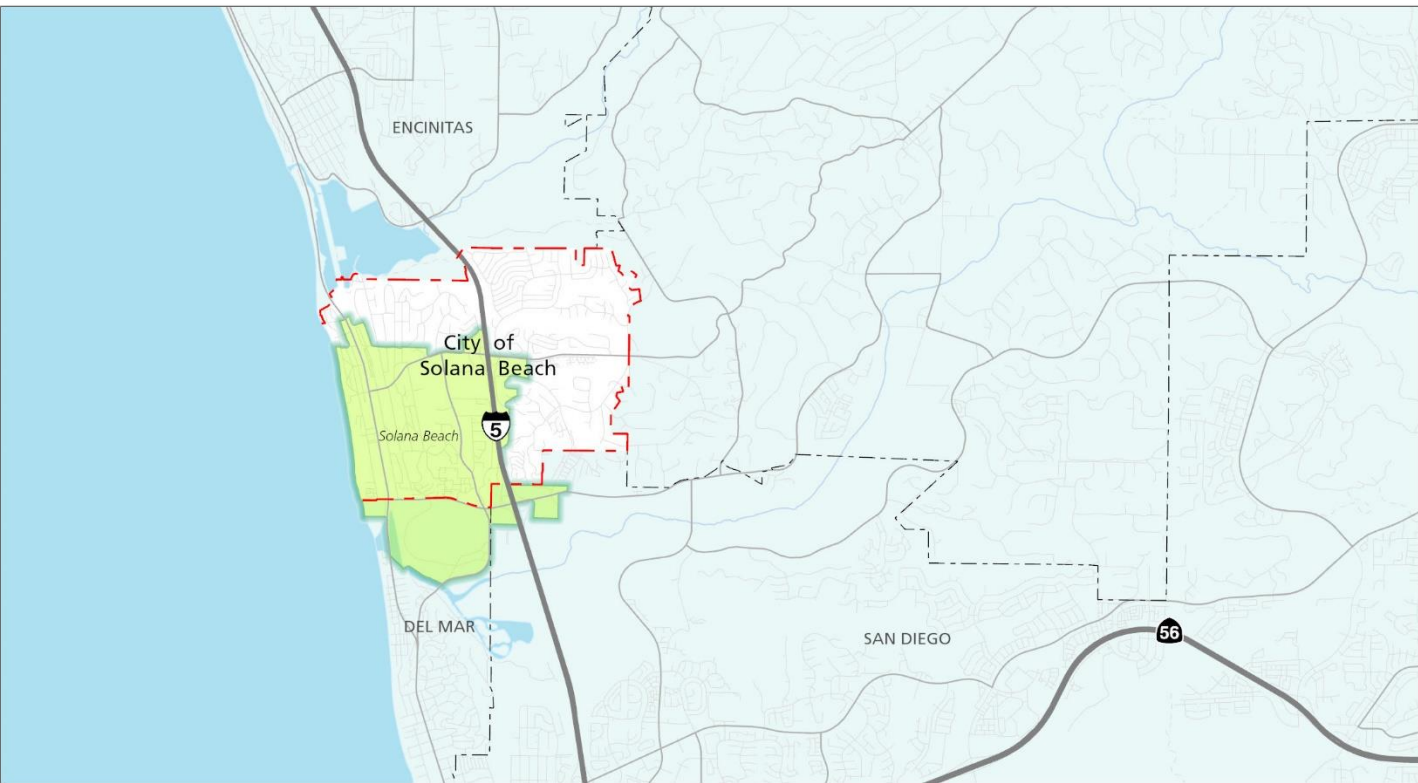


Employment in the San Diego region

City of Solana Beach



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August 2019

Fast facts

City of Solana Beach

9,975	employees
0.7%	region's employees
3.4	land area (square miles)
2,925.2	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 Solana Beach**, including maps showing where individuals who work in the City of Solana Beach live and how far they have to travel to get to their places of employment, where residents of Solana Beach travel to work, as well as a map that shows all of the travel to and from the City of Solana Beach regardless if for work, recreation, or any other reason. SANDAG 2018 demographic and socioeconomic estimates for the population of Solana Beach are included (Appendix B), as is the packet for the employment center located partially in the City of Solana Beach (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 a 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).

