



## 11.4 VMT Analysis

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## Technical Memorandum

March 21, 2023

**To:** Matt Simons, City of Lancaster  
44933 Fern Avenue  
Lancaster, CA 93534

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**Subject:** East Side Overlay Zone Programmatic VMT Assessment

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### *Introduction*

The purpose of this technical memorandum is to provide a programmatic level Vehicle Miles Travelled (VMT) assessment for the East Side Overlay Zone (Overlay Zone) located in the City of Lancaster, California to evaluate potential transportation impacts under California Environmental Quality Act (CEQA) process. This assessment considers the land use modifications associated with the proposed Overlay Zone compared to the currently adopted General Plan.

This analysis has been prepared consistent with City guidelines and thresholds of significance as outlined in the *Transportation Analysis Updates in Lancaster* (May 2020) and the *City's Local Transportation Assessment Guidelines* (January 2021).

### *Project Description*

The City is proposing to establish an Overlay Zone in the eastern portion of the city in response to interest in developing industrial uses in this area. The Overlay Zone encompasses approximately 5,841 acres generally bound by Avenue J to the north, 110<sup>th</sup> Street East to the east, Avenue L to the south, and 40<sup>th</sup> Street East to the west. The Overlay Zone consists of scattered areas of rural development predominantly surrounded by agricultural use and approximately 2,286 acres of vacant, undeveloped land. **Exhibit 1 in Attachment A** shows the boundary of the Overlay Zone.

The Overlay Zone would be applied to the existing rural residential zoning (RR-2.5) and would establish additional or stricter standards and criteria for covered properties in addition to those of the underlying zoning district. Anticipated allowable uses would include, but are not limited to, alternative energy, distribution, light industrial, light manufacturing, research and development, and warehousing. The intent of the Overlay Zone is to allow more flexibility and development potential as well as the opportunity to provide additional jobs to this underutilized portion of the city.

Based on input from City staff, it is assumed that 75% of the currently vacant/undeveloped land could develop as the new allowable uses included in the Overlay zone. For the purpose of this transportation assessment, the breakdown of potential new uses on existing vacant or undeveloped parcel were assumed to be the following based on input provided by the City's Community Development Department:

- 42.5% Warehousing
  - 29.75% High-Cube
  - 12.75% standard warehouse
- 20% Light Industrial/Manufacturing
- 12.5% Research & Development

The remaining 25% of the currently vacant/undeveloped land would utilize the existing zoning designations of the current General Plan and would remain unchanged without and with the proposed Overlay Zone (i.e., rural residential, agriculture).

### ***VMT Guidelines***

The primary resource for the VMT assessment is the City of Lancaster's *Local Transportation Assessment Guidelines* (January 2021). As outlined in the guidelines, land use projects that meet the City established screening threshold criteria based on size, location, proximity to transit, or trip-making potential may be presumed to have a less-than-significant transportation impact under CEQA and do not require a full detailed VMT analysis. If the project is not screened out from a full VMT analysis, the Southern California Association of Governments (SCAG) regional travel demand model shall be used to determine the project's full VMT.

While the City has identified Los Angeles County's Antelope Valley Planning Area (AVPA) as the geographic area for establishing the baseline VMT, this programmatic assessment only considers the traffic analysis zones (TAZ's) within the Overlay Zone. In addition, the City has established a threshold of significance as 15% below the baseline VMT and projects where the VMT exceeds this threshold are considered to have a significant VMT impact, however this assessment only compares the changes to VMT associated with the land use modifications in the Overlay Zone.

### ***VMT Screening Assessment***

As outlined in the City's guidelines, land use projects that meet certain screening criteria may be presumed to have a less-than-significant transportation impact under CEQA. **Table 1** summarizes the each of the screening criteria identified in the guidelines and is provided for information purposes only. As the Overlay Zone is subject to a programmatic analysis evaluating the impacts associated with the changes in the allowable land uses, it is not subject to the project specific screening. Potential transportation impacts under CEQA for the Overlay Zone are discussed in the following sections.

**TABLE 1 – VMT SCREENING CRITERIA SUMMARY**

Screening Criteria	Project Requirements to Meet Screening Criteria
1 Project Size	A project that generates 110 or fewer daily trips.
2 Locally Serving Retail	A project that has locally serving retail uses that are 50,000 square feet or less, including specialty retail, shopping center, grocery store, pharmacy, financial services, fitness center or health club, restaurant, and café. If the project contains other land uses, those uses need to be considered under other applicable screening criteria.
3 Low VMT Area	A residential or office project that is located in a TAZ that is already 15% below the AVPA Baseline VMT.
4 Transit Proximity	A multifamily residential project providing higher density housing or a commercial project in an area already zoned for commercial use that is located within ½ mile of the Metrolink station or within ½ mile of a bus stop with service frequency of 15 minutes or less during commute periods.
5 Affordable Housing	A residential project that provides affordable housing units; if part of a larger development, only those units that meet the definition of affordable housing satisfy the screening criteria.
6 Transportation Facilities	Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersection traffic control (e.g. traffic signals or roundabouts), or widening at intersections to provide new turn lanes.

