

The Annual Economic Impacts of CalSTRS Benefit Payments

April 2007

Study Report Without County-Level Data

Prepared for



California State Teachers' Retirement System

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Executive Summary

The California State Teachers' Retirement System accepts moneys from school district employers and from their teaching staff, as well as a small amount from the State of California, and then invests those dollars to provide a secure retirement at the end of these teachers' careers. CalSTRS has achieved a 9.1% rate of return over the past decade, with an annual rate of 13.21% in 2006. These earnings pay about 75% of the retirees' monthly checks.

One consequence of this steady performance is that retired teachers have become a significant economic engine in their communities through spending their income payments and the resulting "economic spin-off." CalSTRS' benefit recipients contribute almost \$9.225 billion per year to the California economy, and about \$4.49 billion is new dollars from value-adding ripple effects. Because of investment earnings and the spin-off effects of retiree spending, the California economy gains about \$6.71 for every one dollar "invested" in pensions by employers and taxpayers and \$0.44 in government revenues.

Purpose of study

This study is intended to examine the economic impacts of the California State Teachers' Retirement System on the economies of the state of California and its 58 counties.

CalSTRS

- With assets of \$159.1 billion at the end of February 2007, CalSTRS is the second largest of the state public retirement programs, and the largest teacher retirement fund.
- The fund builds a pool of retirement savings for 453,000 active members and disbursed benefit payments in 2006 to 181,833 retirees, 18,833 survivors and 7,683 disabled teachers.
- Teachers do not receive Social Security payments and most have no paid health care in retirement.
- The average CalSTRS member retired at age 61.2 after almost 26 years of service and received benefit payment checks of about \$3,810.
- Over the past decade, earnings on investments have averaged a healthy 9.1%, and investment earnings now provide for about 75% of retiree income benefits paid in 2006.

Findings

- Benefit payments in 2006 of \$6.029 billion support a total *output* (the ripple effect of business and government revenues as spending from those benefit checks works its way through the California economy) of about \$9.225 billion.
- This economic activity supports a total of 60,867 jobs, with total compensation of around \$2.112 billion.

- The total impact on *value added*, the Gross State Product, is about \$4.49 billion, about 0.28% of the \$1.556 trillion GSP. This results in a larger impact in the California economy than the furniture or oil and gas extraction industries (as reported by the Bureau of Economic Analysis for 2004 and 2005, the last years for which data was available).
- On average, each dollar invested by the state and schools in retirement with CalSTRS yielded a return of about \$6.71 in 2006 to the California economy after being matched by employee contributions, earning returns from growth of assets and then being paid to retirees and trickling through the local economy.
- State and local governments earn \$606,960,115 per year in new revenues as a result of CalSTRS benefit income payments in California. Each employer dollar invested also reaps \$0.44 in new tax and fee revenues.
- The size of impacts is larger in those counties with larger cohorts of retired education personnel, but the ratio of impacts to the overall local economy is much greater in rural communities. For example, while the impact of benefit payments is only 0.25% of the total economic output in Los Angeles County, the impact is 1.57% of the Sierra County economy.

Methodology

Data Used: This study is based on data covering the 2006 calendar year. The retirement fund provided the number and the amount of benefit payments paid to retirees in each ZIP code, which was then aggregated by county and region, the basic areas that IMPLAN correlates to other economic data.

Using an Input-Output Model: Measuring the economic impacts created by benefit payments requires the use of a model of the county or regional economy that can show the full effects to all sectors of the area. Recipients spend their benefit payments on household consumption (for example, utilities, groceries, retail purchases, transportation, local taxes and other categories). These business and public entities in turn make purchases, take profits and pay employees – all of which would not take place without the benefit payments. In a further round, those owners, employers and employees also spend their incomes, generating a second round of incomes to other businesses and to local government suppliers (and then a third round and so on...). Thus the sum of all the successive rounds of benefits will be much higher than the original benefit payments. In order to measure the total effects, researchers use an econometric model called an *input-output model*, which was originally created during WWII to predict how much of critical materials would be required to produce a target level of industrial output.

IMPLAN: This study uses the IMPLAN model, developed in the mid-1970s by the USDA, the U.S. Forest Service, and University of Minnesota economists for community impact analysis of federally-funded projects. IMPLAN is currently specified as the methodology required on many federal and state public works and natural resources projects and is widely used in California for California Environmental Quality Act (CEQA) reviews. The name for this trademarked software package originated from the description IMPact Analysis for PLANning.

The IMPLAN model must be calibrated for each local economy where impacts will be measured. The calibration requires a model for the local economy that shows all of the productive sectors and measures interconnections among them. The calibration is based on data from the U.S. Bureau of Labor Statistics ES-202 survey of local businesses, which is updated every two years. The update used in this study was performed in 2004.

Researchers

Dr. Robert Fountain is a *professor emeritus* at California State University Sacramento, having over 25 years of experience in teaching and research on housing and regional economics topics. He has a doctoral degree from UCLA with major field concentration in Housing, Real Estate and Urban Land Economics. Other fields of study include Finance, Urban and Regional Planning and Research Methodology.

He is the Director of the Applied Research Center at Sacramento State and has also served as Chief Economist for the Sacramento Regional Research Institute and Director of the Real Estate & Land Use Institute at Sacramento State.

Dr. Fountain's experience in economic analysis over a range of related topics such as economic forecasting, economic development, land use planning, housing market analysis, labor market and educational issues and many others allows him to go "outside the box" and identify relationships among issues that have an integrated effect on the regional economic environment.

Dr. Robert Waste studied and taught at Harvard and Yale and received his Ph.D. from the University of California at Davis. He is now a professor in the Department of Public Policy and Administration, California State University, Sacramento and Faculty Advisor to the California Executive Fellows Program, a joint program of the CSUS Center for California Studies and the Office of the Governor of California. Previously, he was Chair of the Department of Public Policy and Administration.

Since 2002, Dr. Waste has served as the Chair of the Sacramento City Planning Commission.

His books include:

- *Independent Cities: Rethinking U.S. Urban Policy* (New York: Oxford University Press, 1998).
- *The Ecology of City Policymaking* (New York: Oxford University Press, 1989).
- *Power and Pluralism in American Cities: Researching the Urban Laboratory* (Westport, CT: Greenwood Press, 1987).

Introduction

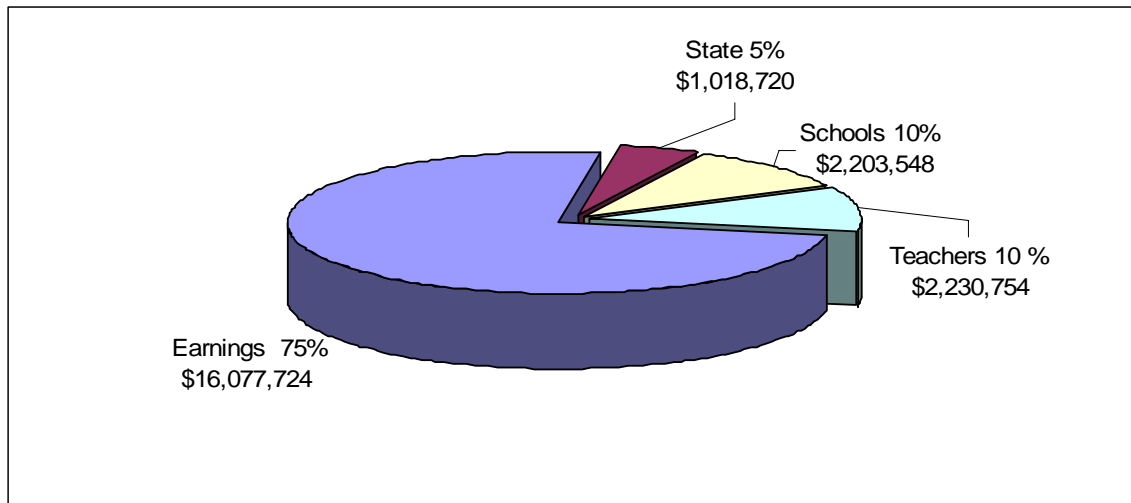
Purpose of the study

CalSTRS collects, manages and invests contributions from school district employers, teachers and the State of California in order to provide a secure retirement for hundreds of thousands of retirees. By carefully investing contributions, almost three-quarters of the needs of those retirees are paid by investment earnings.

