

State Clearinghouse
No. 92101101

metro green line northern extension

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

February 1994



LOS ANGELES
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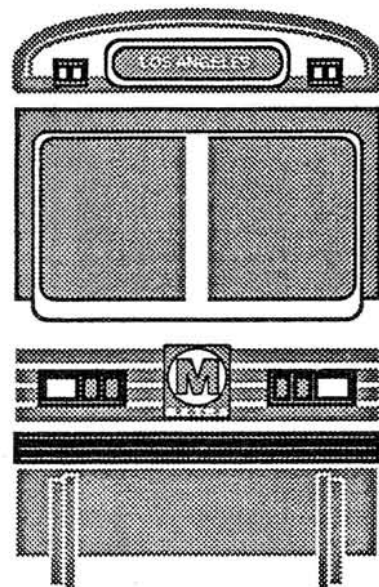


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111.0 INTRODUCTION

1.1 CONTENTS OF FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

This Final Supplemental Environmental Impact Report (Final SEIR) for the Metro Green Line Northern Extension presents the comments received during the public circulation period for the Draft Supplemental Environmental Impact Report (Draft SEIR) and the Los Angeles County Metropolitan Transportation Authority's (MTA) responses to those comments. Also included in this Final SEIR are any corrections or additions to the content of the SEIR that needed to be made as a result of public comments. The comments, responses to comments, and additions and corrections are included in Chapter 2 of this Final SEIR.

Chapter 3 includes a listing of the persons, organizations, and public agencies who commented on the Draft SEIR during the public comment period. The Draft SEIR is incorporated by reference as part of this Final SEIR. For further information on the Final SEIR or to obtain a copy of the Draft SEIR, contact:

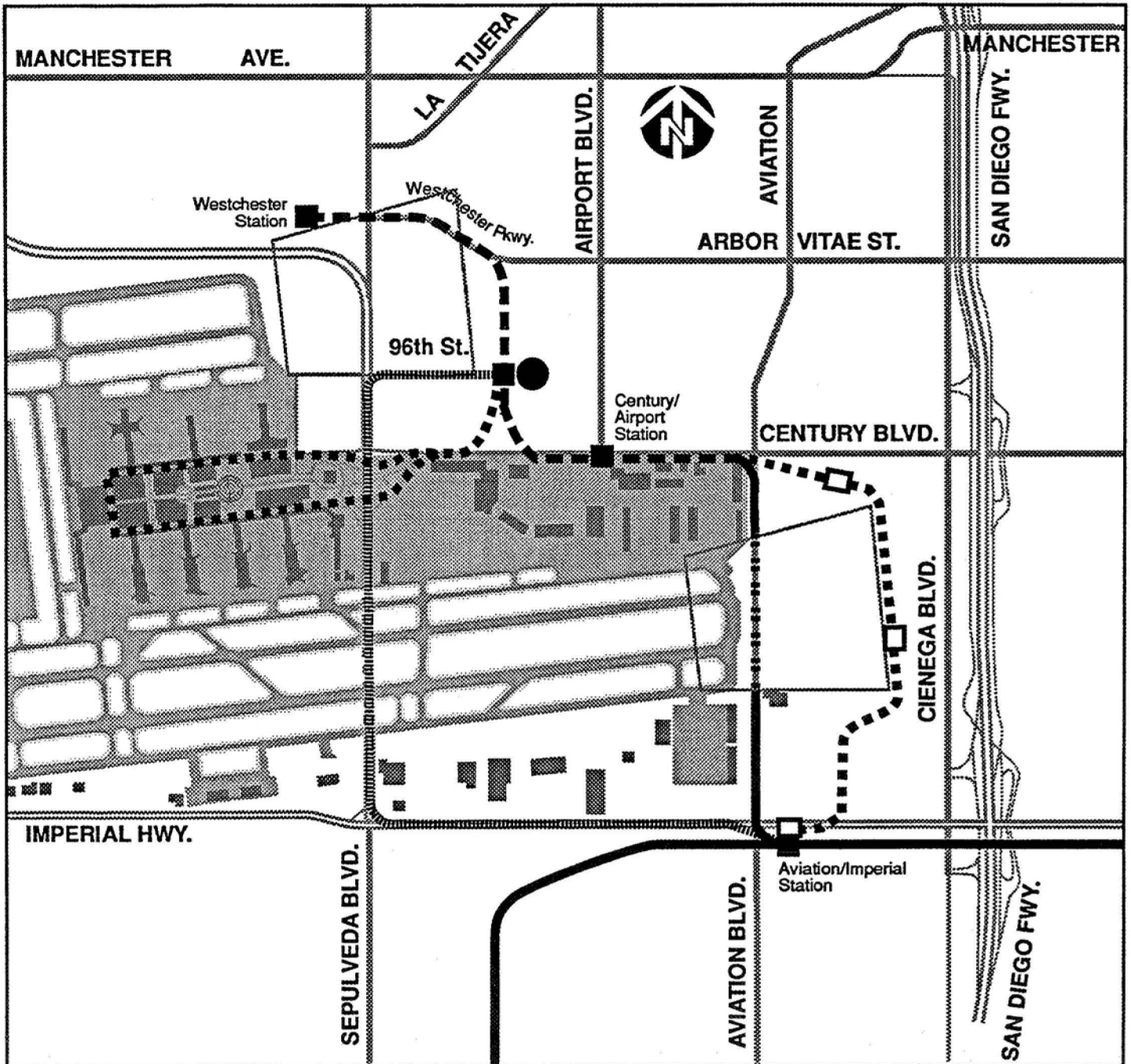
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1.2 PROJECT SUMMARY










This SEIR assesses two rail alternatives (Metro Green Line Along Aviation Boulevard and People Mover Through Lot B); an expanded "All-Bus" Alternative; and a No-Build Alternative. Construction of a multi-modal transportation center (MTC) is also analyzed. Figure 1-1 presents the build alternatives that were considered.

One of the major goals of the project is to provide a connection between the regional rapid transit system and the planned Los Angeles International Airport (LAX) central terminal area (CTA) people mover system proposed by the Los Angeles Department of Airports (DOA). The LAX CTA people mover system is planned to facilitate the movement of airline passengers between terminals, two airport parking lots, and the ground transportation center in LAX Lot C proposed by DOA. The MTC (proposed by the MTA), also to be located in Lot C, would bring together the LAX people mover, the Metro Green Line Light Rail Transit (LRT), the LAX to Palmdale high speed line (if and when it is built), and local and regional bus service. The LAX CTA people mover and ground transportation center will be assessed in a separate EIR to be prepared by DOA. Coordination with the DOA has been undertaken with regard to its planned CTA people mover and ground transportation center.

A description of each of the alternatives being considered in this SEIR is presented in the succeeding discussion.



LEGEND

-  Metro Green Line Along Aviation Blvd.
-  Metro Green Line Along Aviation Blvd. (Subway Segment)
-  People Mover Through Lot B
-  Both Rail Alternatives
-  All Bus
-  Stations (People Mover)
-  Stations (Both Rail Alternatives)
-  Multi-Modal Transportation Center
-  Airport Clear Zones

**Figure 1-1
ALTERNATIVES
CONSIDERED**



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1.2.1 No-Build

CEQA requires that a No-Build Alternative be considered. The No-Build Alternative assumes only the current construction of the Metro Green Line LRT near the periphery of LAX at the Aviation/Imperial Station. No transit service improvements would be designed to serve Metro Green Line passengers destined for the LAX terminal area.

1.2.2 All-Bus

MTA requires that transit projects consider an alternative involving the use of buses. This alternative would include a shuttle bus line operating between the Aviation/Imperial Station and the LAX people mover station at the MTC in Lot C. The All-Bus Alternative is shown in Figure 1-2. Because the LAX CTA people mover would provide service between the Lot C MTC and the terminal area, the existing LAX Lot C shuttle would be eliminated. The passengers would need to make an additional transfer at the MTC to the LAX people mover which would stop at all terminals.

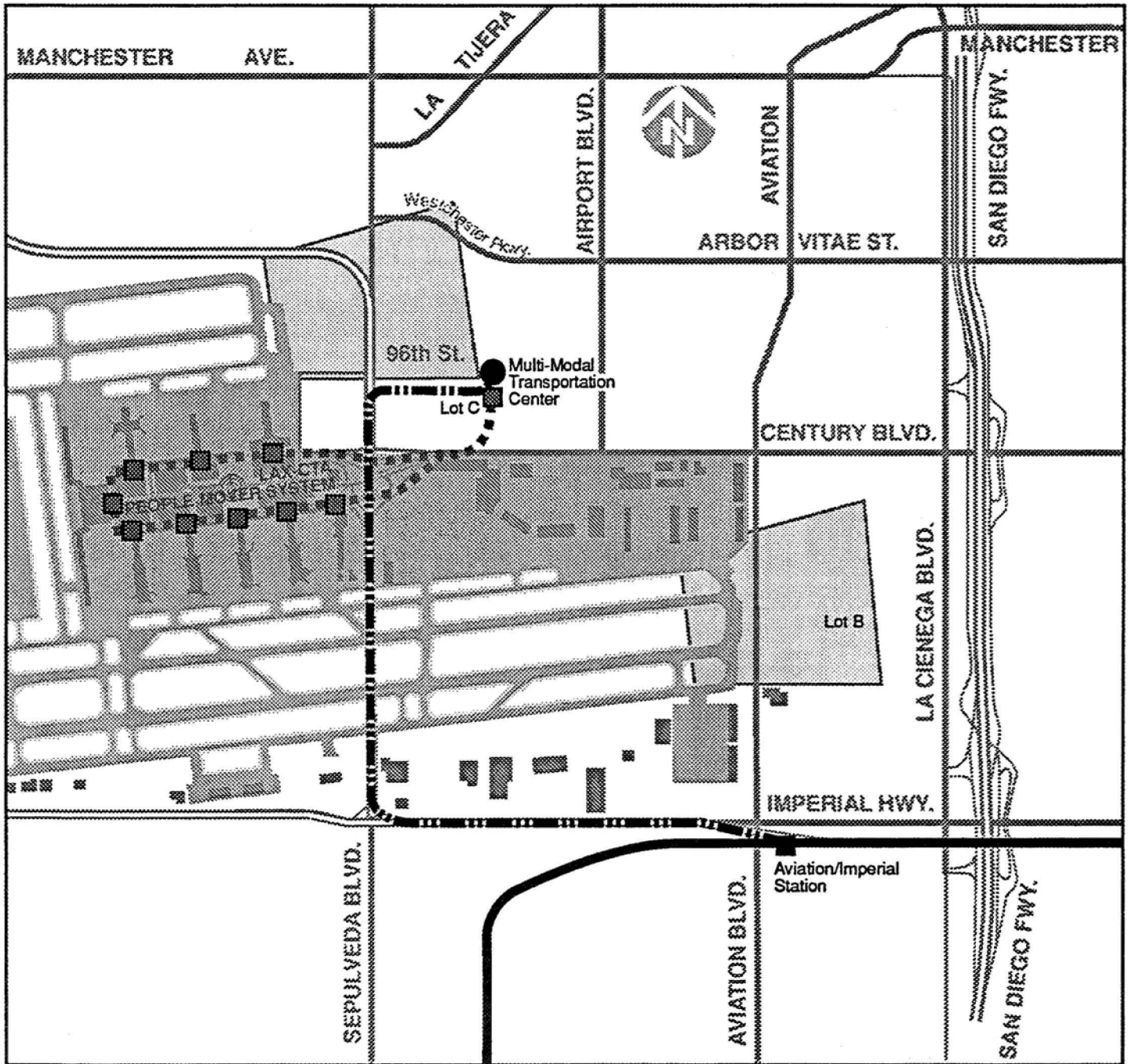
1.2.3 Metro Green Line Along Aviation Boulevard