Source: City of Lancaster Department of Public Works *Local Transportation Assessment Guidelines (January 2021)*

### **VMT Analysis Methodology**

As stated previously, this VMT assessment is consistent with the City of Lancaster’s VMT guidelines. General assumptions and methodology for the VMT analysis are as follows:

**Regional Travel Demand Model** – As outlined in the City’s guidelines, the Southern California Association of Governments (SCAG) regional travel demand model was used to determine the VMT within the affected TAZ’s. This travel demand model was used to develop the VMT data needed for this analysis using standard employment densities for the land uses described previously.

**Geographic Area** – According to the City’s guidelines, the City of Lancaster has identified Los Angeles County’s Antelope Valley Planning Area (AVPA) as the geographic area for the Baseline VMT. However, this programmatic assessment compares the VMT per service population without and with the change in land use for the following TAZ’s within the Overlay Zone:

- 20331100
- 20331200
- 20333100
- 20333200
- 20333300
- 20333400
- 20333500
- 20333600
- 20333700
- 20333800
- 20333900
- 20335100
- 20335200
- 20335300
- 20335400
- 20335500
- 20335600

**VMT Metric** – The City guidelines provide recommended thresholds for by land use type. For Land Use Plans the appropriate VMT metric is total VMT per service population which was used in this analysis using the Production/Attraction (PA) methodology.

**VMT Threshold** – As outlined in the City’s guidelines, a proposed land use plan exceeding a level of 15% below the AVPA baseline may indicate a significant transportation impact. Conversely, land use plans that would generate VMT that is 15% or more below the existing VMT per service population may indicate a less-than-significant transportation impact. However, this programmatic assessment only compares the VMT metrics with the established General Plan against the proposed land use modifications associated with the Overlay Zone.

## Modeling Assumptions

The SCAG transportation demand model (TDM) covers the Antelope Valley Planning Area (AVPA) and includes Lancaster, Palmdale, and portions of LA County. This model uses 2020 as the baseline year with the future forecast year of 2040 and was used to calculate the Baseline Total VMT per service population Without and With the Overlay Zone using the Production/Attraction (PA) method. No modifications were made to the model's roadway network.

After the model was run to establish the Existing 2020 and Future Forecast 2040 baseline conditions with the City's General Plan land use assumptions (Without Overlay Zone), the proposed land use modifications were coded into the model utilizing the industrial land use assumptions discussed previously using standard employment densities. Based on input from City staff (Community Development Department), it is assumed that 75% of the currently vacant/undeveloped land would utilize the new proposed land uses based on the following breakdown:

- 42.5% Warehousing
  - 29.75% High-Cube
  - 12.75% standard warehouse
- 20% Light Industrial/Manufacturing
- 12.5% Research & Development

The remaining 25% of the currently vacant/undeveloped land would utilize the existing zoning designations of the current General Plan and would remain unchanged without and with the proposed Overlay Zone (i.e. rural residential, agriculture).

The following section outlines the results of the VMT assessment.

## Programmatic Level VMT Assessment

For the TAZs within the Overlay Zone, the average VMT per service population is 45.6 under Existing 2020 with Lancaster General Plan conditions, which is calculated based on a total service population of 21,498 and a total daily VMT of 981,116. Under Future Forecast Year 2040 conditions with the General Plan land uses, the total service population is anticipated to increase to 21,704, however the total daily VMT is anticipated to decrease to 844,437. This results in a VMT per service population of 38.9.

With the land use modifications associated with the Overlay Zone, the average VMT per service population for the TAZs within the Overlay Zone is estimated to be of 34.1 under Existing 2020 with East Side Overlay conditions based on a total service population of 35,836 and a total daily VMT of 1,220,829. This is approximately 25.4% below the baseline General Plan conditions VMT per service population of 45.6.

Under Future Forecast Year 2040 Conditions with the East Side Overlay, the average VMT per service population within the study area is estimated to be 28.8 based on a service population of 36,042 and a total VMT of 1,038,314. This is approximately 26% below the baseline General Plan 2040 conditions VMT per service population of 38.9.

**Table 2** summarizes the results of the General Plan VMT assessment as well as the conditions with the Overlay Zone land use modifications. As shown, the total daily VMT is projected to increase due to the intensification of employment opportunities with the Overlay Zone compared to the General Plan; however, the VMT per service population shows an overall decrease of over 25% for both analysis years.

**Exhibit B** contains the SCAG VMT Model Results.

TABLE 2 – VMT SUMMARY

Performance Measure	With Lancaster GP	With East Side Overlay	Net Difference	% Difference
<b>Existing 2020</b>				
Population	21,419	16,749	-4,670	-21.80%
Employment	79	19,087	19,008	24060.76%
Service Population	21,498	35,836	14,338	66.69%
Total Daily VMT (PA Method)	981,116	1,220,829	239,713	24.43%
VMT service Population	45.6	34.1	-12	-25.22%
<b>Future Forecast Year 2040</b>				
Population	21,618	16,948	-4,670	-21.60%
Employment	86	19,094	19,008	22102.33%
Service Population	21,704	36,042	14,338	66.06%
Total Daily VMT (PA Method)	844,437	1,038,314	193,877	22.96%
VMT service Population	38.9	28.8	-10	-25.96%

**Conclusion**

As the Overlay Zone proposes to increase the allowable land uses within the study area, an assessment of the change in VMT per service population was conducted to evaluate the potential transportation impacts.

