Metro Purple Line Extension, Section 2
Draft Supplemental Environmental Impact Statement
Public Hearing: June 22, 2017



Public Hearing Agenda

- Presentation
 - Purple Line Extension (PLE) Project Background and Schedule
 - Draft Supplemental Environmental Impact Statement (SEIS)
 - o Background
 - Analysis
 - o Conclusions
 - Next Steps
- Public Comment



Purple Line Extension: Approved Project



Purple Line Extension: Schedule

*Metro's goal is to complete the entire project by 2024 if the IOC awards the 2024 Olympic Games to Los Angeles

	Under Construction	In Pre-Construction	
	Section 1	Section 2	Section 3
Length	3.92 Miles	2.59 Miles	2.59 Miles
New Stations	Wilshire/La Brea Wilshire/Fairfax Wilshire/La Cienega	Wilshire/Rodeo Century City Constellation	Westwood/UCLA Westwood/VA Hospital
Pre-Construction Activities	Complete	2016 - 2018	2016-2018*
Construction	Current - 2023	2018 – 2025*	2018-2025*
Operations	2024	2025*	2026*

Purple Line Extension: Background

• October 2007: Start of environmental analysis

September 2010: Draft EIS/EIR released for public comment

October 2010: Metro Board of Directors selects Locally Preferred

Alternative for further analysis in Final EIS/EIR

May 2012: Metro Board of Directors certifies Final EIR

• August 2012: Federal Transit Administration (FTA) approves Project

by issuing Record of Decision (ROD)

May 2014: FTA awards federal matching funds for Section 1

• July 2014: Metro awards Section 1 Design/Build contract

• November 2014: Section 1 groundbreaking

January 2017: FTA awards federal matching funds for Section 2 and

Metro awards Section 2 Design/Build contract

April 2017: Metro issues Notice to Proceed to Section 2

Design/Build contractor

Draft SEIS: Background

May 2012: City of Beverly Hills and Beverly Hills Unified School

District (BHUSD) file lawsuit against Metro arguing

the EIR is not in compliance with CEQA

November 2012: City of Beverly Hills and BHUSD file lawsuit against

FTA arguing the EIS is not in compliance with

NEPA

December 2015: State lawsuit concludes; EIR is found to be in

compliance with CEQA

August 2016: Federal Judge:

Orders FTA to prepare Supplemental EIS for portions

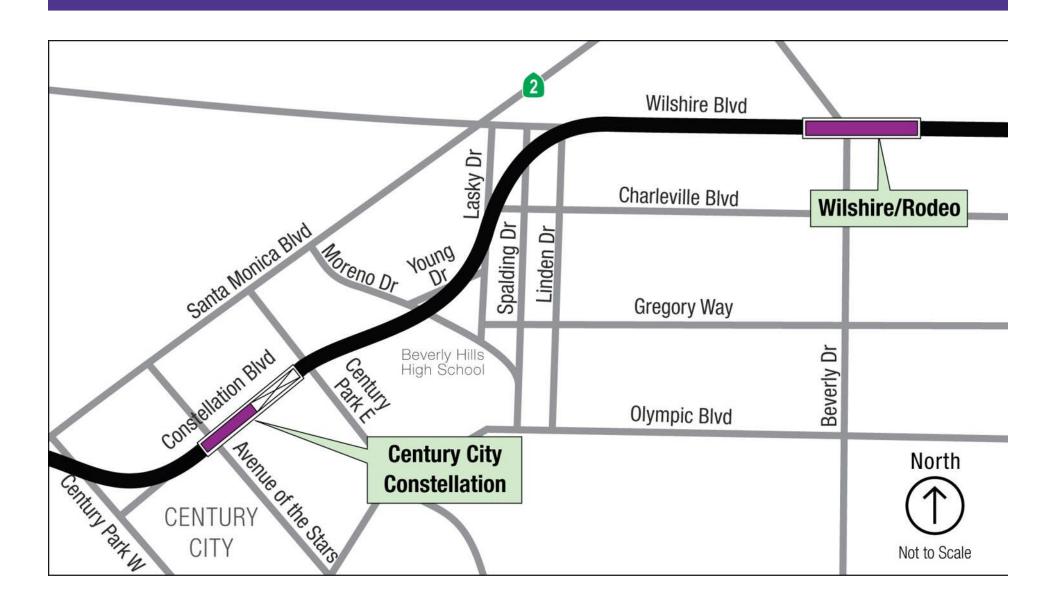
of Section 2 and conduct "4(f) analysis"