Highlight 1

Industries in this jurisdiction and the region overall

	City of Solana Beach		Region	
	Number of jobs	Percentage/rank	Number of jobs	Percentage/rank
Health care and social assistance	1,084	11% (3)	199,700	13% (1)
Retail trade	1,039	10% (4)	156,612	10% (2)
Professional, scientific, technical	1,339	13% (2)	148,766	10% (3)
Food services	1,533	15% (1)	131,594	9% (4)
Manufacturing	110	1% (17)	109,234	7% (5)
Administrative, support, waste services	533	5% (8)	91,519	6% (6)
Construction	662	7% (5)	83,498	5% (7)
Local government education	347	4% (12)	80,300	5% (8)
Other services	546	6% (7)	69,124	5% (9)
Finance and insurance	396	4% (11)	47,848	3% (10)
Wholesale trade	253	3% (14)	46,625	3% (11)
Arts, entertainment, recreation	470	5% (9)	45,639	3% (12)
Real estate, rental, leasing	433	4% (10)	38,582	3% (13)
Local government	146	2% (15)	37,429	2% (14)
Transportation and warehousing	24	<1% (18)	36,183	2% (15)
Accommodation	111	1% (16)	33,094	2% (16)
Educational services	615	6% (6)	32,892	2% (17)
State government education	0	0% (21)	31,600	2% (18)
Information	330	3% (13)	26,262	2% (19)
Department of Defense	0	0% (22)	22,500	1% (20)
Management of companies/enterprises	2	<1% (19)	21,500	1% (21)
Federal government	0	0% (23)	11,454	1% (22)
Farm	2	<1% (20)	9,000	1% (23)
Utilities	0	0% (24)	7,208	<1% (24)
State government	0	0% (25)	7,037	<1% (25)
Mining and logging	0	0% (26)	300	<1% (26)
Total	9,975		1,525,500	

Source: SANDAG Employment Estimates, 2016

Highlight 2






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

<p>26%</p> <p>have Bachelor's degree or higher (24% region)</p>	<p>\$50,805</p> <p>mean employee salary (\$55,801 region)</p>	<p>these jobs represent</p> <p>0.7%</p> <p>of the region's jobs</p>	<p>these incomes represent</p> <p>0.4%</p> <p>of regional labor income</p>
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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 Solana Beach	82%	4%	12%	2%	<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 Solana Beach		Region	
	Mean number of miles	Mean length of time (Minutes)	Mean number of miles	Mean length of time (Minutes)
Vehicles	15.1	30.8	12.0	25.1
Transit	17.4	95.3	10.7	62.8
Bike	4.0	20.1	4.3	21.6
Walk	1.0	20.5	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 Solana Beach

