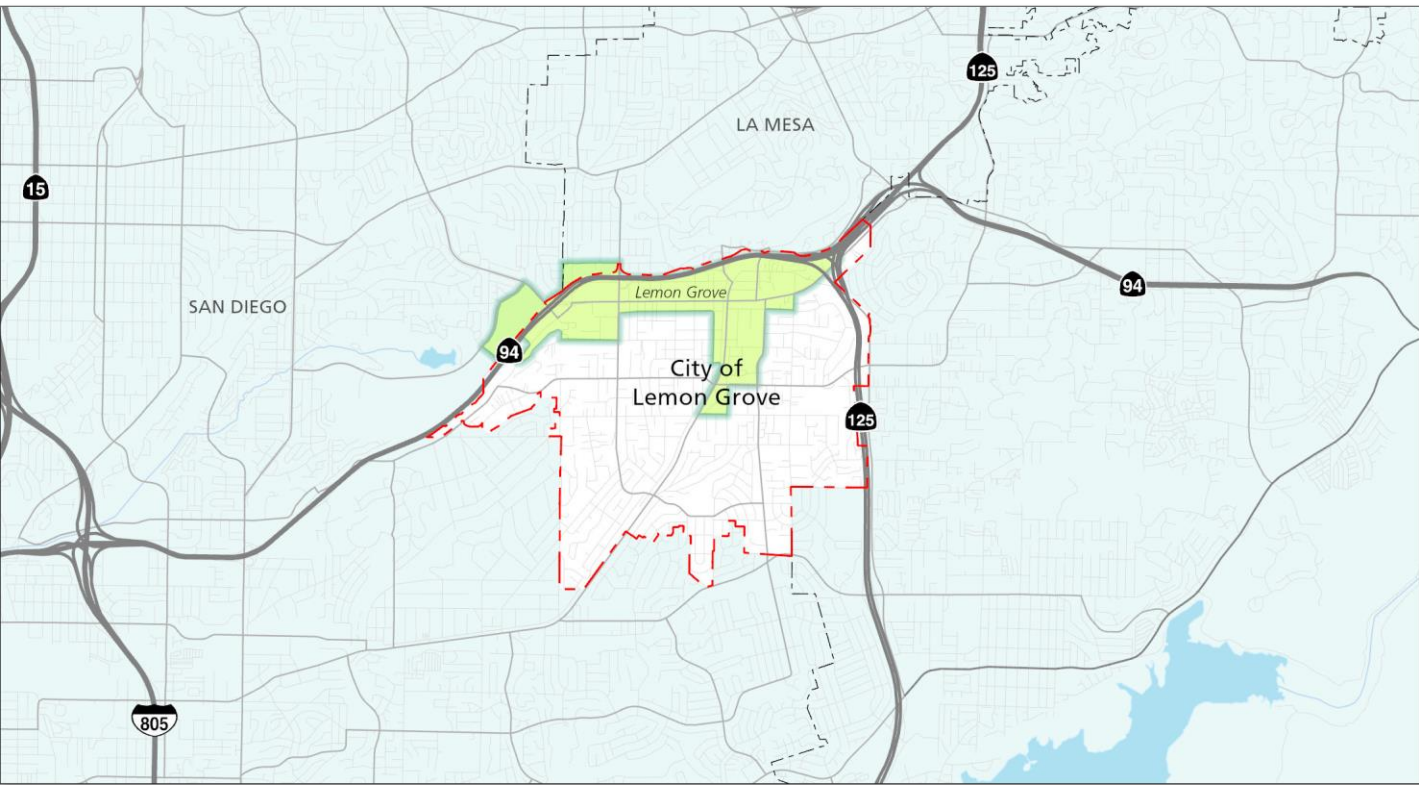# Employment in the San Diego region
City of Lemon Grove

Key contact

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August 2019

Fast facts

City of Lemon Grove	
8,976	employees
0.6%	region's employees
3.9	land area (square miles)
2,295.7	employees per square mile

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Background

The San Diego region is a growing and dynamic place to live and work. As the community, policy makers, and other stakeholders collaborate regarding how we create transportation options for our residents that are competitive and environmentally responsible, it is essential we utilize the data we have regarding where people live and work to invest in strategies that will best serve our communities.

In spring 2019, the Data, Analytics, and Modeling Department of SANDAG applied data analytics to multiple data sources to better understand where employment centers are in the region, where the employees in these areas commute from, and what their commutes look like. The result of this analysis were packets describing over 70 employment centers across the San Diego region.

As a next step in this series, this packet describes employment in the **City of Lemon Grove**, including maps showing where individuals who work in the City of Lemon Grove live and how far they have to travel to get to their places of employment, where residents of Lemon Grove travel to work, as well as a map that shows all of the travel to and from the City of Lemon Grove regardless if for work, recreation, or any other reason. SANDAG 2018 demographic and socioeconomic estimates for the population of Lemon Grove are included (Appendix B), as is the packet for the employment center partially in the City of Lemon Grove (as shown in the red outline on the cover of this packet and Appendix C). Because employment centers can cross jurisdictional boundaries and not all the employees in a jurisdiction are included in an employment center, it is important to note the number of employees in this employment center will not total the number of employees in this jurisdiction.

