Economic Impact Study of CalSTRS Benefit Payments in California
Overview Report

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Executive Summary

This report analyzes the economic impact of ongoing monthly and quarterly benefit payments made by the California State Teachers' Retirement System (CalSTRS) in fiscal year 2011-2012 (FY 2012) on California and its sub-regions. These payments totaled $9.2 billion during FY 2012, which equated to approximately $7.6 billion in expenditures across California.

An input-output model was developed with the IMPLAN software system to estimate the total economic impact of the payments on income, employment, and output. The total economic impact includes both the direct impact from expenditures, as well as indirect and induced effects resulting from the initial spending.

The state-wide total economic impact from CalSTRS benefit payments is estimated at:

- 92,815 jobs
- $4.4 billion in total labor income
- $11 billion in total output
- $1.2 billion in associated tax payments to state and local government

Sections overviewing the economic impacts across California's Assembly districts, Senate districts, counties, regions, and Congressional districts conclude this overview report. Greater details and methodology on the impact of CalSTRS payments on these sub-regions can be found in appendices as follows:

Zone:	Associated Appendix:
Regions	Appendix A
Counties	Appendix B
Congressional Districts	Appendix C
Senate Districts	Appendix D
Assembly Districts	Appendix E

Findings Highlights

State-wide:

- State-wide total employment impact is similar to that of the non-profit sector in California (charitable trusts, community foundations/chests, scholarships trusts, etc.).
- State-wide total output impact is similar to the wineries sector in California (growing, blending, and manufacturing wines and brandies from grapes).
- State-wide total labor income impact is similar to the online/direct sales sector in California (electronic shopping, mail-order houses, fruit and other temporary stand sellers).

Regions:

- Regions had the highest correlation between gross benefit payments and total output effect rankings among all of the geographies. This relationship is shown in the rankings from Table A3 of Appendix A. Each region ranked exactly the same in terms of benefit payments and total output effect; except for the North Coast and the Northern Sacramento Valley, which swapped rankings.
- Benefit payments and impacts varied the greatest across the regions:
    - The total output effect by region had a range of $4.5 billion, from $4.5 billion to $7 million. The mean total output effect was $734.5 million and the median $266.3 million.
    - Gross benefit payments by region had a range of $3.1 billion from $3.1 billion to $11 million. The mean benefit payment was $613.7 million and the median $256.7 million.
- The regions with the largest benefit payment and those with greatest economic impacts tended to be those with greatest populations and economies.
- <u>Region impacts (top five listed per category):</u>
    - Largest Economic Impact: Greater Los Angeles, Greater Bay Area, Greater San Diego, Inland Empire, Greater Sacramento.
    - Highest Total Jobs/$M Expenditures: Greater Los Angeles – 13.48, Greater San Diego – 12.16, Greater Sacramento – 12.13, Inland Empire – 11.83, Greater Bay Area – 11.76.
    - Highest Benefit Payments to GRP: Mother Lode, Northern Sierra Nevada, Shasta Cascades, Northern Sacramento Valley, North Coast.

Counties:

- Counties had the one of the highest correlation between gross benefit payments and total output effect among all of the geographies. This relationship is shown in the rankings from Table B3 of Appendix B. Each of the top five counties in benefit payments ranked exactly the same for total output effect.
- Benefit payments and impacts varied significantly across the counties:
    - The total output effect by county had a range of $2.7 billion, from $2.7 billion to $0.2 million. The mean total output effect was $190 million and the median $50 million.
    - Gross benefit payments by county had a range of $1.9 billion, from $1.9 billion to $0.6 million. The mean benefit payment was $158.7 million and the median $54.5 million.
- Higher ranking recipient counties and those with greatest economic impacts tended to be those with bigger populations and economies.

- County impacts (top five listed per category):
  - Largest Economic Impact: Los Angeles, Orange, San Diego, Riverside, Santa Clara.
  - Highest Total Jobs/$M Expenditures: Los Angeles – 13.32, Orange – 13.21, Ventura – 13.01, San Diego – 12.97, Placer – 12.88.
  - Highest Benefit Payments to GRP: Sierra, Calaveras, Tuolumne, Trinity, Mariposa.

Congressional Districts:

- Significant correlation between gross benefit payments and total output effect also exists across the 53 Congressional districts. This relationship is shown in Table C3 of Appendix C. Accordingly, the top 11 Congressional districts that received $250 million or more in benefit payments each ranked in the top 14 for total output effect.
- Despite nearly equal populations, benefit payments and impacts also varied across Congressional Districts:
  - The total output effect by Congressional district had a range of $417.7 million, from $442 million to $24.3 million. The mean total output effect was $207.9 million and the median $201.3 million.
  - Gross benefit payments by Congressional district had a range of $307.9 million, from $334.2 million to $26.4 million. The mean benefit payment was $173.7 million and the median $170.8 million.
- Recipient Congressional districts, such as Fresno (22), North Coast (2), and Santa Barbara (24) ranked relatively higher in output effects compared to their rankings in benefit payments. As with the Senate and Assembly districts, greater absorptive capacity of these economies, particularly in the retail sector, is likely the reason.
- Congressional District impacts (top five listed per category):
  - Largest Economic Impact: Huntington Beach (48), Foothills (4), Pasadena (27), North Coast (2), Fresno (22).
  - Highest Total Jobs/$M Expenditures: San Bernardino (31) – 14.3, Fresno (22) – 14.09, Foothills (4) – 13.4, Ventura (26) – 13.4, La Mesa (53) – 13.32.
  - Highest Benefit Payments to GRP: Fresno (22), North East California (22), Foothills (4), Coachella Valley (36), Stanislaus (10).

Senate Districts:

- Significant correlation between gross benefit payments and total output effect also exists across the 40 Senate districts. This relationship is shown in Table D3 of Appendix D. Accordingly, the top seven Senate districts that received $330 million or more in benefit payments each ranked in the top seven for total output effect.
- Despite nearly equal populations, benefit payments and impacts also varied across Senate districts:
  - The total output effect by Senate district had a range of $472.3 million, from $550 million to $77.8 million. The mean total output effect was $275.4 million and the median $282.6 million.
  - Gross benefit payments by Senate District had a range of $334.9 million, from $397.4 million to $62.5 million. The mean benefit payment was $226.6 million and the median $243.2 million.
- Recipient Senate Districts, such as Pasadena (25), Foothills (8), Ventura Co (27), and Roseville-Yuba-Tehama (4) ranked relatively higher in output effects compared to their rankings in benefit payments. As with the Assembly districts, greater absorptive capacity of these economies, particularly in the retail sector, is likely the reason.

- Senate District impacts (top five listed per category):
  - Largest Economic Impact: North East California (1), Irvine (37), Pasadena (25), Foothills (8), Santa Cruz-SLO (17).
  - Highest Total Jobs/$M Expenditures: North East California (1) – 13.89, Roseville-Yuba-Tehama (4) – 13.4, San Joaquin (5) – 13.3, Foothills (8) – 13.22, Ventura (27) – 13.08.
  - Highest Benefit Payments to GRP: North East California (1), North Coast (2), San Joaquin (5), Redlands (23), Carlsbad (36).

Assembly Districts:

- A strong correlation between gross benefit payments and total output effect exists across the 80 Assembly districts. This relationship is shown in the rankings from Table E3 of Appendix E. For example, the top 12 Assembly districts each received $175 million or more in benefit payments and each of these ranked in the top 15 Assembly districts for total output effect.
- Despite nearly equal populations, benefit payments and impacts varied across Assembly districts:
  - The total output effect by Assembly district had a range of $297.5 million, from $309.6 million to $12.1 million. The mean total output effect was $137.7 million and the median $134.3 million.
  - Gross benefit payments by Assembly district had a range of $255.5 million, from $442 million to $12.9 million. The mean total output effect was $115.1 million and the median $113.8 million.
- Some top recipient Assembly districts, such as Fresno (23), Tri-Valley (16), and Santa Barbara (37) ranked relatively higher in output effects. Greater absorptive capacity of these economies, particularly in the retail sector, is likely the reason.
- Assembly District impacts (top five listed per category):
  - Largest Economic Impact: Pasadena (41), Irvine (74), Fresno (23), Roseville (6), Monterey (29).
  - Highest Total Jobs/$M Expenditures: Fresno (23) – 14.53, Redlands (40) – 14.48, Santa Barbara (37) – 13.86, Ventura (44) – 13.64, Stockton (13) – 13.36.
  - Highest Output to Expenditures: Fresno (23), Tri-Valley (16), West San Fernando Valley (45), Roseville (6), Redlands (40).

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Glossary

BLS	Bureau of Labor Statistics
CalSTRS	California State Teachers' Retirement System
Direct Effects	These are the changes in jobs, sales, and income related exclusively to initial expenditures.
Employment	This is the number of full- and part-time jobs based on an annual average of monthly jobs. That is, one job lasting 12 months is equal to two jobs lasting six months each and is equal to three jobs lasting four months each.
FTB	Franchise Tax Board
FY	Fiscal Year
GRP	Gross Regional Product – is conceptually equivalent to gross domestic product (GDP); while GDP measures newly created value through production by residents in the domestic economy, GRP measures newly created value through production by residents in the regional economy, be it a state, county, or district.
Indirect Effects	These represent the iterative impacts of inter-industry transactions as supplying industries respond to demand from the sector(s) where the initial expenditures occurred.
Induced Effects	These reflect the contribution benefit payments make to household expenditures by direct and indirect sector employees.
IRS	Internal Revenue Service
Labor Income	This is the sum of employee compensation and proprietor income. Employee compensation includes wages, salaries, benefits, and all other employer contributions, while proprietor income consists of payments received by self-employed individuals and unincorporated business owners.
Output	This represents the value of industry production. It accounts for the total change in the value of production in an industry for a given time period. Output varies as a measure across industries. For manufacturers, the value of production is sales plus or minus any change in inventories. For service sectors, the value of production equals their sales. While for retail and wholesale trade, the value of production equals their gross margin and not their gross sales.
Total Effects	These are the combined impacts of the Direct, Indirect, and Induced Effects.

1 Introduction

CalSTRS benefit payments totaled $10.7 billion in FY 2012, of which approximately $9.2 billion were ongoing monthly and quarterly payments to beneficiaries living in California.[1] Table 1 presents the historic composition of CalSTRS income sources since 1985. In FY 2012, member contributions totaled $2.3 billion, employer contributions $2.2 billion, state General Fund payments $1.3 billion and the remaining $4.9 billion from investment income and accumulated assets.[2] Benefit recipients in California spend a significant portion of this money on in-state goods and services, which supports local businesses. These businesses purchase goods themselves, which increases demand for other local vendors that further contributes to the California workforce and economy.

