active member of the Corridor-wide (Tier 2) Community Advisory Committee. In addition, several TAC members routinely attended the Tier 2 CAC meetings either to observe or to serve as a technical resource, which helped provide both continuity and interface among these advisory bodies to the I-710 Study.

The TAC reconvened, as a whole, beginning in February 2004 to hear status reports on the development of a community-based design concept for the Hybrid Strategy and to receive updates on the activities of the Tier 1 and Tier 2 Community Advisory Committees. During March and April of 2004, the TAC reviewed conceptual plans of the Hybrid Design Concept, representing the work of the Gateway Cities COG engineering team and the Tier 1 community advisory committees.

In early September 2004, the TAC met again to receive the Tier 2 CAC Report, *Major Opportunity/Strategy Recommendations and Conditions*, and to formulate their recommendations for a Hybrid Strategy for the I-710 Study Area for consideration by the Oversight Policy Committee. The TAC sought to bring the greatest transportation benefit to the overall I-710 Corridor in terms of public health, safety and mobility, while adhering to the Guiding Principles.

The TAC made no further changes to the draft Hybrid Design Concept (presented in Section S.6 of this report) with the understanding that the segment of the I-710 Corridor between the BNSF/UP railroad yards in Vernon/Commerce and SR-60 is still under study and that findings from this focused study effort, including any new freeway-to-freeway ramp connections between I-710 and I-5, will need to be integrated with the overall I-710 Hybrid Design Concept prior to initiating environmental studies on I-710. The TAC further recognizes that additional design options will be explored and refinements will necessarily occur to the Hybrid Design Concept as it moves forward into project development (e.g., environmental studies and preliminary engineering.) Examples of these design issues include items such as the specific location of truck lane ingress/egress ramps; proposed local interchange configurations; and weave distances between ramps that connect to I-710. Some of these design issues were identified during the course of the I-710 Study and are called out in Section S.10 of this report (Issues for Further Consideration). Yet others will be identified through the more detailed environmental and engineering studies that typically occur in future phases of project development.

## **S.10 I-710 Oversight Policy Committee Actions**

The I-710 Oversight Policy Committee met on September 30, 2004 to receive the reports from the Tier 2 Community Advisory Committee and the Technical Advisory Committee, as well as public comment related to both reports. After added consideration of these two reports, the OPC then met on November 18, 2004 and adopted the Locally Preferred Strategy (LPS) for the I-710 Major Corridor Study. In addition they adopted four recommendations providing direction and guidance on the future phases of project development and on companion actions.

### *The Locally Preferred Strategy*

The OPC approved the Hybrid Design Concept and the related supporting elements as the Locally Preferred Strategy:

- Hybrid Design Concept, which consists of ten (10) mixed flow lanes, specified interchange improvements, and four (4) truck lanes between the intermodal rail-yards in Vernon/Commerce and Ocean Boulevard in Long Beach (see Figure S-11)
- Alternative B – Transportation System Management/Transportation Demand Management Improvements
- Improvement to arterial highways within the I-710 Corridor
- Construction of truck inspection facilities to be integrated with the selected overall design concept

The LPS adds both general purpose capacity to I-710, as well as separating trucks from autos to the extent feasible by also adding truck-only lanes. The LPS includes all of the transportation projects of the No Build Alternative as these comprise the future condition in the I-710 Corridor. As described above, the LPS also includes all of the programs, policies, and strategies from Alternative B. Based on the OPC Action of November 18, 2004, the Locally Preferred Strategy will be forwarded to the MTA Board for its consideration and action.

The OPC, as part of the LPS decision, also committed to an additional “mini” study of the segment of the Corridor between Atlantic/Bandini and SR-60 to determine an acceptable design concept and scope for that segment of the Corridor. The results of this mini-study will be reviewed by the impacted Tier 1 CACs, the Tier 2 CAC, and the TAC. These advisory committee recommendations will be considered by the OPC prior to its adoption of the design concept and scope for this segment of the Corridor, which will then be referred to the MTA for inclusion in the I-710 Corridor LPS. It is anticipated that these efforts will be concluded by Summer 2005.

### *Additional OPC Actions*

The OPC adopted four additional actions to support the LPS decision and in response to community issues regarding the I-710 Corridor, as expressed in the Tier 2 CAC’s report. These actions are:

- Request the Gateway Cities Council of Governments to return with suggested steps for initiating the development and implementation of a corridor level air quality action plan to include not only technical but also funding, institutional structure and legislative strategies as well as an approach to holding public agencies with jurisdiction in the

Corridor accountable for progress in meeting air quality and public health objectives in the Corridor and Region.

