Group and Organization Comments and Responses
INFORMATION CONCERNING

BEVERLY HILLS AS UNITED
IN SUPPORT OF THE WESTSIDE SUBWAY
EXTENSION ALONG SANTA MONICA BLVD.
BUT VIGOROUSLY OPPOSED TO THE “ALTERNATIVES”
UNDER BEVERLY HILLS HIGH SCHOOL
AND RESIDENCES
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853-1
The map included with your comment has been noted.

853-2
Your comment below the map about the "Lasky alternative" and the "Linden" alternative going under the high school has been noted.
Your comments about the City of Beverly Hills City Council's review of the Draft EIS/EIR, their submission of a comment letter, and their concerns about tunneling under residential properties and the Beverly Hills High School have been noted.

Your comment about the City's support for the Westside Subway Extension Project and its strong preference for the alignment along Wilshire Boulevard and Santa Monica Boulevard have also been noted.
The unanimous resolution from the Beverly Hills City Council supporting the Westside Subway Extension Project, supporting the route along Santa Monica Boulevard, opposing the alternative route under Beverly Hills High School, and expressing concern about potential impacts from the Project has been noted. Please refer to submission 608 for a detailed response to the official comment letter from the Beverly Hills Unified School District.
Your inclusion of an article from the *Los Angeles Times* entitled “Westside subway extension public comment period starting” has been noted. The comment process followed NEPA/CEQA guidelines. Following the completion of the Draft EIS/EIR, a notification of availability (NOA) was published in the Federal Register by FTA and advertised through local media to solicit public comment by Metro. The Draft EIS/EIR was circulated to those agencies with jurisdiction by law, parties that have expressed an interest, either through the scooping process or in response to the Notice of Availability, and other entities potentially affected by any of the alternatives. There was a 45-day public comment period for the Draft EIS/EIR from September 3-October 18, 20 with a total of five public hearings. Only comments received during this official 45-day public comment period were included as part of the official record and responded to in the Final EIS/EIR. Commenters could submit comments by one of five methods: written letter, email, online comment form, and written and oral comments at the public hearings.
Metro followed FTA’s New Starts project planning and development process and carefully considered public input in developing the location of the Century City Station. The process of determining the location of the Century City Station began with the Westside Transit Corridor Alternatives Analysis Study in 2007. At the beginning of the Alternatives Analysis (AA) Study, two general corridors—one along Wilshire Boulevard and the other along Santa Monica Boulevard—were presented to the public at Early Scoping meetings. Some people who spoke at the Early Scoping meetings generally supported the proposed station locations that were presented (Santa Monica Boulevard in Century City being one of them).

However, some attendees also suggested additional or alternate station locations, with some commenting that the station in Century City should be south of Santa Monica Boulevard, closer to the center of Century City, which Metro took into consideration.

During scoping for the Draft EIS/EIR in 2009, Metro sought additional public comment on the alignment and station options in the Beverly Hills to Westwood area, including the Century City Station location. During preparation of the Draft EIS/EIR, the alignment and station locations were refined to avoid impacts to the natural and built environments where feasible, provide a cost-effective solution to increase east/west mobility in the Study Area, and respond to public and agency input. The analysis and refinement of the station and alignment locations, including the Century City Station location, are described in the Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report. Ultimately, the Century City Santa Monica Boulevard and the Century City Constellation Station were carried forward for analysis in the Draft EIS/EIR.

Following public circulation of the Draft EIS/EIR on October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools. The Metro Board of Directors also decided to not include the Constellation South alignment between the Wilshire/Rodeo and Century City Stations as part of the LPA, but to continue to study the Constellation North and the Santa Monica Boulevard alignments. The Constellation South alignment passed beneath more residential properties than the Constellation North or Santa Monica Boulevard alignments. In addition, the Metro Board of Directors decided to not include the West or Central alignments between Century City and Westwood/UCLA as part of the LPA, but to continue to study the East alignment because the East alignment is the most direct and least expensive route between the two stations.

Safety, both during construction and eventual operations, is one of Metro’s highest priorities.
and is one of the key evaluation criteria in selection of the Locally Preferred Alternative (LPA). In response to the Metro Board of Director’s request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

On most transit tunnel projects, significant portions of the alignment are constructed adjacent to or beneath buildings. The LPA passes beneath homes and schools in these neighborhoods because the curve radius required for subway tunnels is much wider than that required at a typical surface street intersection. The current alignment minimizes tunneling under buildings to the east and west of both the Century City Stations. The station position on Constellation Boulevard requires the tunnel alignment to be under the south portion of Beverly Hills High School Building B in order to reach the station location. There is no reasonable tunnel alignment that does not pass under homes or structures within the Beverly Hills High School campus.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. The use of state-of-the-art pressurized closed-face TBMs for soft-ground tunneling has greatly improved the control of ground movements such that tunneling can be done with minimal surface settlements. The presence of the tunnels will neither affect the risk to buildings above them during an earthquake nor change the severity of shaking. Finally, tunnels can be constructed and operated safely in gassy grounds and oil wells do not pose an unmitigatable risk to tunneling.

The additional detailed geotechnical studies also assessed soil conditions and determine the potential for noise or vibration impacts on the surface along the refined alignments. These studies concluded that the predicted vibration and noise levels are within the FTA requirements and operation of the subway is not anticipated to have adverse impacts with the implementation of mitigation, including areas where the tunnels pass beneath homes and schools. During construction, low levels of noise and vibration may be experienced for a day or two as each of the two TBMs pass under a given location. In addition, as the tunnels are driven, construction trains bring supplies to and from the tunnel heading. However, these underground construction noises will also be controlled to be within Metro criteria.

The Westside Subway Extension will not reduce the availability of BHHS for use as an emergency shelter or impact the operations of its use as an emergency shelter. Furthermore, tunneling would not prevent future development of the BHHS campus.
vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top of the tunnel), which would allow for construction of an underground structure over the tunnel at a later date.

These geotechnical studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site. Tunnels to the east and west of Century City pass through at least two active faults. However, there are numerous tools, designs, and construction means and methods that have been used elsewhere that can be used to safely tunnel through these fault zones.

In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that the Century City Constellation Station would result in 3,350 more boardings along new Westside Subway Extension stations than the Century City Santa Monica Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile walksheds.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station and alignments and Section 8.8.4 of the Final EIS/EIR for a more detailed response to geotechnical concerns. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
The highlighted sections of the referenced Beverly Hills Courier article have been noted. Please see the response to comment 853-6 above regarding the location of the Century City Station and alignments, including the development of station and alignment options. Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The *Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report* provides a more detailed description of the refinements to the Century City Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the *Westside Subway Extension Century City Station Location Report* for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the *Westside Subway Extension Century City Area Fault Investigation Report* and the *Westside Subway Extension Century City Area Tunneling Safety Report*. The results of further ridership studies can be found in the *Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives* and the *Westside Subway Extension Century City TOD and Walk Access Study*. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
From the hills of Beverly Hills

United city speaks
And notes on issues, event by event

853-8

Your inclusion of the October 6, 2010 article from the Beverly Hills Weekly entitled “United city speaks” has been noted. Please see the response to comment 853-6 above regarding the location of the Century City Station and alignments, including the development of station and alignment options.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report provides a more detailed description of the refinements to the Century City Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your inclusion of the July 8, 2010 article from the Beverly Hills Weekly entitled "Subway Blues" has been noted. Please see the response to comment 853-6 above regarding the location of the Century City Station and alignments, including the development of station and alignment options.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report provides a more detailed description of the refinements to the Century City Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your inclusion of the October 14, 2010 article from the Beverly Hills Weekly entitled "MTA insults council" has been noted. Please see the response to comment 853-6 above regarding the location of the Century City Station and alignments, including the development of station and alignment options.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report provides a more detailed description of the refinements to the Century City Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your inclusion of the letter submitted to the Beverly Hills Courier dated October 1, 2010 has been noted. The addition of your comment about this letter being one of many has also been noted. Please see the response to comment 853-6 above regarding the location of the Century City Station and alignments, including the development of station and alignment options.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The Westside Subway Extension Alternatives Screening and Refinement Scoping Report provides a more detailed description of the refinements to the Century City Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your comment in support of the Century City Santa Monica Station and concerns about tunneling beneath homes and schools has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools. The Metro Board of Directors also decided to not include the Constellation South alignment between the Wilshire/Rodeo and Century City Stations as part of the LPA, but to continue to study the Constellation North and the Santa Monica Boulevard alignments. The Constellation South alignment passed beneath more residential properties than the Constellation North or Santa Monica Boulevard alignments. In addition, the Metro Board of Directors decided to not include the West or Central alignments between Century City and Westwood/UCLA as part of the LPA, but to continue to study the East alignment because the East alignment is the most direct and least expensive route between the two stations.

Safety, both during construction and eventual operations, is one of Metro's highest priorities and is one of the key evaluation criteria in selection of the Locally Preferred Alternative (LPA). In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

On most transit tunnel projects, significant portions of the alignment are constructed adjacent to or beneath buildings. The LPA passes beneath homes and schools in these neighborhoods because the curve radius required for subway tunnels is much wider than that required at a typical surface street intersection. The current alignment minimizes tunneling under buildings to the east and west of both the Century City Stations. The station position on Constellation Boulevard requires the tunnel alignment to be under the south portion of Beverly Hills High School Building B in order to reach the station location. There is no reasonable tunnel alignment that does not pass under homes or structures within the Beverly Hills High School campus.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. The use of state-of-the-art pressurized closed-face TBMs for soft-ground tunneling has greatly improved the control of ground movements such that tunneling can be done with minimal surface settlements. The presence of the tunnels will neither affect the risk to buildings above them during an excavation.
earthquake nor change the severity of shaking. Finally, tunnels can be constructed and
operated safely in gassy grounds and oil wells do not pose an unmitigatable risk to
tunneling.

The additional detailed geotechnical studies also assessed soil conditions and determine
the potential for noise or vibration impacts on the surface along the refined alignments.
These studies concluded that the predicted vibration and noise levels are within the FTA
requirements and operation of the subway is not anticipated to have adverse impacts with
the implementation of mitigation, including areas where the tunnels pass beneath homes
and schools. During construction, low levels of noise and vibration may be experienced for
a day or two as each of the two TBMs pass under a given location. In addition, as the
tunnels are driven, construction trains bring supplies to and from the tunnel heading.
However, these underground construction noises will also be controlled to be within Metro
criteria.

The Westside Subway Extension will not reduce the availability of BHHS for use as an
emergency shelter or impact the operations of its use as an emergency shelter.
Furthermore, tunneling would not prevent future development of the BHHS campus. The
vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top
of the tunnel), which would allow for construction of an underground structure over the
tunnel at a later date.

These geotechnical studies also determined that the Century City Santa Monica Station
would cross the West Beverly Hills Lineament, a northern extension of the active Newport-
Ingleswood Fault, which poses a significant safety risk to passengers at this station location.
No evidence of faulting was found at the proposed Century City Constellation Station site.
Tunnels to the east and west of Century City pass through at least two active faults.
However, there are numerous tools, designs, and construction means and methods that
have been used elsewhere that can be used to safely tunnel through these fault zones.

In addition, the Century City Constellation Boulevard Station has the best pedestrian
environment, can be expected to attract the most transit riders, and is centrally located to
help shape the redevelopment of Century City as an important transit-oriented destination
on the Westside Subway Extension. Further refinements to the ridership analysis
concluded that the Century City Constellation Station would result in 3,350 more boardings
along new Westside Subway Extension stations than the Century City Santa Monica
Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile
walksheds.

Based on all of these factors, the Century City Station Location Report concluded by
recommending that the Century City Station be located along Constellation Boulevard due
to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership
853-12
projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station and alignments and Section 8.8.4 of the Final EIS/EIR for a more detailed response to geotechnical concerns. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

853-13
Your comment regarding the location of the Century City Station location has been noted. Please see the response to comment 853-12 above.
Your comment regarding the cost differential between the two Century City Station location options has been noted. Please refer to the Westside Subway Extension Century City Station Location Report for an updated cost comparison of the two Century City Station locations.