Figure 1-3 displays the Metro Green Line along Aviation Boulevard Alternative. This alternative would be on aerial structure from its southern terminus until clearing 111th Street and would then descend to a subway segment off the eastern ends of runways 25L and 25R. Past these runways, the line would again be on aerial structure to its northern terminus at either LAX Lot C or Westchester Station. Three center-platform stations are planned for this alternative: Century/Airport, LAX Lot C, and Westchester (this station applies only if the project terminates at Westchester Parkway). The MTC would be located within Lot C. The existing bus transit center would be redesigned consistent with the MTC. Because the LAX CTA people mover would provide service between the Lot C MTC and the terminal area, the existing LAX Lot C shuttle would be eliminated. Tail tracks to store rail vehicles would be located at the project's northern terminus either just west of Westchester Station or within Lot C, depending on the terminus point selected. Three or four substations would be located along the alignment (depending upon where the northern terminus is located). These substations would power the rail vehicles and would draw power from the utility grids of the Los Angeles Department of Water and Power.

The Metro Green Line technology would employ the P-2000 vehicle (steel-wheel on steel-rail vehicle). The vehicle may be either automated or require a train operator. Up to two cars would be operated for each train. The train could operate with three vehicles in the future if the need arises and the station platforms are extended to accommodate the longer train length. The trains would be propelled by electric motors that receive electrical power from overhead wires (via the overhead contact system) that are connected to the substations along the alignment. During peak times, the trains would run about five minutes apart.

1.2.4 People Mover Through Lot B

The People Mover through Lot B Alternative is presented in Figure 1-4. This alternative would be an extension of the proposed LAX CTA people mover system and would be built



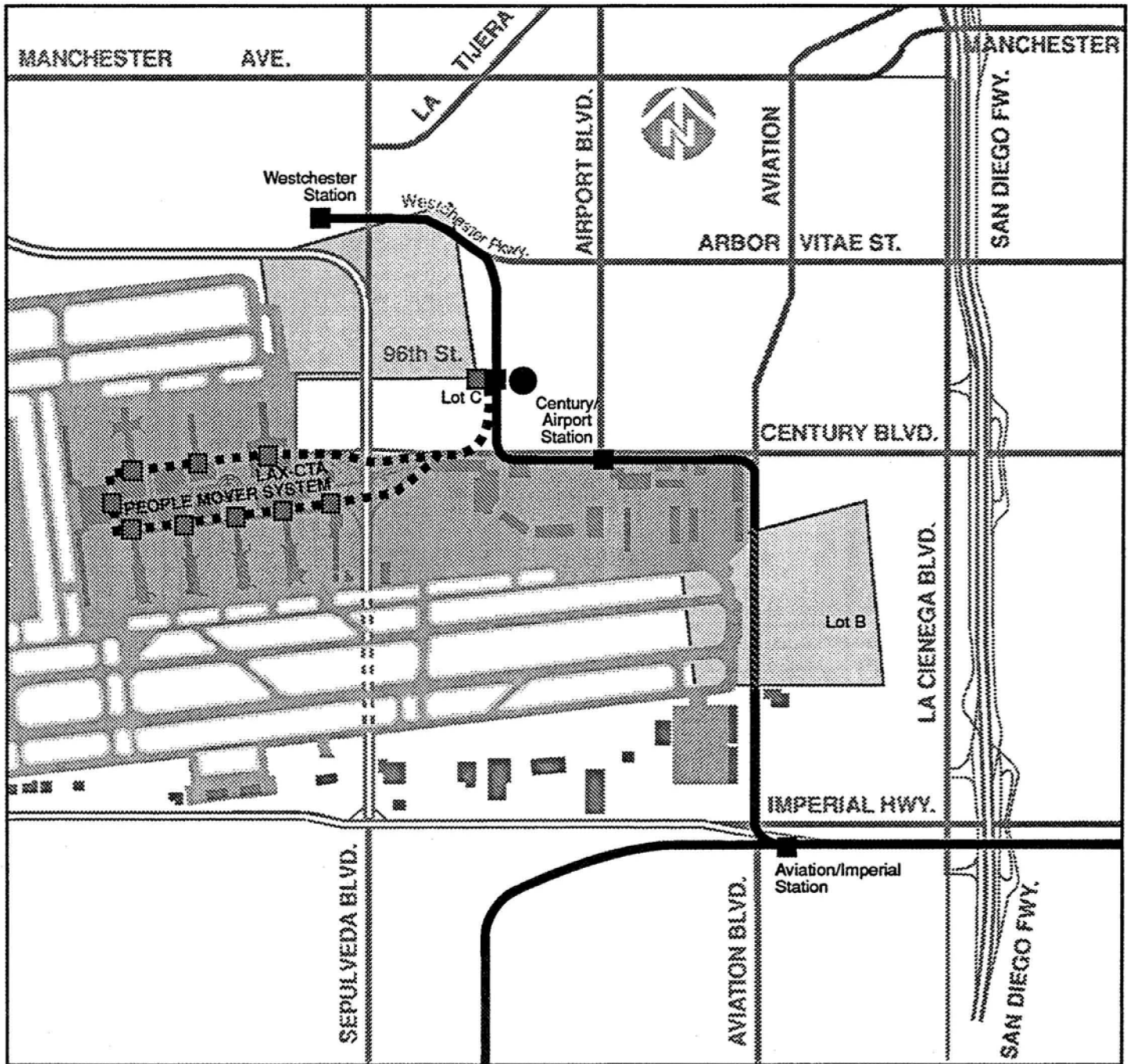
LEGEND

- Shuttle Bus
- Metro Green Line
- Station
- - - - LAX-CTA People Mover
- People Mover Station
- Multi-Modal Transportation Center

**Figure 1-2
ALL-BUS ALTERNATIVE
SHUTTLE BUS SERVICE**



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LEGEND








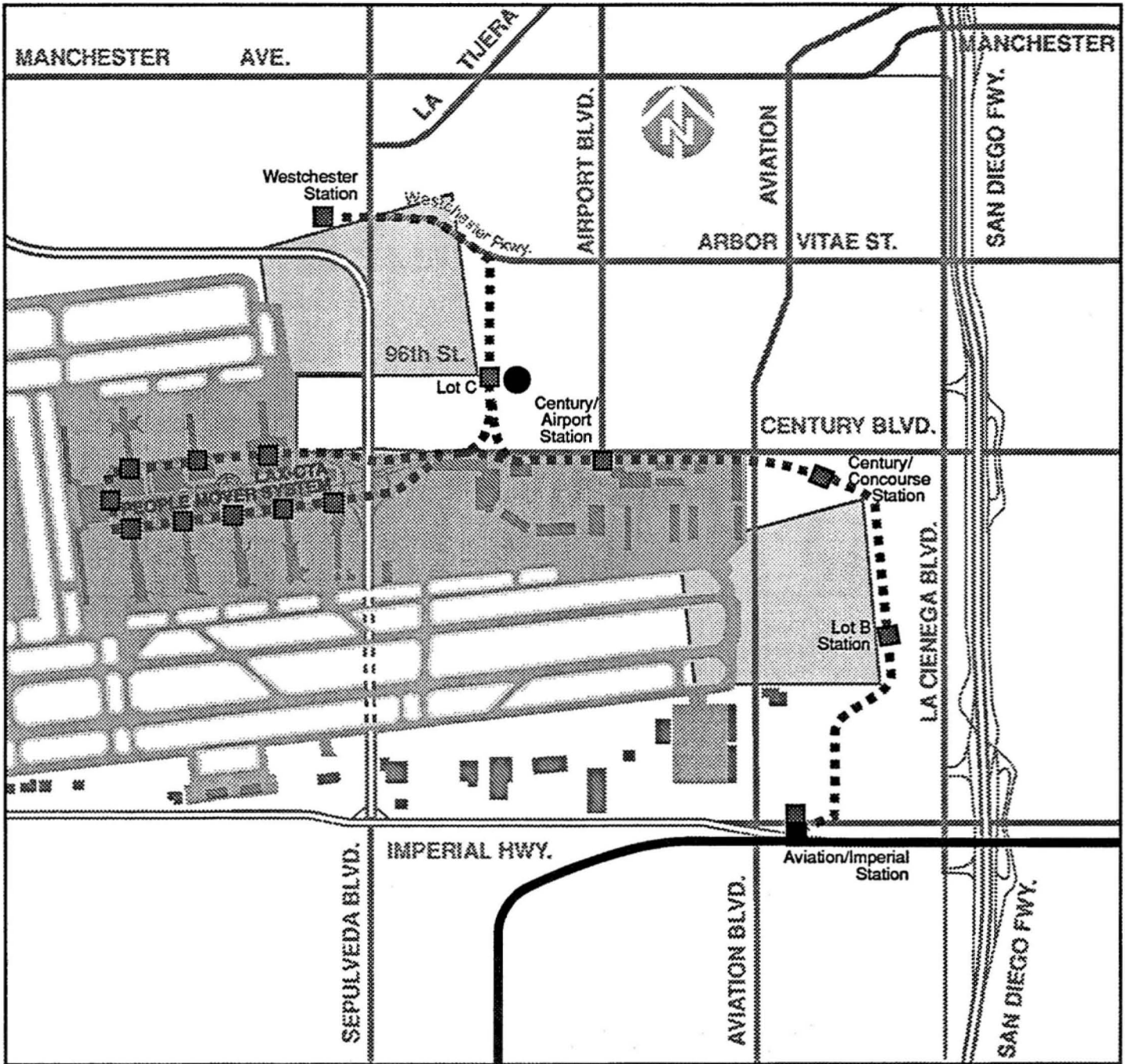
-  Alignment
-  Subway Segment
-  Station
-  LAX-CTA People Mover
-  People Mover Station
-  Multi-Modal Transportation Center
-  Airport Clear Zones

Figure 1-3
METRO GREEN LINE ALONG
AVIATION BOULEVARD



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- LEGEND**
- People Mover Alignment
 - People Mover Station
 - Metro Green Line Alignment
 - Metro Green Line Station
 - Multi-Modal Transportation Center
 - ▨ Airport Clear Zones

Figure 1-4
PEOPLE MOVER TECHNOLOGY
THROUGH LOT B



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on aerial structure. Like the Metro Green Line Alternative, the northern terminus could be located at either LAX Lot C or Westchester Station. Six stations would be provided: Aviation/Imperial, LAX Lot B, Century Boulevard/Concourse Way, Century Boulevard/Airport Boulevard, LAX Lot C, and Westchester (this station applies only if the project terminates at Westchester). All stations, with the exception of Aviation/Imperial, would have center platforms. Aviation/Imperial Station would use a side platform arrangement. Tail tracks and substations would be similar to that described for the Metro Green Line alternative.