Did not "vacate" ROD, allowing Purple Line Extension

to remain environmentally cleared



Draft SEIS: Focused Study Area



Draft SEIS: Addressed Per Court Order

- <u>Subsurface Gas</u>: Potential risks of subway construction, including tunneling, to cause gas to migrate
- <u>Air Quality</u>: Potential impacts of tailpipe emissions/particulate matter generated by construction equipment during construction and tunneling at the Century City/Constellation Station

Seismic Studies:

- Discussion of the completeness of available Section 2 seismic risk information
- Review of seismic analysis that supported decision to locate Century City Station below Constellation Boulevard
- Historic & Recreational Use "4(f) Analysis"
 - Further analysis of possible impacts to parks, recreation and historic sites
 - Evaluation of alignment alternatives that avoid these properties
 - Identification and incorporation of additional mitigations to address impacts



Draft SEIS: Additional Analysis

In addition to responding to issues specified in the Court's ruling, the Draft SEIS analyzes:

- Century City/Constellation Station
 - Changes to land uses since 2012 adjacent to construction staging areas
 - Changes to construction staging areas
- Wilshire/Rodeo Station
 - Removal of subway crossover track





Draft SEIS: Subsurface Gas Oil Fields and Wells Along Subway Route

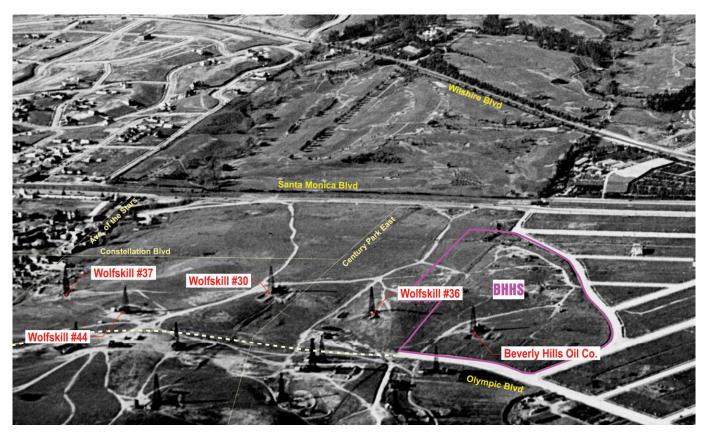
- Section 1: Salt Lake Oil Field
- Section 2: Beverly Hills Oil Field
- Section 3: Sawtelle Oil Field



Draft SEIS: Subsurface Gas Soil Gas Migration

Two (2) types of risks evaluated:

- Tunneling could cause soil gas to migrate to surface or into buildings
- Encountering abandoned oil wells while tunneling





Draft SEIS: Subsurface Gas Risks of Tunneling near Oil Fields

- Oil deposits in Section 2 are approximately 2,000 feet below the surface
- Gas migrates to the surface naturally under certain conditions
- All Metro tunnel projects near oil fields evaluate gas risks
- Over 192 soil samples have been collected along Section 2 to evaluate gas conditions and identify appropriate mitigations, if necessary