Your comments regarding the modernization expansion plans for the high school have been noted. The vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top of the tunnel), which would allow for construction of an underground structure over the tunnel at a later date. However, Metro will continue to coordinate with BHHS throughout the design phase to minimize conflict.

Your comment regarding the risks of tunneling near oil wells have been noted. Tunnels, through known oil well fields, have been safely constructed with no adverse incidents with either hazardous gas or oil casings. In recent Los Angeles tunneling history, there have been no oil well incidents related to tunneling, and oil well casings have been safely removed and re-abandoned.

During the Draft EIS/EIR, known oil fields and documented active or abandoned oil wells were identified from published oil well maps. Table 4-45 in the Draft EIS/EIR identifies oil wells (abandoned and active) that may be located within 100 feet of the proposed tunnel or station, as well as those that may be located within the proposed tunnel alignment. The oil fields themselves are much deeper than the potential subway tunnels. Shafts for existing active and abandoned oil wells have been mapped in the vicinity of the project alignment along with other utilities such as sewer, water, gas, and electric lines.

During the preparation of the Final EIS/EIR, a comprehensive study of all available information found that there was one mapped abandoned oil well within the proposed tunnel alignment. According to the state’s records, the location of this well is beneath a parking structure on Century Park East and does not lie within the Beverly Hills High School (BHHS) campus. The magnetic survey program indicated that the mapped locations of abandoned oil wells could be inaccurate by 50 to 200 feet.

A geophysical (magnetic) survey was performed on the BHHS campus to detect metal, which would indicate the presence of an abandoned oil well casing. The survey identified only one anomaly on the BHHS campus that is close to the alignment. It is on the west edge of the lacrosse field and is located 5 to 10 feet north of the tunnel envelope. The anomaly may or may not be a well casing, but it will be further investigated and addressed appropriately as described below.
For exploration beneath the BHHS buildings during the next phases of design, horizontal directional drilling (HDD) investigation will be conducted along the alignment at tunnel level. A magnetometer probe survey will be conducted in the drilled hole to detect metal casings so that if found, they can be re-abandoned properly below the tunnel depth prior to tunneling. Moreover, during tunnel construction in Los Angeles, magnetometer surveys have been conducted in probe borings extending in front of the TBM to ensure that obstructions, such as well casings, are detected before they are reached by the TBM. In suspected oil field areas, probing of the tunnel zone will be carried out by HDD either before tunneling or ahead of the face during tunneling. To ensure that these additional studies are conducted, the following mitigation is included in the Final EIS/EIR.

- CON-53—Further Research on Oil Well Locations

With implementation of this mitigation measure, oil wells do not pose a risk to tunneling for the project. Abandoned oil wells have been encountered in the past during tunneling in Los Angeles. Procedures have been developed to evaluate the well conditions and safely re-abandon them. Metro has experienced no gas incidents related to encounters with oil well casings during tunnel excavation on other projects.

Please refer to Section 4.8 and Section 4.15 of the Final EIS/EIR for more detailed discussion of oil wells. The results of further geotechnical investigations conducted during the Final EIS/EIR can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Even though it may present a small chance, if one of these accidents were to happen, should it be underneath a roadway or underneath a High School with 2,500-3,000 students and teachers? And which is more likely—one of these construction accidents that have occurred over the past few years or an earthquake with a recurrence rate once every 7,000 years?

With regard to subsidence along the LPA, no current substantial subsidence problems related to petroleum or groundwater extraction have been identified. Therefore, the subsidence related to extraction of petroleum and groundwater is not considered a hazard to the LPA during operations. However, the potential exists for ground subsidence related to construction activities such as tunneling and dewatering at station areas along the full
length of the proposed alignment and options. Therefore, construction dewatering induced subsidence poses a potentially adverse impact.

Dewatering is usually not necessary when tunneling with pressure-face TBM. However, station construction will require excavations that will encounter the groundwater table and/or perched groundwater, dewatering may be required to complete the construction in some areas. Dewatering of the excavations made during construction could result in potentially damaging subsidence adjacent to the construction area. However, experience in much of the corridor is that the soils have previously undergone numerous cycles of ground-water fluctuation, and have therefore previously experienced the settlements associated with lowering of the ground water, and will not be expected to have significant additional settlement.

To minimize risks, prior to construction, structures along the tunnel alignment are assessed and tunneling equipment and operating criteria are selected that will best protect the structures. Ground movements are limited by monitoring and controlling critical operations of the tunnel boring machine, and, if needed, by use of supplemental ground control measures, such as grouting. Ground movements around the tunnel and at the surface are measured and nearby structures are surveyed in order to make timely adjustments and to confirm that ground movements are under control as the tunnel is advanced. The following mitigation measures will be implemented during construction to minimize any potential for ground settlement or subsidence.

- CON-47—Use of Pressurized-face TBM for Tunnel Construction
- CON-48—Preconstruction Survey, Instrumentation, and Monitoring
- CON-49—Additional Geotechnical Exploration
- CON-50—Additional Methods to Reduce Settlement

With implementation of these mitigation measures, construction risks related to subsidence and settlement will be reduced to less than significant.

Your comments about tunneling and liquefaction risks have been noted.

Metro has conducted geotechnical and seismic investigations to determine those soil conditions that are subject to liquefaction. Tunnels for the Westside Subway Extension project will be mostly excavated and constructed within consolidated, dense to very dense and stiff to hard soils belonging to older alluvium/Lakewood Formation sediments, which are considered significantly less prone to liquefaction than young alluvial sediments. However, due to the presence of shallow groundwater and young surficial alluvial deposits, there may be potential liquefaction adjacent to the upper portions of some station walls at the Wilshire/La Cienega, Westwood/UCLA, and Westwood/VA Hospital Stations. Lateral spreading is not anticipated in the vicinity of the LPA.

Based on the magnitude of evaluated liquefaction, either structural design or ground
improvement techniques or deep foundations to minimize these hazards will be selected. The following mitigation measures will be implemented during operation to reduce risks related to liquefaction:

- GEO 4 – Liquefaction and Seismic Settlement
- GEO 7 – Tunnel Advisory Panel Design Review

With implementation of these mitigation measures, liquefaction risk during operation will be reduced to less than significant.

During construction, designs to minimize risk of liquefaction related damage to the excavation support system include increasing the depth of solid piles to reach non-liquefiable zones, or ground improvement to densify the soil may be provided prior to the installation of the excavation support system therefore liquefaction is not a significant impact during construction.

Please refer to Section 4.8 and Section 4.15 of the Final EIS/EIR for more detailed discussion of ground settlement and subsidence during operation and construction. The results of further geotechnical investigations conducted during the Final EIS/EIR can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment regarding ridership and the location of the Westwood/UCLA Station has been noted. During public scoping, the public was presented with several station options for Westwood/UCLA. Six station location options were developed in response to scoping comments, including two locations along Le Conte Avenue, adjacent to the UCLA campus. These stations were evaluated based on a number of engineering and environmental criteria. Based on the results of this screening, the two Le Conte Stations were eliminated from further consideration for two primary reasons. First, they would have required tunnel alignments to travel under the Veterans National Cemetery in order to allow the subway to continue west. In addition, the narrow streets in Westwood Village and the additional distance from Wilshire Boulevard made these locations ill-suited for station construction and associated impacts including locating sufficient land for construction staging and earth removal and identifying haul routes. Station locations closer to or under Wilshire Boulevard will serve Westwood Village as well as the high rise office buildings along Wilshire Boulevard and the multi-family residential buildings in that vicinity. Significant bus service already exists in the Westwood Village area provided by Metro, Santa Monica Big Blue Bus, Culver City Municipal Bus Lines, UCLA Transit, and others.

With regard to the relationship between walking distance and ridership, research has shown that most transit riders are willing to walk up to one-half mile to access a rail station.
Using normal walking speeds, this distance can be covered in approximately 10 minutes. These walking-distance thresholds are recognized in the travel forecasting process for the Westside Subway Extension Project and other urban rail systems.

Please refer to Section 8.8.6 of the Final EIS/EIR for more detailed responses to concerns related to the Westwood/UCLA Station. Please refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives, including station locations, and the LPA selection process. The Westside Subway Extension Alternatives Screening and Refinement Following Scoping Report provides a more detailed description of the refinements to the Westwood/UCLA Station following Draft EIS/EIR scoping in response to community comments and engineering requirements. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Westwood/UCLA Station and the Westwood/VA Hospital Station Locations Report for a comparison of the two Westwood/UCLA locations. In addition, the Westside Subway Extension Station Entrance Location Report and Recommendations provides a comparison of the potential entrance locations at Westwood Boulevard, Gayley Avenue and Veteran Avenue for both the On-Street and Off-Street Stations and the Westside Subway Extension Station Circulation Report provides a comprehensive station access circulation study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment regarding safety of tunneling and list of construction accidents have been noted. Safety, both during construction and eventual operations, is one of Metro's highest priorities and is one of the key evaluation criteria in selection of the LPA. Impacts of construction and potential mitigation measures were further evaluated in the Final EIS/EIR. In recent years, Metro has employed improved tunneling techniques to minimize impacts on adjacent properties. The primary method for avoiding subsidence is the use of "Pressure Face" tunnel boring machines. With this new technology, pressure is maintained in the surrounding earth while the tunnel is being excavated, thereby significantly reducing the risk of subsidence. Using this technology, Metro recently completed 1.8-miles of twin tunnel for the Metro Gold Line Eastside Extension project with no measurable surface subsidence and no substantiated damage claims from settlement. If necessary, secondary ground stabilization methods such as compensation grouting will be used. Metro has established procedures to document existing conditions at properties along the subway construction alignment in advance of construction to accurately assess and address any damage claims that may arise. Refer to Appendix E of the Final EIS/EIR for more discussion on subway construction methods.
853-20
The geotechnical studies conducted in preparation of the Final EIS/EIR concluded that the Westside Subway Extension will not reduce the availability of Beverly Hills High School (BHHS) for use as an emergency shelter or impact the operations of its use as an emergency shelter. The vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top of the tunnel). The presence of the tunnels will neither affect the risk to buildings above them during an earthquake nor change the severity of shaking.

Please refer to the Westside Subway Extension Century City Area Tunneling Safety Report for the results of the further geotechnical studies conducted. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

853-21
Your comment has been noted. Midline vent shaft and emergency exits would not be constructed along the tunneling alignment in between the Wilshire/Rodeo and Century City Stations.

853-22
Your comments regarding the Santa Monica earthquake fault has been noted.

You make reference to the frequency of the Santa Monica fault. It should be noted that the time between earthquakes on a fault is extremely variable—a fault with an average recurrence of 8,000 years could have earthquakes much less or more frequently. There are almost no faults in the world where the recurrence intervals have been determined with a high level of confidence. For planning purposes, the State of California and engineering/geology practice do not attempt to differentiate between faults that have had a long time since the last earthquake.

You indicate that San Andreas Fault has a more frequent rate of recurrence. While it is true that the San Andreas Fault can produce very strong, and more frequent earthquakes that could affect a very large area, probabilistic seismic hazard analyses (PSHA) that integrate the probabilities of earthquakes from all active and potentially active faults in the southern California area indicate that for a site in the Westwood/Century City area, the predominant shaking hazard comes from the Santa Monica/Hollywood faults and the Newport-Inglewood fault. PSHA-type analyses are the predominant basis of the design of structures for earthquake shaking in the California Building Code (CBC).

With regards to approved development in Century City, buildings in Century City are designed in accordance with the Los Angeles Building Code, considering the shaking hazard (which increases as distance to a fault decreases), and considering the hazard due to fault rupture (the building code requires that structures not be constructed on an active
fault in order to prevent damage due to fault rupture displacement), along with other secondary earthquake hazards.

With regard to your statement about the Santa Monica fault being active, please note that the State of California identifies the Santa Monica faults as an active fault within the most recent geologic epoch (the Holocene era, which extends from about 11,000 years ago until the present). The State of California bases this conclusion on the scientific research conducted to date on the fault.

With regard to your statement that the Santa Monica Mountains Blind thrust fault may no longer be active. It should be noted that this is a sentence on page 1575 of Dolan et al. paper, in the portion where Dolan et al. is speaking of the postulated Santa Monica Mountains Blind Thrust fault (proposed by other authors), which is a different fault from the Santa Monica fault. Therefore, Dolan did not state anywhere in the paper that the Santa Monica fault may not be active.