The SCAG transportation demand model was run to obtain the baseline VMT per service population conditions for the Existing 2020 conditions and Future Forecast 2040 conditions. The land use modifications associated with the Overlay Zone were coded into the model using standard employment densities to determine the “with Overlay Zone” VMT per service population.

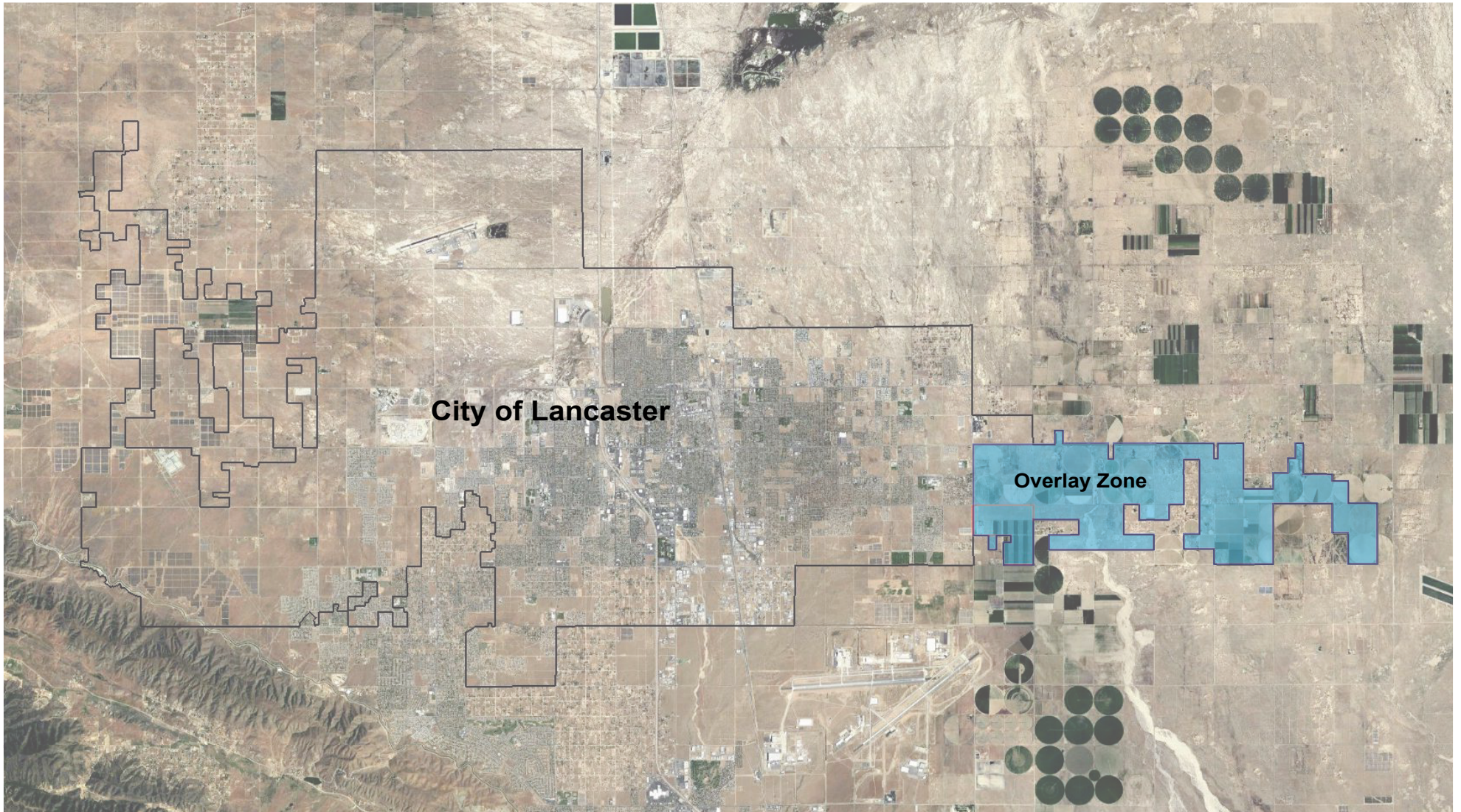
The results of the model runs and VMT analysis demonstrated that the total VMT per service population for the Overlay Zone shows a decrease of over 25% compared to the General Plan VMT per service population for both analysis years. Therefore, the **Overlay Zone is presumed to result in a less-than-significant transportation impact and no mitigation is required.**