Draft SEIS: Subsurface Gas Soil Gas Migration Findings

- Gas levels are not elevated in most of Section 2
- Levels are consistent or lower than other areas where underground construction is occurring
- Gas migrating to the surface rapidly dilutes into the atmosphere
- Gas migration can be managed with current safe tunneling practices
- Negligible risk that tunneling could alter soil gas migration routes due to:
 - Existing soil conditions
 - Earth pressure balance tunneling technology minimizes soil disturbance



Draft SEIS: Subsurface Gas Measures to Manage Gas Risk

- Gas monitoring wells have been installed along the alignment
- Additional gas monitoring wells will be installed in areas where elevated concentrations have been detected
- Wells will be monitored for gases before, during and after tunneling
- Near oil wells, ambient air will be monitored at the ground surface to screen for indications of soil gas emissions
- If significant deviations from pre-construction levels are found, Metro will:
 - Further monitor in nearby buildings; and,
 - Ventilate to reduce levels, if needed





Draft SEIS: Subsurface Gas Risk from Abandoned Oil Wells

- Oil wells typically have a "casing" that extends from the surface to a depth of 100 feet or more
- When wells are abandoned, the California Division of Oil, Gas and Geothermal Resources requires casings be filled with cement plugs
- Surveys have identified the following abandoned wells:
 - Six (6) on BHHS property; the closest is 35 feet from the tunnel alignment
 - One (1) in Century City near Century Park East
 - Several near the Century City/Constellation Station
- No oil wells are presently known to exist in the path of the tunnel alignment



Draft SEIS: Subsurface Gas Manage Risk from Abandoned Oil Wells

- Further geophysical surveys will be conducted prior to tunneling to identity unmapped wells
- If an abandoned well is found and access to the top of the well is available at the ground surface, the well can be re-abandoned after removing the portion of the steel casing at the tunnel depth
- If an abandoned oil well is found and access to the top of the well is unavailable, there are methods to address this condition:
 - Minor adjustments to the tunnel alignment to avoid the casing
 - Access to the casing from within the Tunnel Boring Machine or the parallel tunnel



Draft SEIS: Air Quality

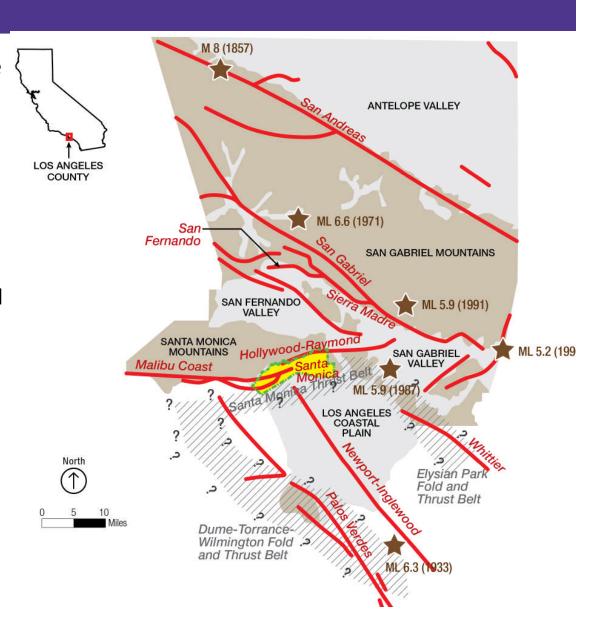
- Analysis focused on emissions from construction vehicles and equipment, and release of particulates
- Construction specifications require the use of:
 - Cleaner trucks and equipment, and emission control equipment
 - Control of idling equipment
 - Dust control and street watering
 - Haul routes away from schools and residential areas, where feasible
- Assures that construction emissions will meet:
 - South Coast Air Quality
 Management District's Local
 Significance Threshold
 - National Ambient Air Quality
 Standards





- Los Angeles is a seismically active region
- Purple Line Extension is close to Santa Monica and Newport-Inglewood faults
- Subway lines have been built close to faults
- Subway tunnels have been built to cross faults and require special design
- Metro Red Line tunnel crosses
 Hollywood-Raymond fault and
 was not impacted by 1994
 Northridge Earthquake