Please note that the most thorough research to-date on the Santa Monica fault were by Dolan et al, and are thus used as the primary source for scientific information about the fault. Nevertheless, extensive additional studies were conducted as part of the Final EIS/EIR evaluation of the subway to provide far more data on the Santa Monica fault in the vicinity of the Century City Station than has ever been performed before. The results of further geotechnical investigations, including seismic studies, can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report.

Please note that hazards from an earthquake include fault rupture (cracking/fracturing of the ground where one side of the fault moves relative to the other), shaking, and other secondary effects. While the hazard due to shaking should be designed against, the hazard due to fault rupture is potentially much more severe, but is also much more limited in area, being confined to the specific zone of rupture. The design of the station structure was performed by incorporating an appropriate clearance between the zone of faulting and the station.

Please refer to Section 4.8 and Section 4.15 of the Final EIS/EIR for more detailed discussion of seismic safety both during operation and construction. The results of further geotechnical investigations conducted during the Final EIS/EIR can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your comment regarding property values has been noted.

Since the LPA will improve transit service in the Study Area, research suggests that it is likely that properties within walking distance of the stations will realize value premiums over similar properties that are farther away. Based on studies of other regions with transit systems (i.e., San Francisco, San Diego, and San Jose, California; New York, New York; and Portland, Oregon), an average home price increase of 6.4 percent within one-half mile of each transit station may be experienced. Although most studies on real estate value impacts from transit show increases in value, they cannot explicitly isolate transit benefits from other market forces that affect real estate values.

Value increases within proximity of a transit station are realized in sales price as well as rent premiums. For residential properties, these increases resulted from potential commute or recreational travel time savings and associated vehicle cost reductions (including both reduced mileage as well as a reduction in the number of cars owned by the household).

Negative impacts on property values from transit (termed “nuisance” effects) also can occur but are not anticipated to result from this Project. Measurable noise impacts from vehicles, increased foot traffic, adjacent structures, transit-associated parking, and increased bus traffic interfacing with transit stations can reduce the desirability of properties near a fixed guideway station. Such nuisance effects will most likely occur in areas where value is not attributed to the accessibility improvements that transit provides. This does not appear likely within the Study Area, as stations are planned for areas that are already densely developed and near major roads and bus routes.

All residents and businesses displaced as a result of the LPA will be given advance written notice and will be informed of their eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisition Policies Act. In areas where the subway operates under private property, Metro will work with the property owner to secure a subsurface easement. The following mitigation measures will be implemented to ensure just compensation for acquisitions and easements:

- CN-1—Relocation Assistance and Compensation
- CN-2—Propose Joint-use Agreements
- CN-3—Compensation for Easements

Please refer to Sections 4.2.2, 4.2.3, and 4.2.4 of this Final EIS/EIR for a discussion of the economic and fiscal impacts of the Project, including property acquisitions and easements. Refer to the Westside Subway Extension Economic and Fiscal Impacts Analysis and Mitigation Report for a more detailed discussion of property value impacts.
The map included with your comment has been noted. Your comment below the map about the "Lasky alternative" and the "Linden" alternative going under the high school has been noted.
The petition included in your comment letter entitled "Beverly Hills is United!" has been noted.
The petition included in your comment letter entitled "Beverly Hills is United!" has been noted.
The inclusion of an excerpt from the Metro Staff Report dated October 12, 2010 has been noted.

Your comment has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools.
The inclusion of the webcast link of the Metro Meeting at Roxbury Park has been noted. The note at the bottom of the page indicating that the meeting was attended by 350-400 people is also noted.
Your comment in support of the Century City Santa Monica Station location and concerns about tunneling beneath homes and schools has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools. The Metro Board of Directors also decided to not include the Constellation South alignment between the Wilshire/Rodeo and Century City Stations as part of the LPA, but to continue to study the Constellation North and the Santa Monica Boulevard alignments. The Constellation South alignment passed beneath more residential properties than the Constellation North or Santa Monica Boulevard alignments. In addition, the Metro Board of Directors decided to not include the West or Central alignments between Century City and Westwood/UCLA as part of the LPA, but to continue to study the East alignment because the East alignment is the most direct and least expensive route between the two stations.

Safety, both during construction and eventual operations, is one of Metro's highest priorities and is one of the key evaluation criteria in selection of the Locally Preferred Alternative (LPA). In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

On most transit tunnel projects, significant portions of the alignment are constructed adjacent to or beneath buildings. The LPA passes beneath homes and schools in these neighborhoods because the curve radius required for subway tunnels is much wider than that required at a typical surface street intersection. The current alignment minimizes tunneling under buildings to the east and west of both the Century City Stations. The station position on Constellation Boulevard requires the tunnel alignment to be under the south portion of Beverly Hills High School Building B in order to reach the station location. There is no reasonable tunnel alignment that does not pass under homes or structures within the Beverly Hills High School campus.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. The use of state-of-the-art pressurized closed-face TBMs for soft-ground tunneling has greatly improved the control of ground movements such that tunneling can be done with minimal surface settlements. The presence of the tunnels will neither affect the risk to buildings above them during an
Tunnels, through known oil well fields, have been safely constructed with no adverse incidents with either hazardous gas or oil casings. In recent Los Angeles tunneling history, there have been no oil well incidents related to tunneling, and oil well casings have been safely removed and re-abandoned.

During the Draft EIS/EIR, known oil fields and documented active or abandoned oil wells were identified from published oil well maps. Table 4-45 in the Draft EIS/EIR identifies oil wells (abandoned and active) that may be located within 100 feet of the proposed tunnel or station, as well as those that may be located within the proposed tunnel alignment. The oil fields themselves are much deeper than the potential subway tunnels. Shafts for existing active and abandoned oil wells have been mapped in the vicinity of the project alignment along with other utilities such as sewer, water, gas, and electric lines.

During the preparation of the Final EIS/EIR, a comprehensive study of all available information found that there was one mapped abandoned oil well within the proposed tunnel alignment. According to the state’s records, the location of this well is beneath a parking structure on Century Park East and does not lie within the Beverly Hills High School (BHHS) campus. The magnetic survey program indicated that the mapped locations of abandoned oil wells could be inaccurate by 50 to 200 feet.

A geophysical (magnetic) survey was performed on the BHHS campus to detect metal, which would indicate the presence of an abandoned oil well casing. The survey identified only one anomaly on the BHHS campus that is close to the alignment. It is on the west edge of the lacrosse field and is located 5 to 10 feet north of the tunnel envelope. The anomaly may or may not be a well casing, but it will be further investigated and addressed appropriately as described below.

For exploration beneath the BHHS buildings during the next phases of design, horizontal directional drilling (HDD) investigation will be conducted along the alignment at tunnel level. A magnetometer probe survey will be conducted in the drilled hole to detect metal casings so that if found, they can be re-abandoned properly below the tunnel depth prior to tunneling. Moreover, during tunnel construction in Los Angeles, magnetometer surveys have been conducted in probe borings extending in front of the TBM to ensure that obstructions, such as well casings, are detected before they are reached by the TBM. In suspected oil field areas, probing of the tunnel zone will be carried out by HDD either before tunneling or ahead of the face during tunneling. To ensure that these additional studies are conducted, the following mitigation is included in the Final EIS/EIR.

- CON-53-Further Research on Oil Well Locations
With implementation of this mitigation measure, oil wells do not pose a risk to tunneling for the project. Abandoned oil wells have been encountered in the past during tunneling in Los Angeles. Procedures have been developed to evaluate the well conditions and safely re-abandon them. Metro has experienced no gas incidents related to encounters with oil well casings during tunnel excavation on other projects.

These geotechnical studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site. Tunnels to the east and west of Century City pass through at least two active faults. However, there are numerous tools, designs, and construction means and methods that have been used elsewhere that can be used to safely tunnel through these fault zones.

In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that the Century City Constellation Station would result in 3,350 more boardings along new Westside Subway Extension stations than the Century City Santa Monica Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile walksheds.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station and alignments and Section 8.8.4 of the Final EIS/EIR for a more detailed response to geotechnical concerns. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment regarding noise and vibration during operation has been noted.
Subway tunnels are typically at least 50 to 70 feet below the surface to the track depth. As a result, noise and vibration are not typically noticeable at the surface. In the Beverly Hills, Century City, and Westwood areas, the proposed subway tunnels would generally be deeper than this in the areas where it would pass beneath homes and schools. For example, at Beverly Hills High School, the track depth would be 75-80 feet below the first floor of the school buildings. In Westwood, the track depth is more than 100 feet deep in most places. Since the first segment of the subway opened in 1993, Metro has received no complaints about noise or vibration due to subway operations.

Additional detailed geotechnical studies were conducted during the Final EIS/EIR phase to assess soil conditions and determine the potential for noise or vibration impacts on the surface along the refined alignments. This included measurements at the Beverly Hills High School site and in its buildings, as well as in the residential area between the Century City and Westwood/UCLA Stations.

These studies concluded that the predicted vibration and noise levels are within the FTA requirements, and tunnel operation is not anticipated to have adverse impacts with the implementation of mitigation. Noise from operation of the LPA from such sources as station ventilation system fans, emergency ventilation fans, traction power substations, and emergency generators will be designed to meet the noise-level limits specified in Metro Rail Design Criteria and will not result in any noise impacts. There are no vibration-sensitive receivers along the LPA that are predicted to exceed the FTA ground-borne vibration criteria.

Three locations along the LPA were identified where exceedance of the FTA ground-borne noise criteria will occur due to train operations along tangent track or through crossovers, if mitigation measures are not implemented. These locations are the Wilshire Ebell Theatre, an apartment building on Wilshire Boulevard at Orange Drive, and the Saban Theatre. To mitigate the potential for ground-borne noise impacts at these three locations, the following mitigation measures will be implemented:

- **VIB-1**—High compliance direct-fixation resilient rail fasteners will be incorporated into the design of the trackwork at the Wilshire Ebell Theatre and the Saban Theatre, which will reduce ground-borne noise by 5 to 7 dBA.
- **VIB-2**—A low impact crossover such as a moveable point frog or a spring-loaded frog will be used in the design of Wilshire/La Brea No. 10 double crossover for the apartments, which will reduce ground-borne noise by 5 to 6 dBA.

With these mitigation measures, there are no vibration-sensitive receivers that are predicted to exceed the FTA ground-borne vibration criteria during operation. Mitigation measure VIB-2 was added subsequent to the Draft EIS/EIR due to the additional studies conducted during preparation of this Final EIS/EIR.
850-2
Should future underground construction be considered that would place a school building foundation closer to the tunnel, mitigation measures could be implemented to reduce ground-borne noise and vibration impacts. To mitigate such noise impacts, a high-compliance direct-fixation resilient rail fastener can be incorporated into the track work.

Results of these additional noise and vibration analyses and mitigation measures can be found in Section 4.6 of this Final EIS/EIR and the Westside Subway Extension Noise and Vibration Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

850-3
In recent years, Metro has employed improved tunneling techniques to minimize impacts on adjacent properties. Pressurized face tunnel boring machines developed over the past 30 years now provide reliable control of ground movements around the tunnel and have become a standard throughout the world. Behind the cutting wheel at the front of the tunnel is an enclosed chamber that is filled with the excavated soil. This provides pressure that supports the ground in front of the tunnel face and significantly reduces the risk of surface subsidence. Using this technology, Metro recently completed 1.7-miles of twin tunnel for the Metro Gold Line Eastside Extension project, passing beneath structures with no measurable surface subsidence and no substantiated damage claims from settlement.

With regard to subsidence along the LPA, no current substantial subsidence problems related to petroleum or groundwater extraction have been identified. Therefore, the subsidence related to extraction of petroleum and groundwater is not considered a hazard to the LPA during operations. However, the potential exists for ground subsidence related to construction activities such as tunneling and dewatering at station areas along the full length of the proposed alignment and options. Therefore, construction dewatering induced subsidence poses a potentially adverse impact.