Because the data shared here are analyzed specifically for the purposes of these analyses, it is important to note that these results may differ from other sources. Additional information regarding the data sources and important factors to consider when interpreting this information are provided at the end of this packet (Appendix A).

Industries in this jurisdiction and the region overall

	City of Lemon Grove		Region	
	Number of jobs	**Percentage/ rank**	**Number of jobs**	**Percentage/ rank**
Health care and social assistance	**1,583**	**18% (2)**	199,700	13% (1)
Retail trade	**1,878**	**21% (1)**	156,612	10% (2)
Professional, scientific, technical	255	3% (8)	148,766	10% (3)
Food services	**977**	**11% (4)**	131,594	9% (4)
Manufacturing	137	2% (12)	109,234	7% (5)
Administrative, support, waste services	**1,072**	**12% (3)**	91,519	6% (6)
Construction	885	10% (6)	83,498	5% (7)
Local government education	326	4% (7)	80,300	5% (8)
Other services	**977**	**11% (5)**	69,124	5% (9)
Finance and insurance	160	2% (9)	47,848	3% (10)
Wholesale trade	144	2% (11)	46,625	3% (11)
Arts, entertainment, recreation	36	<1% (18)	45,639	3% (12)
Real estate, rental, leasing	127	1% (13)	38,582	3% (13)
Local government	72	1% (15)	37,429	2% (14)
Transportation and warehousing	144	2% (10)	36,183	2% (15)
Accommodation	2	<1% (20)	33,094	2% (16)
Educational services	49	1% (17)	32,892	2% (17)
State government education	0	0% (21)	31,600	2% (18)
Information	9	<1% (19)	26,262	2% (19)
Department of Defense	0	0% (22)	22,500	1% (20)
Management of companies/enterprises	94	1% (14)	21,500	1% (21)
Federal government	0	0% (23)	11,454	1% (22)
Farm	0	0% (24)	9,000	1% (23)
Utilities	0	0% (25)	7,208	<1% (24)
State government	49	1% (16)	7,037	<1% (25)
Mining and logging	0	0% (26)	300	<1% (26)
Total	**8,976**		**1,525,500**	

Source: SANDAG Employment Estimates, 2016

Other statistics about the education level and income of employees in this jurisdiction

15%	**$38,268**	these jobs represent **0.6%**	these incomes represent **0.3%**
have Bachelor's degree or higher (24% region)	mean employee salary ($55,801 region)	of the region's jobs	of regional labor income

Sources: SANDAG Employment Estimates, 2016; LEHD LODES OD, 7.3, 2015

Highlight 3
What mode of transportation employees in this jurisdiction use to get to work during peak period

	Drive alone	Transit	Carpool	Bike	Walk
City of Lemon Grove	79%	4%	15%	1%	1%
Region	80%	4%	13%	2%	1%

Source: SANDAG Activity Based Model, 2016

Highlight 4
How far employees drive on average to get to this jurisdiction during peak period and how long it takes them on average, by transportation mode

	City of Lemon Grove		Region	
	Mean number of miles	Mean length of time (Minutes)	Mean number of miles	Mean length of time (Minutes)
Vehicles	9.5	18.4	12.0	25.1
Transit	7.6	57.7	10.7	62.8
Bike	2.7	13.6	4.3	21.6
Walk	1.4	27.7	1.2	23.2

Note: Peak period includes 6:00 a.m. to 8:59 a.m. and 3:30 p.m. to 6:59 p.m.

Source: SANDAG Activity Based Model, 2016

Highlight 5
Where employees travel from to work in the City of Lemon Grove

Jurisdiction	Number of workers who travel from jurisdiction to the City of Lemon Grove	Percent
San Diego	2,079	40%
Unincorporated	1,034	20%
Chula Vista	484	9%
Lemon Grove	466	9%
El Cajon	287	6%
La Mesa	213	4%
Santee	140	3%
National City	139	3%
Imperial Beach	75	2%
Escondido	54	1%
Oceanside	42	1%
San Marcos	30	1%
Vista	28	1%
Carlsbad	24	1%
Poway	20	<1%
Coronado	19	<1%
Encinitas	13	<1%
Del Mar	3	<1%
Solana Beach	1	<1%
Total	**5,151**	

Note: The total number of employees shown here is lower than presented elsewhere because employees who travel from outside the region or have an unknown origin location are excluded and only primary jobs are included.

Source: SANDAG Employment Estimates, 2016; LEHD LODES OD, 7.3, 2015

Map 1
Where do employees in the City of Lemon Grove live?