Table 1 Average CalSTRS Benefit Payment Income Sources

	Member Contributions	Employer Contributions	State Contributions	Investment Earnings
Since 1985	17%	17%	9%	58%

Source: CalSTRS

This study quantifies the total effect of these benefit payments on California's economy based on the following measures:

- Economic value of production (output) from CalSTRS benefit payments in California
- Jobs (employment) created
- Related labor income

CalSTRS, which is the largest educator-only pension fund in the world, had $151.3 billion in net assets at the end of FY 2012. It administers retirement, disability, and survivor benefits for California's 862,192 public school educators and their beneficiaries. CalSTRS members include employees of approximately 1,700 school districts, community college districts, county offices of education, and regional occupational programs. Membership is in effect as long as contributions remain on deposit with CalSTRS.

At the end of FY 2012, there were 421,499 active members contributing to the State Teachers' Retirement Plan and 178,655 inactive members. An additional 262,038 individuals were beneficiaries of

[1] Ongoing monthly and quarterly payments include retirement, disability, survivor, and purchasing power benefits. However, they do not include ad hoc payments such as one-time death payments, underpayment adjustments when a member's employer reports more service credit or salary than originally received, court-ordered payments, and refunds of member contributions and interest.

[2] Source: California State Teachers' Retirement System (2012) *Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2012*, page 41.

the CalSTRS benefit programs. These beneficiaries received retirement, disability and survivor benefits; details are reported in Table 2.

Table 2 FY 2012 CalSTRS Beneficiaries

	Beneficiaries	Percentage of Beneficiaries
Disability benefits	9,036	3.4%
Survivor benefits	22,724	8.7%
Service Retirement benefits	230,278	87.9%
Total	262,038	100.0%

The remaining sections of this report examine the economic impact of these benefit payments in California. Section 2 reviews the results of the state-wide economic impact analysis and Section 3 discusses the tax impact. Section 4 presents the data and methodology used in the analysis. Sections 5 through 9 then present summaries of the impacts across various California geographies. Details of the economic impact on the areas contained in Sections 5 through 9 are reported further in appendices as follows: Regions (Appendix A); Counties (Appendix B); Congressional Districts (Appendix C); Senate Districts (Appendix D); and Assembly Districts (Appendix E).

2 Economic Impact

CalSTRS benefit recipients in California made $7.3 billion in expenditures, after deducting savings and net income tax payments from the $9.2 billion in payments made in-state during FY 2012.[3] The value and relative share of these expenditures are reported by aggregate economic sector (Industry) in Table 3.[4]

Table 3 Benefit Expenditures by Industry

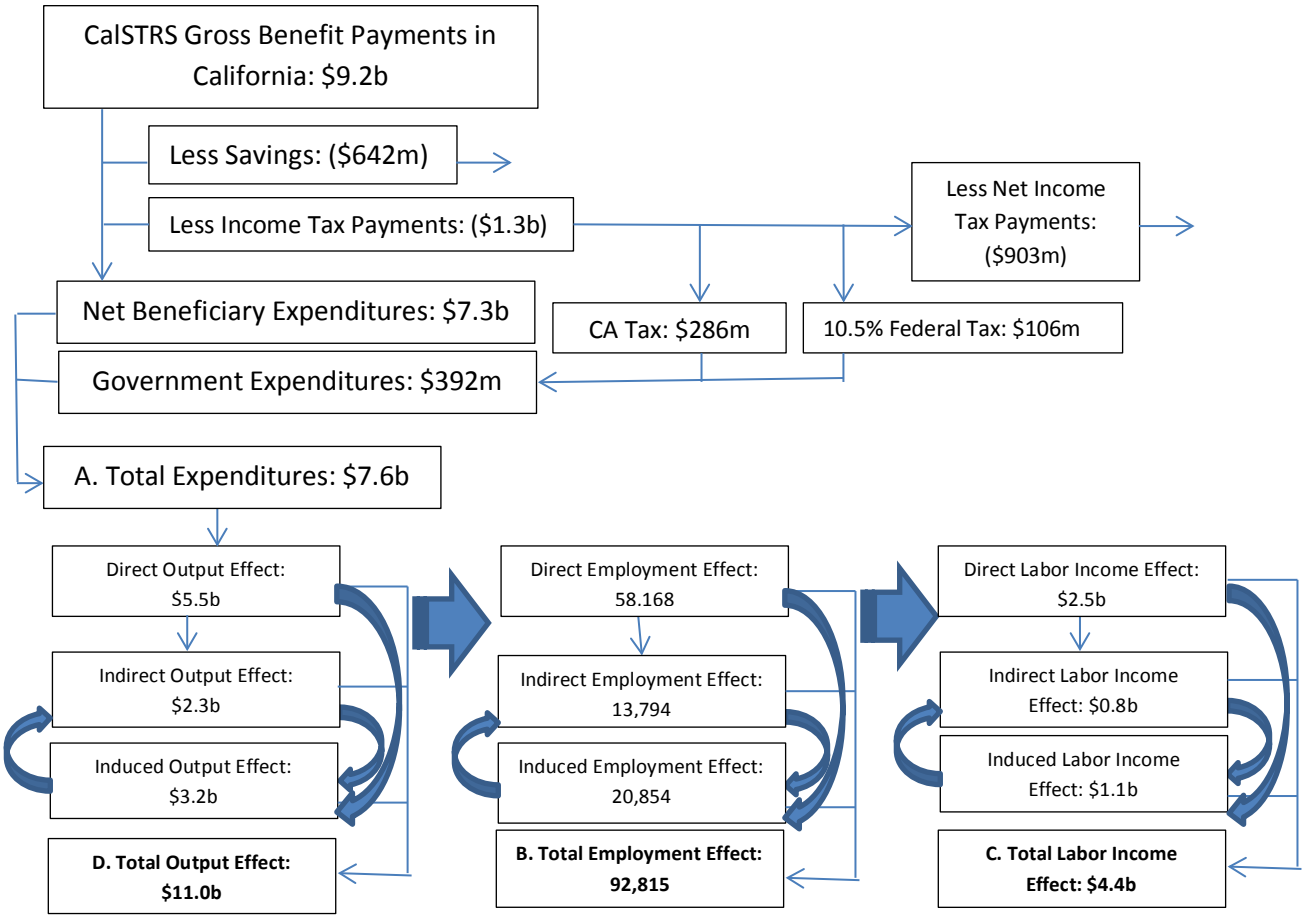
Industry	Expenditure Share	Expenditure Amount
Retail Trade	30.0%	$2,174,083,561
Real Estate and Rental and Leasing	21.4%	$1,553,560,815
Finance and Insurance	16.0%	$1,162,308,641
Other Services	8.5%	$614,619,371
Accommodation and Food Services	6.8%	$491,765,591
Utilities	4.8%	$348,896,715
Health Care and Social Assistance	3.9%	$280,821,796
Information	2.3%	$169,898,122
Building, Security & Waste Management Services	1.9%	$138,937,014
Transportation and Warehousing	1.7%	$123,664,332
Arts, Entertainment, and Recreation	1.3%	$91,947,068
Cash Transfers	0.6%	$42,338,449
Educational Services	0.5%	$39,123,516
Professional, Scientific, and Technical Services	0.3%	$18,813,308
Total	100.0%	$7,250,778,299

[3] This includes only ongoing monthly and quarterly benefit payments.

[4] Spending by industry was derived from the Consumer Expenditure Survey for persons 65 and over that reside in the West. For details see: U.S Bureau of Labor Statistics (2013), *Consumer Expenditures in 2011*: Washington D.C.

There were also an additional $392 million in government expenditures made as a result of income tax payments in FY 2012. These consisted of all of the $286 million in income tax payments for ongoing monthly and quarterly benefits made by CalSTRS to California's Franchise Tax Board and a portion (10.5% or $106 million) of the $1.01 billion in income tax payments made by CalSTRS to the Internal Revenue Service. Therefore, with the $7.3 billion in net beneficiary expenditures and the $392 million in government expenditures supported from CalSTRS beneficiary income tax payments, the total state-wide CalSTRS associated expenditures in FY 2012 equaled $7.6 billion.

Figure 1 State-Wide Economic Impact of CalSTRS FY 2012 Benefit Payments



As illustrated in Figure 1 above and detailed in Table 4 below, the economic impact of the $7.6 billion in beneficiary expenditures on California's economy in FY 2012 was about $11 billion in output, $4.4 billion in labor income, and 92,815 jobs. Indirect employment effects were 13,794 jobs and induced effects were 20,854 jobs. Indirect labor income effects were $0.8 billion and induced labor income effects were $1.1 billion. Lastly, indirect output effects were $2.3 billion and induced output effects equaled $3.2 billion.

Table 4 Overview of CalSTRS FY 2012 Benefit Payments' State-Wide Economic Impact

Economic Description			
Gross Regional Product		$1,951,267,114,172	
Employment		19,551,664	
Population		37,691,910	
Land Area (Sq. Miles)		1,555,973	
Net CalSTRS Beneficiaries' Expenditures		$7,250,778,299	
Government Expenditures		$392,042,157	
Total Expenditures from CalSTRS Benefit Payments		**$7,642,820,456**	
Economic Impact			
Impact Type:	Employment	Labor Income	Output
Indirect Effect	13,794	$827,422,123	$2,332,235,947
Induced Effect	20,854	$1,070,408,245	$3,190,221,468
Total Effect	**92,815**	**$4,364,312,496**	**$11,017,949,116**
Top Ten Industries Affected by Employment			
Description	Employment	Labor Income	Output
Supermarkets, liquor, & other food/beverage stores	9,098	$355,322,668	$212,289,435
Restaurants, bars, & other eating/drinking places	8,225	$208,100,968	$524,408,697
Department Stores, Superstores & Warehouse Clubs	6,778	$208,320,222	$158,331,175
Real estate establishments	4,648	$81,225,217	$817,264,060
Services to buildings and dwellings	2,735	$79,663,757	$169,881,969
Retail Stores - Sporting goods, hobby, books & music	2,618	$72,687,684	$62,723,947
New/Used vehicle dealers & parts/accessories stores	2,609	$151,490,009	$87,344,632
Securities, investments, & related activities	2,475	$141,936,618	$415,497,264
Individual & family social assistance services	2,463	$69,876,963	$103,379,570
Vehicle repair and maintenance services	2,002	$90,258,669	$165,202,491

3 Tax Impact

CalSTRS benefit payments generate tax revenue in two ways: 1) state and federal income tax withholdings from benefit payments and 2) tax revenue resulting from expenditures associated with benefit payments. CalSTRS withheld $286 million in state income taxes and $1.01 billion in federal income taxes from its ongoing monthly and quarterly benefit payments to California residents in FY 2012. These payments facilitated government expenditures with direct, indirect, and induced economic impacts just like other economic activities. We assumed that all of the state income tax ($286 million) would be spent in California and that the federal income tax spent in California would be proportional to the share of federal expenditures made in California. Therefore, it was estimated that 10.5% ($106 million) of the federal income taxes withheld from CalSTRS benefit payments would be spent state-

wide.[5] State government expenditures were allocated using IMPLAN's institutional spending patterns for educational and non-educational government spending based on the FY 2012 State General Fund budget. Federal government spending in California was divided between IMPLAN's military and non-military institutional spending patterns based on the most recent division reported in the U.S. Census Bureau's *Consolidate Federal Funds Report*.