Dewatering is usually not necessary when tunneling with pressure-face TBMs. However, station construction will require excavations that will encounter the groundwater table and/or perched groundwater, dewatering may be required to complete the construction in some areas. Dewatering of the excavations made during construction could result in potentially damaging subsidence adjacent to the construction area. However, experience in much of the corridor is that the soils have previously undergone numerous cycles of ground-water fluctuation, and have therefore previously experienced the settlements associated with lowering of the ground water, and will not be expected to have significant additional settlement.

To minimize risks, prior to construction, structures along the tunnel alignment are assessed and tunneling equipment and operating criteria are selected that will best protect the structures. Ground movements are limited by monitoring and controlling critical operations of the tunnel boring machine, and, if needed, by use of supplemental ground control.
measures, such as grouting. Ground movements around the tunnel and at the surface are measured and nearby structures are surveyed in order to make timely adjustments and to confirm that ground movements are under control as the tunnel is advanced. The following mitigation measures will be implemented during construction to minimize any potential for ground settlement or subsidence.

- CON-47—Use of Pressurized-face TBMs for Tunnel Construction
- CON-48—Preconstruction Survey, Instrumentation, and Monitoring
- CON-49—Additional Geotechnical Exploration
- CON-50—Additional Methods to Reduce Settlement

With implementation of these mitigation measures, construction risks related to subsidence and settlement will be reduced to less than significant. The geotechnical studies conducted in preparation of the Final EIS/EIR concluded that the Westside Subway Extension will not reduce the availability of Beverly Hills High School (BHHS) for use as an emergency shelter or impact the operations of its use as an emergency shelter. The vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top of the tunnel). The presence of the tunnels will neither affect the risk to buildings above them during an earthquake nor change the severity of shaking.

Section 4.14 of the Final EIS/EIR identifies BHHS as historic property and concludes that a No Adverse Effect Determination under Section 106 was made for BHHS. Construction of the Project will not cause physical destruction or damage to the BHHS campus, and will not change the character of the use of the property or physical features within the setting of the property that contributes to its significance. Also, the Project will not result in indirect visual, atmospheric, or audible elements that will diminish the integrity of significant features of the BHHS campus.

Please refer to Section 4.8 and to the Westside Subway Extension Century City Area Tunneling Safety Report for the results of the further geotechnical studies conducted. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment in support of the Santa Monica Boulevard route has been noted. Please refer to responses to comments number 850-1, 850-2, and 850-3 above.
Your comment in support of the Century City Santa Monica Station location and concerns about tunneling beneath homes and schools has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools. The Metro Board of Directors also decided not to include the Constellation South alignment between the Wilshire/Rodeo and Century City Stations as part of the LPA, but to continue to study the Constellation North and the Santa Monica Boulevard alignments. The Constellation South alignment passed beneath more residential properties than the Constellation North or Santa Monica Boulevard alignments. In addition, the Metro Board of Directors decided not to include the West or Central alignments between Century City and Westwood/UCLA as part of the LPA, but to continue to study the East alignment because the East alignment is the most direct and least expensive route between the two stations.

Safety, both during construction and eventual operations, is one of Metro's highest priorities and is one of the key evaluation criteria in selection of the Locally Preferred Alternative (LPA). In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

On most transit tunnel projects, significant portions of the alignment are constructed adjacent to or beneath buildings. The LPA passes beneath homes and schools in these neighborhoods because the curve radius required for subway tunnels is much wider than that required at a typical surface street intersection. The current alignment minimizes tunneling under buildings to the east and west of both the Century City Stations. The station position on Constellation Boulevard requires the tunnel alignment to be under the south portion of Beverly Hills High School Building B in order to reach the station location. There is no reasonable tunnel alignment that does not pass under homes or structures within the Beverly Hills High School campus.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. The use of state-of-the-art pressurized closed-face TBMs for soft-ground tunneling has greatly improved the control of ground movements such that tunneling can be done with minimal surface settlements. The presence of the tunnels will neither affect the risk to buildings above them during an
earthquake nor change the severity of shaking.

Tunnels, through known oil well fields, have been safely constructed with no adverse incidents with either hazardous gas or oil casings. In recent Los Angeles tunneling history, there have been no oil well incidents related to tunneling, and oil well casings have been safely removed and re-abandoned.

During the Draft EIS/EIR, known oil fields and documented active or abandoned oil wells were identified from published oil well maps. Table 4-45 in the Draft EIS/EIR identifies oil wells (abandoned and active) that may be located within 100 feet of the proposed tunnel or station, as well as those that may be located within the proposed tunnel alignment. The oil fields themselves are much deeper than the potential subway tunnels. Shafts for existing active and abandoned oil wells have been mapped in the vicinity of the project alignment along with other utilities such as sewer, water, gas, and electric lines.

During the preparation of the Final EIS/EIR, a comprehensive study of all available information found that there was one mapped abandoned oil well within the proposed tunnel alignment. According to the state’s records, the location of this well is beneath a parking structure on Century Park East and does not lie within the Beverly Hills High School (BHHS) campus. The magnetic survey program indicated that the mapped locations of abandoned oil wells could be inaccurate by 50 to 200 feet.

A geophysical (magnetic) survey was performed on the BHHS campus to detect metal, which would indicate the presence of an abandoned oil well casing. The survey identified only one anomaly on the BHHS campus that is close to the alignment. It is on the west edge of the lacrosse field and is located 5 to 10 feet north of the tunnel envelope. The anomaly may or may not be a well casing, but it will be further investigated and addressed appropriately as described below.

For exploration beneath the BHHS buildings during the next phases of design, horizontal directional drilling (HDD) investigation will be conducted along the alignment at tunnel level. A magnetometer probe survey will be conducted in the drilled hole to detect metal casings so that if found, they can be re-abandoned properly below the tunnel depth prior to tunneling. Moreover, during tunnel construction in Los Angeles, magnetometer surveys have been conducted in probe borings extending in front of the TBM to ensure that obstructions, such as well casings, are detected before they are reached by the TBM. In suspected oil field areas, probing of the tunnel zone will be carried out by HDD either before tunneling or ahead of the face during tunneling. To ensure that these additional studies are conducted, the following mitigation is included in the Final EIS/EIR.

- CON-53-Further Research on Oil Well Locations
With implementation of this mitigation measure, oil wells do not pose a risk to tunneling for the project. Abandoned oil wells have been encountered in the past during tunneling in Los Angeles. Procedures have been developed to evaluate the well conditions and safely re-abandon them. Metro has experienced no gas incidents related to encounters with oil well casings during tunnel excavation on other projects.

These geotechnical studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site. Tunnels to the east and west of Century City pass through at least two active faults. However, there are numerous tools, designs, and construction means and methods that have been used elsewhere that can be used to safely tunnel through these fault zones.

In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that the Century City Constellation Station would result in 3,350 more boardings along new Westside Subway Extension stations than the Century City Santa Monica Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile walksheds.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station and alignments and Section 8.8.4 of the Final EIS/EIR for a more detailed response to geotechnical concerns. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment regarding noise and vibration during operation has been noted.
Subway tunnels are typically at least 50 to 70 feet below the surface to the track depth. As a result, noise and vibration are not typically noticeable at the surface. In the Beverly Hills, Century City, and Westwood areas, the proposed subway tunnels would generally be deeper than this in the areas where it would pass beneath homes and schools. For example, at Beverly Hills High School, the track depth would be 75-80 feet below the first floor of the school buildings. In Westwood, the track depth is more than 100 feet deep in most places. Since the first segment of the subway opened in 1993, Metro has received no complaints about noise or vibration due to subway operations.

Additional detailed geotechnical studies were conducted during the Final EIS/EIR phase to assess soil conditions and determine the potential for noise or vibration impacts on the surface along the refined alignments. This included measurements at the Beverly Hills High School site and in its buildings, as well as in the residential area between the Century City and Westwood/UCLA Stations.

These studies concluded that the predicted vibration and noise levels are within the FTA requirements, and tunnel operation is not anticipated to have adverse impacts with the implementation of mitigation. Noise from operation of the LPA from such sources as station ventilation system fans, emergency ventilation fans, traction power substations, and emergency generators will be designed to meet the noise-level limits specified in Metro Rail Design Criteria and will not result in any noise impacts. There are no vibration-sensitive receivers along the LPA that are predicted to exceed the FTA ground-borne vibration criteria.

Three locations along the LPA were identified where exceedance of the FTA ground-borne noise criteria will occur due to train operations along tangent track or through crossovers, if mitigation measures are not implemented. These locations are the Wilshire Ebell Theatre, an apartment building on Wilshire Boulevard at Orange Drive, and the Saban Theatre. To mitigate the potential for ground-borne noise impacts at these three locations, the following mitigation measures will be implemented:

- **VIB-1**—High compliance direct-fixation resilient rail fasteners will be incorporated into the design of the trackwork at the Wilshire Ebell Theatre and the Saban Theatre, which will reduce ground-borne noise by 5 to 7 dBA.
- **VIB-2**—A low impact crossover such as a moveable point frog or a spring-loaded frog will be used in the design of Wilshire/La Brea No. 10 double crossover for the apartments, which will reduce ground-borne noise by 5 to 6 dBA.

With these mitigation measures, there are no vibration-sensitive receivers that are predicted to exceed the FTA ground-borne vibration criteria during operation. Mitigation measure VIB-2 was added subsequent to the Draft EIS/EIR due to the additional studies conducted during preparation of this Final EIS/EIR.
823-2
Should future underground construction be considered that would place a school building foundation closer to the tunnel, mitigation measures could be implemented to reduce ground-borne noise and vibration impacts. To mitigate such noise impacts, a high-compliance direct-fixation resilient rail fastener can be incorporated into the track work.

Results of these additional noise and vibration analyses and mitigation measures can be found in Section 4.6 of this Final EIS/EIR and the Westside Subway Extension Noise and Vibration Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

823-3
In recent years, Metro has employed improved tunneling techniques to minimize impacts on adjacent properties. Pressurized face tunnel boring machines developed over the past 30 years now provide reliable control of ground movements around the tunnel and have become a standard throughout the world. Behind the cutting wheel at the front of the tunnel is an enclosed chamber that is filled with the excavated soil. This provides pressure that supports the ground in front of the tunnel face and significantly reduces the risk of surface subsidence. Using this technology, Metro recently completed 1.7-miles of twin tunnel for the Metro Gold Line Eastside Extension project, passing beneath structures with no measurable surface subsidence and no substantiated damage claims from settlement.

With regard to subsidence along the LPA, no current substantial subsidence problems related to petroleum or groundwater extraction have been identified. Therefore, the subsidence related to extraction of petroleum and groundwater is not considered a hazard to the LPA during operations. However, the potential exists for ground subsidence related to construction activities such as tunneling and dewatering at station areas along the full length of the proposed alignment and options. Therefore, construction dewatering induced subsidence poses a potentially adverse impact.

Dewatering is usually not necessary when tunneling with pressure-face TBM's. However, station construction will require excavations that will encounter the groundwater table and/or perched groundwater, dewatering may be required to complete the construction in some areas. Dewatering of the excavations made during construction could result in potentially damaging subsidence adjacent to the construction area. However, experience in much of the corridor is that the soils have previously undergone numerous cycles of ground-water fluctuation, and have therefore previously experienced the settlements associated with lowering of the ground water, and will not be expected to have significant additional settlement.

To minimize risks, prior to construction, structures along the tunnel alignment are assessed and tunneling equipment and operating criteria are selected that will best protect the structures. Ground movements are limited by monitoring and controlling critical operations of the tunnel boring machine, and, if needed, by use of supplemental ground control measures.
measures, such as grouting. Ground movements around the tunnel and at the surface are measured and nearby structures are surveyed in order to make timely adjustments and to confirm that ground movements are under control as the tunnel is advanced. The following mitigation measures will be implemented during construction to minimize any potential for ground settlement or subsidence.

- CON-47—Use of Pressurized-face TBMs for Tunnel Construction
- CON-48—Preconstruction Survey, Instrumentation, and Monitoring
- CON-49—Additional Geotechnical Exploration
- CON-50—Additional Methods to Reduce Settlement

With implementation of these mitigation measures, construction risks related to subsidence and settlement will be reduced to less than significant. The geotechnical studies conducted in preparation of the Final EIS/EIR concluded that the Westside Subway Extension will not reduce the availability of Beverly Hills High School (BHHS) for use as an emergency shelter or impact the operations of its use as an emergency shelter. The vertical alignment of the tunnel would be 55 to 70 feet below the ground surface (to the top of the tunnel). The presence of the tunnels will neither affect the risk to buildings above them during an earthquake nor change the severity of shaking.