City of Lemon Grove
Employee Place of Residence

● 1 dot = 1 Employee

Darker colors indicate higher concentrations of employees

⬭ City of Lemon Grove

Source: Longitudinal Employer-Household Dynamics survey, U.S. Census Bureau, 2015

MILES
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0   4   8
KILOMETERS

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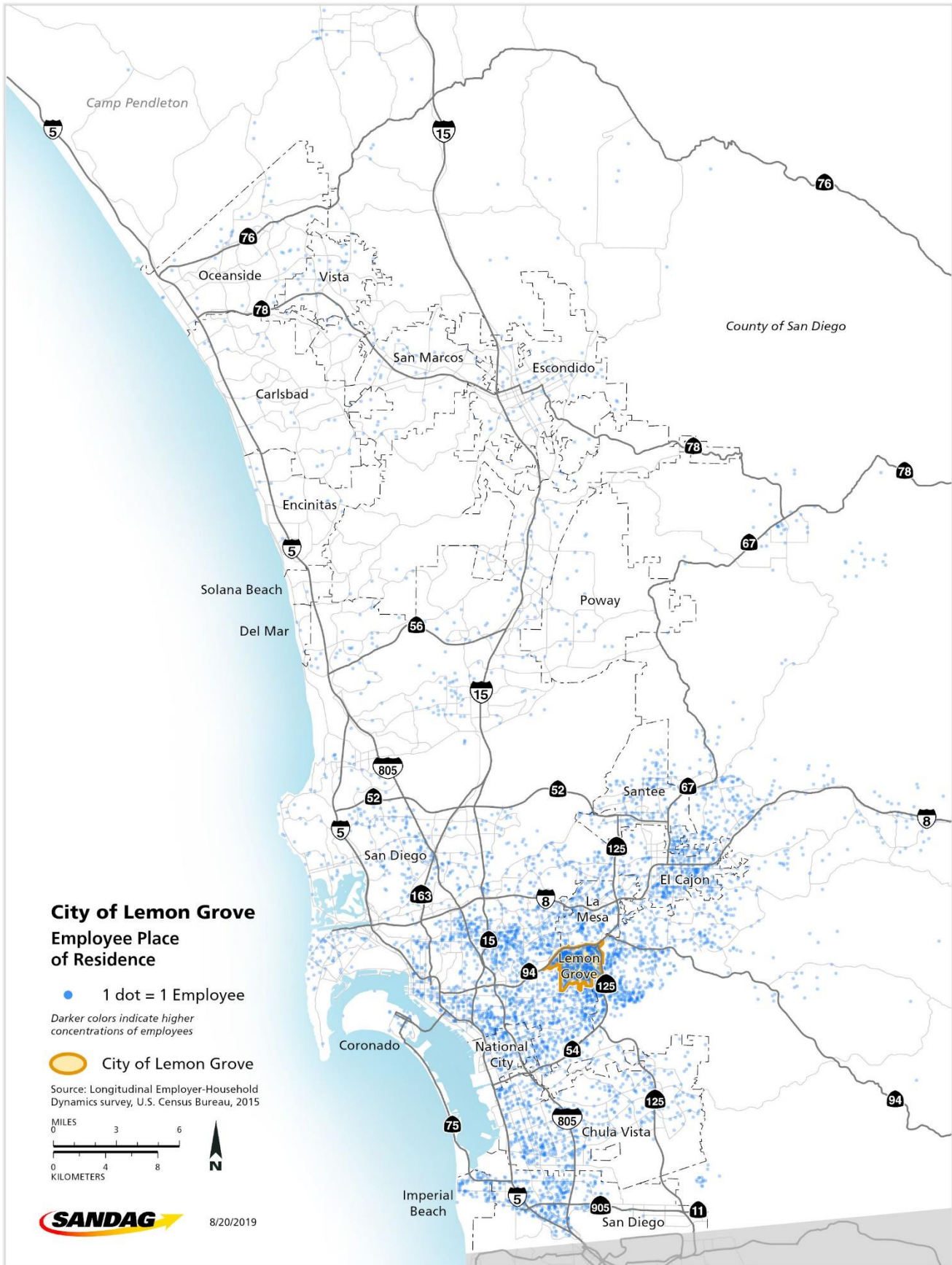
Map 2
Where do residents of Lemon Grove work?

City of Lemon Grove
Resident Place of Work

● 1 dot = 1 Resident

Darker colors indicate higher concentrations of residents

⬭ City of Lemon Grove

Source: Longitudinal Employer-Household Dynamics survey, U.S. Census Bureau, 2015