CalSTRS beneficiary expenditures and government expenditures supported by income tax payments also generate significant tax revenue. This revenue is derived from corporate, personal income, and business taxes collected through each round of spending. Table 5 shows the estimated value of this revenue exceeded $1.8 billion, of which $892 million (Line 1.6) were state and local tax payments and $929 million (Line 2.5) were federal tax payments. Including the $1.3 billion (Lines 1.7 + 2.6) in income tax payments made by CalSTRS from gross benefit payments, the total tax revenue associated with CalSTRS benefit payments exceeded $3.1 billion (Line 3).

Table 5 Overview of CalSTRS FY 2012 Benefit Payments' State-Wide Tax Impact

Line	*Description*	*Value*
1	**State and Local Payments Resulting from Total CalSTRS Expenditures**	
1.1	Net Dividend Payments to Government (Payments from Investments)	$1,407,026
1.2	Social Insurance Tax Payments (Retirement, Health & Disability Insurance)	$14,557,284
1.3	Corporate Profit Tax Payments (Corporate Net Income Tax)	$33,091,012
1.4	Personal Tax Payments (Income & Property Taxes)[6]	$157,494,130
1.5	Indirect Business Tax Payments (Sales, Property & Motor Vehicle Taxes)	$684,920,179
1.6	*Sub-Total State and Local Tax Payments (Lines 1.1 to 1.5)*	*$891,469,631*
1.7	CalSTRS State (FTB) Income Tax Payments	$285,637,862
1.8	*Total State and Local Tax Payments (Lines 1.6 & 1.7)*	*$1,177,107,493*
2	**Federal Payments Resulting from Total CalSTRS Expenditures**	
2.1	Indirect Business Tax Payments (Customs & Excise Taxes)	$71,545,245
2.2	Corporate Profit Tax Payments (Corporate Net Income Taxes)	$138,922,859
2.3	Personal Tax Payments (Income Taxes) [7]	$321,120,772
2.4	Social Insurance Tax Payments (Retirement, Health & Disability Insurance)	$397,120,684
2.5	*Sub-Total Federal Tax Payments (Lines 2.1 to 2.4)*	*$928,709,560*
2.6	CalSTRS Federal (IRS) Income Tax Payments	$1,008,965,340
2.7	*Total Federal Tax Payments (Lines 2.5 & 2.6)*	*$1,937,674,900*
3	**Grand Total of Tax Payments (Lines 1.8 & 2.7)**	**$3,114,782,393**

Among the $892 million in state and local tax payments, indirect business taxes accounted for more than three-quarters ($685 million) in revenue. These consisted primarily of property (45%) and sales (43%) taxes paid by businesses to state and local government. Federal tax payments generated as a

[5] In the latest Consolidated Federal Funds Report available, which reports data between FY 2001 and 2010, California received an average of 10.5% of total federal expenditures. For details see: U.S Census Bureau (2011), *Consolidated Federal Funds Report for Fiscal Year 2010*: Washington D.C.

[6] State & Local Personal Tax Payments (Line 1.4) include state income tax paid by economic agents as a result of expenditures' impacts, but are separate from CalSTRS' Franchise Tax Board (FTB) payments on benefits (Line 1.7).

[7] Federal Personal Tax Payments (Line 2.3) include federal income tax paid by economic agents from expenditures' impacts, but are separate from CalSTRS' Internal Revenue Service (IRS) payments on benefits (Line 2.6).

result of CalSTRS expenditures equaled $929 million in FY 2012. Social insurance payments were the largest component (43%); these payments went to programs such as Social Security, Medicare, and unemployment insurance. Personal tax payments (income taxes) were the second largest share of payments (35%); followed by taxes on corporate profits (15%).

4 Data and Methodology

Analysis of CalSTRS benefit payments involves three principal stages. First, expenditures associated with benefit payments made by CalSTRS need to be assessed and assigned to economic sectors. Second, expenditures resulting from taxes paid by CalSTRS gross benefit payments are divided among government sectors. Finally, the total economic effect of those expenditures on the economy is estimated. The process is briefly described in the remainder of this section.

4.1 Benefit Payments

In FY 2012, CalSTRS made $10.7 billion in benefit payments, of which $9.2 billion (86%) were ongoing monthly and quarterly payments to addresses in California. Calculating the economic impact of expenditures from these payments on the California economy requires their conversion into net direct expenditures. This involves reducing gross payments to reflect income taxes and savings, then allocating the remaining net expenditures to appropriate sectors in the economy. Income tax payments in FY 2012 reduce benefits by $1.3 billion.[8] Savings by beneficiaries reduces expenditures by a further $0.6 billion.[9] Thereby, state-wide net expenditures from recipients of CalSTRS benefit payments equaled $7.3 billion. This $7.3 billion in expenditures is distributed by industry using spending behavior reported in the Consumer Expenditure Survey; Table 3 in Section 2 reported these expenditures across aggregate economic sectors with which the economic impacts were estimated. [10]

4.2 Tax Payments

As discussed in Section 3, CalSTRS withheld $1.3 billion in income taxes from its ongoing monthly and quarterly benefit payments to California residents in FY 2012. Approximately one-fifth (22%) of these taxes were paid on beneficiaries' behalf by CalSTRS to California's Franchise Tax Board. We assumed

[8] This $1.3 billion is based on federal and state withholdings made by CalSTRS on its FY 2012 ongoing monthly and quarterly benefit payments to beneficiaries with California addresses.

[9] The $0.6 billion in savings equates to an 8.1% savings rate calculated by the difference between average annual net income after taxes and expenditures from the 2010-2011 Consumer Expenditure Survey for consumers aged 65 and over in the West region.

[10] This methodology differs from the 2007 CalSTRS Economic Impact of Benefits Payment Report which modeled CalSTRS benefit payments as a change to household incomes. The updated methodology is more detailed in the way it accounts for taxes and uses known expenditure patterns of after-tax disposable incomes by retirement-age households rather than average tax and expenditure patterns across all households.

that all of this state income tax ($286 million) was spent in California. Therefore, $286 million in government expenditures was allocated between state education ($146 million) and non-education functions ($140 million) using the proportions from the FY 2012 California State Budget. At the federal level, we allocated state-wide expenditures of the $1.01 billion in federal income tax payments according to the recent historic share of federal expenditures made in California.[11] Therefore, it was estimated that 10.5% ($106 million) of the federal income taxes withheld from CalSTRS ongoing monthly and quarterly benefit payments would be spent in-state. Using the most recent reported division for California, the $106 million in government expenditures was then allocated between federal defense ($18 million) and non-defense functions ($88 million). The economic impact associated with these government expenditures was then derived through the use of institutional spending patterns available in the IMPLAN software.

4.3 Economic Impact Analysis

The analysis was performed using an input-output model calibrated to reflect the state economy across which impacts were assessed. In deriving this model, we utilized IMPLAN Version 3.1 with data for calendar year 2011. The full range of economic impacts that result from the expenditures—the **Total Effect**—is the sum of the direct, indirect, and induced effects:

- **Direct Effects** are the changes in jobs, sales, and income related exclusively to initial expenditures.
- **Indirect Effects** represent the iterative impacts of inter-industry transactions as supplying industries respond to demand from the sector(s) where the initial expenditures occurred. An example of an indirect impact might be a fresh produce supplier adding deliveries to accommodate demand at restaurants frequented by CalSTRS beneficiaries.
- **Induced Effects** reflect the contribution benefit payments make to household expenditures by direct and indirect sector employees. Examples of induced impacts include employees' expenditures on items such as retail purchases, housing, medical services, banking, and insurance.

[11] In the latest Consolidated Federal Funds Report available, which reports data between FY 2001 and 2010, California received an average of 10.5% of total federal expenditures. For details see: U.S. Census Bureau (2011), *Consolidated Federal Funds Report for Fiscal Year 2010*: Washington D.C.

In this analysis, the total, direct, indirect, and induced effects are reported by output, labor income, and employment:

- **Output** represents the value of industry production. It accounts for the total change in the value of production in an industry for a given time period. Output varies as a measure across industries. For manufacturers, the value of production is sales plus or minus any change in inventories. For service sectors, the value of production equals their sales. While for retail and wholesale trade, the value of production equals their gross margin and not their gross sales.

- **Labor Income** is the sum of employee compensation and proprietor income. Employee compensation includes wages, salaries, benefits, and all other employer contributions, while proprietor income consists of payments received by self-employed individuals and unincorporated business owners.

- **Employmen**t is the number of full- and part-time jobs based on an annual average of monthly jobs. That is, one job lasting 12 months is equal to two jobs lasting six months each and is equal to three jobs lasting four months each.

Input-output models are in a sense, general accounting systems of transactions between industries, businesses, and consumers that estimate the range of economic impacts. We use the IMPLAN software to create complete, extremely detailed Social Accounting Matrices and Multiplier Models of the California economy that enable in-depth examinations of CalSTRS benefit payments.

IMPLAN was developed in the late-1970s by the United States Forest Service and researchers at the University of Minnesota. The software was initially based on input-output accounts whose analysis was pioneered in the Nobel Prize winning work of Wassily Leontief. As the software evolved, it began using Social Accounting Matrices in its analysis. Currently, IMPLAN is among the most widely used economic impact modeling systems. It provides a transparent and detailed approximation of economic impacts. However, actual impacts depend on timing, scale of impacts, and the structure of technologies.

5 CalSTRS Benefit Payments in California's Regions

Summaries of CalSTRS ongoing monthly and quarterly benefit payments and their impact by region are reported in Tables 6 and 7 below, as well as in Figure 2. Details of regional impact and methodology are provided in Appendix A.