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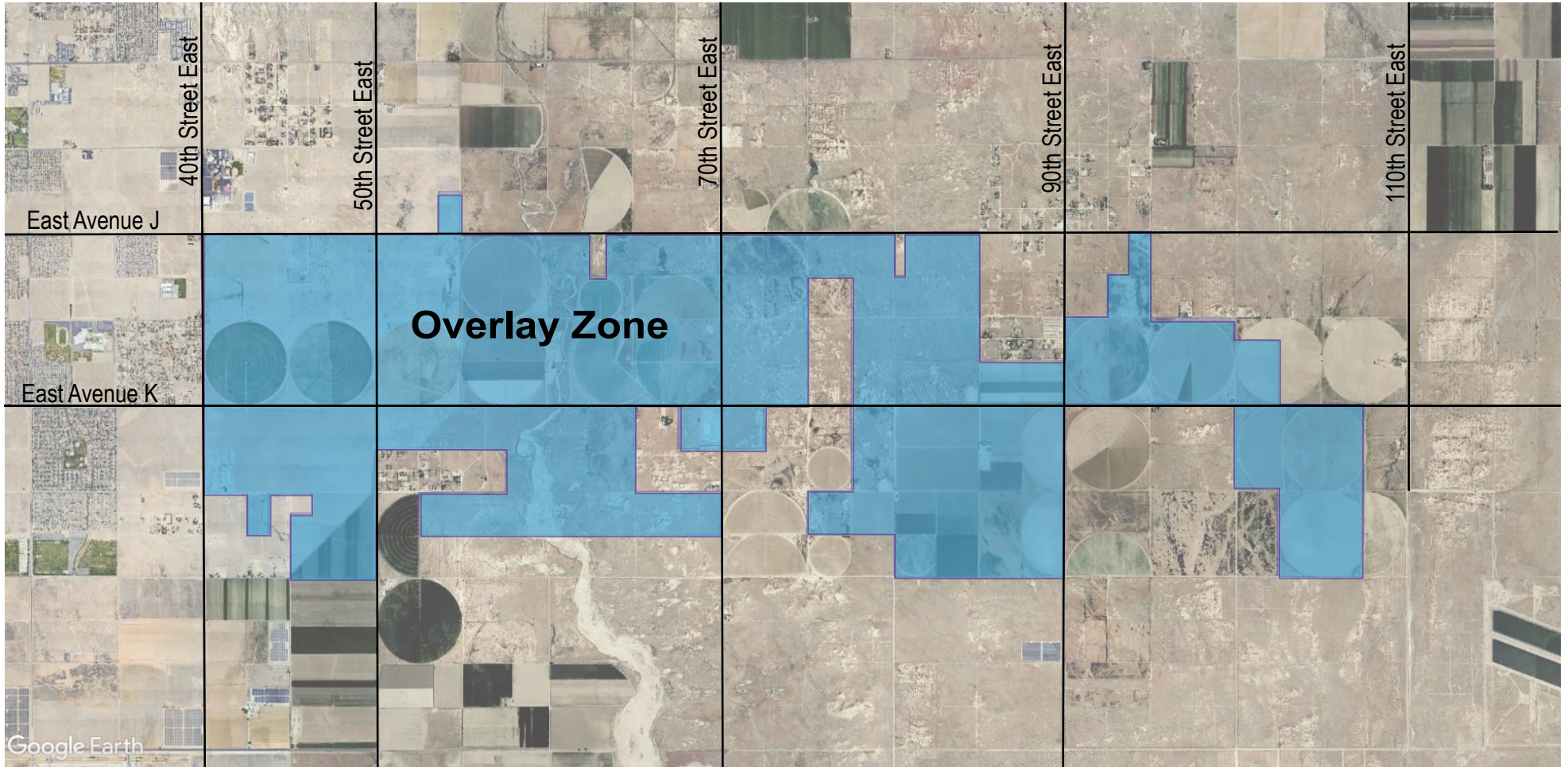
*Attachment A*  
*Exhibits*

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Not to Scale



Not to Scale

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*Attachment B*  
*SCAG VMT Model Results*

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### Baseline Year 2020 Without and With Project Total VMT

	City of Lancaster Overlay Study Area	2020 With Lancaster GP	2020 With Lancaster Overlay	Note
	Population	21,419	16,749	
	Employment	79	19,087	
	Service Population	21,498	35,836	
Vehicle No Trucks	Total vehicle trips (no trucks)	48,382	88,020	
	Total vehicle VMT (no trucks)	1,063,842	1,321,939	
	Average vehicle trip distance (no trucks)	21.99	15.02	[a]
Trucks Only	Total truck trips	417	14,091	
	Total truck VMT	13,697	262,878	
	Average truck trip distance	32.87	18.66	[a]
All Vehicles	Total vehicle trips (include trucks)	48,799	102,111	
	Total VMT (include trucks)	1,077,539	1,584,817	
	Total VMT per service population (include trucks)	22.08	15.52	[b]

**Notes:**

[a] The 6.51 mile of average vehicle trip distance (no trucks) and 18.22 mile of average truck trip distance are not the trip lengths generated by the net new development directly, but the effect on vehicle trip and VMT for the whole project area. The effect of adding more housing to the study area will reduce trip length on average. In order to compute the average vehicle distance, the net new VMT should be divided by the net new vehicle trips, but this should not be interpreted to mean that the new development will have markedly different patterns than the existing development; rather the effects on travel of adding housing will be to bring everyone's average down

[b] We recommend to divide the net change of Total VMT by the net change of Service Population. Please note that the results of 9.52 VMT per Service Population is not actual VMT per Service Population generated by the new development. It means that by adding new housing, this VMT metric will decrease on average.