MILES
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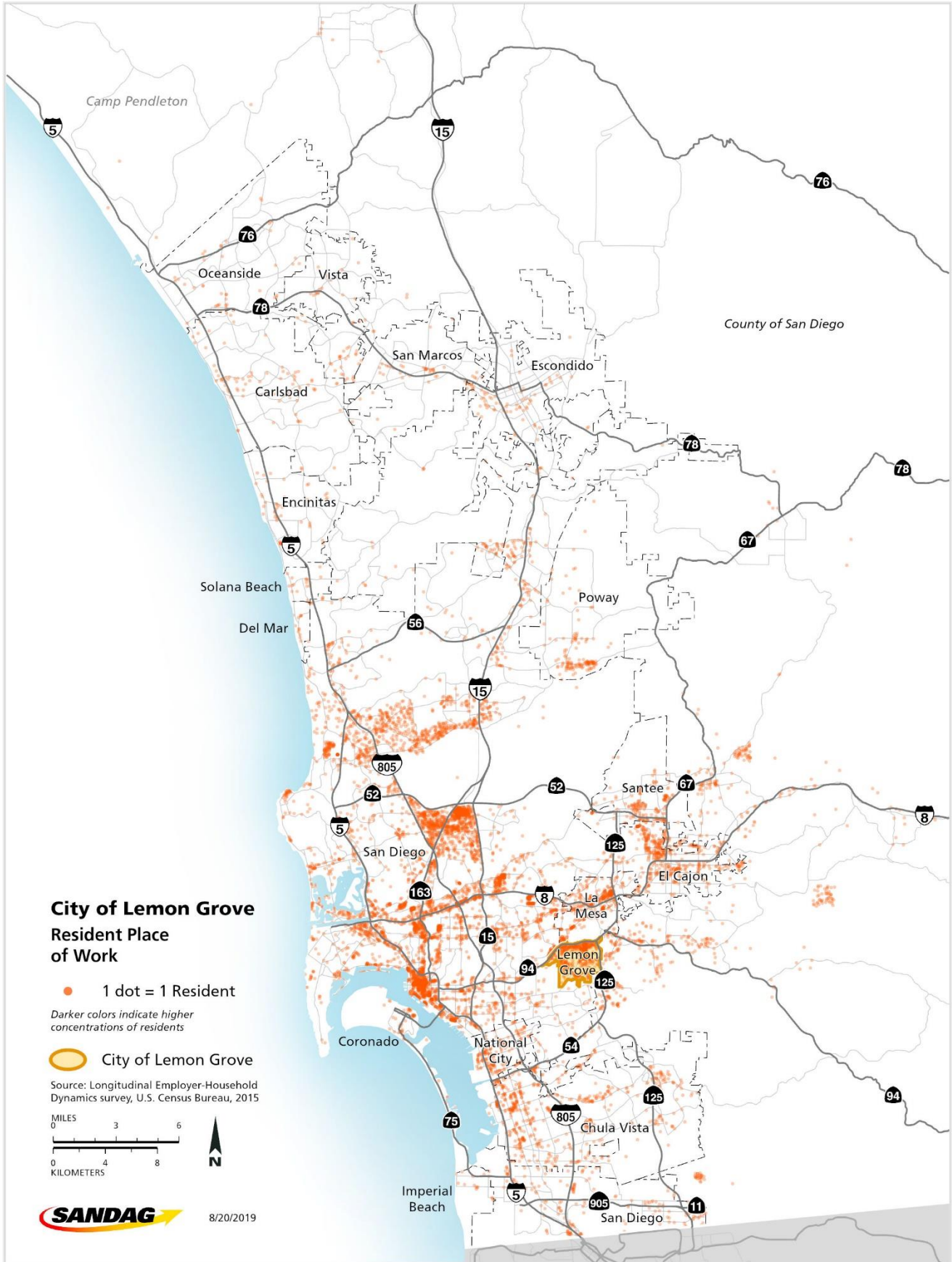
Map 3
All automobile trips that originate or end in the City of Lemon Grove for work, recreation, or any other reason

**Lemon Grove
2016 Estimated Total
Auto Travel Activity**
150,000 origins / destinations

Road utilization of
all vehicle trips that
either begin or end
in Lemon Grove

Heavy Utilization   Light Utilization

Lemon Grove

Utilization Scale-C:
population below 85,000

Source: SANDAG Activity Based Model, v14.0.1

MILES
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0   4   8
KILOMETERS

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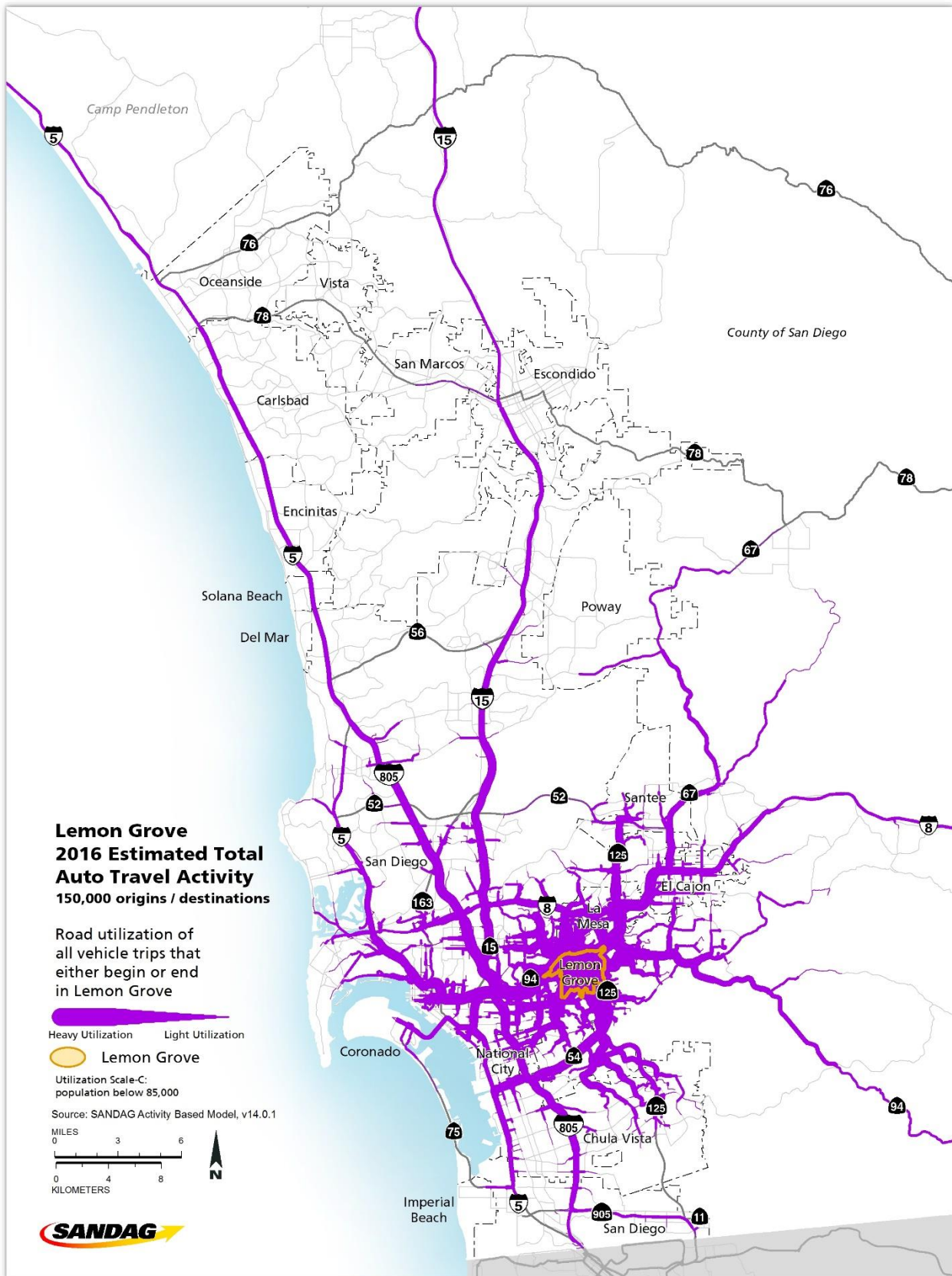
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Appendix A: Jurisdiction employment methodology, data sources, and other things to consider