Table 6 California Regional Profiles

Region	Gross Benefit Payments (millions)	Gross Regional Product (millions)
Eastern Sierra Nevada	$11.5	$1,608.4
Greater Bay Area	$1,771.4	$541,027.6
Greater Los Angeles	$3,126.8	$748,341.5
Greater Sacramento	$674.3	$105,836.0
Greater San Diego	$862.8	$185,116.4
Inland Empire	$837.1	$129,091.2
Mother Lode	$72.0	$4,665.5
North Coast	$114.7	$10,697.7
Northern Central Coast	$228.8	$28,695.7
Northern Sacramento Valley	$114.6	$10,634.1
Northern San Joaquin Valley	$347.4	$45,384.9
Northern Sierra Nevada	$76.0	$6,161.2
Shasta Cascades	$83.4	$7,564.4
Southern Central Coast	$256.7	$34,073.5
Southern San Joaquin Valley	$628.8	$92,369.2

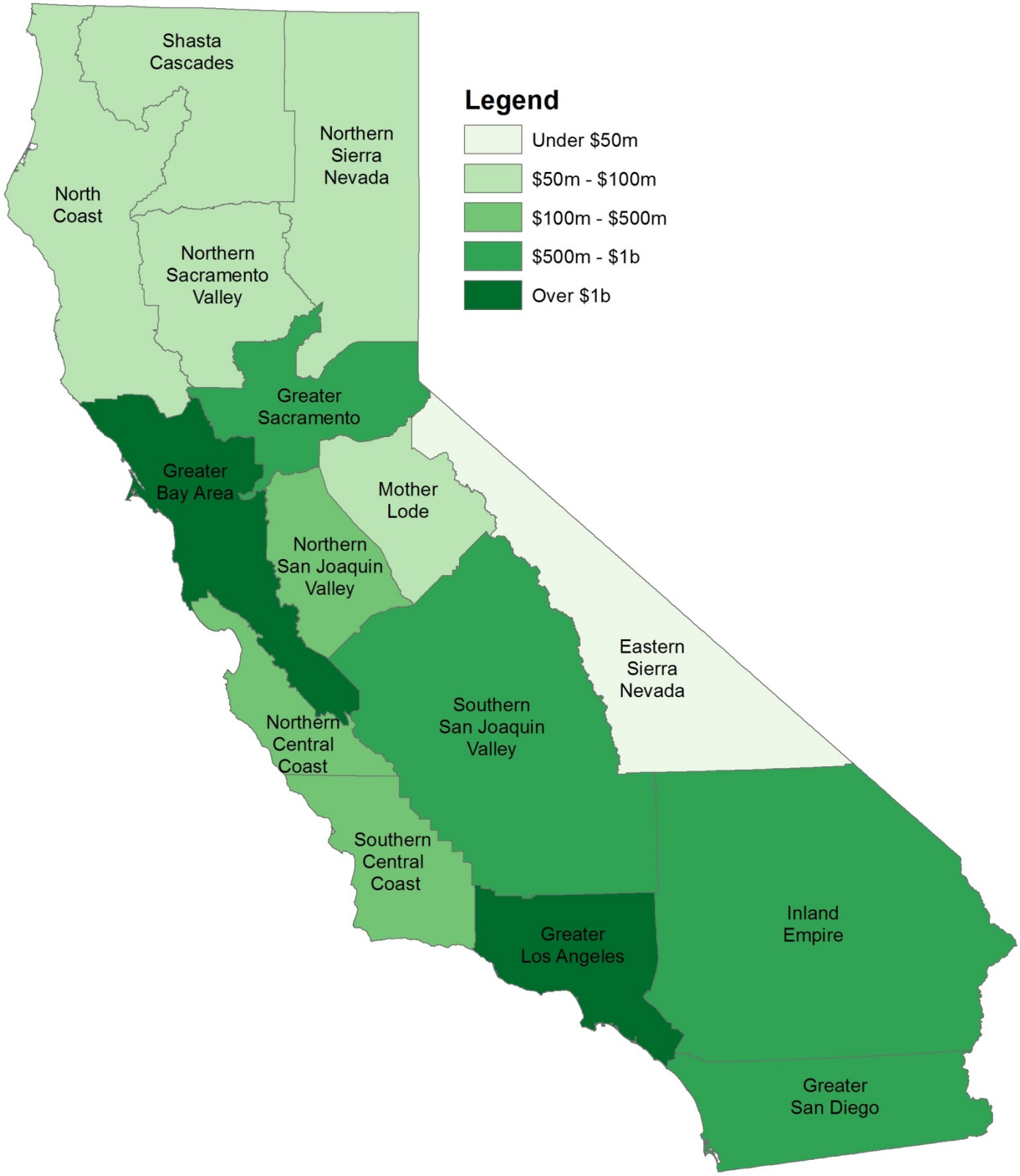
	Gross Benefit Payments (millions)	Gross Regional Product (millions)
State-wide	$9,206.2	$1,951,267.1

Table 7 California Regional Economic Impacts

Region	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
Eastern Sierra Nevada	$9.6	75	$2.7	$7.2
Greater Bay Area	$1,470.5	17,290	$950.3	$2,246.9
Greater Los Angeles	$2,585.8	34,850	$1,784.4	$4,459.3
Greater Sacramento	$560.1	6,795	$301.0	$779.8
Greater San Diego	$717.8	8,732	$391.6	$987.4
Inland Empire	$695.3	8,223	$296.8	$799.4
Mother Lode	$60.5	492	$15.9	$50.7
North Coast	$96.3	647	$20.1	$85.0
Northern Central Coast	$191.1	2,093	$85.7	$215.4
Northern Sacramento Valley	$95.8	922	$32.2	$87.9
Northern San Joaquin Valley	$288.2	3,215	$117.3	$315.0
Northern Sierra Nevada	$64.0	555	$18.2	$56.0
Shasta Cascades	$69.9	773	$27.9	$75.6
Southern Central Coast	$215.1	2,500	$101.6	$266.3
Southern San Joaquin Valley	$522.8	5,654	$218.7	$586.1

	A. Total Expenditures (millions)	B. Employment Effect	C. Labor Income Effect (millions)	D. Output Effect (millions)
State-wide	$7,642.8	92,815	$4,364.3	$11,017.9

Figure 2 Map of CalSTRS Total Output Effects ($ millions) in California by Region (FY 2012)



6 CalSTRS Benefit Payments in California's Counties

Summaries of CalSTRS ongoing monthly and quarterly benefit payments and their impact by county are reported in Tables 8 and 9 below, as well as in Figure 3. Details of counties' impacts and methodology are provided in Appendix B.

Table 8 California County Profiles

County	Gross Benefit Payments (millions)	Gross Regional Product (millions)	County	Gross Benefit Payments (millions)	Gross Regional Product (millions)
Alameda	$353.9	$86,431.0	**Orange**	$983.3	$185,824.5
Alpine	$0.6	$79.1	**Placer**	$166.4	$15,924.1
Amador	$15.0	$1,316.5	**Plumas**	$9.7	$759.1
Butte	$89.5	$7,093.4	**Riverside**	$451.6	$62,688.7
Calaveras	$21.4	$1,107.9	**Sacramento**	$341.4	$68,221.4
Colusa	$4.5	$972.5	**San Benito**	$14.1	$1,590.0
Contra Costa	$290.3	$63,591.2	**San Bernardino**	$385.4	$66,402.5
Del Norte	$8.2	$789.6	**San Diego**	$830.8	$179,373.2
El Dorado	$73.6	$6,770.1	**San Francisco**	$112.5	$92,921.5
Fresno	$264.6	$34,554.3	**San Joaquin**	$152.5	$21,766.1
Glenn	$6.7	$1,000.1	**San Luis Obispo**	$136.4	$13,030.7
Humboldt	$47.2	$4,725.5	**San Mateo**	$174.0	$55,803.7
Imperial	$32.0	$5,743.2	**Santa Barbara**	$120.3	$21,042.8
Inyo	$7.1	$745.8	**Santa Clara**	$422.0	$179,692.3
Kern	$184.0	$34,466.3	**Santa Cruz**	$113.3	$10,429.7
Kings	$26.1	$5,201.1	**Shasta**	$61.8	$6,035.8
Lake	$16.4	$1,650.1	**Sierra**	$2.1	$92.5
Lassen	$11.2	$1,191.3	**Siskiyou**	$21.5	$1,528.5
Los Angeles	$1,885.4	$523,573.8	**Solano**	$96.8	$16,609.4
Madera	$37.1	$4,473.3	**Sonoma**	$171.0	$21,990.9
Marin	$85.8	$14,837.9	**Stanislaus**	$137.2	$16,479.9
Mariposa	$7.8	$540.9	**Sutter**	$30.2	$2,909.5
Mendocino	$37.3	$3,175.6	**Tehama**	$13.9	$1,568.0
Merced	$57.7	$7,138.9	**Trinity**	$5.6	$356.8
Modoc	$2.8	$325.1	**Tulare**	$116.9	$13,674.2
Mono	$3.8	$783.5	**Tuolumne**	$27.8	$1,700.2
Monterey	$115.4	$18,266.0	**Ventura**	$258.1	$38,943.2
Napa	$51.2	$7,559.7	**Yolo**	$51.3	$9,479.8
Nevada	$50.2	$3,793.2	**Yuba**	$11.4	$2,531.1

