QUANTIFICATION OF THE ECONOMIC IMPACT OF REMOTE WORK POLICIES ON CITY OF SACRAMENTO AND SACRAMENTO DOWNTOWN

Presented to: Downtown Sacramento Partnership

Presented by: Varshney & Associates, Sacramento, California

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VARSHNEY & ASSOCIATES

HEALTHCARE • INVESTMENT MANAGEMENT • BUSINESS CONSULTING

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EXECUTIVE SUMMARY

Introduction

Without swift action and a collaborative approach to mitigate impacts of telework policies following the COVID-19 pandemic, **Downtown Sacramento will suffer an estimated $4.37 billion economic loss over the next two decades**, resulting in a devastating hit to the capital city and severely impact those who call this region home.

Over 40 percent of the office inventory in the central city is state-owned and workforce-operated, which left Sacramento and the city center vulnerable, and showcasing the undeniable effects the lack of daytime employees could have on an area. Following the COVID-19 pandemic, there was a significant shift in working models for in-office employees which held profound and unanticipated short and long-term impacts to the region. Outside of Washington, D.C., few city centers in the country are more impacted by state government remote work policies than Sacramento in terms of reliance on federal workforce and directly related industries.

Downtown Sacramento Partnership engaged with Varshney & Associates to conduct an economic study to quantify the estimated impacts of hybrid and telework models on downtown Sacramento. This new reality has had dramatic and devastating impacts on the economic vitality of downtown Sacramento, and without urgent and significant strategic actions, these impacts will have a profound effect throughout the capital region for decades to come.

Through this study, key findings showed:

- State of California telework has an estimated negative economic impact on Downtown Sacramento of over $218.5 million annually.

- Over the next 20 years, the negative economic impact on Downtown Sacramento is estimated to surpass $4.37 billion.

Background

Pre-2020, the State of California employed over 70,000 workers in the capital region, a majority of whom worked from offices in downtown Sacramento regularly. During the first quarter of 2020, the state departments broadly adopted emergency telework policies due to the global pandemic, but while California's State of Emergency related to the pandemic officially ended in the first quarter of 2023, a majority of eligible state employees continue to work remotely at a greater rate than the national average of government employees.

California State buildings are 40% of downtown Sacramento's office inventory, creating a large reliance on its population to the viability of the city for the last 20-30 years. Further, as the capital city to a state whose gross domestic product (GDP) projected to be the world's 4th largest economy, Sacramento is highly dependent on decisions and policies related to the State of California's department headquarters located in the region.

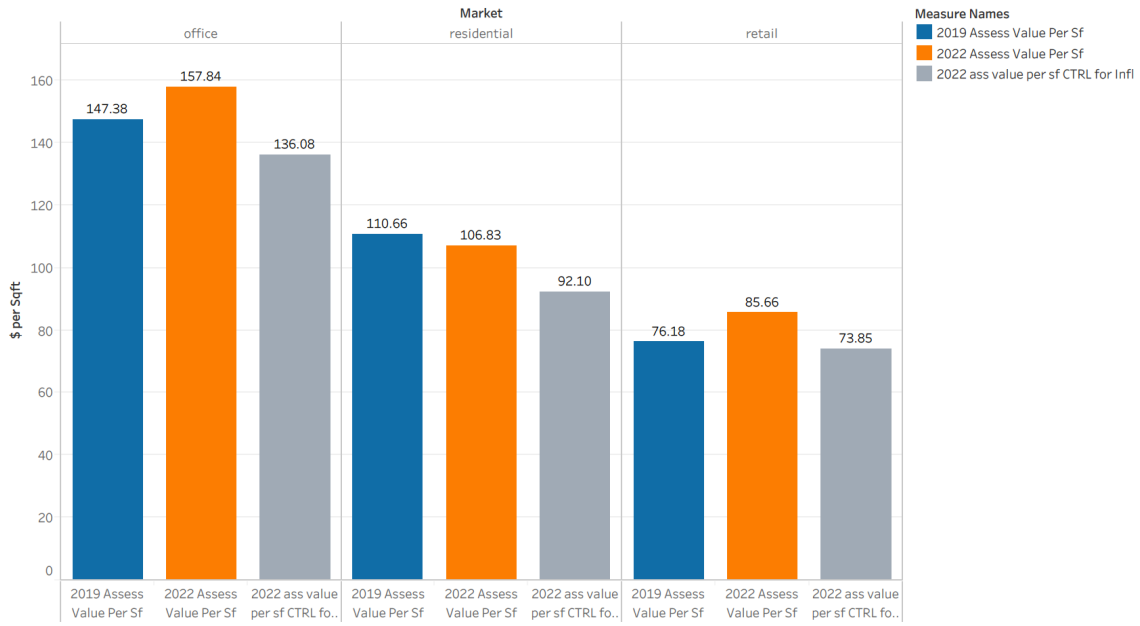
Following the widespread turn to remote office work in March of 2020, over 50 locally owned businesses have closed, 20 in the first year of the pandemic alone. There has been a 26.5% decrease in sales tax from 2019-2022, just over $2 million dollars. While anecdotally we noted a decrease in the foot traffic observed, through data analysis it was discovered that pedestrian counts dropped from an average of 200%, taking a tremendous toll on not only businesses, but also on public space impact. It was clear that downtown had taken a toll, and with it, the city as a whole followed.

In June 2023, Downtown Sacramento Partnership engaged Varshney & Associates to conduct an economic impact study to help quantify the estimated impact of hybrid and telework work models on Downtown Sacramento, defined as the 95814-zip code, as well as Greater Sacramento City, defined as Congressional District 6.

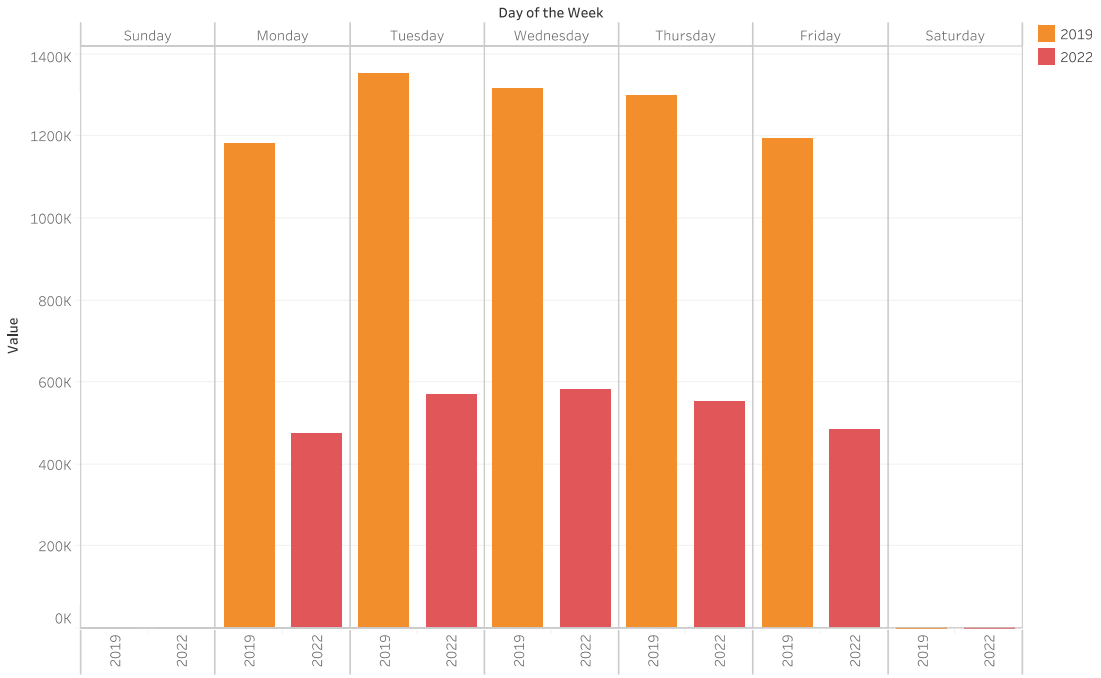
The purpose of this study was to quantify the loss over a short and long-term period of time to not only the downtown core to California's state capital, but also to the Sacramento region as a whole. This included losses in real estate value, employee spending, hotel revenue, among others, with an estimate of total loss both per year and over a maximum of a 20-year period.

Data

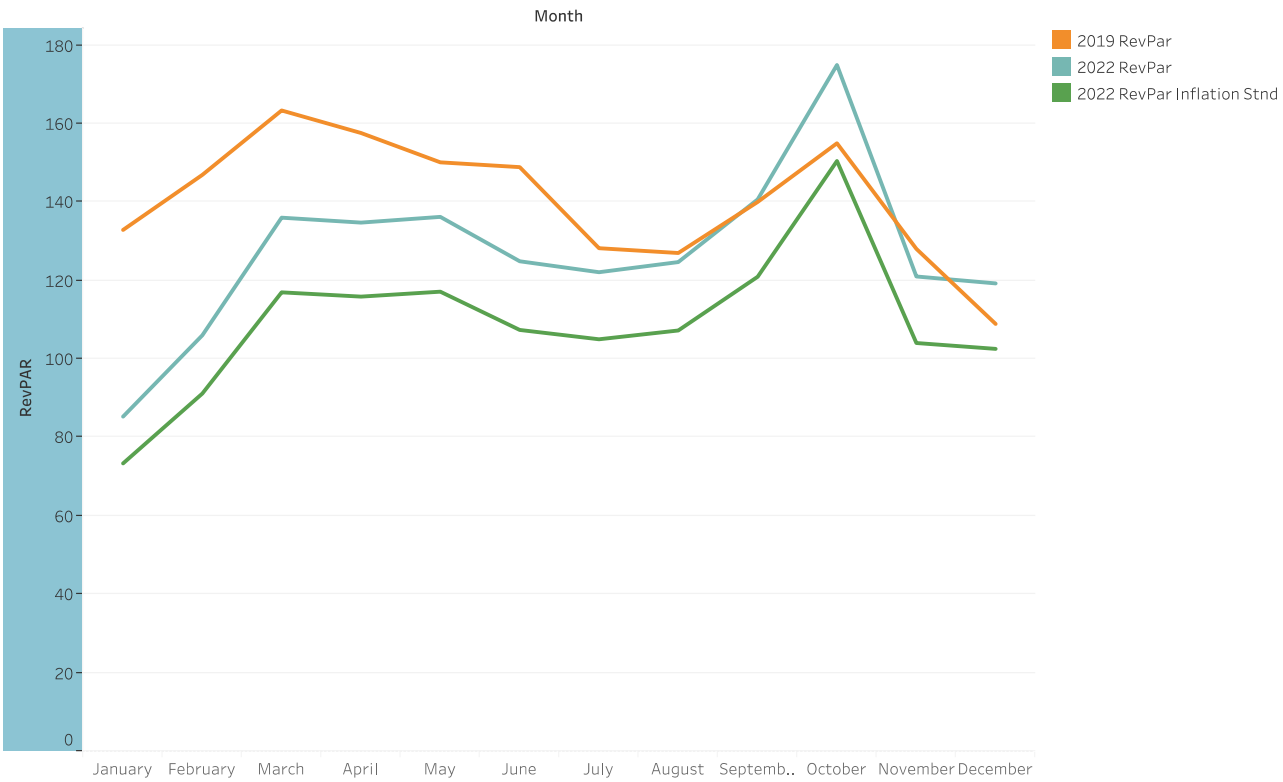
Graph 1: Even when controlling for inflation, it was found that the assessed value of properties in downtown Sacramento were not consistent with inflation and that post-covid properties were now worth less than they were pre-Covid. This was due, in large part, to telework models implemented at the State level.