CalSTRS is a defined benefit retirement plan. It provides benefits based on a member's years of service, age and highest compensation. In addition, benefits are provided for disability and death, with payments in some cases going to survivors or beneficiaries of eligible members. By providing these types of benefits, CalSTRS enables 1,400 school districts, community colleges, county offices of education and regional occupational programs to attract and retain qualified and experienced educators. The retirement benefits also assure these teachers a secure and dignified retirement at the end of their careers in public service.

Contributions to Retirement Income Payments FY 2005-06

Investment earnings pay 75% of all pensions and teachers contribute another 10%



Source: CalSTRS 2006 Comprehensive Annual Financial Report

This report focuses on one aspect of CalSTRS operations: disbursement of benefit payments directly to households of California teachers, and the resulting ripple of economic impacts on the state and its counties. The report will provide details on the amount of payments, the ensuing business activities and the employment and payroll impacts.

CalSTRS

Created by state legislation in 1913 to address the old-age needs of retired educators, the California State Teachers Retirement System is the second largest public pension plan and the largest teachers' retirement fund in the United States. CalSTRS had a total membership of 794,812 and assets of \$159.1 billion as of February 2007. CalSTRS' primary responsibility is to provide retirement-related benefits and services to teachers in public schools from kindergarten through community college.

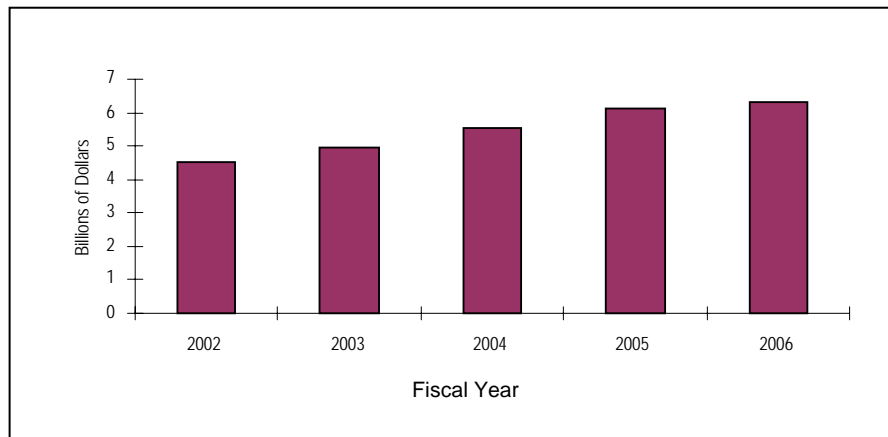
The Teachers' Retirement Board has exclusive control over the investment and administration of the Teachers' Retirement Fund. The 12-member board consists of four ex-officio members, including the Superintendent of Public Instruction, the State Treasurer, the State Controller and the Director of Finance. The Governor appoints five members, including three public members, one school board member or community college trustee and one retiree. Three members are elected by CalSTRS participants and members.

School districts, teachers and the State of California share in contributing to CalSTRS retirement funds. In 2005-2006, CalSTRS reports that state contributions to the plan averaged 2.017% of teacher's salaries, school district employer contributions averaged 8.25%, and member contributions were 8%. Total contributions made in 2006 by employers, teachers and the state to the fund were \$5.453 billion.

CalSTRS pays monthly payments to 181,833 retirees, 18,330 survivors and 7,683 disabled teachers on behalf of their employers. In 2006, the average retiree left service at age 61.2 after 26 years of service, and their monthly income replacement check was an average of \$3,810. These payments totaled \$6.86 billion in 2006.

Total Benefits Paid

Benefits paid to retirees, disability beneficiaries and survivors
(in billions of dollars)



Source: CalSTRS 2006 Summary Report to Members

Earnings in 2006 were \$14.26 billion (an annual return of 13.21%). Despite a dip during the national market slump following the dot-com boom, CalSTRS' annual earnings have been an average of 9.1% over the past decade.

Economic Impacts on the State of California

CalSTRS benefit payments for 2006, the most recent calendar year, are summarized in Figure 1, below. A total of 217,621 beneficiaries in all 50 states and a large number of military postal locations received about \$6.86 billion in payments. (Note that the data include not only retirement benefits but also one-time benefit payments and other types of payments.)

As expected, the largest concentration of benefit payments and beneficiaries are located within California. California's neighboring states also generally exhibit higher numbers of recipients and benefit payments. States with a history as a popular retirement destination, such as Florida, also show larger recipient and benefit payment totals. The payments within California are about 87.9% of the total, about \$6.03 billion to 285,005 beneficiaries.

Figure 1. CalSTRS Benefit Payment Summary

TOTAL BENEFIT PAYMENTS

<i>Location</i>	<i>Number of Recipients</i>	<i>Percentage of Recipients</i>	<i>Total Amount Paid</i>	<i>Percentage of Amount Paid</i>
California	184,156	84.6%	\$6,029,513,824	87.9%
Other Locations	33,465	15.4%	832,771,490	12.1%
Total	217,621	100.0%	\$6,862,285,314	100.0%

Note: Any differences due to rounding.

Data Sources: CalSTRS and ZIP code downloads.

CalSTRS BENEFIT PAYMENTS BY STATE OR OTHER LOCATION

<i>State/Location</i>	<i>Number of Recipients</i>	<i>Total Benefit Amount</i>	<i>Average per Recipient</i>
Alabama	225	\$5,277,949.57	23,457.55
Alaska	124	\$2,385,737.72	19,239.82
American Samoa	1	\$9,377.44	9,377.44
Arizona	4,284	\$110,033,902.58	25,684.85
Arkansas	431	\$10,471,530.05	24,295.89
Armed Forces –Europe	21	\$318,675.55	15,175.03
Armed Forces - Pacific	19	\$248,368.97	13,072.05
California	184,156	\$6,029,513,823.64	32,741.34
Colorado	1,321	\$32,478,725.49	24,586.47
Connecticut	79	\$1,556,594.16	19,703.72
Delaware	27	\$649,523.23	24,056.42
District of Columbia	30	\$746,923.59	24,897.45
Florida	1,357	\$31,635,953.52	23,313.16
Georgia	496	\$12,224,185.18	24,645.53
Guam	3	\$56,611.91	18,870.64
Hawaii	745	\$19,860,424.68	26,658.29
Idaho	1,038	\$26,432,864.05	25,465.19
Illinois	406	\$8,229,313.22	20,269.24
Indiana	225	\$5,298,905.24	23,550.69
Iowa	200	\$4,600,763.64	23,003.82
Kansas	271	\$5,662,260.43	20,893.95
Kentucky	153	\$3,973,669.79	25,971.70
Louisiana	194	\$4,930,514.34	25,415.02
Maine	86	\$2,069,236.75	24,060.89
Maryland	212	\$4,804,997.35	22,665.08
Massachusetts	174	\$3,777,061.22	21,707.25
Michigan	300	\$7,036,400.71	23,454.67
Minnesota	300	\$7,088,702.47	23,629.01
Mississippi	144	\$3,704,327.37	25,724.50
Missouri	511	\$11,908,941.72	23,305.17
Montana	515	\$13,516,035.70	26,244.73
Nebraska	127	\$2,634,523.61	20,744.28
Nevada	2,835	\$82,253,757.43	29,013.67
New Hampshire	83	\$2,036,524.50	24,536.44
New Jersey	103	\$2,593,446.26	25,179.09
New Mexico	783	\$19,626,648.49	25,065.96
New York	276	\$5,996,563.94	21,726.68
North Carolina	551	\$13,228,637.06	24,008.42
North Dakota	71	\$1,754,338.48	24,708.99
Ohio	300	\$7,186,909.35	23,956.36
Oklahoma	559	\$12,846,941.34	22,982.01
Oregon	4,340	\$106,038,329.58	24,432.79
Pennsylvania	260	\$5,739,856.36	22,076.37
Puerto Rico	19	\$210,216.25	11,064.01
Rhode Island	22	\$633,371.42	28,789.61
South Carolina	223	\$5,913,506.62	26,517.97
South Dakota	187	\$4,925,087.59	26,337.37
Tennessee	412	\$10,760,008.85	26,116.53
Texas	1,989	\$50,099,633.86	25,188.35
Utah	1,298	\$34,764,218.39	26,782.91
Vermont	50	\$1,309,993.44	26,199.87
Virgin Islands	1	\$30,559.78	30,559.78
Virginia	402	\$9,976,830.57	24,817.99
Washington	3,475	\$87,004,814.99	25,037.36
West Virginia	58	\$1,378,909.50	23,774.30
Wisconsin	213	\$4,569,640.66	21,453.71
Wyoming	170	\$3,879,499.32	22,820.58
Unidentified Location	768	\$14,390,244.97	18,737.30
Total	217,621	\$6,862,285,313.89	31,533.19

