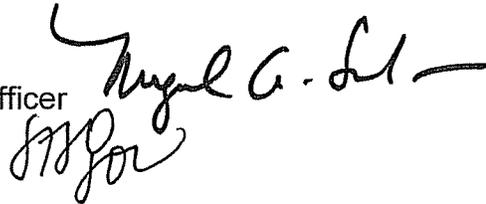


CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: November 8, 2012

To: Antonio R. Villaraigosa, Mayor
Herb J. Wesson, Council President and Chair, Rules, Elections and
Intergovernmental Relations Committee

From: Miguel A. Santana, City Administrative Officer
Gerry F. Miller, Chief Legislative Analyst



Subject: **HALF CENT SALES (TRANSACTION) TAX BALLOT MEASURE (C.F. No. 13-1100-S6)**

Summary

On October 31, 2012, Council approved a motion directing the Offices of the City Administrative Officer and Chief Legislative Analyst to report to Council with an analysis of a proposed half-cent sales tax ballot measure (C.F. No. 13-1100-S6). To complete an analysis of the proposed local sales tax (more accurately referred to as a transaction tax), the City hired a consultant, Beacon Economics, to evaluate the impact of implementing a 0.25 percent and 0.5 percent tax. According to the consultant's analysis, a 0.25 percent (quarter cent) tax would generate additional revenue ranging from \$105 million to \$108 million. Revenue from a 0.5 percent (half cent) tax would range from \$208 million and \$215 million. Sales could decrease less than one percent for a quarter-cent tax and between less than one percent and 1.3 percent for a half-cent tax, depending on sensitivity of the local market or type of goods being sold. This revenue would be deposited directly within the General Fund to fund the City's essential services, including police and fire services or public infrastructure improvements such as street or sidewalk repairs. A general tax measure would require approval of 50 percent of the voters plus one.

Findings

In Fiscal Year 2011-12, the City received approximately \$323 million in sales tax revenue from the state. This revenue was received pursuant to the 0.75 percent tax rate on taxable sales within the City of Los Angeles in accordance with the Bradley-Burns Uniform Local Sales and Use Tax Law. (See bolded line item in Table 1 below.) In addition to the Bradley Burns rate, state law currently allows local jurisdictions to assess up to 2 percent for a local sales transaction tax. Currently, Los Angeles County has utilized 1 percent for two transportation initiatives—Propositions A and C. (Measure R was excluded from the 2 percent cap.) The City has the ability to increase the local sales transaction tax by another 1 percent, raising the total sales tax rate to 9.75 percent in the City.

Table 1. Sales Tax Components

State Rate	6.25%
Statewide Bradley-Burns Rate (1%)	
County Transportation	0.25%
Local Point of Sales	0.75%
<hr/> Subtotal Statewide Sales Tax	<hr/> 7.25%
Local Sales (Transaction) Taxes (capped at 2%)	
Proposition A	0.50%
Proposition C	0.50%
Measure R (exempt from 2% cap)	0.50%
<hr/> Total Tax Rate in the City	<hr/> 8.75%

The Half-Cent Transactions and Use (Sales) Tax Ordinance, as submitted by the City Attorney (C.F. No. 13-1100-S6), allows the local sales transaction tax to function as a sales tax. Like the City's current sales tax ordinance, the measure adopts all of the state law provisions relating to the administration of the sales tax by reference. There are slight differences, however, between the assessment of a transaction tax by a locality and the State sales tax, as detailed below:

- The local portion of the Bradley-Burns statewide sales tax (the 0.75% the City currently receives) is disbursed to the locality where the sale took place, regardless of the type of sale.
- For cash and carry purchases, the local sales transaction tax goes to the locality where the sale took place.
- For purchases delivered by a common carrier, the local sales transaction tax goes to the locality of the place of delivery, given that one is assessed by that locality.
- For vehicles (lease or sale), the local sales transaction tax goes to the locality where the vehicle is registered, if one is assessed by that locality.
- For internet sales, the local sales transaction tax goes to the locality of the place of delivery, if one is assessed by that locality. However, this tax is compulsory only if the business operates within the locality.

Thus, depending the type of sale taking place, the local portion of the statewide Bradley-Burns sales tax would be remitted to the locality at the point of sale, while the local sales transaction tax would be remitted to the locality where the sold good is delivered/registered.

The combined sales and transaction tax for a majority of California cities is 8.75 percent or lower. Local cities with higher tax rates include Santa Monica and Avalon (9.25 percent) and Pico Rivera and South Gate (9.75 percent). For the November 2012 election, California had two state sales tax measures and 36 local transaction and use tax measures. Voters approved Proposition 30, which increases the state sales tax rate by 0.25 percent for four years, and initial returns suggest that 29 of the local measures have passed as well. In Los Angeles County, voters in the City of Commerce and Culver City have approved a half-cent (0.5 percent) local sales transaction tax, while voters in La Mirada approved a one-cent (1 percent) tax. The La Mirada and Culver City taxes are temporary measures that expire in five years and ten years, respectively. These measures were general tax measures that required 50 percent of the vote plus one for approval. Measure J, to extend the current half-cent transaction tax for transportation in Los

Angeles County for another 30 years, did not pass. Although it received approval from approximately 64.7 percent of voters, a two-thirds vote was required for passage as it was a special tax.