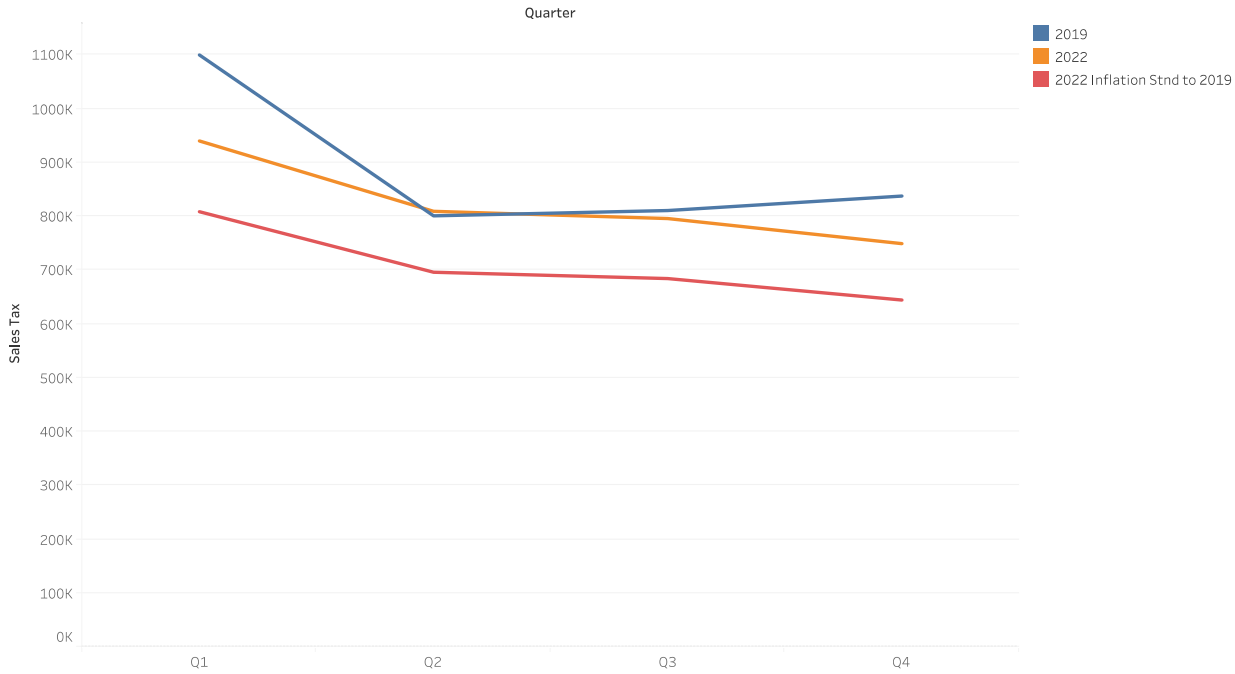
Graph 2: Comparing the amount of State workers in 2019 and 2022, Graph 1 shows a staggering loss of over half the number of employees following telework implementations.



Graph 3: Sales Tax numbers showcase the lack of business downtown following the rise of telework policies - when controlling inflation, the difference is further staggering.



Graph 4: 2022 Revenue per Available Rooms (RevPARs) have stayed consistently beneath 2019 numbers, especially when controlled for inflation.



Findings

Findings through the economic impact study were astounding, far outweighing the initial projections of loss to Sacramento through the downtown core alone. The three major areas of revenue loss to the city of Sacramento due directly to telework models can be separated into three major impact areas: real estate value depreciation, retail revenue loss, and hospitality revenue loss.

Reduced demand for commercial office space directly influenced the assessed values of Downtown real estate. The reduced demand and vacancy rates translated into lower lease rates and, consequently, lower property values per square foot. **Real estate loss over a 20-year period will be nearly $2.7 billion, with a total loss of assessed value of office, retail, and residential real estate in Downtown Sacramento is nearly $135 Million per year**.

In 2019 there were roughly 70,000 stater workers downtown, and each daytime state employee contributes, on average, almost $3,000 per year. **The loss of the daytime workforce will lead to over $50 million in loss of the employee spendings per year, with over $1 billion in revenue loss to the city over a 20-year period**.

Since 2019, Revenue per Available Room (RevPAR) is down an average of $28 (per room), making the total loss in the downtown core $75,956 per day. **Without intervention, hotel revenue loss will be nearly $28 million per year, with nearly $554 million lost over a 20-year period**.

Needs and Next Steps

While the study primarily focused on three primary economic aspects—namely, the loss of Downtown real estate value, decreased employee spending, and reduced hotel revenues—it is important to acknowledge the broader spectrum of potential repercussions. Among these are the declining activity levels in sectors like restaurants, retail, entertainment, and transportation, all of which form integral components of Sacramento's economic ecosystem.

The multifaceted impact of telework models extends beyond the three primary factors studied, creating a complex web of economic challenges for Sacramento Downtown, which will require innovative strategies to adapt and thrive in this evolving landscape.

QUANTIFICATION OF THE ECONOMIC IMPACT OF REMOTE WORK POLICIES ON CITY OF SACRAMENTO AND SACRAMENTO DOWNTOWN

INTRODUCTION AND PURPOSE

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Over 40 percent of the office inventory in the central city is state-owned and workforce-operated, which left Sacramento and the city center vulnerable, and showcasing the undeniable effects the lack of daytime employees could have on an area. Following the COVID-19 pandemic, there was a significant shift in working models for in-office employees which held profound and unanticipated short and long-term impacts to the region. Outside of Washington, D.C., **no city center in the country is more impacted by state government remote work policies than Sacramento** in terms of reliance on federal workforce and directly related industries.

Downtown Sacramento Partnership engaged with Varshney & Associates to conduct an economic study to quantify the estimated impacts of hybrid and telework models on downtown Sacramento. This new reality has had dramatic and devastating impacts on the economic vitality of downtown Sacramento, and without urgent and significant strategic actions, these impacts will have a profound effect throughout the capital region for decades to come.

The impact includes the decreased business activity due to transfer to work from home (WFH) models, the jobs taken away from service, retailing, hospitality and other sectors of City of Sacramento and Sacramento Downtown local economies, the respective decrease of income generated by those employed, and the incremental loss of business taxes created.

Background

Pre-2020, the State of California employed over 70,000 workers in the capital region, a majority of whom worked from offices in downtown Sacramento regularly. During the first quarter of 2020, the state departments broadly adopted emergency telework policies due to the global pandemic, but while California's State of Emergency related to the pandemic officially ended in the first quarter of 2023, a majority of eligible state employees continue to work remotely at a greater rate than the national average of government employees.

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Issues of the Study

The specific issues addressed in this study are:

➢ How much business activity do remote work policies eliminate in Sacramento Downtown?

➢ How this overall impact is diffused through the various sectors of the economy of the Sacramento Downtown and City of Sacramento as a whole?

➢ Which factors related to WFH transition and in what degree produce negative impact on Sacramento Downtown and City of Sacramento economies?

➢ How many jobs in service and related sectors in Sacramento Downtown and City of Sacramento are eliminated as a result of WFH transfer?

➢ How negative economic impact of WFH can further be quantified in terms of output, value added, labor income, and indirect business taxes?

METHODOLOGY

Two models were used in this analysis. A specially designed "feeder" model was created to estimate direct negative economic impact of transfer to WFH. Then, IMPLAN was used to compute the overall long-term (20 years time horizon) direct, indirect, and induced economic impacts.

Specialty Feeder Model

The economic impact assessment hinges on the concept of expenditures occurring within a well-defined geographic region. To gauge the extent of these expenditures, the analysts devised a

specialized "feeder" economic model tailored to address the variables and key factors associated with the transition to a work-from-home (WFH) paradigm in Sacramento Downtown. This model served as the foundation for supplying input data to the subsequent IMPLAN analysis, shedding light on the precise mechanisms through which the negative economic consequences of WFH ripple across both the City of Sacramento and its Downtown core.

Within the feeder model, several variables were taken into account to comprehensively evaluate the effects of WFH. These encompassed factors such as the devaluation of Downtown real estate, diminished employee spending, and reduced hotel revenues resulting from a portion of the workforce adopting the WFH model. However, it's important to recognize that these are not the sole variables at play. The implications extend further, touching upon other facets of the local economy. This includes the potential contraction in sectors like dining, retail, entertainment, and transportation, which have historically thrived on the patronage of Downtown office-goers.

Therefore, while the initial focus was on Downtown real estate, employee spending, and hotel revenues, the overarching impact of WFH on Sacramento Downtown is far-reaching and multifaceted, necessitating a nuanced understanding of the broader economic dynamics at play beyond the applied feeder model.

IMPLAN Model

The methodology of IMPLAN tool is based on economic input–output modeling. It is a quantitative approach that measures and forecasts the interdependencies between different sectors of a national economy. Under this methodology inter-industry relationships within an economy are quantified and represented in the input-output matrix.

The primary analytical tool used in this study is the econometric input-output model IMPLAN. This model is the mechanism that computes the impact of a level of expenditures in terms of overall economic activity, job creation, non-income tax generation, etc. It provides modeling based on data and tools to assess economic impacts at the state, county, and micro (zip-code) levels.

It is widely recognized and used nationally and regionally, and its clients, more than 1,500 active users in the United States and internationally, include the federal government, state governments, universities, and private sector consultants.

The benefit of using input-output models, including IMPLAN, is that they help evaluate the effects of industries on each other based on the supposition that industries use the outputs of other industries as inputs. Some other models measuring economic activity examine only the total output or employment of an industry, and not the dual causality that may run both ways. The use of an input-output model provides a much more comprehensive view of the inter-related economic impacts. It examines economic relationships between businesses and between business and consumers.

Each industry that produces goods and services has an influence on, and in turn is influenced by, the production of goods and services of other industries. These interrelationships are captured through a multiplier effect as the demand and supply trickle over from industry to industry (i.e., direct and derived demand) and thus impact total output, compensation, employment, etc. Multipliers may vary from one region to another depending on the strength of these interrelationships. IMPLAN data can be used to compute economic impact at the regional and county levels. Of particular interest are

industry output, employment, value added as measured by employee compensation, and taxes on production and imports.

Multiplier Effect

Multipliers are the basis of how an input-output analysis system such as IMPLAN makes estimations of the potential impacts of economic changes. The multiplier is defined as the impact of a one-unit change in indicators such as income, sales, employment, that causes the respective effect in income, sales, employment in the economy of the area. Expressed as a rate of change, a multiplier describes how for a given change in a particular industry a resultant change will occur in the overall economy. For instance, for every dollar spent in the economy an additional $0.25 of economic activity is generated locally, implying a multiplier of 1.25.

The concept of the multiplier effect is based on understanding of the financial funds turnover in the economy as a recycling process. In this case, the recycling of dollars is analyzed within the certain territorial borders defined by the zip codes that represent the service area of the CNUMC.

The direct, indirect, and induced benefits arising due to the multiplier effects can be presented in five ways: output, employment, labor income, value added, and taxes on production and imports.

- ***Output*** accounts for total revenues including all sources of income for a given time period for an industry in dollars. It is the total production value and includes all components of production such as employee compensation, proprietor income, intermediate expenditures, taxes on production and imports, and other property type income. This is the best overall measure of business and economic activity. For example, an output multiplier of 1.5 means that for each dollar of spending or reduction of spending, an additional 50 cents is spent in or taken away from other sectors because of related business-to-business and consumer spending.

- ***Employment*** demonstrates the number of jobs generated and is calculated on an annual full-time/part-time basis. IMPLAN is an annual model, therefore Employment estimates provided by IMPLAN represent annualized Employment values (i.e. if a worker works 6 months, IMPLAN counts that as 0.5 jobs, and one job sustained over 5 years counts as 5 jobs). A person can hold more than one job, so the job count is not necessarily the same as the count of employed persons. For example, an employment multiplier of 1.5 means that for each two jobs created or eliminated, an additional one job is created or eliminated because of related business-to-business and consumer spending.

- ***Labor Income*** represents the total value of all forms of employment income paid for a given time period. It includes all forms of employee compensation paid by employers (e.g., total payroll costs including benefits, wages and salaries of workers, health and life insurance, retirement payments, non-cash compensation), and proprietary income (payments received by self-employed individuals and/or unincorporated business owners such as self-employment income, income received by private business owners including doctors, lawyers). For example, a labor income multiplier of 1.5 means that for each dollar of labor income created or eliminated, an additional 50 cents of labor

income is created or eliminated in other sectors because of related business-to-business and consumer spending.

- ***Value Added*** is the difference between an industry's total output and the cost of its intermediate inputs for a given time period. It equals gross output (i.e., sales or receipts and other operating income, plus inventory change) minus intermediate inputs (i.e., consumption of goods and services purchased from other industries or imported). Value Added is a measure of the contribution to GDP made by an individual producer, industry, or sector. For example, a Value Added multiplier of 1.5 means that for each dollar of value added or eliminated there will be an additional value added or eliminated in the amount of 50 cents in other sectors because of related business-to-business and consumer spending.

