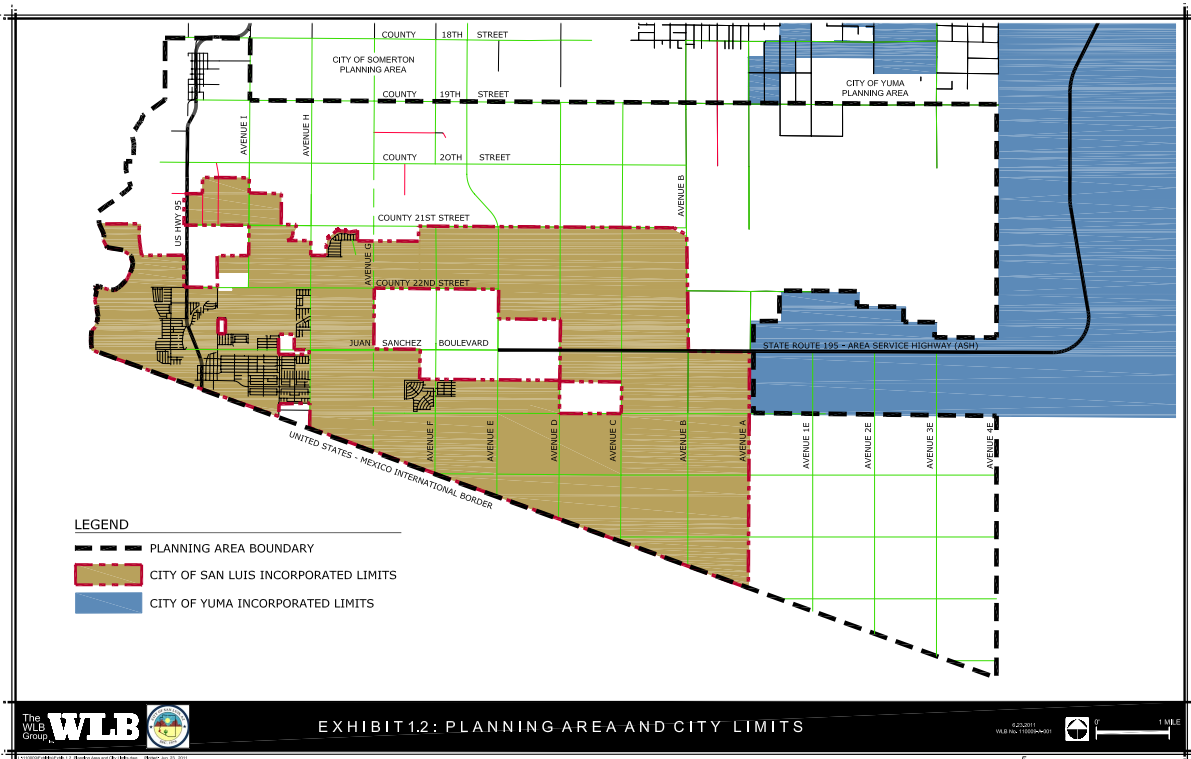


## APPENDIX C: LAND USE ASSUMPTIONS

The estimates and projections of residential and nonresidential development in this *Land Use Assumptions* document are for areas within the boundaries of the City of San Luis. The map below illustrates the area within the City of San Luis Service Area boundaries.



Arizona’s Development Fee Act requires the preparation of Land Use Assumptions, which are defined in Arizona Revised Statutes § 9-463.05(T)(6) as:

*“projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the General Plan of the municipality.”*

The City of San Luis, Arizona retained TischlerBise to analyze the impacts of development on its capital facilities and to calculate development fees based on that analysis. TischlerBise prepared current demographic estimates and future development projections for both residential and nonresidential development that will be used in the Infrastructure Improvements Plan (IIP) and calculation of the development fees. Current demographic data estimates for 2018 are used in calculating levels of service (LOS) provided to existing development in the City of San Luis. Although long-range projections are necessary for planning infrastructure systems, a shorter time frame of five to ten years is critical for the development fee analysis.

Arizona’s Development Fee Act requires fees to be updated at least every five years and limits the IIP to a maximum of 10 years. Therefore, the use of a very long-range “build-out” analysis is no longer acceptable for deriving development fees in Arizona municipalities.