- Forward the Tier 2 report in its entirety to be accepted as pre-scoping guidance to the preparation of the EIR/EIS.
- Request the Gateway Cities Council of Governments to identify and pursue appropriate avenues to implement those Tier 2 recommendations that prove to exceed the scope of any I-710 transportation improvement project and report back to the community.
- Request MTA and COG staff to suggest a process and structure for continuing community participation throughout the environmental analysis.

### **S.11 Issues for Further Consideration**

While consensus for a Locally Preferred Strategy was reached among study decision-makers, it was with the understanding that a number of issues of concern that were raised during the study process would be revisited during the environmental review, preliminary engineering, final design, and construction phases of the proposal. For the most part, these are issues that were beyond the scope and authority of the I-710 planning study. Some are matters about which design assumptions had to be made for study purposes and yet about which considerable controversy remains. Others have to do with phasing of the overall project and ensuring that it supports the overall health and quality of life issues in the I-710 Study Area. These issues represent critical concerns of several of the local representatives, the community advisory group members, and the public, and will become part of future discussions as the various aspects of the project move into the next phases.

*Air Quality Action Plan* – The Tier 2 Community Advisory Committee (CAC) determined that air quality is the number one public health issue in the I-710 Corridor. The OPC agrees and has approved a resolution requesting the GCCOG develop and implement a corridor level Air Quality Action Plan, independent of the future environmental studies of proposed improvements to I-710. This study will need to be developed and continued consultation with the affected communities implemented. In addition, this Action Plan will need to inform the future environmental studies of the proposed I-710 improvements.

*Public Involvement Plan for EIS/EIR Phase* – Concurrent with their LPS decision, the OPC has also approved a request to MTA and GCCOG staff to suggest a process and structure for continuing community participation throughout the upcoming environmental analysis of the proposed I-710 infrastructure improvements. The OPC has committed to the public to continue the high level of community participation achieved with the Tier 1 and Tier 2 CACs through the environmental analysis phase of proposed I-710 improvements. The agency staff will need to work with the affected communities to determine if the current CAC process best serves the community consultation process in the EIS/EIR phase or whether a different process is preferred.

*Mini-Corridor Study* – As part of their LPS decision, the OPC acknowledged that additional study and community consensus building is required to determine the LPS design concept and scope for the northern segment of the Corridor between

## BOARD REPORT ATTACHMENT B

### I-710 Oversight Policy Committee Actions

On November 18, 2004, the I-710 Oversight Policy Committee adopted the Locally Preferred Strategy and requested that it incorporate the results of the sub-area “mini-study” upon its completion, and seek funding to initiate an EIR/EIS.

In addition, the Oversight Policy Committee adopted four additional provisions to support the Locally Preferred Strategy in response to community issues regarding the I-710 Corridor, as expressed in the Tier 2 CAC’s final report. These provisions are:

1. Request the Gateway Cities Council of Governments to return with suggested steps for initiating the development and implementation of a Corridor level air quality plan to include not only technical but also funding, institutional structure and legislative strategies as well as an approach to holding public agencies with jurisdiction in the Corridor accountable for progress in meeting air quality and public health objectives in the Corridor and Region.
2. Forward the Tier 2 report in its entirety to be accepted as pre-scoping guidance to the preparation of the EIR/EISS.
3. Requests the Gateway Cities Council of Governments to identify and pursue appropriate avenues to implement those Tier 2 recommendations that prove to exceed the scope of any I-710 transportation improvement project and report back to the community.
4. Request MTA and the COG staff to suggest a process and structure for continuing community participation throughout the environmental analysis.



# Acknowledgements

## TIER 2 COMMITTEE MEMBERS

Glenna J. Amos\*  
*City of South Gate*

Harold Arsenian\*  
*City of Vernon*

Dr. Ed Avol  
*USC School of Medicine*

Hamid Bahadori  
*Automobile Club of  
Southern California*

Gerald Burgess\*  
*City of Paramount*

Victor Caballero\*  
*City of Huntington Park*

Gustavo Camacho\*  
*East Los Angeles*

Malcolm Carson  
*Legal Aid Foundation of  
Los Angeles*

Roberto Chavez\*  
*City of Compton*

Louis Diaz  
*International Brotherhood  
of Teamsters*

Clifford Dunbar\*  
*City of Bell Gardens*

Bob Eula\*  
*City of Commerce*

Belinda Faustinos  
*San Gabriel and Lower Los  
Angeles Rivers and  
Mountains Conservancy*