- ***Taxes on Production and Imports less Subsidies (TOPI)*** [1] is one of the components of Value Added and includes sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. For all industries other than government enterprises, subsidies are counted as a negative figure towards TOPI. While all taxes during the normal operation of businesses are included, taxes on profits or income are not included. For example, a TOPI multiplier of 1.5 means that for each dollar of taxes generated an additional 50 cents is paid as taxes by taxpayers in other sectors because of related business-to-business and consumer spending.

Four types of multiplier effects are usually analyzed in the output-input models like IMPLAN: direct, indirect, induced, and total (see table 1 below).

- The *direct* effect characterizes an initial impact of an economic activity on the region's economy. For every dollar spent in an industry, if the industry exists in the region, there is one-dollar worth of direct impact in the local economy.
    - For Output, this Effect is either 1.00 or 0.00. For every dollar spent in an Industry, if the Industry exists in the region, there is a dollar's worth of activity in the local economy. If the Industry doesn't exist in the region, the effect is 0.00.
    - For Employment, the Effect represents the number of jobs per $1,000,000 of production in the Industry.
    - Labor Income Effects represent the Labor Income dollars per $1,000,000 of production in the Industry.
    - Value Added Effects represent the Total Value Added and various Value Added subset dollars per $1,000,000 of production in the Industry.
    - For TOPI, the Effect represents the tax dollars per $1,000,000 of production in the Industry.

[1] In IMPLAN based studies "taxes on production and import (TOPI)" are also termed as "indirect business taxes (IBT)".

- The *indirect* effect defines the creation of additional economic activity that results from linked businesses, suppliers of goods and services, and provision of operating inputs.
    - For Output, the Effect represents the sum of local business-to-business purchases per dollar of Output.
    - For Employment, the Effect represents the number of jobs per $1,000,000 of business-to-business purchases by all resultant rounds of local Industry purchases.
    - Labor Income Effect represents the value of Labor Income dollars per $1,000,000 of business-to-business purchases by all resultant rounds of local Industry purchases.
    - Value Added Effect represents the value of Value Added dollars per $1,000,000 of business-to-business purchases by all resultant rounds of local Industry purchases.
    - For TOPI, the Effect represents the value of tax dollars per $1,000,000 of business-to-business purchases by all resultant rounds of local Industry purchases.
- The *induced* effect measures consumption expenditures of direct and indirect sector employees. While the indirect effect considers business-to-business transactions only, the induced effect includes the sum of household purchases per dollar spent, based on the respective labor income payments. Examples of induced benefits include employees' expenditures on items such as retail purchases, housing, banking, medical services, and insurance.
    - For Output, the Effect represents the sum of local Household purchases per dollar of Output, based on Labor Income payments made by the originating Industry and the local Industries from which they purchase.
    - For Employment, the Effect represents the number of jobs supported in local Industries per $1,000,000 of Direct spending in the originating Industry as a result of Household purchases derived from Labor Income payments throughout all rounds of the impact.
    - Labor Income Effect represents the value of Labor Income dollars per $1,000,000 of Direct spending in the originating Industry in local Industries as a result of Household purchases derived from Labor Income payments throughout all rounds of the impact.
    - Value Added Effect represents the Value Added dollars per $1,000,000 of Direct spending in the originating Industry in local Industries as a result of Household purchases derived from Labor Income payments throughout all rounds of the impact.
    - For TOPI, the Effect represents the value of tax dollars per $1,000,000 of Direct spending in the originating Industry in local Industries as a result of Household purchases derived from Labor Income payments throughout all rounds of the impact.
- The *total* effect is the sum of the direct, indirect, and induced effects.

Table 1. Economic Impact Multiplier

Type of Multiplier	Direct	Indirect	Induced
Output Multiplier	Direct spendings	Local business- to-business purchases due to spendings made	Local household purchases due to spendings made
Employment Multiplier	Number of jobs due to direct spendings	Number of jobs due to all resultant rounds of local industry purchases caused by spendings	Number of jobs as a result of household purchases caused by spendings
Labor Income Multiplier	Labor income of employees and proprietors	Labor income resulting from all subsequent rounds of local industry purchases driven by spendings.	Labor income as a result of household purchases caused by spendings
Value Added	Total value added dollars created by spendings	Value added dollars due to all resultant rounds of local industry purchases caused by spendings	Value added dollars as a result of household purchases caused by spendings
TOPI	Sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments directly caused by spendings	Sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments paid due to all resultant rounds of local industry purchases caused by spendings	Sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments paid as a result of household purchases caused by spendings

Other Assumptions of the Study

To measure the economic impact of the WFH transition, the study makes the following assumptions:

- The negative economic impact of the WFH transition is estimated in the model as the result of three major activities: loss of Downtown real estate value, loss of employee spendings, and loss of hotel revenues. The model does not include other sources of the negative impact (e.g. decreased restaurants, bars, and entertainment spendings, decrease of Downtown public transportation traffic etc.)
- All economic impact are computed for a 20-year period and while in any individual year the numbers could vary, the totals represent aggregate impact over 20 years.

- No price changes after 2023 are built in the model. All impacts are estimated in 2023 Net Present Value dollars, and for updating the analysis base, IMPLAN dataset(s) for subsequent years should be used;
- The scope of this study does not include possible offsets (e.g., adverse positive or negative impacts from rental or housing price, land acquisition, crowding out effects, traffic and environmental issues etc.) that should be the subject of separate studies;
- Both for the zip code and Congressional District level analyses IMPLAN operates with Econometric method of estimating Regional Purchasing Coefficients (considered less accurate than Trade Flow method used for the county-level analysis) as the Trade Flow data is not available in IMPLAN on that level.

The numerical input in the model is based on the data provided by Sacramento Downtown Partnership. Given the longitudinal nature of the study, an assumption of inflation is made, and deflator coefficients are used by IMPLAN for calculating real rather than nominal values. All estimates, both input and output, are made based on the Net Present Value in 2023 dollars.

DEFINITIONS OF THE GEOGRAPHIC AREAS

The economic impact analysis was performed for two geographic areas: Downtown Sacramento and City of Sacramento.

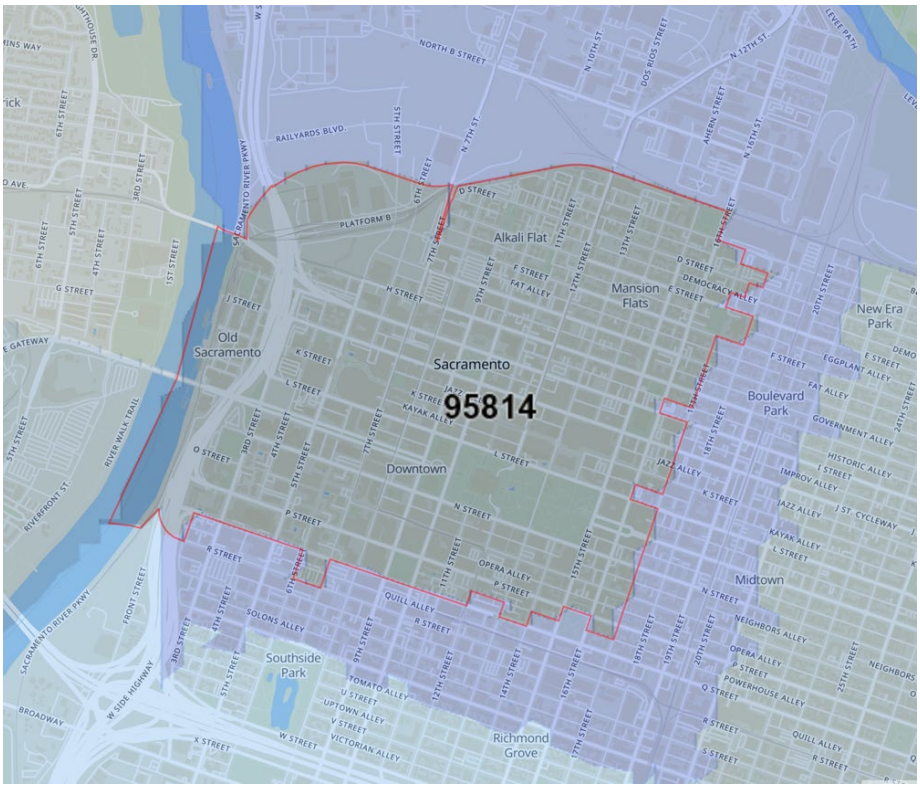
Downtown Sacramento

In this study, the Downtown Sacramento area is defined based on zip code 95814. Although the precise geographical boundaries of Sacramento's Downtown are not officially delineated using zip codes, we adopted this approach to enable a more precise measurement of its economic impact.

The economic impact assessment tool we employed for this study is designed to analyze economic impacts at various geographical levels, including zip code, Congressional District, county, state, and national levels. Each of these levels represents a different scale of analysis, capturing economic effects at different geographic scopes. Therefore, rather than attempting to adjust the impact results to align with the informal borders of Downtown Sacramento, which might require complex and potentially less accurate adjustments, we found it more accurate to define the study areas in a manner that aligns with IMPLAN's measurement capabilities.

For a visual representation of how we defined the Downtown Sacramento area for the purposes of this study, please refer to Figure 1. This approach ensures that our economic impact analysis aligns more closely with the available data and measurement criteria, facilitating a more accurate assessment of the area's economic impact.

Figure 1. Downtown Sacramento Area definition for the purposes of the study



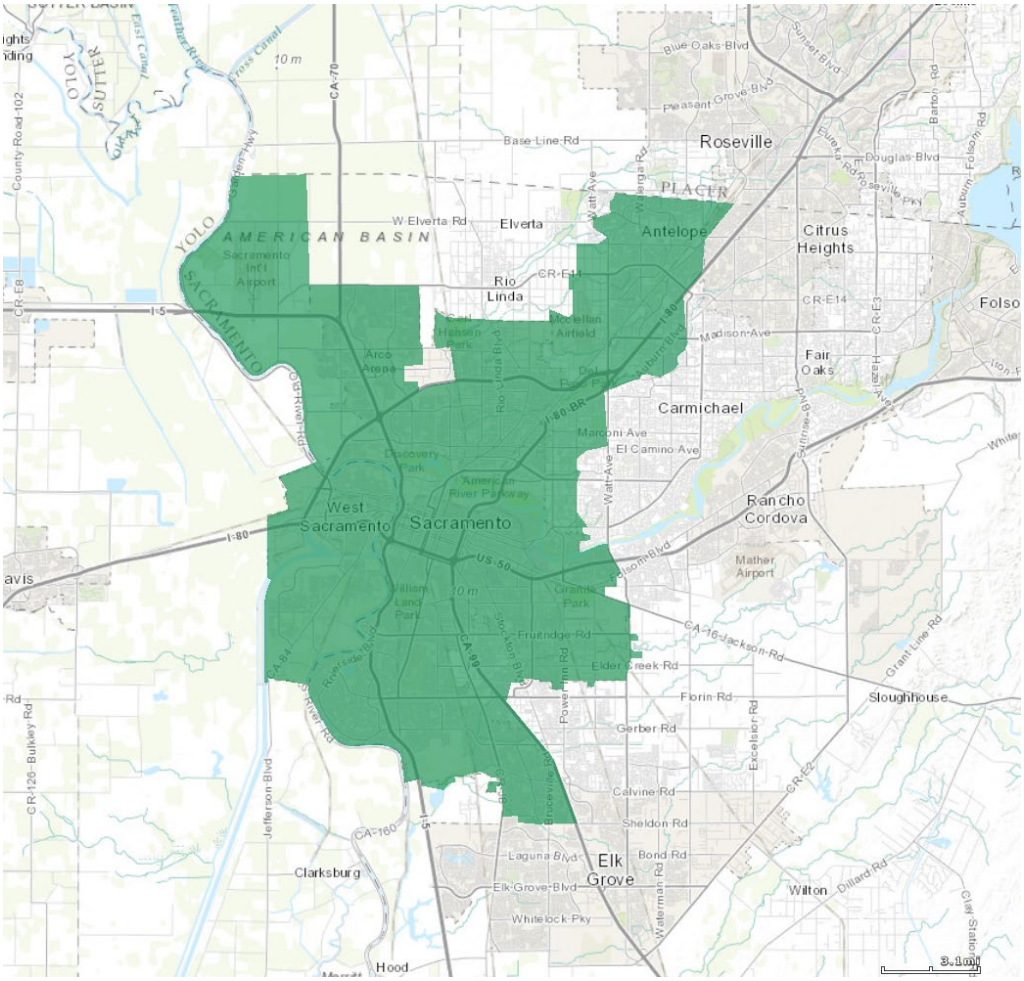
City of Sacramento Area

For the purpose of this study, the geographical boundaries of the City of Sacramento area were determined as California's 6th Congressional District. The specification of the Congressional District territory corresponds to the 117th Congress of the United States (January 2021 to 2023)[2].