### Future Forecast Year 2040 Without and With Project Total VMT

	City of Lancaster Overlay Study Area	2040 With Lancaster GP	2040 With Lancaster Overlay	Note
	Population	21,618	16,948	
	Employment	86	19,094	
	Service Population	21,704	36,042	
Vehicle No Trucks	Total vehicle trips (no trucks)	44,778	80,321	
	Total vehicle VMT (no trucks)	943,164	1,147,720	
	Average vehicle trip distance (no trucks)	21.06	14.29	[a]
Trucks Only	Total truck trips	423	14,116	
	Total truck VMT	14,347	274,978	
	Average truck trip distance	33.88	19.48	[a]
All Vehicles	Total vehicle trips (include trucks)	45,201	94,437	
	Total VMT (include trucks)	957,512	1,422,699	
	Total VMT per service population (include trucks)	21.18	15.07	[b]

**Notes:**

directly, but the effect on vehicle trip and VMT for the whole project area. The effect of adding more housing to the study area will reduce trip length on average. In order to compute the average vehicle distance, the net new VMT should be divided by the net new vehicle trips, but this should not be interpreted to mean that the new development will have markedly different patterns than the existing development; rather the effects on travel of adding housing will be to bring everyone's average down (including existing uses).

[b] We recommend to divide the net change of Total VMT by the net change of Service Population. Please note that the results of 9.45 VMT per Service Population is not actual VMT per Service Population generated by the new development. It means that by adding new housing and jobs, this VMT metric will decrease on average.

**Baseline Year 2020 Without and With Project VMT Metrics Summary**

2020	With Lancaster GP	With Lancaster Overlay
Households	7,080	5,305
Population	21,419	16,749
Employment	79	19,087
Service Population	21,498	35,836
Homebased (HB) VMT	906,186	547,461
Homebased Work (HBW) VMT	913	353,570
PA VMT	981,116	1,220,829
HB VMT per capita	42.3	32.7
HBW VMT per employee	11.6	18.5
PA VMT per service population	45.6	34.1

**Future Forecast Year 2040 Without and With Project VMT Metrics Summary**

2040	With Lancaster GP	With Lancaster Overlay
Households	7,133	5,358
Population	21,618	16,948
Employment	86	19,094
Service Population	21,704	36,042
Homebased (HB) VMT	779,655	479,015
Homebased Work (HBW) VMT	768	279,838
PA VMT	844,437	1,038,314
HB VMT per capita	36.1	28.3
HBW VMT per employee	8.9	14.7
PA VMT per service population	38.9	28.8

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*Attachment C*  
*SCAG Model Data*

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**2020 lancaster gp (not original scag model)**

			21,419		21,414		7,080		-		-		-		79		913		906,186		928,393		52,723	
TAZ	TAZ_TIER1	CNTY	TAZ_ID	POP	RES	HH	GN	K12	COLLEGE	MEDIAN	TOT_EMP	ZONETYPE	Internal_Sequence_TAZ	HBW_A_VMT	HB_P_VMT	TOT_P_VMT	TOT_A_VMT							
20331100	20331000	Los Angeles	20331100	4212.456139	4212.456139	1404.152046	0	0	0	52482	3		1054	14.434158	120819.875	124232.3906	8591.290039							
20331200	20331000	Los Angeles	20331200	26	26	7	0	0	0	43136	10		1055	119.028458	745.483459	804.820801	322.555084							
20333100	20333000	Los Angeles	20333100	6748.086883	6748.086883	1557.250819	0	0	0	161606	0		1062	0	361622.1875	365984.9375	10032.4043							
20333200	20333000	Los Angeles	20333200	1567.29788	1567.29788	632.462263	0	0	0	159778	0		1063	0	58487.24609	60407.3125	4592.878418							
20333300	20333000	Los Angeles	20333300	1069.448248	1069.448248	420.766524	0	0	0	39225	1		1064	0	27410.08398	28638.67188	2649.845703							
20333400	20333000	Los Angeles	20333400	1094.119888	1094.119888	442.542617	0	0	0	163762	42		1065	532.056213	43926.14453	45655.76172	4377.924805							
20333500	20333000	Los Angeles	20333500	2413.608381	2413.608381	1042.239983	0	0	0	51063	19		1066	213.530396	95657.8125	99443.63281	8490.079102							
20333600	20333000	Los Angeles	20333600	1086.76886	1081.76886	510.26833	0	0	0	60076	4		1067	34.27673	43039.83984	44843.82813	4355.26123							
20333700	20333000	Los Angeles	20333700	13	13	3	0	0	0	175545	0		1068	0	841.788635	853.248962	9.279515							
20333800	20333000	Los Angeles	20333800	6	6	2	0	0	0	180055	0		1069	0	211.392822	218.714691	11.529429							
20333900	20333000	Los Angeles	20333900	2	2	1	0	0	0	202833	0		1070	0	60.155449	60.155449	12.678136							
20335100	20335000	Los Angeles	20335100	81	81	45	0	0	0	51971	0		1080	0	3814.301758	4020.634033	570.496216							
20335200	20335000	Los Angeles	20335200	1795.108891	1795.108891	472.397077	0	0	0	81049	0		1081	0	89351.25781	91030.77344	4059.851807							
20335300	20335000	Los Angeles	20335300	44	44	21	0	0	0	56004	0		1082	0	1910.02417	1992.311157	237.537598							
20335400	20335000	Los Angeles	20335400	28	28	16	0	0	0	45949	0		1083	0	1055.159424	1119.224243	184.166428							
20335500	20335000	Los Angeles	20335500	1221.351036	1221.351036	495.240342	0	0	0	114145	0		1084	0	56773.37109	58589.72266	4155.245605							
20335600	20335000	Los Angeles	20335600	11	11	8	0	0	0	65703	0		1085	0	460.232819	497.087799	70.096176							