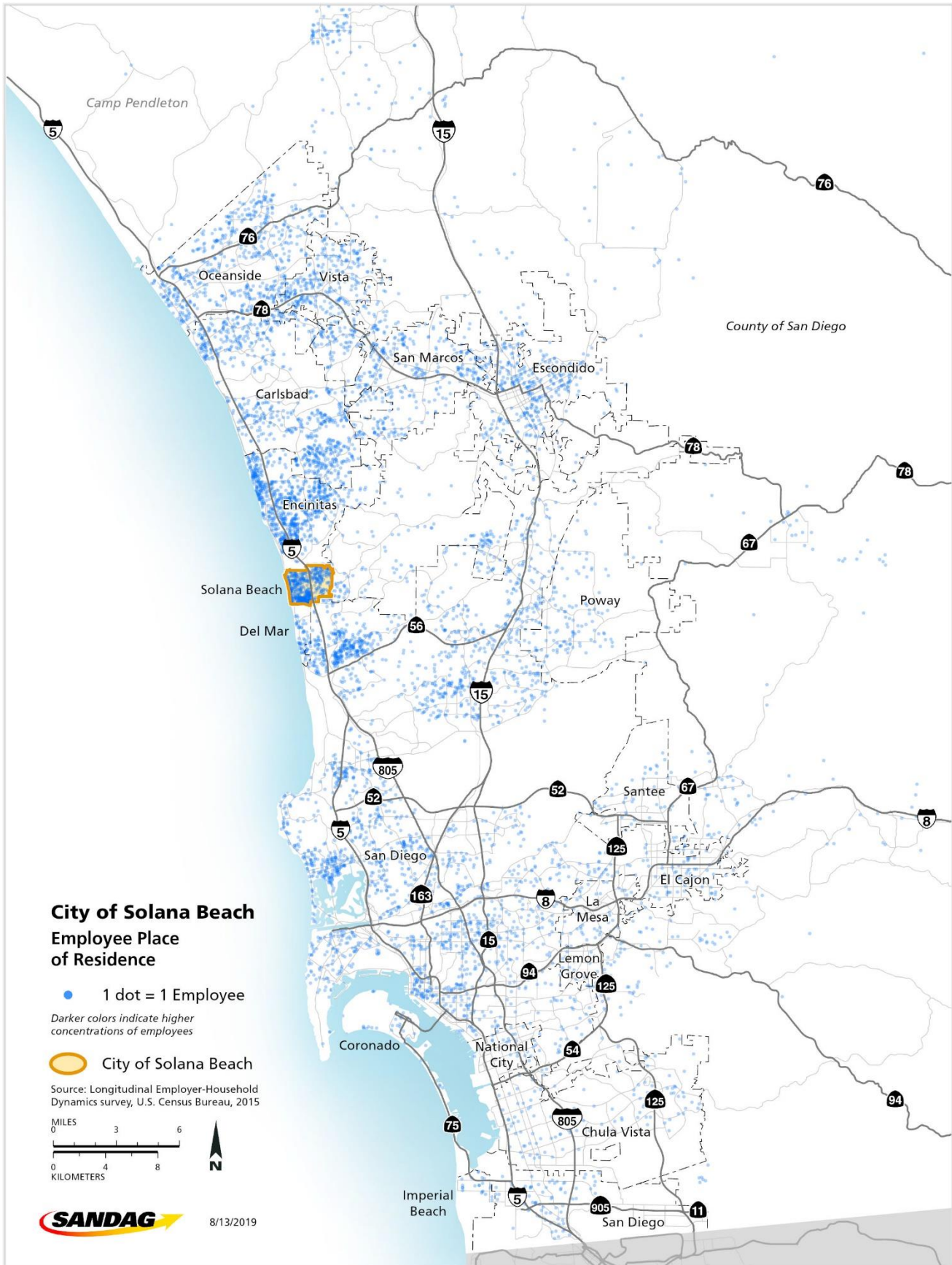
Jurisdiction	Number of workers who travel from jurisdiction to the City of Solana Beach	Percent
San Diego	2,197	34%
Encinitas	730	11%
Carlsbad	619	9%
Unincorporated	588	9%
Oceanside	553	8%
Solana Beach	473	7%
Vista	325	5%
Escondido	295	5%
San Marcos	271	4%
Poway	107	2%
Chula Vista	97	2%
El Cajon	68	1%
Del Mar	49	1%
La Mesa	46	1%
Santee	44	1%
Coronado	38	1%
National City	29	<1%
Imperial Beach	21	<1%
Lemon Grove	16	<1%
Total	6,566	

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.