This region not only includes the central area of Sacramento but also extends its scope to encompass adjacent areas. Specifically, it comprises the City of West Sacramento, situated within Yolo County, which plays a significant role within the broader Sacramento metropolitan area. Additionally, within this comprehensive boundary, there are several smaller zones, including unincorporated territories like Antelope, Arden-Arcade, Carmichael, Foothill Farms, Freeport, Fruitridge Pocket, Lemon Hill, McClellan Park, North Highlands, and Parkway, among others, as illustrated in Figure 2.

[2] The territory of the District was altered for the 118th Congress of the U.S. (January 2023-25), and presently, Sacramento Downtown territory falls within California's 7th Congressional District. However, the current version of IMPLAN still utilizes the previous (117th Congress) division between congressional districts.

Figure 2. City of Sacramento Area definition for the purposes of the study



Considering the location of the City of West Sacramento (situated just across the bridge from Sacramento Downtown), it would be reasonable to include it as part of the city's territory for the economic impact analysis. Additionally, the other mentioned territories are in close proximity to the City and share economic ties with it.

The rationale behind defining the study area in this manner stems from the limitations of the IMPLAN tool, which exclusively calculates economic impact based on predetermined geographical units such as zip codes, congressional districts, counties, states, and the national level. Consequently, instead of attempting to adjust the impact results to align with the administrative borders of the City of Sacramento, it is more suitable to define the area in a manner that aligns with IMPLAN's measurement capabilities. This approach ensures a more precise and accurate assessment of the economic dynamics within this region, reflecting the interconnectedness of these adjacent territories with the City of Sacramento.

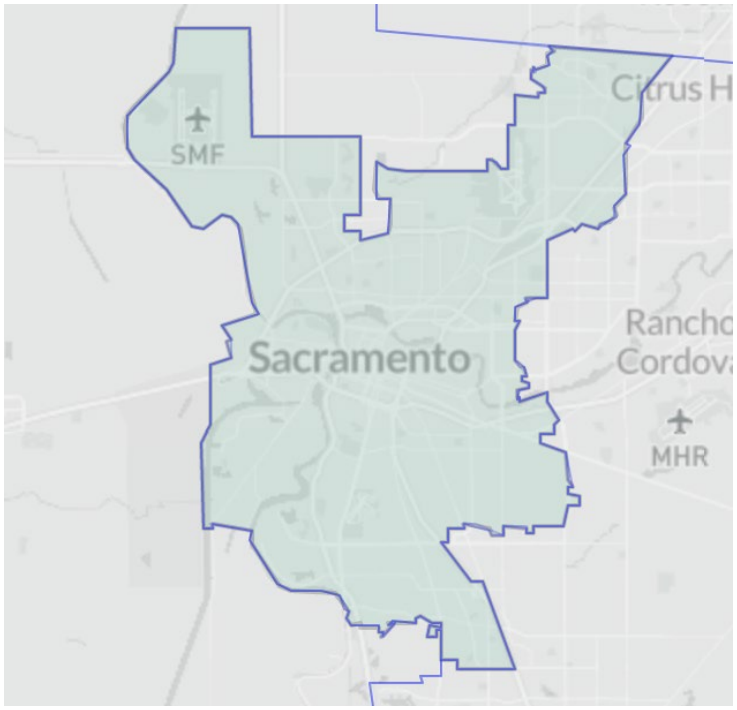
By adopting this geographical framework, a comprehensive and accurate analysis of the economic dynamics and impacts within the City of Sacramento and its surrounding regions with IMPLAN is

ensured. This approach enables the incorporation of the diverse characteristics and contributions of these areas, offering a more detailed and nuanced comprehension of the economic landscape throughout the study period.

Figure 3 offers a visual representation of the City of Sacramento area definition for the purposes of this study, which corresponds to the territory of California's 6th Congressional District for the 117th Congress (spanning from January 2021 to 2023). It also provides a comparison with the administrative boundaries of the City of Sacramento.

Figure 3. California 6th Congressional District and City of Sacramento Borders

California 6th Congressional District



City of Sacramento

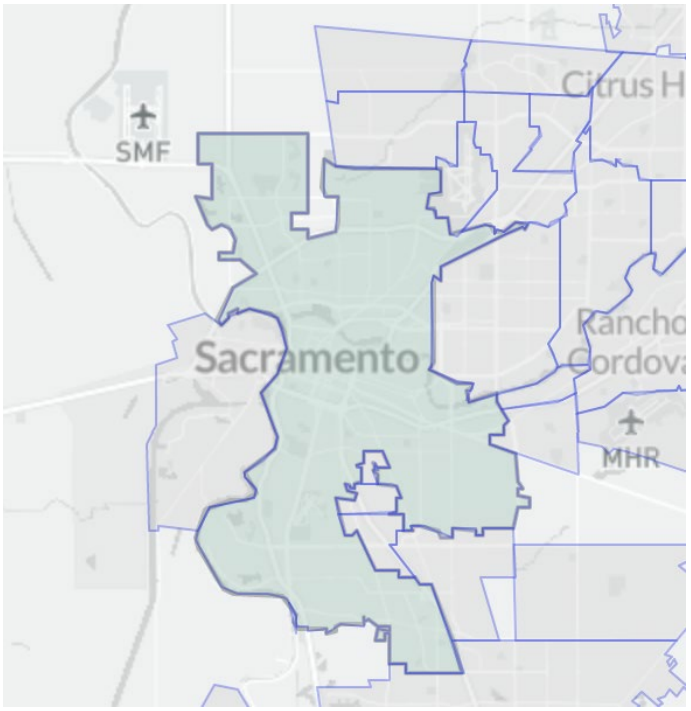


Table 2 below offers a comparison of economic and demographic characteristics between the California 6th Congressional District for the 117th Congress and the City of Sacramento[3]. Further details regarding the fundamental demographic and economic data used as the background for the IMPLAN analysis for both the GSA and the City of Sacramento can be found in the Appendix section at the end.

[3] Source: U.S. Census Bureau. *Census Reporter*. https://censusreporter.org/profiles/50000US0606-congressional-district-6-ca/

Table 2. Comparison of Population, Area, and Household Income in the City of Sacramento and California 6th Congressional District (117th Congress)

	Population	Area (sq.m)	Number of Households	Median Household Income (per year)
City of Sacramento	513,620	97.7	191,911	$69,134
California 6th Congressional District	781,943	175	281,104	$64,687

STUDY FINDINGS

Components of the Feeder Model

The three major components of the feeder model were identified as a result of the initial data analysis and input from Downtown Sacramento Partnership: the loss of Downtown real estate value, the loss of employee spending, and the loss of hotel revenues.

Loss of Downtown Real Estate Value

The COVID-19 pandemic precipitated a profound transformation in workflow structures within numerous government, public, and private entities, leading to the widespread adoption of remote work as the standard operational model for many organizations. Consequently, Downtown areas worldwide, including Sacramento as the capital of the State of California, bore witness to unparalleled shifts in their dynamics. The accelerated transition to work from home and the implementation of remote work policies during the pandemic not only revolutionized business operations but also carried significant implications for the local economies of urban centers like Downtown Sacramento. One of the most conspicuous outcomes has been the decline in assessed real estate values in Downtown. The factors contributing to this trend can be categorized as follows.

Reduced Office Space Demand

One of the most pronounced impacts of the WFH trend has been the reduced demand for office space in Downtown areas. With many employees working remotely, companies downsized their office spaces or adopted flexible office arrangements. This reduced demand for commercial office space directly influenced the assessed values of Downtown real estate. The reduced demand and vacancy rates translated into lower lease rates and, consequently, lower property values per square foot.

Changes in Retail Dynamics

Sacramento Downtown area hosts a vibrant mix of retail establishments that cater to office workers and visitors. The decrease in foot traffic due to remote work has led to a significant reduction in retail sales, affecting the profitability of businesses and their ability to pay higher rents. As a result, property owners saw decreased rental income, which, in turn, impacted the assessed values of retail real estate in Downtown areas.

Impact on Residential Real Estate

The residential real estate in Sacramento Downtown area was not immune to the shift towards WFH. Many residents chose to move away from urban center to less densely populated areas of the city and adjacent territories, seeking more space and a change in lifestyle. This shift in demand, along with the reduced appeal of Downtown living without the daily commute, influenced residential property values in these areas.

Ripple Effect on Hotel and Hospitality Industry

The Sacramento Downtown hotel and hospitality industry faced a substantial decline in occupancy rates and room revenues as business travel waned and tourists stayed away. The reduced income and profitability of hotels had a cascading effect on the commercial real estate values in Downtown areas, as hotel properties saw decreased assessed values due to diminished cash flows.

Long-Term Uncertainty

One of the key factors conditioning the loss of Downtown real estate assessed value is the long-term uncertainty surrounding the future of work. While WFH became necessary during the pandemic, many companies are now adopting hybrid models that incorporate remote work. This uncertainty about the permanence of remote work has made businesses and investors cautious about leasing or purchasing expensive Downtown properties.

The loss of Downtown real estate assessed value is undeniably tied to the shift towards work from home after the COVID-19 pandemic. Reduced demand for office space, changes in retail dynamics, a shifting residential landscape, and the ripple effects on the hotel and hospitality industry have all played a part in this decline. The long-term uncertainty surrounding the future of work has added to the complexity of the issue. As Downtown areas adapt to these changes, they will need to find innovative strategies to revitalize their real estate markets and reimagine their role in a post-pandemic world.

Quantification of the Real Estate Value Loss

The loss in Downtown real estate value is not merely a temporary or isolated phenomenon but rather an ongoing trend that carries significant financial implications. It's estimated that the annual loss in Downtown real estate value amounts to a substantial $134,604,345. When projected over a 20-year period, this cumulative loss reaches an astounding $2,692,086,903. These figures underscore the magnitude of the economic challenge posed by the shift to remote work, which directly impacts the assessed values of Downtown properties.

The Table 3 below further elucidates this issue by providing a detailed comparison of Downtown real estate assessed values per square foot in the year 2022 relative to the values recorded in 2019. This analysis encompasses three primary categories of real estate: office, retail, and residential properties. By examining the changes in these assessed values over this specified timeframe, the table offers a comprehensive perspective on the evolving landscape of Downtown real estate. Additionally, it enables stakeholders to assess prevailing trends, gauge the degree of impact on different property types, and consider the adjustments needed to account for inflation.

Table 3. Downtown Real Estate Assessed Value per sq. ft in 2022 compared to 2019[4]

Market	2019 Tax Assessment	2022 Tax Assessment	2022 lot sf	2022 building sf	2022 total sf	2019 assess value per sf	2022 assess value per sf	2022 assessed value per sf adjust for inflation
Office	$1,507,561,559	$1,629,074,323	1,383,011	8,938,338	10,321,349	$147.38	$157.84	$136.08
Retail	$74,046,190	$155,011,786	585,347	1,224,340	1,809,687	$76.18	$85.66	$73.85
Residential	$81,914,249	$79,078,667	122,601	617,624	740,225	$110.66	$106.83	$92.10

The subsequent Table 4 illustrates the shifts in per square foot assessed values of Downtown real estate during the year 2022 in contrast to the figures recorded in 2019, adjusting for inflation. It includes losses incurred in value per square foot for each distinct real estate category culminating in a comprehensive total loss figure. By segmenting the data, the table allows for a more precise evaluation of the losses in assessed values specific to each category, thereby facilitating a profound understanding of how different sectors within Downtown real estate have been affected.

The incorporation of adjustments for inflation ensures that the presented data reflects not only the nominal changes but also accounts for the real economic effects by adjusting values to the prevailing economic conditions. It adds depth and accuracy to the assessment, allowing for a more genuine representation of the changes in assessed values over the specified time frame.