It is proposed that the City implement a local sales transaction tax as a general tax to address the structural deficit. To analyze the resulting impact to sales and resulting revenue from a proposed increase, the consultant, Beacon Economics, conducted a literature review of previous research on sales tax increases and constructed its own empirical model. The consultant reported that empirical work on the subject revealed that any reduction in spending would depend on the types of goods sold. For example, a consumer may be willing to travel to lower tax areas if they were able to purchase identical items of high value or long shelf lives. Thus, sales of bigger ticket items such as major appliances might decrease to a greater extent than food or apparel sales. However, research also revealed the potential decline to sales within Los Angeles may be alleviated by its size, its higher concentration of retail establishments, higher tax rates of neighboring cities, and higher local payroll. Ultimately, the consultant reports that a small increase in the local sales tax will have a somewhat negative effect on consumer spending, but a potentially very positive effect on tax revenues.

To analyze the potential revenue impact of a transaction tax in the City, the consultant identified fourteen other California cities that implemented or increased their tax. Data from these cities along with the results of previous research were analyzed to infer the likely effect of an increase in Los Angeles. Based on Fiscal Year 2011-12 revenues, the consultant's projections for the potential impact of a quarter-cent and half-cent transaction tax, with varying degrees of sales effect depending on sensitivity of the local market or type of goods being sold, is summarized below:

Table 2. Additional Revenue from Transaction (Sales) Tax (\$ millions)

	0.25 percent (quarter cent) tax	0.5 percent (half cent) tax
No Effect	\$107.7	\$215.5
High Sales Effect (1.3% per half cent)	\$104.9	\$208.5
Low Sales Effect (0.4% per half-cent)	\$106.9	\$213.3

Additionally, the consultant examined the potential impact to sales across types of goods, with consideration that more expensive items would provide greater incentive to purchase goods outside the City. The consultant reported that most of the type of goods sold (apparel, furnishings, appliances, food, restaurants, general merchandise, gasoline) either show no reduction in sales or the decline was not statistically significant. The sale of building materials did have a statistically significant reduction, with a potential decrease in sales of 3.95 percent for a half cent sales tax increase.

Based on the sales tax analysis and previous analyses of the proposed measures—the Recreation and Parks Parcel Tax, the Parking Occupancy Tax, and the Documentary Transfer Tax (C.F. Nos. 13-1100-S2, 13-1100-S3 and 13-1100-S4)—the sales tax measure provides the greatest benefit the General Fund and the public. (See Table 3 below.) It is recommended that it be submitted to voters for approval for the March 5, 2013 election, so that collection of the tax may commence on July 1, 2013. With the approval of the tax by voters, and the continuing pursuit

of cost reduction efforts, such as pension reform, the City will be able to significantly reduce the structural deficit while improving core City services.

Table 3. Additional Revenue from Proposed Ballot Measures (\$ millions)

	Low Estimate	High Estimate
Sales Tax (half cent, 0.5%)	\$208	\$215
Tiered Documentary Transfer Tax (0.225%-0.9%)	\$76	\$82
Parking Occupancy Tax (15%)	\$41	\$43
Recreation and Parks Parcel Tax (\$39)		\$30

Recommendation

It is recommended that the Council adopt the necessary resolutions and ordinances transmitted by the City Attorney, report No. R12-0353, attached to CF13-1100-S6, to place a half-cent transactions and use tax measure on the March 5, 2013 Primary Nominating Election ballot, no later than November 14, 2012.

Fiscal Impact

Approval of proposed half cent transaction tax by Los Angeles City voters will generate additional General Fund revenues ranging from approximately \$208 million to \$215 million in and would reduce the structural deficit in outgoing years. The cost for putting a measure on the City Primary Nominating election ballot is included in the budgeted funds of the City Clerk.

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Attachment

Sales Tax Analysis

Economic and Revenue Impacts, City of Los Angeles



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Contents

Executive Summary	1
Study Overview	2
Literature Review	3
Review of Tax Exemptions	4
Empirical Study - Effects of Higher Taxes on Sales	5
Revenue Effect	7
Conclusion	8
References	10



Executive Summary

Beacon Economics has conducted an analysis of the potential impacts to city revenues and local sales as a result of increasing the sales tax rate in the City of Los Angeles. Based upon a review of the existing literature, an empirical study of the past experience of California cities that have raised the sales tax rate, and some basic calculations on the revenue impacts that result, Beacon Economics concludes the following:

- Previous literature indicates a negative effect of higher local sales taxes on overall sales in a municipality. The effect is larger on costlier items, and when substitute outlets with lower tax rates are nearby.
- Our empirical study of 14 California cities that increased their sales tax rate shows a 1.7% decrease in sales for every one percentage point increase in local sales taxes. However, we found no evidence of decreased sales in food stores, restaurants, general merchandise outlets and service stations.
- The negative effect could potentially be larger on the periphery, where border cities have lower tax rates.
- Depending on the effect of the sales tax increase on overall sales, the additional revenues for the City of Los Angeles could vary by up to \$7 million.

***Table 1: Additional Revenues from Sales Tax
Fiscal Year 2011 - 2012, in dollars***

	0.25 Increase	0.50 Increase
No Effect	107,749,059	215,498,117
Baseline Sales Effect	105,917,325	210,918,782
Low Sales Effect	106,887,066	213,343,136
High Sales Effect	104,947,583	208,494,429
Range	2,801,476	7,003,689

Source: Beacon Economics

Study Overview

Beacon Economics has been contracted by the City of Los Angeles' City Administrator's Office (CAO) to estimate the market impact of an increase in the City's sales tax rate by either 0.25 or 0.50 percentage points from the current level of 8.75%. The following study includes a review of the existing literature on the impacts of sales tax rates on taxable sales. This analysis lays out the major conclusions of the empirical work to date by other economists, as well as an empirical analysis conducted by Beacon Economics on the revenue and spending impacts that can be expected as a result of the proposed sales tax rate increase. The report includes:

1. A literature review to consider the impact of sales taxes on consumer spending, and specifically how other jurisdictions apply their sales taxes. The review of the literature will lay out the various ways different jurisdictions apply their sales taxes, paying specific attention to whether certain categories of spending are exempted or are applied equally across all sectors. In addition, the review of the existing literature also includes a discussion of the theoretical impact of sales taxes on consumer spending. The literature review concludes with a summary of past studies of the impact of sales tax rates (both positive and negative) on consumer spending and local sales tax revenues.
2. In addition to reviewing the existing studies on the effects of increases in local sales tax rates, Beacon Economics has also conducted an empirical study of actual examples of cities raising their sales tax rates, with an analysis of the impact to consumer spending across various categories of expenditures. The empirical analysis also includes the revenue impacts of the proposed tax rate increases in addition to the economic impacts. The experiments will be handled as follows:
 - Relevant examples were collected, focusing mainly on California.
 - Data on taxable sales before and after the changes in sales taxes, as well as a relevant controls were used, including regional unemployment and spending to model broader economic trends in the economy.
 - This methodology was then used to look for changes in the taxable sales bases that occur after changes in the sales tax rates.
 - The experiment was performed applying both a 0.25 percentage point increase and 0.50 percentage point increase in the sales tax rate.
3. The second stage of the empirical analysis examined the impacts of higher tax rates on taxable sales by category. This analysis has identified sectors that are more sensitive to changes in sales tax rates. These categories include apparel stores, auto dealers and auto supplies, building materials and farm implements, drug stores, eating and drinking places, food stores, general merchandise stores, home furnishings and appliances, and service stations.

Finally, Beacon Economics includes an analysis of the revenue impacts of an increase in the sales tax rate in the City of Los Angeles, demonstrating the potential effects that are likely to result from the proposed changes to the City of Los Angeles' sales tax rate. Using 2011-12 taxable sales data for the City of Los Angeles, Beacon Economics has compared the current sales tax system revenues with those of a proposed increase in the sales tax rate after accounting for changes in consumer behavior in response to the tax rate increase. These results and conclusions are detailed in the report that follows.

Literature Review

Based on our findings, an increase in the local sales tax is likely to engender a slight decrease in the overall sales tax base. To a degree, the city may lose out on some consumer spending, as residents near lower-tax communities or residents currently living in lower tax communities may opt to purchase goods in those lower-tax communities or online, but the literature suggests that overall consumption of only some goods may change.

A report by Gregory Burge and Cynthia Rogers suggests that in the aggregate, a municipal sales tax increase of 1% results in a 1.5% decrease in the sales tax base (that is, a 1.5% reduction in consumer spending)—a tax elasticity of demand of 1.5.¹ In these terms, a 0.25 percentage point increase in the local sales tax (one of the options currently under consideration by the City of Los Angeles) would equate to a 0.375% reduction in consumer spending, and a 0.5 percentage point increase in the local sales tax (Option #2) would equate to a 0.75% reduction in consumer spending.

The research suggests that this reduction in spending would likely vary substantially among the types of goods in demand. According to an often-cited study by Ronald Fisher,² in the event of a difference in sales taxes within a region, consumers will likely be willing to travel to lower-tax areas if they plan to purchase homogenous commodities that they either purchase in large quantities each trip or that have high value and/or long shelf lives. As suggested by William Fox,³ sales of nondurable goods like food and apparel are likely to decrease very little, while sales of relatively expensive durable goods, such as major appliances, are likely to decrease to a statistically significant degree. Importantly, sales tax on vehicle sales in the state, one of a household's bigger-ticket items, is assessed based on where the vehicle will be registered. Thus, while these types of purchases may be more sensitive to changes in tax rates, consumers lack the option to substitute for a lower tax rate by traveling to an adjacent-lower tax area to make their purchases as their sales tax depends on where they live.

In the case of Los Angeles, much of the impact of an increase in the sales tax on consumer spending will depend upon how easy it is for consumers that normally purchase goods within the city to travel to lower-tax communities. The City of Los Angeles would benefit to some degree from the fact that it sits at the center of retail spending in the whole metropolitan area. Consumers tend to flock to areas with a high-concentration of retail establishments, even if prices are slightly higher in those areas. In addition, Los Angeles is a central tourism destination in the state, and it is unlikely that tourism to the area will be affected by the local sales tax rate.

Yet, the City must also consider the possibility that if consumer spending is quite high in neighboring municipalities, as well, consumers near those neighboring municipalities may choose to go outside of the City to spend. Indeed, Burge and Rogers claim that this effect is crucial. In their words, when a municipality is nearby a regional retail center (RRC)—in which total consumer spending is greater than \$100 million—the differential between its own local option sales tax rate and the sales tax rate of the RRC exerts a considerable influence on the home municipality's tax base. A municipality with a one percentage point higher sales tax relative to a nearby regional retail center could face an approximately 4.5% decline in consumer spending. Applying Burge's and Rogers's tax elasticity of demand from above, a 0.25 percentage point increase in sales tax could translate to a 1.125% decrease in consumer spending, while a 0.5 percentage point increase in sales tax could translate to a 2.25% decrease in consumer spending.

¹Burge, Gregory, and Cynthia Rogers. "Local Option Sales Taxes and Consumer Spending Patterns: Fiscal Interdependence under Multi-Tiered Local Taxation." *Regional Science and Urban Economics* (2010).

²Fisher, R.C. "Local Sales Taxes: Tax Rate Differentials, Sales Loss, and Revenue Estimation." *Public Finance Review* 8.2 (1980): 171-88.

³Fox, William. "Tax Structure and the Location of Economic Activity along State Borders." *National Tax Journal*, XIV (1986), 362-274.

At this stage, it is important to point that in the specific case of the City of Los Angeles, many of the neighboring cities already maintain higher sales tax rates including Pico Rivera (9.75%), South Gate (9.75%), El Monte (9.25%), Inglewood (9.25%), Santa Monica (9.25%), and South El Monte (9.25%). Thus, for Los Angeles residents living in parts of the city that are near these areas, the effect of competition from neighboring areas is effectively eliminated.

And, Bo Zhao suggests that a city such as Los Angeles could benefit more from an increase in the local option sales tax than would a smaller city. Cities with more workers and higher incomes tend to have higher local sales tax capacities. Retail establishments tend to be concentrated near job centers, and most people live near their places of work.⁴ Los Angeles, which is overwhelmingly the biggest job center in the region, and thus has a very high payroll tax capacity, will very likely have a high local sales tax capacity, as well, and thus tax revenue gains will likely be substantial, even if consumer spending were to decrease in response to a new sales tax.

These are not the only factors that predict high revenues for the City of Los Angeles in response to an increase in the local sales tax. Paul Lewis and Elisa Barbour from the Public Policy Institute of California have identified variables positively associated with local sales tax “success”: population size, household income, redevelopment effort, the presence of an interstate highway.⁵ Los Angeles ranks high among U.S. cities for each of these variables. An increase in the sales tax would likely supply a substantial boost in revenue for the City.

Review of Tax Exemptions

The degree to which tax revenue would increase upon an increase in the sales tax varies according to the number of exemptions imposed on the tax. Most tax exemptions are for services, though exemptions for food for home consumption, for instance, are also very common.

On the other hand, some researchers claim that these exemptions are crucial for economic growth. David Merriman and Mark Skidmore find that for the years 1982-1992, increases in sales taxes were responsible for as much as one-third of the negative growth in the retail sector, for which most goods were faced new taxes, and as much as one-eighth of the positive growth in the often tax-exempt service sector.⁶ Others point to the exemption of business purchases of production inputs as key to economic growth. It is difficult to estimate the impact that a tax on some business purchases would have on retaining local business, but it would clearly favor larger, vertically integrated businesses that could acquire production inputs without purchasing them.⁷

Ultimately, though, with an emphasis on consumer purchases, the existing literature suggests that a small increase in the local sales tax will have a somewhat negative effect on consumer spending, but a potentially very positive effect on sales tax revenues. With regard to many goods—namely, low-cost, nondurable goods—consumers may be unwilling to travel to a lower-tax community to make a purchase. Where a city is most at risk from raising a local sales tax is in the event that consumer spending is already very high in lower-tax neighboring communities. This is almost certainly

⁴Zhao, Bo. “The Fiscal Impact of Potential Local-Option Taxes in Massachusetts.” Working paper. *New England Public Policy Center at the Federal Reserve Bank of Boston* (2009).

⁵Barbour, Elisa and Paul G. Lewis. “California Cities and the Local Sales Tax.” *Public Policy Institute of California* (1999).

⁶Merriman, David and Mark Skidmore. “Did Distortionary Sales Taxation Contribute to the Growth of the Service Sector?” *National Tax Journal* (2000).

⁷Mikesell, John. L. “The American Retail Sales Tax: Considerations on Their Structure, Operations, and Potential as a Foundation for a Federal Sales Tax.” *National Tax Journal* (1997).

true in places like Los Angeles, where surrounding cities already have higher tax rates than the City of Los Angeles. Still, raising the tax rate could potentially remove the incentive for residents of those neighboring areas to do their shopping in Los Angeles.

This would be true of the City of Los Angeles with the implementation of a sales tax increase. The run-up to the housing bubble showed clearly that consumer spending in the Inland Empire is heavily predicated upon the region's relative affordability to Los Angeles, most of all in housing. Given our interpretation of the existing literature, it is plausible to think that low as a local sales tax increase would be, some consumers would travel inland to benefit from a relatively more affordable sales tax. The potential consequence may not outweigh the potential gains of new tax revenue for the City, but it is a crucial point to consider.

Empirical Study - Effects of Higher Taxes on Sales

In order to understand the effect of potential increases in sales tax in the City of Los Angeles, Beacon Economics undertook an empirical study to quantify its impacts on sales and city revenues from sales tax. Even though cities in California already receive a portion of the state's sales tax revenues, some cities have enacted their own city-specific sales tax. These cities will serve as the treatment group in our empirical analysis.

Economic theory tells us that an increase in sales tax rates should have a negative impact on sales. When sales tax rates go up, sales tend to decline. The consumer has a choice of whether to purchase substitute goods or purchase from substitute outlets, such as neighboring areas with lower sales tax rates or online. The decision will be influenced by the item being purchased and the convenience of the substitute location. For example, the consumer might forgo driving to a lower sales tax outlet to purchase a bottle of soda. However, the consumer might consider a substitute outlet if the desired good is a durable, "big-ticket" item. On a similar note, if the lower sales tax district is across the street compared to across town, the decision would most likely be different.

Initially, we looked at quarterly total taxable sales for six cities in California that had a change in the sales tax rate between the first quarter of 2000 and the second quarter of 2012. This sample proved complicated to analyze because of the difficulty in finding proper controls for broader economic conditions due to the Great Recession (Dec 2007 - Jun 2009) and the spending "boom" prior to the recession. We needed to differentiate between the drops in sales because of the recession and the drops in sales due to higher sales taxes. To tackle this problem, we expanded the sample size of our analysis and analyzed cities that enacted a sales tax prior to the Great Recession.

This approach brought us to 14 cities in California and a date range from 1993 to 2007, all of which enacted a transaction and use tax. The data for quarterly taxable sales were acquired from the California State Board of Equalization. The history of city sales tax rate changes is from Publication 71 also provided by the California State Board of Equalization. California's unemployment rate was generated from the Federal Reserve Economic Data (FRED) service.

Table 2: Cities Used for Empirical Study

City	Tax Rate	Effective Date
Clovis	0.30%	4/1/2000
Davis	0.50%	7/1/2004
Santa Cruz	0.25%	7/1/2004
Stockton	0.25%	4/1/2005
Santa Rosa	0.25%	4/1/2005
Richmond	0.50%	4/1/2005
El Cajon	0.50%	4/1/2005
Montclair	0.25%	4/1/2005
South Lake Tahoe	0.50%	4/1/2005
Salinas	0.50%	4/1/2006
Merced	0.50%	4/1/2006
San Rafael	0.50%	4/1/2006
Laguna Beach	0.50%	7/1/2006
National City	1.00%	10/1/2006

Source: Beacon Economics

The dependent variable in our pooled, seemingly unrelated regression is a logarithmic format of quarterly taxable sales. Explanatory variables in the regression are a lagged form of each city’s taxable sales, California’s unemployment rate, each city’s respective county taxable sales, and California’s taxable sales, all in logarithmic format. California’s unemployment rate, county and state taxable sales serve as controls for broader economic conditions. These will help differentiate between the drop in taxable sales due to economic conditions and the increase in sales taxes. Finally, the variable of interest is the rate change for each city, where the variable is zero prior to the tax and the sales tax rate thereafter. The coefficient on the tax rate variable will tell us the effect of higher taxes.

The first model uses taxable sales for all outlets. We find that there is a negative relationship between taxable sales and tax rates. The coefficient of the tax rate variable is -0.017 and appears to be statistically significant at the 5% level of significance. This implies that a one percentage point increase in sales tax rate reduces sales by 1.7%. The City of Los Angeles is considering a 0.25 or 0.50 percentage point increase. Therefore, the effect in Los Angeles could potentially be a 0.425% or 0.85% decrease in sales. This effect is applicable to cash-and-carry items, whereas the effect on delivered items could be slightly lower due to lack of opportunity for geographical substitution.

We also analyzed the effect on specific outlets. For apparel stores, we find that a one percentage point increase in taxes decreases sales by 2%. However, the coefficient is not statistically significant at conventional levels of significance. Building materials show the largest effect, with significance: a one percentage point increase in taxes reduces sales by 7.8%. For the City of Los Angeles, this implies a decrease in sales of 1.95% or 3.9% depending on the enacted rate. Theoretically this appears viable, as these are costly items and more expensive items could potentially have a larger effect. Home furnishings and appliances showed a -2% impact, however the coefficient was not significant.

We find no evidence that an increase in tax rates reduces food, restaurant, general merchandise or service station sales. This also appears theoretically viable, since these are less expensive items, and the cost of transport to the sub-

stitute outlet with lower tax rates is higher than the benefit received from the tax differential. Regarding auto sales, we feel it is not appropriate for discussion, as the taxes are based on vehicle registration address, and therefore the substitution effect is nearly non-existent.

Another question to ponder is whether a certain kind of exemption is appropriate to minimize the effect on sales. For example, should the City of Los Angeles exempt building material sales from the new tax? An exemption on certain outlets could potentially reduce the effect of higher sales taxes on other outlets. For example, if building materials are exempt, the effect on furnishings could potentially be lower. However, it is nearly impossible to estimate the effect on the exempt outlet. Once the taxes are enacted, the consumer may not be completely informed that certain exemptions are in place, and therefore the above mentioned elasticities would still be applicable. Estimating the perception of the consumer of what is taxable and what's not is a complex task. In case of an uninformed consumer, we could see a reduction in sales without any additional revenues for the city. Furthermore, administration costs increase, because the exemption provides an incentive for re-coding of businesses that have been affected.

The effect on total sales for all outlets could potentially be different on the periphery of the city. This is known as "border-city problem." The consumer might choose to shop at an outlet in the border city that has a lower tax rate, if doing so is convenient. For example, a consumer contemplating shopping at the Grove or Westfield Century City (assuming equal distance to both) might consider the total tax rate when making a decision. Santa Monica enacted a 0.50% city sales tax in 2011. Increasing the sales tax rate by 0.50 percentage points would put the City of Los Angeles on par with Santa Monica but above areas such as Beverly Hills, Culver City, Century City, Pasadena or Burbank.

Revenue Effect

Using fiscal year 2011-12 state and city revenues, Beacon Economics has estimated the effect of a 0.25 and 0.50 percentage point increase in City of Los Angeles sales tax rate. The city currently receives 0.75% of total taxable sales, which, for fiscal year 2011-12, was approximately \$323.25 million. Based on the empirical study herein, we estimate four scenarios of the impact on sales tax rates on sales for each proposed increase. First, we estimate a scenario with no effect on sales, then we include the baseline effect of potential decrease in sales of 0.425% and 0.85%. We also include a low-elasticity scenario (sales drop by 0.20% and 0.40%) and a high-elasticity scenario (sales drop by 0.65% and 1.3%).

A 0.25 percentage point increase in the sales tax rate with no effect on sales should generate \$107.75 million in additional revenue for the City, or a 33.3% increase. The baseline scenario shows a decrease in sales which brought revenue gains down slightly to \$105.9 million, or a 32.7% increase. The low-elasticity scenario shows an increase in revenues of \$106.9 million, or 33%. Finally, the high-elasticity scenario shows an increase in revenues of \$104.9 million, or 32.5%.

With a 0.50 percentage point increase and no effect on sales, the city should expect an additional \$215.5 million in revenues, or a 66.67% increase. Under the baseline scenario, the sales tax increase would generate an additional \$210.9 million in revenue, or a 65.2% increase. Under the low-elasticity scenario, the tax increase would generate an additional \$213.3 million in revenue. Under the high-elasticity scenario, the tax increase would generate \$208.5 million in additional revenue.

The City's tax revenues could vary widely depending on the effect of the sales tax on the revenue base. With a 0.25 percentage point increase, the increase in tax revenues could vary by as much as \$2.8 million. On the other hand, with a 0.50 percentage point increase, the increase in tax revenues could vary by as much as \$7 million.

Conclusion

Beacon Economics concludes that an increase in sales tax rates could have a negative effect on sales. Review of other credible empirical work has indicated a similar conclusion. With regard to low-cost, nondurable goods consumers would be unwilling to commute to a border city with lower tax rates. This point is evident in our empirical work, as well as in other studies. We found no evidence that the higher sales tax rate had an effect on food, restaurant, general merchandise or service station sales. "Big-ticket" items show a bigger negative effect.

It goes without saying that the additional tax revenues outweigh the negative effect on sales. However, the City of Los Angeles must consider the variance in additional revenues for planning and budget purposes. With a 0.25 percentage point increase in tax rates the additional revenues could vary by as much as \$2.8 million, whereas with a 0.50 point increase the revenues could differ by up to \$7 million.

Table 3: Revenue Effects by Scenario and Size of Increase

0.25 Percentage Point Tax Rate Increase							
Scenario	Revenue Base		Tax Rates (%)				City Revenues (\$ Millions)
	(\$ Millions)	State Rate	County Rate	City Rate	Trans. Rate	Total Rate	
FY 2011-12 Actuals	43,100	6.25	1.50	0.75	0.25	8.75	323.25
No Sales Effects Scenario	43,100	6.25	1.50	1.00	0.25	9.00	431.00
Change (\$ Millions)	0	N/A	N/A	N/A	N/A	N/A	107.75
Change (Percent)	0	0.00	0.00	0.25	0.00	0.25	33.33
Baseline Sales Effects	42,916	6.25	1.50	1.00	0.25	9.00	429.16
Change (\$ Millions)	-183	N/A	N/A	N/A	N/A	N/A	105.92
Change (Percent)	-0.42	0.00	0.00	0.25	0.00	0.25	32.77
Low Sales Effects	43,013	6.25	1.50	1.00	0.25	9.00	430.13
Change (\$ Millions)	-86	N/A	N/A	N/A	N/A	N/A	106.89
Change (Percent)	-0.20	0.00	0.00	0.25	0.00	0.25	33.07
High Sales Effects	42,819	6.25	1.50	1.00	0.25	9.00	428.19
Change (\$ Millions)	-280	N/A	N/A	N/A	N/A	N/A	104.95
Change (Percent)	-0.65	0.00	0.00	0.25	0.00	0.25	32.47
0.50 Percentage Point Tax Rate Increase							
FY 2011-12 Actuals	43,100	6.25	1.50	0.75	0.25	8.75	323.25
No Sales Effects Scenario	43,100	6.25	1.50	1.25	0.25	9.25	538.75
Change (\$ Millions)	0	N/A	N/A	N/A	N/A	N/A	215.50
Change (Percent)	0	0.00	0.00	0.50	0.00	0.50	66.67
Baseline Sales Effects	42,733	6.25	1.50	1.25	0.25	9.25	534.17
Change (\$ Millions)	-366	N/A	N/A	N/A	N/A	N/A	210.92
Change (Percent)	-0.85	0.00	0.00	0.50	0.00	0.50	65.25
Low Sales Effects	42,927	6.25	1.50	1.25	0.25	9.25	536.59
Change (\$ Millions)	-172	N/A	N/A	N/A	N/A	N/A	213.34
Change (Percent)	-0.40	0.00	0.00	0.50	0.00	0.50	66.00
High Sales Effects	42,539	6.25	1.50	1.25	0.25	9.25	531.74
Change (\$ Millions)	-560	N/A	N/A	N/A	N/A	N/A	208.49
Change (Percent)	-1.3	0.00	0.00	0.50	0.00	0.50	64.50

Source: Beacon Economics

References

- Barbour, Elisa and Paul G. Lewis. "California Cities and the Local Sales Tax." *Public Policy Institute of California* (1999).
- Burge, Gregory, and Cynthia Rogers. "Local Option Sales Taxes and Consumer Spending Patterns: Fiscal Interdependence under Multi-Tiered Local Taxation." *Regional Science and Urban Economics* (2010).
- Fisher, R.C. "Local Sales Taxes: Tax Rate Differentials, Sales Loss, and Revenue Estimation." *Public Finance Review* 8.2 (1980): 171-88.
- Fox, William. "Tax Structure and the Location of Economic Activity along State Borders." *National Tax Journal*, XIV (1986), 362-274.
- Merriman, David and Mark Skidmore. "Did Distortionary Sales Taxation Contribute to the Growth of the Service Sector?" *National Tax Journal* (2000).
- Mikesell, John. L. "The American Retail Sales Tax: Considerations on Their Structure, Operations, and Potential as a Foundation for a Federal Sales Tax." *National Tax Journal* (1997).
- State of Georgia Department of Audits and Accounts. *Georgia Tax Expenditure Report for FY2013* (2011).
- Zhao, Bo. "The Fiscal Impact of Potential Local-Option Taxes in Massachusetts." Working paper. *New England Public Policy Center at the Federal Reserve Bank of Boston* (2009).

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HISTORICAL DATA ON SALES TAX RECEIPTS AND LOS ANGELES CITY POPULATION

Year Count	Fiscal Year	Property Tax			Sales Tax Annual Change	Population Annual Growth Rates (Adopted Budget Book)
		Sales Tax Receipts	Sales Tax Replacement	Total Sales Tax		
1	1998-99	\$ 306,359,620	\$ -	\$ 306,359,620		0.75%
2	1999-00	\$ 331,709,668	\$ -	\$ 331,709,668	8.27%	0.75%
3	2000-01	\$ 357,222,338	\$ -	\$ 357,222,338	7.69%	0.48%
4	2001-02	\$ 351,061,598	\$ -	\$ 351,061,598	-1.72%	0.48%
5	2002-03	\$ 363,786,834	\$ -	\$ 363,786,834	3.62%	0.48%
6	2003-04	\$ 377,890,274	\$ -	\$ 377,890,274	3.88%	0.48%
7	2004-05*	\$ 316,561,386	\$ 90,695,756	\$ 407,257,142	7.77%	0.48%
8	2005-06	\$ 323,555,436	\$ 88,936,666	\$ 412,492,102	1.29%	0.13%
9	2006-07	\$ 333,884,625	\$ 112,093,653	\$ 445,978,278	8.12%	0.13%
10	2007-08	\$ 335,562,124	\$ 119,336,844	\$ 454,898,968	2.00%	0.13%
11	2008-09	\$ 311,937,620	\$ 111,683,135	\$ 423,620,755	-6.88%	0.13%
12	2009-10	\$ 280,095,992	\$ 84,975,778	\$ 365,071,770	-13.82%	0.13%
13	2010-11	\$ 296,607,966	\$ 96,811,687	\$ 393,419,653	7.77%	0.31%
14	2011-12	\$ 323,247,176	\$ 100,538,201	\$ 423,785,377	7.72%	0.55%
15	2012-13	\$ 338,969,528	\$ 116,458,165	\$ 455,427,693	7.47%	0.96%
Average					3.08%	0.42%

* State reduced City's 1 cent sales tax by 0.25 cents and replaced it with Property Tax Receipts.

SUMMARY DATA USED FOR HALF (0.5) CENT SALES TAX INCREASE PROJECTIONS

Annual Growth Rate Assumptions Based on Above Table Data

Sales Tax Receipts	3.08%
Los Angeles City Population	0.42%

Calculation of Revenue Generated by Half (0.5) Cent Sales Tax Increase

Description	Sales Tax
2013-14 Adopted Budget (0.75 Cent Sales Tax Rate)	\$ 352,790,000
Half (0.5) Cent Sales Tax increase	\$ 235,193,333
Total for 1.25 Cent Sales Tax Rate	\$ 587,983,333
High Side Retail Offset of Increased Rate (1.3%)	\$ (7,643,783)
Adjusted Sales Tax Receipts for 1.25 Cent Rate	\$ 580,339,550
Half (0.5) Cent Portion Adjusted Receipts (40%)	\$ 232,135,820
Convert Amount from Fiscal to Calendar Year (2014)	\$ 235,714,931

Los Angeles City Population (2013)	3,863,839
LAEDC Estimate of Sales Tax Portion Paid by Residents	41.8%
Los Angeles City Household Size	2.9

PROJECTIONS FOR HALF (0.5) CENT SALES TAX INCREASE

Year Count	Calendar Year	Sales Tax Receipts	Residents' Sales Tax Portion	Los Angeles City Population	Per Resident Sales Tax	Per Household Sales Tax
1	2015	\$ 242,983,521	\$ 101,567,112	3,896,726	\$ 26.06	\$ 75.59
2	2016	250,476,247	104,699,071	3,913,274	26.75	77.59
3	2017	258,200,022	107,927,609	3,929,892	27.46	79.64
4	2018	266,161,970	111,255,704	3,946,581	28.19	81.75
5	2019	274,369,435	114,686,424	3,963,341	28.94	83.92
6	2020	282,829,989	118,222,935	3,980,172	29.70	86.14
7	2021	291,551,435	121,868,500	3,997,074	30.49	88.42
8	2022	300,541,819	125,626,481	4,014,048	31.30	90.76
9	2023	309,809,434	129,500,343	4,031,095	32.13	93.16
10	2024	319,362,828	133,493,662	4,048,214	32.98	95.63
11	2025	329,210,814	137,610,120	4,065,405	33.85	98.16
12	2026	339,362,476	141,853,515	4,082,669	34.75	100.76
13	2027	349,827,178	146,227,760	4,100,007	35.67	103.43
14	2028	360,614,574	150,736,892	4,117,418	36.61	106.17
15	2029	371,734,613	155,385,068	4,134,904	37.58	108.98
Totals		\$ 4,547,036,358	\$ 1,900,661,198	Averages	\$ 31.50	\$ 91.34