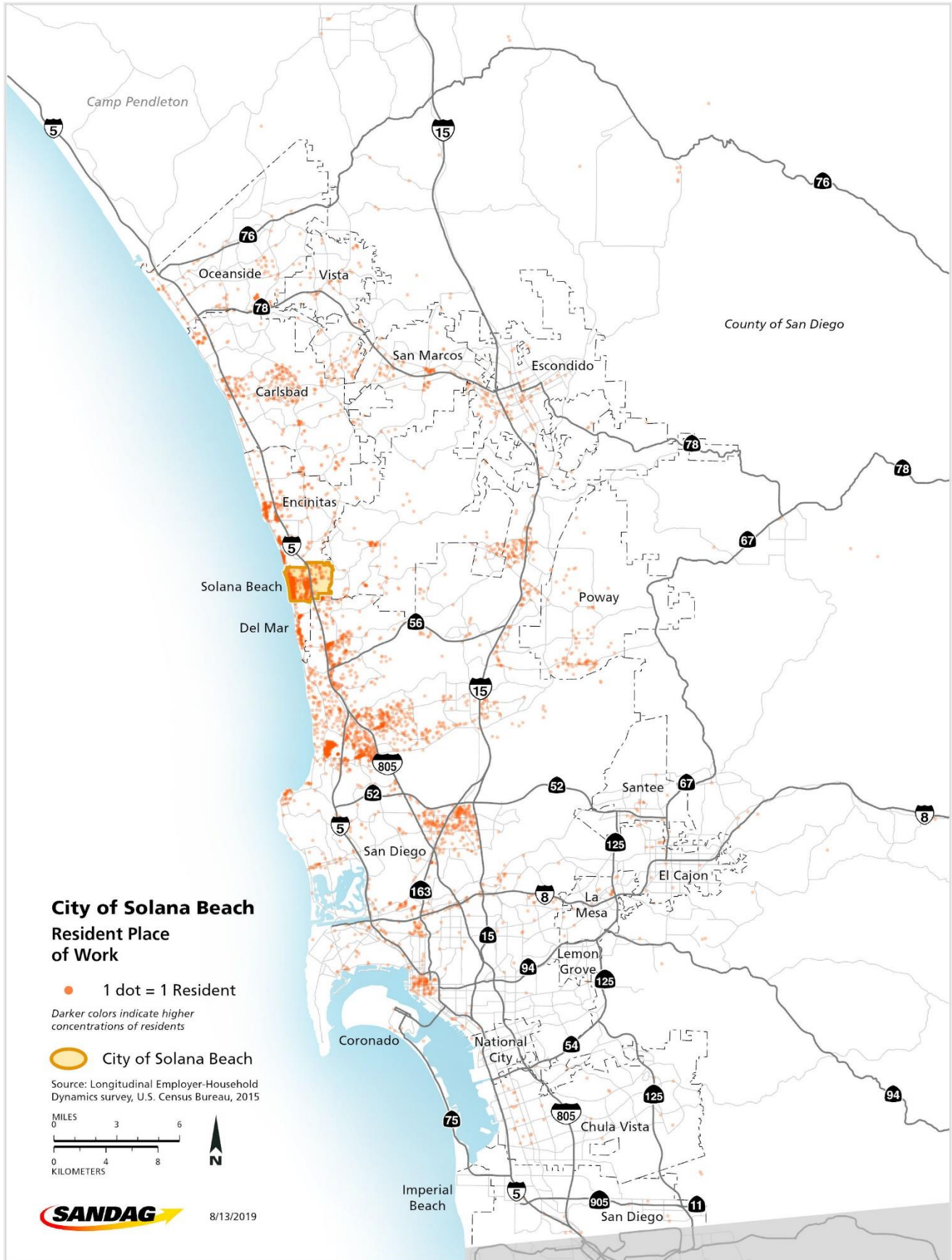
Source: SANDAG Employment Estimates, 2016; LEHD LODS OD, 7.3, 2015