Note: Any difference due to rounding.
Data Sources: CalSTRS and ZIP code files

Economic Impacts for the State of California

The economic impacts of the \$6.029 billion in benefit payments in the state of California are shown in the tables below. The methodology and terminology are discussed in the following section.

The California Economy in Perspective

Figure 2 shows an overview of the California economy in 2003, the most recent year for which detailed composition data are available. The total of all business and government revenues was about \$2.749 trillion. Of this amount, the value added, called the Gross State Product—the measurement of new value created in the economy—was \$1.556 trillion, which is the best measure of the overall productivity of the economy. There were about 20,057,000 jobs, earning total compensation of about \$875 billion.

Figure 2. Overview of the California Economy

<i>State</i>	<i>Total Output</i>	<i>Value Added</i>	<i>Employee Compensation</i>	<i>Employment</i>
California	\$2,749,082,404,000	\$1,556,387,098,000	\$875,496,202,000	20,056,812

Note: Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

Statewide Economic Impacts of CalSTRS Benefit Payments

Figure 3 shows the impact of the CalSTRS benefit payments. The benefit payments of \$6.029 billion support a total output (business and government revenues) of about \$9.225 billion, showing an economic multiplier of about 1.53, due to the repetitive spending of the benefit payments throughout the interrelated economy.

The economic “footprint” of CalSTRS benefit payments – which our study has determined to be \$9.225 billion annually added into the overall California economy – is substantial. In fact, CalSTRS benefit payments result in 1/3 of 1% of the entire California economic output. Put differently, one out of every three hundred “things” in the California economy – such as jobs, products, transactions, benefits and consequences – is either a direct or indirect consequence of CalSTRS benefit payments.

Figure 3. Summary of Economic Benefits Resulting from CalSTRS Benefit Payments

<i>State</i>	<i>Benefit Payments</i>	<i>Total Output</i>	<i>Value Added</i>	<i>Employee Compensation</i>	<i>State & Local Government Taxes</i>	<i>Employment</i>
California	\$6,029,513,678	\$9,225,934,563	\$4,490,204,649	\$2,112,924,047	\$606,960,115	60,867

Note: State and Local Government Taxes show only tax generation, not distribution to local governments. Any differences due to rounding.

The total impact on value added, the Gross State Product, is about \$4.49 billion, about 0.4% of the GSP. A total of 60,867 jobs were supported by this activity, with total compensation of around \$2.11 billion.

Comparing CalSTRS’ Impacts to Other California Industries

CalSTRS benefit payments inject an *added* \$4.49 billion in the California economy annually, making CalSTRS a larger player in the California economy than – as Figure 4 illustrates – the oil and gas extraction or furniture industries in 2004 and 2005 (the latest date NAICS figures were available from the Bureau of Economic Analysis, a function of the U.S. Department of Commerce). Another useful way to think of the *total output* economic footprint of CalSTRS benefit payments is to recognize that CalSTRS’ annual benefit payments have a larger economic impact on California’s annual economy than does the *combined* economic activity of three campuses the size of U.C. Davis (\$2.7 billion) or U.C. Irvine (\$3 billion), including medical schools and hospitals.

Figure 4. Comparing CalSTRS’ Economic Footprint

Total Statewide Value-Added (“New”) Output	
CalSTRS GSP in 2006*	\$ 4,490,204,549
Apparel (in California)	4,525,000,000
Oil and gas extraction	4,406,000,000
Furniture	3,193,000,000
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Total CalSTRS-Generated Jobs (in California)	60,867 FTE **
Biotechnology-Generated Jobs (in California)	60,000 FTE
*Gross State Product	
** Full-Time Equivalent/New Full-Time Job Positions	

Economic Impacts of CalSTRS Benefit Payments at the County Level

The appendices of this report contain a county-by-county analysis of the CalSTRS benefit payment annual footprint. While the CalSTRS benefit payment footprint is significant in every county, retired education personnel create a larger-scale CalSTRS economic footprint in counties with a large education presence, and they make up a higher ratio of the overall county economic base in rural counties where they may constitute a larger portion of the population.

For example, in Sacramento County, CalSTRS accounts for 2,019 jobs – a figure equal to 0.25% of all jobs in the entire county. In the same county, CalSTRS payment impacts amount to \$310.53 million, or about 0.35% of all economic activity. CalSTRS benefit payments provide \$65 million in employee compensation in Sacramento County,

generate \$20 million in state and local tax revenues, and inject \$138 million in value-added dollars annually into the county economy.

But in Sierra County, while the overall totals of economic impact may be smaller (\$1.35 million in benefit payments), the impact in the overall community is a larger percentage of the total county economic output – 1.57%. Overall employment impacts are also slightly greater – 0.30%.

Top 10 Counties Ranked by Total Output Resulting from CalSTRS Benefit Payments

<i>County</i>	<i>Total Output Impact of CalSTRS Benefit Payments</i>	<i>Total Output of County Economy</i>	<i>Percent Attributable to CalSTRS Benefits</i>
Los Angeles	\$ 1,910,355,040	\$ 765,154,898,000	0.25%
Orange	894,243,844	209,218,577,000	0.31%
San Diego	740,045,871	228,879,639,000	0.32%
Santa Clara	375,726,434	225,775,912,000	0.17%
Riverside	349,958,315	81,785,167,000	0.43%
Alameda	328,665,973	136,640,219,000	0.24%
Sacramento	310,527,593	88,246,908,000	0.35%
San Bernardino	307,557,937	89,918,634,000	0.34%
Contra Costa	263,818,224	104,315,040,000	0.25%
Fresno	226,970,652	46,128,629,000	0.49%

Note: Any differences due to rounding.

Top 10 Counties Ranked by Percentage of Total Economy Output Attributable to Total Output Resulting from CalSTRS Benefit Payments

<i>County</i>	<i>Total Output Impact of CalSTRS Benefit Payments</i>	<i>Total Output of County Economy</i>	<i>Percent Attributable to CalSTRS Benefits</i>
Sierra	\$ 1,352,603	\$ 85,969,000	1.57%
Calaveras	16,943,374	1,399,938,000	1.21%
Trinity	4,316,786	361,369,000	1.19%
Mariposa	5,764,238	496,890,000	1.16%
Tuolumne	22,941,418	2,076,610,000	1.10%
Siskiyou	17,649,299	1,877,910,000	0.94%
Nevada	39,963,533	4,962,101,000	0.81%
Lassen	8,732,695	1,122,391,000	0.78%
Inyo	6,149,498	791,610,000	0.78%
Amador	11,609,978	1,524,180,000	0.76%

Note: Any differences due to rounding.