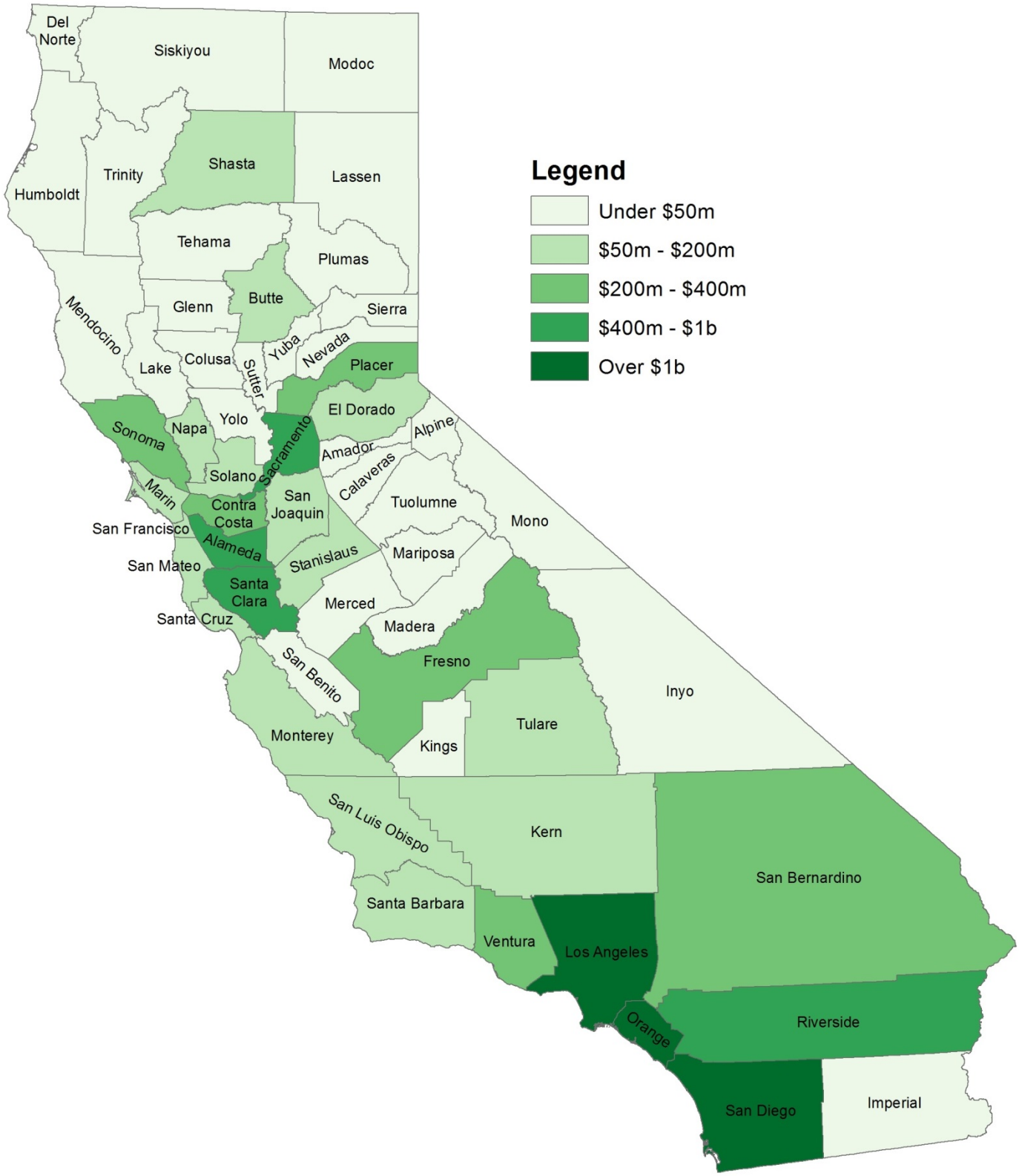
	Gross Benefit Payments (millions)	Gross Regional Product (millions)
State-wide	$9,206.2	$1,951,267.1

Table 9 California Counties Economic Impact

County	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)	County	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
Alameda	$292.7	3,454	$165.0	$412.2	**Orange**	$811.6	10,721	$573.7	$1,360.0
Alpine	$0.5	2	$0.1	$0.2	**Placer**	$138.5	1,784	$83.0	$213.0
Amador	$12.6	102	$3.5	$11.0	**Plumas**	$8.2	62	$2.3	$7.1
Butte	$74.7	851	$31.5	$85.5	**Riverside**	$375.6	4,532	$167.1	$459.8
Calaveras	$17.9	144	$4.6	$16.8	**Sacramento**	$283.0	3,451	$162.0	$421.1
Colusa	$3.8	25	$0.9	$2.6	**San Benito**	$11.7	85	$3.3	$9.2
Contra Costa	$242.3	2,882	$141.3	$361.1	**San Bernardino**	$319.7	3,962	$149.3	$391.9
Del Norte	$6.9	53	$1.8	$5.6	**San Diego**	$691.4	8,967	$425.0	$1,083.0
El Dorado	$61.3	631	$24.1	$71.4	**San Francisco**	$93.0	921	$64.3	$136.1
Fresno	$220.3	2,806	$111.4	$306.2	**San Joaquin**	$126.7	1,487	$58.1	$158.9
Glenn	$5.6	37	$1.2	$3.8	**San Luis Obispo**	$114.3	1,370	$52.6	$147.5
Humboldt	$39.7	448	$15.6	$44.0	**San Mateo**	$144.0	1,554	$89.9	$192.4
Imperial	$26.4	228	$7.6	$20.5	**Santa Barbara**	$100.8	1,228	$54.5	$136.4
Inyo	$6.0	50	$1.9	$4.7	**Santa Clara**	$348.8	3,692	$196.6	$459.1
Kern	$152.5	1,523	$61.8	$160.5	**Santa Cruz**	$94.7	1,095	$44.1	$122.8
Kings	$21.6	164	$6.3	$16.0	**Shasta**	$51.8	645	$25.0	$65.9
Lake	$13.7	113	$4.2	$12.2	**Sierra**	$1.8	6	$0.1	$0.8
Lassen	$9.3	67	$2.1	$7.0	**Siskiyou**	$18.2	157	$5.1	$16.4
Los Angeles	$1,559.1	20,764	$1,093.2	$2,720.5	**Solano**	$80.4	824	$34.8	$87.6
Madera	$31.1	247	$9.9	$26.9	**Sonoma**	$143.1	1,787	$73.7	$200.0
Marin	$71.7	729	$45.7	$98.2	**Stanislaus**	$113.8	1,379	$50.5	$132.5
Mariposa	$6.6	45	$1.3	$4.6	**Sutter**	$25.0	294	$10.8	$28.9
Mendocino	$31.3	332	$12.1	$33.3	**Tehama**	$11.6	85	$2.9	$8.6
Merced	$47.8	446	$16.1	$42.3	**Trinity**	$4.7	28	$0.8	$3.2
Modoc	$2.4	16	$0.5	$1.7	**Tulare**	$97.3	1,039	$40.1	$99.9
Mono	$3.2	23	$0.8	$2.4	**Tuolumne**	$23.3	222	$7.9	$23.7
Monterey	$96.3	1,082	$47.7	$114.2	**Ventura**	$215.1	2,798	$119.1	$316.0
Napa	$42.8	457	$20.6	$53.2	**Yolo**	$42.8	432	$18.1	$46.8
Nevada	$42.3	434	$14.7	$45.0	**Yuba**	$9.5	53	$2.1	$5.7

	A. Total Expenditures (millions)	B. Employment Effect	C. Labor Income Effect (millions)	D. Output Effect (millions)
State-wide	$7,642.8	92,815	$4,364.3	$11,017.9

Figure 3 Map of CalSTRS Total Output Effects ($ millions) in California by County (FY 2012)



7 CalSTRS Benefit Payments in California's Congressional Districts

Summaries of CalSTRS ongoing monthly and quarterly benefit payments and their impacts by Congressional district are reported in Tables 10 and 11 below, as well as in Figure 4. Details of Congressional impact and methodology are provided in Appendix C.

Table 10 California Congressional District Profiles [12]

Congressional District	Gross Benefit Payments (millions)	Gross Regional Product (millions)	Congressional District	Gross Benefit Payments (millions)	Gross Regional Product (millions)
1 Northeast Cal	$290.0	$25,100.9	**28 Hollywood**	$129.7	$55,984.3
2 North Coast	$257.1	$33,709.9	**29 E. San Fernando V**	$53.6	$24,751.9
3 Yolano-Yuba-Lake	$170.8	$29,332.4	**30 W. San Fernando Vly**	$187.5	$49,818.2
4 Foothills	$313.2	$28,520.5	**31 San Bernardino**	$151.2	$21,112.2
5 Napa-Santa Rosa	$218.1	$35,266.5	**32 W. Covina**	$121.9	$32,914.3
6 Sacramento	$132.6	$34,425.1	**33 LA Coast**	$269.7	$71,686.2
7 E. Sac Co	$207.9	$31,489.1	**34 Downtown LA**	$43.6	$43,747.4
8 SB High Desert	$142.5	$18,871.7	**35 Ontario**	$66.2	$29,009.9
9 San Joaquin	$160.0	$21,044.9	**36 Coachella V**	$206.9	$19,192.9
10 Stanislaus	$167.1	$18,721.2	**37 Culver City**	$178.0	$41,388.7
11 Contra Costa	$228.6	$49,628.8	**38 Whittier**	$129.5	$31,580.3
12 San Francisco	$92.8	$89,095.9	**39 Fullerton**	$245.3	$34,644.0
13 Oakland	$181.8	$38,031.3	**40 Downey**	$26.4	$22,040.4
14 San Mateo	$165.3	$54,654.2	**41 Riverside**	$115.8	$16,984.6
15 Hawyard-Pleas-Liv	$149.2	$34,155.5	**42 Corona**	$111.1	$24,094.9
16 Merced	$127.5	$23,597.6	**43 Inglewood**	$115.1	$34,997.0
17 Milpitas	$116.0	$104,317.3	**44 Carson**	$64.9	$23,149.9
18 Silicon Valley	$253.1	$59,981.6	**45 Irvine**	$250.1	$56,497.2
19 San Jose	$142.1	$39,584.4	**46 Santa Ana**	$77.6	$34,797.0
20 Monterey	$219.5	$28,393.5	**47 Long Beach**	$204.1	$35,459.4
21 Kings	$88.4	$26,469.0	**48 Huntington Beach**	$334.2	$45,145.7
22 Fresno	$258.0	$22,081.5	**49 Carlsbad**	$257.7	$52,216.5
23 Kern	$201.3	$26,454.8	**50 East SD Co.**	$194.2	$23,811.8
24 Santa Barbara	$253.2	$37,606.8	**51 S. SD - Imperial**	$78.9	$19,739.4
25 S. Clarita/Palmdale	$117.8	$26,008.3	**52 SD**	$209.4	$62,201.0
26 Ventura Co	$226.5	$33,804.9	**53 La Mesa**	$213.0	$39,560.6
27 Pasadena	$290.1	$34,393.9			

	Gross Benefit Payments (millions)	Gross Regional Product (millions)
State-wide	$9,206.20	$1,951,267.10