## **SUMMARY OF GROWTH INDICATORS**

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Key land use assumptions for the City of San Luis development fee study are population, housing units, and employment projections. Based on discussions with staff, TischlerBise projects population using Arizona Department of Administration compound annual growth rates for 2015-2030. TischlerBise derives housing unit estimates by converting annual population increases to housing units using persons per housing unit factors. For nonresidential development, the base year employment estimate is calculated based on 2015 estimates from the U.S. Census Bureau's OnTheMap web application. The 2015 jobs per housing unit ratio is applied to the housing unit projections to project future employment. The employment projections are converted into floor area based on average square feet per job multipliers. The projections contained in this document provide the foundation for the Development Fee Report. These metrics are the service units and demand indicators used in the Development Fee Report.

Development projections and growth rates are summarized in Figure C11. These projections will be used to estimate development fee revenue and to indicate the anticipated need for growth-related infrastructure. However, development fees methodologies are designed to reduce sensitivity to development projections in the determination of the proportionate-share fee amounts. If actual development is slower than projected, fee revenue will decline, but so will the need for growth-related infrastructure. In contrast, if development is faster than anticipated, San Luis will receive an increase in fee revenue, but will also need to accelerate infrastructure improvements to keep pace with the actual rate of development.

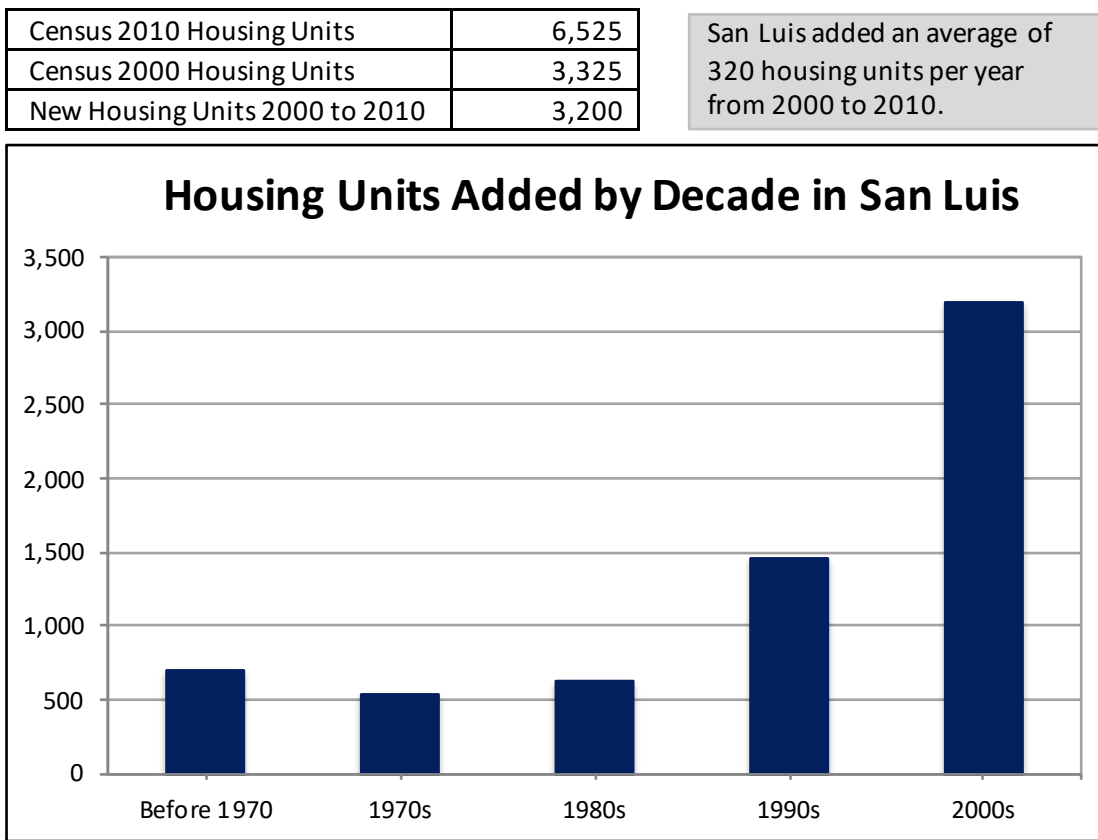
**RESIDENTIAL DEVELOPMENT**

Current estimates and future projections of residential development are detailed in this section including population and housing units by type.