Methodology

As a supplement to the employment center products and presentations, SANDAG has prepared this packet to showcase jurisdiction employment data. This packet was created using the same source data and methodology as the employment center products. Employment centers represent areas of employment concentration, whereas this packet refers to the jurisdictional employment in whole.

Additional technical information regarding this methodology is available by contacting the Data, Analytics, and Modeling Department at SANDAG.

Data sources and other things to consider

Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) 7.3 (2015)

The Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) data are a publicly available product of the U.S. Census Bureau. The LODES data are an extract of the LEHD infrastructure which is composed of administrative records, census, and survey data. The LODES data provide counts of unemployment insurance-covered wage and salary jobs, including private sector and state, local and some federal government jobs. Workplace location and residential location of an employee is measured at the census block-level (2010). The 2015 data that are used here reflect the latest available data (version 7.3) at the time of this analysis and included two primary tables: Original-Destinations (OD) (used in Highlight 5 and Maps 1 and 2), and Workplace Area Characteristics (WAC) (Highlight 2). It should be noted these data (1) contain wage and salary jobs (and exclude self-employed individuals); (2) do not include military and other security-related federal agencies, postal workers, some employees at nonprofits and religious institutions, and informal workers; (3) only includes an individual's primary job if an individual has more than one; and (4) education attainment includes only workers age 30 or older. Additional information is available at https://lehd.ces.census.gov/data/.

SANDAG Employment Estimates (2016)

On a regular basis, SANDAG produces estimates of employment and individual earnings for the San Diego region. These estimates were used in Fast facts and Highlights 1, 2, and 5. These estimates utilize California Employment Development Department (EDD) data, the Quarterly Census of Employment and Wages (QCEW) data, and the LEHD LODES data from the U.S. Census Bureau among other sources. The employment estimates include wage and salary for private sector and government workers, as well as the self-employed. Uniformed military are not included; however, U.S. Department of Defense (DOD) civilian workers have been assigned to military bases. Tribal government jobs are included where data were available. Additional information regarding these estimates is available by contacting the Economic and Demographic Analysis Modeling team at SANDAG.

SANDAG Population and Housing Estimates (2016)

Each year SANDAG produces estimates of population and housing for the San Diego region. These estimates utilize several data sources including the California Department of Finance, the U.S. Census Bureau, and a variety of other publicly available datasets. These small-area estimates contain information on the characteristics of the population (ethnicity, age, sex) and housing units (occupied, vacant, unoccupiable) in the region. The population living in military barracks, college dorms and other institutional facilities are included in the population and are counted in housing referred to as Group Quarters. The active military population and their dependents who live in households are included in the household population counts. The population and housing estimates are created in a process similar to the Regional Growth Forecast and contain similar information, however the Population and Housing Estimates reflect current conditions. These data are in Appendix B. Additional information regarding these estimates is available by contacting the Economic and Demographic Analysis Modeling team at SANDAG.