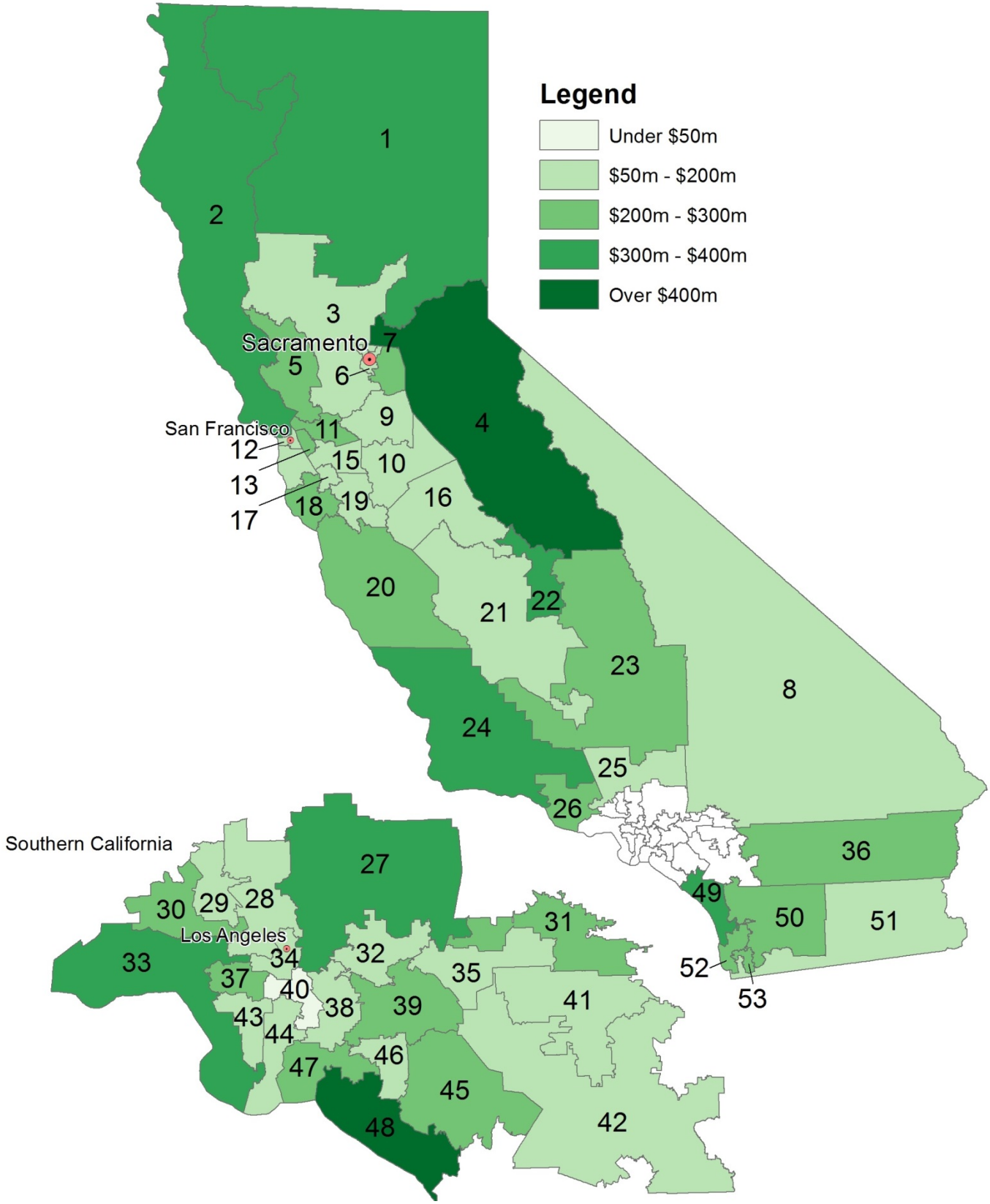
[12] The names for the Congressional districts are taken from the website: *Around The Capitol*. For details see: http://www.aroundthecapitol.com/districts/

Table 11 California Congressional District Economic Impact

Congressional District	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
1 Northeast Cal	$243.0	3,049	$115.1	$328.9
2 North Coast	$215.3	2,685	$135.0	$340.6
3 Yolano-Yuba-Lake	$142.1	1,665	$71.3	$191.8
4 Foothills	$261.5	3,504	$151.8	$418.9
5 Napa-Santa Rosa	$182.3	2,233	$99.4	$264.4
6 Sacramento	$109.7	1,385	$64.4	$165.5
7 E. Sac Co	$172.6	2,105	$98.8	$251.7
8 SB High Desert	$118.9	1,329	$51.2	$140.4
9 San Joaquin	$133.1	1,648	$68.4	$188.4
10 Stanislaus	$138.7	1,762	$67.2	$177.0
11 Contra Costa	$191.0	2,428	$120.4	$299.1
12 San Francisco	$76.9	752	$51.5	$107.2
13 Oakland	$150.7	1,729	$83.0	$210.8
14 San Mateo	$136.5	1,447	$84.8	$183.9
15 Hawyard-Pleas-Liv	$123.1	1,415	$70.3	$179.1
16 Merced	$105.8	1,277	$49.8	$140.6
17 Milpitas	$95.5	972	$49.1	$112.9
18 Silicon Valley	$210.0	2,323	$123.6	$290.2
19 San Jose	$117.3	1,243	$66.0	$155.5
20 Monterey	$183.3	2,274	$102.8	$256.9
21 Kings	$73.5	676	$28.2	$78.5
22 Fresno	$214.8	3,026	$122.7	$331.1
23 Kern	$166.9	2,097	$89.2	$241.0
24 Santa Barbara	$212.2	2,789	$122.1	$325.2
25 S. Clarita/Palmdale	$97.7	1,132	$55.2	$134.1
26 Ventura Co	$188.9	2,531	$112.2	$294.2
27 Pasadena	$238.9	3,118	$160.6	$395.0
28 Hollywood	$107.4	1,260	$64.8	$156.0
29 E. San Fernando V	$44.4	434	$21.9	$50.3
30 W. San Fernando Vly	$155.5	1,969	$102.7	$241.1
31 San Bernardino	$125.1	1,789	$71.4	$201.3
32 W. Covina	$100.8	1,191	$59.3	$138.5
33 LA Coast	$224.2	2,544	$130.5	$309.8
34 Downtown LA	$36.0	380	$19.7	$51.8
35 Ontario	$54.9	701	$29.1	$79.6
36 Coachella V	$172.4	2,141	$82.5	$226.2
37 Culver City	$147.3	1,694	$85.3	$206.0
38 Whittier	$106.6	1,235	$62.9	$149.6
39 Fullerton	$202.4	2,446	$125.5	$298.5
40 Downey	$21.7	198	$9.7	$24.3
41 Riverside	$95.6	1,156	$44.7	$127.2
42 Corona	$92.7	1,085	$41.5	$114.0
43 Inglewood	$95.0	1,123	$55.8	$135.1
44 Carson	$53.8	423	$21.8	$56.5
45 Irvine	$206.3	2,400	$126.0	$293.0
46 Santa Ana	$64.0	786	$41.5	$97.7
47 Long Beach	$168.5	2,122	$110.9	$268.5
48 Huntington Beach	$275.7	3,471	$186.4	$442.0
49 Carlsbad	$214.5	2,575	$124.1	$307.5
50 East SD Co.	$162.1	1,901	$84.5	$218.9
51 S. SD - Imperial	$65.3	656	$27.2	$72.2
52 SD	$174.1	2,192	$106.0	$265.5
53 La Mesa	$176.6	2,352	$114.3	$284.1

	A. Total Expenditures (millions)	B. Employment Effect	C. Labor Income Effect (millions)	D. Output Effect (millions)
State-wide	$7,642.8	92,815	$4,364.3	$11,017.9

Figure 4 Map of CalSTRS Total Output Effects ($ millions) in California by Congressional District (FY 2012)



8 CalSTRS Benefit Payments in California's Senate Districts

Summaries of CalSTRS ongoing monthly and quarterly benefit payments and their impacts by Senate district are reported in Tables 12 and 13 below, as well as in Figure 5. Details of Senate districts' impact and methodology are provided in Appendix D.

Table 12 California Senate District Profiles[13]

Senate District	Gross Benefit Payments (millions)	Gross Regional Product (millions)	Senate District	Gross Benefit Payments (millions)	Gross Regional Product (millions)
1 Northeast Cal	$403.6	$36,659.2	**21 Palmdale**	$126.9	$20,551.5
2 North Coast	$335.4	$33,777.3	**22 San Gabriel Valley**	$149.6	$43,790.8
3 Napa/Yolano	$261.7	$45,706.3	**23 Redlands**	$251.6	$27,652.1
4 Roseville-Yuba-Tehama	$279.9	$35,306.1	**24 East LA**	$63.5	$53,570.0
5 San Joaquin	$238.9	$25,324.5	**25 Pasadena**	$371.4	$63,334.2
6 Sacramento	$202.3	$40,519.7	**26 Coast LA**	$300.7	$95,483.3
7 Concord	$272.0	$52,468.5	**27 Ventura Co**	$280.5	$60,867.6
8 Foothills	$367.5	$43,976.5	**28 Coachella Valley**	$221.4	$31,283.2
9 Oakland	$238.8	$44,962.0	**29 Fullerton**	$263.0	$48,603.0
10 Hywd-Frmnt-Snta Clra	$148.7	$96,431.8	**30 Culver City**	$166.5	$74,573.6
11 San Francisco	$126.7	$81,286.2	**31 Riverside**	$150.1	$24,597.0
12 Merced	$156.2	$29,568.9	**32 Whittier**	$173.2	$50,683.8
13 San Mateo	$242.4	$89,927.8	**33 Long Beach**	$92.6	$36,381.5
14 Fresno/Bakersfield	$124.4	$42,469.3	**34 Huntington Beach**	$256.6	$49,402.0
15 San Jose	$259.9	$52,895.4	**35 Carson**	$143.0	$46,683.5
16 Kern	$262.4	$38,615.4	**36 Carlsbad**	$340.7	$38,522.1
17 Santa Cruz-SLO	$373.3	$42,358.9	**37 Irvine**	$380.5	$81,976.2
18 San Fernando V	$117.3	$45,819.3	**38 East San Diego Co.**	$282.2	$41,545.1
19 Santa Barbara/Ventura	$268.8	$35,706.1	**39 San Diego**	$283.5	$83,304.7
20 Ontario	$87.6	$37,061.8	**40 S. San Diego**	$141.0	$27,621.3

	Gross Benefit Payments (millions)	Gross Regional Product (millions)
State-wide	$9,206.2	$1,951,267.1

