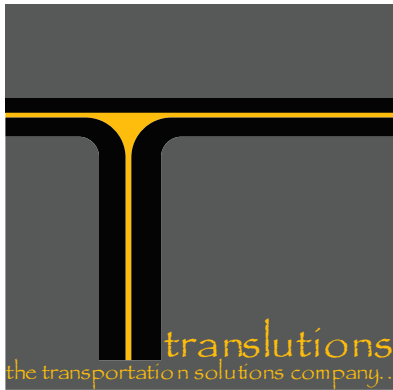


**APPENDIX G**

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**Vehicle Miles Traveled Technical Memorandum**



# memorandum

**DATE:** June 13, 2022  
**TO:** Natalie Thompson, Senior Environmental Planner, AECOM  
**FROM:** Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP  
**SUBJECT:** Headworks – VMT Memorandum

Translutions, Inc. (Translutions) is pleased to provide this memorandum discussing the vehicle Miles Traveled (VMT) for the proposed Headworks Site Development project in the City of Los Angeles. The proposed project is located at 6001 W. Forest Lawn Drive in the City of Los Angeles, California, at the LADWP Headworks spreading grounds property.

## PROJECT DESCRIPTION

The project site will be developed to include a Water Quality Lab (WQL), Direct Potable Reuse (DPR) Demonstration Facility, and a public park (Headworks Park). The WQL component of the project will replace the existing Los Angeles Department of Water and Power (LADWP) laboratory located in Pasadena as well as the Rinaldi mobile lab facility located in Granada Hills and help LADWP to address issues including energy efficiency, operations and maintenance costs, and insufficient space to perform regulatory required laboratory testing. The WQL will consolidate the work locations of several related functions, such as sample collection, biology, science and research, and the water quality mobile laboratory trailer (MLT) that are currently performed in separate locations. The project will also help consolidate management and administrative functions related to water quality currently located at LADWP Headquarters and other downtown locations.

The DPR Demonstration Facility component of the proposed project would be an advanced water purification facility (AWPF) for treated drinking water augmentation, as defined in the State Water Resource Control Board (SWRCB) Proposed Framework for Regulating Direct Potable Reuse in California. The DPR Demonstration Facility would provide the opportunity to verify the technologies and processes required to produce purified recycled water suitable for DPR under close coordination with the SWRCB Division of Drinking Water (DDW), which must ultimately approve DPR programs.

The Headworks Park component of the proposed project would incorporate landscaping reflective of native plant communities and provide educational opportunities regarding local ecosystems and the Los Angeles River, as well as passive open-space recreation uses, including a segment of the Los Angeles River Trail system linking to adjacent recreation areas and trails. The park, a portion of which would be located atop the Headworks West Reservoir, would be consistent with the previously established plans to plant the top and sides of the buried concrete reservoir and surrounding areas with native vegetation.

The WQL would operate 7 days a week, 12-hours a day, from 6 a.m. to 6 p.m. At the outset of operations, 102 personnel would report to the facility on weekdays in staggered shifts. Of this total, 62 personnel would be transferred from the existing laboratory building in Pasadena. The Pasadena facility is owned by LADWP, and it would not be backfilled with another department use or leased to an outside entity. In addition, 5 personnel would be transferred from the LADWP Rinaldi Yard in Granada Hills, where the water quality mobile laboratory and support trailers are currently located. This function would be entirely relocated to the proposed WQL. The proposed WQL would initially require an increase of 35 personnel above the current staffing at the Pasadena lab to perform the laboratory functions required to meet state and federal regulations and ensure drinking water quality. Over time, it is anticipated that the number of personnel at the WQL would increase to a maximum of 172 based on the requirement for additional laboratory procedures and on organizational changes that would involve the transfer of existing management and administrative staff from the LADWP headquarters building in downtown Los Angeles. This increase in personnel from 102 to 172 may occur over a ten-year period. It is anticipated that the positions transferred from LADWP headquarters to the WQL would be replaced at the headquarters with new hires in other areas. On weekends, the WQL would maintain operations with a skeleton crew. While most personnel would operate from the laboratory building on a daily basis, some personnel would spend a portion of their day in the field collecting water samples, for which

fleet vehicles would be available from the WQL. Regular deliveries of chemicals and other supplies would be accommodated via the secondary, non-public gate at the west end of the Headworks spreading grounds property.

The DPR facility will include five (5) employees. The public park will include approximately 15 acres.

## TRIP GENERATION

Trip generation for the project is based on trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation (11<sup>th</sup> Edition). The WQL part of the project involves research and development and the DPR would operate primarily as a light industrial use. The trip generation for these uses were based on the number of employees anticipated at maximum occupancy. The following trip generation rates were used for the various components of the project:

- WQL – Land Use 760 – Research & Development Center
- DPR – Land Use 110 – General Light Industrial
- Park – Land Use 411 – Public Park

Table A shows the project trip generation. As shown in Table A, the total project is anticipated to generate 72 trips during the a.m. peak hour, 69 trips during the p.m. peak hour, and 608 daily trips.