**2040 lancaster gp (not original scag model)**

			21,618		21,613		7,133		-		-		-		86		768		779,655		798,898		45,539	
TAZ	TAZ_TIER1	CNTY	TAZ_ID	POP	RES	HH	GN	K12	COLLEGE	MEDIAN	TOT_EMP	ZONETYPE	Internal_Sequence_TAZ	HBW_A_VMT	HB_P_VMT	TOT_P_VMT	TOT_A_VMT							
20331100	20331000	Los Angeles	20331100	4217.456139	4217.456139	1406.152046	0	0	0	52482	3		1054	11.799215	119256.1953	122202.2578	7825.894043							
20331200	20331000	Los Angeles	20331200	26	26	7	0	0	0	42616	10		1055	94.180656	755.832275	803.947998	256.357117							
20333100	20333000	Los Angeles	20333100	6749.086883	6749.086883	1558.250819	0	0	0	161606	0		1062	0	278586.7813	282334.1563	8836.407227							
20333200	20333000	Los Angeles	20333200	1574.29788	1574.29788	634.462263	0	0	0	159778	0		1063	0	53282.42969	54924.98828	4004.684814							
20333300	20333000	Los Angeles	20333300	1074.448248	1074.448248	421.766524	0	0	0	39225	1		1064	0	25009.53906	26103.26953	2503.062988							
20333400	20333000	Los Angeles	20333400	1106.119888	1106.119888	446.542617	0	0	0	163762	42		1065	436.10437	38093.76953	39622.98828	3979.440674							
20333500	20333000	Los Angeles	20333500	2424.608381	2424.608381	1045.239983	0	0	0	51063	19		1066	139.408615	85504.51563	88650.1875	7058.680664							
20333600	20333000	Los Angeles	20333600	1101.76886	1096.76886	514.26833	0	0	0	60076	8		1067	86.996246	34996.69922	36608.02344	4118.007813							
20333700	20333000	Los Angeles	20333700	13	13	3	0	0	0	172336	0		1068	0	751.313904	761.614685	8.526608							
20333800	20333000	Los Angeles	20333800	6	6	2	0	0	0	180055	1		1069	0	188.555618	218.736038	129.299316							
20333900	20333000	Los Angeles	20333900	2	2	1	0	0	0	202833	0		1070	0	68.933189	68.933189	9.891737							
20335100	20335000	Los Angeles	20335100	142	142	62	0	0	0	58108	0		1080	0	5798.602051	6030.566406	319.736694							
20335200	20335000	Los Angeles	20335200	1804.108891	1804.108891	474.397077	0	0	0	81049	0		1081	0	81587.24219	83009.96875	3000.25415							
20335300	20335000	Los Angeles	20335300	63	63	25	0	0	0	63309	0		1082	0	2383.262939	2466.5	29.177753							
20335400	20335000	Los Angeles	20335400	49	49	20	0	0	0	58673	1		1083	0	1705.875122	1805.347412	122.415833							
20335500	20335000	Los Angeles	20335500	1243.351036	1243.351036	501.240342	0	0	0	114145	0		1084	0	51004.72656	52541.85547	3246.578857							
20335600	20335000	Los Angeles	20335600	22	22	11	0	0	0	63309	1		1085	0	680.365662	744.266724	90.82917							