**Recent Residential Construction**

Development fees require an analysis of current levels of service. For residential development, current levels of service are determined using estimates of population and housing units. Shown below, Figure C2 indicates the estimated number of housing units added by decade according to data obtained from the U.S. Census Bureau. San Luis experienced strong growth in the 1990s and 2000s. From 2000 to 2010, San Luis’ housing inventory increased by an average of 320 units per year.

**Figure C2: Housing Units by Decade**



Source: U.S. Census Bureau, Census 2010 Summary File 1, Census 2000 Summary File 1, 2012-2016 5-Year American Community Survey (for 1990s and earlier, adjusted to yield total units in 2000).

## Household Size

According to the U.S. Census Bureau, a household is a housing unit occupied by year-round residents. Development fees often use per capita standards and persons per housing unit (PPHU) or persons per household (PPH) to derive proportionate share fee amounts. When PPHU is used in the fee calculations, infrastructure standards are derived using year-round population. When PPH is used in the fee calculations, the development fee methodology assumes a higher percentage of housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. TischlerBise recommends that development fees for residential development in San Luis be imposed according to the number of year-round residents per housing unit. This methodology assumes some portion of the housing stock will be vacant during the course of a year. According to the U.S. Census Bureau American Community Survey, San Luis' vacancy rate was 6.3 percent in 2015.

PPHU calculations require data on population and the types of units by structure. The 2010 census did not obtain detailed information using a "long-form" questionnaire. Instead, the U.S. Census Bureau switched to a continuous monthly mailing of surveys, known as the American Community Survey (ACS), which has limitations due to sample-size constraints. For example, data on detached housing units are now combined with attached single units (commonly known as townhouses). For development fees in San Luis, detached stick-built units and attached units (commonly known as townhouses, which share a common sidewall, but are constructed on an individual parcel of land) are included in the "Single-Family Unit" category. The second residential category includes duplexes and all other structures with two or more units on an individual parcel of land. This category is referred to as "Multi-Family Unit." (Note: housing unit estimates from ACS will not equal decennial census counts of units. These data are used only to derive the custom PPHU factors for each type of unit).

Figure C3 below shows the 2011-2015 five-year ACS estimates for San Luis. Single-family units averaged 3.45 persons per housing unit (26,381 persons / 7,657 housing units) and multi-family units averaged 2.23 persons per housing unit (2,522 persons / 1,133 housing units). In 2015, San Luis' housing stock averaged 3.29 persons per housing unit. Including persons in group quarters, the citywide average is 3.54 persons per housing unit.

**Figure C3: Persons per Housing Unit**

Units in Structure	Persons	Households	Persons per Household	Housing Units	Persons per Housing Unit	Housing Mix	Vacancy Rate
Single-Family Units <sup>1</sup>	26,381	7,193	3.67	7,657	<b>3.45</b>	87.1%	6.10%
Multi-Family Units <sup>2</sup>	2,522	1,040	2.43	1,133	<b>2.23</b>	12.9%	8.20%
Subtotal	28,903	8,233	3.51	8,790	<b>3.29</b>	100.0%	6.30%
Group Quarters	2,215						
Total	31,118			8,790	<b>3.54</b>		

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, Tables B25024, B25032, B25033, B26001

1. Includes detached, attached (i.e. townhouses), and mobile home units.

2. Includes dwellings in structures with two or more units.

### Population and Housing Unit Estimates

To accurately determine current and future population in San Luis, TischlerBise compared population estimates and growth rates from ACS data, Arizona Department of Administration (ADOA) data, and the San Luis General Plan. ADOA released population projections through 2050 for jurisdictions in 2016, along with annual updates of population estimates. TischlerBise uses ADOA’s 2017 population estimate of 35,289 and the 2015 to 2030 compound annual growth rate of 3.58 percent to project population to the 2018 base year. For this analysis, the base year total population estimate is 36,552 (including group quarters) and the household population is 33,969.

TischlerBise converts estimated population to housing units using persons per housing unit factors detailed in Figure C3 – 3.54 persons per housing unit. The base year total population of 36,552 divided by 3.54 persons per housing unit results in an estimate of 10,325 housing units.