**Table A - Project Trip Generation**

Land Use	Units	Peak Hours						Daily
		AM Peak Hour			PM Peak Hour			
		In	Out	Total	In	Out	Total	
Proposed Demo & WQL Lab Trip Generation Rates <sup>1</sup> Trip Generation	172 Employees	0.34 58	0.06 11	0.40 69	0.05 8	0.33 57	0.38 65	3.37 580
Demo Facility Trip Generation Rates <sup>2</sup> Trip Generation	5 Employees	0.44 2	0.09 1	0.53 3	0.11 1	0.38 1	0.49 2	3.10 16
Public Park Trip Generation Rates <sup>3</sup> Trip Generation	15 Acres	0.01 0	0.01 0	0.02 0	0.06 1	0.05 1	0.11 2	0.78 12
<b>Total Trip Generation</b>		<b>60</b>	<b>12</b>	<b>72</b>	<b>10</b>	<b>59</b>	<b>69</b>	<b>608</b>

<sup>1</sup> Trip generation based on rates for Land Use 760 - "Research & Development Center" from Institute of Transportation Engineers' (ITE) Trip Generation (11<sup>th</sup> Edition).

<sup>2</sup> Trip generation based on rates for Land Use 110 - "General Light Industrial" from ITE Trip Generation (11<sup>th</sup> Edition).

<sup>3</sup> Trip generation based on rates for Land Use 411 - "Public Park" from ITE Trip Generation (11<sup>th</sup> Edition).

## VMT SCREENING

For identification of VMT impacts for a land use project, CEQA requires the identification of impacts based on whether the project conflicts or is inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1). The City of Los Angeles has developed several screening criteria to identify if a detailed analysis will be required.

**Trip Based Screening.** The primary screening criterion is a trip-based screening. If a project generates less than 250 daily trips, impacts are considered to be less than significant. As seen on Table A, the project generates more than 250 daily trips. Therefore, this screening criteria does not apply.

**Land Use Based Screening.** The City's guidelines also state that public services (e.g., police, fire stations, public utilities, public parks) do not generally generate substantial VMT. Instead, these land uses are often built-in response to development from other land uses (e.g., office and residential). Therefore, these land uses can be presumed to have less-than-significant impacts on VMT. The proposed project includes a public park and a drinking water treatment facility, which are public services that are presumed to have a less than significant VMT impact. Therefore, these components of the project are screened out from analysis. The WQL, although an LADWP function, would not meet the definition of a public service since it would serve as a laboratory and administrative facility that would generate daily employee trips in excess of the VMT daily threshold. Therefore, the WQL is subject to a VMT analysis.

**WQL Net VMT Screening.** To evaluate the VMT/employee for the WQL, the net change per employee was calculated. As stated earlier, the proposed project will replace the Pasadena and Rinaldi facilities. The Pasadena facility is located at 555 E Walnut Street in Pasadena, and the Rinaldi facility is located at 15901 Rinaldi Street in Granada Hills. For this evaluation, the net VMT for the project was calculated by subtracting the total VMT per employee for the Pasadena and Rinaldi facilities from the VMT for the proposed project. The VMT per employee for employees that are expected to transfer to the WQL from LADWP facilities in downtown Los Angeles were not subtracted because it is anticipated that those positions would be backfilled at the current locations in the future, unlike the positions in Pasadena and Rinaldi.

The Pasadena facility is in Traffic Analysis Zone (TAZ) 22121400 of the SCAG RTP Model. The VMT per employee for the TAZ is 16.3 miles/employee. The Rinaldi facility is included in the City of Los Angeles VMT Calculator, which shows a VMT per employee of 14.1 miles/employee. The VMT/Employee for the proposed project site is 12.4 miles/employee based on the VMT Calculator.

The total VMT for existing and proposed facilities were calculated by multiplying the VMT/employee for the existing and proposed facilities. The reduction of 62 employees at the Pasadena location will result in a VMT reduction of 1,011 miles, and that of the Rinaldi facility will result in a reduction of 71 miles. The VMT for the proposed project is anticipated to be 2,133 miles for 172 employees. The net change in VMT is 1,051 miles, which results in a net VMT of 6.11 miles per employee. Table B shows the calculations.

**Table B: Project VMT/Employee**

Land Uses	VMT/Employee	Employees	Total VMT
Project	12.4	172	2,133
VMT reduction from Pasadena Facility	16.3	62	-1,011
VMT reduction from Rinaldi Facility	14.1	5	-71
Net VMT			1,051
<b>Net VMT/Employee</b>		172	<b>6.11</b>
<b>City Threshold (Central APC)</b>			<b>7.6</b>

The project is located in the Central Area Planning Commission (APC), which has a VMT Impact Criteria (15% Below APC Average) of 7.6 miles per employee. Therefore, the project will result in less than significant impacts.

**CONCLUSION**

As seen from the above analysis, the project results in less than significant impacts as the VMT per employee is less than the threshold for the Central APC.