Section 4.14 of the Final EIS/EIR identifies BHHS as historic property and concludes that a No Adverse Effect Determination under Section 106 was made for BHHS. Construction of the Project will not cause physical destruction or damage to the BHHS campus, and will not change the character of the use of the property or physical features within the setting of the property that contributes to its significance. Also, the Project will not result in indirect visual, atmospheric, or audible elements that will diminish the integrity of significant features of the BHHS campus.

Please refer to Section 4.8 and to the Westside Subway Extension Century City Area Tunneling Safety Report for the results of the further geotechnical studies conducted. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment in support of the Santa Monica Boulevard route has been noted. Please refer to responses to comments number 823-1, 823-2, and 823-3 above.
### RECORD #577 DETAIL

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**577-1**

Your comment regarding a potential second entrance at the Wilshire/La Brea station has been noted. The number of entrances at each station was based on the ridership projections for each station. Based on these projections, Metro would construct one entrance per station at all proposed station locations, except Westwood/UCLA, which would have two entrances. The proposed entrance for the Wilshire/La Brea station would either be located on the northwest or the southwest corner of the Wilshire/La Brea intersection and would not interfere with the proposed development on the BRE property on the southeast corner of the Wilshire/La Brea intersection. The recommended location for the entrance is on the northwest corner. Please refer to Sections 2.6 and 7.4 of the Final EIS/EIR for a discussion of the entrance location at the Wilshire/La Brea Station.
October 10, 2010

David Mieger, Project Director
DEO, Countywide Planning & Development
Metro
1 Gateway Plaza, 99-22-5
Los Angeles, CA 90012

Re: Comments on Westside Subway Extension Draft EIS/EIR

Dear Metro:

The Brentwood Community Council ("BCC") is the broadest based Brentwood community organization, representing approximately 50,000 stakeholders of the community, including homeowner associations, business organizations, youth groups, schools, religious groups, volunteer service groups, multi-family residential dwellers, public safety and environmental organizations. The proposed subway stops at the VA and at Wilshire/Bundy are within the area likely to impact Brentwood. At a BCC meeting on October 5, 2010, this letter was unanimously approved by the Brentwood Community Council.

Project Support

The Brentwood Community Council supports the extension of the Wilshire Blvd. Subway to Santa Monica (Alternatives 3 or 5), and to the VA (Alternative 2) over Westwood (Alternative 1) in the near term (Phase 1).
Support for 30/10 Initiative

We also support the 30/10 initiative to build Phase 1 of the Westside Subway Extension in ten years, and hope that funding can be identified to complete the subway to 4th Street in Santa Monica.

Disagreement with Metro's Parking Policy

The BCC disagrees with Metro's blanket policy stated in the "Parking" sections of the DEIR that parking should not be provided at any of the stations in the Westside Subway Extension. The data used to support this policy in the DEIR is national data and fails to take into account any local conditions at different stations, nor does it appear that local residents and workers have been surveyed to assess the parking demand. Our particular concerns are about the stations at the VA and Bundy which are in or adjacent to Brentwood.

Prior to issuing an FEIR Metro must conduct a locally-oriented study of the parking needs at different stations along the extension, and any recommendations about parking must take into account the results of that study. The study should be on a station by station basis, and should include an assessment of the demand at different levels of pricing for parking. Unless and until such a study is conducted, it is inappropriate for Metro to issue any recommendations for parking policy at the stations.

Table 3-8 of Chapter 203, Part 201 of the DEIR includes an assumption that only 2 to 3% of people who take the subway will drive to the stations, and that 2/3 will walk and 1/3 will take bus transit. Given the multi-billion dollar cost of building the subway, it is imperative that Metro enable as many residents as possible to take the subway to their destinations. If they cannot get to the subway from their homes, they cannot ride the subway. Certainly the cost of providing parking facilities is trivial as compared to the cost of building the subway. Given the geography of Los Angeles, particularly the areas west of Beverly Hills and west of the 405, many residents do not have access to

341-2
Your support for the 30/10 initiative has been noted.

341-3
Your comments about parking have been noted. Park-and-ride can be an important mode of access to transit. However, these facilities are usually located in low-density areas that lack local bus service feeding the stations. That is not the case with this Project. Therefore, none of the stations proposed as part of the Project will provide parking.

The provision of park-and-ride facilities would be inconsistent with the purpose and need of the Project. The Project Study Area is already very congested and Metro seeks to discourage people from driving to access the subway. Park-and-ride facilities also could lead to increased auto use and potentially result in traffic impacts at intersections.

The provision of park-and-ride facilities also would be inconsistent with both the existing built environment surrounding stations and efforts to encourage transit-oriented development. The Project corridor is very dense due to medium and high density commercial and residential development. The construction of park-and-ride facilities would consume space that could be put to more productive residential and commercial uses.

Any added park-and-ride facilities would have major implications on Project costs. The study area also has very high land costs and there is lack of available parcels for park-and-ride development. Due to land costs and scarcity, any parking would need to be in multi-story garages, resulting in substantially higher capital costs than current estimates.

Convenient and safe access by pedestrians and bicyclists will be an important element of the Westside Subway Extension Project. Sidewalks, bicycle lanes, and other facilities along the Project corridor support non-motorized access. To assess potential future access improvements to subway stations, Project design efforts included a study of circulation needs in each station area. The results of this study are available in the Westside Subway Extension Station Circulation Report and Section 3.7 of this Final EIS/EIR. This study provided important guidance on potential station features, including those specifically relating to pedestrian and bicycle access. Areas explored by the study included the following:

- Provision of bicycle facilities at stations
- Enhanced bus shelters and lighting
- Making crosswalks more visible with crosswalk treatments and advance stop bars, increasing safety for pedestrians transferring from buses or traveling to other destinations on foot
- Improving the transit and pedestrian environment with the addition of sidewalk treatments

Results of the station circulation study helped direct further design of subway stations and
supported station area planning for the Project. The station area planning examined access opportunities and potential improvements in the neighborhoods surrounding subway stations.

Section 3.7 of this Final EIS/EIR summarizes the findings of the Station Circulation Report and lists specific measures to be implemented at stations to improve pedestrian and bicycle access. These measures include the following:

- T-5 through T-8-Install Crossing Deterrents/Crossing Deterrents
- T-9-Provide consistency with General Plan Designation Sidewalk Width Adjacent to Metro-Controlled Parcels
- T-10-Provide consistency with General Plan Designation Sidewalk Width Coordination with Jurisdictions
- T-11-Provide High Visibility Crosswalk Treatments
- T-12-Meet Federal, State, and Local Standards for Crossing
- T-13-Meet Metro Rail Design Criteria Minimums for Bicycle Parking
- T-14-Study Bicycle Parking Demand and Footprint Configuration
- T-15-Determine Alternative Sites for Bicycle Parking

Metro is committed to working with local jurisdictions to improve the environment for pedestrians and bicyclists at all Project stations and will continue to assess and refine the needs of pedestrians and bicyclists as the Project progresses into Final Design.

Please refer to Section 8.8.8 of the Final EIS/EIR for more detailed responses to concerns related to station connectivity. In addition, the Westside Subway Extension Station Circulation Report provides a comprehensive station access circulation study of Project stations and Section 3.7 provides an analysis of potential impacts to pedestrian and bicycle networks. In addition, Section 3.6 of the Final EIS/EIR estimates the demand for parking at the stations and provides an analysis of potential spillover parking impacts to surrounding communities. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
north-south bus service that would enable them to get to Wilshire Blvd. to access a subway station. Therefore, accommodations must be made for them to drive to the nearest station and park.

In addition to car parking at the stations, the stations must have adequate parking for bicycles, and major routes into the stations should be designed to allow easy access by bicycles. The current DEIR does not appear to have a bicycle policy, and does not assume that anyone rides bicycles to the stations, which seems unreasonable.

Using national data instead of local data to reach conclusions on parking policy has led to the following erroneous or unsupported statements in the “Parking- Impact and Policy” sections of the DEIR such as:

- **The projected demand for parking is nearly identical for the VA (394 spaces per day) and Bundy/Wilshire stations (334 stations per day), even though the VA is adjacent to the I-405 freeway.** One of the justifications given at past public hearings for having a station at the VA was that people driving in from the Valley who wanted to access the subway could do so without having to drive into Westwood. Hence, all those people driving from the Valley should create a demand for parking at the VA that far exceeds the projection in the DEIR.

- **Rail stations in urban areas in other parts of the country do not provide parking.** However, parking is provided at suburban areas adjacent to New York City—on Long Island, Connecticut, and New Jersey, and at BART stations in the Bay area.

- **Parking lots must be made available at free or minimal cost in order for people to use them.** No data is provided to back up this assertion, and an assertion can equally be made that people will take the subway as long as the total cost of their trip including parking is less than the cost of parking at their end destination. Therefore, a survey must be

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341-4
The Westwood/VA Hospital Station is intended to capture riders using facilities at or near the hospital complex. It was not intended to capture motorists using I-405. Park-and-ride facilities are not provided at any station along the LPA in part because it would be inconsistent with the purpose and need of the Project. The Project Study Area is already very congested and Metro seeks to discourage people from driving to access the subway. Some potential demand may still occur. Accordingly, a follow-up study of parking supply in stations areas was carried out for the Final EIS/EIR. The results of this parking study can be found in the Westside Subway Extension Updated Off-Street Parking Analysis Memorandum and have been incorporated into Section 3.6 of the Final EIS/EIR. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

341-5
See previous response to comment number 341-3 on park-and-ride facilities at subway stations.

341-6
See previous response to comment number 341-3 on park-and-ride facilities at LPA stations.
conducted to assess parking demand at different price points.

- Providing parking lots “disproportionately benefits project users who own vehicles”. This statement is ridiculous, given that most adults in Los Angeles drive cars, and are paying the taxes that will fund the subway project. One of the key objectives of the subway is to provide mobility alternatives to all residents who live or work near the Westside Extension, not only to those who don’t own cars. Drivers who use the parking would pay additional fees to park. An equally silly statement can be made that providing bus service unfairly subsidizes people who do not own cars.

The subway is an extremely expensive undertaking, and it makes no sense to build a line that can bring people into the area west of Beverly Hills and west of the 405 without allowing people within the area to access the subway lines to leave the area. While current traffic patterns in Los Angeles generate more trips into the area west of the 405 than leaving the area every day, this has only been the case for the past 15 to 20 years, and it is entirely possible that the demand to leave the area will once again be greater in the future (unless the County and Metro are prepared to write-off the future of Downtown L.A.). Therefore, the subway must be constructed to enable the maximum number of people to use it. In the County of Los Angeles, this almost certainly includes providing parking at the subway stations. In any case, no assertions should be made without proper research into parking demand, and no policy should be set by Metro until such a study is completed.

Thank you.

Raymond Klein, Chair
Brentwood Community Council

cc: Councilman Bill Rosendahl
cc: Westside Extension@metro.net

341-7
See previous response to comment number 341-3 on park-and-ride facilities at LPA stations.
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To: Metro Board of Directors

To the Honorable Metro Board of Directors:

Whereas, UCLA is a major cultural and employment institution in Los Angeles that attracts a large, diverse population of over 60,000 students, staff and faculty in addition to medical patients, arts patrons, and other visitors

Whereas, a subway to Westwood/UCLA would greatly improve quick, affordable transit access to the campus for this diverse community and is expected to see up to 14,000 boardings per day at a Westwood station

Whereas, a subway to Westwood/UCLA would allow students greater access to internships and job opportunities in Downtown, Miracle Mile, Century City, Hollywood, and other areas served by Metro

Whereas, a subway to Westwood/UCLA would allow quicker access to UCLA from affordable neighborhoods served by rail and bus transit, which will allow UCLA students, who face increased tuition and fees, faculty and staff, who face who furloughs and pay reduction, to reliably access the campus from affordable neighborhoods outside of the Westside

Whereas, a subway to UCLA would accomplish an array of public benefits that extend beyond UCLA, including reduced greenhouse gas emissions, a new travel option for those who require or seek alternative transportation, and lower transportation costs for residents and employees of all income levels in Westwood and elsewhere along the expanded system

Whereas, Bruins for Transit campaigned for Measure R in 2008 because it would fund the subway to Westwood/UCLA.