Map 1

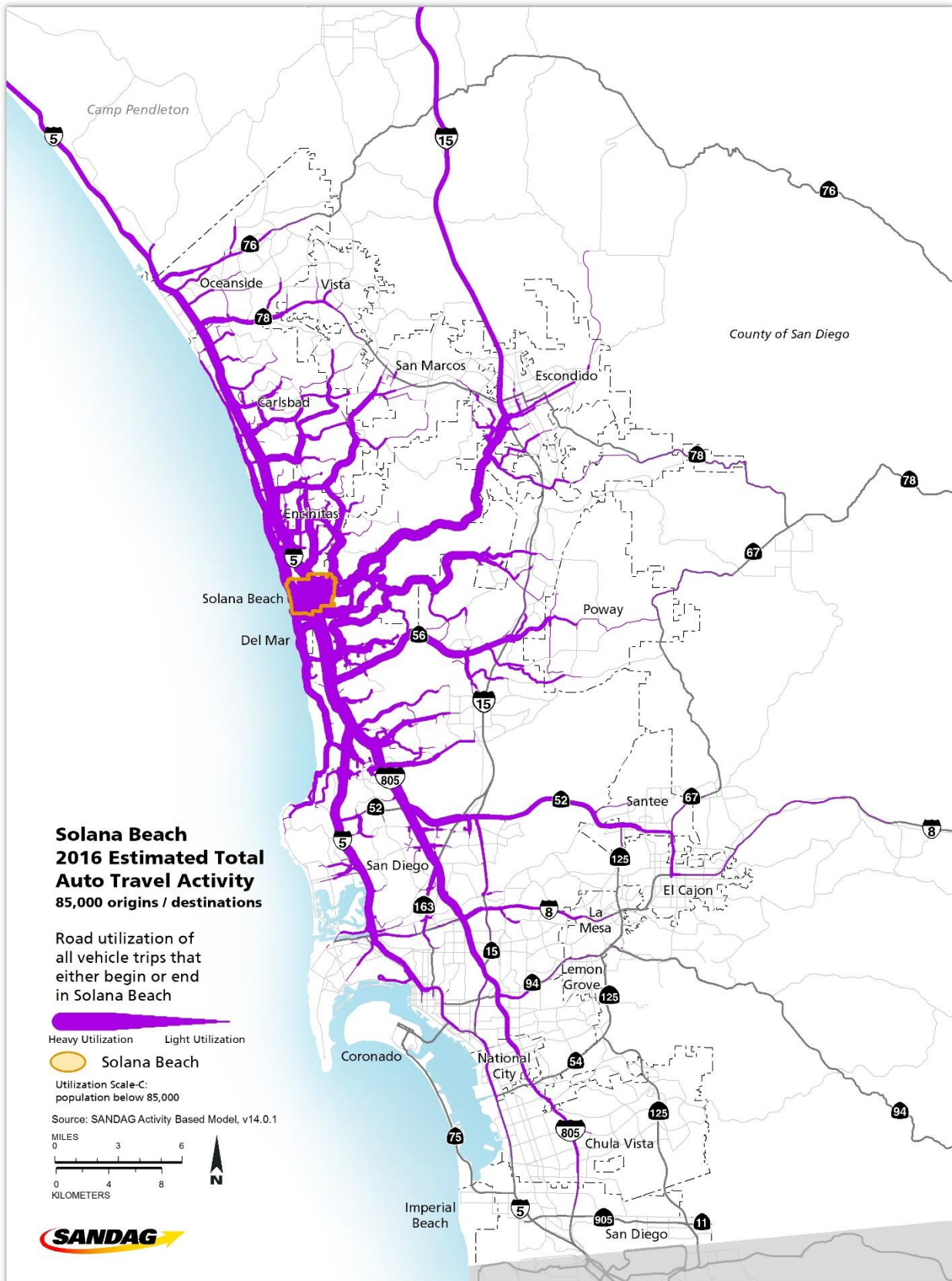
Where do employees in the City of Solana Beach live?



Where do residents of Solana Beach work?



All automobile trips that originate or end in the City of Solana Beach for work, recreation, or any other reason



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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 Solana Beach. 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 Solana Beach



	Jan 1, 2018
Total Population	13,938
Household Population	13,938
Group Quarters Population	0
Persons Per Household	2.35

Housing and Occupancy

	Total Housing Units	Households	Vacancy Rate
Total Housing Units	6,489	5,943	8.4%
Single Family - Detached	3,075	2,881	6.3%
Single Family - Attached	779	721	7.4%
Multi-Family	2,635	2,341	11.2%
Mobile Home and Other	0	0	--

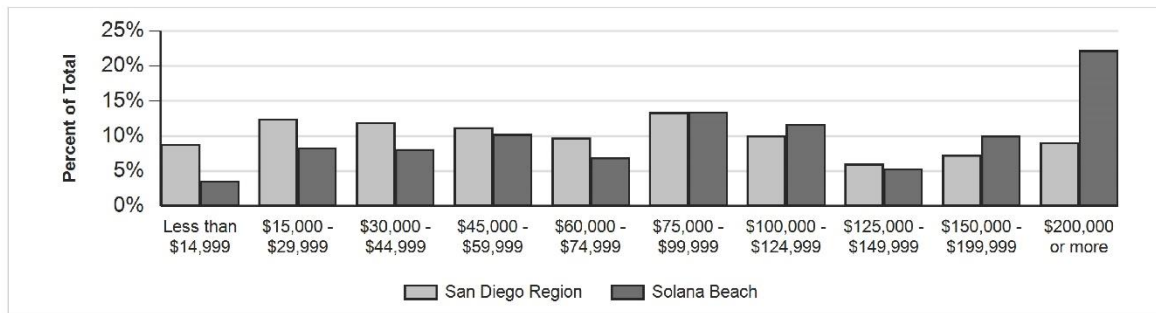
Household Income

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	4%	8%	8%	10%	7%	13%	12%	5%	10%	22%

Median Household Income

	2018
Adjusted for Inflation (2010 \$)	\$98,858
Not adjusted for inflation (current 2017\$)	\$111,476



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.