Return on State and Local Employer Contributions Invested

As shown above, 75% of the payments made to CalSTRS beneficiaries comes from investment earnings and another 10% comes from employee contributions. Only 10.2% of the total paid out comes from employer contributions, and another 4.7% comes from state contributions. So on average, each dollar invested by the state and school districts in retirement yields a return of about \$6.71 to California's economy.

Government Revenues Resulting from Retirement Payments

In addition, this economic ripple effect generates payments to the government — fees and taxes—to support services. The total annual impact on these government revenues is also sizeable: \$606,960,115 per year is returned to state and local governments as a result of CalSTRS benefit payments in California. If you look at each dollar paid by public employers as invested in pension funds, then that dollar returns \$0.44 in government revenues on top of other economic impacts.

Impact of Each Taxpayer Dollar “Invested” in CalSTRS

Employer and taxpayer dollars are leveraged by employee contributions, investment earnings and the ripple effect to earn a “return” on the initial investment

<i>School and State Investment in CalSTRS (Schools 10.2%, State 4.7%)</i>	<i>Total Impact (100%)</i>	<i>Return on Investment (per dollar)</i>
\$1,079,434,344	Total Economic Impact \$9,225,934,563	\$6.71
	State and Local Government Revenue \$606,960,115	\$0.44

Methodology and Data

Methodology

Purpose of the Study. The purpose of this study is to show the total economic benefits created throughout California and its counties and regions by the payments of benefits by CalSTRS. It is intended to show not only the direct amounts of CalSTRS benefits distributed, but also the resulting additional economic impacts that accrue throughout the economy.

Data. The data used in the study were provided by CalSTRS for the calendar year 2006. The data includes all payments made directly to households, but do not include medical benefits or other benefits paid directly to providers. The data is tabulated by U.S. Postal ZIP code and is assembled to the county level using commercially-available conversion programs. Note that in some cases county boundaries do not exactly coincide with ZIP codes, so geographical approximations are made in the conversion process. Small but insignificant errors may be introduced at the county level, but these have very insignificant effects on the outputs of the study.

Using an Input-Output Model. Measuring the economic impacts created by CalSTRS benefits requires the use of a model of the county or regional economy that can show the full effects to all sectors of the economy, not just the CalSTRS benefit recipients. When the CalSTRS recipients receive the benefit payments, that represents an infusion of income into the local economy which creates a chain of economic activities whose total is greater than the initial benefit payments.

When the recipients spend the benefit payments on household consumption (such as utilities, groceries, retail purchases, housing payments, education, health care, transportation, local taxes and many other categories) the business or government providers of those goods and services receive additional sales or revenues. This increases the provider's profits, contributes to employee compensation and supports additional workers who would not be supported without the CalSTRS benefit payments.

In turn, those owners and employees of the suppliers also spend their incomes on household consumption, which generates a second round of incomes to businesses and local government suppliers. That secondary round of expenditures will in turn create a third round of expenditures, and the linked sequence of expenditures will continue until successive rounds become infinitesimally small, at which time the sum of all the successive rounds of benefits will be much higher than the original CalSTRS benefit payments.

The ratio of the total effects divided by the direct or initial effect is called the economic multiplier, and ranges from about 1.3 to over 3.0 for various direct impact sectors in different economies. The multiplier effect identified for CalSTRS benefit payments is 1.53.

In order to measure the total of the successive expenditures flows, an econometric model called an input-output model is required. Input-output models were created during World War II to predict how much of critical materials would be required to produce a target level of industrial output. The model showed that to create a given level of industrial output, it took much more of the critical material because the industries which supply components and supplies to the desired industry and the households of workers also used some of the critical material.

IMPLAN. In this study, the computations were made using the IMPLAN model, an input-output model which can show the full range of the inter-relationships in the regional economy which are affected by direct economic impacts, such as CalSTRS benefits. The USDA and the U.S. Forest Service in the mid-1970s developed IMPLAN with University of Minnesota economists for community impact analysis of federally-funded projects. The name originally came from the description “IMPact Analysis for PLANning.”

The Natural Resources Inventory and Analysis (NRIAI) and Social Sciences Institutes (SSI) are supporting usage of IMPLAN throughout the Natural Resources Conservation Service. The model is currently specified as the methodology required for analysis on many federal and state public works and natural resources projects and is widely used in California for California Environmental Quality Act (CEQA) environmental impact assessments.

The IMPLAN model must be calibrated for each local economy in which impacts are to be measured. The calibration creates a model for the local economy which shows all of the productive sectors and measures the interconnections between them. The calibration is made using a database created by the U.S. Bureau of Labor Statistics called the ES-202 data, which is based on a survey of all businesses and updated every two years. The latest data is based on the ES-202 survey completed in 2004. Note that this database may not exactly match data or estimates from other sources, such as the Census Bureau, the Bureau of Economic Analysis, the Employment Development Department or the Department of Finance population estimates.

Model Terminology and Outputs. The model describes the economic structure and the economic impacts in several ways. One description is by the sequence of events which result in the multiplied total effect:

- The *Direct Impact*, the event which triggers the sequence, or in this case, the payment of CalSTRS benefits to households.
- The *Indirect Impact*, which identifies the second-order effects on the economy when the CalSTRS benefits are spent at businesses and government providers of goods and services.
- The *Induced Impact*, when the employees of the service providers spend their wages and profits, initiating a third-order effect.

- The *Total Impact* is the sum of the Direct, Indirect, and Induced impacts derived by the econometric model. This is the desired all-inclusive view of the economic benefits created by CalSTRS benefits on the economy.

A second description provided by the IMPLAN model is based on the specific measurement of the economic benefits. These range from the total revenues or sales of all businesses and government agencies, to the final impact on employment. The measures are described below:

- *Total Output* is the total business and government sales or revenues generated by firms, government entities and households involved in the economic activity, and is widely used because it is the measure most business and government entities use to measure their level of activity. It includes all types of income including profits, return of capital, return on investment, employee compensation and taxes.

The additional measures below are all part of the Total Output, and are therefore smaller than the Total Output.

- *Value Added* is a net estimate which identifies the actual creation of new value in the economy. It excludes the costs of purchased materials and services, but includes profits, capital costs, worker compensation and other aspects of the productive activity. The sum of all Value Added activities in the region equals the Gross Regional Product (GRP for the region or GNP for the nation). It is a better measure of the real economic contribution of an activity, but is a concept which individual business firms and government agencies cannot readily compute.
- *Employee Compensation* measures the part of Value Added which goes to the employees of the firm or government agency. It is not just salary, but includes all costs of benefits, bonuses, vacation, sick leave and all other compensation.
- *Employment* is the count of full-time equivalent employment generated by the project on an annual basis. It does not necessarily represent a count of employees active at a given time: a large number of temporary or part-time employees would be reduced to a full-time equivalent number which would be lower in terms of actual numbers of employed persons.
- *State and Local Tax Generation* is a model estimate of the corporate, personal, property and sales taxes generated, as well as in-lieu charges for services. The measure is one of generation, not allocation. It is very difficult to estimate how much of this is retained by or returned to cities or counties, as the California fiscal structure and allocation processes by the state are complex and change rapidly.