We, the undersigned, strongly support the Westside Subway Extension and urge the Metro Board to approve the Draft Environmental Impact Report and select Alternative 2, extending beyond Westwood/UCLA, as the locally preferred alternative.

Sincerely,
The Undersigned

88. robert benapt
87. shannon stowers
86. carlos toro
85. Karla Barron all @signature.com names were signed on paper and have paper proof of signature
84. Joy Kwong ?
83. cassie Young ?
82. Jennifer Lo
81. Jessica Ko jessicaklow@gmail.com
80. Jessica Jew
79. Hannah Polow ?
78. Katie Angotti
77. Tanya Kim ?
76. Shannon Scovell ?
75. Anastasia Gamick ?
74. Andrew Jesien ?
73. Celestine Do ?
72. Christopher Jones ?
Daniel Freedman
Huma Husain
Charlie Le
Kevin Vu
Ebone Griffin
Steve Montes
Sahil Punamia
Omar Sandhu
Richard Patricelli
Kris Holz
Peter Bengston
Adrina Kocharian
Steven Chan
John L. Sandeen
Steven Sabicic
Roman Lopez
Jocom Giles
Kelly Maloney
Molly Follyn
Leo Gonzalez
Vanessa Han
Carrie F.
Elina Nasser
Jennelle Hsu
Gabriel Sermeno
Jessica Platon
Rebecca Shields Moose
Rebecca Shields Moose
Daniel Walker
Kevin Gan
Philip J. Kehres
Elissa B Barratt
Elissa B Barratt
Cherie Lewis
Angela Su
Eric Banghart
Richard A. Rosich
Jessica Scholes
UCLA staff member
UCLA staff member
Joel Epstein
LA needs more fixed rail public transportation asap
Anthony Nguyen
Alex Coleman
Matthew Barrett
Rachel Margaret Alonso
Chris Fistonich
200% support!
Wendy Chung
Kenneth Huang
Without a doubt, Los Angeles needs the Westside Subway Extension to act as a backbone to connect together the centers of commerce and culture. High quality transit segregated from road traffic will only increase the mobility and vitality of life in LA.
with the University continually growing, and traffic continually becoming more and more of a problem, the subway can’t get here soon enough.
Your preference for either the No Build or a robust revision of the TSM Alternative has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). Alternative 2 was selected as the LPA because the analysis in the Draft EIS/EIR demonstrated that the Build Alternatives would be more effective than the TSM Alternative in terms of enhancing mobility, serving development opportunities, and addressing other aspects of the Purpose and Need for the Project. Please refer to Chapter 7 of the Draft EIS/EIR and Section 2.5 of the Final EIS/EIR for information on this analysis.

Furthermore, the Project would not eliminate bus service along Wilshire Boulevard but rather would supplement it with rail. As explained in Chapter 2, Metro Local, Limited, Rapid, and Express bus service along Wilshire Boulevard will continue to operate in conjunction with the rail system, if approved and implemented. The Wilshire Boulevard Bus Rapid Transit project is also assumed to be in place. Maintenance of local bus service levels is an important component of the transit system serving the Westside Corridor. With the extension the Purple Line subway service to the Westwood/VA Hospital Station, it is estimated that one-third of demand would involve local bus access. Metro continues to seek to improve the region's transit needs and continually evaluates various transit corridors to achieve a more interconnected transportation system. To help guide design of subway stations, potential enhanced local bus service at stations was assessed and is discussed in Chapter 3 of the Final EIS/EIR.

The Project will be funded primarily through a combination of Measure R local funds and Federal New Starts funds, with some other local, State, and Federal funds. Metro will continue to use a combination of local, State, and Federal funding sources to operate and maintain the system. In addition to these funding sources, Metro relies on fare revenues to fund about one-third of its operating costs. Bus operating funds will not be used to construct the Project, and no fare increases or service reductions are proposed to cover the Project's costs. The selection of the TSM Alternative would not have resulted in lower fares. The Metro Board of Directors establishes fares. Currently, the Base Fare for each boarding is $1.50 and the Metro Day Pass is $5.00. A transfer is the same as the Base Fare - $1.50.

Furthermore, the Westside Subway Extension Project will increase transit options and improve mobility for residents across Los Angeles County, including low-income and minority residents who are transit-dependent. Transit service is meant to serve where the demand is greatest, and these areas are often within neighborhoods that have Environmental Justice (EJ) populations and communities of concern. Four of the seven stations are located in, or adjacent to the Environmental Justice populations identified in Section 4.2.6 of the Final EIS/EIR. Therefore, people living in EJ populations will have the same opportunity to access the transit and mobility improvements provided by the subway.
The increased connectivity would also reduce the number of transfers which would have a beneficial economic impact to elderly and low-income communities. The Project would also allow easier access to major employment centers. Transit user benefits associated with the LPA are anticipated both along the Project corridor as well as across the region. The transit benefits associated with the LPA are further detailed in Section 3.4 of the Final EIS/EIR.

Your comment about potential violation of Title VI of the 1964 Civil Rights Act has been noted. The Westside Subway will augment bus service in the corridor, and as such, will not adversely affect low income people or people of color who ride the bus. To the contrary, bus riders will have a new option that will, for many, provide a faster, more reliable, and more comfortable way to travel.

Your comment regarding the sufficiency of considering alternatives per the California Environmental Quality Act (CEQA) has also been noted. The CEQA addresses the selection of a range of alternatives to be evaluated in Section 15126.6(f): "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project."

Metro evaluated the No Build, the TSM, and five Build Alternatives on equal basis in the Draft EIS/EIR. The Draft EIS/EIR, as well as the preceding Alternatives Analysis provided a thorough consideration of feasible transit alternatives, both bus and rail, sufficient to provide the basis for a reasoned choice.

An enhanced bus alternative would result in some transit benefits as compared to the No-Build Alternative. However, the LPA, if implemented, will achieve more effective results in terms of addressing the purpose and need of the Project. As compared to the LPA, an enhanced bus alternative would not provide sufficient capacity for the longer term needs of the Study Area. Also it would not provide as reliable a trip-time performance as the LPA.

Your comment regarding the expense of the project and its benefits not justifying the expense has been noted. The Metro Board, in selecting Alternative 2 as the Locally Preferred Alternative, has found that the benefits do justify the costs. In addition, after reviewing the project against the New Starts Criteria specific in law, the Federal Transit Administration has given the Project a medium rating for project justification.

The Project will serve a range of populations and communities, as outlined in Section 4.2 of
the Draft EIS/EIR, including non-white and low income communities.

Your comment has been noted. The project will not reduce resources for the bus system, nor will Metro raise fares in order to construct the Project.

Your comment regarding Metro missing an opportunity to develop a world class bus system has been noted. The analysis in the Draft EIS/EIR demonstrated that the Build Alternatives would be more effective than the TSM Alternative in terms of enhancing mobility, serving development opportunities, and addressing other aspects of the Purpose and Need for the Project. Per FTA guidance, the TSM Alternative was designed to represent a “best bus” scenario for serving the corridor. Please refer to Chapter 7 of the Draft EIS/EIR for information on this analysis.
Your comment regarding the benefits versus costs of the Project has been noted. Section 3.4 and Chapter 7 of the Final EIS/EIR provide information on the LPA’s ridership and user benefits. While the commenter considers these benefits to be minimal, relative to cost, the benefits themselves are substantial and could not be achieved in any other way.

Your comment about the Project’s cost-effectiveness rating has been noted. When approving the Locally Preferred Alternative into Preliminary Engineering, the FTA gave the project a medium overall rating for project justification, considering not only the Project’s cost effectiveness rating but also the Project’s other benefits, including land use and economic development. FTA’s PE approval means that the Westside Subway is considered to be a good viable candidate for New Starts funds.

Your comment about the Project being bad for health has been noted. There is no evidence in the Draft EIS/EIR or the Final EIS/EIR that the Project would worsen health conditions. Chapter 7 of the Draft EIS/EIR provided a comparative analysis of the alternatives evaluated.

The Westside Extension Study Area contains some of the most congested arterial streets in the County. Any approach to resolving the significant traffic congestion in the County, and for purposes of this study of congestion in the Study Area, needs a multi-modal approach. While there are freeway, arterial, and bus improvement projects planned within the Study Area to address mobility, no one project alone can reduce the extraordinary levels of congestion in the Westside and each has trade-offs and environmental consequences in its implementation. Chapter 1 of this Final EIS/EIR details the Purpose and Need of the Project. As described, a major purpose of the Westside Subway Extension is to improve transit speed and reliability for the Study Area and, in particular, to provide enhanced mobility that will not be affected by freeway and arterial congestion levels. The improved capacity, speed, and reliability that will result from the subway’s exclusive guideway, offer the best solution to improve travel times, generate the projected 29 percent increase in transit riders in the study area between 2006 and 2035 (from 286,200 to 370,500), and provide an environmentally sound transit alternative.

Given the future conditions of the freeways, arterials, and travel speeds, the Westside Subway Extension provides benefit. Significant increases in travel are expected in the future and no major new highways or arterial widenings are planned. Without the subway, traffic congestion will be worse in the future. The Westside Subway Extension Project will provide significant new capacity to accommodate increases in travel demand but it will not, by itself, be sufficient to significantly reduce surface traffic congestion on the Westside.
This Final EIS/EIR presents a detailed examination of the travel-demand projections for 2035, which provide further insights on potential impacts of the LPA, specifically in terms of reduced auto trips during the seven-hour peak period. It is recognized that the LPA will result in a relatively small percentage decrease in trips. But, under the LPA, approximately 12,000 auto trips occurring in the seven-hour peak period will be eliminated. In addition, the Project will provide a highly attractive and viable public transportation alternative for Westside residents, workers, and visitors; particularly in terms of travel times and reliability.

The reduction vehicle miles of travel (VMT) will result in reductions in roadway congestion, pollutant emissions, and fossil fuel consumption. While the decrease from this one project is small in relation to total VMT, the Project will lead to an improvement over No Build conditions.

Please refer to Section 8.8.9 of the Final EIS/EIR for a more detailed response to traffic congestion reductions. Information on how the LPA would affect travel in the region and Study Area is presented in Section 3.4, Section 3.5 and Chapter 7 of the Final EIS/EIR. The Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives provides a summary of the updated travel forecast results for the Final EIS/EIR. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Your comment regarding Metro missing an opportunity to develop a world class bus system has been noted. The analysis in the Draft EIS/EIR demonstrated that the Build Alternatives would be more effective than the TSM (or "best bus") Alternative in terms of enhancing mobility, serving development opportunities, and addressing other aspects of the Purpose and Need for the Project. Moreover, the eligible uses of Measure R funds USC Section 5309 do not allow for these funds to be diverted to bus improvements or fare reductions.

Your comment about the bus-only lanes has been noted. Please see the responses above to comments number 591-1, 591-2 and 591-8 that discuss how the Build Alternatives are far more effective than the TSM Alternative in terms of enhancing mobility, serving development opportunities, and addressing other aspects of Purpose and Need. Also, please note that the Wilshire BRT is assumed to be in place with all of the alternatives considered in the Draft EIS/EIR (as well as the Locally Preferred Alternative in the Final EIS/EIR), and that Measure R and New Starts funds cannot be diverted to ineligible uses.
Your comments about the percentages of different population groups and potential violation of Title VI of the 1964 Civil Rights Act have been noted.

Metro is developing a comprehensive transportation system through the implementation of bus and rail projects. Given that the demographics of Los Angeles County are diverse, not every project will serve the same percentages of each population group; however, the overall objective of the entire Metro transportation plan is to provide the most effective transportation solution in a particular area based on a defined Purpose and Need, and to serve all communities within the county. There is a tremendous need, as identified in Chapter 1 of both the Draft EIS/EIR and the Final EIS/EIR for a very high-capacity transit system in the Westside Study Area, given the tremendous congestion, the dense residential and commercial land uses that generate high numbers of daily person trips, and the anticipated growth.