SANDAG Activity Based Transportation Model (2016)

To plan and complete regional transportation projects, SANDAG creates and maintains a transportation model which uses a variety of regional transportation survey and socioeconomic and demographic data (e.g., count of trips from home to work, how people carpool, what bus routes are most frequented, and which highways are used and when). These data are then utilized in the Activity Based Model (ABM) to simulate individual and household transportation choices. These choices include how individuals travel around the region (the mode), why people travel around the region (the trip purpose), and when they travel (time of day). The ABM model is refined based on transportation data and expert feedback on methodology and data sources. For this analysis, SANDAG utilized release version 14.0.1 of ABM to estimate travel for the year 2016 (reference scenario #232). Data in both Highlight 3 and 4 are restricted only to transportation trips in the model in which (1) the trip begins at home and ends at work and does not have any intermediary stops (e.g., dropping a child at school); and (2) the trip's purpose is work and (3) the trip start time is during peak periods which are defined as 6:00 a.m. to 8:59 a.m. and 3:30 p.m. to 6:59 p.m. Transit travel time includes walk time to transit stop, initial wait time, in vehicle time, transfer wait time, and walk time to the destination. Map 3 includes all auto trips (work and non-work related) to and from City of Lemon Grove. The margin of error might be larger for small jurisdictions with few work trips and all trips. Additional information about the ABM is available here: sandag.org/index.asp?subclassid=120&fuseaction=home.subclasshome

Appendix B: Jurisdiction resident profile

Demographic and Socioeconomic Estimates
Jurisdiction
Lemon Grove

	Jan 1, 2018
Total Population	**26,834**
Household Population	26,488
Group Quarters Population	346
Persons Per Household	3.05

Housing and Occupancy

|	Total Housing Units	Households	Vacancy Rate
Total Housing Units	**9,108**	**8,684**	**4.7%**
Single Family - Detached	6,326	6,103	3.5%
Single Family - Attached	739	716	3.1%
Multi-Family	1,996	1,819	8.9%
Mobile Home and Other	47	46	2.1%

Household Income
Households by Income Category (2010 $, adjusted for inflation)

	Less than $15,000	$15,000-$29,999	$30,000-$44,999	$45,000-$59,999	$60,000-$74,999	$75,000-$99,999	$100,000-$124,999	$125,000-$149,999	$150,000-$199,999	$200,000 or more
% of Total	9%	17%	15%	11%	12%	15%	10%	4%	3%	2%

Median Household Income

	2018
Adjusted for Inflation (2010 $)	$57,159
Not adjusted for inflation (current 2017$)	$64,455
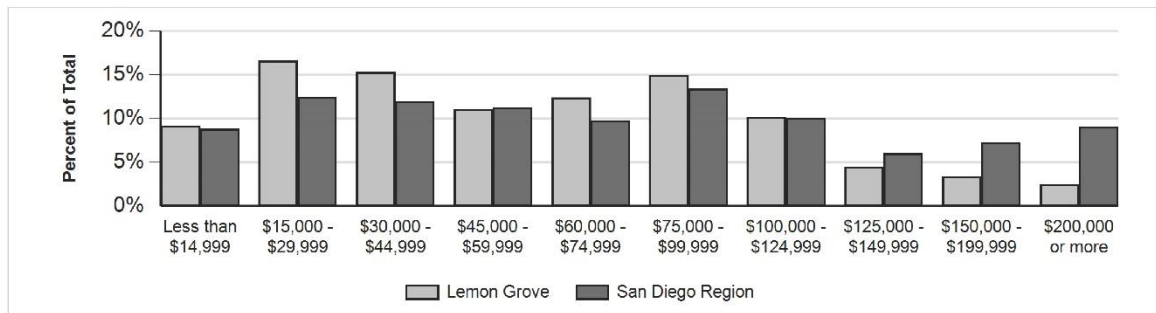
IMPORTANT ADVISORY:

Caution should be taken when using data for small population groups, particularly at small levels of geography. Minor adjustments were made (such as correcting the location of housing units that were erroneously allocated by the Census Bureau to roads and open space) to more accurately reflect the region's true population and housing distribution.

In addition, Census 2010 does not include information about structure type or household income. Those details and other demographic estimates shown here are developed from other sources, including the California Department of Finance E-5 estimates for cities and the County of San Diego; San Diego County Assessor Records, vital events records from the California Department of Health, and income data from the U.S. Census Bureau American Community Survey.

Caution should always be taken when using data for small population groups, particularly at small levels of geography.

Population by Age and Sex

	Total	Male	Female	Percent Female
Total Population	**26,834**	**13,209**	**13,625**	**51%**
Under 5	1,889	973	916	48%
5 to 9	2,057	1,080	977	47%
10 to 14	1,974	985	989	50%
15 to 17	1,157	604	553	48%
18 and 19	696	339	357	51%
20 to 24	2,073	1,061	1,012	49%
25 to 29	1,811	897	914	50%
30 to 34	1,674	814	860	51%
35 to 39	1,772	905	867	49%
40 to 44	1,635	806	829	51%
45 to 49	1,589	775	814	51%
50 to 54	1,595	814	781	49%
55 to 59	1,708	832	876	51%
60 and 61	670	301	369	55%
62 to 64	886	405	481	54%
65 to 69	1,260	609	651	52%
70 to 74	880	418	462	53%
75 to 79	582	236	346	59%
80 to 84	413	170	243	59%
85 and older	513	185	328	64%
Under 18	7,077	3,642	3,435	49%
65 and older	3,648	1,618	2,030	56%
Median Age	35.2	34.1	36.4	N/A