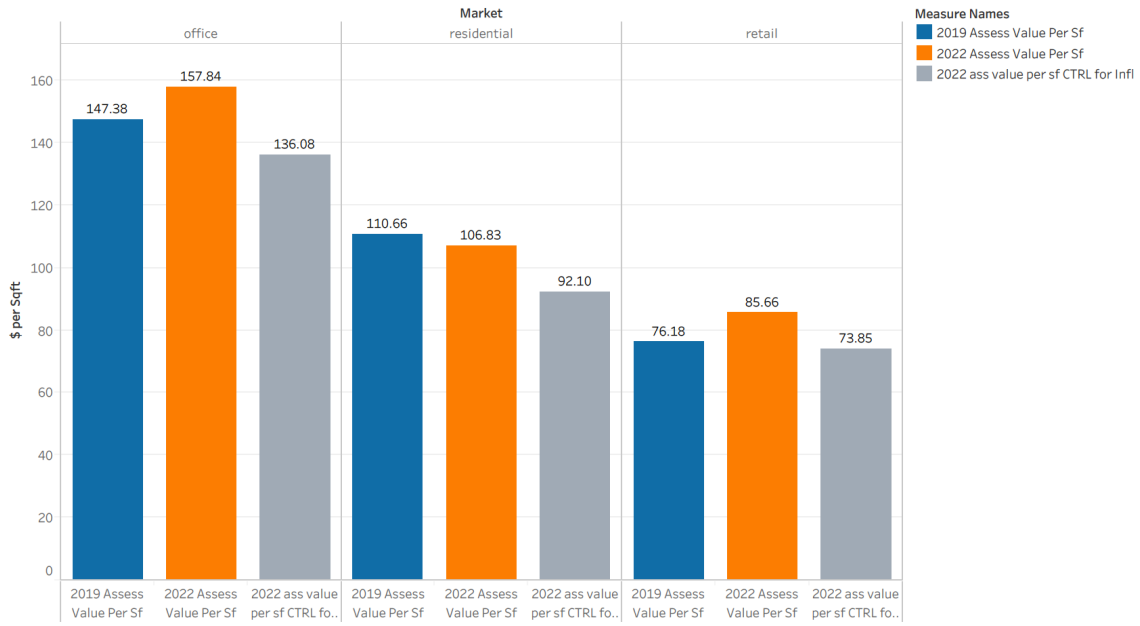
Table 4. Loss of the Total Downtown Real Estate Assessed Value in 2022 compared to 2019

	2019 and 2022 difference, assessed value per sq.ft (inflation adjusted)	2022 total sq.ft	Loss of the total assessed value (2022 sq. footage)
Office	$11.30	10321349	$116,655,894.57
Retail	$2.33	1809687	$4,211,343.58
Residential	$18.56	740225	$13,737,107.01
Total			$134,604,345.15

In addition, the Figure 4 below graphically represents the difference in assessed value for each of the three categories of Downtown real estate.

[4] Source: Sacramento Downtown Partnership, August 2023.

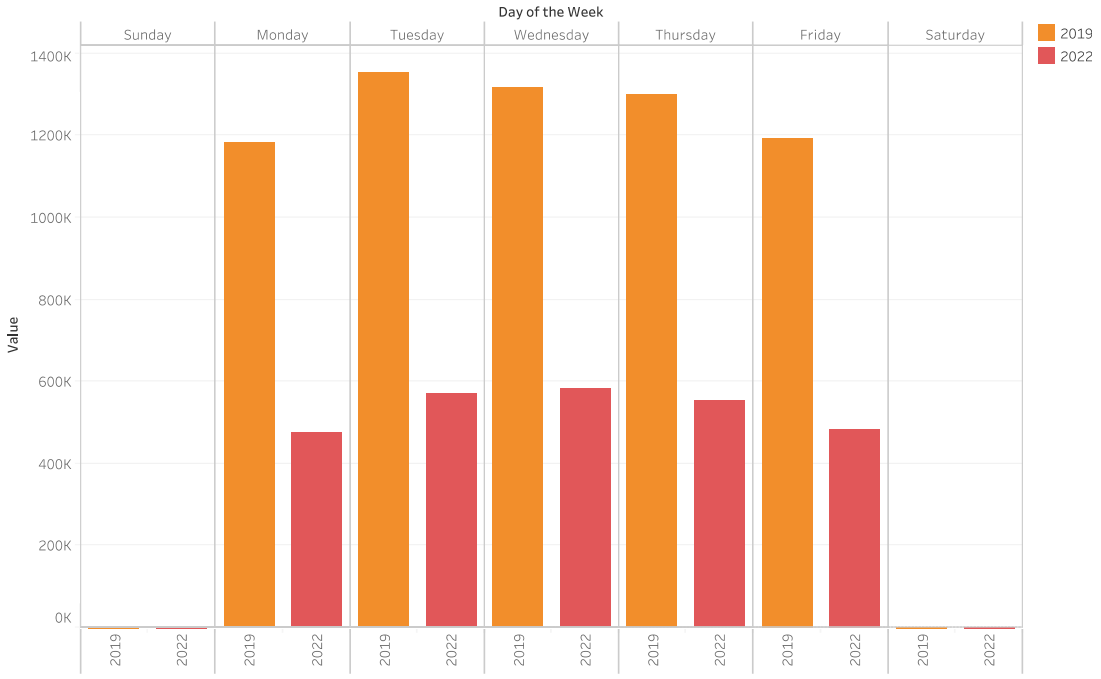
Figure 4. Difference of assessed value per square ft in Sacramento Downtown, 2022 vs 2019 (adjusted for inflation)



Loss of Employee Spending

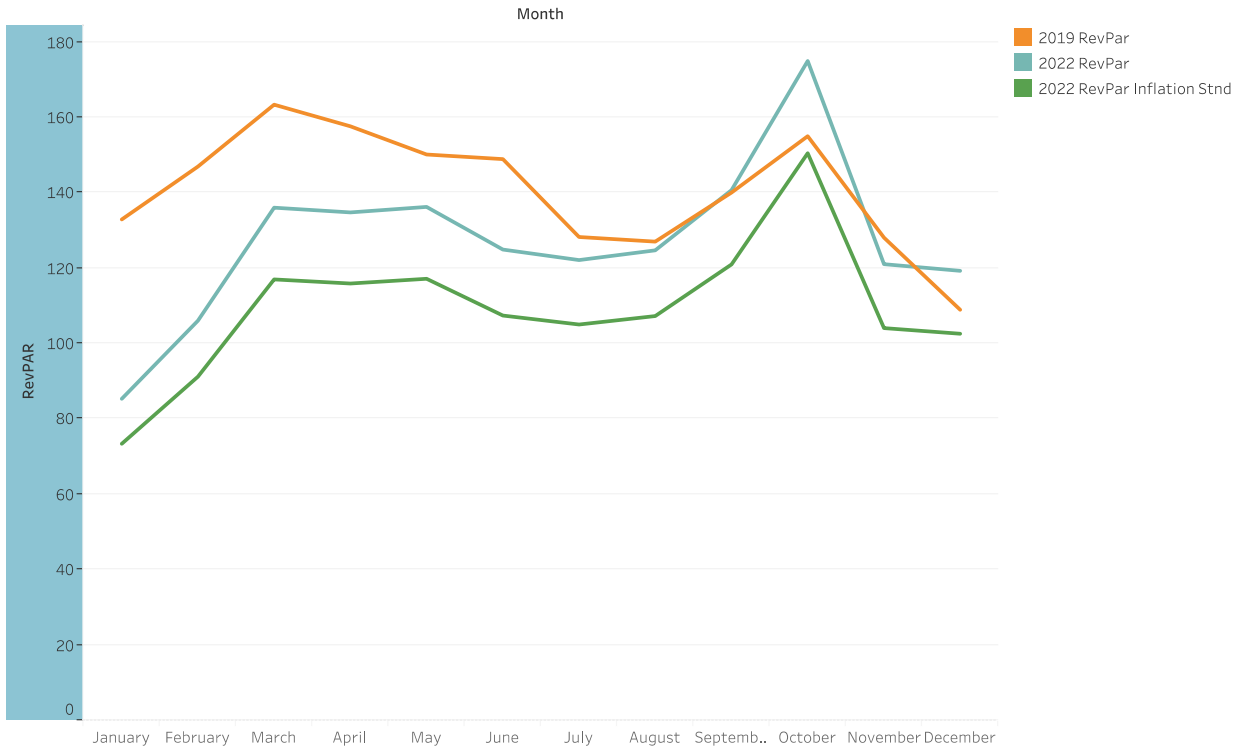
One notable consequence has been the decrease in employee spending in Downtown areas. Figure 5 demonstrates the difference of number of workers in Sacramento Downtown in 2022 compared to 2019.

Figure 5. Difference between number of workers in Sacramento Downtown by day of the week, 2022 vs 2019



In addition, Figure 6 represents the decline in the sales tax in Sacramento Downtown in 2022 compared to 2019.

Figure 6. Sales tax collected in Sacramento Downtown, 2022 vs 2019



The major factors that conditioned reduction of employee expenditures in Downtown Sacramento as a result of the shift to WFH and remote work policies can be grouped as the following.

Reduced Daily Commutes

One of the most conspicuous reasons for the decline in employee spending in Downtown Sacramento is the reduced need for daily commutes. With many employees no longer required to travel to a physical office location in the city center, the frequency of commuting has decreased significantly. This translates to fewer expenditures on transportation, such as fuel, public transit fares, parking fees, and vehicle maintenance. Employees now allocate less of their income towards these commuting-related expenses, which would otherwise have been spent in the Downtown area.

Decline in Dining and Cafeteria Expenses

Downtown Sacramento boasts a diverse culinary scene with numerous restaurants, cafes, and eateries catering to the office worker lunch crowd. However, the advent of WFH has significantly diminished the demand for these establishments. Fewer employees in the city center mean reduced foot traffic to restaurants and cafeterias. As a result, individuals spend less on dining out or purchasing meals during their workday, leading to decreased revenues for local food establishments.

Decreased Retail and Convenience Store Visits

Downtown areas are often hubs for retail and convenience stores that cater to the needs of office-goers. With employees working remotely, there is a noticeable decrease in visits to these

establishments. Employees no longer have the same level of need for quick purchases during lunch breaks or after-work shopping trips, which ultimately reduces the revenue generated by these businesses. This translates to a decline in employee spending in Downtown retail establishments.

Reduced Entertainment and After-Work Activities

The vibrancy of Downtown areas extends beyond the workday, with numerous entertainment options and after-work activities. However, the shift to remote work has altered the dynamics of after-work socializing. Employees who would have previously frequented theaters, bars, and entertainment venues in Downtown Sacramento are now more likely to engage in such activities closer to their homes, affecting the patronage and revenue of Downtown entertainment establishments.

Impact on Tourism and Hospitality

Downtown Sacramento also relies on tourism, attracting visitors who stay in local hotels and dine in its restaurants. With fewer business travelers and tourists due to remote work policies, the hospitality industry in the Downtown area has seen decreased occupancy rates and room revenues. This, in turn, impacts employee spending, as workers in the tourism and hospitality sector have fewer opportunities for income growth and discretionary spending.