Larry Galvan\*  
*City of Cudahy*

Julie C. Gonzalez\*  
*City of Bell*

Steve Goodling  
*Long Beach Area  
Convention and Visitors  
Bureau*

Patricia Herrera\*  
*City of Long Beach*

Roger Holman\*  
*City of Long Beach*

Alan Hose\*  
*City of Long Beach*

Tom Houston\*  
*City of Compton*

Randy Kendrick  
*City of Bell*

Bobbi Kimble\*  
*City of Long Beach*

Angelo Logan  
*Coalition for Environmental  
Health and Justice*

Dr. Joseph Magaddino  
*California State University  
at Long Beach*

Mandy McLaughlin\*  
*City of Compton*

Dr. Domenick Miretti  
*Marine Clerks Association*

Dr. Elisa Nicholas  
*Long Beach Alliance for  
Children with Asthma*

Harold Omel\*  
*City of Long Beach*

Servando Ornelas\*  
*East Los Angeles*

Bill Pagett  
*Technical Advisory  
Committee Chair*

Noel Park  
*San Pedro Peninsula  
Homeowners Coalition*

Ray Park\*  
*City of Carson*

Luis Romero\*  
*City of Maywood*

Patty Senecal  
*Transport Express*

Harold Tseklenis\*  
*City of Downey*

Linda Vitale\*  
*City of Long Beach*

Rod White\*  
*City of Lynwood*

Harold Williams  
*South Bay Council of  
Governments*

\*Designated Tier 1 Community Advisory Committee Member representing corridor communities.

Note: Some communities had a change in representatives during the process

## STAFF SUPPORT

*Metro*: Lynda Bybee, Susan Gilmore, Ray Maekawa, Ernest Morales

*Gateway Cities COG*: Deborah Chankin, Richard Powers, Jerry Wood

*MIG*: Pat McLaughlin, Esmeralda Garcia, Sam Gennawey, Katherine Padilla



and the entire project taken as a whole must result in a net reduction in criteria pollutants.

3. Prior to the initiation of the environmental review process, all Tier 1 Community Advisory Committees must have formally endorsed the freeway improvement design concept.
4. Prior to adopting a preferred alternative the OPC must conduct a study and cost benefit analysis of potential goods movement alternatives as an alternative to increasing the capacity of the I-710 Freeway.
5. A study of the impact of construction on air quality, traffic, congestion, noise and impact on surrounding communities must be conducted, and if construction does go forward, specific mitigation plans must be developed and put into effect during the construction process to minimize and mitigate the impact of construction on the surrounding communities.
6. Major infrastructure improvements must be conditioned on achieving a net decrease in noise impacts upon the affected communities.

The Committee recognizes that certain aspects of the design concepts, particularly for designated on-ramps, may be appropriate for implementation prior to addressing the “mainline” issues. However, these improvements cannot be constructed in isolation from all of the other recommendations such as public health, community enhancement, and noise abatement. The I-710 design must take into account the safety and quality of life of the communities in the corridor, including provisions for greenbelts and open space.

This Executive Summary presents a synopsis of our committee’s findings and recommendations, which are presented, in eight topic areas. (Greater detail is provided in the full report.)

## HEALTH

Air quality is the number one public health issue. Poor air quality has had significant negative impacts on public, economic, environmental and community health in the corridor. Particulates and other pollutants from diesel truck traffic in the I-710 Corridor and the ports of Los Angeles and Long Beach are our communities’ primary air-quality-related health concern. The first consideration for approval of any improvements within the I-710 corridor must be the project’s ability to reduce air quality impacts. Therefore, these steps must be taken before construction can begin on the “mainline” project to reduce air pollution.

The Tier 2 Committee recommends the following air quality improvement strategies:

## SAFETY

The I-710 corridor is one of the most unsafe freeways in the State. Increasing truck traffic, conflicts between cars and trucks, aging infrastructure, and outdated design are all contributing causes to accidents in and around the freeway. The high concentration of older trucks, which frequently become disabled, poses a significant safety hazard, as do truck intrusions into nearby communities and neighborhoods. Just as the Alameda Corridor helped reduce conflicts between trains and automobiles, any improvements to the I-710 corridor must resolve the inherent conflicts between automobiles and trucks.

The Tier 2 Committee recommends the following safety improvement strategies:

1. Continue support and implementation of safety programs.
2. Increase enforcement of traffic and vehicle safety laws and regulations.
3. Increase public and trucker education on safety and neighborhood issues.
4. Implement infrastructure improvements.
5. Separate trucks and cars.