Researchers

Dr. Robert Fountain is a *professor emeritus* at California State University Sacramento, having over 25 years of teaching and researching housing and regional economics topics. He has a doctoral degree from UCLA, with major field concentration in Housing, Real Estate and Urban Land Economics. Other fields of study include Finance, Urban and Regional Planning and Research Methodology.

He is the Director of the Applied Research Center at Sacramento State and has also served as Chief Economist for the Sacramento Regional Research Institute and Director of the Real Estate & Land Use Institute at Sacramento State.

Dr. Fountain's experience in economic analysis over a range of related topics such as economic forecasting, economic development, land use planning, housing market analysis, labor market and educational issues and many others allows him to go "outside the box" and identify relationships among issues that have an integrated effect on the regional economic environment.

Dr. Robert Waste studied and taught at Harvard and Yale and received his Ph.D. from the University of California at Davis. He is now a professor in the Department of Public Policy and Administration, California State University, Sacramento and Faculty Advisor to the California Executive Fellows Program, a joint program of the CSUS Center for California Studies and the Office of the Governor of California. Previously, he was Chair of the Department of Public Policy and Administration.

Since 2002, Dr. Waste has served as the Chair of the Sacramento City Planning Commission.

His books include:

- *Independent Cities: Rethinking U.S. Urban Policy* (New York: Oxford University Press, 1998).
- *The Ecology of City Policymaking* (New York: Oxford University Press, 1989).
- *Power and Pluralism in American Cities: Researching the Urban Laboratory* (Westport, CT: Greenwood Press, 1987).

Tables and Summaries

The data provided in the report for each county or region has four components. The first table gives the economic structure of the local economy, unrelated to the measurement of CalSTRS benefits. That data is given to provide a perspective for the magnitudes of the CalSTRS impacts.

The second table shows the aggregate economic impacts of the CalSTRS benefits on the local economy. The table shows the direct CalSTRS benefit total for calendar year 2006 and the resulting impacts on the economy including the Total Output, Value Added, Employee Compensation, State and Local Tax Generation, and Employment generated or supported by CalSTRS benefits.

The third table is included to illustrate the generation of benefits via the Direct, Indirect, Induced and Total benefits for each measure of benefit. The data in the right-hand column of Table 3 is the same as that shown in Table 2.

Table 4 gives some insight into how CalSTRS benefits affect the various economic sectors of the local economy. Because CalSTRS benefits are introduced through the recipient households, the table proportions are related to household consumption patterns. The three sectors receiving the largest impacts include Public Administration (government services providers), Health Care and Social Assistance, and Retail Trade.

Tables similar to these will be provided for all counties in California, and for the state of California as a whole.

TABLE 1. OVERVIEW OF THE SACRAMENTO COUNTY ECONOMY

County	Total Output	Value Added	Employee Compensation	Employment
Sacramento	\$88,246,908,000	\$56,245,421,000	\$35,718,876,000	766,960

Note: Data based on 2004 U.S. Bureau of Labor Statistics ES-202 Report. Any differences due to rounding.

**TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS**

County	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Sacramento	\$234,642,442	\$310,527,593	\$138,157,062	\$65,512,905	\$20,080,047	2,019

Note: State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
SACRAMENTO COUNTY GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Sacramento County	Direct	Indirect	Induced	Total
Total Output	\$234,642,442	\$38,982,941	\$36,902,210	\$310,527,593
Value Added	\$92,279,882	\$22,821,214	\$23,055,966	\$138,157,062
Employee Compensation	\$42,037,239	\$12,416,455	\$11,059,211	\$65,512,905
Employment	1,349	329	341	2,019
State and Local Taxes				\$20,080,047

Note: Any differences due to rounding.

TABLE 4
SACRAMENTO COUNTY SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$526,651	\$67,107	5
21	Mining	\$528,314	\$30,319	2
22	Utilities	\$1,984,701	\$332,137	3
23	Construction	\$1,317,142	\$465,873	11
31-33	Manufacturing	\$8,680,013	\$1,705,792	29
42	Wholesale Trade	\$13,168,906	\$4,669,148	80
44-45	Retail Trade	\$30,656,804	\$11,164,448	406
48-49	Transportation and Warehousing	\$4,661,881	\$1,603,535	45
51	Information	\$6,891,613	\$1,487,505	28
52	Finance and Insurance	\$23,378,056	\$6,704,332	117
53	Real Estate and Rental and Leasing	\$12,848,404	\$1,186,101	73
54	Professional, Scientific, and Technical Services	\$10,013,205	\$4,024,046	93
55	Management of Companies and Enterprises	\$2,496,316	\$1,126,628	15
56	Administrative and Support	\$5,208,609	\$2,252,339	95
61	Educational Services	\$2,327,019	\$1,185,456	56
62	Health Care and Social Assistance	\$31,662,122	\$15,703,759	370
71	Arts, Entertainment, and Recreation	\$2,622,645	\$972,334	53
72	Accommodation and Food Services	\$15,078,751	\$4,873,857	304
81	Other Services (except Public Administration)	\$12,067,221	\$5,331,481	225
92	Public Administration	\$34,643,111	\$626,708	10

Note: Model adjusts for intracounty trade.
Any differences due to rounding.

CalSTRS Impacts on the California Economy

TABLE 1
OVERVIEW OF THE CALIFORNIA ECONOMY

State	Total Output	Value Added	Employee Compensation	Employment
California	\$2,749,082,404,000	\$1,556,387,098,000	\$875,496,202,000	20,056,812

Note: Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

State	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
California	\$6,029,513,678	\$9,225,934,563	\$4,490,204,649	\$2,112,924,047	\$606,960,115	60,867

Note: State and Local Government Taxes show only tax generation, not distribution to local government.
Any differences due to rounding.

TABLE 3
CALIFORNIA GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

California- Statewide	Direct	Indirect	Induced	Total
Total Output	\$6,029,513,678	\$1,540,075,816	\$1,656,345,069	\$9,225,934,563
Value Added	\$2,662,586,920	\$847,064,168	\$980,553,561	\$4,490,204,649
Employee Compensation	\$1,203,012,686	\$444,326,730	\$465,584,631	\$2,112,924,047
Employment	36,622	10,767	13,478	60,867
State and Local Taxes				\$606,960,115

Note: Any differences due to rounding.

TABLE 4
 CALIFORNIA SECTOR DISTRIBUTION OF ECONOMIC BENEFITS CREATED BY
 CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$63,929,443	\$8,747,637	548
21	Mining	\$23,562,454	\$3,443,772	52
22	Utilities	\$131,536,730	\$17,271,966	161
23	Construction	\$44,358,711	\$15,128,064	362
31-33	Manufacturing	\$893,060,903	\$132,618,879	2,487
42	Wholesale Trade	\$441,252,688	\$150,904,002	2,568
44-45	Retail Trade	\$831,834,791	\$295,173,693	10,504
48-49	Transportation and Warehousing	\$192,717,957	\$73,249,591	1,679
51	Information	\$278,265,399	\$57,834,103	764
52	Finance and Insurance	\$701,455,544	\$216,857,861	3,249
53	Real Estate and Rental and Leasing	\$390,968,817	\$35,321,395	2,162
54	Professional, Scientific, and Technical Services	\$344,553,005	\$130,737,228	2,840
55	Management of Companies and Enterprises	\$88,338,652	\$40,899,234	465
56	Administrative and Support	\$165,891,019	\$70,997,082	2,807
61	Educational Services	\$99,367,213	\$54,663,631	1,942
62	Health Care and Social Assistance	\$944,571,206	\$444,692,183	11,015
71	Arts, Entertainment, and Recreation	\$118,133,180	\$43,996,746	1,920
72	Accommodation and Food Services	\$453,159,669	\$150,367,435	8,455
81	Other Services (except Public Administration)	\$347,909,629	\$125,115,952	6,270
92	Public Administration	\$1,027,971,021	\$44,903,593	617

Note: Model adjusts for intracounty trade.
 Any differences due to rounding.