The MTC would also be similar to that planned for the Metro Green Line alignment; however, the connection with the Metro Green Line (east-west rail line from El Segundo to Norwalk now under construction) would be at the Aviation/Imperial Station, not at Lot C, if the people mover were selected to serve the area between the Aviation/Imperial Station and the Westchester Station or Lot C. For passengers wishing to travel on the Metro Green Line and the proposed LAX to Palmdale line, a transfer to the people mover would be required. Because the people mover would provide service between Lot B, Lot C, and the CTA, the existing LAX Lot B and Lot C shuttles would be eliminated.

The people mover technology to be selected for this alternative could be any of a number of vehicle types including monorail, steel wheel, and rubber tire. All would be fully automated (driverless) vehicles. No overhead contact system would be required to propel these vehicles. Three different train services would be operated under this alternative: Westchester Station and Lot C to Aviation/Imperial Station; Westchester Station and Lot C to the CTA; and Aviation/Imperial Station and Lot B to the CTA. Two external train services would operate around the CTA loop, from Westchester Station and from Aviation/Imperial Station. Adding an internal loop would mean that three trains could operate every four minutes, resulting in a combined headway of 80 seconds.

2.0 RESPONSES TO COMMENTS

2.1 INTRODUCTION

This chapter presents a record of the substantive comments received on the Draft Supplemental Environmental Impact Report (Draft SEIR). Both written comments received during circulation of the document and oral testimony provided at the public hearing have been included. The public review period for the Draft SEIR commenced on July 1, 1993 and ended on August 15, 1993. A public hearing was held on August 2, 1993 at the Airport Marina Hotel, 8601 Lincoln Boulevard, Los Angeles, California.

During the course of the public review period, 19 written communications were received: one from an elected official; nine from public agencies; four from private organizations; three from businesses; and two from individuals. Some of the letters received raised a single issue while others contained multiple comments or questions. Five of the letters submitted supported the proposed Metro Green Line Northern Extension project, and three letters opposed the project.

At the public hearing, five speakers testified before the hearing officer, a Caltrans official. Some of the speakers duplicated comments which were also submitted in written form. Three speakers expressed support for the project while one speaker opposed the project.

Comments have been organized into the following categories:

Alternatives	Land Use
Stations	Transportation and Circulation
Socioeconomic	Public Services
Noise	Construction
Air Quality	Miscellaneous
Aviation	Corrections and Additions
Funding and Priority Issues	

Of all the comments received, "Transportation and Circulation" was the most frequently encountered category. Other frequent comments had to do with the following issues: alternatives, stations, aviation, and construction impacts.

Because many of the comments expressed similar concerns, comments were summarized and paraphrased. Consequently, the comments presented in this chapter may not represent direct quotations of the comments or testimony provided during the public review period. The paraphrasing was done solely for the purpose of reducing redundancy, with no intent of obscuring any comment or testimony received. Both the original written comments submitted during the public comment period and testimony received at the public hearing are available for inspection at the offices of the Los Angeles County Metropolitan Transportation Authority.

2.2 COMMENTS AND RESPONSES

2.2.1 Alternatives

Comment 1.1: The Metro Green Line Northern Extension project is crucial because it would be an affordable line that could be built quickly; it would provide convenient access to LAX; it would alleviate traffic congestion; the proposed LAX to Palmdale Airport rail project depends on a transit hub in LAX Lot C; and it would increase mobility and economic vitality in the Westchester, Playa del Rey, Playa Vista, and Marina del Rey areas. (Councilwoman R. Galanter)

Response: Comment noted.

Comment 1.2: I support the Metro Green Line Northern Extension. Perhaps electric bus could be developed along Crenshaw Boulevard and Hawthorne Boulevard to feed the system. Development of LRT along Crenshaw Boulevard would also be desirable except for the 1.2 mile section that does not have adequate right-of-way width. Cut-and-cover methods of construction could be used in that portion. (Dayton Associates)

Response: We note your support for the Metro Green Line Northern Extension. The MTA is now in the process of preparing the Crenshaw-Prairie Corridor Study which is examining the feasibility of a LRT system in that area.

Comment 1.3: Can the subway portion of the Metro Green Line alignment along Aviation Boulevard be built at-grade so that construction would cost less? (A. Allah)

Response: An EIR was previously completed in 1989 for this project which studied an at-grade alignment along Aviation Boulevard. Subsequent to completion of the study, the Federal Aviation Administration (FAA) had concerns about the potential of electromagnetic interference of the Metro Green Line vehicles and overhead contact system (OCS) with airport navigational aids and the intrusion of the rail guideway and OCS into the runway protection zones for runways 25L and 25R. To avoid these potential conflicts, the at-grade alignment located off these runway ends was changed to a subway segment and studied in this SEIR.

Comment 1.4: The Metro Green Line Along Aviation Boulevard Alternative is preferable because of the following factors: across-the-platform transfers in both directions in Lot C is possible if suggestions recommended in Comment 2.3 are instituted; transfers at Lot C would be less confusing; less displacements and right-of-way impacts would result; and Marina del Rey could eventually be served. (T.A. Nelson, P.E.)

Response: Comment noted.

Comment 1.5: If the Metro Green Line technology is selected, then it should be aligned so that it has the same stations that the people mover would have. A Lot B Station would be especially important because all LAX shuttle buses could be eliminated. (A. Allah)

Response: A Metro Green Line alternative was previously considered which would have had the same stations as the people mover alternative. However, this alternative was eliminated after it was determined that this technology would not be suited to this alignment. The alignment from Aviation/Imperial Station through Lot B and the industrial area along 102nd Street requires a

number of hard curves which can be better traveled at higher speeds by a people mover. If the Metro Green Line Along Aviation Boulevard Alternative is selected for implementation, service to Lot B could be integrated with the Aviation/Imperial Station by using a shuttle bus between the two points.

Comment 1.6: We object to the proposed alignment of the people mover because of its adverse impacts to the planned Los Angeles County Municipal Courthouse. The Metro Green Line alignment could be beneficial if that alternative is properly planned and coordinated with the County. (Los Angeles County Internal Services Division)

Response: We note your Division's preference for the Metro Green Line alignment. We intend to coordinate the design of whichever rail alternative is selected with the County as well as with others responsible for existing and proposed developments which could be affected by the project.

Comment 1.7: We support the People Mover Through Lot B Alternative for the following reasons: Extending the Metro Green Line north of Aviation/Imperial Station would necessitate diverting trains which could reduce the service frequency to the El Segundo employment center and South Bay; building the people mover would be more desirable than the Metro Green Line because it would allow service to more destinations and would be more aesthetically appealing since no overhead catenary system would be needed; and installing a people mover would afford more flexibility in dealing with physical constraints and would have the line haul capacity to serve Westchester and Marina del Rey. (Continental Development Corporation)

Response: Comment noted.

Comment 1.8: The high speed line now planned to connect LAX and Palmdale should operate between Norwalk and LAX and then from LAX to Palmdale. The vehicle could travel at slower speeds required by the tracks being built between Norwalk and LAX, but it could then travel at its designed higher speed between LAX and Palmdale. (A. Allah)

Response: Comment noted. The high speed line has been deferred. If and when the LAX to Palmdale line again becomes an active project, both the alignment and technology would need to be determined. The intent of the Metro Green Line Northern Extension is to provide service from the Metro Green Line main line northward to Lot C and to connect with the high speed rail at that location. The technologies under consideration for both the Metro Green Line main line and northern extension are more appropriate for this particular project than a high speed technology.

Comment 1.9: A steel wheel-steel rail technology would be better for the people mover alternative than either the rubber-tired or monorail technologies. (A. Allah)

Response: Various technologies are being considered. The technology selected will be based on the service required for the people mover to operate efficiently in the area.

Comment 1.10: Once the Metro Green Line from Norwalk to El Segundo becomes operational, the All-Bus Alternative should be implemented until rail can be built. (A. Allah)

Response: Bus shuttle service between the LRT main line and LAX will be provided until the rail system can be built.

Comment 1.11: Light rail is a more preferable alternative to serve the LAX area than buses. (M. Hets)

Response: Comment noted.

Comment 1.12: What do the LRT alternatives provide that cannot be provided by shuttle buses at substantially less cost? (Coalition for Rapid Transit)

Response: A LRT system would extend regional service and would promote regional access especially once the LAX to Palmdale line is built. Use of a fixed guideway system, which separates the transit system from the streets, instead of buses traveling on the streets would also result in less traffic congestion.

Comment 1.13: If the All-Bus Alternative is implemented, the Department recommends an alternative shuttle bus route which would traverse Aviation Boulevard to Century Boulevard; Century Boulevard to Airport Boulevard; Airport Boulevard to 96th Street; 96th Street to the Multi-Modal Transportation Center (MTC). It would be a quarter-mile shorter than the proposed route and would be less frustrating to passengers since they would not be required to pass the airport on the bus and then backtrack to the airport on the LAX-CTA people mover. Although left turns for buses may be more feasible under the Department's proposed route, either route will require intersection capacity analysis if left-turn signal phasing is proposed at route intersections. (Los Angeles Department of Transportation)

Response: Comment noted. The Draft SEIR also indicates (on page 3-3) that alternative routings to the All-Bus Alternative are possible. As discussed in the response to Comment 1.10, shuttle buses will be considered as part of the Metro Green Line Norwalk to El Segundo LRT. The bus routes for the interim service have not been finalized, and public input would be considered in determining which routes would be best.

Comment 1.14: The northern extension should be built to conveniently serve the people of Los Angeles by establishing the Metro Green Line terminus at or near the middle of the airline satellite complex (possibly under the Theme Restaurant) by means of a subway. (Sierra Club)

Response: The 1989 Draft EIR considered an option, Alternative 2, which would have provided service via subway to an airport station located between Terminals 1 and 2. This alternative was eliminated from further consideration for several reasons. Alternative 2 could present major utility conflicts and construction complexities at the portal and at the LAX Station location. Air passenger service would be disrupted since construction of the station would temporarily close two gates at each terminal. The study also indicated that two contamination areas were known to exist or were in proximity of that alternative and that other contamination sites also appeared to be in the vicinity of the proposed corridor route. Because of the geometrics necessary for this alignment, it also would not have served Century Boulevard, Lot C, or Westchester Parkway. Therefore, this alternative did not maximize regional access, and it would have been considerably more expensive than the other alternatives considered in the Draft EIR. Subsequent to completion of the EIR, the LAX/Green Line Interagency Transit Study Joint Policy Group and Technical Task Force, composed of representatives from various Federal, state, and local agencies as well as from the City Council, Mayor, and County Supervisor's offices, studied three additional subway alternatives. These were known as Options 1, 2, and 5-RG. All three alternatives were found to be considerably more expensive than the two rail alternatives analyzed in this SEIR. For example, Option 5-RG was estimated to cost about \$560 million. Like the previous subway

alternative studied, there were also engineering difficulties associated with building a subway underneath the airport facilities. In addition, none of these options would serve any of the areas on the east end of the airport.