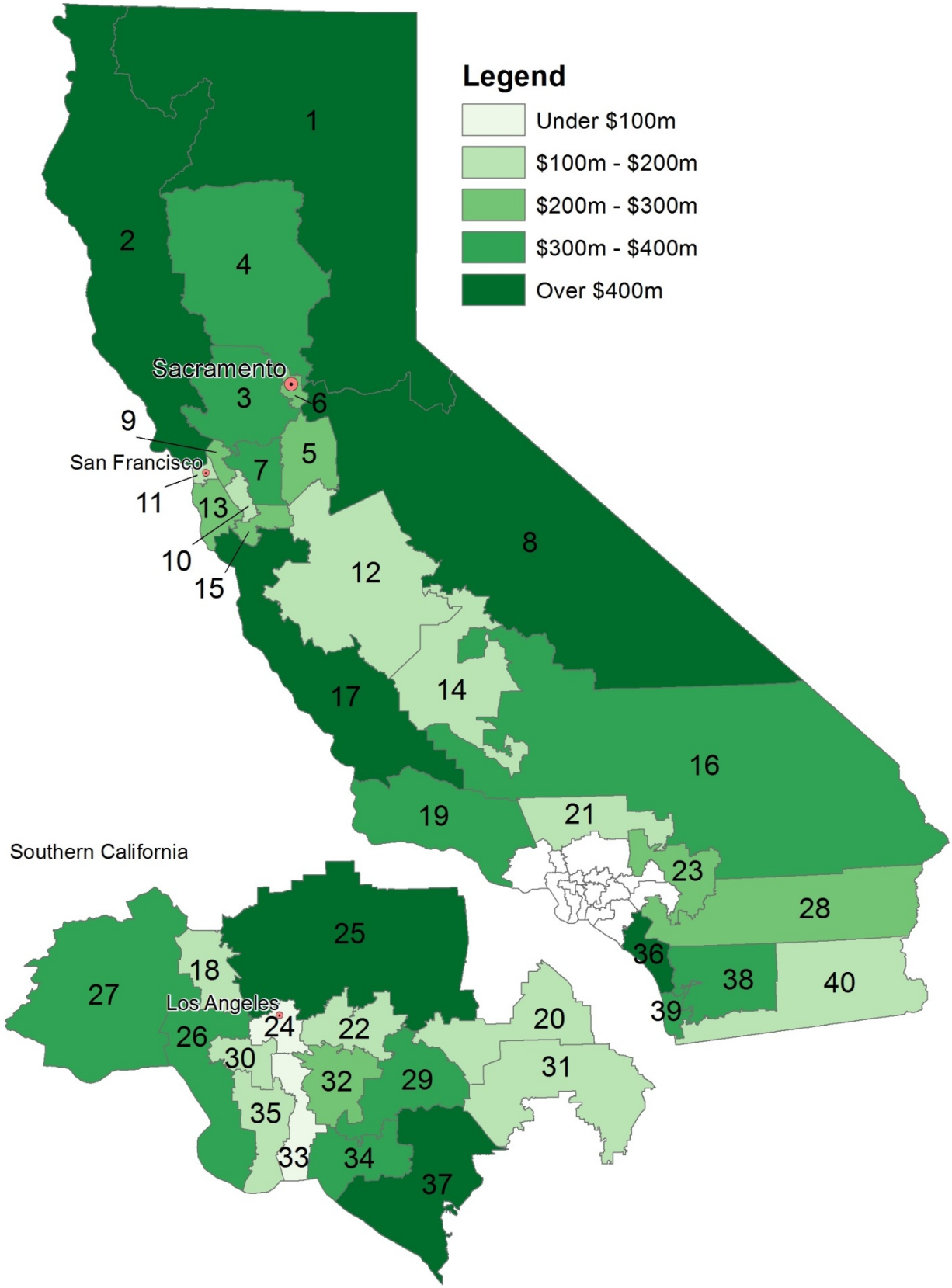
[13] The names for the Senate districts are taken from the website: *Around The Capitol*. For details see: http://www.aroundthecapitol.com/districts/

Table 13 California Senate District Economic Impact

Senate District	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
1 Northeast Cal	$337.2	4,684	$199.4	$550.0
2 North Coast	$280.9	3,449	$161.1	$411.5
3 Napa/Yolano	$218.2	2,712	$119.0	$311.9
4 Roseville-Yuba-Tehama	$233.0	3,122	$138.2	$369.1
5 San Joaquin	$198.1	2,634	$104.0	$283.9
6 Sacramento	$167.4	2,047	$95.0	$241.2
7 Concord	$226.6	2,835	$140.8	$350.7
8 Foothills	$306.7	4,056	$167.3	$472.4
9 Oakland	$198.2	2,295	$110.3	$278.6
10 Hywd-Frmnt-Snta Clra	$122.5	1,379	$71.3	$171.2
11 San Francisco	$104.6	1,061	$71.9	$150.0
12 Merced	$129.8	1,276	$51.5	$139.7
13 San Mateo	$200.9	2,119	$119.2	$261.1
14 Fresno/Bakersfield	$103.4	1,125	$46.2	$128.8
15 San Jose	$214.7	2,287	$121.4	$281.3
16 Kern	$218.0	2,686	$108.9	$302.7
17 Santa Cruz-SLO	$311.9	3,817	$171.8	$445.8
18 San Fernando V	$97.1	1,183	$59.8	$140.0
19 Santa Barbara/Ventura	$224.7	2,905	$130.1	$337.9
20 Ontario	$72.6	939	$39.2	$107.2
21 Palmdale	$105.6	1,150	$53.5	$129.2
22 San Gabriel Valley	$123.4	1,505	$74.8	$180.4
23 Redlands	$209.2	2,705	$105.7	$296.9
24 East LA	$52.4	599	$30.9	$77.8
25 Pasadena	$306.4	3,831	$195.5	$474.5
26 Coast LA	$249.5	2,877	$145.9	$341.3
27 Ventura Co	$233.0	3,049	$152.2	$369.8
28 Coachella Valley	$184.5	2,338	$88.4	$242.9
29 Fullerton	$217.1	2,642	$134.4	$321.5
30 Culver City	$137.9	1,524	$77.2	$192.3
31 Riverside	$124.0	1,443	$55.8	$155.3
32 Whittier	$142.7	1,657	$84.5	$203.1
33 Long Beach	$76.5	758	$38.1	$96.7
34 Huntington Beach	$211.6	2,625	$138.1	$326.9
35 Carson	$118.3	1,202	$59.6	$144.3
36 Carlsbad	$283.0	3,460	$170.4	$421.4
37 Irvine	$313.6	3,874	$207.0	$484.6
38 East San Diego Co.	$235.3	2,833	$133.7	$337.4
39 San Diego	$235.8	3,053	$147.2	$365.1
40 S. San Diego	$116.5	1,078	$45.1	$121.4

	A. Total Expenditures (millions)	B. Employment Effect	C. Labor Income Effect (millions)	D. Output Effect (millions)
State-wide	$7,642.8	92,815	$4,364.3	$11,017.9

Figure 5 Map of CalSTRS Total Output Effects ($ millions) in California by Senate District (FY 2012)



9 CalSTRS Benefit Payments in California's Assembly Districts

Summaries of CalSTRS ongoing monthly and quarterly benefit payments and their impact by Assembly district is reported in Tables 14 and 15 below, as well as in Figure 6. Details of Assembly districts' impact and methodology are provided in Appendix E.

Table 14 California Assembly District Profiles[14]

Assembly District	Gross Benefit Payments (millions)	Gross Regional Product (millions)	Assembly District	Gross Benefit Payments (millions)	Gross Regional Product (millions)
1 Northeast Cal	$197.9	$15,462.72	**41 Pasadena**	$255.5	$24,142.02
2 North Coast	$180.8	$15,621.17	**42 Yucaipa**	$163.3	$17,801.12
3 Butte-Tehama-Yuba	$149.4	$11,620.60	**43 Burbank**	$96.8	$36,807.65
4 Napa/Yolo/Dixon	$140.8	$25,278.44	**44 Ventura Co**	$141.5	$19,489.56
5 Foothills	$170.8	$12,094.44	**45 W. San Fernando V**	$122.5	$34,811.48
6 Roseville	$200.9	$18,116.99	**46 Sherman Oaks**	$66.9	$24,646.55
7 Sacramento	$68.5	$30,964.62	**47 Rialto**	$34.7	$12,632.57
8 East Sacramento Co.	$146.2	$23,088.32	**48 West Covina**	$80.9	$23,605.87
9 South Sacramento	$111.2	$11,145.63	**49 Monterey Park**	$100.2	$16,409.23
10 Marin-Petaluma	$155.7	$20,252.71	**50 West LA**	$110.9	$55,744.58
11 Fairfield-Delta	$95.3	$13,044.66	**51 East LA**	$39.1	$24,974.46
12 Modesto	$136.5	$15,904.05	**52 Ontario**	$53.0	$24,680.28
13 Stockton	$92.4	$13,400.26	**53 Downtown LA**	$12.9	$39,181.79
14 Concord	$116.4	$32,560.63	**54 Culver City**	$146.6	$40,445.85
15 Berkeley	$141.2	$23,614.37	**55 Yorba Linda**	$163.4	$21,794.94
16 Tri-Valley	$180.4	$26,849.28	**56 Imperial County**	$81.4	$11,540.55
17 East SF	$55.1	$59,946.19	**57 Whittier**	$96.3	$21,999.40
18 Oakland	$97.3	$22,222.57	**58 Downey**	$64.6	$22,620.59
19 West SF	$72.1	$22,809.05	**59 South LA**	$13.7	$16,052.59
20 Hayward	$84.9	$29,941.98	**60 Corona**	$59.3	$12,413.06
21 Merced	$91.8	$13,910.86	**61 Riverside**	$90.8	$13,028.23
22 San Mateo	$132.7	$32,220.15	**62 Inglewood**	$91.7	$28,530.93
23 Fresno	$199.7	$19,487.19	**63 South Gate**	$24.8	$17,019.77
24 Palo Alto-Mountain View	$110.5	$56,764.01	**64 Carson**	$42.8	$22,831.40
25 Fremont-Sta Clara	$65.7	$73,987.83	**65 Fullerton**	$101.6	$25,542.05
26 Tulare	$125.8	$16,994.85	**66 Torrance**	$191.4	$26,419.37
27 San Jose	$66.4	$18,867.15	**67 Murrieta**	$79.4	$13,987.26
28 Campbell-Saratoga	$176.7	$22,443.52	**68 Tustin**	$146.3	$40,770.58
29 Monterey	$205.2	$21,923.94	**69 Santa Ana**	$42.0	$27,205.20
30 East Monterey	$95.9	$14,131.21	**70 Long Beach**	$154.3	$20,337.88
31 W. Fresno	$67.5	$16,599.28	**71 East SD Co.**	$142.1	$22,538.66
32 Kings	$60.0	$17,561.12	**72 Seal Beach**	$173.5	$21,225.09
33 SB High Desert	$83.5	$10,985.82	**73 Dana Point**	$190.6	$15,857.90
34 Bakersfield	$140.8	$20,132.27	**74 Irvine**	$231.0	$44,226.23
35 San Luis Obispo	$174.6	$12,801.25	**75 Escondido**	$119.5	$20,909.20
36 Palmdale	$56.1	$8,740.07	**76 Carlsbad**	$147.7	$21,433.10
37 Santa Barbara	$161.2	$27,819.79	**77 North SD**	$123.0	$50,090.11
38 Santa Clarita	$119.2	$22,996.84	**78 Coastal SD**	$158.9	$50,931.95
39 E. San Fernando	$35.8	$24,737.24	**79 East SD**	$121.3	$38,337.51
40 Redlands	$117.4	$17,360.67	**80 South SD**	$49.8	$13,846.91

