



City of South Lake Tahoe Seasonal Variation in Retail Cannabis Tax Revenues

The City of South Lake Tahoe has requested that HdL provide a discussion and estimates for the seasonal variations in cannabis tax revenues. South Lake Tahoe is a busy vacation destination, with high amounts of tourist traffic predominantly in the Summer (mid-June through Labor Day) and Winter (mid-December through March 31st) seasons. It is anticipated that retail cannabis sales in the City will likely follow a pattern similar to sales of beer, wine and liquor.

Other cannabis taxes, such as taxes on cultivation, manufacturing and distribution, will not likely be influenced by this seasonal fluctuation as they feed into a statewide market, rather than the local tourist market. While it is possible that visiting tourists may show a preference for sampling “local” products, as they often do with craft beers or regional wines, we believe the effect of this will likely be too small to project with any accuracy until we have data from a minimum of one full year of a fully-regulated statewide market.

HdL provided a series of revenue estimates for the City based upon conservative, moderate and aggressive scenarios for the number of cannabis businesses, as well as a range of tax rates. The revenue estimate for the ballot statement was based upon the moderate scenario, which included two cannabis retailers taxed at a rate of 6% of gross receipts, generating \$300,000 in annual revenue for the City.

To determine the seasonal nature of how these revenues may be collected over the course of the year, we looked at monthly receipts for Transient Occupancy Tax (TOT) receipts and quarterly receipts for retail sales of beer, wine and liquor. The monthly TOT figures were found on the City’s website.

South Lake Tahoe TOT receipts, by quarter (most recent four quarters through March 2018):

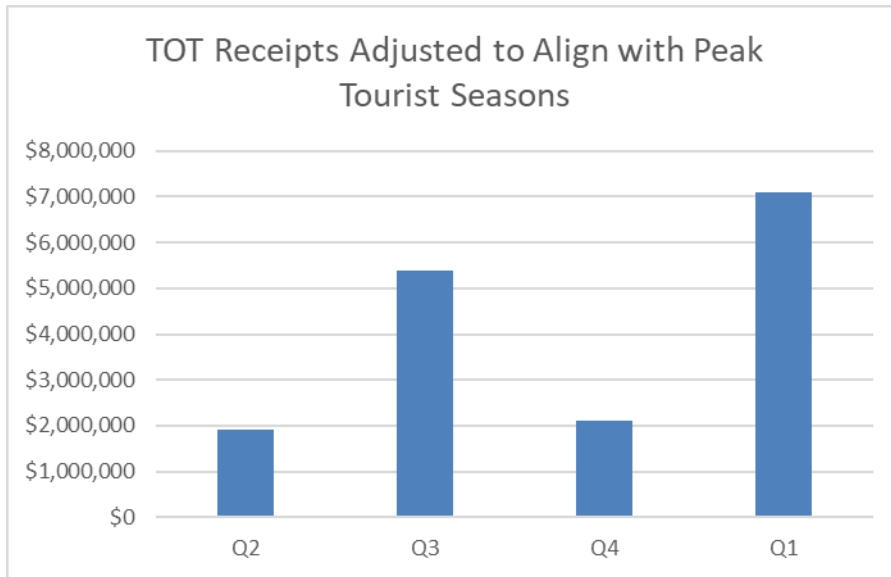
Q1 (2017)	\$6.2 million
Q2 (2017)	\$3.1 million
Q3 (2018)	\$4.2 million
Q4 (2017)	\$3.0 million

The City notes that the winter tourist season generally runs from December 15th through March. December TOT receipts¹ are \$1.8 million, roughly 3X higher than those for November (\$0.6 million) or October (\$0.7 million), so we can infer that this significant increase falls predominantly in the latter half of the month. Adjusting the Q3 numbers to include this increased portion of December receipts brings TOT receipts for the entire December 15th – March 31st Winter tourist season up to \$5.4 million, and the remainder of Q2 down to \$1.9 million.

The Summer tourist season begins mid-June, two weeks before the start of Q1. As with December, there is a significant jump in TOT from April and May (each about \$0.7 million) to June (\$1.6 million). If we add this additional \$0.9 million to Q1, it brings the total TOT receipts for the June 15th – September 3rd Summer tourist season to \$7.1 million. These revised figures are shown in Figure 1, below, in which Q1 and Q3 are both adjusted to align with the full Summer and Winter tourist seasons as defined.

¹ TOT number used here include General Fund TOT, City Redevelopment TOT and Redevelopment Area TOT

Figure 1:



However, not all of this increase is attributable to seasonal population changes, alone. Hotel room prices can double or even triple during the Winter or Summer peak seasons. While TOT figures can indicate general population increases due to tourism, the figures likely present an exaggerated picture.