## NOISE

Excessive noise is a serious public health concern in the corridor and cannot be resolved by simply building more sound walls. A comprehensive analysis of noise along the corridor must lead to a plan that recognizes the health impacts to our communities and seeks to resolve those impacts by providing appropriate relief. Major infrastructure improvements must be conditioned on achieving a net decrease in noise impact upon the affected communities.

The Tier 2 Committee recommends the following noise control strategies:

1. Provide appropriate and effective sound walls to reduce noise impacts to neighborhoods and schools adjacent to the freeway.
2. Implement noise mitigation programs.
3. Conduct a study to assess how truck traffic from extended gate hours for trucks and 24/7 port operations will impact communities, and assess what mitigations may be appropriate.

## DESIGN CONCEPTS

A new design concept for I-710 and/or alternative transportation modes for vehicles and goods movement is needed that responds to the specific design recommendations developed by the Tier 1 CACs to minimize or limit take of homes within their communities along I-710. The hybrid design, as developed to date, does a credible job of accomplishing this goal. However, final decisions on project configuration can only be made subsequent to incorporation of the further study of East Los Angeles and City of Commerce and upon completion of cost benefit and environmental studies. The I-710 design must take into account the safety and quality of life of the communities located next to the freeway, including provisions for greenbelts and open space.

The Tier 2 Committee recommends the following design concept strategies:

1. Endorse the specific Tier 1 CAC recommendations included in the Appendix.
2. Support capacity enhancement improvements for the I-710 Freeway upon meeting the conditions recommended in this report, including those recommended by both Tier 1 and Tier 2 CACs.
3. If economic and environmental studies show that expansion of the freeway is necessary, develop new transportation infrastructure for I-710 that separates cars from trucks.
4. If economic and environmental studies show that expansion of the freeway is necessary, locate the new truck lanes in such a way as to minimize community impacts.
5. Redesign unsafe and congested interchanges on I-710.
6. Consider future needs and requirements in implementing any new I-710 design.
7. If economic and environmental studies show that expansion of the freeway is necessary, upgrade of the existing freeway must satisfy criteria detailed in this report.

## ENVIRONMENTAL JUSTICE

In the fifty years since the freeway was first built, the corridor has become home to minority and low-income populations. For many years, the people who live within the corridor have shouldered an unfair burden in health, economic, and quality of life issues. Environmental justice requires a mechanism for the meaningful involvement of all people in the transportation decision-making process and to ensure that the low-income and

California State Department of Transportation (Caltrans). Further, we expect our recommendations to be used as required guidance in the planning and development of future corridor improvements. The Committee and the communities we represent expect to have continued formal and meaningful participation in the I-710 corridor improvement process and look forward to working with the OPC and future project sponsors toward an improved and revitalized I-710 Corridor.

**I-710 Oversight Policy Committee Actions**

On November 18, 2004, the OPC met to adopt a Locally Preferred Strategy and take action on the Tier 2 report. Culminating four years of study, the OPC took the following actions unanimously:

- A. Adopted the Locally Preferred Strategy described below and illustrated in the attachment for purposes of environmental analysis, incorporate the results of the sub-area “mini” study upon its completion, and seek funding to initiate an EIR/EIS.

Description:

- The hybrid design concept, which consists of ten (10) mixed flow lanes, specified interchange improvements, and four (4) truck lanes between the inter-modal railyards in Vernon/Commerce and Ocean Boulevard in Long Beach (Illustration attached.)
- Alternative B Transportation System Management/Transportation Demand Management
- Improvement of arterial highways within the I-710 Corridor
- Construction of truck inspection facilities to be integrated with the selected overall design concept









- B. Requested the Gateway Cities Council of Governments to return with suggested steps for initiating the development and implementation of a Corridor level Air Quality Action Plan to include not only technical but also funding, institutional structure and legislative strategies as well as an approach to holding public agencies with jurisdiction in the Corridor accountable for progress in meeting air quality and public health objectives in the Corridor and Region.
- C. Forwarded the Tier 2 report in its entirety to be accepted as pre-scoping guidance to the preparation of the EIR/EIS.
- D. Requested the Gateway Cities Council of Governments to identify and pursue appropriate avenues to implement those Tier 2 recommendations that prove to exceed the scope of any I-710 transportation improvement project and report back to the community.
- E. Requested MTA and the COG staff to suggest a process and structure for continuing community participation throughout the environmental analysis.