Population by Age
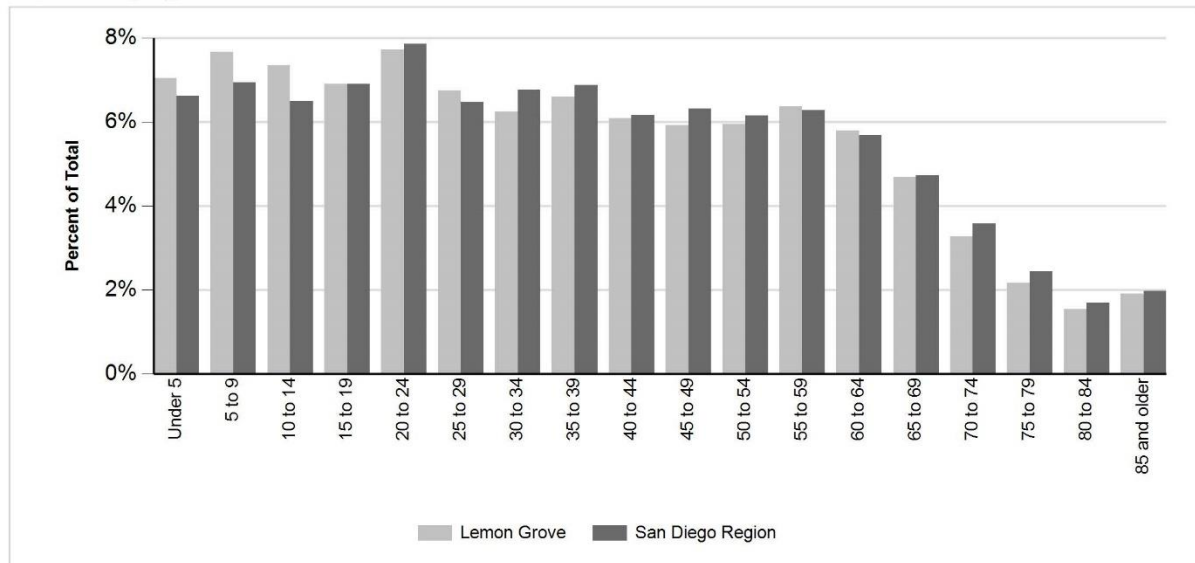
Source: SANDAG, Current Estimates
SANDAG
www.sandag.org

May 25, 2019
Lemon Grove
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Population by Race, Ethnicity and Age

	Hispanic	Non-Hispanic				
		White	Black	American Indian	Asian & Pacific Isl.	All Other
Total Population	**12,567**	**8,593**	**2,931**	**115**	**1,605**	**1,023**
Under 5	1,129	415	188	5	71	81
5 to 9	1,161	455	203	7	83	148
10 to 14	1,203	390	157	8	85	131
15 to 17	700	221	108	5	60	63
18 and 19	422	147	72	3	30	22
20 to 24	1,133	503	211	5	108	113
25 to 29	915	455	253	3	96	89
30 to 34	742	544	217	16	91	64
35 to 39	829	543	217	8	113	62
40 to 44	859	460	152	7	115	42
45 to 49	758	495	169	5	120	42
50 to 54	654	582	194	5	123	37
55 to 59	594	730	212	9	115	48
60 and 61	243	287	83	1	50	6
62 to 64	253	440	106	5	66	16
65 to 69	347	637	149	6	94	27
70 to 74	217	473	100	6	67	17
75 to 79	163	278	75	8	49	9
80 to 84	129	204	43	1	32	4
85 and older	116	334	22	2	37	2
Under 18	4,193	1,481	656	25	299	423
65 and older	972	1,926	389	23	279	59
Median Age	27.9	46.7	36.3	38.4	42.8	22.9

Source: SANDAG, Current Estimates
SANDAG
www.sandag.org

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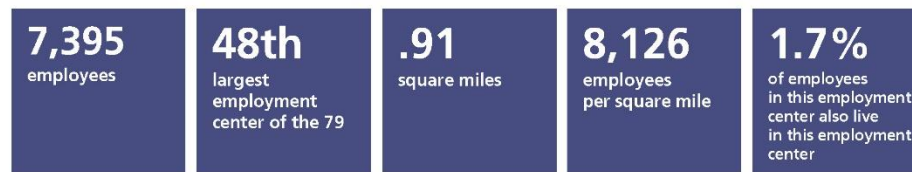# Appendix C: Employment center located within the City of Lemon Grove

Lemon Grove employment center

Tier 4 employment centers in the San Diego region[1]:
An analysis of where people live and work

Highlight 1
Characteristics of this employment center

7,395 employees	48th largest employment center of the 79	.91 square miles	8,126 employees per square mile	1.7% of employees in this employment center also live in this employment center