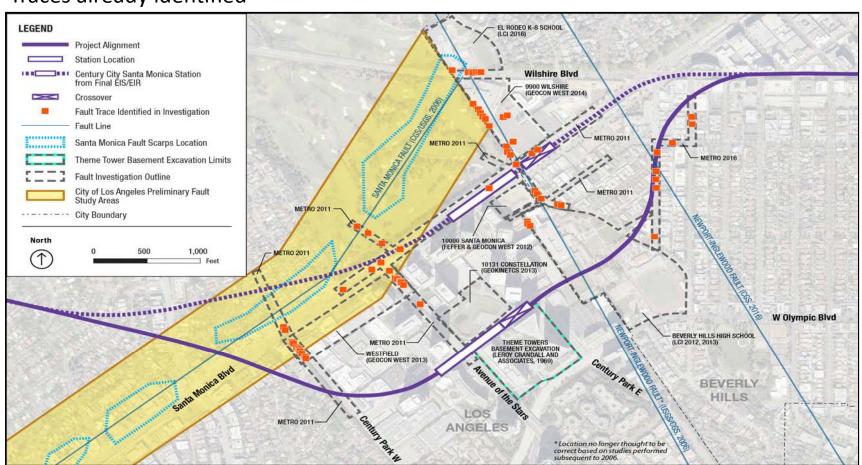
- Excavation for construction of the old ABC Entertainment Center, Century City Towers and parking garage, beginning in 1969, provided an opportunity to study geology of the area
- No evidence of faulting was found



- In addition to significant seismic analysis provided in 2012,
 Metro has conducted or reviewed eleven (11) additional studies confirming:
 - Fault strands along Santa Monica Boulevard alignment do not extend further south to Century City/Constellation station
 - Numerous fault strands in the vicinity of Santa Monica Boulevard could pose a surface rupture hazard at this station location
- For safety reasons, the station was not recommended to be located below Santa Monica Boulevard, but instead at Century City/Constellation where there is no evidence of faulting



- Available seismic risk information indicates that a zone of faulting extends south of Santa Monica Boulevard but does not extend as far south as Constellation Boulevard
- Yellow zone shows City of LA's Preliminary Fault Rupture Study area; orange dots indicate Fault Traces already identified



Draft SEIS: Section 4(f) Analysis

- In the focused study area, Section 4(f) applies to:
 - Parks and recreation facilities; and,
 - Significant historic sites
- "Use" of Section 4(f) property occurs when:
 - Land is permanently incorporated into a transportation facility;
 - Temporary occupancy of land is adverse; or,
 - There is a "constructive use" of a Section 4(f) property
- Impact is considered "de minimis" if use does not adversely affect the activities, features, or attributes that qualify the property for Section 4(f) protection



Draft SEIS: Section 4(f) Analysis

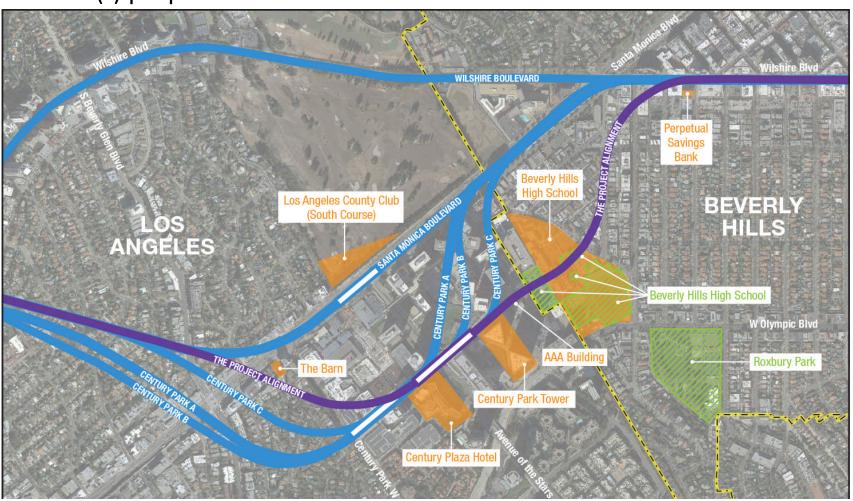
- Court directed FTA to assess the "use" of Beverly Hills High School under Section 4(f) due to planned tunneling
- The analysis evaluates:
 - Potential "use" of BHHS from planned tunneling under the property
 - Potential "use" of other Section
 4(f) historic resources near the
 Century City/Constellation Station
 construction staging areas