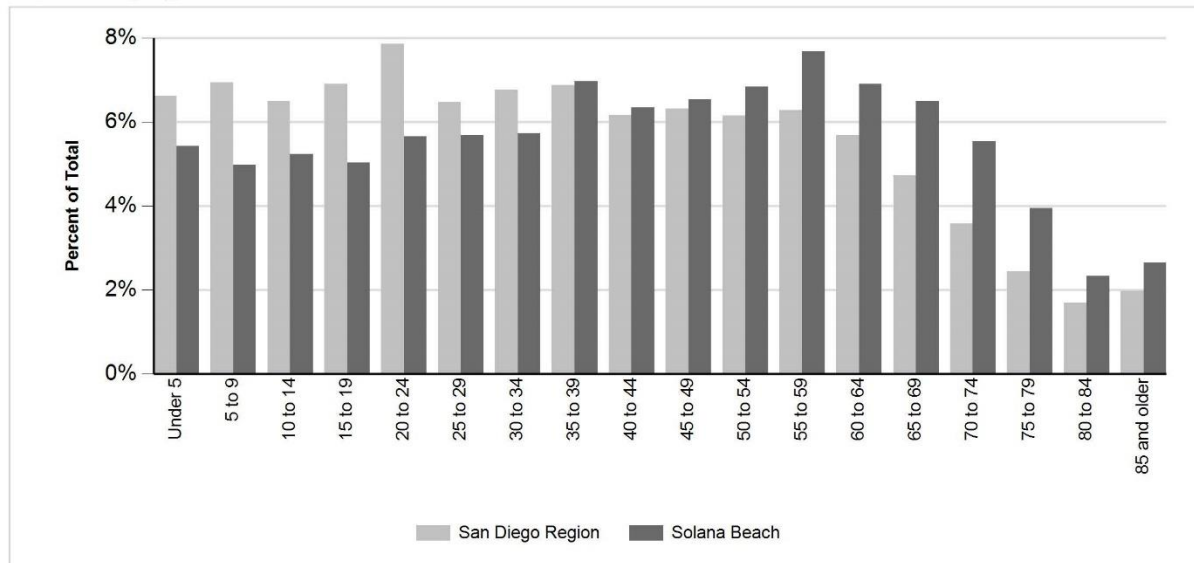
In addition, Census 2010 does not include information about structure type or household income. Those details and other demographic estimates shown here are developed from other sources, including the California Department of Finance E-5 estimates for cities and the County of San Diego; San Diego County 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	13,938	6,783	7,155	51%
Under 5	757	363	394	52%
5 to 9	694	342	352	51%
10 to 14	730	386	344	47%
15 to 17	424	217	207	49%
18 and 19	277	126	151	55%
20 to 24	788	395	393	50%
25 to 29	792	389	403	51%
30 to 34	800	409	391	49%
35 to 39	971	474	497	51%
40 to 44	884	442	442	50%
45 to 49	911	452	459	50%
50 to 54	953	445	508	53%
55 to 59	1,071	518	553	52%
60 and 61	396	197	199	50%
62 to 64	566	261	305	54%
65 to 69	905	436	469	52%
70 to 74	772	347	425	55%
75 to 79	551	268	283	51%
80 to 84	326	161	165	51%
85 and older	370	155	215	58%
Under 18	2,605	1,308	1,297	50%
65 and older	2,924	1,367	1,557	53%
Median Age	44.2	43.3	45.0	N/A

Population by Age



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

May 25, 2019
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Population by Race, Ethnicity and Age

	Non-Hispanic					
	Hispanic	White	Black	American Indian	Asian & Pacific Isl.	All Other
Total Population	1,857	10,550	83	37	833	578
Under 5	158	497	5	1	46	50
5 to 9	172	436	8	1	27	50
10 to 14	180	444	11	4	37	54
15 to 17	100	266	6	2	20	30
18 and 19	73	160	5	1	15	23
20 to 24	122	547	10	1	41	67
25 to 29	70	609	6	1	47	59
30 to 34	94	596	6	0	58	46
35 to 39	122	710	8	2	72	57
40 to 44	149	614	1	2	88	30
45 to 49	152	654	3	4	74	24
50 to 54	128	730	5	3	67	20
55 to 59	110	867	1	8	60	25
60 and 61	32	321	2	1	31	9
62 to 64	41	489	2	3	27	4
65 to 69	55	801	0	2	36	11
70 to 74	34	687	0	1	40	10
75 to 79	28	498	2	0	19	4
80 to 84	19	288	2	0	17	0
85 and older	18	336	0	0	11	5
Under 18	610	1,643	30	8	130	184
65 and older	154	2,610	4	3	123	30
Median Age	32.8	48.0	23.3	49.4	43.0	26.3