Comment 1.15: The northern extension should be built in a subway which would connect Imperial Boulevard with the LAX Bradley Terminal and Westchester. As an alternative, the subway alignment proposed by the Sierra Club should be considered. Either subway alternative would provide better regional access and relief from traffic congestion than the alternatives currently proposed. (Coalition for Rapid Transit)

Response: See response to preceding comment.

Comment 1.16: To get people out of their cars, another alternative should be implemented. A monorail should be built from LAX to Union Station in downtown Los Angeles. (C. Christensen)

Response: This SEIR assesses the impacts of a northerly extension of the Metro Green Line to either Lot C or Westchester, and the monorail suggested by the commentor is outside the scope of this study.

Comment 1.17: To relieve traffic congestion, the Metro Green Line to El Segundo should be extended south, perhaps have a San Diego Freeway intercept at Compton Boulevard and eventually reach San Pedro. Another southern corridor route would be the Metro Green Line/Blue Line interconnect to downtown Long Beach. (Coalition for Rapid Transit)

Response: The Norwalk to El Segundo line will temporarily end at Marine Boulevard (also known as Compton Boulevard) once the line becomes operational in 1995. A southerly extension beyond Marine Boulevard to serve the South Bay cities is currently in the MTA's 30-year Transportation Plan. However, as noted in the response to subsequent Comment 7.1, this plan is being reevaluated due to limited funds.

2.2.2 Stations

Comment 2.1: The Metro Green Line Northern Extension project should include a Westchester Station. (H. Drollinger, M. Hets, D. Cope, Continental Development Corporation)

Response: Comment noted.

Comment 2.2: Westchester Station may serve as a temporary terminal station under the Metro Green Line Alternative, so feeder bus access may be desirable. (Los Angeles Department of Transportation)

Response: A bus/rail interface plan will be developed in conjunction with the project to service the area.

Comment 2.3: A more convenient transfer between the people mover and the Metro Green Line should be designed for Lot C by building a two-level station or by constructing the people mover guideway in one direction to go over or under the Metro Green Line and then level out to be adjacent to the other Metro Green Line track. (T.A. Nelson, P.E.)

Response: Comment noted. Your comments will be forwarded to both the MTA design team and the Los Angeles Department of Airports (LADOA) for consideration. MTA intends to coordinate the design of both the rail facilities and the Multimodal Transportation Center with LADOA. A key consideration in the design for any facility at this location is Runway 24L.

Comment 2.4: The Lot C Station shown in Figure 3-9 could be reconfigured to better facilitate intermodal transfers by placing the two LAX-CTA people mover tracks in the center surrounded on both sides by transfer platforms and a Metro Green Line track on the other side of each platform. This would eliminate one of the three transfer platforms. Dual escalators should be considered at each end of the platforms to better serve passengers with luggage. (Los Angeles Department of Transportation)

Response: Comment noted. See response to preceding comment.

Comment 2.5: If the LAX-CTA people mover terminates at Lot C, it would be more convenient to have a loop and single track platform rather than dual-track. We recommend that this operation be analyzed. (Los Angeles Department of Transportation)

Response: Comment noted. See response to Comment 2.3.

Comment 2.6: The short-term parking lot at the Lot C Station under both rail alternatives should be reconfigured to prevent bus/auto conflicts at the driveways. Also, bus circulation flow may interfere with pedestrian access with the current design. (Los Angeles Department of Transportation)

Response: Comment noted. See response to Comment 2.3.

Comment 2.7: Under the people mover alternative, consideration should be given to reconfiguring the Aviation/Imperial Station in the same manner as the Department's previous recommendations for the Lot C Station to better facilitate transfer passengers. (Los Angeles Department of Transportation)

Response: Comment noted. See response to Comment 2.3.

Comment 2.8: Section 3.2.3.1 should include a figure for the Aviation/Imperial Station under the Metro Green Line Alternative since the Metro Green Line will branch at this point and only one platform will be necessary. (Los Angeles Department of Transportation)

Response: No figure was included in the Draft SEIR since that station is now under construction as part of the Norwalk to El Segundo main line, and no changes to the station configuration are necessary if the Metro Green Line Along Aviation Boulevard Alternative is selected.

Comment 2.9: The number of walk-in passengers projected for the Century/Concourse Station is questionable since the station is set so far back from Century Boulevard. Vehicle access for westbound traffic on Century Boulevard will be difficult since the signalized intersection at Century Boulevard and Concourse Way is not adjacent to the park-and-ride lot. The lot should be redesigned to emphasize the 102nd Street entrance and to eliminate bus/auto mixing. (Los Angeles Department of Transportation)

Response: Comment noted. See response to Comment 2.3.

Comment 2.10: What will be the parking policy for the Westchester and Aviation/Imperial Stations? How will Metro Green Line or people mover patrons be differentiated from LAX long-term parking users? Without overnight or long-term parking restrictions, LAX users could conceivably avoid parking fees at Lot B or Lot C by using project parking lots. (Los Angeles Department of Transportation)

Response: Parking restrictions, such as limiting overnight parking, would be formulated and implemented as a part of this project. It may not be possible to differentiate between daytime parking for airport and rail users. However, the number of persons needing only daytime parking for airport uses is expected to be minimal, therefore, use of transit parking facilities for airport-related uses would be minimal.

Comment 2.11: Page 3-16 of the Draft SEIR indicates that under the Metro Green Line Alternative, the trains could operate with three vehicles in the future if the need arises and the station platforms are extended to accommodate the longer train length. What platform length would be required? (Los Angeles Department of Transportation)

Response: The station platforms are now designed to accommodate two vehicles. However, they could be extended to 270 feet to accommodate three vehicles, if necessary.

Comment 2.12: The proposed station drawings for all of the alternatives should be revised to accommodate better bus access. At the MTC, the proposed entrance and exit driveways should be revised to permit one-way bus traffic rather than the two-way flows as shown in Figure 3-19 of the Draft SEIR. Short-term parking at that station should be relocated since the current plan may pose a potential safety problem if disembarking car passengers dash across the bus lanes to reach the train platform. Westchester Station should have a bus turnout on each side of Westchester Parkway to allow passengers improved access to this station. A pedestrian signal light is also recommended. Bus circulation patterns within Aviation Station and Century/Concourse Station are also recommended to be revised to enhance traffic flows. (Operations Division, Metropolitan Transportation Authority)

Response: Surface operations will be coordinated with MTA's service planning during preliminary engineering to better accommodate buses and other modes of access.

2.2.3 Socioeconomics

Comment 3.1: The California Environmental Quality Act (CEQA) requires an analysis of cumulative and long term impacts, and that cannot be done without consideration of economics. A benefit/cost analysis of the alternatives should have been included in the Draft SEIR. (Coalition for Rapid Transit)

Response: Sections 6 and 8 of the Draft SEIR discuss the cumulative and long-term impacts of the project. CEQA requires the focus of the analysis to be on the environmental impacts rather than economic impacts of a project. Economic impact is one of the many factors considered by the local decision-making body in determining whether to proceed with a project.

2.2.4 Noise

Comment 4.1: I am concerned about the train noise impacts to the residential community and library located near the Sepulveda Eastway/Westchester Parkway intersection. (D. Cope)

Response: The Draft SEIR included a noise analysis for the people mover assuming use of a steel-wheel on steel rail technology. This technology was assessed because it represents the "worst case" for cumulative noise level analysis when considering the possible technologies which could be used for either the Metro Green Line or people mover alternatives. Table 5-6 of the Draft SEIR shows that for both the library and the house located nearest the proposed rail alignment, there would be no change in Community Noise Exposure Levels (CNEL) between existing and future noise levels assuming project implementation. It should also be noted that a noise analysis was performed for the 1989 EIR. That analysis found that there were no existing structures anywhere along the alignment studied where the increase in CNEL was expected to reach 3 dB (the point at which an average listener can detect a change in noise levels).

Comment 4.2: If the People Mover Through Lot B Alternative is selected, we request that the MTA coordinate the design of the alignment with us to avoid adverse noise impacts to the Los Angeles County Municipal Courthouse and the remainder of Continental City. (Continental Development Corporation)

Response: If the people mover alignment is selected, MTA intends to consult with both the Continental Development Corporation and Los Angeles County on design and related issues.

Comment 4.3: In locations where an adverse noise or vibration impact is anticipated, impacts should be mitigated to a level of insignificance. (Continental Development Corporation)

Response: As discussed in Sections 5.6.7 and 5.6.8 of the Draft SEIR, the measures proposed will mitigate impacts to a level of insignificance.

Comment 4.4: The SEIR should include the most recent evaluation of the existing noise and vibration impacts associated with the construction and operation of the proposed project. The analysis of the project noise and vibration impact is based on a field measurement survey conducted in 1988-89. (City of El Segundo)

Response: No additional field measurements were performed for this SEIR since no major physical changes in this already built-up area have occurred which would result in noise levels that would be substantially different from those presented in the 1989 Draft EIR.

Comment 4.5: The SEIR should discuss the airport noise contour maps prepared by the Los Angeles Department of Airports. (Los Angeles Department of Planning)

Response: The ambient noise levels presented in the 1989 Draft EIR, which were used in this SEIR, considered airport noise as well as other sources, and there is no need to include separate airport noise contour maps as a part of this transit project.

2.2.5 Air Quality

Comment 5.1: I am concerned about the effect of bus fumes on the residential area and library located near the Sepulveda Eastway/Westchester Parkway intersection. (D. Cope)

Response: There should not be any appreciable difference over existing conditions in the numbers of buses operating in that area as a result of the rail project. Also note that recent changes to both Federal and State air quality regulations require transit buses to have fewer emissions in the future. Conventional diesel-powered buses operating within the City of Los Angeles will be replaced by cleaner-burning vehicles within the next few years.

Comment 5.2: If the All-Bus Alternative is implemented, electric buses should be considered since the old buses tend to be terribly polluting to an area that is already polluted. (D. Cope)

Response: See response to preceding comment. Note that the MTA now has the most extensive program in the United States for testing several cleaner-burning bus technologies. The MTA has also undertaken a study which is examining the feasibility of operating electric trolley buses (ETBs) along various routes. A pilot program for two ETB starter lines is scheduled to begin construction in the near future. While all of these cleaner technologies are being considered for operation within the LAX area, no specific technology has been selected at this time.