### Population and Housing Unit Projections

This analysis projects population growth using ADOA’s 2015 to 2030 compound annual growth rate of 3.58 percent, and this results in a 2028 total population of 51,961 persons. Converting the total population projections to housing unit projections using 3.54 persons per housing unit results in a 2028 housing unit estimate of 14,678. To estimate household population, this analysis multiplies the housing unit projections by 3.29 persons per housing unit – this excludes group quarters. The 10-year increase in household population results in 14,322 additional persons.

The housing units are distributed by type based on the housing mix detailed in Figure C3. Therefore, 87.1 percent of projected new units are single-family and 12.9 percent are multi-family. For this study, it is assumed that the persons per housing unit ratio will remain constant. TischlerBise projects a 10-year increase of 14,322 persons, or an average of 1,432 persons annually, and a corresponding 10-year increase of 4,353 housing units, or an average of 435 units annually.

Population and housing unit projections are used to illustrate the possible future pace of service demands, revenues, and expenditures. To the extent these factors change, the projected need for infrastructure will also change. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase at a corresponding rate. If development occurs at a slower rate than is projected, the demand for infrastructure will also decrease.

**Figure C4: Residential Development Projections**

	2018	2019	2020	2021	2022	2023	2028	10-Year Increase
	Base Yr	1	2	3	4	5	10	
<b>Population</b>								
Household	33,969	35,187	36,447	37,753	39,102	40,503	48,291	14,322
Group Quarters	2,583	2,674	2,769	2,867	2,972	3,078	3,670	1,087
<b>Total Population</b>	<b>36,552</b>	<b>37,861</b>	<b>39,216</b>	<b>40,620</b>	<b>42,074</b>	<b>43,581</b>	<b>51,961</b>	<b>15,409</b>
<b>Housing Units</b>								
Single-Family	8,994	9,316	9,650	9,996	10,353	10,724	12,786	3,792
Multi-Family	1,331	1,379	1,428	1,479	1,532	1,587	1,892	561
<b>Total Housing Units</b>	<b>10,325</b>	<b>10,695</b>	<b>11,078</b>	<b>11,475</b>	<b>11,885</b>	<b>12,311</b>	<b>14,678</b>	<b>4,353</b>

## NONRESIDENTIAL DEVELOPMENT

Current estimates and future projections of nonresidential development are detailed in this section including jobs and nonresidential floor area.

### Employment Estimates

In addition to data on residential development, the calculation of development fees requires data on employment (number of jobs) and nonresidential square footage in San Luis. TischlerBise uses the term “jobs” to refer to employment by place of work. TischlerBise analyzed recent employment trends, the U.S. Census Bureau, and had discussions with City staff.

TischlerBise uses a four step process to calculate base year job and nonresidential footage estimates, and projections for 10 years past the base year. First, 2018 employment estimates are derived using 2015 OnTheMap employment estimates. Second, job estimates are organized by type: Industrial, Commercial, Institutional, and Office & Other Service. Third, the 2015 jobs per housing unit ratio of 0.504 is applied to housing unit projections in Figure C4 to project citywide jobs. The last step allocates jobs by type based on the 2015 share of total jobs. This process is detailed below in Figure C5.

**Figure C5: Estimated Employment and Distribution by Industry Type**

Nonresidential Category	2018 Jobs <sup>1</sup>	Percent of Total Jobs	Square Feet per Job <sup>2</sup>	2018 Estimated Floor Area <sup>3</sup>	Jobs per 1,000 Sq. Ft. <sup>2</sup>
Industrial <sup>4</sup>	634	12%	615	389,910	1.63
Commercial <sup>5</sup>	1,226	24%	427	523,502	2.34
Institutional <sup>6</sup>	1,362	26%	1,076	1,465,266	0.93
Office & Other Service <sup>7</sup>	1,982	38%	337	667,934	2.97
<b>Total</b>	<b>5,204</b>	<b>100%</b>		<b>3,046,612</b>	<b>1.71</b>

1. TischlerBise calculation based on 2015 OnTheMap employment estimates.
2. Trip Generation, Institute of Transportation Engineers, 10th Edition (2017).
3. TischlerBise calculation (2018 jobs X square feet per job).
4. Major sectors are Agriculture and Warehousing.
5. Major sectors are Retail, Accommodation, and Food Services.
6. Major sectors are Educational Services and Public Administration.
7. Major sectors are Administration & Support, and Health Care.

### Nonresidential Square Footage Estimates

TischlerBise uses 2017 Institute of Transportation Engineers (ITE) data as a proxy for future nonresidential floor area (Figure C6). The prototype for industrial development is light industrial (110) with an average of 615 square feet per employee, institutional development uses an elementary school (ITE 520) with an average of 1,076 square feet per job, office development uses general office (710) that averages 337 square feet per job, and commercial development uses shopping center (820) and averages 427 square feet per job. TischlerBise estimates San Luis has approximately 3.05 million square feet of nonresidential space.

Figure C6: The Institute of Transportation Engineers, Employee and Building Area Ratios

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit <sup>1</sup>	Wkdy Trip Ends Per Employee <sup>1</sup>	Emp Per Dmd Unit	Sq Ft Per Emp
<b>110</b>	<b>Light Industrial</b>	<b>1,000 Sq Ft</b>	<b>4.96</b>	<b>3.05</b>	<b>1.63</b>	<b>615</b>
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	3.93	2.47	1.59	628
150	Warehousing	1,000 Sq Ft	1.74	5.05	0.34	2,902
310	Hotel	room	8.36	14.34	0.58	na
<b>520</b>	<b>Elementary School</b>	<b>1,000 Sq Ft</b>	<b>19.52</b>	<b>21.00</b>	<b>0.93</b>	<b>1,076</b>
540	Community College	student	1.15	14.61	0.08	na
610	Hospital	1,000 Sq Ft	10.72	3.79	2.83	354
620	Nursing Home	bed	3.06	2.91	1.05	na
<b>710</b>	<b>General Office (average size)</b>	<b>1,000 Sq Ft</b>	<b>9.74</b>	<b>3.28</b>	<b>2.97</b>	<b>337</b>
720	Medical-Dental Office	1,000 Sq Ft	34.80	8.70	4.00	250
750	Office Park	1,000 Sq Ft	11.07	3.54	3.13	320
<b>820</b>	<b>Shopping Center (average size)</b>	<b>1,000 Sq Ft</b>	<b>37.75</b>	<b>16.11</b>	<b>2.34</b>	<b>427</b>

1. Trip Generation, Institute of Transportation Engineers, 10th Edition (2017).

### Employment and Nonresidential Floor Area Projections

Future employment growth and nonresidential development in San Luis are based on housing unit growth. To project employment, TischlerBise uses the 2015 jobs per housing unit ratio, 0.504, and applies that ratio to the housing unit projections shown in Figure C4. Based on the 2028 housing unit projection of 14,678 units and a jobs per housing unit ratio of 0.504, the 2028 employment projection equals 7,398 jobs.

To project growth in nonresidential square footage, TischlerBise applies the previously discussed square feet per employee factors to the projected increase in employment. The results of these calculations are shown in Figure C7. Over the next 10 years, San Luis is projected to gain 2,194 jobs and add an estimated 1.284 million square feet of nonresidential development.

Figure C7: Nonresidential Development Projections

	2018	2019	2020	2021	2022	2023	2028	10-Year Increase
	Base Yr	1	2	3	4	5	10	
<b>Employment</b>								
Industrial	634	657	680	704	730	756	901	267
Commercial	1,226	1,270	1,315	1,362	1,411	1,462	1,743	517
Institutional	1,362	1,411	1,461	1,514	1,568	1,624	1,937	575
Office & Other Service	1,982	2,052	2,127	2,203	2,281	2,363	2,817	835
<b>Total Employment</b>	<b>5,204</b>	<b>5,390</b>	<b>5,583</b>	<b>5,783</b>	<b>5,990</b>	<b>6,205</b>	<b>7,398</b>	<b>2,194</b>
<b>Nonresidential Floor Area (x1,000)</b>								
Industrial	390	404	418	433	449	465	554	164
Commercial	524	542	562	582	602	624	744	220
Institutional	1,465	1,518	1,572	1,629	1,687	1,747	2,084	619
Office & Other Service	668	692	717	742	769	796	949	281
<b>Total Nonres. Floor Area</b>	<b>3,047</b>	<b>3,156</b>	<b>3,269</b>	<b>3,386</b>	<b>3,507</b>	<b>3,632</b>	<b>4,331</b>	<b>1,284</b>

## AVERAGE WEEKDAY VEHICLE TRIPS

Average Weekday Vehicle Trips are used as a measure of demand by land use. Vehicle trips are estimated using average weekday vehicle trip ends from the reference book, *Trip Generation, 10<sup>th</sup> Edition*, published by the ITE in 2017. A vehicle trip end represents a vehicle entering or exiting a development (as if a traffic counter were placed across a driveway).

### Trip Rate Adjustments

To calculate road development fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent. As discussed further below, the development impact fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

### Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 62 percent to account for commuters leaving San Luis for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure C8, the U.S. Census Bureau’s OnTheMap web application indicates that 76 percent of resident workers traveled outside of San Luis for work in 2015. In combination, these factors ( $0.31 \times 0.50 \times 0.76 = 0.118$ ) support the additional 12 percent allocation of trips to residential development.

**Figure C8: Commuter Trip Adjustment**

<b>Trip Adjustment Factor for Commuters<sup>1</sup></b>	
Employed Residents	9,211
Residents Living and Working in San Luis	2,189
Residents Commuting Outside San Luis for Work	7,022
<b>Percent Commuting out of San Luis</b>	<b>76%</b>
<b>Additional Production Trips<sup>2</sup></b>	<b>12%</b>
<b>Residential Trip Adjustment Factor</b>	<b>62%</b>

1. U.S. Census Bureau, OnTheMap Application (version 6.1.1) and LEHD Origin-Destination Employment Statistics, 2015.

2. According to the National Household Travel Survey (2009)\*, published in December 2011 (see Table 30), home-based work trips are typically 30.99 percent of “production” trips, in other words, out-bound trips (which are 50 percent of all trip ends). Also, LED OnTheMap data from 2015 indicate that 76 percent of San Luis’ workers travel outside the city for work. In combination, these factors ( $0.3099 \times 0.50 \times 0.76 = 0.12$ ) account for 12 percent of additional production trips. The total adjustment factor for residential includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (12 percent of production trips) for a total of 62 percent.

\*<http://nhts.ornl.gov/publications.shtml> ; Summary of Travel Trends - Table "Daily Travel Statistics by Weekday vs. Weekend"

### Adjustment for Pass-By Trips

For commercial development, the trip adjustment factor is less than 50 percent because retail development attracts vehicles as they pass by on arterial and collector roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, ITE data indicate 34 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66 percent multiplied by 50 percent, or approximately 33 percent of the trip ends.

### Estimated Residential Vehicle Trip Rates

As an alternative to simply using the national average trip generation rate for residential development, the ITE publishes regression curve formulas that may be used to derive custom trip generation rates, using local demographic data. Key independent variables needed for the analysis (i.e. vehicles available, housing units, households, and persons) are available from American Community Survey data. Shown in Figure C9, custom trip generation rates for San Luis vary slightly from the national averages. For example, single-family residential development is expected to generate 10.90 average weekday vehicle trip ends per dwelling – compared to the national average of 9.44 (ITE 210). Multi-family residential development is expected to generate 5.10 average weekday vehicle trip ends per dwelling, which is lower than the national average of 5.44 (ITE 221).

**Figure C9: Average Weekday Vehicle Trip Ends by Housing Type**

		Households by Structure Type <sup>2</sup>				
Tenure by Units in Structure	Vehicles Available <sup>1</sup>	Single-Family	Multi-Family	Total	Vehicles per HH by	
Owner-Occupied	12,533	5,873	27	5,900	2.12	
Renter-Occupied	3,163	1,320	1,013	2,333	1.36	
<b>Total</b>	<b>15,696</b>	<b>7,193</b>	<b>1,040</b>	<b>8,233</b>	<b>1.91</b>	

Units in Structure	Persons in Households <sup>3</sup>	Trip Ends <sup>4</sup>	Vehicles by Type of Unit	Trip Ends <sup>5</sup>	Average Trip Ends	Housing Units <sup>6</sup>	Trip Ends per Unit	
							San Luis	ITE <sup>7</sup>
Single-Family	26,381	73,429	14,265	92,967	83,198	7,657	10.90	9.44
Multi-Family	2,522	5,694	1,431	5,931	5,813	1,133	5.10	5.44
<b>Total</b>	<b>28,903</b>	<b>79,123</b>	<b>15,696</b>	<b>98,898</b>	<b>89,010</b>	<b>8,790</b>	<b>10.10</b>	