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Appendix C: Employment center located within the City of Solana Beach



Solana Beach employment center Tier 4 employment centers in the San Diego region¹: An analysis of where people live and work

Highlight 1

Characteristics of 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

	Solana Beach employment center		Region	
	Number of jobs	Percentage/ rank	Number of jobs	Percentage/ rank
Health care and social assistance	1,092	9% (4)	199,700	13% (1)
Retail trade	1,249	11% (3)	156,612	10% (2)
Professional, scientific, technical	1,301	11% (2)	148,766	10% (3)
Food services	2,415	20% (1)	131,594	9% (4)
Manufacturing	110	1% (17)	109,234	7% (5)
Administrative, support, waste services	521	4% (10)	91,519	6% (6)
Construction	676	6% (6)	83,498	5% (7)
Local government education	246	2% (14)	80,300	5% (8)
Other services	594	5% (8)	69,124	5% (9)
Finance and insurance	426	4% (11)	47,848	3% (10)
Wholesale trade	312	3% (13)	46,625	3% (11)
Arts, entertainment, recreation	1,074	9% (5)	45,639	3% (12)
Real estate, rental, leasing	523	4% (9)	38,582	3% (13)
Local government	146	1% (15)	37,429	2% (14)
Transportation and warehousing	29	<1% (18)	36,183	2% (15)
Accommodation	120	1% (16)	33,094	2% (16)
Educational services	630	5% (7)	32,892	2% (17)
State government education	0	0% (21)	31,600	2% (18)
Information	341	3% (12)	26,262	2% (19)
Department of Defense	0	0% (22)	22,500	1% (20)
Management of companies/enterprises	2	<1% (20)	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	6	<1% (19)	7,037	<1% (25)
Mining and logging	0	0% (26)	300	<1% (26)
Total	11,813		1,525,500	

Source: SANDAG Employment Estimates, 2016

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: Solana Beach employment center*. San Diego, CA: Author.

Highlight 3

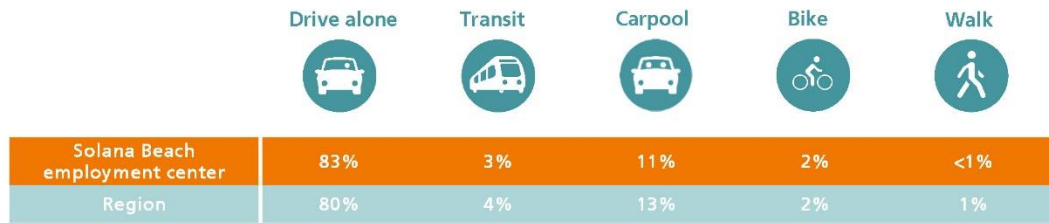
Other statistics about the education level and income of employees in this employment center



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?



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

	Solana Beach employment center		Region	
	Mean number of miles	Mean length of time (Minutes)	Mean number of miles	Mean length of time (Minutes)
Vehicles	15.1	30.5	12.0	25.1
Transit	17.4	97.7	10.7	62.8
Bike	3.9	19.4	4.3	21.6
Walk	1.0	19.6	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	2,035	34%
Encinitas	666	11%
Carlsbad	560	9%
Unincorporated	514	9%
Oceanside	507	9%
Solana Beach	392	7%
Vista	311	5%
Escondido	271	5%
San Marcos	257	4%
Poway	94	2%
Chula Vista	88	2%
El Cajon	62	1%
Del Mar	47	1%
Santee	44	1%
La Mesa	41	1%
Coronado	37	1%
National City	26	<1%
Imperial Beach	20	<1%
Lemon Grove	16	<1%
Total	5,988	

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

Solana Beach employment center