2.2.6 Aviation

Comment 6.1: What are the FAA's objections to the original northern extension project? (M. Hets)

Response: See response to Comment 1.3.

Comment 6.2: Why were there no clearances from FAA on the original northern extension project? (H. Drollinger, Coalition for Rapid Transit)

Response: The FAA has been involved in the review of the initial studies as well as this SEIR. In May 1990, the FAA indicated in a letter to the Los Angeles Department of Airports (LADOA) that the FAA had no objections to the alignment assessed in the 1989 EIR as long as two conditions were met. However, the alignment they reviewed would not have been automated and would have been powered by a third rail rather than an overhead catenary system (OCS). A subsequent FAA Form 7460-1, Notice of Proposed Construction or Alteration was submitted to FAA in July 1990 which presented an automated system powered by OCS. In October of that same year, the FAA responded to LADOA that they had no objections as long as the localizers were relocated and lighting was installed atop OCS poles per FAA specifications. However, subsequent to that last letter, after 50 percent of the rail project engineering design had already been completed, FAA decided to withdraw its approval. The reasons that FAA withdrew its approval are still unclear to the MTA since all the conditions attached to its earlier approval can be readily met by MTA. In addition, a subsequent study by a recognized aviation expert shows that all of FAA's concerns can be adequately mitigated. Tests conducted to support the study show that potential electromagnetic interference with navigational aids can be readily mitigated.

Comment 6.3: The aerial portion of the Metro Green Line route along Aviation Boulevard which is in the runway protection zone (RPZ) for the approach runways 25R and 25L is

considered to be incompatible with LAX since land uses causing a concentration of people are prohibited within the RPZ. The development of runway 25L as a Category III runway may be affected by this project. In addition, the impact to the runway 7R localizer has not been fully analyzed. (Federal Aviation Administration)

Response: As depicted in Figure 3-4 of the Draft SEIR, there is no aerial portion of the Metro Green Line in the RPZ of either runways 25R or 25L. Nor is there penetration into the 50:1 and the 34:1 glide slopes. There is a 500-foot section of the MGL that is directly under the southern end of the zone. This section is an open cut where the top of rail elevation is 21.06 feet below the 50:1 glide slope and 29.86 feet below the 34:1 glide slope. Within the open-cut section, the average Metro Green Line population during peak hour is 6.2 persons, significantly less than the average population in vehicles on Aviation and Avion. This minor MGL impact can be mitigated by relocating 111th Street, as the FAA has suggested, at a cost of \$6.6 million. The MTA will closely examine this option with the FAA and the LADOA as the project continues into preliminary engineering and design.

Comment 6.4 The Metro Green Line Along Aviation Boulevard Alternative should be changed to reflect relocation of 111th Street and removal of this penetration in accordance with the FAA's comments noted in Comment 6.3. (Los Angeles Department of Airports)

Response: The MTA will work with both the LADOA and FAA during preliminary engineering to develop strategies, such as relocating 111th Street, to minimize aeronautical impacts. Also, see response to Comment 6.3.

Comment 6.5: It would be acceptable for the cut and fill construction of the subway segment to occur during night and early morning hours during normal airport operations. However, special procedures for coordination between the contractor and air traffic personnel must be developed in the event that normal operations cannot be conducted. (Federal Aviation Administration)

Response: The MTA will work with both the LADOA and FAA during design and construction to ensure that impacts on aviation are minimized.

Comment 6.6: Is the datum used for the horizontal measurement, the latitude and longitude, based on the North American Datum 1983 (NAD 83)? (Federal Aviation Administration)

Response: Yes.

Comment 6.7: The analysis of the impact on the runway 7L and 7R localizers during construction may require flight testing to ensure that the localizers can maintain operations during construction. (Federal Aviation Administration)

Response: See response to Comment 6.5.

Comment 6.8: Construction coordination should take place early in the design stage since the FAA requires advance planning. (Federal Aviation Administration)

Response: See response to Comment 6.5.

Comment 6.9: Both approach lighting systems crossing Aviation Boulevard have navigational approach lights located west of the access road and will require protection during construction. Note also that runway 25L is planned to be upgraded from a CAT-II to a CAT-III Instrument Landing System (ILS). The runway 25R MALSR (medium intensity approach lighting system with rail) power and control station and cabling will likely require relocation. (Federal Aviation Administration)

Response: See response to Comment 6.5.

Comment 6.10: During construction of the subway segment, the existing access road next to the tracks may be blocked. There may be a problem rerouting the access road because there is no available space due to runway 25R edge of pavement being so close to the work area. The blast fences cannot be moved forward without affecting the MALSR obstruction free light plane. (Federal Aviation Administration)

Response: See response to Comment 6.5.

Comment 6.11: The results of the McFarland Report point to the possibility for building a subway underneath the airport, and such an alternative should have been considered. The McFarland Report indicated three potential navigational problems including: 1.) electrical emission interference from rail cars with LAX tower/aircraft transmissions; 2.) visual distractions to pilots from lights, reflections, and moving vehicles; and 3.) possible entanglements of low-flying aircraft with rail car trolley power lines. (Coalition for Rapid Transit)

Response: See response to Comment 1.14 with regard to consideration of a subway alternative. In addition, you indicated that the *Investigation of All Potential Negative Impacts on Landing Capability at the Los Angeles International Airport Due to Installation of the Metro Green Line at its East Boundary*, (the McFarland Report), found potential navigational conflicts. The McFarland Report assessed the impacts of an at-grade alignment along Aviation Boulevard and noted that, "...of the more than 50 facilities present at LAX, in only 6 of these cases (3 of these being components of the same monitor system) will performance be affected significantly by the Metro Green Line. The findings are that in each of these 6 cases at least one engineering solution exists."

Comment 6.12: The project should conform with the Airport Approach Zoning Regulations, Section 12.50 in the City of Los Angeles Planning and Zoning Code. (Los Angeles Department of Airports)

Response: The MTA believes that both the current alternative and previous alignment can conform with the intent of the cited regulation. The MTA will work with both the City Planning Department and the LADOA during preliminary engineering to ensure that the project conforms with the Airport Approach Zoning Regulations.

2.2.7 Funding and Priority Issues

Comment 7.1: The Metro Green Line Northern Extension was to have originally been completed by about 1993. However, now we are told that it may not be operational until about 2000. Why not? (H. Drollinger)

Response: The original intent was to complete the northern extension at about the same time that the Norwalk to El Segundo base line becomes operational. The LACTC, now part of the MTA, had already completed some of the design work and an EIR in 1989 for the northern extension project. However, both the FAA and LADOA subsequently voiced concerns about the possibility of electromagnetic interference of the Metro Green Line vehicles and overhead contact system (OCS) with airport navigational aids and the intrusion of the rail guideway and OCS into the runway protection zones for runways 25L and 25R. (See response to Comment 6.2) A Task Force, composed of representatives from various Federal, state, and local agencies as well as from the City Council, Mayor, and County Supervisor's offices was then set up to study feasible alternatives to address these concerns. This study required an additional two years to complete. With the merging of the LACTC into the recently formed MTA, the MTA has been re-examining priorities for the 30-year Transportation Plan because the Plan proposed numerous rail projects which cannot all be funded due to a short fall in revenues which were previously projected. The MTA Board is faced with deciding how to best spend the limited funds available for the many projects planned. Some projects will need to be eliminated while others may have to be delayed. There still appears to be support among Board members for construction of the Metro Green Line Northern Extension project. However, the time frame for construction of this line is not known at this time.

Comment 7.2: The LACTC previously indicated that the northern extension of the Metro Green Line had top priority; however, now with the change from LACTC to MTA, the rules have changed, and even though this project should still be a priority, it may no longer be so considered. (H. Drollinger)

Response: See response to preceding comment.

Comment 7.3: Given the LADOA's financial difficulties, how can that agency propose a \$454 million people mover system to service its automobile lots? A Metro Green Line subway option that serves Bradley Terminal would serve airline passengers better and can be financed, at least in part, by MTA sales tax funding. (Coalition for Rapid Transit)

Response: See response to Comment 1.14 regarding a subway option. The purpose of the northern extension project is primarily to provide regional access, and service to the LAX lots would be a secondary objective. LADOA recently received approval from the FAA to add a three dollar passenger facility charge (PFC) to airline tickets for passengers flying out of LAX. Part of the revenues generated from the PFCs would be used for construction of a people mover system.

Comment 7.4: The Draft SEIR should have considered possible revenue supplements from joint development of a half dozen sites, including the two junctions of the Metro Blue and Green Lines and the Metro Green Line/Metro Link, along the El Segundo/Norwalk alignment. Both housing and commercial centers are possible at Metro Stations in the air rights and adjacent areas. Or what about building two San Diego Freeway-intercept stations at Culver and Compton Boulevards and using the air rights above and adjacent to needed pay parking structures for these stations to build revenue-producing apartment buildings, commercial offices, and retail stores. Why doesn't MTA have an equity interest in the proposed Continental City development since the Metro trains are the only feature which make this site attractive to developers? (Coalition for Rapid Transit)

Response: Joint development is normally considered for most rail projects. However, for LRT projects, the joint revenue potential would not be available in time to augment construction. The

future revenues could, however, potentially be used for operations or for enhancements of the existing rail facilities after they are built and operational.

2.2.8 Land Use

Comment 8.1: The people mover alignment appears to be about 50 feet inside the eastern property line of the Los Angeles County Municipal Courthouse site, which could have the following effects: loss of surface parking and voiding of the current regional planning approval of required parking for this facility; disturbance of major utility infrastructure; encroachment into the required Fire Department approved fire lane; interference with the proposed future parking structure; and close proximity to the new building structure with the potential for numerous adverse impacts. Both Continental Development Corporation and the County of Los Angeles Internal Services Department should be included in the construction coordination process, and that process should begin as early as possible during preliminary design. (Continental Development Corporation, Los Angeles County Internal Services Dept.)

Response: If the people mover alternative is selected, MTA intends to consult with both the Continental Development Corporation and Los Angeles County on this issue.

Comment 8.2: The SEIR should quantify potential impacts to the proposed Continental City based on existing lot configurations, driveways, and roadways, even though no building plans currently exist. Plan and Profile Drawing 1C in the Draft SEIR indicates potential impacts from column placement in at least two locations on Continental City Drive and to a planned 60-foot wide future street. Vertical clearances of the guideway structure may not be adequate for truck traffic; we recommend a minimum 16 foot clearance. The MTA should coordinate design of the people mover alignment with Continental Development Corporation to avoid or minimize adverse impacts to Continental City. (Continental Development Corporation)

Response: It is difficult to quantify impacts to a proposed development when plans are so preliminary in nature. Consultation with Continental Development Corporation to minimize impacts will be pursued once the plans for Continental City are better known.