HdL has access to confidential sales tax data collected by the California Department of Tax and Fee Administration (CDTFA). This data provides a glimpse into seasonal purchasing habits in South Lake Tahoe. We have tabulated the data for taxable sales from grocery stores² and liquor stores in Figure 2, below. The data available for this analysis was not detailed enough to allow us to estimate the portion of Q4 receipts that occur between June 15th and July 1st, or the portion of Q2 sales that fall between December 15th and January 1st, as we were able to estimate with the TOT data.

Figure 2:



² Most groceries are not taxed, but purchases of beer, wine and liquor are subject to State and local sales taxes, as are non-food items sold at grocery stores.

HdL has access to similar confidential sales tax data for cannabis retailers³ which we are not able to present here due to its confidential nature. However, looking at this data for both South Lake Tahoe and for El Dorado County as a whole shows a similar, though smaller, seasonal or quarterly pattern that generally follows the pattern for grocery stores and liquor stores.

We would anticipate that some portion of these retail sales that occur in the latter part of Q4 should be added to Q1 to give a full picture of the Summer tourist season, and some portion of Q2 sales should be added to Q3 to give a fuller picture of the Winter tourist season. Doing so would likely show a pattern similar to the TOT receipts with similar, if smaller, spikes in both Q1 and Q3, generally correlating with the Summer and Winter tourist seasons. This pattern would likely be less exaggerated, as these prices do not fluctuate as greatly as hotel prices.

HdL’s revenue estimate of \$300,000 from two cannabis retailers was based upon actual receipts from the confidential CDTFA data described above. That estimate assumed two retailers, each averaging \$2,500,000 in gross receipts, taxed at a rate of 6%. This amount is highly consistent with a demand-based model, in which the amount of cannabis sales for a jurisdiction are determined by population. This model is shown in Figure 3, below.

Figure 3:

Revenue Projections for Retail Cannabis Sales in the City of South Lake Tahoe			
	Low Estimate	"Best" Estimate	High Estimate
City population	21,700	21,700	21,700
Percentage of population that uses cannabis	10.0%	14.0%	22.0%
Number of cannabis users	2,170	3,038	4,774
Average transaction amount	\$73	\$73	\$73
Transaction frequency (per month)	2	2	2
Monthly gross receipts	\$316,820	\$443,548	\$697,004
Annual gross receipts	\$3,801,840	\$5,322,576	\$8,364,048
Annual revenue by tax rate (below)			
4%	\$152,074	\$212,903	\$334,562
5%	\$190,092	\$266,129	\$418,202
6%	\$228,110	\$319,355	\$501,843

In this model, we provide three estimates of the percentage of the population that uses cannabis on a regular basis, each based upon data. Assuming a “best estimate” of 14% would yield 3,038 regular cannabis users. Applying an average transaction of \$73 at a frequency of twice a month would indicate a little over \$5.3 million in gross receipts, just slightly above the amount shown by the CDTFA data. Applying the proposed tax rate of 6% would yield \$319,355 in annual tax revenue, just slightly above the \$300,000 in HdL’s previous report.

Combining all of this data suggests that HdL’s original revenue projection is likely an underestimate that captures only those sales to the resident population of South Lake Tahoe. As tourists become accustomed to the idea of seeking out local cannabis retailers while on vacation, just as they would liquor stores, these sales and associated tax revenues may very well increase. Though locally-permitted medical cannabis dispensaries have existed around the State for many years, State-licensed sales of cannabis have only been happening since January 1st of this year. It will likely take a little time for

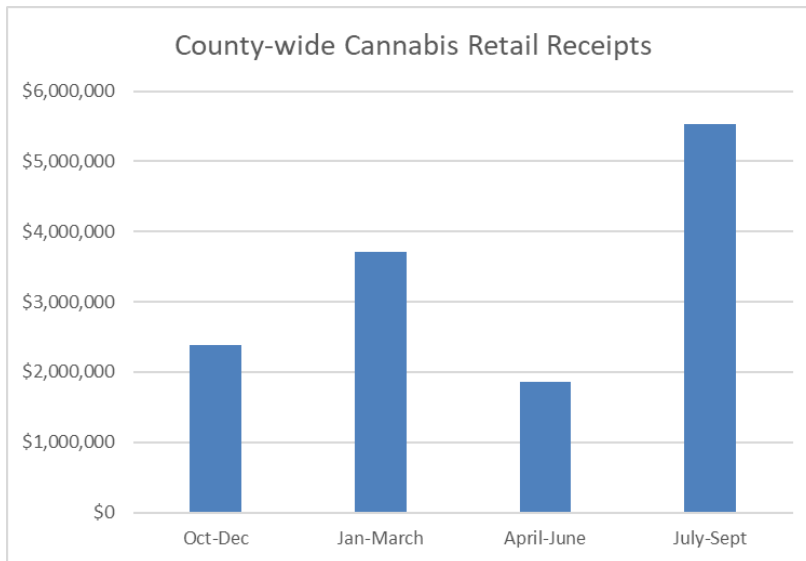
³ Most cannabis retailers around the State remain unlicensed, but many nonetheless report taxable sales to the CDTFA.

travelers and tourists to get accustomed to the idea of walking into a store in whatever city they are visiting to buy cannabis over the counter.