1. Vehicles available by tenure from Table B25046, American Community Survey, 2012-2016 5-Year Estimates.
2. Households by tenure and units in structure from Table B25032, American Community Survey, 2012-2016 5-Year Estimates.
3. Total population in households from Table B25033, American Community Survey, 2012-2016 5-Year Estimates.
4. Vehicle trips ends based on persons using formulas from Trip Generation (ITE 2017). For single-family housing (ITE 210), the fitted curve equation is  $EXP(0.89 * LN(persons) + 1.72)$ . To approximate the average population of the ITE studies, persons were divided by 47 and the equation result multiplied by 47. For multi-family housing (ITE 221), the fitted curve equation is  $(2.29 * persons) - 81.02$ .
5. Vehicle trip ends based on vehicles available using formulas from Trip Generation (ITE 2017). For single-family housing (ITE 210), the fitted curve equation is  $EXP(0.99 * LN(vehicles) + 1.93)$ . To approximate the average number of vehicles in the ITE studies, vehicles available were divided by 55 and the equation result multiplied by 55. For multi-family housing (ITE 221), the fitted curve equation is  $(3.94 * vehicles) + 293.58$ .
6. Housing units from Table B25024, American Community Survey, 2012-2016 5-Year Estimates.
7. Trip Generation, Institute of Transportation Engineers, 10th Edition (2017).

## Functional Population

TischlerBise recommends functional population to allocate the cost of certain facilities to residential and nonresidential development. As shown in Figure C10, functional population accounts for people living and working in a jurisdiction. OnTheMap is a web-based mapping and reporting application that shows where workers are employed and where they live. It describes geographic patterns of jobs by their employment locations and residential locations as well as the connections between the two locations. OnTheMap was developed through a unique partnership between the U.S. Census Bureau and its Local Employment Dynamics (LED) partner states.

Residents who do not work are assigned 20 hours per day to residential development and four hours per day to nonresidential development (annualized averages). Residents who work in San Luis are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents who work outside San Luis are assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2015 functional population data for San Luis, the cost allocation for residential development is 80 percent while nonresidential development accounts for 20 percent of the demand for municipal facilities.

**Figure C10: Functional Population**

Demand Units in 2015				
Residential	Population		Demand Hours/Day	Person Hours
	29,550			
	Residents Not Working	20,339	20	406,780
	Employed Residents	9,211		
	Employed in San Luis	2,189	14	30,646
	Employed outside San Luis	7,022	14	98,308
	Residential Subtotal			535,734
			<b>Residential Share</b>	<b>80%</b>
Nonresidential				
	Non-working Residents	20,339	4	81,356
	Jobs Located in San Luis	4,844		
	Residents Employed in San Luis	2,189	10	21,890
	Non-Resident Workers (inflow commuters)	2,655	10	26,550
	Nonresidential Subtotal			129,796
			<b>Nonresidential Share</b>	<b>20%</b>
			Total	665,530

Source: U.S. Census Bureau, OnTheMap 6.5 Application and LEHD Origin-Destination Employment Statistics.

## DEVELOPMENT PROJECTIONS

Provided below is a summary of cumulative development projections used in the development fee study. Base year estimates for 2018 are used in the development impact fee calculations. Development projections are used to illustrate a possible future pace of demand for service units and cash flows resulting from revenues and expenditures associated with those demands.