The Subway Project will complement the bus system that exists and create an even more effective, efficient, interconnected, and far-reaching transit system. By doing so, all populations within this corridor, as well as those beyond the specific Study Area, will benefit from enhanced mobility and access to and from the Westside. All populations from North Hollywood, or the Eastside, or those along the Metro Blue Line system, to name a few, will have improved access to jobs, recreation, entertainment venues, and housing.
Your comment about the Expo line in comparison to the Westside Subway has been noted.

Metro and the Exposition Metro Line Construction Authority have jointly approved a Funding Agreement and a Master Cooperative Agreement for the Expo Phase 2 project between Culver City and Santa Monica. Award of a design-build contract for this project is expected in the near future. Thus, the Expo Phase 2 project is considered to be a committed project.

Analyses in the Westside Draft EIS/EIR assumed that Expo Phase 2 to Santa Monica was in place. The analysis of ridership and cost effectiveness for Alternative 3 (Santa Monica Extension) and Alternative 5 (Santa Monica Extension plus West Hollywood Extension) showed the potential merit of building both the Expo Phase 2 project and a Westside Subway to Santa Monica.

Please also see the responses to comments 591-2 and 591-11 regarding Metro complying with Title VI of the Civil Rights Act.

Your comment about operations funding has been noted. The annual operations and maintenance (O&M) costs associated with the Westside Subway Extension are projected to be funded as part of the operation of LACMTA's overall rail system. Metro's financial plan predicts that it will have sufficient operating revenues to pay for operating and maintaining the planned rail system, including the Westside Subway.

Your comment about the potential reduction of the 720 Wilshire Rapid Line has been noted. With frequent subway service operating between downtown Los Angeles and Westwood, some shifts in demand from bus to rail could occur. Metro's bus service may be modified in the future to adjust to changing levels of demand. Nevertheless, planning for the Westside Subway has assumed that local bus service will not change with the Westside Subway. Indeed, maintaining local bus service levels in the Study Area is an important component of the overall transit plan. With the extension the Purple Line subway service to Westwood/VA Hospital, it is estimated that one-third of demand would involve local bus access.

Your comment about Alternatives 3, 4, and 5 has been noted. The Metro Board of Directors approved Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative.
Your comment about potential cost overruns of the Project has been noted. Recognizing the complexities of the Project, FTA conducted a risk assessment before approving the start of Preliminary Engineering. The assessment looked closely at the cost estimate and contingencies, nothing some potential for cost increases. Going forward, FTA and Metro will work together to update the estimate while addressing the findings of the risk assessment. Metro’s intent is to manage the project costs so that they do not exceed available resources.
Your comment in support of the Westside Subway Extension Project has been noted.

On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools.

In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. However, these studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site.

In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that the Century City Constellation Station would result in 3,350 more boardings along new Westside Subway Extension stations than the Century City Santa Monica Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile walksheds.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in...
the Century City vicinity can be found in the *Westside Subway Extension Century City Area Fault Investigation Report* and the *Westside Subway Extension Century City Area Tunneling Safety Report*. The results of further ridership studies can be found in the *Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives* and the *Westside Subway Extension Century City TOD and Walk Access Study*. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your comment in support of the Westside Subway Extension has been noted.

Your comment in support of the Century City Constellation Station location has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools.

In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. However, these studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site.

In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. However, these studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in
the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Your comment in support of the Westside Subway Extension Project has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative. Only Alternatives 1 and 2 are affordable within the adopted Long Range Transportation Plan, and between them, Alternative 2 provides higher ridership and improved cost effectiveness. Additionally, Alternative 2 serves the VA Hospital and other communities west of the I-405 more effectively.

Please refer to Sections 2.3, 2.4, and 2.5 of the Final EIS/EIR for an overview of the development of alternatives and the LPA selection process.
Your commenta on Alternatives 4 or 5 and their potential effects on the Cedars-Sinai campus have been noted. The concerns raised in this paragraph are summarizing concerns that are detailed in the remainder of your letter. Please refer to the responses below for more detail on each of the issues summarized in this comment.

Cedars-Sinai is concerned, however, about potentially adverse environmental impacts that could result from construction and operation of Alternatives 4 or 5 of the Project. Alternatives 4 and 5 propose a route along San Vicente between Beverly Boulevard and Third Street that would require permanent easements under the Cedars-Sinai campus. Alternatives 4 and 5 also include a station at the Beverly Center, part of which would be located under the Cedars-Sinai campus, with a possible entrance inside a Cedars-Sinai parking structure. Both the station and the entrance would necessitate acquisition of permanent easements from Cedars-Sinai by Metro. The construction of the Project could create noise and vibration impacts that could disrupt operations at the Medical Center, and road closures during construction could hinder access to the Cedars-Sinai campus. Operation of the Project could also create noise and vibration impacts on a daily basis that could conflict with operations at the Medical Center, particularly due to the large number of structures at the Cedars-Sinai campus that are located below grade.

This letter describes the uses at the Medical Center that may be affected by the Project, the potential impacts of the Project on the Medical Center, and the steps Metro should take to eliminate these impacts. Cedars-Sinai looks forward to working cooperatively with Metro to identify, avoid, and mitigate these impacts.

I. THE CEDARS-SINAI CAMPUS

The Cedars-Sinai campus of approximately 24 acres in the City of Los Angeles is generally bounded by San Vicente Boulevard to the east, Robertson Boulevard to the west, Third Street to the south, and Beverly Boulevard to the north (Exhibit A). Along San Vicente Boulevard, the proposed path of Alternatives 4 and 5, the Cedars-Sinai campus contains the Saperstein Critical Care Tower (the “Saperstein Tower”), the 5, Mark Taper Imaging Center (the “Imaging Center”), the Advanced Health Sciences Pavilion (the “Pavilion”), and a parking structure (“Parking Structure 4”) (Exhibit B).

The Saperstein Tower, located near the southwest corner of San Vicente Boulevard and Beverly Boulevard, is an approximately 250,800 square foot, 11-story structure that is approximately 158 feet tall (Exhibit C). The Saperstein Tower consists of nine stories above grade and two stories (approximately 30 feet) below grade. The Saperstein Tower contains 12 intensive care unit beds, a 48 bed direct observation unit, 30 acute care beds, an intensive care unit, and other state-of-the-art medical facilities.

The Imaging Center, located on San Vicente Boulevard north of Gracie Allen Drive, is an approximately 64,400 square foot, four-story structure that is approximately 50 feet tall (Exhibit D). The Imaging Center consists of three stories above grade and one story (approximately 17 feet) below grade. The setback of the Imaging Center...
Your comment regarding permanent underground easements on the Cedars-Sinai Campus has been noted. With regard to the purpose of the underground easement, the Real Estate Acquisitions Technical Report (p. 4-2) states that "An easement is the right to use another person's land for a stated purpose. An easement can involve a general or specific portion of the property and can be at either the surface level or beneath the property. Easements can be temporary, during construction for example, or permanent. Temporary construction easements are necessary when there is a need to utilize a portion of a property for construction staging or equipment use. Permanent underground easements are utilized when tunneling for a subway and during its operation. A permanent underground easement would be obtained for each parcel the tunnel passes beneath." The design of the subway tunnel accounted for the location of existing structures and the potential requirements of easements related to existing structures was evaluated in Section 4.2.2 of the Draft EIS/EIR and Final EIS/EIR.

Metro will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), which mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a Federal agency or with Federal financial assistance. The Uniform Act provides for uniform and equitable treatment for persons displaced from their homes and businesses and establishes uniform and equitable land acquisition policies. For easements, Metro will appraise each property to determine the fair market value of the portion that will be used either temporarily during construction or permanently above and below ground. Just compensation, which shall not be less than the approved appraisal, will be made to each displaced property owner. The following mitigation measures will be implemented to ensure just compensation for acquisitions and easements:

- CN-1-Relocation Assistance and Compensation
- CN-2-Propose Joint-use Agreements
- CN-3-Compensation for Easements

Please refer to Sections 4.2.2, 4.2.3, and 4.2.4 of this Final EIS/EIR for a discussion of the economic and fiscal impacts of the Project, including property acquisitions and easements. Refer to the Westside Subway Extension Acquisitions and Displacement Supplemental Report for a more detailed discussion of properties that will be impacted by the LPA.
Your comment regarding permanent below-ground easements for the Beverly Center Station has been noted. Appendix E, Construction Methods, as part of the Draft EIS/EIR contained the dimensions of a station, as well as the depth below the surface. Drawing AU-001 of Appendix B (Draft Station Plan Report) supporting the Draft EIS/EIR depicted one of three proposed station entrances in the parking structure. Should this station and corresponding alignment been selected coordination to minimize impacts would have continued. This station is no longer under consideration as a recommended station or related alignment based on the Metro Board of Directors LPA selection in October 2010.

III. PERMANENT BELOW-GROUND EASEMENT FOR BEVERLY CENTER STATION

The DEIR depicts a portion of the Beverly Center Station beneath Cedars-Sinai and states that permanent easements would be necessary for construction and operation of the Beverly Center Station (DEIR at p. 2-63). The DEIR does not specify the depth and size of the station or the extent that it would encroach upon Cedars-Sinai’s property.

Cedars-Sinai is developed with multiple underground uses, including the Superstein Tower, the Imaging Center, the Pavilion and Parking Structure 4. Cedars-Sinai is concerned that the Beverly Center Station could conflict with or displace these existing uses. The structures along San Vicente could be damaged if the Beverly Center Station easement allows the station to encroach upon Cedars-Sinai’s existing underground uses. Even if the new station is constructed below the existing uses, the station could disturb the soil, water table level or foundation of the existing uses, requiring them to be secured with significant structural supports.

Metro must ensure that Cedars-Sinai’s existing uses will not be disturbed in any way because of the Project, either by providing mitigation measures or by relocating the Beverly Center Station. Metro should provide Cedars-Sinai with additional information that specifies the depth and location of the station and the extent that it encroaches upon Cedars-Sinai’s property.

IV. PERMANENT ABOVE-GROUND EASEMENT FOR THE BEVERLY CENTER STATION ENTRANCE
Your comment regarding the station entrance within Parking Structure 4 has been noted. Refer to the response above that only one station entrance is planned to be constructed for each station (with a few exceptions where two entrances would be built). The location of a station entrance will be carefully coordinated with the affected property owners to identify the locations that are best suited to an entrance, that the property owners are amenable to an entrance on their property, and to ensure that any potential impacts from the entrance are mitigated.

Your comment regarding noise and vibration during construction at Cedars-Sinai has been noted. Please note that the Beverly Center Station is not included in the Final EIS/EIR following Board selection of a LPA in October 2010.

The greatest noise impacts will occur near stations, tunnel access portals, and construction laydown areas where construction activities at the surface are concentrated. In addition, haul routes will experience increased truck traffic, which could add to traffic noise. With the exception of these areas, all other construction will occur completely below-grade. Section 4.15.3 of this Final EIS/EIR analyzes construction noise impacts and mitigation measures.

When the construction site for the station box is open, noise from construction equipment will be audible at street level and result in an adverse effect. This time period will produce the highest levels of construction noise. The excavation and installation of street decking is expected to last four to five months. As the excavation continues below street level, the noise of construction will be reduced because the sides of the excavated opening will act as a sound barrier. Eventually when the surface opening is covered with temporary decking, construction noise at the surface will no longer be noticeable above the traffic noise. Therefore, the excavation of the station box will result in a temporary adverse noise effect.

To reduce the potential for noise and vibration impacts associated with construction, Metro's plans, specifications, and estimates (bid) documents will include measures to comply with the City of Los Angeles, City of Beverly Hills, and County of Los Angeles noise ordinances during construction hours. To further reduce noise impacts during construction, the following mitigation measures will be implemented:

- CON-22-Hire or Retain the Services of an Acoustical Engineer
- CON-23-Prepare a Noise Control Plan
- CON-24-Comply with the Provisions of the Nighttime Noise Variance
- CON-25-Noise Monitoring
- CON-26-Use of Specific Construction Equipment at Night
- CON-27-Noise Barrier Walls for Nighttime Construction
- CON-28-Comply with Local Noise Ordinances
Although mitigation measures will help to reduce noise impacts during construction, an adverse construction noise effect will remain after mitigation in the construction areas.