CalSTRS Economic Benefits by Region

Economic benefits (impacts) of CalSTRS payments to beneficiaries were also calculated on a regional basis. The table below illustrates the benefits amounts by region and is followed by the definitions of the regions used in this analysis.

CalSTRS BENEFIT PAYMENT AMOUNTS BY REGION

<i>Region</i>	<i>Number of Recipients</i>	<i>Total Benefits Paid</i>
Los Angeles	58,710	\$2,067,139,222.97
Bay Area	37,982	\$1,236,181,249.73
Great Valley	17,616	\$ 571,239,452.13
San Diego	17,173	\$ 548,434,315.83
Inland Empire	15,502	\$ 491,924,156.15
Sacramento	13,538	\$ 420,749,241.40
Central Coast	8,194	\$ 246,825,239.56

Note: Any differences due to rounding.

Region Definitions

- 1.) Bay Area (Alameda, Contra Costa, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Francisco, San Mateo, and Sonoma counties)
- 2.) Central Coast (Monterey, San Luis Obispo, and Santa Barbara counties)
- 3.) Great Valley (Fresno, Tulare, Kern, Merced, San Joaquin, and Stanislaus counties)
- 4.) Inland Empire (Riverside and San Bernardino counties)
- 5.) Los Angeles (Los Angeles, Orange, and Ventura counties)
- 6.) Sacramento (El Dorado, Placer, Sacramento, and Yolo counties)
- 7.) San Diego (Imperial and San Diego counties)

San Francisco Region Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE SAN FRANCISCO REGION ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
San Francisco	\$754,755,098,000	\$416,438,173,000	\$245,398,039,000	4,462,188

Note: San Francisco Region includes Alameda, Contra Costa, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Francisco, San Mateo, and Sonoma Counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
San Francisco	\$1,236,181,264	\$1,761,501,823	\$856,666,637	\$406,606,522	\$113,553,089	10,442

Note: San Francisco Region includes Alameda, Contra Costa, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Francisco, San Mateo, and Sonoma Counties. Any differences due to rounding.

TABLE 3
SAN FRANCISCO REGION GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

San Francisco Region	Direct	Indirect	Induced	Total
Total Output	\$1,236,181,264	\$263,216,089	\$262,104,470	\$1,761,501,823
Value Added	\$543,344,068	\$152,336,157	\$160,986,412	\$856,666,637
Employee Compensation	\$247,537,827	\$81,854,122	\$77,214,573	\$406,606,522
Employment	6,741	1,710	1,992	10,442
State and Local Taxes				\$113,553,089

Note: San Francisco Region includes Alameda, Contra Costa, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Francisco, San Mateo, and Sonoma Counties. Any differences due to rounding.

TABLE 4
 SAN FRANCISCO REGION SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
 CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$4,994,509	\$1,205,831	67
21	Mining	\$1,424,632	\$183,275	3
22	Utilities	\$29,367,608	\$3,039,045	22
23	Construction	\$8,157,470	\$2,994,075	61
31-33	Manufacturing	\$128,032,648	\$19,604,209	268
42	Wholesale Trade	\$75,865,499	\$26,640,608	363
44-45	Retail Trade	\$157,354,515	\$55,479,303	1,853
48-49	Transportation and Warehousing	\$32,436,208	\$12,595,149	275
51	Information	\$53,148,248	\$11,576,522	145
52	Finance and Insurance	\$135,965,408	\$44,637,120	538
53	Real Estate and Rental and Leasing	\$71,149,113	\$6,958,533	387
54	Professional, Scientific, and Technical Services	\$63,394,964	\$25,355,933	490
55	Management of Companies and Enterprises	\$15,013,777	\$7,399,446	63
56	Administrative and Support	\$29,289,728	\$13,088,767	417
61	Educational Services	\$20,072,140	\$12,187,542	354
62	Health Care and Social Assistance	\$188,428,879	\$90,903,409	1,959
71	Arts, Entertainment, and Recreation	\$21,228,229	\$7,656,459	370
72	Accommodation and Food Services	\$89,554,162	\$30,614,491	1,567
81	Other Services (except Public Administration)	\$67,741,330	\$25,897,603	1,143
92	Public Administration	\$203,184,948	\$8,589,202	99

Note: San Francisco Region includes Alameda, Contra Costa, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Francisco, San Mateo, and Sonoma counties. Model adjusts for intra-county trade. Any differences due to rounding.

Central Coast Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE CENTRAL COAST ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
Central Coast	\$53,137,897,000	\$32,704,302,000	\$17,527,864,000	487,519

Note: Central Coast includes Monterey, San Luis Obispo, and Santa Barbara counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Central Coast	\$246,528,238	\$329,977,079	\$147,540,240	\$65,679,395	\$20,312,661	2,174

Note: Central Coast includes Monterey, San Luis Obispo, and Santa Barbara counties. Any differences due to rounding.

TABLE 3
CENTRAL COAST GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Central Coast	Direct	Indirect	Induced	Total
Total Output	\$246,528,238	\$40,949,754	\$42,499,087	\$329,977,079
Value Added	\$97,416,935	\$23,698,660	\$26,424,645	\$147,540,240
Employee Compensation	\$41,897,884	\$11,881,728	\$11,899,783	\$65,679,395
Employment	1,420	359	395	2,174
State and Local Taxes				\$20,312,661

Note: Central Coast includes Monterey, San Luis Obispo, and Santa Barbara counties. Any differences due to rounding.

TABLE 4
CENTRAL COAST SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$1,463,826	\$329,783	15
21	Mining	\$1,409,841	\$117,653	5
22	Utilities	\$2,719,322	\$496,667	6
23	Construction	\$1,541,615	\$483,244	13
31-33	Manufacturing	\$12,159,922	\$1,572,579	34
42	Wholesale Trade	\$13,122,031	\$3,955,683	83
44-45	Retail Trade	\$31,648,457	\$11,132,159	403
48-49	Transportation and Warehousing	\$5,083,356	\$1,924,035	55
51	Information	\$6,253,185	\$1,429,172	26
52	Finance and Insurance	\$21,171,828	\$6,570,122	107
53	Real Estate and Rental and Leasing	\$13,686,923	\$1,152,066	84
54	Professional, Scientific, and Technical Services	\$9,247,601	\$3,451,244	88
55	Management of Companies and Enterprises	\$2,653,277	\$1,193,476	15
56	Administrative and Support	\$5,460,873	\$2,184,501	102
61	Educational Services	\$3,277,566	\$1,738,993	64
62	Health Care and Social Assistance	\$33,317,119	\$15,398,465	401
71	Arts, Entertainment, and Recreation	\$4,184,042	\$1,265,659	85
72	Accommodation and Food Services	\$17,473,757	\$5,634,970	330
81	Other Services (except Public Administration)	\$12,080,804	\$4,263,035	231
92	Public Administration	\$39,042,442	\$1,385,889	28

Note: Central Coast includes Monterey, San Luis Obispo, and Santa Barbara counties. Model adjusts for intra-county trade. Any differences due to rounding.

Great Valley Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE GREAT VALLEY ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
Great Valley	\$176,727,890,000	\$94,849,294,000	\$51,312,552,000	1,533,639

Note: Great Valley includes Fresno, Tulare, Kern, Merced, San Joaquin, and Stanislaus counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Great Valley	\$571,239,430	\$792,361,076	\$341,663,906	\$151,004,297	\$48,454,823	5,543

Note: Great Valley includes Fresno, Tulare, Kern, Merced, San Joaquin, and Stanislaus counties. State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
GREAT VALLEY GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Great Valley	Direct	Indirect	Induced	Total
Total Output	\$571,239,430	\$112,276,390	\$108,845,256	\$792,361,076
Value Added	\$219,715,616	\$58,358,226	\$63,590,064	\$341,663,906
Employee Compensation	\$94,366,816	\$28,186,292	\$28,451,189	\$151,004,297
Employment	3,563	935	1,046	5,543
State and Local Taxes				\$48,454,823

Note: Great Valley includes Fresno, Tulare, Kern, Merced, San Joaquin, and Stanislaus counties. Any differences due to rounding.