**Figure C11: Development Projections Summary**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	10-Year Increase
	Base Yr	1	2	3	4	5	6	7	8	9	10	
<b>Population</b>												
Household	33,969	35,187	36,447	37,753	39,102	40,503	41,954	43,454	45,010	46,623	48,291	14,322
Group Quarters	2,583	2,674	2,769	2,867	2,972	3,078	3,187	3,303	3,421	3,542	3,670	1,087
<b>Total Population</b>	<b>36,552</b>	<b>37,861</b>	<b>39,216</b>	<b>40,620</b>	<b>42,074</b>	<b>43,581</b>	<b>45,141</b>	<b>46,757</b>	<b>48,431</b>	<b>50,165</b>	<b>51,961</b>	<b>15,409</b>
<b>Housing Units</b>												
Single-Family	8,994	9,316	9,650	9,996	10,353	10,724	11,108	11,505	11,918	12,344	12,786	3,792
Multi-Family	1,331	1,379	1,428	1,479	1,532	1,587	1,644	1,703	1,763	1,827	1,892	561
<b>Total Housing Units</b>	<b>10,325</b>	<b>10,695</b>	<b>11,078</b>	<b>11,475</b>	<b>11,885</b>	<b>12,311</b>	<b>12,752</b>	<b>13,208</b>	<b>13,681</b>	<b>14,171</b>	<b>14,678</b>	<b>4,353</b>
<b>Employment</b>												
Industrial	634	657	680	704	730	756	783	811	840	870	901	267
Commercial	1,226	1,270	1,315	1,362	1,411	1,462	1,514	1,568	1,624	1,682	1,743	517
Institutional	1,362	1,411	1,461	1,514	1,568	1,624	1,682	1,743	1,805	1,870	1,937	575
Office & Other Service	1,982	2,052	2,127	2,203	2,281	2,363	2,448	2,535	2,626	2,720	2,817	835
<b>Total Employment</b>	<b>5,204</b>	<b>5,390</b>	<b>5,583</b>	<b>5,783</b>	<b>5,990</b>	<b>6,205</b>	<b>6,427</b>	<b>6,657</b>	<b>6,895</b>	<b>7,142</b>	<b>7,398</b>	<b>2,194</b>
<b>Nonresidential Floor Area (x1,000)</b>												
Industrial	390	404	418	433	449	465	482	499	517	535	554	164
Commercial	524	542	562	582	602	624	646	670	693	718	744	220
Institutional	1,465	1,518	1,572	1,629	1,687	1,747	1,810	1,875	1,942	2,012	2,084	619
Office & Other Service	668	692	717	742	769	796	825	854	885	917	949	281
<b>Total Nonres. Floor Area</b>	<b>3,047</b>	<b>3,156</b>	<b>3,269</b>	<b>3,386</b>	<b>3,507</b>	<b>3,632</b>	<b>3,763</b>	<b>3,898</b>	<b>4,037</b>	<b>4,182</b>	<b>4,331</b>	<b>1,284</b>

## APPENDIX D: LAND USE DEFINITIONS

### RESIDENTIAL DEVELOPMENT

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As discussed below, residential development categories are based on data from the U.S. Census Bureau, American Community Survey. San Luis will collect development fees from all new residential units. One-time development fees are determined by site capacity (i.e. number of residential units).

#### Single-Unit:

1. **Single-family detached** is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides.
2. **Single-family attached (townhouse)** is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.
3. **Mobile home** includes both occupied and vacant mobile homes, to which no permanent rooms have been added. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

#### 2+ Units:

1. **2+ units (duplexes and apartments)** are units in structures containing two or more housing units, further categorized as units in structures with “2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more apartments.”
2. **Boat, RV, Van, Etc.** includes any living quarters occupied as a housing unit that does not fit the other categories (e.g., houseboats, railroad cars, campers, and vans). Recreational vehicles, boats, vans, railroad cars, and the like are included only if they are occupied as a current place of residence.

## NONRESIDENTIAL DEVELOPMENT

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The proposed general nonresidential development categories (defined below) can be used for all new construction within San Luis. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates and employment densities (i.e., jobs per thousand square feet of floor area).

**Commercial:** Establishments primarily selling merchandise, eating/drinking places, and entertainment uses. By way of example, *Commercial / Retail* includes shopping centers, supermarkets, pharmacies, restaurants, bars, nightclubs, automobile dealerships, and movie theaters, hotels, and motels.

**Industrial:** Establishments primarily engaged in the production, transportation, or storage of goods. By way of example, *Industrial* includes manufacturing plants, distribution warehouses, trucking companies, utility substations, power generation facilities, and telecommunications buildings.

**Institutional:** Establishments including public and quasi-public buildings providing educational, social assistance, or religious services. By way of example, *Institutional* includes schools, universities, churches, daycare facilities, government buildings, and prisons.

**Office & Other Service:** Establishments providing management, administrative, professional, or business services; personal and health care services. By way of example, *Office and Other Services* includes banks, business offices, assisted living facilities, nursing homes, hospitals, medical offices, and veterinarian clinics.