Comment 8.3: Land values would likely increase at all station areas where development occurs. Potentially adverse impacts could occur in station areas where an inadequate land supply exists to accommodate projected commercial and/or residential development. The greatest pressure is expected to occur where land susceptible to reinvestment is exceeded by the combination of projected commercial and residential growth. Because land values are determined by market forces beyond the control of public agencies, these impacts cannot be mitigated. (Los Angeles Department of Planning)

Response: Transit studies of major projects in the United States indicate that land values generally increase within one-quarter mile of station locations. MTA is coordinating with the City in developing a joint land use policy to forestall adverse impacts of projected increased development as well as guide future development along transit corridors and around transit facilities.

2.2.9 Transportation and Circulation

Comment 9.1: Traffic data taken from the transportation analysis for the Playa Vista project should be provided in the SEIR as an appendix. (Continental City Development Corporation)

Response: This information is too voluminous to include in this SEIR. However, the data used can be found in the *Draft Environmental Impact Report, Master Plan Project for Playa Vista, Technical Appendices Volume XIV, Transportation Analysis, Appendix C Intersection Capacity Analyses*, prepared for the Los Angeles Department of Transportation, September 1992.

Comment 9.2: Section 5.2 of the Draft SEIR used manual traffic counts from 1989 and 1990. Because Department policy is that manual counts used for studies be no more than two years old, all new intersection analysis should use counts from 1991 and beyond. (Los Angeles Department of Transportation)

Response: When this SEIR study was begun in 1992, the traffic data used for the analysis was more recent than when the Draft SEIR was finally circulated in July 1993. We see no need for undertaking new counts since no substantial changes have occurred in the project area which would suggest that there would be any significant changes from the counts taken in 1989 and 1990. Note also that this project may not be built within the next five years because of changes in priorities for the MTA's 30-year transportation plan. The changes, now under review by the MTA Board, are necessary because of a shortfall in revenue that was previously projected to fund all the rail projects in this plan. If construction does not commence within five years, a number of issues would need to be reviewed, including traffic impacts.

Comment 9.3: The criteria used in the Draft SEIR to determine significant traffic impacts are more liberal than LADOT criteria. Under LADOT criteria, intersections with a current LOS of A, B, C, D, E or F are considered to have a significant impact if there is a change in V/C of .06, 0.06, .04, .02, .01, or .01, respectively. Under LADOT criteria, it appears that all but one of the studied intersections in the Draft SEIR would experience a significant impact. The traffic analysis is incomplete and should be corrected as part of the SEIR, and any significant traffic impacts should be mitigated to a level of insignificance. Insignificance means, for example, that if the 2010 base V/C ratio for an intersection is 1.104 and the with-project V/C is 1.193, then the mitigation measures will have to decrease the V/C ratio by 0.089. (Continental Development Corporation, Los Angeles Department of Transportation)

Response: Note that the impacts due to the project alternatives are incremental in nature. They represent only a small proportion of the total projected impacts to the intersections studied. However, under LADOT criteria, intersections with a current LOS of E or F would be considered significantly affected if only small traffic increases are projected due to a project. Therefore, if the LADOT criteria is applied, four of the five intersections studied would experience a significant impact. The MTA intends to work with the LADOT during preliminary engineering to formulate acceptable strategies to mitigate significant traffic impacts where possible.

Comment 9.4: We suggest that the 12 intersections shown in Table 4-1 of the Draft SEIR and the intersection of Sepulveda Boulevard and 96th Street be analyzed and presented in Table 5-3 of the Final SEIR. (Los Angeles Department of Transportation)

Response: Most of the 12 intersections mentioned are outside the project area, and it is unlikely that the northern extension project would have any significant effect on them. The five intersections selected for analysis are the ones that would be most affected by the rail alternatives due to their proximity to the proposed stations.

Comment 9.5: The intersection analysis should assume that the intersections noted in the last paragraph of page 6-3 of the Draft SEIR will be widened and that the intersection of Airport and Century Boulevards will be restriped only. All capacity analysis calculations for the 2010 base year condition and the with-project conditions should use the proposed intersection striping/configurations from the LAX Work Program. In addition, the analysis should assume that the following long-term widenings will occur: Arbor Vitae Street (Airport Boulevard to I-405); La Tijera Boulevard at I-405 on/off ramp; Lincoln Boulevard (Jefferson Boulevard to Loyola Boulevard); and La Cienega Boulevard (Arbor Vitae Street to Imperial Highway). Again, the LAX Work Program should be consulted for intersection geometric designs. The analysis should assume that the following projects will not occur by 2010: widening of Sepulveda Boulevard from Lincoln Boulevard to Centinela Avenue; widening of Aviation Boulevard from Imperial Highway to Arbor Vitae; Century Boulevard double decking project; Sepulveda Boulevard Tunnel project; and the 96th Street/Bellanca Avenue widening project. Specific mitigation measures must be proposed at Sepulveda Boulevard and LaTijera Boulevard, as well as at any other intersections on Sepulveda Boulevard impacted by project traffic. (Los Angeles Department of Transportation)

Response: Note that, as discussed in the response to Comment 9.2, if the traffic review indicates that the analysis needs to be redone, then these, as well as any other improvements known at the time of the new analysis, would be considered.

Comment 9.6: The annual average growth rate of 0.5 percent used in the intersection analysis in the Draft SEIR should be increased to 2 percent which is the average growth rate that the Department uses for study purposes. (Los Angeles Department of Transportation)

Response: The methodology used to calculate future traffic growth is the same as that used for previous light rail EIR studies, such as the Pasadena and Long Beach lines. The methodology utilized projected traffic volumes from the SCAG regional model and is considered to be acceptable for a regional project such as this. Furthermore, use of the 0.5 percent growth rate for projection of future base conditions showed that all intersections would be over capacity. Any higher growth rate would generate traffic volumes well beyond the levels that could be accommodated by the intersections with mitigation. Recent history, however, indicates that a 0.5% growth rate may, in fact, be high.

Comment 9.7: Section 5.2.3.5 of the Draft SEIR discusses mitigation of sight distance impacts by use of protected left-turn signal phasing at intersections along Century Boulevard that would be affected by column placement. Left-turn phasing generally decreases intersection capacity and level of service, so any intersections with proposed left-turn phasing should also be analyzed for impacts to capacity. (Los Angeles Department of Transportation)

Response: Refinement of the column placement has eliminated all sight distance problems.

Comment 9.8: The Final SEIR should include a more comprehensive evaluation of the impacts of the vehicular trips generated by the project, including traffic increases and parking demand around the stations and transportation center. (City of El Segundo)

Response: The analysis of traffic impacts performed in the Draft SEIR was consistent with the EIR and is sufficient in level of detail for this phase of project development.

Comment 9.9: The proposed project may result in an increase in trip generation above the current level which could increase the surface parking that may result in the development of a new circulation system in the area. What type of circulation will be in place during and after construction, and how will this affect pedestrian flow? (Los Angeles Department of Planning)

Response: MTA will work with the Los Angeles Department of Transportation during preliminary engineering to develop and implement an effective traffic circulation plan.

Comment 9.10: Travel diverted to an extended rail rapid transit system would reduce the number of auto trips in the region. However, auto trips would also be associated with travel to and from the stations. There will be localized traffic increases in the area of stations, especially those with parking facilities offering high levels of access for park-and-ride and kiss-and-ride patrons. Increases in traffic volumes on streets in station areas could have an effect on traffic flow at intersections critical to transit station access. (Los Angeles Department of Planning)

Response: The analysis presented in the Draft SEIR considers these factors.

Comment 9.11: Table 5-3 of the Draft SEIR shows that for the five intersections studied, that the same or worse V/C ratios will occur by 2010 regardless of which rail alternative is implemented. No traffic has been taken off the streets to improve ground access. (Coalition for Rapid Transit)

Response: Comment noted. The extension of the rail rapid transit system would reduce the number of auto trips and vehicle miles of travel in the corridor. However, there could be localized traffic increases at station locations, especially if there are parking facilities offering high levels of access for park-and-ride and kiss-and-ride patrons. The only such facility would be at Westchester Station if that station becomes the northern terminus. The only other significant facilities are the airport parking lots in LAX Lots B and C. It is expected that due to alternative transit provided by the project, the overall impact will be favorable.

Comment 9.12: The distribution of arriving and departing modes used by riders at each station site should include a realistic mix of bus, pedestrian, and passenger vehicle modes from both the local and regional areas. (Los Angeles Department of Planning)

Response: Comment noted. The final design of each station will take into account a realistic mixture of the various modes that would potentially use each station.

Comment 9.13: Other non-motorized transportation facilities such as bicycle pathways and racks should be considered in the analysis. (Los Angeles Department of Planning)

Response: The mode share for bicycles would be low in the LAX area. However, bike rack facilities could be provided at the stations.

Comment 9.14: The aerial guideway support structures could interfere with pedestrian movements. Also, beyond the right-of-way dedication, any station related facilities should be set back five to ten feet to accommodate increased pedestrian activity at station sites. (Los Angeles Department of Transportation, Los Angeles Department of Planning)

Response: The guideway has been designed not to impede pedestrian movements. During preliminary engineering, the station design will also be further refined to accommodate efficient pedestrian activity.

Comment 9.15: What will be the impacts to the signalized intersection at 104th Street and Aviation Boulevard if 104th Street needs to be relocated to accommodate the Metro Green Line Alternative? (Los Angeles Department of Transportation)

Response: The relocation of the street will not result in any impacts on access in the area. The alignment of both sides of the intersection will be improved with the relocation, and all traffic movements currently provided will be maintained.

Comment 9.16: The fourth sentence in the first paragraph on page 3-30 of the Draft SEIR should be revised to read, "Straddle bents would be used at intersections where column touchdown points would impede traffic flow or cause visibility problems." (Los Angeles Department of Transportation)

Response: Design will be developed to minimize adverse impacts. A specific method is not defined at this time. LADOT will be involved in the review procedure.

Comment 9.17: Striping changes without street improvements on roadways that are not constructed to the City's designated standards are not acceptable. City standards for a Major Highway are 40-foot half widths and 10-foot sidewalks, while those for a Secondary Highway are 35-foot half widths and 10-foot sidewalks. Aerial guideway columns should be located on MTA or on private property and outside of the sidewalk area, if possible, to maintain good pedestrian flow and circulation. Also, beyond the right-of-way dedication, any station-related facilities should be set back five to ten feet in consideration of increased pedestrian activity at station sites. (Los Angeles Department of Transportation)

Response: Comment noted. MTA intends to coordinate with your department during final engineering on this issue.

2.2.10 Public Services

Comment 10.1: As part of mitigation for the potential for increased crime and vandalism in and around rail stations, the MTA should be required to assign transit security personnel in sufficient numbers to provide adequate service, and the security force must be held to provide a high standard of service so that riders feel safe enough to use the rail line. In addition, vandalism-resistant materials should be used wherever feasible. As mitigation measures, MTA should be required to implement a youth oriented anti-vandalism education program and a graffiti removal program. (Continental Development Corporation)

Response: Security at Metro rail stations and facilities is a high priority for MTA, and the Metro Green Line Northern Extension would have security measures similar to those in place for existing rail projects. Vandalism-resistant materials will be used wherever possible. MTA already has an existing anti-graffiti program which will continue.