**TABLE 4
GREAT VALLEY SECTOR DISTRIBUTION OF ECONOMIC BENEFITS CREATED
BY CalSTRS BENEFIT PAYMENTS**

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$11,654,435	\$1,311,450	88
21	Mining	\$7,427,594	\$1,418,141	16
22	Utilities	\$10,402,712	\$1,671,075	20
23	Construction	\$3,803,092	\$1,241,143	34
31-33	Manufacturing	\$48,857,853	\$6,002,125	132
42	Wholesale Trade	\$25,676,316	\$8,742,348	184
44-45	Retail Trade	\$71,977,032	\$25,311,507	1,038
48-49	Transportation and Warehousing	\$13,698,123	\$4,917,797	142
51	Information	\$19,823,577	\$3,559,394	75
52	Finance and Insurance	\$46,194,156	\$11,928,422	268
53	Real Estate and Rental and Leasing	\$32,594,623	\$2,905,562	206
54	Professional, Scientific, and Technical Services	\$19,057,813	\$6,573,015	196
55	Management of Companies and Enterprises	\$5,508,239	\$2,309,962	39
56	Administrative and Support	\$12,744,545	\$5,212,609	258
61	Educational Services	\$5,245,298	\$2,330,427	126
62	Health Care and Social Assistance	\$85,365,954	\$39,289,878	1,116
71	Arts, Entertainment, and Recreation	\$5,807,278	\$1,954,879	120
72	Accommodation and Food Services	\$38,060,235	\$11,714,546	822
81	Other Services (except Public Administration)	\$26,825,925	\$8,882,221	599
92	Public Administration	\$93,109,425	\$3,727,796	65

Note: Great Valley includes Fresno, Tulare, Kern, Merced, San Joaquin, and Stanislaus counties. Model adjusts for intra-county trade. Any differences due to rounding.

Inland Empire Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE INLAND EMPIRE ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
Inland Empire	\$171,703,799,000	\$97,997,906,000	\$55,175,319,000	1,530,496

Note: Inland Empire includes Riverside and San Bernardino counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Inland Empire	\$491,924,163	\$672,589,843	\$294,157,065	\$134,134,694	\$43,020,837	4,546

Note: Inland Empire includes Riverside and San Bernardino counties. State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
INLAND EMPIRE GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Inland Empire	Direct	Indirect	Induced	Total
Total Output	\$491,924,163	\$88,710,642	\$91,955,038	\$672,589,843
Value Added	\$191,945,916	\$47,628,475	\$54,582,674	\$294,157,065
Employee Compensation	\$84,935,264	\$24,044,567	\$25,154,863	\$134,134,694
Employment	2,942	750	855	4,546
State and Local Taxes				\$43,020,837

Note: Inland Empire includes Riverside and San Bernardino counties. Any differences due to rounding.

TABLE 4
INLAND EMPIRE SECTOR DISTRIBUTION OF ECONOMIC BENEFITS CREATED
BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$3,398,676	\$551,658	30
21	Mining	\$294,610	\$18,416	1
22	Utilities	\$8,381,204	\$1,268,631	16
23	Construction	\$3,260,191	\$1,116,671	29
31-33	Manufacturing	\$43,747,640	\$5,616,148	121
42	Wholesale Trade	\$27,850,656	\$9,563,485	195
44-45	Retail Trade	\$64,472,954	\$23,643,233	867
48-49	Transportation and Warehousing	\$12,360,040	\$4,832,391	114
51	Information	\$17,197,093	\$2,953,207	60
52	Finance and Insurance	\$35,263,633	\$9,566,346	196
53	Real Estate and Rental and Leasing	\$28,553,302	\$2,531,005	174
54	Professional, Scientific, and Technical Services	\$13,362,174	\$4,597,280	141
55	Management of Companies and Enterprises	\$4,571,937	\$1,869,092	34
56	Administrative and Support	\$11,636,334	\$4,911,989	226
61	Educational Services	\$5,214,113	\$2,640,768	115
62	Health Care and Social Assistance	\$66,629,420	\$31,900,385	862
71	Arts, Entertainment, and Recreation	\$7,674,760	\$2,539,267	145
72	Accommodation and Food Services	\$34,924,473	\$11,568,894	676
81	Other Services (except Public Administration)	\$26,101,905	\$9,406,241	499
92	Public Administration	\$79,675,267	\$3,039,587	48

Note: Inland Empire includes Riverside and San Bernardino counties. Model adjusts for intra-county trade. Any differences due to rounding.

Los Angeles Region Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE LOS ANGELES REGION ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
Los Angeles	\$1,110,767,152,000	\$626,259,411,000	\$341,137,021,000	7,974,754

Note: Los Angeles Region includes Los Angeles, Orange, and Ventura counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Los Angeles	\$2,067,139,199	\$3,121,326,069	\$1,516,433,164	\$710,319,092	\$201,312,602	20,452

Note: Los Angeles Region includes Los Angeles, Orange, and Ventura counties. State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
LOS ANGELES REGION GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Los Angeles Region	Direct	Indirect	Induced	Total
Total Output	\$2,067,139,199	\$508,164,815	\$546,022,055	\$3,121,326,069
Value Added	\$909,009,781	\$282,983,069	\$324,440,314	\$1,516,433,164
Employee Compensation	\$410,184,790	\$146,706,200	\$153,428,102	\$710,319,092
Employment	12,451	3,561	4,440	20,452
State and Local Taxes				\$201,312,602

Note: Los Angeles Region includes Los Angeles, Orange, and Ventura counties. Any differences due to rounding.

TABLE 4
 LOS ANGELES REGION SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
 CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$4,237,099	\$1,266,406	60
21	Mining	\$12,204,812	\$1,739,819	24
22	Utilities	\$44,645,694	\$5,138,983	52
23	Construction	\$12,653,695	\$4,150,316	101
31-33	Manufacturing	\$301,559,561	\$45,655,392	925
42	Wholesale Trade	\$149,684,966	\$50,620,495	885
44-45	Retail Trade	\$274,680,504	\$97,774,446	3,396
48-49	Transportation and Warehousing	\$63,805,118	\$24,353,606	557
51	Information	\$91,212,618	\$17,488,301	240
52	Finance and Insurance	\$237,726,058	\$73,320,257	1,110
53	Real Estate and Rental and Leasing	\$133,041,366	\$12,172,539	701
54	Professional, Scientific, and Technical Services	\$115,440,533	\$42,306,525	942
55	Management of Companies and Enterprises	\$29,607,282	\$13,472,496	163
56	Administrative and Support	\$57,778,755	\$24,386,380	1,005
61	Educational Services	\$39,401,113	\$21,278,031	762
62	Health Care and Social Assistance	\$319,110,053	\$149,077,120	3,751
71	Arts, Entertainment, and Recreation	\$40,967,481	\$15,483,000	627
72	Accommodation and Food Services	\$154,141,472	\$51,741,529	2,832
81	Other Services (except Public Administration)	\$118,757,963	\$43,294,959	2,127
92	Public Administration	\$349,999,881	\$15,598,492	192

Note: Los Angeles Region includes Los Angeles, Orange, and Ventura counties. Model adjusts for intra-county trade. Any differences due to rounding.