**2020 with project - lancaster overlay**

			16,749		16,744		5,305		-		-		-		19,087		353,570		547,461		596,258		624,570	
TAZ	TAZ_TIER1	CNTY	TAZ_ID	POP	RES	HH	GN	K12	COLLEGE	MEDIAN	TOT_EMP	ZONETYPE	Internal_Sequence_TAZ	HBW_A_VMT	HB_P_VMT	TOT_P_VMT	TOT_A_VMT							
20331100	20331000	Los Angeles	20331100	4212.456139	4212.456139	1404.152046	0	0	0	52482	3		1054	17.569418	103871.0469	107324.3047	8490.65332							
20331200	20331000	Los Angeles	20331200	26	26	7	0	0	0	43136	10		1055	126.000412	668.072693	726.946777	321.029327							
20333100	20333000	Los Angeles	20333100	6748.086883	6748.086883	1557.250819	0	0	0	161606	0		1062	0	288262.25	292573.2188	9880.370117							
20333200	20333000	Los Angeles	20333200	1567.29788	1567.29788	632.462263	0	0	0	159778	0		1063	0	41831.63281	43703.45313	4745.041016							
20333300	20333000	Los Angeles	20333300	1069.448248	1069.448248	420.766524	0	0	0	39225	1		1064	0	22985.75586	24215.55859	2641.592529							
20333400	20333000	Los Angeles	20333400	1094.119888	1094.119888	442.542617	0	0	0	163762	42		1065	625.354797	33017.78125	34701.27344	4584.657227							
20333500	20333000	Los Angeles	20333500	44	44	19	0	0	0	51063	8471.485		1066	159933.5781	625.290527	11056.58301	191927.2031							
20333600	20333000	Los Angeles	20333600	58	53	25	0	0	0	60076	5901.88		1067	104437.4609	867.984375	8191.164551	125134.2969							
20333700	20333000	Los Angeles	20333700	13	13	3	0	0	0	175545	0		1068	0	749.89917	761.47522	9.751263							
20333800	20333000	Los Angeles	20333800	6	6	2	0	0	0	180055	0		1069	0	178.558319	185.802155	11.277536							
20333900	20333000	Los Angeles	20333900	2	2	1	0	0	0	202833	0		1070	0	47.533272	47.533272	11.244195							
20335100	20335000	Los Angeles	20335100	81	81	45	0	0	0	51971	0		1080	0	2950.273438	3147.750244	599.89325							
20335200	20335000	Los Angeles	20335200	38	38	10	0	0	0	81049	4657.725		1081	88430.29688	674.173157	16558.26367	269700.625							
20335300	20335000	Los Angeles	20335300	44	44	21	0	0	0	56004	0		1082	0	1194.119141	1258.557251	237.510666							
20335400	20335000	Los Angeles	20335400	28	28	16	0	0	0	45949	0		1083	0	671.505371	729.194031	189.332062							
20335500	20335000	Los Angeles	20335500	1706.560377	1706.560377	690.8	0	0	0	114145	0		1084	0	48570.00781	50749.07422	6011.831055							
20335600	20335000	Los Angeles	20335600	11	11	8	0	0	0	65703	0		1085	0	295.376831	328.068237	74.109482							

**2040 with project - lancaster overlay**

			16,948		16,943		5,358		-		-		-		19,094		279,838		479,015		520,118		518,196	
TAZ	TAZ_TIER1	CNTY	TAZ_ID	POP	RES	HH	GN	K12	COLLEGE	MEDIAN	TOT_EMP	ZONETYPE	Internal_Sequence_TAZ	HBW_A_VMT	HB_P_VMT	TOT_P_VMT	TOT_A_VMT							
20331100	20331000	Los Angeles	20331100	4217.456139	4217.456139	1406.152046	0	0	0	52482	3		1054	15.20882	103851.3047	106838.4531	7814.529785							
20331200	20331000	Los Angeles	20331200	26	26	7	0	0	0	42616	10		1055	97.806236	688.27594	736.585815	244.934937							
20333100	20333000	Los Angeles	20333100	6749.086883	6749.086883	1558.250819	0	0	0	161606	0		1062	0	227830.3281	231557.9219	8880.570313							
20333200	20333000	Los Angeles	20333200	1574.29788	1574.29788	634.462263	0	0	0	159778	0		1063	0	38981.27344	40593.73438	4179.410645							
20333300	20333000	Los Angeles	20333300	1074.448248	1074.448248	421.766524	0	0	0	39225	1		1064	0	21536.81836	22634.98828	2506.951416							
20333400	20333000	Los Angeles	20333400	1106.119888	1106.119888	446.542617	0	0	0	163762	42		1065	489.391876	29245.47266	30741.54102	4149.902344							
20333500	20333000	Los Angeles	20333500	55	55	22	0	0	0	51063	8471.485		1066	126547.5859	642.157104	9246.764648	154403.1563							
20333600	20333000	Los Angeles	20333600	73	68	29	0	0	0	60076	5905.88		1067	82828.07813	877.308472	7088.006836	101267.5156							
20333700	20333000	Los Angeles	20333700	13	13	3	0	0	0	172336	0		1068	0	677.675598	688.045227	10.186123							
20333800	20333000	Los Angeles	20333800	6	6	2	0	0	0	180055	1		1069	0	162.736328	192.679901	130.478012							
20333900	20333000	Los Angeles	20333900	2	2	1	0	0	0	202833	0		1070	0	57.056023	57.056023	10.722104							
20335100	20335000	Los Angeles	20335100	142	142	62	0	0	0	58108	0		1080	0	4523.375977	4747.098633	324.333893							
20335200	20335000	Los Angeles	20335200	47	47	12	0	0	0	81049	4657.725		1081	69860.32031	719.949829	13716.72754	229358.4688							
20335300	20335000	Los Angeles	20335300	63	63	25	0	0	0	63309	0		1082	0	1489.381836	1554.838623	22.787472							
20335400	20335000	Los Angeles	20335400	49	49	20	0	0	0	58673	1		1083	0	1104.885986	1194.639038	128.425308							
20335500	20335000	Los Angeles	20335500	1728.560377	1728.560377	696.8	0	0	0	114145	0		1084	0	46202.46484	48046.93359	4668.189453							
20335600	20335000	Los Angeles	20335600	22	22	11	0	0	0	63309	1		1085	0	424.388641	481.745605	95.555481							