2.2.11 Construction

Comment 11.1: A 24-foot vertical clearance is required for the portion of the fixed guideway along Century Boulevard between Sepulveda Boulevard and Aviation Boulevard because this segment of Century Boulevard is designated as a house moving route. (Los Angeles Department of Transportation)

Response: The segment of the guideway along Century Boulevard is actually located on property off the south side of the street, with the exception of the portion where the alignment crosses Century Boulevard just west of Avion Drive. The final design plans will be coordinated with your Department to ensure that the guideway would be built to an acceptable height.

Comment 11.2: Construction work hours should be coordinated with the Department's Rail Transit Section. (Los Angeles Department of Transportation)

Response: MTA will coordinate with the Rail Transit Section on this issue.

Comment 11.3: Video surveillance cameras, as well as traffic control officers, may be required at certain locations to mitigate construction traffic impacts. (Los Angeles Department of Transportation)

Response: The maintenance of traffic plan will be prepared with extensive coordination with LADOT.

Comment 11.4: What would be the construction impacts on vehicular and pedestrian traffic, the influence on adjacent structures and buried utilities, and the necessity of final restoration of the street surfaces? (Los Angeles Department of Planning)

Response: Sections 5.16.1, 5.16.2, and 5.16.8 of the "Construction" section of the Draft SEIR discuss these issues. With regard to buried utilities, the full extent of specific impacts are not known at this time. However, during final design, MTA will consult with all appropriate utility companies to discuss measures to reduce potential impacts on existing utility lines.

Comment 11.5: Truck staging areas and haul routes should be coordinated with both the Department of Transportation and the Los Angeles Bureau of Engineering. (Los Angeles Department of Transportation)

Response: MTA will coordinate with both agencies on these matters.

Comment 11.6: MTA should work closely with the Los Angeles Unified School District planners to mitigate any safety concerns of hauling excavated earth material if the Metro Green Line Along Aviation Boulevard Alternative is selected. (Los Angeles Department of Planning)

Response: MTA will consult with the Los Angeles Unified School District.

Comment 11.7: What construction methods will be used for the stations? What is the typical depth for the station excavation? (Los Angeles Department of Planning)

Response: Construction methods have not been defined at this time. They will be defined during the design process. For the existing Metro Green Line stations, cast-in drilled hole

foundations typically are within the 70 feet to 90 feet range. Other excavations range between five feet and 13 feet.

Comment 11.8: How much time will the tunnel construction require? What are the impacts and possible mitigation measures? (Los Angeles Department of Planning)

Response: Mitigation measures are described in Sections 5.3.4, 5.14.5, 5.15.3, and 5.16.12 of the Draft SEIR. Time for construction will depend on methods of construction and restrictions resulting from mitigation measures developed through discussions with the FAA and LADOA. Methods of construction will be better known as design proceeds.

Comment 11.9: We are concerned about the constructability of the cut-and-cover section of the Metro Green Line Along Aviation Boulevard Alternative in the direct vicinity of the thresholds of the south runways. The issues of concern to the FAA in their review of the FAA Form 7460-1, summarized in Comments 6.3, and 6.5 through 6.10, should be addressed. (Los Angeles Department of Airports)

Response: Refer to the responses to the FAA's comments. MTA intends to closely coordinate the plans and construction of the cut-and-cover section with both the LADOA and the FAA if the Metro Green Line Alternative is selected.

Comment 11.10: Explain why 104th Street has to be relocated if the portal would be outside the existing roadway. (Los Angeles Department of Transportation)

Response: The statement (page 5-13) about the roadway to which you are referring relates to Aviation Boulevard. The portal, as well as the alignment, is outside of the existing Aviation Boulevard and no reduction in roadway capacity would be expected. Although the portal would be located about 115 feet north of the centerline of the existing 104th Street, the top of the subway tunnel would be only about three feet below the surface of 104th Street at this point. This street will likely need to be relocated about 25 feet south where the subway tunnel would be deeper beneath the ground surface. The need to relocate 104th Street will be determined during final engineering.

Comment 11.11: City policy for subway ventilation openings requires that they be located on LACMTA property. However, under certain conditions and as a last resort, openings may be located on sidewalks in the public right-of-way. (Los Angeles Department of Transportation)

Response: Comment noted.

Comment 11.12: We are concerned about the effect of the relocation of the drainage ditch adjacent to the cargo areas in the Metro Green Line Along Aviation Boulevard Alternative. Cargo operations in the adjacent buildings must be maintained during construction. (Los Angeles Department of Airports)

Response: If the Metro Green Line Alternative is selected, MTA will coordinate the design of the relocation with your Department as well as the air cargo businesses which could potentially be affected to ensure that impacts to cargo operations are minimized. Page 5-74 of the Draft SEIR indicates that a plan will be developed to ensure that no businesses are without access to public roadways throughout the construction period.

Comment 11.13: If portions of the drainage ditches along Aviation Boulevard and Century Boulevard need to be relocated, where would they be relocated, and how much time would it take? (Los Angeles Department of Planning)

Response: If the Metro Green Line Alternative is selected, the drainage ditch along Aviation Boulevard would be relocated slightly west onto LAX property, and the ditch along Century Boulevard would be relocated slightly south also onto LAX property. If this alternative is selected, further studies will be undertaken to determine the extent of relocation necessary and the locations where the ditches would be moved. MTA intends to coordinate the design plans with your Department. Time for construction will not be known until the design is developed and constraints due to traffic mitigation requirements are known.

Comment 11.14: What would be the procedure if soil or groundwater contamination from leaking underground storage tanks is encountered during construction? (Los Angeles Department of Planning)

Response: If contamination is encountered, the type and extent of such contamination will first be determined and appropriate disposal methods will be devised and implemented in accordance with applicable Federal, State, and local regulations. This issue is discussed further in Section 5.15.

Comment 11.15: To reduce air quality impacts during construction, measures, such as the following, should be implemented: Construction equipment should be shut off to reduce idling when not in direct use for extended periods of time; low sulfur fuel should be used for construction equipment; maintain a fugitive dust control program during cleaning, grading, earth moving or excavation, by regular watering, paving construction roads, or other dust preventative measures as defined in the South Coast Air Quality Management District (SCAQMD) Rule 403; and comply with SCAQMD's regulation XV and implementation of a traffic demand management program. (City of El Segundo)

Response: MTA will be required to implement most of the measures listed in order to comply with SCAQMD Rule 403. A traffic control plan, including detour plans, will also be formulated in cooperation with the City of Los Angeles and other affected jurisdictions.

Comment 11.16: The impact of the people mover alternative on the Caltrans maintenance facility at Aviation Boulevard and Imperial Highway has not been assessed. Placement of the people mover columns could conflict with this facility including parking and traffic circulation. The vertical and horizontal clearances from the I-105 structure and columns must be verified. Early coordination with Caltrans is recommended. (Caltrans)

Response: The people mover alignment has been designed to minimize impacts to both the proposed Caltrans maintenance facility and the I-105 structure. If the people mover alignment is selected for implementation, MTA intends to coordinate the preliminary engineering plans with Caltrans.

Comment 11.17: The SEIR needs to address the temporary City Bus Center impacts of the construction of the MTC. Under each build alternative, existing bus routes would need to be modified during and after construction of the MTC. What is needed is an interim terminal since many of the services that now serve the City Bus Center also layover there. (Metropolitan Transportation Authority, Operations Division)

Response: See response to Comment 9.9.

2.2.12 Miscellaneous

Comment 12.1: This SEIR should be discarded and rewritten with a rational proposal for the interface with the airport. (Sierra Club)

Response: The alternatives for interface with the airport which were examined in this SEIR were determined to be the most feasible based upon the results of several previous studies of many other potential alignments. Section 2.0, "Project History" provides a detailing of the earlier studies and alternatives examined and discusses reasons that some of the other alternatives were rejected. Various federal, state, and local agencies, as well as elected officials and members of the community, have been involved in the formulation of both the previous alternatives developed as well as those alternatives considered in this SEIR. Both public and private support indicate that these alternatives are both rational and feasible.

Comment 12.2: The Airport Commission should permit transit buses to directly access the airline satellite terminals instead of requiring passengers to travel by shuttle to and from Parking Lot C to use the bus system or to access their parked cars. The purpose of this inconvenience is to force people to drive their cars and pay high parking fees, and to charge high shuttle and rental car agency franchise fees. Parking fees should be charged at a rate to discourage single-occupant auto travel to the airport, and attractive alternatives should be provided the traveler to get to and from the airport. (Sierra Club)

Response: This issue is outside the jurisdiction of the MTA, the sponsoring agency for the Metro Green Line Northern Extension project, which is the subject of this SEIR. As such, this comment is not germane to this project and cannot be addressed by the MTA.

Comment 12.3: The Metro Green Line needs to serve both LAX and the transit center directly without requiring transfers. (Westchester/LAX Chamber of Commerce)

Response: The 1989 Draft EIR considered an option, Alternative 2, which would have provided service (via subway) from Aviation/Imperial Station to an airport station located between Terminals 1 and 2. This alternative was eliminated from further consideration for several reasons. Alternative 2 could present major utility conflicts and construction complexities at the portal and at the LAX Station location. Air passenger service would be disrupted since construction of the station would temporarily close two gates at each terminal. The study also indicated that two contamination areas were known to exist or were in proximity of that alternative and that other contamination sites also appeared to be in the vicinity of the proposed corridor route. Because of the geometrics necessary for this alignment, it also would not be possible to serve the transit center at Lot C as well as Century Boulevard and Westchester Parkway. Therefore, this alternative did not maximize regional access, and it would have been considerably more expensive than the other alternatives considered in the Draft EIR.

Comment 12.4: We are concerned about the safety aspect of a 5.2% grade on the connector track between the Metro Green Line and Blue Line. The vehicle contracted for the Metro Green Line cannot stop on a grade greater than 4.5%. (California Public Utilities Commission)

Response: The vehicles are designed to stop at a 6% grade.

Comment 12.5: A new or revised Cooperative Agreement will be necessary for this and other Metro Green Line extensions to reflect new requirements since the Metro Green Line project is no longer within the I-105 median. (Caltrans)

Response: MTA will work with Caltrans to develop a new or revised Cooperative Agreement.

Comment 12.6: Are there any parts of the alignments being proposed in the SEIR that still need to be approved by other agencies? (H. Drollinger)

Response: All of the agencies (Caltrans, Los Angeles Departments of Transportation and Airports, and the Federal Aviation Administration) that need to approve the selected alignment have been involved in the process of formulation and review of the alternatives assessed in this SEIR through their membership on the joint interagency task force. These agencies have had opportunities to comment informally on the alignments proposed, and their input has been considered in the design of the proposed alternatives. All agencies will still need to provide their formal approvals prior to construction of the northern extension project.