Sacramento Region Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE SACRAMENTO REGION ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
Sacramento	\$134,351,084,000	\$81,628,612,000	\$49,552,725,000	1,140,208

Note: Sacramento Region includes El Dorado, Placer, Sacramento, and Yolo counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
Sacramento	\$420,749,251	\$571,103,470	\$256,543,563	\$119,759,952	\$36,940,699	3,812

Note: Sacramento Region includes El Dorado, Placer, Sacramento, and Yolo counties. State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
SACRAMENTO REGION GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Sacramento Region	Direct	Indirect	Induced	Total
Total Output	\$420,749,251	\$74,335,170	\$76,019,049	\$571,103,470
Value Added	\$166,502,494	\$43,039,815	\$47,001,254	\$256,543,563
Employee Compensation	\$74,492,975	\$23,079,879	\$22,187,098	\$119,759,952
Employment	2,473	633	707	3,812
State and Local Taxes				\$36,940,699

Note: Sacramento Region includes El Dorado, Placer, Sacramento, and Yolo counties. Any differences due to rounding.

TABLE 4
 SACRAMENTO REGION SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
 CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$1,738,905	\$219,546	14
21	Mining	\$963,503	\$43,519	4
22	Utilities	\$4,296,347	\$770,985	8
23	Construction	\$2,723,177	\$945,286	23
31-33	Manufacturing	\$18,381,883	\$3,429,330	57
42	Wholesale Trade	\$21,246,879	\$7,435,629	133
44-45	Retail Trade	\$54,874,212	\$19,713,703	733
48-49	Transportation and Warehousing	\$9,313,431	\$3,644,273	91
51	Information	\$12,950,424	\$2,746,355	54
52	Finance and Insurance	\$43,257,062	\$12,068,363	221
53	Real Estate and Rental and Leasing	\$24,135,549	\$2,144,758	141
54	Professional, Scientific, and Technical Services	\$19,069,568	\$7,464,258	179
55	Management of Companies and Enterprises	\$4,611,646	\$2,067,032	27
56	Administrative and Support	\$9,675,707	\$4,044,468	180
61	Educational Services	\$4,142,797	\$2,083,353	104
62	Health Care and Social Assistance	\$57,617,604	\$27,704,782	683
71	Arts, Entertainment, and Recreation	\$6,672,020	\$2,362,158	131
72	Accommodation and Food Services	\$28,486,046	\$9,161,369	576
81	Other Services (except Public Administration)	\$22,464,754	\$9,262,737	421
92	Public Administration	\$67,663,418	\$2,448,048	35

Note: Sacramento Region includes El Dorado, Placer, Sacramento, and Yolo counties. Model adjusts for intra-county trade. Any differences due to rounding.

San Diego Region Benefits Resulting from CalSTRS Payments

TABLE 1
OVERVIEW OF THE SAN DIEGO REGION ECONOMY

Region	Total Output	Value Added	Employee Compensation	Employment
San Diego	\$235,551,016,000	\$142,687,294,000	\$82,134,221,000	1,897,115

Note: San Diego Region includes Imperial and San Diego counties. Data based on 2004 U.S. Bureau of Labor Statistics Data (ES-202 Report).

TABLE 2
SUMMARY OF ECONOMIC BENEFITS
RESULTING FROM CalSTRS BENEFIT PAYMENTS

Region	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
San Diego Region	\$548,434,322	\$767,601,726	\$353,203,977	\$162,593,389	\$48,883,613	5,051

Note: San Diego Region includes Imperial and San Diego counties. State and Local Government Taxes show only tax generation, not distribution to local government. Any differences due to rounding.

TABLE 3
SAN DIEGO REGION GENERATION OF ECONOMIC BENEFITS
FROM CalSTRS BENEFIT PAYMENTS

Sacramento Region	Direct	Indirect	Induced	Total
Total Output	\$548,434,322	\$107,893,759	\$111,273,645	\$767,601,726
Value Added	\$223,783,184	\$61,671,275	\$67,749,518	\$353,203,977
Employee Compensation	\$98,307,914	\$32,822,106	\$31,463,369	\$162,593,389
Employment	3,214	857	980	5,051
State and Local Taxes				\$48,883,613

Note: San Diego Region includes Imperial and San Diego counties. Any differences due to rounding.

TABLE 4
 SAN DIEGO REGION SECTOR DISTRIBUTION OF ECONOMIC BENEFITS
 CREATED BY CalSTRS BENEFIT PAYMENTS

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	\$2,998,644	\$498,647	29
21	Mining	\$304,156	\$5,240	1
22	Utilities	\$9,076,638	\$1,299,525	15
23	Construction	\$3,707,963	\$1,318,527	30
31-33	Manufacturing	\$41,256,422	\$6,473,623	131
42	Wholesale Trade	\$32,286,062	\$11,048,461	189
44-45	Retail Trade	\$71,882,323	\$25,652,274	958
48-49	Transportation and Warehousing	\$11,021,743	\$4,596,645	120
51	Information	\$19,359,797	\$4,319,394	61
52	Finance and Insurance	\$61,272,708	\$17,368,083	319
53	Real Estate and Rental and Leasing	\$33,180,082	\$2,688,650	190
54	Professional, Scientific, and Technical Services	\$25,474,862	\$10,376,980	218
55	Management of Companies and Enterprises	\$6,716,395	\$2,995,778	40
56	Administrative and Support	\$13,274,621	\$5,957,022	221
61	Educational Services	\$7,338,420	\$3,777,039	151
62	Health Care and Social Assistance	\$70,793,302	\$33,266,246	847
71	Arts, Entertainment, and Recreation	\$9,878,080	\$3,500,364	181
72	Accommodation and Food Services	\$39,324,984	\$13,011,492	739
81	Other Services (except Public Administration)	\$30,143,901	\$10,568,235	547
92	Public Administration	\$89,556,056	\$3,871,164	65

Note: San Diego Region includes Imperial and San Diego counties. Model adjusts for intra-county trade. Any differences due to rounding.

County Benefits Resulting from CalSTRS Payments

Top 10 Counties Ranked by Total Output Resulting from CalSTRS Benefit Payments

<i>County</i>	<i>Total Output Impact of CalSTRS Benefit Payments</i>	<i>Total Output of County Economy</i>	<i>Percent Attributable to CalSTRS Benefits</i>
Los Angeles	\$ 1,910,355,040	\$ 765,154,898,000	0.25%
Orange	894,243,844	209,218,577,000	0.31%
San Diego	740,045,871	228,879,639,000	0.32%
Santa Clara	375,726,434	225,775,912,000	0.17%
Riverside	349,958,315	81,785,167,000	0.43%
Alameda	328,665,973	136,640,219,000	0.24%
Sacramento	310,527,593	88,246,908,000	0.35%
San Bernardino	307,557,937	89,918,634,000	0.34%
Contra Costa	263,818,224	104,315,040,000	0.25%
Fresno	226,970,652	46,128,629,000	0.49%

Note: Any differences due to rounding.

Top 10 Counties Ranked by Percentage of Total Economy Output Attributable to Total Output Resulting from CalSTRS Benefit Payments

<i>County</i>	<i>Total Output Impact of CalSTRS Benefit Payments</i>	<i>Total Output of County Economy</i>	<i>Percent Attributable to CalSTRS Benefits</i>
Sierra	\$ 1,352,603	\$ 85,969,000	1.57%
Calaveras	16,943,374	1,399,938,000	1.21%
Trinity	4,316,786	361,369,000	1.19%
Mariposa	5,764,238	496,890,000	1.16%
Tuolumne	22,941,418	2,076,610,000	1.10%
Siskyou	17,649,299	1,877,910,000	0.94%
Nevada	39,963,533	4,962,101,000	0.81%
Lassen	8,732,695	1,122,391,000	0.78%
Inyo	6,149,498	791,610,000	0.78%
Amador	11,609,978	1,524,180,000	0.76%

Note: Any differences due to rounding.