Quantification of the Loss of Employee Spendings in Sacramento Downtown

The loss of employee spendings is estimated as $50,127,000 per year and $1,002,540,000 per 20 years. Based on the WFH Study[5] approach, the estimated reduction in employee spending in and around Downtown was quantified as the following:

Table 5. Loss of the Employee Spendings in Sacramento Downtown as a Result of Remote Work Policies

Estimated number of Sacramento Downtown employees in 2019	70,000
Estimated percentage of permanent remote workers[6]	30%
Decreased average spending per employee per year	$ 2,387
Estimated annual direct negative economic impact on Downtown Sacramento	$ 50,127,000

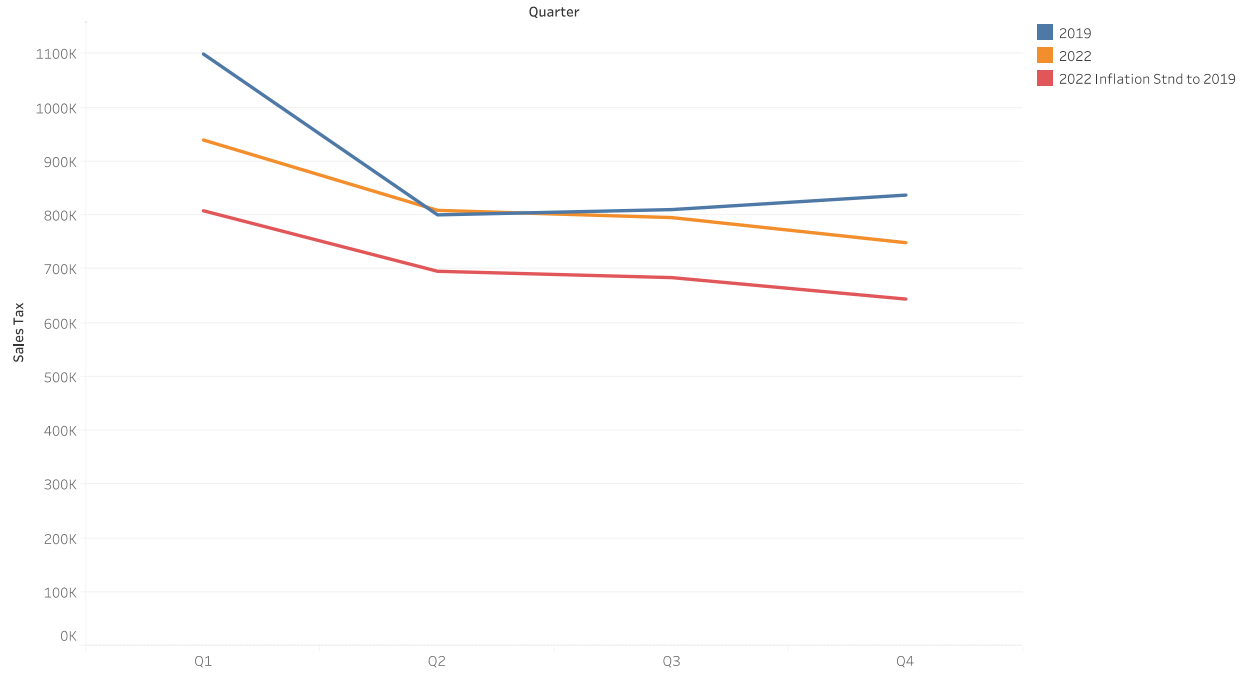
Loss of Hotel Revenues

One sector that has been significantly impacted by the transition to WFH is the hotel industry in Sacramento Downtown. Figure 6 shows the loss of the revenues per available room in Downtown Sacramento hotels in 2019-2022.

[5] Source: Barrero, J.M., Bloom, N., Buckman, S., and Davis, S.J. *WFH Research*. August 5, 2023 https://wfhresearch.com/wp-content/uploads/2023/08/WFHResearch_updates_August2023.pdf

[6] The assumption of remote workers percentage is based on the abovementioned *WFH Research*, p.10, "Percent of paid full days worked from home".

Figure 7. Revenues per available room in Downtown Sacramento hotels, 2022 vs 2019



The major factors leading to the losses of hotel industry revenues in Sacramento Downtown can be categorized as the following.

Decline in Business Travel

One of the most substantial factors contributing to the decline in hotel revenues is the substantial decrease in business travel. Downtown areas, including Sacramento, typically attract a considerable number of business travelers who visit for meetings, conferences, and other work-related activities. However, with remote work policies reducing the need for in-person meetings, business travel has sharply declined. This has resulted in reduced occupancy rates for hotels in Downtown Sacramento, leading to a significant drop in revenues.

Decreased Tourism

Tourism is another essential source of revenue for hotels in Sacramento Downtown. The city is known for its cultural attractions, historical sites, and events that draw tourists from various locations. However, the pandemic and the ensuing shift to remote work have deterred many tourists from traveling. With fewer tourists visiting the area, hotels in Downtown Sacramento have experienced lower occupancy rates and a decrease in the revenues typically generated from the tourism sector.

Hybrid Work Models

The adoption of hybrid work models, combining remote work and occasional office visits, has led to fewer employees needing overnight accommodations in Downtown Sacramento. Employees who once stayed in hotels while attending meetings or conducting business are now less likely to require

such accommodations. This shift has directly impacted hotel bookings and occupancy rates, translating into decreased revenues for the hotel industry.

Reduced Demand for Event Spaces
Downtown hotels often provide event spaces for conferences, conventions, and social gatherings. However, the shift to remote work has resulted in the cancellation or downsizing of many events that would have taken place in these venues. The reduced demand for event spaces has adversely affected the hotel industry's ability to generate revenue from hosting such gatherings, adding to the overall decline in revenues.

In response to these challenges, some hotels in Sacramento Downtown have adapted by offering alternative services, such as co-working spaces within their facilities, to cater to the evolving needs of remote workers. While these innovations may mitigate some revenue loss, they do not entirely offset the overall decrease in hotel revenues brought about by the WFH transition.

Quantification of the Loss of Hotel Revenues in Sacramento Downtown
Hotels revenues loss is estimated as $27,687,608 per year and $553,752,161 per 20 years. The table below provides an analysis of the hotel revenue per available room in Sacramento Downtown for the years 2019 and 2022. The table offers a representation of the impact of changing hotel revenue per available room, both with and without inflation adjustments, on the overall financial landscape of hotels in Sacramento Downtown between 2019 and 2022.

Table 6. Loss of the Hotel Revenues in Sacramento Downtown as a Result of Remote Work Policies

	Hotel RevPAR (year average)
2019	$ 138.77
2022	$ 126.17
2022 (inflation adjusted)	$ 110.67
Difference 2019 vs 2022 (inflation adjusted)	$ 28.09
Number of rooms (2022)	2,700
Total loss per day	$75,856
Total loss per year	$27,687,608

IMPLAN Analysis Results

As described in the Methodology section, the IMPLAN analysis consists of five measures: Output, Employment, Labor Income, Value Added, and Taxes on Production and Import (TOPI). The results for both geographic areas (i.e., Sacramento Downtown and City of Sacramento) are described below. Summary data from IMPLAN output are presented within the report narrative as exhibits. It is important to note that the economic impact on the City of Sacramento includes the economic impact on the Downtown Sacramento area.

Model Output

The IMPLAN model quantifies the multiplier effect that occurs when new output or employment is added in the geographical area via the designated economic activities. The economic impact is measured for 544 industries identified in the newest version of IMPLAN. For purposes of this study, the analysts then aggregated the results for the individual industries into 8 industry categories which were created in a manner that takes into account key sectors in the regional economy and are based generally on the North American Industrial Classification System (NAICS):

- Agriculture
- Mining
- Construction
- Manufacturing
- Transportation, Information, Power, and Utilities
- Trade
- Service
- Government

Total Economic Impact

The combined economic impact of the loss of Downtown real estate value, loss of employee spendings, and loss of hotel revenues is described below for both geographic areas.

Impact on the City of Sacramento

The summary of the total economic impact on the City of Sacramento is presented in the Exhibit below, and in detail in Tables 3.A through 3.F at the end in the Appendix. The impacts are grouped into the categories of output, employment, labor income, value added, and taxes on production and imports. They are further separated in each category into the major industrial sectors such as agriculture, mining, construction, manufacturing, TIPU (transportation, information, power, and utilities), trade, service, and government. This shows both the overall total impact and how it is distributed through the industry categories. In addition to it, for demonstrating the industry-specific effect the findings are also presented for each category for the top ten industries of City of Sacramento that will experience the greatest negative impact.

Loss of "Output" is estimated to total more than $5.45 billion over the 20 year period. This includes total lost revenues for all sources of income and represents the best overall measure of losses on business and economic activity levels.

Loss of "Employment" based on this economic activity is estimated to be equivalent to 29,448 jobs within 20 years period (i.e., on average 1,472 jobs per year). Employment demonstrates the number of jobs potentially lost and is calculated on an annual full-time/part-time equivalent average.

"Labor Income" loss is projected to be more than $1.41 billion. Labor income includes all forms of employee compensation paid by employers (e.g., total payroll costs including benefits, wages and salaries of workers, health and life insurance, retirement payments, non-cash compensation), and proprietary income (e.g., self employment income, income received by private business owners including doctors, laywers, etc.).

"Value Added" loss is estimated to be more than $2.87 billion. Value added is the difference between an industry's total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).

Shown below (Exhibit A) are the total impacts for each of these five effects in the City of Sacramento Area.

Exhibit A. Total negative impacts of WFH on City of Sacramento Area economy

Impact Type	Loss of Employment	Loss of Labor Income	Loss of Total Value Added	Loss of Output
Direct Effect	15,335	$593,686,009	$1,426,309,141	$2,927,913,096
Indirect Effect	7,590	$452,264,466	$763,231,300	$1,426,274,295
Induced Effect	6,524	$364,201,958	$681,271,698	$1,099,302,668
Total Effect	29,448	$1,410,152,433	$2,870,812,139	$5,453,490,060

In summary, within the City of Sacramento Area, within 20 year period of time the direct and indirect Output losses are estimated to exceed $4.35 billion, with induced losses (i.e., reductions in consumption expenditures by direct and indirect sector employees) adding nearly $1.10 billion. The direct and indirect Employment losses account for 22,925 jobs, and induced losses add another 6,524 jobs. Labor Income losses, both direct and indirect, are projected to be nearly 1.05 billion, with induced losses exceeding $364 million. Additionally, direct and indirect under-received Value Added is expected to total nearly $2.2 billion, with induced losses adding more than $681 million.

Impact on Sacramento Downtown

The summary of the total economic impact on Sacramento Downtown is presented in the Exhibit below, and in detail in Tables 4.A through 4.F at the end in the Appendix. The impacts are grouped into the categories of output, employment, labor income, value added, and taxes on production and imports. They are further separated in each category into the major industrial sectors such as agriculture, mining, construction, manufacturing, TIPU (transportation, information, power, and utilities), trade, service, and government. This shows both the overall total impact and how it is distributed through the industry categories. In addition to it, for demonstrating the industry-specific effect the findings are also presented for each category for the top ten industries of Sacramento Downtown that will experience the greatest negative impact.

Loss of "Output" is estimated to be more than $4.37 billion. This includes total lost revenues for all sources of income and represents the best overall measure of losses on business and economic activity levels.

Loss of "Employment" based on this economic activity is estimated to be equivalent to 22,836 jobs within 20 years period (i.e., on average 1,142 jobs per year). Employment demonstrates the number of jobs potentially lost and is calculated on an annual full-time/part-time equivalent average.

"Labor Income" loss is projected to be more than 1.04 billion. Labor income includes all forms of employee compensation paid by employers (e.g., total payroll costs including benefits, wages and salaries of workers, health and life insurance, retirement payments, non-cash compensation), and proprietary income (e.g., self employment income, income received by private business owners including doctors, laywers, etc.).

"Value Added" loss is estimated to be more than $2.23 billion. Value added is the difference between an industry's total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).

Shown below (Exhibit B) are the total impacts for each of these five effects in the City of Sacramento Area.

Exhibit B. Total negative impacts of WFH on Sacramento Downtown

Impact Type	Loss of Employment	Loss of Labor Income	Loss of Total Value Added	Loss of Output
Direct Effect	15,298	$ 592,849,360	$ 1,430,433,419	$ 2,927,913,096
Indirect Effect	5,731	$ 360,976,963	$ 641,176,706	$ 1,177,964,597
Induced Effect	1,807	$ 90,792,159	$ 161,851,423	$ 266,952,971
Total Effect	22,836	$ 1,044,618,482	$ 2,233,461,548	$ 4,372,830,665

In summary, within Sacramento Downtown, the direct and indirect Output losses are estimated to be nearly $4.11 billion, with induced losses (i.e., reductions in consumption expenditures by direct and indirect sector employees) adding nearly $267 million. The direct and indirect Employment losses account for 21,029 jobs, and induced losses add another 1,807 jobs. Labor Income losses, both direct and indirect, are projected to be nearly $954 million, with induced losses nearly $91 million. Additionally, direct and indirect under-received Value Added is expected to be more than $2.07 billion, with induced losses adding nearly $162 million.

Component Specific Impact

As stated above, the negative economic impact of the WFH transition is estimated in the model as the result of three major factors: the loss of Downtown real estate value, the loss of employee spending, and the loss of hotel revenues. IMPLAN analysis makes it possible to separate the negative impact of WFH produced by each of these three components.

Loss of Real Estate Value Specific Impact

The summary of real estate value specific impact is presented in the Table 5A for City of Sacramento and Table 5B for Sacramento Downtown.