**2020 lancaster gp (not original scag model)**

TAZ	cnty	District	POP	RES	HH	Tot_emp	NEWTAZ	OD_CarP_VMT	OD_CarA_VMT	OD_CarP_Trps	OD_CarA_Trps	OD_TrkP_VMT	OD_TrkA_VMT	OD_HTrkP_Trps	OD_HTrkA_Trps	OD_TotP_VMT	OD_TotA_VMT
			21,419.2	21,414.2	7,080.3	79.0		541,370.1	522,471.6	24,082.5	24,299.8	6,911.7	6,785.4	208.4	208.4	548,281.8	529,257.0
20331000	Los Angeles	7	4238.4561	4238.4561	1411.152	13	20331000	77041.29688	78138.84375	4638.461914	4700.160156	1257.418579	1230.230347	40.679096	40.679226	78298.71545	79369.0741
20333000	Los Angeles	7	14000.33	13995.33	4611.5305	66	20333000	363104.25	343654.3125	15571.25586	15631.2959	4575.597168	4487.647949	139.557526	139.557663	367679.8472	348141.9604
20335000	Los Angeles	7	3180.4599	3180.4599	1057.6374	0	20335000	101224.5938	100678.4453	3872.750977	3968.342773	1078.636963	1067.555786	28.140875	28.141638	102303.2307	101746.0011

**2040 lancaster gp (not original scag model)**

TAZ	cnty	District	POP	RES	HH	Tot_emp	NEWTAZ	OD_CarP_VMT	OD_CarA_VMT	OD_CarP_Trps	OD_CarA_Trps	OD_TrkP_VMT	OD_TrkA_VMT	OD_HTrkP_Trps	OD_HTrkA_Trps	OD_TotP_VMT	OD_TotA_VMT
			21,618.2	21,613.2	7,133.3	86.0		478,391.7	464,772.7	22,259.0	22,518.8	7,209.6	7,137.8	211.7	211.7	485,601.3	471,910.5
20331000	Los Angeles	7	4243.4561	4243.4561	1413.152	13	20331000	76322.04688	76509.78125	4366.551758	4426.020508	1321.786865	1305.498657	41.298759	41.299175	77643.83374	77815.27991
20333000	Los Angeles	7	14051.33	14046.33	4626.5305	71	20333000	307975.0938	293203.5313	14131.01465	14149.45996	4724.826172	4676.728516	140.794296	140.794708	312699.9199	297880.2598
20335000	Los Angeles	7	3323.4599	3323.4599	1093.6374	2	20335000	94094.55469	95059.35938	3761.410156	3943.32251	1162.97168	1155.562744	29.647888	29.650347	95257.52637	96214.92212

**2020 with project - lancaster overlay**

TAZ	cnty	District	POP	RES	HH	Tot_emp	NEWTAZ	OD_CarP_VMT	OD_CarA_VMT	OD_CarP_Trps	OD_CarA_Trps	OD_TrkP_VMT	OD_TrkA_VMT	OD_HTrkP_Trps	OD_HTrkA_Trps	OD_TotP_VMT	OD_TotA_VMT
			16,749.0	16,744.0	5,305.0	19,089.0		656,433.2	665,505.7	43,357.6	44,662.3	132,060.9	130,816.8	7,045.3	7,045.3	788,494.1	796,322.5
20331000	Los Angeles	7	4238.4561	4238.4561	1411.152	15	20331000	66626	68061	4663	4715	1234	1226	41	41	67860	69287
20333000	Los Angeles	7	10601.953	10596.953	3103.0222	14416	20333000	389949	381715	24606	24877	129995	128760	6984	6984	519943	510475
20335000	Los Angeles	7	1908.5604	1908.5604	790.8	4658	20335000	199859	215730	14089	15070	832	831	21	21	200691	216561

**2040 with project - lancaster overlay**

TAZ	cnty	District	POP	RES	HH	Tot_emp	NEWTAZ	OD_CarP_VMT	OD_CarA_VMT	OD_CarP_Trps	OD_CarA_Trps	OD_TrkP_VMT	OD_TrkA_VMT	OD_HTrkP_Trps	OD_HTrkA_Trps	OD_TotP_VMT	OD_TotA_VMT
			16,948.0	16,943.0	5,358.0	19,094.0	#####	570,503.2	577,217.1	39,515.3	40,806.1	138,236.8	136,741.6	7,058.0	7,058.0	708,740.0	713,958.7
20331000	Los Angeles	7	4243.4561	4243.4561	1413.152	13	20331000	67161.65625	67232.89844	4392.73291	4444.950195	1307.087769	1291.927856	41.296978	41.297398	68468.74402	68524.82629
20333000	Los Angeles	7	10652.953	10647.953	3118.0222	14421	20333000	328295.25	319666.25	21870.73438	22073.11328	136014.1875	134539.8125	6994.124023	6994.124512	464309.4375	454206.0625
20335000	Los Angeles	7	2051.5604	2051.5604	826.8	4660	20335000	175046.2656	190317.9063	13251.81348	14287.99316	915.519043	909.901489	22.552519	22.554977	175961.7847	191227.8077