It is difficult to anticipate the amount of increase that will likely happen. While we can assume that cannabis usage by tourists may follow the pattern of alcohol use, cannabis is much more 'portable' than alcohol, so it is perhaps more likely that tourists will bring what they need with them. On the other hand, there is still both a novelty to walking into a store to purchase cannabis and a stigma about being seen doing so. The anonymity of purchasing cannabis while on vacation away from home may make cannabis users more likely to do so.

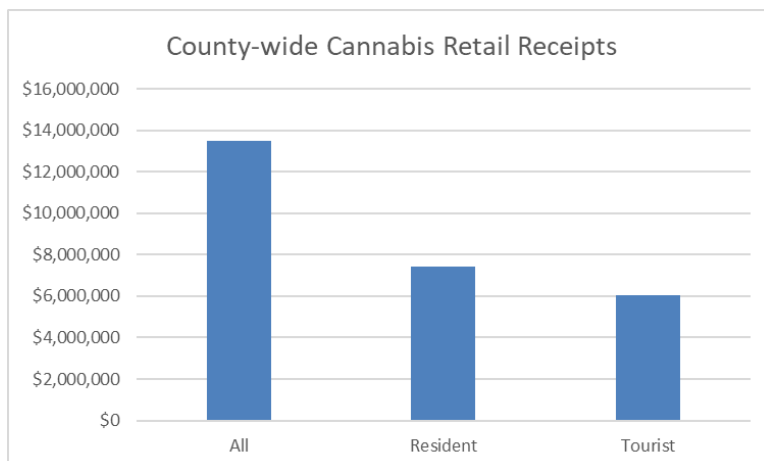
Monthly CDTFA data for El Dorado County as a whole shows a seasonal distribution that largely mimics the pattern for TOT receipts (Figure 4).

Figure 4:



If we assume the lower figure for the April-June period represents essentially the resident population, without a significant input from tourists or travelers, then we can multiply this over four quarters to estimate the amount of annual sales attributable to the local resident population. The amount above that baseline would presumably be attributable to seasonal tourist inputs. This is shown in Figure 5, below.

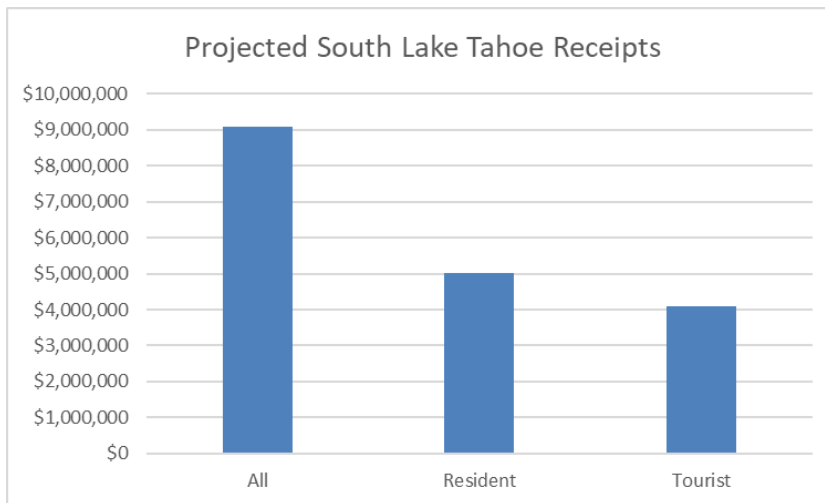
Figure 5:



This data suggests that 55% of all retail cannabis sales in El Dorado County as a whole are attributable to the resident population. The other 45% of retail cannabis sales are seasonal, and likely attributable to tourists or visitors.

HdL's previous revenue estimate projected 2 cannabis retailers with a combined \$5 million in gross receipts, taxed at 6% and generating \$300,000 in annual revenue for the City. Applying the analysis above, we would predict that seasonal tourist inputs could increase that amount to an annual total of around \$9.1 million in gross receipts, with 55% (\$5 million) coming from the local resident population, and 45% (\$4.1 million) coming from tourists and visitors. These projections are shown in Figure 6, below.

Figure 6:



Applying the proposed cannabis retail tax rate of 6% of gross receipts would generate an estimated \$546,000 in annual revenue for the City. Of this, \$300,030 would come from the local resident population and \$245,700 would come from seasonal tourist inputs. This is shown in figure 7.

Figure 7:

