December 13, 2016

United Way of Greater Los Angeles plays a unique role in connecting partners across the business, government and philanthropic sectors to design long-term solutions to break the cycle of poverty in Los Angeles.

Once United Way learned of the initiative that will appear on the March ballot as Measure S, the organization decided to join the diverse coalition of community organizations that is united to stop the measure.

Los Angeles has the least affordable housing in the United States. After a harrowing recession, Los Angeles finds that its economy is recovering slowly, with progress being fragile. More than 270,000 Los Angeles households are “severely rent-burdened,” paying more than half their incomes in rent.

Los Angeles’ construction industry stands as a double bulwark against recession: first, the jobs it creates put workers’ feet on a ladder that can take them from entry-level, low-skill work to middle-class, high-skill jobs; second, only by building new housing can Los Angeles ease the rising housing costs that have so many Angeleno families living on the edge. Measure S would have a disastrous impact on these families: it would make rents soar, eliminate thousands of jobs, and force thousands more Angelenos out of their homes.

As you will see in this report from Beacon Economics, the development that Measure S prohibits is critical to lowering housing costs and growing a sustainable Los Angeles economy. Banning any new building that includes a zoning change or General Plan Amendment means that billions of dollars would be drained from our economy, and tens of millions of dollars from our schools, parks and city budgets. Voting for Measure S would eliminate 12,000 jobs in the first year of its passage—the majority of which would be those construction careers.

Measure S would risk a return to recession. And what would we get in return for that risk?

A city that can’t build the housing it needs. A city that transfers wealth from renters to landlords. A city that can’t even make good on the investment in fighting homelessness that Los Angeles voted overwhelmingly to support by 77%—because the parcels where we could build new housing are suddenly banned from construction.

A sustainable economy requires all of the tools in the toolkit. Even as the situation grows uncertain around the federal government, the City of Los Angeles has demonstrated remarkable optimism, voting not only to invest in fighting homelessness but also in building out its transit system.

United Way of Greater Los Angeles invites you to read this report on the consequences of banning the construction of the housing our city desperately needs. And, we invite all Angelenos to come to the table to debate how, together, we can create a welcoming, inclusive city.

Sincerely,

Elise Buik
President & CEO
United Way of Greater Los Angeles

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"[The L.A. Housing Ban] is a recipe for higher housing costs, more homelessness and greater inequality."
-LA TIMES Editorial Board, May 17, 2016
Executive Summary

Measure S, which will be on the Los Angeles ballot in March, seeks a two-year moratorium on construction requiring a General Plan amendment, zone change or adjustment to height restrictions. Proponents of the measure claim that such projects hurt the quality of life in neighborhoods. But General Plan amendments, zone changes or height changes allow the city to approve important projects that encourage economic activity and urban renewal in Los Angeles in the face of a General Plan that is very much in need of update. As a result, the economic, housing and fiscal costs to Los Angeles of the passage of Measure S would be very high.

Using city-level data on historical projects that required a General Plan amendment, zone change or adjustment to height restrictions, Beacon Economics has estimated the benefits lost through putting projects on hold. The estimated annual impacts of these construction projects are detailed below. In the sections that follow, Beacon Economics has also extrapolated those effects to reflect two-year and decade-long impacts of the passage of the measure. This demonstrates the potential consequences of the proposed two-year moratorium over its immediate lifespan and its even more disruptive longer-term consequences in stalling residential and non-residential construction.

If adopted, Measure S will have the effect of halting construction, stifling the economic activity and job creation as a result of that construction, cost Los Angeles millions in tax revenue and make an already dire housing situation much worse.

<table>
<thead>
<tr>
<th>Summary: Annual Economic Impact of Affected Developments(^a) (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>Direct</td>
</tr>
<tr>
<td>Indirect</td>
</tr>
<tr>
<td>Induced</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

\(^a\)Refers to Projects that require a General Plan amendment, zone change, or height district change.

Key Economic Impacts

- Measure S would cost Los Angeles over 12,000 jobs in a single year, with 57% of these jobs in the construction sector. The City of Los Angeles stands to lose roughly 15-17% of construction jobs each year as a result of Measure S.

- Construction activity associated with projects that would be put on hold under the measure would have generated an estimated $1.9 billion in economic output in a single year.
Construction activity associated with those projects would also have generated over $642 million in wages for workers in Los Angeles.

Beacon Economics estimates that Los Angeles would forgo $142 million in economic output each year from lost business and consumer spending generated from the tenants of properties subject to the moratorium set forth in the measure.

Although Measure S has a two-year limit, there is a possibility that the moratorium could extend up to ten years.\(^1\) For analytical purposes, Beacon Economics examined a scenario where the moratorium extends to a ten-year period. The results of a ten-year moratorium are as follows:

- A ten-year moratorium on construction projects targeted under Measure S would cost the City of Los Angeles over 120,000 jobs, with over half of these jobs in the construction sector.
- Construction activity associated with projects that would be put on hold under Measure S would generate an estimated $19.3 billion in economic output.
- A decade-long moratorium on construction activity associated with projects targeted under the Measure would also have generated over $6.4 billion in wages for workers in the City of Los Angeles.

### Summary: Ten-Year Moratorium Impact of Affected Developments ($2016)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Jobs</th>
<th>Wages ($)</th>
<th>Output ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>69,200</td>
<td>3,794,714,800</td>
<td>11,709,672,400</td>
</tr>
<tr>
<td>Indirect</td>
<td>32,500</td>
<td>1,649,818,100</td>
<td>4,792,791,400</td>
</tr>
<tr>
<td>Induced</td>
<td>18,800</td>
<td>979,247,400</td>
<td>2,862,055,200</td>
</tr>
<tr>
<td>Total</td>
<td>120,400</td>
<td>6,423,780,300</td>
<td>19,364,518,900</td>
</tr>
</tbody>
</table>

**Source:** IMPLAN; Calculations by Beacon Economics

In 2015, zone changes, General Plan amendments, and changes to height districts were associated with 30% of total construction spending broken down as follows:

- 1.2% ($31 million) of new single-family construction spending.
- 18.4% ($477 million) of new multi-family construction spending.
- 10.4% ($422 million) of new non-residential construction spending.

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\(^1\)We looked into a ten year period because the Department of City Planning has set forth a system in which it can take up to ten years to update all community plans. More details regarding the System for Updating Community Plans can be found at http://clkrep.lacity.org/onlinedocs/2016/16-0422_rpt_PLAN_08-26-2016.pdf
**Key Fiscal Impacts**

- Los Angeles would forgo over $70 million per year in sales, property, transient occupancy and other fiscal revenues with the passage of Measure S — enough to hire over 1,000 new policemen or firefighters.

- This loss of revenue would be difficult for Los Angeles to bear. Important quality-of-life measures funded by the city would be deprived of much-needed revenue, including millions of dollars for parks and recreational facilities generated through Quimby and Finn fees.

- The city would lose over $27 million in property tax revenue over the course of the two-year moratorium, and an additional $1.5 million each year in ongoing fiscal impacts.

- Over $10 million would be lost in sales tax revenue each year from combined upfront and ongoing construction and business activity.

**Key Housing Impacts**

- Each year, Measure S could take away 37-45 single-family units, and 2,100-2,800 multi-family units, further straining the housing supply and putting upward pressure on rents. These losses, which are based on permitted units, would be considerably higher if the actual number of units forgone were closer to the number of proposed units; in 2015, the most recent year for which numbers of proposed units requesting zone changes and/or a General Plan Amendment are available, that number was 9,099.

- According to the latest figures from the American Community Survey,\(^2\) in 2015 nearly 58% of all renter households in the City of Los Angeles spent 30% or more of their income on rent. By comparison, less than 47% of renter households in the nation spent more than 30% of their income in 2014, a 2.1 percentage point decline from 2010.

These data show that a moratorium on projects requiring a General Plan amendment, zone change or adjustment to height restrictions would have far-reaching impacts on the L.A. economy. Thus, a two-year moratorium, as outlined under the measure, could affect over 24,000 jobs in Los Angeles, leading to a potential loss of $3.8 billion in economic activity and over $1.2 billion in lost wages. In essence, a two-year moratorium would put an important driver of economic activity in Los Angeles at risk.

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\(^2\)Table B25070: Gross Rent as a Percentage of Household Income in the Past 12 Months, 2015 ACS 1-Year Estimates.
**Introduction**

Attempting one of the most restrictive policy changes in recent Los Angeles history, backers of The Building Moratorium have placed Measure S on the March ballot. The measure seeks to enact a two-year moratorium on construction projects that do not directly conform to Los Angeles’ General Plan and thus require discretionary approval from the city. Projects that require a zone change, General Plan amendment or adjustment to height restrictions would be put on hold with the passage of the measure.

Los Angeles is in the midst of a housing crisis. The city is in desperate need of housing, but the initiative would freeze much needed residential projects. Many of the projects that require a zone change, General Plan amendment or an adjustment to height restrictions would help mitigate the housing crisis by adding to the stock of housing. The city has two choices: build more housing or have rents and prices determine who stays and who leaves.

Placing a two-year moratorium on construction projects that do not conform to Los Angeles’ currently outdated General Plan would even prohibit the affordable housing that Measure S’s backers claim, misleadingly, to have exempted from the ban. Although the measure claims to include an “affordable housing exemption,” the exemption does not apply to buildings that require General Plan Amendments. The city of Los Angeles recently published a list of city-owned sites on which affordable housing could be built; Measure S would ban building even 100% affordable housing on 90% of those sites. This is to say nothing of mixed-income housing, a valuable tool in the affordable housing kit that Measure S grants no exemptions whatsoever.³

Los Angeles’ population recently surpassed 4 million, making it the second-largest city in the nation. A growing population increases the demand for housing. As it stands, Los Angeles does not have adequate housing to keep pace with its population. The housing shortage, in turn, makes lower-income people worse off.

When groups such as backers of Measure S block developers from building housing, home prices and rental rates rise. There is only so much land available on the market for development. Removing developable land will drive up the price of existing land on the market, making it more expensive and less likely for affordable housing to be built.

Backers of Measure S, seeking to impose height and land restrictions on new structures, claim that they do not want Los Angeles to look like Manhattan. But a relatively small number of large buildings will not transform Los Angeles into Manhattan. Three new five-story buildings would take up three times as much land as one new 15-story building while providing the same amount of housing. The skyline may appear less like that of Manhattan, but the supply of available space would be substantially lower, driving up prices on all remaining space. If developers stop building up, they have to build out, increasing development in neighborhoods.

Also, high housing costs in Los Angeles are a critical issue for residents at all income levels. Lack of enough supply is resulting in increasingly higher housing costs, which forces residents to move to more affordable areas, making housing for lower-income households even more scarce and less affordable.

Cities across the United States have adopted General Plans to provide a comprehensive guide for city planners across various policy areas. Unfortunately, the current community plans for Los Angeles are outdated by decades. Even some city leaders opposing Measure S are sympathetic to the need for General Plan update, including Mayor Eric Garcetti. But passing Measure S and thus enacting a two-year moratorium to projects requesting adjustments to the General Plan would amplify significant economic and social issues in Los Angeles both in the short and long term.

### Data Collection

A database of construction permits, obtained from the Los Angeles Department of Building and Safety, was merged with a full list of General Plan amendments, zone changes and changes to height districts obtained...
from the city Planning Department. The files were merged by addresses to gather information from the permit database for each address with a zone change or General Plan amendment.

The information gathered from the permit database includes:

- The type of construction allowed in each address: single-family housing, multifamily housing or commercial;
- The secondary type of construction allowed in each address: hotel, office, retail, industrial or other;
- The valuation of all construction permits in each address from July 2006 to June 2016;
- The number of units for all construction permits in each address from July 2006 to June 2016.

Although permit valuations serve as an economic indicator for the construction industry, a large proportion of spending on construction is not accounted for in permit valuations. Permit valuations in Los Angeles are based on the building square footage. But actual spending on construction can be much higher, especially for more amenity rich properties. For example, in 2015, zone changes, General Plan amendments, and changes to height districts were associated with:

- 1.2% ($31 million) of new single-family construction spending.
- 18.4% ($477 million) of new multi-family construction spending.
- 10.4% ($422 million) of new non-residential construction spending.

We estimate that actual spending on construction is greater than permit valuations. This assumption is based on comparisons between the U.S. Census Construction Spending Survey and both the U.S. Census Building Permit Survey and the California Homebuilding Foundation, Construction Industry Research Board.

**Types of Impact and Methodology**

To determine the impacts of Measure S, Beacon Economics analyzed 10 years of permit data on projects in Los Angeles that required a zone change, General Plan amendment or height changes to find the value of permitted construction at those sites. From there, it was possible to generate a reasonable, conservative estimate of the total cost of construction, as well as the expected number of occupants at the properties to which Measure S would have applied in recent years.

By understanding the impacts of recent projects for which zone changes, General Plan amendments or height changes were needed, it is possible to estimate the expected impact of the moratorium imposed by Measure S on upcoming construction projects. The analysis that follows shows the construction and ongoing impacts from the perspective of both the City of Los Angeles and Los Angeles County.

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The analysis will be divided into three components:

- **Economic impacts**: How the measure may impact the local economy in terms of output and jobs;
- **Housing impacts**: How the measure may impact the local housing market in terms of supply, prices and rents; and
- **Fiscal impacts**: How the measure may impact local tax revenue and fees.

The impacts of the construction of the projects are the effects of short-term spending into the local economy to get those projects completed. These effects may include economic activity generated by that spending, the jobs created by that spending or the tax effects (permits and other fees) paid to local agencies to get approval for those projects.

The ongoing impacts of operations at those properties are the long-term effects of spending by new residents at residential and commercial properties and the revenue generated by new hotel rooms. This spending generates local economic activity, jobs and tax dollars year after year.

Economic impacts, in turn, are represented in two ways:

- **Short run**: The impacts of the construction of those projects;
- **Long run**: The ongoing impacts of operations at those properties.

Estimates are presented in terms of the one-year immediate impact, the two-year impact (as if the moratorium were passed) and a longer-term, the 10-year impact, reflecting the possibility that the moratorium were to prevent development of certain projects for a longer period.

Beacon Economics applied a multiplier analysis approach to determine these estimates, with the assumption that dollars spent in the local economy get re-spent, generating a total economic impact well above the initial level of spending. Beacon Economics employed the IMPLAN modeling system. The IMPLAN system is an input/output model that can be used to estimate the short-run impact of changes in the economy through the use of multipliers. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output benchmarks with other data to construct quantitative models of trade flow relationships among businesses, and between businesses and final consumers across the given economy. IMPLAN may be used to examine the effects of a change in one or several economic activities to predict its effect on a local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the Bureau of Economic Analysis and follow a balanced account format recommended by the United Nations.

IMPLAN’s Regional Economic Accounts and the Social Accounting Matrices are used to construct region-level multipliers that describe the response of the relevant regional economy to a change in demand or production as a result of the activities and expenditures from construction projects. Each industry that produces goods or services generates demand for other goods and services, and this demand is multiplied...
through a particular economy until it dissipates through “leakage” to economies outside the specified area.

IMPLAN models discern and calculate leakage from local economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions through a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects from increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area, in this case Los Angeles. IMPLAN calculates this distinction by applying the area's economic characteristics described in terms of actual trade flows within the area.

Impact studies operate under the basic assumption that any increase in spending has three effects:

- First, there is a direct effect on that industry itself. For example, projects that require a zone change, General Plan amendment or height changes require labor and resources for the construction projects;

- Second, there is a chain of indirect effects on all the industries whose outputs are used by the industry under observation. For a construction project, indirect effects would include the demand and employment that is stimulated at firms that provide goods and services to this project, such as architectural/engineering services or suppliers of raw building materials;

- Third, induced effects arise when employment increases and household spending patterns are expanded. These induced effects arise because suppliers pay out wages to their employees associated with the construction projects, and those wages are then spent back into the local economy on household items such as food, gas, cars and housing. These generate additional demand/output and associated wages that are then spent back into the local economy, generating additional secondary effects.

The impacts Beacon Economics has calculated signify losses to the city’s economy. In other words, not allowing construction projects that require a zone change, General Plan amendment or height changes eliminates a considerable amount of economic activity each year.

Also, some of these projects are commercial structures, which offer a number of benefits and stimulate significant economy activity for the city through jobs for local residents and tax revenue for the city and state.
Economic Impact Overview

If adopted, Measure S will have the effect of halting construction, stifling the economic activity and job creation as a result of that construction, cost Los Angeles millions in tax revenue and make an already dire housing situation much worse.

As will be demonstrated below, past construction projects that required a zone change, General Plan amendment or height changes generated a significant economic impact on the Los Angeles economy. Moreover, construction projects of these types require a significant amount of labor and are a crucial source of employment for many Los Angeles residents. Local businesses benefit from construction projects, because many of the raw materials needed for construction projects are supplied from within the city itself. It is not only the direct impacts of these construction projects that matter, but how these projects ripple through the rest of the local economy, generating secondary impacts, which in turn generate new jobs and boost wages for workers in the local economy.

First, this section examines the historical impact of permitted projects that required a zone change, General Plan amendment or height changes, using data on historical permitted projects in Los Angeles. Second, this section generates an assessment of the economic impact of a moratorium on projects that require a zone change, General Plan amendment or height changes, relying on Beacon Economics' proprietary forecasts to estimate the future losses caused by the measure. Third, this section focuses on the ongoing impacts of the moratorium on economic activity in Los Angeles.

Historical Impacts

Upon examining recent data, it is clear that zone changes, General Plan amendments or height changes have played an important role in Los Angeles’ development. Our analysis examined a 10-year history of permitted projects that required a zone change, General Plan amendment or height changes that were previously imposed in the city’s zoning code. This dataset included projects for single-family, multi-family, retail, office, industrial and hotel permits. The estimates detailed below represent the historical impact of these projects aggregated over the 10-year period on the Los Angeles economy.

Historical Impacts on Output

The set of projects that involved a zone change, General Plan amendment, or height changes that occurred in the ten-year period from July 2006 to June 2016 generated $7.4 billion in output for Los Angeles. Of this total, $4.6 billion represented direct spending on construction projects for goods and services, while $2.7 billion represented secondary spending by firms that supplied the materials for these projects, individuals that received an increase in revenue as a result of the expenditures, firms that received an increase in revenue as a result of the increase in income, and so on. Despite the Great Recession occurring during the period examined, projects that required a zone change, General Plan amendment or height changes have generated a significant impact.
**Historical Impacts on Employment**

Construction projects that required a zone change, General Plan amendment or height changes supported an estimated 46,830 jobs in Los Angeles over that same 10-year period. Of this total, about 30,000 were direct jobs, while over 9,400 jobs were supported from indirect effects, and over 7,500 were supported through induced effects. In addition, projects that required zone changes, General Plan amendments or height changes supported tens of thousands of construction jobs over the last decade. Indeed, of the total construction jobs generated, nearly 70% were in new commercial structures, with the rest divided between the construction of both multi- and single-family development.

Although construction is the largest direct beneficiary, the secondary impacts of these construction projects are distributed among a wide range of industries. Wholesale trade received the largest secondary benefit, with 1,360 jobs supported through indirect and induced effects. The wholesale trade industry, like the construction industry in Los Angeles, is still recovering from the Great Recession. In 2008, wholesale trade employment in the City of Los Angeles was close to 75,000. By the close of 2015, employment in wholesale trade was roughly 71,500. Retail workers, including nonstore, clothing and miscellaneous, received a substantial boost, with nearly 3,000 workers supported through secondary impacts.

Many of the industries impacted through the secondary effects of construction are considered lower-wage sectors that do not require higher education such as a bachelor’s degree. This is a benefit to local residents, as it remains consistently more difficult for individuals with lower levels of education in Los Angeles to find jobs. In other words, low-wage occupations have considerably higher unemployment rates than high-skill occupations. Measure S could do a great deal of harm to industries that are still recovering from the aftermath of the Great Recession.

### Historical Impacts of Affected Developments ($ 2016)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Output ($)</th>
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<tbody>
<tr>
<td>Direct</td>
<td>4,675,081,370</td>
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<tr>
<td>Indirect</td>
<td>1,604,985,150</td>
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<tr>
<td>Induced</td>
<td>1,147,408,600</td>
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<tr>
<td>Total</td>
<td>7,426,985,120</td>
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Source: IMPLAN; Calculations by Beacon Economics

### Historical Impacts of Affected Developments on Employment ($ 2016)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Employment</th>
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<tbody>
<tr>
<td>Direct</td>
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<td>Indirect</td>
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<tr>
<td>Induced</td>
<td>7,520</td>
</tr>
<tr>
<td>Total</td>
<td>46,830</td>
</tr>
</tbody>
</table>

Source: IMPLAN; Calculations by Beacon Economics
**HISTORICAL IMPACTS ON WAGES**

Projects that required a zone change, General Plan amendment or height changes were responsible for an estimated $2.6 billion in wages for L.A. workers. Nearly 64% of this constituted wages in the construction sector. In other words, construction workers in Los Angeles earned $2.6 billion in income from projects required some change to Los Angeles' General Plan.

Construction projects that required a zone change, General Plan amendment or height changes generated hundreds of millions of dollars in wages across a wide distribution of sectors unrelated to the construction sector itself:

- Workers in architecture and engineering earned $71.3 million.
- Workers in hospitals and offices of physicians earned $59.9 million.
- Retail workers\(^5\) earned $120.9 million.
- Wholesale trade workers earned $108.6 million.

Undoubtedly, the measure’s efforts would have a tremendous impact not only on prospective employment opportunities, but would also severely impact wages across various industries that require different skill sets. For example, retail workers and workers in other low wage occupations would suffer some of the greatest losses. These are among the most numerous jobs and tend to have higher rates of unemployment.

\(^5\)Includes health and personal care, nonstore, clothing, general merchandise and miscellaneous retail workers.
As such, the measure puts a greater burden on workers in industries where jobs are more precarious and wages are already fairly low.

### Top Occupations in Los Angeles County by job count

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total Employment</th>
<th>Median Annual Salary ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Salespersons</td>
<td>115,750</td>
<td>23,020</td>
</tr>
<tr>
<td>Cashiers</td>
<td>98,430</td>
<td>19,890</td>
</tr>
<tr>
<td>Office Clerks, General</td>
<td>91,810</td>
<td>30,840</td>
</tr>
<tr>
<td>Food Preparation and Serving Workers</td>
<td>87,460</td>
<td>19,650</td>
</tr>
<tr>
<td>Freight, Stock, and Material Laborers</td>
<td>86,000</td>
<td>24,330</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>73,390</td>
<td>105,530</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>70,810</td>
<td>98,380</td>
</tr>
<tr>
<td>Waiters and Waitresses</td>
<td>69,570</td>
<td>22,540</td>
</tr>
<tr>
<td>Stock Clerks and Order Fillers</td>
<td>61,320</td>
<td>22,880</td>
</tr>
<tr>
<td>All Occupations in Los Angeles County</td>
<td>4,103,590</td>
<td>38,560</td>
</tr>
</tbody>
</table>


*In geographic terms, the labor market for residents of the City of Los Angeles should be viewed regionally and not just at the city level. As such, the discussion and figures shown in the associated table are based upon occupations for all of Los Angeles County.*

### The Economic Impacts of Measure S

**Highlights:**

- In a single year, Measure S would cost the City of Los Angeles $1.9 billion in economic output, over 12,000 jobs, and $642 million in wages.

- Over the course of a two-year moratorium, the measure would cost the city $3.8 billion in economic output, over 24,000 jobs, and nearly $1.3 billion in wages.

- In the ten-year scenario, Measure S would cost the city $19.3 billion in economic output, over 120,000 jobs, and $6.4 billion in wages.

Although Measure S clearly has no impact on past construction activity, historical permitting activity over the last decade in Los Angeles helps illustrate the potential impact of such a construction moratorium in the future. As it stands, Los Angeles has experienced an uptick in residential and non-residential construction since the end of the Great Recession. What is more, Beacon Economics does not expect a slowdown in construction activity in the coming years, based on current building permit trends.

Under the assumption that construction in Los Angeles will continue to increase, our estimates for the impact of the moratorium going forward were based on both the historical share of permitted projects that required a zone change, General Plan amendment or height changes and our proprietary forecasts...
of permitting activity that is likely to occur in Los Angeles in the coming years. Our analysis relied on the share of projects that required a zone change, General Plan amendment or a change in the height limit. These shares were based on recent historical shares of total permitted projects by type (multi-family, for example). Next, these shares were applied to our forecasts to determine what share of the forecast would be projects that are banned under Measure S.

Construction activity can be volatile from year to year, yet Beacon Economics does not foresee any severe declines in construction permits for Los Angeles in the near future. The measure would have an impact on future construction by limiting what can be built and where. For this reason, it’s reasonable to assess the impacts of the moratorium on the expected value of future permitting activity in Los Angeles.

The impacts are presented in three time periods: first, there is an expected annual impact estimate of the moratorium; second, there is a two-year impact estimate, which is the duration of the moratorium under Measure S; third, there is a 10-year impact estimate, based on an assumption that there will be regulatory delay in construction of projects that are tied to zone changes, General Plan amendments or height changes, under L.A.’s current General Plan. This assumption may seem bold, but with multi-family or non-residential projects in Los Angeles already slowed by years of regulatory lag, the likelihood of long-run negative economic consequences due to Measure S is high. The 10-year impact estimate is effectively a “worst-case” scenario.

**Impacts on Output**

<table>
<thead>
<tr>
<th>Summary: Economic Affected Developments on Output ($ 2016)</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>

Source: IMPLAN; Calculations by Beacon Economics

A moratorium on projects that require a zone change, General Plan amendment or height changes would result in substantial losses for the Los Angeles economy. A wide range of sectors in the Los Angeles economy could benefit from projects that might be subject to the moratorium. Excluding projects that require an exemption would create an estimated loss of $1.9 billion for Los Angeles in a single year. Over the two-year life of the moratorium, the city would forgo $3.8 billion in economic output. Under the assumption that the moratorium stalls projects over a 10-year period, Los Angeles would forgo $19.3 billion in economic output.

Some sectors in the city receive an especially substantial benefit as a result of construction expenditures, as measured by their secondary impacts. Construction activity in Los Angeles supports a number of sectors,
all of which stand to lose out as a result of the moratorium on projects that require a zone change, General Plan amendment or height changes to increase density. Severely limiting developments that require these changes would cost Los Angeles a substantial amount of economic activity.

Limiting construction is especially harmful to the local economy because many construction projects typically take years to complete. Construction projects require substantial inputs of labor and capital, and these inputs support jobs and stimulate output elsewhere in the city. The wages earned by workers at every stage of the supply chain generate additional economic activity in the local economy. A moratorium would freeze this process, harming potential and existing workers in the short and longer term.

### IMPACTS ON EMPLOYMENT

Los Angeles has benefitted immensely from construction projects. A moratorium would lead to considerable job losses in Los Angeles because of the reduction in construction. **In a given year, Measure S would cause the loss of over 12,000 jobs. The two-year moratorium would cost Los Angeles over 24,000 jobs.** For a two-year period, a moratorium would prevent the creation of over 13,840 construction jobs. These represent the direct impact of the construction expenditures, yet the job losses expand far beyond those initial expenditures. A sizable amount of secondary jobs would be lost over this two-year period. According to Beacon Economics’ estimates, the two-year moratorium would cost Los Angeles over 10,260 jobs, many of which are distributed among an array of sectors, including retail, wholesale trade, real estate and transportation.
Assume that the moratorium extended beyond the two-year period and projects affected by the moratorium were delayed 10 years. Based on our forecasts of future construction permit activity, these projects would support an estimated 120,000 jobs over a 10-year period, lost because of Measure S. Of this total, over 69,000 are jobs directly supported through construction spending, while 32,500 are supported through indirect spending and 18,800 are supported through induced spending.

In particular, a moratorium would cause a large number of job losses in the construction sector. The city could expect a decline in economic activity consistent with this drop-off in construction activity. Roughly 57% of job losses will be in construction.

In a single year alone, the moratorium imposed by Measure S would cost over 6,900 construction jobs in Los Angeles. This is roughly 15-17% of all construction employment in the city at this time of writing. As shown in the table, projects that require a zone change, General Plan amendment or height changes generate substantial indirect and induced impacts as well. Of these secondary employment impacts, 3,250 jobs come from indirect impacts and 1,880 jobs from induced impacts. Thus, the measure would not only eliminate construction activity supporting over 6,900 jobs in a given year but also 5,130 jobs supported through secondary effects.

### Impacts on Wages

<table>
<thead>
<tr>
<th>Summary: Economic Impact of Affected Developments on Wages ($ 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
</tr>
<tr>
<td>Direct</td>
</tr>
<tr>
<td>Indirect</td>
</tr>
<tr>
<td>Induced</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: IMPLAN; Calculations by Beacon Economics

With a large number of jobs in the Los Angeles economy supported by construction activity, the wages and earnings that workers connected to construction projects generate for Los Angeles are substantial. In a single year, construction workers would lose over $379 million in wages. Overall, workers in L.A. would lose over $642 million each year. What is more, a two-year moratorium on projects requesting adjustments to Los Angeles’ General Plan would cost construction workers roughly $759 million in income, and $3.8 billion in income in the 10-year scenario. Thus, in the event of a moratorium, Los Angeles should expect a pronounced impact on construction wages.

Because construction projects require substantial capital investment, some of the impacts on wages are in industries that require a wide range of skills and education, including engineers, offices of physicians, legal services, management and accounting. The largest secondary wage impacts are in the wholesale trade sector. Overall, the wages losses across all sectors are substantial. Under a two-year moratorium, projects that do not conform to Measure S’s guidelines would result in wage losses of nearly $1.3 billion.
Measure S and Los Angeles County

A two-year moratorium on projects that require a change to Los Angeles’ zoning codes would create losses that extend beyond the city’s boundaries. For the county overall, a two-year moratorium would create significant losses in terms of jobs, output and wages. Over the two-year period that the moratorium would be in effect, L.A. County would forgo nearly $4.1 billion in economic output. For the balance of Los Angeles County, this translates to a loss of nearly $244 million. In other words, construction projects that take
place within the City of Los Angeles would create an economic impact of $244 million outside of the city’s boundaries in the rest of Los Angeles County.

Construction projects within the City of Los Angeles that require a zone change, General Plan amendment or height changes would create 1,770 jobs in Los Angeles County over the two-year period of the moratorium. The take-home pay of these workers is over $90 million. In short, a moratorium would have impacts on the economy that extend beyond the city boundary to communities in the rest of Los Angeles County.

**Leakages Outside of the City of Los Angeles?**

The measure’s efforts would generate a great deal of uncertainty for prospective development in Los Angeles. As a result, some construction could move outside the city in the long term. But what portion of construction projects that would move beyond the city’s boundaries is unclear for a number of reasons.

Los Angeles has one overwhelming factor to entice developers to build in the city: location. Moreover, if developers were certain that the moratorium would cost them at most two years, it would more than likely be less costly for them to wait out the moratorium than move outside the city but within county limits. Larger construction projects that require a General Plan amendment, zone change, or height change require a significant amount of time at all stages of the development process. The introduction of a moratorium, as proposed under Measure S, would amplify uncertainty for developers, could lead to prolonged delays in activity for many years to come, and further exacerbate the impacts of the moratorium in the City of Los Angeles.

**The Ongoing Impacts of Measure S**

The loss of potential housing and office space in Los Angeles directly translates to a loss of revenue that could be generated through the expenditures of residents and workers in those spaces. Put simply, permit values and construction impacts are only part of the story. Both workers and residents spend money in Los Angeles, and this spending stimulates economic activity in the city. Based on the latest data available, taxable sales in Los Angeles amounted to $11,000 per person in 2015. Accordingly, the impacts of the lost spending were deflated using the Bureau of Labor’s Consumer Expenditure Survey, which provides a detailed breakdown of consumption activity by category. According to Beacon Economics’ estimates of lost consumer spending, Los Angeles would lose an additional $77 million in taxable sales each year.

In addition to affecting housing, retail and office construction, the moratorium stalls hotel construction. With fewer rooms available, less hotel revenue would be generated in Los Angeles. A hotel’s revenue per available room (RevPAR) is used to analyze hotel performance by multiplying a hotel’s average daily room rate by its occupancy rate. According to the latest data available, the RevPAR for Los Angeles is about $196. On a year-over-year basis, RevPAR in Los Angeles County has increased 17.3%. Based on this trend, it is expected that the RevPAR in Los Angeles will exceed $200 soon. Because of the growth in tourism, a RevPar estimate of $200 should be viewed as conservative. Measure S is expected to result in lost hotel revenues of $13 million annually.
**Impacts Moving Forward**

**Highlights:**

In addition to forgoing the jobs, wages, and output associated with lost construction, the city will also suffer lost economic activity on an ongoing basis because of forgone operations at those facilities.

- This economic activity could support an additional 1,130 workers each year, with wages of over $56 million.
- Each year, the city would lose out on an additional $142 million in economic output as the result of lost economic activity.
- Over a ten-year period, the City of Los Angeles would lose out on an additional $1.4 billion in economic output.
- Beacon Economics estimates that non-residential structures forgone could host roughly 3,230 additional jobs, with 140 of these in retail, 80 in hotel, and 3,010 in office and other non-residential employment.

With inadequate office, hotel and retail space, residents and prospective workers both lose out from Measure S. Office, retail and hotel space creates employment opportunities, which benefit the local economy regardless of whether the prospective employees are even Los Angeles residents. Furthermore, retail and office space provides opportunities for cleaning, repair, maintenance, security, administrative and other employment areas not directly related to the tenants.

Our estimates suggest Los Angeles stands to lose out on over $142 million each year under the assumption that the potential approved projects that require a zone change, General Plan amendment or height changes are not allowed to undergo construction. These estimates represent the economic benefits that the tenants of the structures would create in the city each year. In other words, in addition to the losses that stem from forgone construction, there will be ongoing losses because of the lost activity that would take place within the buildings that would otherwise constructed. It is estimated that projects impacted by Measure S could support an additional 1,130 workers each year, with associated wages of $56 million. These jobs and wages would be lost each year because of the construction forgone due to the moratorium.

Additionally, there are a number of jobs that could be situated in the structures that would not be built under Measure S. An office structure, for example, not only accommodates future employment but also a wide range of opportunities for employment in the future across a number of industries that could poten-
itially occupy those structures. Beacon Economics estimates that non-residential structures forgone could host 3,230 additional jobs each year. Over the course of a two-year moratorium, the city would lose 6,460 jobs. In the worst-case scenario, the City of Los Angeles would lose 32,300 jobs over a decade-long moratorium. Because these estimates are static, they are highly conservative. The costs of Measure S are likely to be magnified over time because the City of Los Angeles is able to support less activity that stimulates economic output.

**The Fiscal Impacts of Measure S**

**Highlights:**

- Los Angeles would forgo over $70 million per year in sales, property, transient occupancy and other fiscal revenues with the passage of Measure S—enough to hire over 1,000 new policemen or firefighters.

- This loss of revenue would be difficult for Los Angeles to bear. Important quality-of-life measures funded by the city would be deprived of much-needed revenue, including more than $14 million each year for parks and recreational facilities generated through Quimby and Finn fees.

- The city would lose over $27 million in property tax revenue over the course of the two-year moratorium, and an additional $1.5 million each year in ongoing fiscal impacts.

- Over $10 million would be lost in sales tax revenue each year from combined upfront and ongoing construction and business activity.

In addition to generating significant positive economic impacts, projects requiring General Plan Amendments, zone changes or height changes generate substantial tax revenues for the City of Los Angeles. Vast amounts of revenues are collected during the construction process, coming from various taxes and fees. Measure S would necessarily diminish these gains.

Apart from the upfront costs of halting construction, there are ongoing impacts of a moratorium to consider. New properties ultimately produce a steady stream of tax revenues each year after they are built. These go on to make up a portion of the city’s General Fund. Revenue deposited into the General Fund supports important city functions including police, firefighters, parks and community development. These taxes form a dependable portion of income for the city and are at risk of being undermined by a moratorium.

**Upfront and Short-Run Costs**

**Permit Fees**

From a fiscal perspective, permit fees are one of the most significant benefits of an active building industry. There are a number of different permits involved in the construction process, each including a fee
payable to the city. In estimating the total value of these fees, Beacon Economics used a formula provided by the Los Angeles Department of Building and Safety. This method was chosen because of the complex nature of the city’s permit fee schedule. The list of specific fees used in these calculations, as well as details on methodology, can be found in the fiscal appendix of this report.

The total value of permit fees generated every year in Los Angeles is impressive. For instance, the average new single-family unit or condo generates over $5,000 in fees. Nearly $1.3 million in permit fees are collected every year from new residential construction. Likewise, a typical new commercial building generates over $20,000 in fees. This translates to almost $2.5 million of revenue from commercial permit fees every year —money that could be used to restore decaying utility poles or roadways across the city.

Over the last decade, $40 million in permit fees was collected by the city. This included about $1 million from single-family construction and more than $13 million from multifamily units. Over $25 million came from the construction of nonresidential buildings.

**Beacon Economics estimates that on average, more than $3.5 million will be generated each year in permit fees from projects in Los Angeles facing a moratorium because of Measure S. Over the next two years, more than $7 million in new permit fees would be generated from these projects.** The amount of revenue generated over this period is enough to put an extra 110 Los Angeles police officers on the force. With a moratorium in place, local government stands to lose this revenue. Less construction will translate into a constant, long-term reduction in revenue generated by permit fees.

**Quimby and Finn Fees**

Other important fees resulting from the construction process include those that go directly toward parks and recreational facilities, known as Quimby and Finn fees. Quimby fees, which were recently overhauled by the City of Los Angeles, incur a one-time payment of $10,000 per unit for new single-family units and condos, and $5,000 per unit for new apartment complexes. Finn fees have rates that vary depending on the particular zoning of the property, ranging from $5,000 to $8,000 per unit. Each year, the city collects between $20 million and $22 million from Quimby fees. The reduction in residential construction as a result of Measure S would mean that fewer park fees would be collected in Los Angeles. **A moratorium would cost the city over $14 million each year in Quimby and Finn fees. Over the next two years, more than $29 million would be lost. And over the next decade, more than $145 million in these park fees that would otherwise go to the local government would be lost.**

With the city’s recent overhaul of the Quimby Act, an additional $30 million dollars are expected to be generated from Quimby fees alone. The revenue from these fees must be spent in neighborhoods within a 10-mile radius of where they were originally collected. Because many of them are already deficient in public park space, a reduction in this revenue will only worsen this difficult situation.

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7“First change to developer fees in 30 years could bring in $30 million more for L.A. parks.” The Los Angeles Times. September 7, 2016.
8Ibid.
Ever since Proposition 13 was passed in 1978, local government has been straining its budget to allocate funds toward public recreation. Therefore, Los Angeles has relied heavily on Quimby and Finn fees to finance the development of new parks. Losing some of this revenue as a result of Measure S would be a severe challenge for Los Angeles.

**School Development Fees**

Closely related to park fees are school development fees. Used to help fund the construction costs of new schools, the revenue from these fees can be considerable. For instance, new residential housing units that would be affected by the measure are expected to generate nearly $12.5 million each year in school fees. Moreover, new commercial units that are vulnerable to the measure would generate over $400,000 a year in revenue from these fees. **Over the course of the proposed moratorium, almost $26 million in school fee revenue will be foregone.** Additionally, this source of revenue is expected to generate over $128 million across the next ten years. This revenue is important to the city, as it helps pay for the many facility needs of local public schools. The development of new learning centers, such as science and computer labs, are the types of things this revenue could fund. Under Measure S, a significant amount of revenue generated by school development fees would disappear.

**Ongoing and Long-Run Costs**

**Sales Taxes**

Sales taxes are a crucial component of local revenue for Los Angeles. Each year, more than $370 million in sales tax revenue is generated in the local economy. Because this is generated substantially through commercial activity, it is clear that sales tax revenue increases with new commercial construction. A moratorium due to Measure S would cause a slowdown in this construction, ultimately reducing sales tax revenue for local government.

**Beacon Economics estimates that construction projects subject to Measure S would generate over $9 million worth of sales tax revenue in a single year.** Sales taxes are levied on all of the building materials related to construction, as well as the local spending that occurs because of construction, at the time of construction. **Furthermore, Beacon Economics estimates that nearly $19 million over the next two years and $93 million over the next 10 years would be created from new construction sales taxes on projects subject to Measure S.**
An additional $1 million per year in sales tax revenue is estimated to come from long-term, ongoing business operations at properties subject to Measure S. In addition, more than $2 million over the next two years and over $10 million across the next decade are at risk of being curtailed. As new commercial structures are built, new businesses will fill in most of those spaces. This new business activity will eventually lead to an increase in overall economic output in the city and thus more sales tax revenue.

**Property Taxes**

Property taxes are an even more substantial source of revenue for government in Los Angeles. Some of the spending connected to construction on projects that would be subject to Measure S would generate property tax revenue for the city. Businesses receiving revenue because of this construction spending would invest in new construction or renovations themselves. The sum value of this new source of property taxes is quite substantial. In fact, Beacon Economics estimates that over $13 million worth of property taxes might be forgone in a single year with the passage of Measure S. In two years, that figure would climb to $27 million. In the next 10 years, projects requiring General Plan amendments, zone changes or height changes are expected to generate nearly $136 million from property taxes—all of which are diminishable under the measure.

The ongoing effects of the measure include surrendering property tax revenues from the individuals and businesses that would occupy the new buildings were no moratorium in place. **Beacon Economics estimates that more than $1.5 million per year in residential and commercial property tax revenues would be forgone in such an event. In a decade's time, nearly $16 million of these additional property tax revenues would be lost—the equivalent of hiring 125 new police officers, and 125 new firefighters in Los Angeles.**
Proposition 13 has an important impact on property tax revenues for local government by capping property tax appreciation and property value reassessments. In the short term, because all of the properties subject to the moratorium set forth in Measure S would be new, they would be assessed at their value at construction. But if these residential and commercial properties substantially increase in value in a short amount of time, Proposition 13 would limit the amount of tax revenues levied on them. Yet the impacts of Proposition 13 would be much more severe in the long term than in the short term—such as the first several years after the passage of the measure. Beacon Economics estimates that Proposition 13 would not substantially reduce residential and commercial property tax revenues during the time period in which the measure would likely have its effect. As a result, the property tax revenue estimates above represent a best approach even in the context of Proposition 13.

**Summary: Ongoing Tax Revenues ($ 2016)**

<table>
<thead>
<tr>
<th>Local Taxes</th>
<th>1 Year</th>
<th>2 Year</th>
<th>10 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends</td>
<td>8,130</td>
<td>16,260</td>
<td>81,300</td>
</tr>
<tr>
<td>Social Ins Tax- Employee Contribution</td>
<td>4,930</td>
<td>9,860</td>
<td>49,300</td>
</tr>
<tr>
<td>Social Ins Tax- Employer Contribution</td>
<td>9,620</td>
<td>19,240</td>
<td>96,200</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>1,067,290</td>
<td>2,134,580</td>
<td>10,672,900</td>
</tr>
<tr>
<td>Property Tax</td>
<td>1,551,980</td>
<td>3,103,960</td>
<td>15,519,800</td>
</tr>
<tr>
<td>Motor Vehicle License</td>
<td>590</td>
<td>1,180</td>
<td>5,900</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>241,580</td>
<td>483,160</td>
<td>2,415,800</td>
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<tr>
<td>State and Local: Other Fees</td>
<td>54,290</td>
<td>108,580</td>
<td>542,900</td>
</tr>
<tr>
<td>Personal Tax: Other Fees</td>
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<td>1,175,700</td>
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<tr>
<td>Personal Tax: Motor Vehicle License</td>
<td>390</td>
<td>780</td>
<td>3,900</td>
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<tr>
<td>Personal Tax: Property Taxes</td>
<td>11,250</td>
<td>22,500</td>
<td>112,500</td>
</tr>
<tr>
<td>Total</td>
<td>3,067,620</td>
<td>6,135,240</td>
<td>30,676,200</td>
</tr>
</tbody>
</table>

*Source: IMPLAN; Calculations by Beacon Economics*

**Transient Occupancy Taxes**

Although sales and property taxes are the two largest sources of revenue from construction projects requiring General Plan amendments, zone changes or height changes, various other taxes are involved in the construction process that make up a sizable portion of tax revenue. For instance, transient occupancy taxes are added to every room rented out by visitor accommodation establishments, such as hotels and motels. In recent years, some construction projects requiring a General Plan amendment, zone change or height changes have had a hotel component at some level. A moratorium as established through Measure S would thus put construction of some hotel rooms on hold.

Beacon Economics estimates that with a rate set at 14% per room, transient occupancy taxes on rooms put on hold because of Measure S would generate nearly $2 million in revenue each year for Los Angeles. In two years, these rooms would generate about $4 million in transient occupancy tax revenue, and in 10 years, roughly $20 million in revenue.
**Other Taxes**

After sales, property and transient occupancy taxes, an estimated $4.3 million in other taxes will be generated each year. These include various personal taxes and licensing fees. This forgone local tax revenue would amount to almost $9 million in the next two years, and upwards of $43 million in a decade. Furthermore, another $500,000 per year would be lost as an ongoing effect, and nearly $1 million given up over the course of the moratorium.

<table>
<thead>
<tr>
<th>Other Fiscal Impacts ($ 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
</tr>
<tr>
<td>Permit Fees</td>
</tr>
<tr>
<td>Quimby Fees</td>
</tr>
<tr>
<td>TOT</td>
</tr>
<tr>
<td>Sales Tax</td>
</tr>
<tr>
<td>School Fees</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

*Source: IMPLAN; Calculations by Beacon Economics*

**Conclusion**

In short, Beacon Economics estimates that Measure S would have an overall negative fiscal impact of over $70 million per year in Los Angeles—enough revenue to hire over 1,000 new policemen or firefighters. Over two years, as set forth in the proposed moratorium, this impact would be over $140 million. After a decade, the measure would have a total fiscal impact of $700 million on the city. These forgone revenues account for both the short-term (construction) and long-term (ongoing business activity) costs of the passage of the measure. Los Angeles is left in a significantly more precarious fiscal position by losing such a large source of revenue each year solely because of the passage of Measure S.

**Measure S and the Housing Market**

**Highlights:**

- Home prices and rents in the City of Los Angeles are already high and continue to increase.
- Affordability is not just a problem for low-income households, but also for middle-income households.
- Measure S will stop construction and accelerate the displacement of low-income households, who will face longer commutes.
- What’s needed is not a moratorium on construction, but an updated General plan that will help guide growth in the City of Los Angeles.
Today, home prices and rents in Los Angeles are among the highest in the nation. Primarily, this is because Los Angeles has one of the nation’s tightest supplies of housing. Currently, the supply of homes for sale\textsuperscript{9} in Los Angeles County stands at 3.6 months, compared with more than 4.5 months nationally. At the same time, the vacancy rate for apartment units is among the lowest in the country, 3.5% compared with 4.5% for the nation.

As of the second half of 2016, the median home price in the City of Los Angeles is roughly $690,000. Although home prices in Los Angeles are still below that of Bay Area cities, the growth of home prices in Los Angeles compared with California’s other largest cities is unmatched. Over the last 15 years,\textsuperscript{10} home prices in Los Angeles have increased 400%. By comparison, in San Francisco the median price for a single-family house is $1.19 million. Although Los Angeles has lower prices than San Francisco, during the same 15-year period, home prices in San Francisco increased “only” 229%.

Rising prices and rents are symptomatic of insufficient supply, a condition in Los Angeles that has persisted for decades but especially in the last five years. From 2010 to 2015, Los Angeles added over 200,000 households. Over that same period, fewer than 56,000 residential building permits were issued. There was a surge in building permit activity during the housing boom of the 2000s, but a replication of those circumstances is highly unlikely. Home prices in Los Angeles are now above their pre-recession peaks, and Los Angeles rental rates continue to increase. Coupled with a growing population, owners and renters in Los Angeles will suffer from higher costs of living in the future if development continues to lag the growing population.

\textsuperscript{9}Defined as number of months it would take to sell the current homes on the market.

\textsuperscript{10}From Q2-2001 to Q2-2016 (latest data available).
The actions taken by Measure S will only intensify the already-existing problem. Each year, Measure S could take away 37-45 single-family units, and 2,100-2,800 multi-family units, further straining the housing supply and putting upward pressure on rents.\(^\text{11}\) Restricting projects that require a General Plan amendment, zone change or density growth will increase the costs of the existing stock of housing, harming current and potential renters and buyers. While the prevailing conditions of a limited supply and excessive demand have made prices and rents rise, Measure S will intensify this problem. Therefore, policy should increase, not decrease, the supply of single- and multi-family housing stock, contrary to what the measure prescribes.

**Housing and the Rental Market**

The demand for housing in Los Angeles is now stronger than it has been in recent years, because of improving economic conditions and historically low interest rates. In Los Angeles, the median home price has increased an average of 13.3% per year over the past three years. Although some of these price gains may be driven by job growth and higher incomes, the share of households using over 30% of income on housing remains far above the national average.\(^\text{12}\)

\(^{11}\)These figures are based on the actual numbers of permitted units associated with projects that required a GPA/ZC. The proposed number of units is typically much higher than the number permitted. For example, the ratio of proposed to permitted units was 2.8 to 1 in 2014 and 2.0 to 1 in 2015. Therefore, the actual number of permitted units was closer to the number actually proposed, the number of housing units lost because of Measure S would be considerably higher.

\(^{12}\)Housing prices are much higher in Los Angeles than the U.S. According to the National Association of Realtors, median housing prices in Los Angeles Metropolitan-Statistical Area is $536,700 compared to $240,900 for the U.S. median housing prices.
The rental market in Los Angeles has heated up in recent years because many low- and middle-income households have been priced out of the ownership market. As AIDS Healthcare Foundation President Michael Weinstein—who leads the effort to enact Measure S—has said, “With rents in Los Angeles climbing just as high as the towering, ‘mega’ structures developers want to throw up across the city, almost 60% of L.A. renters are now spending more than the recommended 30% of their income just to keep a roof over their heads.”13 Clearly, affordability is a substantial problem in Los Angeles. But what Weinstein does not acknowledge is that the supply of housing is at the root of the affordability problem. Measure S would reduce the supply of housing in Los Angeles, making the affordability problem even worse.

Many low- and middle-income households continue to turn to the local rental market. For instance, in 2015 61.6% of workers aged 16 years and older lived in renter-occupied units in Los Angeles. By comparison, this share was 45.4% in California and 34.6% in the United States. The rate of homeownership in Los Angeles has continued to trend down over the last decade, and the share of renters continues to rise. Becoming a homeowner in Los Angeles is increasingly difficult because of financial and affordability obstacles. As of 2015, the homeownership rate in the City of Los Angeles stood at 36%. By comparison, the homeownership in the nation was 63%.

What tends to get lost in this story is that the affordability concerns in Los Angeles are increasingly becoming a middle-class problem. For example, in the market for owner-occupied homes, a household must earn at least $94,000 in order to afford the payment on a median priced home in Los Angeles County. Home prices are more expensive in the City of Los Angeles, however. It’s safe to say that a household would need to earn over $100,000 to afford the payment on a median priced home in the City of Los Angeles today.

Renter households are struggling to keep up with the rapid increases in the cost of living caused by the region’s tight supply of housing. In fact, Los Angeles is frequently cited as having one the highest rent burdens in the county. As indicated by the rising rents and low vacancy rates, more multi-family construction is desperately needed to offset the wave of rising rents and the burdens they impose on existing and future residents.

The City of Los Angeles continues to face critical policy problems, not the least of which is housing. Rising home prices and rents mean that the city is not producing enough housing. This is not a low-income problem, but one that extends to middle-income households as well. In many parts of the state, rent as a share of renter income exceeds the 30% threshold that is considered to be the norm. This has ramifications for employers who increasingly find it difficult to hire and retain qualified employees. Solutions will be hard to come by, but must include reducing permitting and regulatory burdens associated with construction costs, and possibly, tax reform.

High housing costs have also made Los Angeles an increasingly difficult place for lower-income residents to maintain their quality of life, while many middle-income residents are having trouble moving from

renting to homeownership. In Los Angeles in 2015, nearly 58% of all renter households spent 30% or more of their income on rent. The share of renter households was unchanged from the 2010 figures.

Affordability is not confined to lower-income renter households. By taking away additional units from the housing stock, Measure S would reduce the potential supply of housing, which in turn would worsen the affordability problem that renters are facing.

**Measure S and Land Use**

The city’s zoning laws and General Plan are constraining the supply of housing. A key way to increase the overall supply of housing in Los Angeles is to allow projects that would not normally fit an outdated General Plan for the city (with inconsistent height restrictions from parcel to parcel, for instance) to be approved through a General Plan amendment, zone change or height changes. These projects are approved on a case-by-case basis, through a public process. Some may require an adjustment to a height restriction or a mandated floor area ratio (from 2:1 to 3:1 [building size/lot size], for instance). The projects may involve only a few units, or they may involve hundreds of units and thousands of square feet of commercial property.

General Plan amendments, zone changes or height changes allow the city to approve important projects that encourage economic activity and urban renewal.

Projects in need of General Plan amendments, zone changes or height changes serve an essential role in alleviating the tight supply of residential and commercial stock in Los Angeles. Consequently, Measure S threatens to severely impede development. Fewer residents would be able to afford homes, while the supply of housing would fall even faster, discouraging in-migration to Los Angeles by prospective residents or businesses. Impediments to supply would only make existing problems worse.

**The Growing Importance of Multi-Family Development**

As it stands, land for large-scale single-family construction projects in Los Angeles is virtually nonexistent. Instead, developers in the city willingly pursue multi-family construction projects, increasingly in commercial and mix-used areas with access to transit. Even so, it would take years to address the city’s housing shortage by increasing the supply of multi-family housing. The underlying problem is that multi-family housing units are often a source of contention; thus there is a higher chance that increasing multi-family housing will be met with more regulations and opposition.

Supporters of Measure S argue that developers are concerned only with luxury housing. In essence, the argument made on behalf of the measure is that new developments will turn affordable neighborhoods into unaffordable ones, bringing an influx of upper-class residents and displacing the current occupants. But developers would not enter the market if there was not sufficient demand. There would be no reason for developers to build housing if it was priced out of anyone’s reach. Why is this problematic? Because if that demand exists, it will relocate elsewhere, displacing existing middle and lower-class tenants regardless.
Does new development benefit only the upper class? A study conducted by the nonpartisan California Legislative Analyst’s Office (LAO) found low-income neighborhoods in the Bay Area with a significant amount of new construction have experienced half the displacement of comparable neighborhoods that have not added much new housing. Although rents and housing costs will continue to rise over time, adding supply can help subdue the acceleration in rents while mitigating the displacement of lower-income households due to higher rents. While affordable housing is an important program, it only helps a small fraction of those struggling. The LAO found that the majority of low-income households receive little or no assistance and that “affordable housing programs to serve these households would be extremely challenging and prohibitively expensive.” Instead, the LAO suggested that expanding construction should be used to slow the burden on lower-income households:

“As market–rate housing construction tends to slow the growth in prices and rents, it can make it easier for low-income households to afford their existing homes. This can help to lessen the displacement of low-income households.”

Clearly, depriving Los Angeles of potential housing would intensify the displacement effects of rising rents.

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15 Ibid.
Estimating the Impact of Rent Increases

Will more multi-family units slow the increase in rents? To empirically estimate the impact of additional multi-family housing units on rents, Beacon Economics developed an econometric model using data from REIS, the American Community Survey, the U.S. Census, and the Quarterly Census of Employment and Wages. Rents were estimated as a function of the change in incomes, employment and the growth in multi-family housing stock for 30 U.S. metropolitan areas. This type of model holds constant economic factors such as incomes and employment so that we are able to isolate them and assess how the change in the multi-family housing stock impacts rents.

According to the latest figures from the American Community Survey, there were nearly 871,000 renter-occupied housing units in the City of Los Angeles. As mentioned earlier, the findings from our model suggest that fewer available housing units lead to an increase in rents. While the increase in rents as a result of fewer housing units is not dramatic, it is spread across a large population of renters. This represents a transfer of wealth from renters to landlords that could have been spent in the Los Angeles economy. The annual impact of the lost consumer surplus is detailed in the table above. The transfer of wealth from renters to landlords due to rent increases would create a total loss on the part of renters of roughly $10.6 million each year in the City of Los Angeles. In addition, the increase in rents would cost workers over $4.2 million in wages each year. During a two-year moratorium, the transfer of wealth from renters to landlords due to rent increases would create a total loss of $21.2 million. Over a ten-year period, this amounts to $106 million lost.

At the current rate of rent increases, renters in the City of Los Angeles are collectively paying $74 million per year. Rents rise due to a number of factors including population increases, changes in incomes, and change in housing stock. The results from our model isolate the impact of the change in the stock of multi-family housing. Needless to say, the moratorium would only make the current situation that much worse. An economist once said that prices are like thermometer readings, and that simply submerging the thermometer in ice water does little to address the underlying reality surrounding those prices. Measure S would only accelerate the current pace of rent increases. What is needed is not a moratorium on construction, but an updated General plan that will help guide growth in the City of Los Angeles. In theory, in a balanced market, rents would not rise dramatically. Los Angeles, however, has a long history of insufficient housing. This, in turn, has created a steep uphill battle for renters in the city. What is more, with the relationship between the supply of units and rents established, the converse of Beacon Economics’ findings holds true: slowing the growth in multi-family housing would increase rents at a faster rate.

| Summary: Annual Economic Impact of Increased Rents on Residents($ 2016) |
|---|---|---|---|
| Impact | Jobs | Wages ($) | Output ($) |
| Direct | 60 | 2,902,620 | 6,687,620 |
| Indirect | 10 | 677,720 | 2,006,610 |
| Induced | 10 | 643,060 | 1,879,510 |
| Total | 80 | 4,223,390 | 10,573,730 |

Source: IMPLAN; Calculations by Beacon Economics
Measure S will restrict the supply of housing, but restricting the number of housing will make existing land in Los Angeles more expensive. There is simply not enough spare land to go around. One of the largest (if not the largest) costs for developers is land. Both affordable and luxury housing require roughly the same labor and capital. Although backers of Measure S are in favor of affordable housing, putting additional restrictions on what can be built and where decreases the likelihood that affordable housing will be built.

Not all parcels are created equal. Higher prices may dictate more intensive development, which will fall beyond prevailing zoning and General Plan ordinances. Historically, construction kept pace to subdue rising housing costs:

“In fact, in more than one-third of the larger American cities that added housing units faster than the national rate since 1980, real median housing prices actually fell. In the sprawling cities of the American heartland, land remains cheap, real construction costs are falling, and expanding supply keeps housing prices down.”

In 2013, 23% of multi-family units were permitted with a General Plan amendment, zone change, or height district change. In 2014 this fell to 6%, but increased to 16% in 2015. This amounts to a couple thousand units that would not have been created under the guidelines of Measure S. The importance of multi-family housing will continue to rise because there is only so much spare land available for new development. Relying on an outdated General Plan will intensify the burden on existing residents because rent rise dramatically with restrictions on housing development. In other words, less land makes relying on the General Plan obsolete because it fails to address current conditions.

The Burden on Residents that Stay

The impacts of a two-year moratorium would put an unnecessary burden on existing and prospective residents in Los Angeles. Measure S would contribute to the rising rents that either displace residents or lead to overcrowding. As it stands, sizable numbers of Los Angeles residents spend a high proportion of their incomes on housing costs. In fact, L.A. residents pay higher rent (as a percentage of household income) than notoriously unaffordable cities such as San Francisco, San Jose and New York. At the city level, Los Angeles residents spend an average of 47% of their income on rent, which is the highest percentage in the United States.

When a family devotes a higher share of its income to fixed payments such as rent, this puts the family at risk financially because the income earners are able to save less. In other words, higher costs of living make it harder for income earners to adjust to any shocks to their income (emergencies, for example). It also makes it more difficult for families to save for a down payment on a home. Lower-income tenants face the highest risks from rising rents because they are more vulnerable to eviction.

In the extreme, some of those evicted are at risk of becoming homeless, which already imposes great costs on Los Angeles. Currently, nearly 47,000 homeless people are in the streets and shelters in the County

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17“UCLA study identifies L.A. as most unaffordable rental market in the nation.” Newsroom.UCLA.edu Aug. 12, 2014.
of Los Angeles, and nearly two-thirds (28,000) of them live in the City of Los Angeles.\textsuperscript{18} According to city officials, Los Angeles currently spends more than $100 million each year to combat homelessness.

Making Los Angeles less affordable will contribute to the city’s homelessness problem. Much of the money that the city spends each year on homelessness goes to law enforcement (up to $87 million) rather than addressing the epidemic. Moreover, the homeless population also imposes costs on the city’s public facilities, recreation, parks, sanitation and paramedics. A 2015 report from the City Administrative Officer of Los Angeles found that the Bureau of Sanitation and the Los Angeles Public Library spent over $850,000 in cleanups and increased security in 2014.\textsuperscript{19} The housing crisis and skyrocketing rents have already begun to drive low-income residents from their homes, and Measure S would likely add to this trend.

The measure would likely also increase overcrowding in housing. High housing costs are associated with a higher likelihood of overcrowding. In fact, California households are four times more likely to live in crowded housing, primarily because of tight supply and high housing costs. Although a number of factors can impact crowding, the measure would increase the likelihood of overcrowding.

**Commuting**

With many Angelenos already struggling to make rent, Measure S could effectively price some of them out of the rental market, requiring them to move. Los Angeles provides many job opportunities that appeal to both workers and employees alike. According to the U.S. Census Bureau, more than half (about 700,000) of workers in Los Angeles live in the city.\textsuperscript{20} With rent consuming a larger share of income, some residents may be forced to move either outside of the city or to the city’s cheaper submarkets, which may displace residents currently housed in areas that are relatively affordable.

This trend already exists. Rent in many of the city’s affordable submarkets has risen faster relative to more expensive areas. For example, the Inglewood/Crenshaw submarket’s rent increased 7.0% from the second quarter of 2015 to the second quarter of 2016. Over that same period, rent in the Palmdale/Lancaster submarket rose 7.5%. Over the long run, Measure S is likely to accelerate the gentrification process in the county and city’s relatively affordable submarkets.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{mean_travel_time_to_work.png}
\caption{Mean Travel Time to Work (Minutes) for Los Angeles, 2005 to 2015}
\end{figure}

\textsuperscript{19}“Homelessness and the City of Los Angeles.” Office of the City Administrative Officer. April 16, 2015.
This creates a displacement for existing residents and also adds to Angelenos’ commute times for those who leave the city. According to the 2015 American Community Survey, 13.3% of L.A. residents had a commute 60 minutes or more. Do higher housing costs in fact lead to longer commutes? An analysis from the LAO found that a 10% increase in rent is associated with a 4.5% increase in average commute time.\textsuperscript{21}

Longer commutes impose additional costs on residents in both monetary (such as wear and tear on vehicles) and non-monetary measures (such as time). Residents unable to adjust will have to move to areas that are relatively affordable, and in many cases they will incur additional costs in doing so. For example, Palmdale has some of the lowest rents in Los Angeles County, and not surprisingly, also the longest average commute time in the greater Los Angeles area—42.9 minutes.

**Conclusion**

Placing a moratorium on projects that do not conform to Measure S’s guidelines is not conducive to supporting the growing population of Los Angeles. Reducing residential construction would further accelerate increases in home prices and rents.

Although the consequences are multidimensional, Measure S would have the greatest impact on lower-income residents who do not leave Los Angeles; they are burdened with having to spend a higher portion of their incomes on housing, leaving them with less income to spend elsewhere. Although lower-income residents suffer the greatest burden from the measure, middle-class residents would also suffer from the cutback in residential developments as their rents become marginally unaffordable over time. To alleviate the housing affordability crisis that has struck low-income and middle-income households, more housing construction needs to take place. Measure S, however, would do just the opposite.

Fiscal Impacts Appendix

Permit fees that were figured into our calculations include:

- Building Permit Fee
- Plan Check Fee
- Plan Maintenance Fee
- EQ Instrumentation
- Issuing Fee
- Planning (includes $10 miscellaneous)
- One-Stop Surcharge
- System Dev Surcharge
- State Green Building Surcharge

An Energy Surcharge is added to new buildings or additions.

A Disabled Access Surcharge is added to multi-family and commercial projects.

Additional grading pre-inspection and posting fees may be required for projects in a hillside area.

It should be noted that Beacon Economics has taken a rather conservative approach to these estimates. In doing so, we chose to exclude the Arts Development and School District fees. The Arts Development fee is applied to commercial projects with a valuation of $500,000 or more. The School District fee is applied to projects with a new floor area of 500 square feet or more. A project’s “valuation” is the total value of all construction work for which the building permit is issued, including all painting, roofing, electrical work, plumbing, permanent or fixed heating equipment, elevator equipment, fire sprinkler equipment and any other permanent portions or permanent equipment.

The abovementioned information may be found at:

http://netinfo.ladbs.org/feecalc.nsf/cef2203faf5fd7df8825779900644031?OpenForm

Complete schedules for the abovementioned permit fees may be found on the City of Los Angeles Department of Building and Safety’s website:

https://ladbs.org/faq/fee-schedules

School development fees are exacted at a rate of $3.36 per square foot for residential units, and $0.54 per square foot for commercial units.
Methodology

Permit Fees

Using an online calculator provided by the Department of Building and Safety, we ran various simulations to obtain an average rate of permit fee expenses. Our range for permit valuations was from $1 million to $100 million. These valuations were applied to both residential and commercial construction projects, including new buildings, additions and alterations/repairs. From our simulations, we obtained an average permit fee rate of 0.93% for residential projects. Similarly, we obtained a rate of 0.95% for commercial projects. We then took the average of these two rates, attaining a final permit fee rate of 0.94% for all types of construction projects. This rate was applied to the total valuation of all permits: single and multifamily residential, as well as nonresidential commercial.

School Development Fees

Because a vast majority of the residential properties that would be affected by the measure are multifamily units, we chose to use the average size of these properties in evaluating the impact of school development fees. Based on the observations for which unit size was available in our dataset, the average multifamily unit was 1,308 square feet. Fees on residential structures are assessed at a Level I rate of $3.36 per square foot, while commercial structures are assessed at a Level I rate of $0.54 per square foot.
**Glossary**

**Output**: Output represents the value of industry production. In the context of this report, output is an approximate measure of the money that construction adds into the Los Angeles economy to be spent on local goods, services and wages.

**Direct Effects**: The set of expenditures applied to the predictive model (i.e., I/O multipliers) for impact analysis. It is a series (or single) of production changes or expenditures made by producers/consumers as a result of an activity or policy. These initial changes are determined by an analyst to be a result of this activity or policy. Applying these initial changes to the multipliers in an IMPLAN model will then display how the region will respond economically to these initial changes.

**Expenditures**: Expenditures are the values of the amounts that buyers pay, or agree to pay, to sellers in exchange for goods or services that sellers provide to them or to other institutional units designated by the buyers.

**Input-Output Analysis**: A type of applied economic analysis that tracks the interdependence among various producing and consuming sectors of an economy. More particularly, it measures the relationship between a given set of demands for final goods and services and the inputs required to satisfy those demands.

**Indirect Effects**: The impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money leaks from the local economy, either through imports or by payments to value added. The impacts are calculated by applying Direct Effects to the Type I Multipliers.

**Induced Effects**: The response by an economy to an initial change (direct effect) that occurs through re-spending of income received by a component of value added. IMPLAN's default multiplier recognizes that labor income (employee compensation and proprietor income components of value added) is not a leakage to the regional economy. This money is recirculated through the household spending patterns causing further local economic activity.\(^\text{22}\)

\(^{22}\)Source: IMPLAN.com and Berkeley.edu
**About Beacon Economics**

Beacon Economics, LLC is a leading provider of economic research, forecasting, industry analysis, and data services. By delivering independent, rigorous analysis we give our clients the knowledge they need to make the right strategic decisions about investment, growth, revenue, and policy. Learn more at www.BeaconEcon.com.

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