Draft SEIS: Section 4(f) Analysis Avoidance Alternatives

The SEIS evaluated five (5) Alternatives that completely avoid BHHS and other 4(f) properties



Draft SEIS: Section 4(f) Analysis Avoidance Alternatives

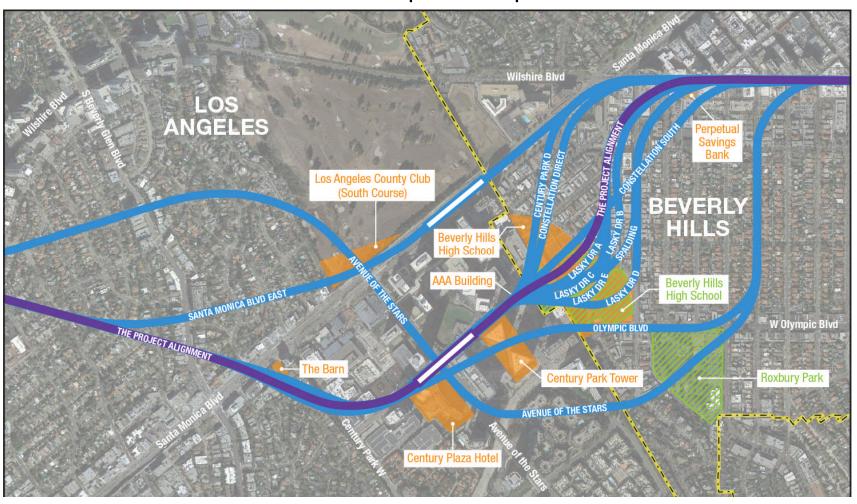
Five (5) Alternatives were evaluated that completely avoided BHHS and other 4(f) properties. In comparison to the Preferred Alignment:

- Wilshire Boulevard Alternative does not serve Century City altogether
- Santa Monica Boulevard Alternative deemed infeasible due to Santa Monica fault
- Two (2) Alternatives deemed impractical due to:
 - Risk of building under high-rise buildings
 - Longer travel times
 - More property acquisition
 - Higher cost
- One (1) Alternative has high risk due to:
 - Proximity to the 60" Stone-Hollywood Trunk Water Line; and,
 - Passage beneath high-rise buildings



Draft SEIS: Section 4(f) Analysis Least Overall Harm Alternatives

The SEIS evaluated twelve (12) alignments that also pass under 4(f) properties but would have different levels of impact compared to the Preferred Alternative



Draft SEIS: Section 4(f) Analysis Least Overall Harm Alternatives

Twelve (12) Alternatives that also pass beneath 4(f) properties were evaluated for "least harm" in comparison to the Preferred Alternative:

- Santa Monica Boulevard Alternative deemed infeasible due to Santa Monica Fault
- Two (2) Alternatives:
 - Avoided recreational 4(f) facilities
 - Still passed under historic 4(f) buildings
 - Significantly greater cost
- Five (5) Alternatives
 - Passed under more 4(f) properties
 - Greater cost
 - More travel delay to subway riders
- Four (4) Alternatives failed to meet minimum design criteria for subway curve radius



Draft SEIS: Section 4(f) Analysis Impacts to Use of BHHS During Operations

- No noise or groundborne vibration thresholds exceeded at BHHS, including:
 - Existing academic buildings
 - Existing recreational facilities
 - Proposed new gymnasium

Any impacts that may result from new buildings at BHHS can be

mitigated





Draft SEIS: Section 4(f) Analysis Impacts to Use of BHHS

- No adverse impacts to BHHS buildings
- Project would not impair recreational activities, features or attributes that qualify the campus for protection under Section 4(f)
- Construction activities would not have an adverse effect on air quality, noise, vibration or aesthetic features, or prevent access and use of the BHHS property



Conclusions

Confirmed the Century City/Constellation station location was based on complete, comprehensive analysis, building on and extending the 2012 findings and including additional mitigation measures:

- Air Quality: No significant impact, due to new construction methods and technologies
- Gas Migration: Low risk potential, due to low levels of gas and mitigation measures during construction
- **Seismic Risk**: Historic data and eleven (11) additional studies from 2012-2017 verify greater risk at a Santa Monica Boulevard station
- **Ridership Data**: Supports and confirms Century City/Constellation Station with greater ridership
- Use of BHHS: No adverse impacts to historic or recreational features identified

Previously approved project remains the Preferred Alternative

Metro

Draft SEIS: Timeline and Next Steps

Current	 June 2: Draft SEIS released for public review June 22: Public hearing on Draft SEIS July 17: Deadline for public comments
Summer 2017	 Review public comments on Draft SEIS Prepare Final SEIS, including responses to comments
Fall 2017	FTA to publish Final SEIS with responses to comments
Fall/Winter 2017	 FTA to determine if changes to Project required FTA may issue an amended Record of Decision



How to Comment

- Public Hearing
 - Verbal comments recorded by court reporter
 - Submit written comments tonight
- All comments due by 5:00 PM, Monday, July 17, 2017
 - Letter to: Eric Geier
 - Metro

One Gateway Plaza

Mailstop 99-13-1

Los Angeles, CA 90012

Email to: purplelineext@metro.net



Draft SEIS: Document Review Locations

- Beverly Hills Public Library, 444 N. Rexford Dr., Beverly Hills 90210
- Donald Bruce Kaufman Brentwood Library, 11820 San Vicente Blvd., Los Angeles 90049
- Fairfax Library, 161 S. Gardner St., Los Angeles 90036
- Felipe de Neve Library, 2820 W. Sixth St. Los Angeles 90057
- Frances H.G. Hollywood Regional Library, 1623 N. Ivar Ave., Hollywood 90028
- John C. Fremont Library, 6121 Melrose Ave., Los Angeles 90038
- Memorial Library, 4625 W. Olympic Blvd., Los Angeles 90019
- Metro Library, One Gateway Plaza, Los Angeles, CA 90012
- Pio Pico Koreatown Library, 694 S. Oxford Ave., Los Angeles 90005
- Robertson Branch Library, 1719 S. Robertson Blvd., Los Angeles 90035
- Santa Monica Main Library, 601 Santa Monica Blvd., Santa Monica 90401
- West Hollywood Public Library, 715 North San Vicente Blvd., West Hollywood 90069
- West Los Angeles Regional Library, 11360 Santa Monica Blvd., Los Angeles 90025
- Westwood Library, 1246 Glendon Ave., Los Angeles 90024
- Will & Ariel Durant Library, 7140 W. Sunset Blvd., Los Angeles 90046
- Wilshire Library, 149 N. St. Andrews Pl., Los Angeles 90004



Download the complete Draft SEIS at metro.net/purple

Draft SEIS: Public Hearing Comments

- Court reporter will capture comments for administrative record
- Two (2) minutes per speaker
- Speak clearly so court reporter can transcribe your comments accurately
- State your name for the record

Responses to comments will be included in the Final SEIS