Sources: SANDAG Employment Estimates, 2016; LEHD LODES OD, 7.3, 2015

Highlight 2
Industries in this employment center and the region overall

	Lemon Grove employment center		Region	
	Number of jobs	Percentage/ rank	Number of jobs	Percentage/ rank
Health care and social assistance	**1,057**	**14% (3)**	199,700	13% (1)
Retail trade	**2,766**	**37% (1)**	156,612	10% (2)
Professional, scientific, technical	91	1% (10)	148,766	10% (3)
Food services	**1,120**	**15% (2)**	131,594	9% (4)
Manufacturing	38	1% (16)	109,234	7% (5)
Administrative, support, waste services	**564**	**8% (5)**	91,519	6% (6)
Construction	**700**	**10% (4)**	83,498	5% (7)
Local government education	0	0% (18)	80,300	5% (8)
Other services	377	5% (6)	69,124	5% (9)
Finance and insurance	180	2% (7)	47,848	3% (10)
Wholesale trade	47	1% (15)	46,625	3% (11)
Arts, entertainment, recreation	95	1% (8)	45,639	3% (12)
Real estate, rental, leasing	26	<1% (17)	38,582	3% (13)
Local government	72	1% (11)	37,429	2% (14)
Transportation and warehousing	70	1% (12)	36,183	2% (15)
Accommodation	0	0% (19)	33,094	2% (16)
Educational services	49	1% (13)	32,892	2% (17)
State government education	0	0% (20)	31,600	2% (18)
Information	0	0% (21)	26,262	2% (19)
Department of Defense	0	0% (22)	22,500	1% (20)
Management of companies/enterprises	94	1% (9)	21,500	1% (21)
Federal government	0	0% (23)	11,454	1% (22)
Farm	0	0% (24)	9,000	1% (23)
Utilities	0	0% (25)	7,208	<1% (24)
State government	490	1% (14)	7,037	<1% (25)
Mining and logging	0	0% (26)	300	<1% (26)
Total	**7,395**		**1,525,500**	

Source: SANDAG Employment Estimates, 2016

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[1] This data summary was prepared by SANDAG and is part of an evolving analysis of where people live and work in the San Diego region. Tier 4 employment centers are those between 2,000 and 14,999 employees. For data notes, sources, and qualifications, please visit: sandag.org\employmentcenters. Suggested reference: SANDAG (2019, May). *Tier 4 employment centers in the San Diego region: Lemon Grove employment center.* San Diego, CA: Author.
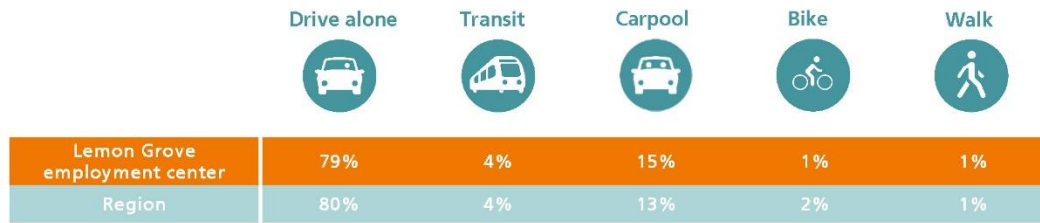
Highlight 3

Other statistics about the education level and income of employees in this employment center

12%
have Bachelor's degree
or higher (24% region)

$30,244
mean employee salary
($55,801 region)

these jobs represent
.5%
of the region's jobs

these incomes represent
.2%
of regional labor income

Sources: SANDAG Employment Estimates, 2016; LEHD LODES OD, 7.3, 2015

Highlight 4

What mode of transportation these employment center employees use to get to work during peak period?

	Drive alone	Transit	Carpool	Bike	Walk
Lemon Grove employment center	79%	4%	15%	1%	1%
Region	80%	4%	13%	2%	1%

Source: SANDAG Activity Based Model, 2016

Highlight 5

How far employees drive on average to get to this employment center during peak period and how long it takes them on average, by transportation mode

	Lemon Grove employment center		Region	
	Mean number of miles	Mean length of time (Minutes)	Mean number of miles	Mean length of time (Minutes)
Vehicles	9.7	18.4	12.0	25.1
Transit	7.5	55.6	10.7	62.8
Bike	4.4	21.9	4.3	21.6
Walk	1.0	20.9	1.2	23.2

Note: Peak period includes 6:00 a.m. to 8:59 a.m. and 3:30 p.m. to 6:59 p.m.

Source: SANDAG Activity Based Model, 2016

Highlight 6

What jurisdictions these employment center employees travel from

Jurisdiction	Number of workers in the employment center	Percent
San Diego	1,694	43%
Unincorporated	724	18%
Chula Vita	413	11%
Lemon Grove	267	7%
El Cajon	217	6%
La Mesa	177	5%
Santee	109	3%
National City	109	3%
Imperial Beach	71	2%
Escondido	35	1%
Oceanside	32	1%
San Marcos	24	1%
Poway	24	1%
Carlsbad	21	1%
Vista	13	<1%
Coronado	10	<1%
Encinitas	8	<1%
Del Mar	3	<1%
Solana Beach	0	0%
Total	**3,951**	

Note: The total number of employees shown here is lower than presented elsewhere because employees who travel from outside the region or have an unknown origin location are excluded and only primary jobs are included.

Source: SANDAG Employment Estimates, 2016; LEHD LODES OD, 7.3, 2015

2

Map 1

Lemon Grove employment center