For the City of Sacramento, the loss of output related to the decrease in real estate value is estimated to total nearly $4.19 billion. Loss of Employment due to this factor is estimated to be equivalent to

20,294 jobs within 20 years period (i.e., on average 1,015 jobs per year). Labor Income loss is projected to be nearly $959 million. Value Added loss is estimated to be nearly $2.10 billion.

For the Sacramento Downtown, the loss of output related to the decrease in real estate value is estimated to total nearly $3.63 billion. Loss of Employment due to this factor is estimated to be equivalent to 16,664 jobs within 20 years period (i.e., on average 833 jobs per year). Labor Income loss is projected to be more than $763 million. Value Added loss is estimated to be more than $1.78 billion.

Loss of Employee Spendings Specific Impact

The summary of employee spendings specific impact is presented in the Table 6A for City of Sacramento and Table 6B for Sacramento Downtown.

For the City of Sacramento, the loss of output related to the decrease of employee spendings is estimated to total more than $480 million. Loss of Employment due to this factor is estimated to be equivalent to 2,844 jobs within 20 years period (i.e., on average 142 jobs per year). Labor Income loss is projected to be nearly $159 million. Value Added loss is estimated to be nearly $298 million.

For the Sacramento Downtown, the loss of output related to the decrease of employee spendings is estimated to be more than $98 million. Loss of Employment due to this factor is estimated to be equivalent to 622 jobs within 20 years period (i.e., on average 31 jobs per year). Labor Income loss is projected to be more than $33 million. Value Added loss is estimated to be more than $59 million.

Loss of Hotel Revenues Specific Impact

The summary of loss of hotel revenues specific impact is presented in the Table 7A for City of Sacramento and Table 7B for Sacramento Downtown.

For the City of Sacramento, the loss of output related to the decrease of hotel revenues is estimated to total more than $787 million. Loss of Employment due to this factor is estimated to be equivalent to 6,310 jobs within 20 years period (i.e., on average 316 jobs per year). Labor Income loss is projected to be nearly $293 million. Value Added loss is estimated to be nearly $474 million.

For the Sacramento Downtown, the loss of output related to the decrease of hotel revenues is estimated to total nearly $649 million. Loss of Employment due to this factor is estimated to be equivalent to 5,509 jobs within 20 years period (i.e., on average 275 jobs per year). Labor Income loss is projected to be more than $248 million. Value Added loss is estimated to be nearly $393 million.

For all three sources of negative impact (loss of Downtown real estate value, the loss of employee spending, and the loss of hotel revenues) the tables in the Appendix provide both overall impact and the impact on top ten industries that are mostly affected by that component.

Tax Impact

A summary of the negative tax impact at both federal and state and local levels is presented in the Exhibits below.

Impact on Federal Level

Exhibit C. Tax impact for Federal Taxes

Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations
Social Ins. Tax- Employee Contribution	$58,059,236	$19,125,008			
Social Ins. Tax- Employer Contribution	$53,253,262				
TOPI: Excise Taxes			$14,884,285		
TOPI: Custom Duty			$12,064,202		
TOPI: Fed Non-Taxes			$1,312,055		
Corporate Profits Tax					$40,968,878
Personal Tax: Income Tax				$85,171,397	
Total Federal Tax	$111,312,499	$19,125,008	$28,260,542	$85,171,397	$40,968,878

To summarize the negative tax impact on federal level, the total amount of subtractive taxes on production and imports (TOPI) is expected to be more than $28 million. Taxes on employee compensation will see a reduction of over $111 million. Corporate taxes will experience a decrease of nearly $41 million, while household taxes will undergo a reduction of more than $85 million. The negative impact on federal level will include more than $19 million of employee contribution taxes in the Proprietor Income category. The total cumulative tax negative impact on the federal level within 20 years period between 2023 and 2042 will be nearly $285 million.

Impact on the City of Sacramento

Exhibit D. Tax impact for State and Local Taxes (City of Sacramento Area)

Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations
Dividends					$1,602,107.00
Social Ins. Tax- Employee Contribution	$2,235,488.00				
Social Ins. Tax- Employer Contribution	$3,419,670.00				
TOPI: Sales Tax			$85,881,943.00		
TOPI: Property Tax			$61,497,629.00		
TOPI: Motor Vehicle Lic.			$2,116,523.00		
TOPI: Severance Tax			$121,688.00		
TOPI: Other Taxes			$13,235,896.00		
TOPI: S/L Non-Taxes			$6,072,775.00		
Corporate Profits Tax					$18,367,515.00
Personal Tax: Income Tax				$34,232,043.00	
Personal Tax: Non-Taxes (Fines- Fees				$4,976,784.00	
Personal Tax: Motor Vehicle License				$1,281,085.00	

Personal Tax: Property Taxes				$699,045.00	
Personal Tax: Other Tax (Fish/Hunt)				$168,155.00	
Total State and Local Tax	$5,655,157.00		$168,926,454.00	$41,357,111.00	$19,969,623.00

To summarize state and local level negative tax impact of WFH transition in City of Sacramento, the total amount of subtractive taxes on production and imports (TOPI) is expected to be nearly $169 million. The amount of lost tax revenues on employee compensation will be nearly $5.7 million. Loss of corporate taxes will be nearly $20 million. Reduction of household taxes will be more than $41 million. The total cumulative state and local negative tax impact of WFH transition within 20 years period between 2023 and 2042 will be nearly $236 million.

Impact on the Sacramento Downtown

Exhibit E. Tax impact for State and Local Taxes (Sacramento Downtown)

Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations
Dividends					$1,283,987.00
Social Ins. Tax- Employee Contribution	$1,759,148.00				
Social Ins. Tax- Employer Contribution	$2,691,004.00				
TOPI: Sales Tax			$56,314,127.00		
TOPI: Property Tax			$40,108,984.00		
TOPI: Motor Vehicle Lic.			$1,377,696.00		
TOPI: Severance Tax			$79,082.00		
TOPI: Other Taxes			$8,103,851.00		
TOPI: S/L Non-Taxes			$3,891,295.00		
Corporate Profits Tax					$14,296,326.00
Personal Tax: Income Tax				$11,807,261.00	
Personal Tax: Non-Taxes (Fines- Fees				$1,644,145.00	
Personal Tax: Motor Vehicle License				$534,197.00	
Personal Tax: Property Taxes				$277,190.00	
Personal Tax: Other Tax (Fish/Hunt)				$55,559.00	
Total State and Local Tax	$4,450,153.00		$109,875,036.00	$14,318,350.00	$15,580,313.00

To summarize state and local level negative tax impact of WFH transition in Sacramento Downtown, the total amount of subtractive taxes on production and imports (TOPI) is expected to be nearly $110 million. The amount of lost tax revenues on employee compensation will be nearly $4.5 million. Loss of corporate taxes will be nearly $15.6 million. Reduction of household taxes will be more than $14.3 million. The total cumulative state and local negative tax impact of WFH transition within 20 years period between 2023 and 2042 will be more than $144 million.

NEEDS AND NEXT STEPS

As the capital city of a state whose gross domestic product (GDP) represents the world's 4th largest economy, Sacramento is highly dependent on decisions and policies related to the State of California's department headquarters located in the region. The new after COVID-19 reality has had dramatic and devastating impacts on the economic vitality of Downtown Sacramento, and without urgent and significant strategic actions, these impacts will have a profound effect throughout the capital region for decades to come.

Without swift action and a collaborative approach to mitigating these impacts, Downtown Sacramento will suffer an estimated $4.37 billion economic loss over the next two decades, resulting in a devastating hit to the capital city and severely impact those who call this region home.

The shift to work from home (WFH) is expected to exert a significant adverse influence on the economy of Sacramento Downtown, extending beyond the factors examined in this study. While the study primarily focused on three key economic aspects—namely, the loss of Downtown real estate value, decreased employee spending, and reduced hotel revenues—it's important to acknowledge the broader spectrum of potential repercussions. Among these are the declining activity levels in sectors like restaurants, retail, entertainment, and transportation, all of which form integral components of Sacramento Downtown's economic ecosystem.

Restaurants and eateries that heavily relied on the office worker lunch crowd may witness a sharp drop in customer footfall. Retail establishments, previously frequented by office-goers during their breaks or after work, could experience diminished sales. The entertainment industry, encompassing theaters, event venues, and nightlife establishments, might face a reduction in patrons as social gatherings in the city center decline. Additionally, transportation services that shuttle employees to and from work could see decreased demand as fewer people commute to the Downtown area.

The multifaceted impact of WFH extends beyond the three primary factors studied, creating a complex web of economic challenges for Sacramento Downtown, which will require innovative strategies to adapt and thrive in this evolving landscape.

APPENDIX

Table 1.A. City of Sacramento (California 6th Congressional District) IMPLAN Model Information.

Model Information			
		Value Added	
GRP	$48,346,022,103	Employee Compensation	$28,803,362,782
Total Personal Income	$39,798,480,000	Proprietor Income	$3,373,015,074
Total Employment	463,010	Other Property Type Income	$12,720,289,142
		Tax on Production and Import	$3,449,355,105
Number of Industries	400		
Land Area (Sq. Miles)	324	Total Value Added	$48,346,022,103
Area Count	1		
Population	710,403	*Final Demand*	31,820,554,712
Total Households	247,187	Households	$17,144,825,663
Average Household Income	$161,006	State/Local Government	$1,969,860,728
		Federal Government	$10,268,438,211
Trade Flows Method	Econometric RPC	Capital	$21,734,371,793
Model Status	Multipliers	Exports	-$31,816,342,193
		Imports	-$2,775,683,792
Economic Indicators		Institutional Sales	
Shannon-Weaver Index	.72367	Total Final Demand:	$48,346,025,122

Table 2.B. Sacramento Downtown (Zip Code 95814) IMPLAN Model Information

Model Information			
		Value Added	
GRP	$4,082,855,289	Employee Compensation	$2,277,978,447
Total Personal Income	$651,363,200	Proprietor Income	$376,150,577
Total Employment	41,251	Other Property Type Income	$1,212,111,037
		Tax on Production and Import	$216,615,228
Number of Industries	225		
Land Area (Sq. Miles)	1	Total Value Added	$4,082,855,289
Area Count	1		
Population	11,640	*Final Demand*	1,158,497,116
Total Households	10,475	Households	$745,405,582
Average Household Income	$62,182	State/Local Government	$66,227,516
		Federal Government	$788,057,312
Trade Flows Method	Econometric RPC	Capital	$4,252,392,342
Model Status	Multipliers	Exports	-$2,862,258,443
		Imports	-$65,466,014
Economic Indicators		Institutional Sales	
Shannon-Weaver Index	.6379	Total Final Demand:	$4,082,855,411

Table 2.A. Top 10 Industries - City of Sacramento (California 6th Congressional District)

Top Ten Industries				
Industry Code	**Description**	**Employment**	**Labor Income**	**Output**
540	* Employment and payroll of state govt, non-education	38,310	$5,379,229,000	$5,844,431,000
541	* Employment and payroll of local govt, education	19,201	$454,841,000	$672,492,000
447	Other real estate	15,568	$1,387,835,000	$1,510,375,000
493	Individual and family services	13,860	$623,808,200	$1,269,013,000
510	Limited-service restaurants	13,309	$137,676,000	$304,247,600
509	Full-service restaurants	13,088	$465,680,200	$2,837,940,000
542	* Employment and payroll of local govt, non-education	12,594	$369,978,800	$904,417,000
472	Employment services	12,456	$316,764,000	$1,035,971,000
418	Transit and ground passenger transportation	9,265	$1,052,780,000	$1,146,722,000
490	Hospitals	9,221	$1,172,938,000	$2,195,625,000

Table 2.B. Aggregated Industry Sectors - City of Sacramento (California 6th Congressional District)

Sector Code	Description	Employment	Output	Employee Compensation	Proprietor Income	Other Property Type Income	Tax On Production And Imports
0	Total	463,010	$76,901,337,582	$28,803,362,782	$3,373,015,074	$12,720,289,142	$3,449,355,105
1	Agriculture	1,289	$174,988,399	$43,626,113	$21,049,792	$46,769,670	$1,728,483
2	Mining	541	$236,340,559	$19,024,709	$2,962,061	$31,551,532	$20,619,741
3	Construction	28,679	$4,797,189,735	$1,698,424,128	$446,308,438	$698,471,161	$41,523,920
4	Manufacturing	15,735	$6,681,609,125	$1,178,418,332	$39,864,798	$779,123,678	$109,695,953
5	Transportation, Information, Power, and Utilities	38,790	$7,129,075,219	$1,264,760,514	$554,205,556	$1,353,581,636	$213,802,061
6	Trade	46,690	$7,858,825,867	$2,055,261,860	$269,490,851	$733,782,406	$1,746,835,759
7	Service	251,882	$38,282,910,187	$12,910,920,416	$2,039,133,579	$7,732,629,845	$1,390,311,463
8	Government	79,404	$11,740,398,491	$9,632,926,710	$0	$1,344,379,214	-$75,162,275