	Gross Benefit Payments (millions)	Gross Regional Product (millions)
State-wide	$9,206.2	$1,951,267.1

[14] The names for the Assembly districts are taken from the website: *Around The Capitol*. For details see: http://www.aroundthecapitol.com/districts/

Table 15 California Assembly District Economic Impact

Assembly District	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
1 Northeast Cal	$166.1	2,215	$85.8	$243.2
2 North Coast	$151.9	1,925	$75.9	$212.4
3 Butte-Tehama-Yuba	$124.6	1,467	$55.2	$158.4
4 Napa/Yolo/Dixon	$117.7	1,510	$66.5	$177.6
5 Foothills	$143.1	1,617	$62.9	$184.1
6 Roseville	$167.0	2,226	$105.5	$272.5
7 Sacramento	$56.7	735	$34.7	$88.3
8 East Sacramento Co.	$121.2	1,491	$70.7	$180.2
9 South Sacramento	$92.2	864	$38.6	$103.2
10 Marin-Petaluma	$130.0	1,625	$85.4	$201.0
11 Fairfield-Delta	$79.4	882	$40.1	$104.3
12 Modesto	$113.3	1,471	$58.1	$157.8
13 Stockton	$76.6	1,023	$41.9	$117.7
14 Concord	$97.0	1,203	$59.6	$152.2
15 Berkeley	$117.2	1,330	$63.4	$158.9
16 Tri-Valley	$150.1	1,950	$98.9	$246.6
17 East SF	$45.4	455	$31.6	$65.6
18 Oakland	$80.8	938	$45.8	$116.5
19 West SF	$59.6	537	$33.0	$70.2
20 Hayward	$70.1	817	$40.1	$100.9
21 Merced	$76.1	894	$33.6	$93.8
22 San Mateo	$109.7	1,243	$72.9	$158.5
23 Fresno	$166.1	2,414	$100.0	$273.7
24 Palo Alto-Mountain View	$91.8	972	$52.7	$119.4
25 Fremont-Sta Clara	$54.0	590	$31.0	$74.1
26 Tulare	$104.8	1,203	$48.8	$132.5
27 San Jose	$54.8	582	$31.2	$74.2
28 Campbell-Saratoga	$146.0	1,648	$89.6	$209.7
29 Monterey	$171.3	2,228	$104.9	$264.6
30 East Monterey	$79.7	860	$40.7	$99.7
31 W. Fresno	$56.3	576	$23.5	$65.8
32 Kings	$49.7	508	$21.5	$59.2
33 SB High Desert	$69.7	748	$29.1	$79.4
34 Bakersfield	$116.7	1,510	$63.6	$176.3
35 San Luis Obispo	$146.1	1,815	$76.5	$205.6
36 Palmdale	$46.6	466	$22.5	$53.2
37 Santa Barbara	$135.1	1,873	$84.8	$216.5
38 Santa Clarita	$98.7	1,217	$59.3	$146.6
39 E. San Fernando	$29.7	276	$14.1	$33.2
40 Redlands	$97.1	1,406	$56.3	$158.3
41 Pasadena	$210.5	2,606	$129.4	$309.6
42 Yucaipa	$136.2	1,790	$69.5	$192.4
43 Burbank	$80.1	952	$49.7	$121.7
44 Ventura Co	$117.9	1,608	$71.6	$187.0
45 W. San Fernando V	$101.7	1,328	$69.9	$166.5

Assembly District	A. Total Expenditures (millions)	B. Total Employment Effect	C. Total Labor Income Effect (millions)	D. Total Output Effect (millions)
46 Sherman Oaks	$55.3	682	$35.0	$82.6
47 Rialto	$28.7	323	$13.0	$35.9
48 West Covina	$66.9	822	$42.7	$101.8
49 Monterey Park	$82.5	1,002	$50.6	$124.2
50 West LA	$92.1	1,063	$56.2	$136.1
51 East LA	$32.2	367	$18.8	$47.7
52 Ontario	$43.9	584	$25.1	$66.9
53 Downtown LA	$10.7	119	$6.3	$16.3
54 Culver City	$121.3	1,409	$70.8	$168.2
55 Yorba Linda	$134.7	1,689	$85.3	$206.1
56 Imperial County	$67.5	776	$29.2	$82.5
57 Whittier	$79.5	867	$42.8	$100.4
58 Downey	$53.2	601	$30.0	$70.0
59 South LA	$11.4	92	$4.6	$12.1
60 Corona	$49.1	569	$22.2	$60.4
61 Riverside	$74.9	919	$35.9	$100.5
62 Inglewood	$75.7	836	$41.2	$101.8
63 South Gate	$20.4	183	$9.4	$24.2
64 Carson	$35.6	272	$13.6	$34.8
65 Fullerton	$83.9	1,020	$53.8	$128.2
66 Torrance	$159.0	1,922	$96.5	$224.7
67 Murrieta	$66.6	757	$28.9	$80.3
68 Tustin	$120.4	1,486	$78.7	$183.0
69 Santa Ana	$34.6	429	$23.0	$54.9
70 Long Beach	$127.3	1,482	$77.2	$193.0
71 East SD Co.	$118.2	1,496	$65.8	$174.9
72 Seal Beach	$143.0	1,701	$86.6	$203.4
73 Dana Point	$157.9	1,907	$99.5	$235.2
74 Irvine	$190.6	2,319	$125.0	$293.4
75 Escondido	$99.9	1,256	$54.2	$138.1
76 Carlsbad	$123.0	1,502	$71.0	$177.5
77 North SD	$102.2	1,312	$64.4	$160.8
78 Coastal SD	$132.2	1,729	$83.7	$207.4
79 East SD	$100.6	1,319	$64.5	$161.3
80 South SD	$41.2	404	$18.3	$46.5

	A. Total Expenditures (millions)	B. Employment Effect	C. Labor Income Effect (millions)	D. Output Effect (millions)
State-wide	$7,642.8	92,815	$4,364.3	$11,017.9

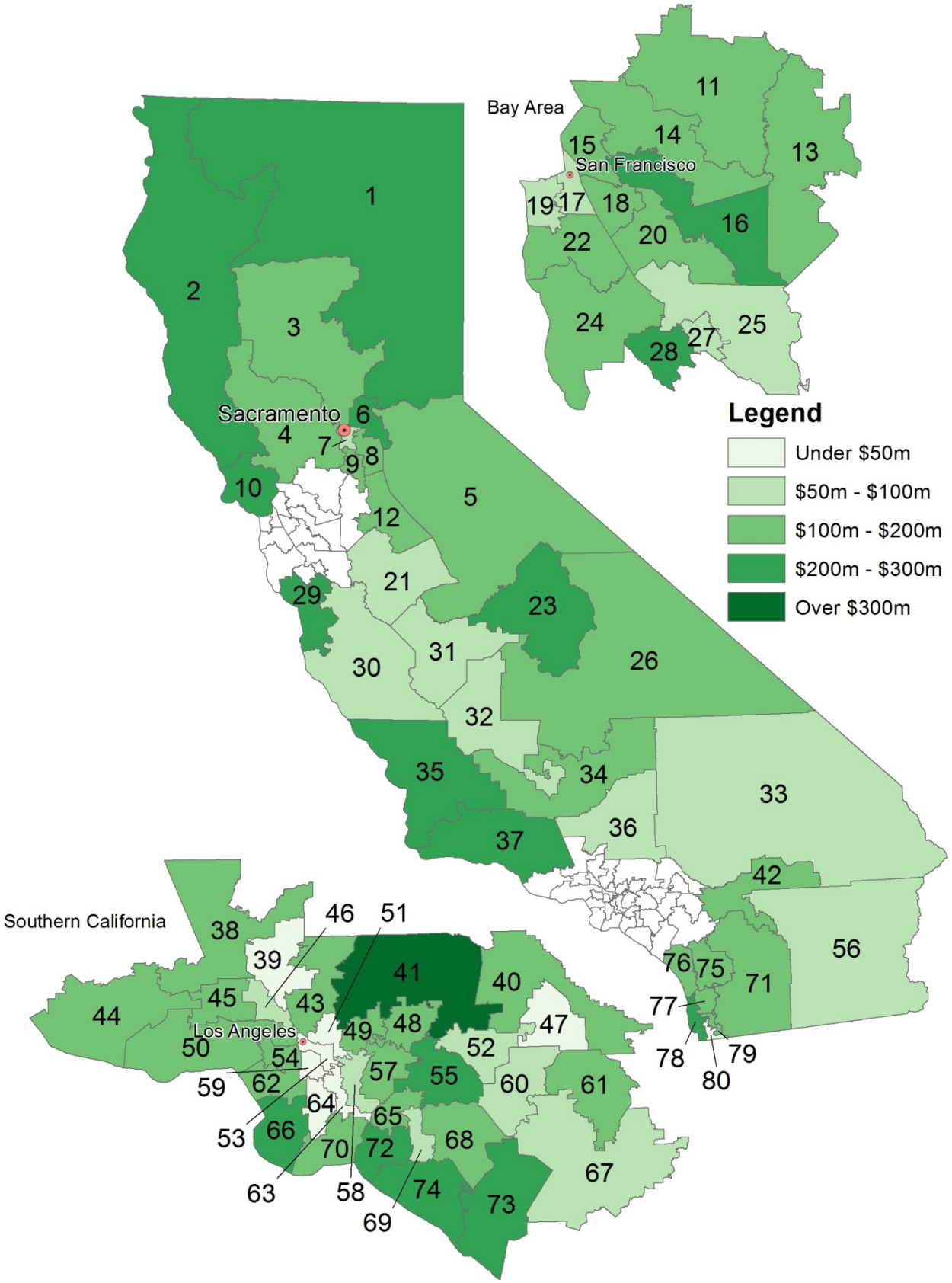



Figure 6 Map of CalSTRS Total Output Effects ($ millions) in California by Assembly District (FY 2012)