# I-710 Major Corridor Study Hybrid Design Concept

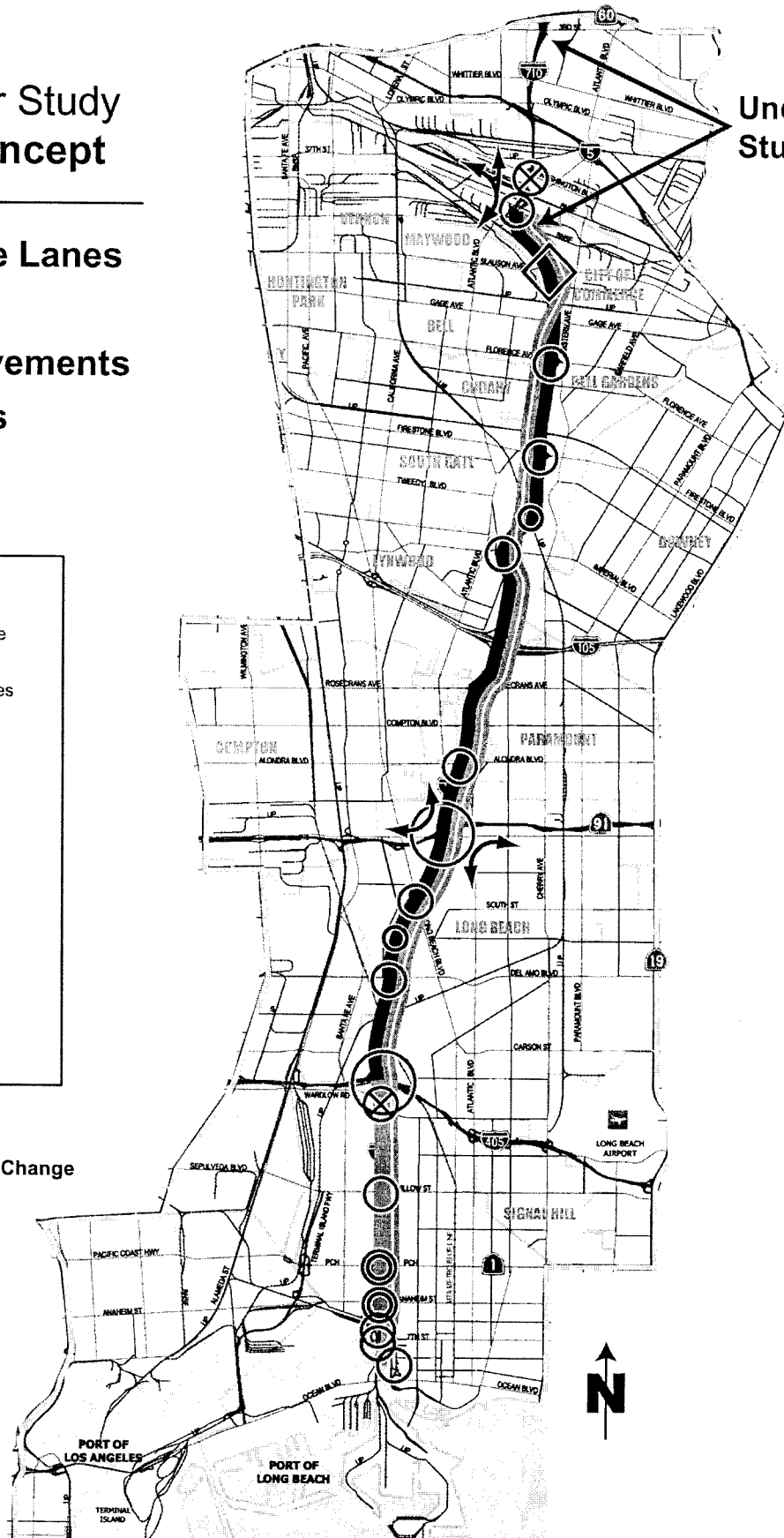
Under Study

- 10 General Purpose Lanes
- 4-Lane Truckway
- Interchange Improvements
- Direct Truck Ramps

**LEGEND**

-  Add One Mixed Flow Lane (Each Direction)
-  Add Two Mixed Flow Lanes (Each Direction)
-  Exclusive Truck Facility
-  Interchange Improvement
-  New Interchange
-  Eliminate Interchange
-  Truck Ramps
-  Truck Ingress/Egress

Preliminary Concepts, Subject to Change



Source: Jerry Wood, Consultant, in association with MMA, Inc. and Nolan Consulting, Inc., April 2004