Table 2.C. Top 10 Industries – Sacramento Downtown (Zip Code 95814)

Top Ten Industries				
Industry Code	**Description**	**Employment**	**Labor Income**	**Output**
540	* Employment and payroll of state govt, non-education	3,061	$90,028,280	$219,988,100
493	Individual and family services	2,776	$269,142,500	$598,130,000
541	* Employment and payroll of local govt, education	2,255	$80,283,020	$490,422,400
472	Employment services	1,876	$19,324,250	$42,796,140
418	Transit and ground passenger transportation	1,616	$171,974,700	$428,511,200
447	Other real estate	1,601	$127,393,100	$329,413,100
509	Full-service restaurants	1,526	$36,319,980	$53,603,800
510	Limited-service restaurants	1,458	$58,004,960	$148,958,900
542	* Employment and payroll of local govt, non-education	1,406	$158,884,600	$365,517,600
490	Hospitals	1,283	$42,822,310	$87,858,900

Table 3.A. Overall Economic Impact of WFH Transition in City of Sacramento

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	15,335	$593,686,009	$1,426,309,141	$2,927,913,096
Indirect Effect	7,590	$452,264,466	$763,231,300	$1,426,274,295
Induced Effect	6,524	$364,201,958	$681,271,698	$1,099,302,668
Total Effect	29,448	$1,410,152,433	$2,870,812,139	$5,453,490,060

Table 3.B. Economic Impact of WFH Transition – Top Ten Industries Affected in City of Sacramento

Industry Code	Description	Employment	Labor Income	Value Added	Output
447	Other real estate	12,058	$451,229,432	$1,259,626,042	$2,728,894,445
507	Hotels and motels, including casino hotels	4,767	$199,062,013	$314,695,363	$512,657,111
60	Maintenance and repair construction of nonresidential structures	498	$38,294,685	$62,538,903	$128,096,975
476	Services to buildings	857	$34,614,703	$45,169,551	$79,250,894
509	Full-service restaurants	860	$26,581,062	$40,332,199	$67,112,596
510	Limited-service restaurants	553	$14,779,455	$24,560,822	$49,924,086
472	Employment services	504	$23,862,622	$33,022,750	$48,871,537
477	Landscape and horticultural services	385	$19,697,802	$23,238,603	$38,728,732
511	All other food and drinking places	480	$16,827,062	$23,378,225	$35,673,071
418	Transit and ground passenger transportation	393	$4,281,126	$5,474,027	$9,692,559

Table 3.C. Economic Impact of WFH Transition by Output – Aggregated Industry Sectors in City of Sacramento

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$2,927,913,096	$1,426,274,295	$1,099,302,668	$5,453,490,060
7	Service	$2,927,913,096	$947,321,541	$783,233,887	$4,658,468,524
5	TIPU	0	$189,176,784	$77,191,051	$266,367,835
6	Trade	0	$56,066,034	$169,650,728	$225,716,763
3	Construction	0	$123,449,139	$12,942,521	$136,391,660
8	Government	0	$74,887,708	$30,928,013	$105,815,722
4	Manufacturing	0	$32,585,197	$23,782,023	$56,367,220
2	Mining	0	$2,584,236	$853,754	$3,437,991
1	Agriculture	0	$203,655	$720,691	$924,346

Table 3.D. Economic Impact of WFH Transition by Employment – Aggregated Industry Sectors in City of Sacramento

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	15,335	7,590	6,524	29,448
7	Service	15,335	6,069	4,621	26,025
6	Trade	0	253	1,241	1,494
5	TIPU	0	505	430	935
3	Construction	0	480	53	534
8	Government	0	179	94	273
4	Manufacturing	0	98	79	177
2	Mining	0	4	1	6
1	Agriculture	0	1	4	5

Table 3.E. Economic Impact of WFH Transition by Value Added – Aggregated Industry Sectors in City of Sacramento

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$1,426,309,141	$763,231,300	$681,271,698	$2,870,812,139
7	Service	$1,426,309,141	$527,548,601	$511,352,143	$2,465,209,885
6	Trade	$-	$34,911,114	$101,842,117	$136,753,231
5	TIPU	$-	$88,194,334	$37,671,256	$125,865,590
3	Construction	$-	$60,269,440	$6,304,242	$66,573,682
8	Government	$-	$41,249,027	$15,751,474	$57,000,501
4	Manufacturing	$-	$10,311,403	$7,734,961	$18,046,364
2	Mining	$-	$628,381	$207,624	$836,005
1	Agriculture	$-	$118,999	$407,880	$526,879

Table 3.F. Economic Impact of WFH Transition by Labor Income – Aggregated Industry Sectors in City of Sacramento

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$593,686,009	$452,264,466	$364,201,958	$1,410,152,433
7	Service	$593,686,009	$332,016,107	$266,280,539	$1,191,982,655
6	Trade	$-	$15,532,608	$57,006,801	$72,539,408
5	TIPU	$-	$33,563,324	$19,188,555	$52,751,879
3	Construction	$-	$36,907,035	$3,952,346	$40,859,381
8	Government	$-	$27,628,909	$12,732,437	$40,361,346
4	Manufacturing	$-	$6,393,066	$4,806,156	$11,199,221
1	Agriculture	$-	$68,695	$184,025	$252,720
2	Mining	$-	$154,722	$51,101	$205,823

Table 4.A. Overall Economic Impact of WFH Transition in Sacramento Downtown

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	15,298	$592,849,360	$1,430,433,419	$2,927,913,096
Indirect Effect	5,731	$360,976,963	$641,176,706	$1,177,964,597
Induced Effect	1,807	$90,792,159	$161,851,423	$266,952,971
Total Effect	22,836	$1,044,618,482	$2,233,461,548	$4,372,830,665

Table 4.B. Economic Impact of WFH Transition – Top Ten Industries Affected in Sacramento Downtown

Industry Code	Description	Employment	Labor Income	Value Added	Output
447	Other real estate	11,919.4	$446,296,886	$1,253,159,544	$2,705,479,436
507	Hotels and motels, including casino hotels	4,699.0	$196,586,822	$310,809,730	$505,967,777
509	Full-service restaurants	564.3	$17,456,624	$26,489,438	$44,057,549
472	Employment services	397.0	$18,706,994	$25,899,011	$38,379,140
60	Maintenance and repair construction of nonresidential structures	376.8	$28,448,629	$46,542,460	$96,075,361
511	All other food and drinking places	343.9	$12,070,500	$16,769,319	$25,578,834
457	Architectural, engineering, and related services	318.5	$35,574,444	$41,479,293	$66,233,854
418	Transit and ground passenger transportation	258.8	$2,803,446	$3,586,115	$6,360,709
510	Limited-service restaurants	242.9	$6,487,809	$10,787,680	$21,936,288
441	Monetary authorities and depository credit intermediation	238.9	$21,272,866	$60,231,861	$96,723,724

Table 4.C. Economic Impact of WFH Transition by Output – Aggregated Industry Sectors in Sacramento Downtown

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$2,927,913,096	$1,177,964,597	$169,032,667	$4,274,910,361
7	Service	$2,927,913,096	$807,057,832	$119,845,273	$3,854,816,201
5	TIPU	$-	$129,982,091	$12,479,121	$142,461,212
8	Government	$-	$100,690,037	$9,112,271	$109,802,308
3	Construction	$-	$95,324,695	$1,762,319	$97,087,014
6	Trade	$-	$23,359,459	$24,509,897	$47,869,355
4	Manufacturing	$-	$15,961,039	$866,284	$16,827,323
2	Mining	$-	$5,579,990	$425,219	$6,005,209
1	Agriculture	$-	$9,455	$32,282	$41,737

Table 4.D. Economic Impact of WFH Transition by Employment – Aggregated Industry Sectors in Sacramento Downtown

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	15,298	5,731	1,146	22,174
7	Service	15,298	4,580	835	20,713
5	TIPU	0	422	77	500
3	Construction	0	374	7	381
6	Trade	0	96	200	295
8	Government	0	193	22	216
4	Manufacturing	0	57	3	60
2	Mining	0	9	1	10
1	Agriculture	0	0	0	0

Table 4.E. Economic Impact of WFH Transition by Value Added – Aggregated Industry Sectors in Sacramento Downtown

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$1,430,433,419	$641,176,706	$102,434,428	$2,174,044,553
7	Service	$1,430,433,419	$454,559,714	$74,683,816	$1,959,676,950
5	TIPU	$-	$60,697,823	$6,171,441	$66,869,264
8	Government	$-	$57,347,017	$5,104,738	$62,451,755
3	Construction	$-	$46,178,740	$852,998	$47,031,738
6	Trade	$-	$15,408,095	$15,205,380	$30,613,476
4	Manufacturing	$-	$5,590,565	$290,037	$5,880,602
2	Mining	$-	$1,389,531	$105,897	$1,495,428
1	Agriculture	$-	$5,220	$20,120	$25,341

Table 4.F. Economic Impact of WFH Transition by Labor Income – Aggregated Industry Sectors in Sacramento Downtown

Sector Code	Description	Direct	Indirect	Induced	Total
0	Total	$592,849,360	$360,976,963	$57,490,307	$1,011,316,629
7	Service	$592,849,360	$263,694,945	$41,520,298	$898,064,603
8	Government	$-	$34,282,686	$3,534,731	$37,817,417
3	Construction	$-	$28,227,301	$531,938	$28,759,239
5	TIPU	$-	$24,836,555	$3,072,818	$27,909,373
6	Trade	$-	$6,036,620	$8,622,187	$14,658,808
4	Manufacturing	$-	$3,549,799	$173,940	$3,723,739
2	Mining	$-	$346,891	$26,435	$373,326
1	Agriculture	$-	$2,166	$7,959	$10,125

Table 5.A. Overall Economic Impact of Real Estate Value Loss in City of Sacramento

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	10,766	$402,887,486	$1,124,677,456	$2,436,537,480
Indirect Effect	6,667	$396,057,343	$676,613,285	$1,268,627,159
Induced Effect	2,861	$159,582,271	$298,101,922	$481,169,002
Total Effect	20,294	$958,527,100	$2,099,392,664	$4,186,333,641

Table 5.B. Overall Economic Impact of of Real Estate Value Loss in Sacramento Downtown

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	10,735	$401,932,121	$1,128,587,472	$2,436,537,480
Indirect Effect	4,999	$314,576,788	$569,442,724	$1,052,262,221
Induced Effect	931	$46,664,783	$83,131,869	$137,202,418
Total Effect	16,664	$763,173,693	$1,781,162,065	$3,626,002,119

Table 6.A. Overall Economic Impact of Decrease of Employee Spendings in City of Sacramento

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	0	0	0	0
Indirect Effect	0	0	0	0
Induced Effect	2,844	$158,911,984	$297,638,079	$480,130,910
Total Effect	2,844	$158,911,984	$297,638,079	$480,130,910

Table 6.B. Overall Economic Impact of Decrease of Employee Spendings in Sacramento Downtown

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	0	0	0	0
Indirect Effect	0	0	0	0
Induced Effect	662	$33,335,187	$59,476,472	$98,018,323
Total Effect	662	$33,335,187	$59,476,472	$98,018,323

Table 7.A. Overall Economic Impact of Hotels Revenues Loss in City of Sacramento

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	4,569	$190,798,523	$301,631,684	$491,375,616
Indirect Effect	923	$56,207,123	$86,618,014	$157,647,136
Induced Effect	819	$45,707,703	$85,531,697	$138,002,757
Total Effect	6,310	$292,713,349	$473,781,396	$787,025,509

Table 7.B. Overall Economic Impact of Hotels Revenues Loss in Sacramento Downtown

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	4,563	$190,917,238	$301,845,947	$491,375,616
Indirect Effect	731	$46,400,175	$71,733,982	$125,702,376
Induced Effect	215	$10,792,189	$19,243,082	$31,732,231
Total Effect	5,509	$248,109,602	$392,823,011	$648,810,223