In addition to noise impacts, construction of the LPA could result in vibration impacts before mitigation is implemented. Impact pile driving at the station boxes will result in adverse vibration impacts. Perceptible vibration levels could be experienced within 200 feet of pile driving operations. Additionally, equipment used for underground construction, such as the TBM and mine trains, could generate vibration levels that could result in audible ground-borne noise levels in buildings at the surface, depending on the depth of the tunnel and soil conditions. Tunneling under residences and schools will occur for a limited time. The TBM tunnels between 30 and 100 feet per day. For an average residence or business, this means that the TBMs would be below the surface of that structure for no more than a day or two. Since underground construction is expected to occur continuously over a 24-hour day, there is the potential for the tunnel boring operation to be audible during nighttime sleep hours when background noise levels inside residential buildings are very low. However, as indicated, the period for this potential disruption would be limited to a few days or less and mitigation measures would be implemented to minimize impacts.

The contractor will be responsible for the protection of vibration-sensitive historic buildings or cultural resource structures within 200 feet of any construction activity. To ensure that noise and vibration impacts associated with construction are below threshold levels, Metro's plans, specifications, and estimates (bid) documents will include the following measures:

- CON-42-Phasing of Ground Impacting Operations
- CON-43-Alternatives to Impact Pile Driving
- CON-44-Alternative Demolition Methods
- CON-45- Restriction on Use of Vibratory Rollers and Packers
- CON-46-Metro Ground-Born Noise and Ground-Born Vibration Limits
If the Metro ground-borne noise limits or ground-borne vibration limits are exceeded during tunneling, the contractor will be required to take action to reduce vibrations to acceptable levels. Such action could include reducing the muck train speed, additional rail and tie isolation, and more frequent rail and wheel maintenance. However, there were no substantiated noise-level complaints made during tunneling for the Metro Gold Line Eastside Extension. Therefore, with mitigation, there will be no construction-related vibration adverse effects due to tunneling activities.

Refer to Section 4.15 of the Final EIS/EIR for more detailed information on construction noise and vibration impacts for the LPA.

Your comment regarding Cedars-Sinai as a sensitive noise receptor within 250 feet of the Project has been noted. The Cedars-Sinai campus should have been identified as a sensitive receptor within 250 feet of a proposed station for Alternatives 4 and 5. Please refer to the Draft EIS/EIR Errata for the correction. The Draft EIS/EIR Errata is available on the Draft EIS/EIR page for the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.

Table 6-7 of the Construction and Mitigation Technical Report shows representative construction noise levels for at a distance of 50 feet. Based on the Construction and Mitigation Technical Report, noise levels from point source stationary noise sources, such as construction equipment decrease at a rate of 6 dB per doubling of distance. A distance of 250 feet from the construction area will be 14 dB less than the values shown in Table 6-7. A sensitive noise receiver located within 500 feet of a station would experience an adverse noise effect during construction. Although the noise impact may be slightly greater if the receptor is within 250 of a station, an adverse effect would be experience within 500 feet. To reduce noise and vibration impacts associated with construction, Metro’s plans, specifications, estimates (bid) documents will include measures to comply with the City of Los Angeles, City of Beverly Hills, and County of Los Angeles noise ordinances during construction hours. Please see the list of mitigation measures outlined in the response to comment 592-6 above that will be implanted to further reduce noise and vibration impacts during construction.
Your comment regarding access to Cedars Sinai during the construction phase for emergency vehicles has been noted. The Draft EIS/EIR and the Final EIS/EIR include an analysis of impacts and mitigation measures specifically related to the construction phase of the Project. Section 4.15 addresses the specific issue of safe emergency access to your facility during construction and provides mitigation measures specifically to address the potential impact. These measures will be a part of the Project.

Your comment regarding operational vibration impacts on the Cedars-Sinai Campus has been noted. The estimated ground-borne vibration levels at 200 feet from the track alignment would be less than 54 VdB (500 microinches/second) for a train operating at 70 mph. Based on this criteria of 500 microinches/second any impact to the hospital activities or equipment will be avoided. Mitigation measures will not be required.
Your comment regarding ground-borne noise impacts on the Cedars-Sinai Campus has been noted. The estimated ground-borne noise at 200 feet from the track alignment would be less than 20 dBA. The FTA criterion for a hospital of 35 dBA would not be exceeded. Mitigation measures would not be required.
October 5, 2010

Honorable Don Knabe, Chair
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2852

Dear Chairman Knabe:

The Century City Chamber of Commerce wholeheartedly supports the Westside extension of the subway and continues to be a strong advocate for the creation of new public transit options for the community. We are encouraged by the progress Metro is making towards achieving this goal and want to contribute our comments to the Draft Environmental Review (DER) document now in circulation.

In order to serve this community with the most ridership, we believe that the Constellation Boulevard and Avenue of the Stars station alignment should be adopted for several reasons:

- It will bring passengers to the heart of Century City, providing both convenience to travelers, as well as increased ridership which will benefit everyone.

- With nearly 40,000 employees within Century City clustered around this intersection, they are more likely to use the subway for both commuting and for trips during the day if the portal is conveniently located.

Thank you for your attention to our views. We look forward to the subway reaching Century City at the corners of Constellation Boulevard and Avenue of the Stars.

Sincerely,

Susan Bullock
President & CEO

Cc: Mayor Antonio Villaraigosa
Honorable Zev Yaroslavsky
L.A. County Supervisor
21 Kenneth Hahn Hall of Administration
508 W. Temple Street
Los Angeles, CA 90012

Councillor Paul Krekorian, Council District 5
City Hall
200 North Spring Street
Room 440
Los Angeles, CA 90012

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Appendix H - Response to Comments

Your comment in support of the Westside Subway Extension has been noted.

Your comment in support of the Century City Constellation Station location has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools.

In response to the Metro Board of Director's request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

The geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. However, these studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site. In addition, the Century City Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension. Further refinements to the ridership analysis concluded that the Century City Constellation Station would result in 3,350 more boardings along new Westside Subway Extension stations than the Century City Santa Monica Station due to proximity to jobs and residences within the critical 600-foot and 1/4-mile walksheds.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further geotechnical investigations in
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Your comment in support of the Century City Constellation Station and station access/ridership projections has been noted. On October 28, 2010, the Metro Board of Directors identified Alternative 2 (Westwood/VA Hospital Extension) as the Locally Preferred Alternative (LPA). As part of the LPA selection, the Metro Board of Directors decided to continue to study both station location options in Century City (Santa Monica Boulevard and Constellation Boulevard) to address concerns raised by the community regarding locating a station directly on a seismic fault and the safety of tunneling under homes and schools.

In response to the Metro Board of Director’s request for more information, further analysis was undertaken to focus on the engineering and environmental aspects of the two options during the preparation of the Final EIS/EIR to expand on the studies conducted in preparation of the Draft EIS/EIR. It should be noted that prior to conducting the comparative study, the Santa Monica Boulevard Station location was shifted slightly to the east from the location in the Draft EIS/EIR to avoid the Santa Monica Fault zone.

During preparation of the Final EIS/EIR, the ridership model from the Draft EIS/EIR was further refined to assess the LPA and incorporate any changes between the Draft EIS/EIR and the Final EIS/EIR. More than ten model runs were conducted to respond to changes, perform additional analysis, and answer questions that were raised during the project development process in the Final EIS/EIR phase. The main types of refinement included feeder bus service, balanced headways and some coding refinement, to determine what changes should be included in the Final EIS/EIR model runs. The refined model predicted boardings along the new Westside Subway Extension stations are approximately 49,300 with the Century City Constellation Station, which is about 3,350 more than the predicted 45,986 boardings with the Century City Santa Monica Station. The main difference in boardings at the Century City Station is the increased walk access trips in the Constellation Station over the Santa Monica Station. The walking time between the TAZ 738 (Century City)’s centroid node and the Century City subway station is 3 minutes in the Constellation Option and 13 minutes in the Santa Monica Option. The number of jobs and jobs per square mile in the 1/4-mile and 1/2-mile area around the Century City Stations is much higher in the Constellation Option than in the Santa Monica Option.

In addition to the refined ridership model, a supplemental ridership study was prepared to evaluate the relative accessibility of the Century City Station locations to surrounding commercial and residential development within a 1/2-mile walking distance. This data was then used to estimate the number of Westside Subway Extension riders who would walk to and from the stations. It should be noted that these ridership projections only consider those riders who walk to the station and these projections are intended to supplement the ridership forecasts. This analysis concluded that the Century City Constellation Boulevard Station attracts more Westside Subway riders compared to the station location along Santa Monica Boulevard. Based on both existing and projected future development in Century City.
City, the Constellation Station has the highest concentration of jobs and residents within the critical 600-foot and 1/4-mile walksheds. As a consequence, the 14,005 riders estimated to walk to the Century City Station along Constellation Boulevard is approximately 72 percent greater than the approximately 8,145 riders expected to walk to the Santa Monica Boulevard Station. The Constellation Boulevard Station has the best pedestrian environment, can be expected to attract the most transit riders, and is centrally located to help shape the redevelopment of Century City as an important transit-oriented destination on the Westside Subway Extension.

In addition to ridership studies, the geotechnical studies conducted during preparation of the Final EIS/EIR concluded that tunneling can be safely carried out beneath the Beverly Hills High School campus and the West Beverly Hills, Century City, and Westwood neighborhoods. However, these studies also determined that the Century City Santa Monica Station would cross the West Beverly Hills Lineament, a northern extension of the active Newport-Inglewood Fault, which poses a significant safety risk to passengers at this station location. No evidence of faulting was found at the proposed Century City Constellation Station site.

Based on all of these factors, the Century City Station Location Report concluded by recommending that the Century City Station be located along Constellation Boulevard due to seismic safety concerns at the Santa Monica Boulevard Station and higher ridership projections with Constellation Boulevard Station.

Please refer to Section 8.8.2 and 8.8.3 of the Final EIS/EIR for more detailed responses to concerns related to the Century City Station. Refer to Section 7.3 of the Final EIS/EIR and the Westside Subway Extension Century City Station Location Report for a comparison of the two Century City Station locations. The results of further ridership studies can be found in the Westside Subway Extension Technical Report Summarizing the Results of the Forecasted Alternatives and the Westside Subway Extension Century City TOD and Walk Access Study. The results of further geotechnical investigations in the Century City vicinity can be found in the Westside Subway Extension Century City Area Fault Investigation Report and the Westside Subway Extension Century City Area Tunneling Safety Report. All reports are available on the Metro Westside Subway Extension Project website: www.metro.net/projects/westside/westside-reports.
Finally, given that the Century City station is located in the heart of Century City it should generate some of the highest ridership of any MTA station. When comparing Westwood, which has much less density than Century City, the DEIR projected 11,000 daily riders. Therefore, it would seem that Century City’s over 17 million square feet should generate more than 20,000 daily riders vs. the projected 6,500. We ask that the MTA reexamine the assumptions in the Draft EIR to consider some of these factors and believe it will find a much higher percentage of ridership than currently projected.

In terms of the location, the CCTMO believes the Constellation Boulevard Station is the correct choice. It is important that the station’s location further establish and promote a Transit Oriented District and therefore should be located in the center of Century City, where it will be surrounded by the highest concentration of office and commercial uses. The Santa Monica Boulevard station is oriented to the periphery of the area adjacent to a golf course, and will not encourage ridership to and from Century City to the same extent as the Constellation Boulevard Station. The majority of tenants and business owners in Century City support the Constellation Boulevard Station alignment, and the CCTMO believes this location will optimize ridership and further promote Century City as a destination for City residents.

We believe the extension of the subway to Century City, Westwood and Santa Monica is of tremendous importance to the region. It will help solve long term transportation issues and create other opportunities for economic growth for the region.

We appreciate the significant effort that has gone into the planning for the Westside Rail Extension and we look forward to working with and supporting the MTA in making it a reality.

Sincerely,

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