Comment 12.7: I am concerned about the impacts of steel particles coming off of the steel wheels of the train vehicles. (D. Cope)

Response: The specific technology to be employed has not yet been determined. The vehicles could have either steel wheels or rubber tires. Even if a vehicle with steel wheels is selected, it is highly unlikely that steel particles would fly off the wheels and cause damage to persons or property.

Comment 12.8: The SEIR only analyzes the impacts for local trolley service limited to the immediate vicinity of LAX and does not analyze the regional aspects of bringing people to LAX. For example, two of the major points of origin for transit passengers would be downtown Los Angeles and Long Beach. There is no effective transfer that these passengers could make from the Metro Blue Line to access LAX. (Coalition for Rapid Transit)

Response: The patronage analysis used in the SEIR does consider regional passengers, including those transferring from the Metro Blue Line, to access the LAX area. To access LAX, Metro Blue Line passengers would need to transfer to the Metro Green Line Norwalk to El Segundo segment at the Imperial/Wilmington Avenue Station and then transfer to the LAX-CTA people mover at either Aviation/Imperial Station or Lot C, depending upon which rail alternative is selected for implementation.

Comment 12.9: The discussion about the people mover operating characteristics presented in the last paragraph on page 3-28 is confusing. What is meant by "external train" services? Is the internal loop the same as the CTA loop? Explain the "combined headway" of 80 seconds. (Los Angeles Department of Transportation)

Response: The external train services are those trains which would operate between the CTA loop and destinations beyond, i.e., one train would operate between Westchester Station and the CTA and the other train would operate between Aviation/Imperial Station and the CTA. The internal loop is the same as the CTA loop. The combined headway of 80 seconds means that a train will pass a point where all three lines are present every 80 seconds. This is derived from the fact that each of the three lines has a four-minute interval between trains. The combined headway would, therefore, be $240 \text{ seconds} / 3 \text{ trains} = 80 \text{ seconds}$.

Comment 12.10: We request that MTA coordinate design of the people mover alignment with Continental City development plans to minimize potential aesthetic, light and glare, and shade and shadow impacts on this proposed development. (Continental City Development Corporation)

Response: If the people mover alignment is selected, MTA intends to consult with Continental City Development Corporation on these issues.

Comment 12.11: What happened to the Department of Airports and MTA public relations work to bring the SEIR to the attention of the public? (Coalition for Rapid Transit)

Response: Notices of the public hearing were published in the *Los Angeles Times* and the *Argonaut*.

Comment 12.12: Several figures were missing from my copy of the Draft SEIR. (T.A. Nelson, P.E., Los Angeles Department of Airports, Los Angeles Department of Transportation, Caltrans)

Response: Several figures were inadvertently left out of some of the copies of the Draft SEIR. Please contact the MTA representative listed in Section 1 of this Final SEIR, and we will send you copies of the missing figures.

Comment 12.13: The redundant Table of Contents page should be deleted from the Draft SEIR. (Los Angeles Department of Transportation)

Response: Comment noted, however, the Draft SEIR is not being reprinted.

Comment 12.14: Page numbers should be put on the figure pages of the Draft SEIR. (Los Angeles Department of Transportation)

Response: Comment noted, however, the Draft SEIR is not being reprinted. Any figures that are included in this Final SEIR will have page numbers.

Comment 12.15: The tail tracks should be labeled on the following figures: Figure 3-10 (Westchester Station/Metro Green Line; Figure 3-20 (Westchester Station/People Mover); and Figure 3-14 (Aviation/Imperial Station). The joint tracks should be identified on Figure 3-19 (Lot C Station and Multi-Modal Transportation Center/People Mover). (Los Angeles Department of Transportation)

Response: Comment noted, however, the Draft SEIR is not being reprinted.

Comment 12.16: James Okazaki of the Department should be added to the list of names of persons consulted (appearing on page 10-2 of the Draft SEIR) under the heading of the "Transportation Department". The other persons listed under this heading were not consulted. (Los Angeles Department of Transportation)

Response: Mr. Okazaki is already listed on page 10-2 under the heading, "LAX/Green Line Interagency Transit Study Joint Policy Group and Technical Task Force". To avoid redundancy, each person's name was listed in Section 10 only once. The project consultant spoke on the telephone with the people listed under the heading of the "Transportation Department" regarding transportation issues relative to this SEIR.

2.3 CORRECTIONS AND ADDITIONS

Comment 1: The cover of the Draft and Final SEIRs should be dated. (Los Angeles Department of Transportation)

Response: Comment noted, however, the Draft SEIR is not being reprinted. The Final SEIR will be dated.

Comment 2: The second sentence under the discussion of the Century/Airport Station on page 3-8 should be changed to read, "The center-platform would straddle Airport Boulevard with pedestrian access at both ends of the platform." (Los Angeles Department of Transportation)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 3: The first sentence on page 3-14 should be changed to read, "The aerial platform would have pedestrian access at both ends." (Los Angeles Department of Transportation)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 4: The last sentence in the second paragraph on page 4-4 should be changed to read, "The contracts for preparation of the upcoming master plan are expected to be awarded in October 1993." (Los Angeles Department of Airports)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 5: Delete the sentence in the third paragraph on page 4-5, "In addition, a parking surcharge of one dollar per car would be levied for airport-serving parking lots." (Los Angeles Department of Airports)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 6: Page 4-6 discusses the proposed Continental City development. The description of this development should be revised as follows: "Continental City is a mixed-use, master-planned urban center. The 28.8-acre site is located on the northeast corner of Imperial Highway and Aviation Boulevard. In 1986, the City of Los Angeles approved a 20-year development agreement for the project which approved development of: a maximum of 3,100,000 square feet of commercial office space including, at the developer's option, a maximum of 100,000 square feet of retail space and a maximum of 1,200 hotel rooms. The master plan for the project included approximately 2 million square feet of retail space. In 1992 a portion of the site was sold to the County of Los Angeles for development of a municipal court facility. Construction of that facility is anticipated to commence sometime during 1994. Tract approval for the remaining portions of the Continental City property allows for development to occur anytime within the next 14 years." (Continental Development Corporation)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 7: The second sentence in the third paragraph on page 5-10 should be changed to read, "One further assumption was that the number of park-and-ride trips in the PM peak hour equals the number of trips attracted to the station in the AM peak hour." (Los Angeles Department of Transportation)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 8: The number of peak hour boardings should be shown for each station in Table 5-2 of the Draft SEIR. In addition, the source of the kiss-and-ride usage statistics and the "existing directional distribution patterns" (discussed on page 5-10) should be cited. (Los Angeles Department of Transportation)

Response: Comment noted and the Draft SEIR is hereby revised as follows:

PEAK HOUR STATION BOARDINGS*				
ALTERNATIVE	METRO GREEN LINE		PEOPLE MOVER	
	AM	PM	AM	PM
Westchester	200	130	200	130
Lot C	160	400	150	350
Century/Airport	50	510	40	470
Century/Concourse	—	—	30	310
Lot B	—	—	20	70
Aviation/Imperial	90	330	70	290

* Station boardings were developed for the traffic analysis and do not include transfers. Numbers are based on SCAG 1991 forecasts.

The source of the information on page 5-10 of the Draft SEIR is the 1989 Draft EIR, *Coastal Corridor Rail Transit Project - Northern Segment*.

Comment 9: The table and text on page 5-53 should be revised. Note (1) of the table should read "Usage factor of 19.7 Kwh/year/square foot; assumes 1,200 square feet for aerial stations." The third paragraph should read "Note that energy usage by any of the three alternatives would be offset by energy savings from reduced vehicle trips." (T.A. Nelson, P.E.)

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 10: On page 6-2 in the discussion for Section 6.2.4, "Metro Green Line Northern Extension from Westchester Station or Lot C to Marina del Rey", the Draft SEIR should be revised to reflect that this project could be built if either the people mover or Metro Green Line technology are selected for implementation. (Continental Development Corporation)

Response: Comment noted. The Draft SEIR is hereby revised to state, "This would be a northern extension to the Metro Green Line alternative assessed in this SEIR. This segment has previously been studied, and an EIR for the *Coastal Corridor Rail Transit Project-Northern Segment* was completed for this project in 1989. No construction would begin on this segment until sometime after the Metro Green Line Northern Extension to Lot C or Westchester Station is completed. Any future northern extensions would likely employ the same technology adopted for the portion of the line to Lot C or Westchester Station."

Comment 11: Section 6.0, "Cumulative Impacts", should also include the following related development projects within the City of El Segundo (City of El Segundo, Department of Planning and Building Safety):

DEVELOPMENT PROJECTS WITHIN THE CITY OF EL SEGUNDO	
PROJECT	STATUS
Holly Park Condominiums 1400 E. Holly Avenue 1.4 acres; 28 units	Approved
Hertz Car Rental storage lot Northwest corner of Douglas St. and Mariposa Ave.	Approved
Sepulveda Boulevard widening Imperial Highway to Rosecrans Ave.	Approval pending
Chevron refinery 324 El Segundo Blvd. Reformulated gasoline project	Approval pending
Overton-Moore Associates 450 North Sepulveda Blvd. 381,673 sq. ft. office	Approved
Blakesley-Comstock 615 Nash 55,000 sq. ft. Research and Development	50% built and occupied
Continental Grand 300-400 Continental Blvd. 467,000 sq. ft. office	One building occupied
The Grand Way 325-375 Continental Blvd. 460,548 sq. ft. office	One building occupied
Xerox Center Phase IV 1951-1961 El Segundo Blvd. 255,242 sq. ft. office and 350 room hotel	Approved
Proposed townhomes 1415 E. Grand Ave. 28 townhome units	Approved

Response: Comment noted and the Draft SEIR is hereby revised.

Comment 12: Change the fourth name on page 10-3 to read, "Neil Peterson, Executive Director, LACTC". (Los Angeles Department of Transportation)

Response: Comment noted and the Draft SEIR is hereby revised.

3.0 PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES COMMENTING ON THE DRAFT SEIR

A complete list of the individuals, organizations, and public agencies commenting on the Draft Supplemental Environmental Impact Report is presented below.

PUBLIC AGENCIES

Local

City of El Segundo, Department of Planning and Building Safety, Sarah Mosleh, Associate Planner

City of Los Angeles, City Council, Ruth Galanter, Councilwoman, Sixth District

City of Los Angeles, Department of Airports, William M. Schoenfeld, Deputy Executive Director

City of Los Angeles, Department of City Planning, Con Howe, Director of Planning

City of Los Angeles, Department of Transportation, James M. Okazaki, Chief of Transit Programs

City of Rancho Palos Verdes, Joel H. Rojas, Senior Planner

County of Los Angeles, Internal Services Department, Stephen T. Sharr, Division Manager, Project Management Division

State

State of California, Department of Transportation (Caltrans), Robert Goodell, Chief, Advance Planning Branch, District 7

State of California, Public Utilities Commission, Donald R. Johnson, Supervising Engineer, Rail Transit Safety Branch, Safety Division

Federal

U.S. Department of Transportation, Federal Aviation Administration, Alex Hammond, Acting Regional Administrator