The Economic Impacts on California and Counties of SACRS Members' Benefit Payments

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September 2007

Prepared for

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Executive Summary

About SACRS

SACRS is an acronym for **State Association of County Retirement Systems**, an association of 20 California county retirement systems. From 1938 to 1951, individual counties established their retirement systems by the adoption of an ordinance accepting the provisions of the County Employees Retirement Law of 1937. Twenty California counties opted to adopt such an ordinance. The counties range from heavily populated Los Angeles County to the northernmost SACRS County of Mendocino, with a population of 83,400. As time went on, these counties banded together to form SACRS.

SACRS members administer *defined benefits* pension programs. A defined benefit pension fund collects, manages and invests contributions. In California, these come from both employees and the local agencies who hire them. The pension plan, with a separate fiduciary board charged first and foremost with protecting retirees' and future retirees' interests, manages these dollars in a pool separated from employers' budgets. By carefully investing contributions and compounding the results, almost 74% of those payments to retirees are paid by investment earnings, bringing new dollars back into California communities.

Defined benefit retirement plans provide 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, SACRS pension funds enable 20 counties and over 138 local agencies to attract and retain qualified and experienced employees. The retirement benefits also assure these deputy sheriffs, health inspectors, firefighters, public health nurses and other local staff a secure and dignified retirement at the end of their careers in public service.

- Collectively, the Retirement Systems assets are in excess of $100 billion, with the median county having $1.5 billion in assets.

- The SACRS member funds disbursed benefit payments in 2006 to 121,042 retirees, survivors and disabled employees. The average monthly check was $2,383.

- The average SACRS fund general member retired in 2006 at age 58 after 19 years of service and received monthly benefit payment checks of $1,833.

- The average SACRS fund safety member retired at age 52 after almost 22 years of service and received monthly benefit payment checks of $3,715.

- Over the past two decades, earnings for public pension funds nationally on investments have averaged a healthy 9.5%, and investment earnings provide for about 74% of retiree income benefits paid (based on national research conducted in 2005).

Purpose of this report

This report was requested by the Board of SACRS as a tool for better understanding how the member funds that comprise SACRS affect the state's economy. The funds successfully provide a secure and affordable retirement for local public employees at the end of their years of service as deputy sheriffs, fire fighters, public health nurses, sanitation and public health workers and in dozens of other jobs.

But as these funds have reached new proportions and economic strength, they also generate ancillary impacts that merit study and policy examination. As savers, defined benefits plans create an economic asset that helps balance our current national trade deficit. As investors, the funds frequently assist in creating new jobs and prosperity in California. And, as investors, the funds earn from their careful, diligent investments, and thus bring new dollars back into California communities. The payments that retirees receive as a consequence of their employment and their contributions feed back outward into their communities, rippling further onward to create even more prosperity. This study aims to measure that impact on the State's and the County economies that sponsor SACRS member funds.

Findings

- The estimated economic multiplier for SACRS member county aggregate benefit payments is approximately 1.53, indicating that for every dollar paid in retirement benefits, the California economy realizes an additional 53 cents in economic impacts.

- Benefit payments in 2006 of $3.462 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 $5.297 billion.

- This economic activity supports a total of 34,951 jobs — more jobs than produced by the truck transportation industry in California — with total compensation of around $1.213 billion.

- On average, each dollar invested by employers yielded a return of about $5.88 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. ($5.3 billion in total output divided by $900.6 million in employer contributions).

- State and local governments earn $348,542,200 per year in new revenues as a result of SACRS' member funds' retiree benefit payments in California. Each employer dollar invested also reaps $0.39 in new tax and fee revenues. ($348.5 million in government revenues divided by $900.6 million in employer contributions).

Methodology

Data: The data used in this study are provided directly by SACRS member counties and reflect benefit payments for calendar year 2006. The data include all payments made directly to households, but do not include medical benefits or other benefits paid directly to providers. The data is tabulated by US 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 sometimes made in the conversion process.

Input-Output Model: Measuring the economic impacts created by SACRS member payments requires utilization of a model of the county economy which can show the full effects to all sectors of the economy, not just the retirees receiving pension payments. When retirees receive these benefit payments, this represents an infusion of income into the local economy which subsequently creates a chain of economic activities whose total is greater than the initial payment amount.

When the recipients use benefit payments for 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 spending increases the provider's profits, employee compensation, and supports additional workers who would not be supported without the SACRS member county 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 retirement benefit payments.

IMPLAN: In this study, the economic impact computations will be made using the IMPLAN model, an input-output model which can show the full range of the inter-relationships in the county and state economy which are affected by direct economic impacts, such as the pension payments made by SACRS member counties. The USDA and the Forest Service in the mid-1970s developed IMPLAN with University of Minnesota economists for community impact analysis of federally-funded projects. The model is currently specified as the part of the methodology required for analysis on many Federal and State public works and natural resources projects, and is widely used in California for 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 inter-connections between them. The calibration is made using a database created by the United States Bureau of Labor Statistics called the ES-202 data, which is based on a survey of all businesses and is updated every two years. The latest data is based on the ES-202 survey completed in 2004. Note that this data base 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.

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 held fellowships at Harvard and Yale and received his Ph.D. from the University of California at Davis. Dr. Waste taught previously at Brown University, and 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.

Background

About The State Association of County Retirement Systems (SACRS)

SACRS is an acronym for State Association of County Retirement Systems, an association of 20 California counties whose retirement systems are governed by the 1937 Act. The County Employees Retirement Law of 1937, beginning with Section 31450 of the California Government Code, sets forth the policies and regulations governing the actions of these county retirement systems. From 1938 to 1951, individual counties established their retirement systems by the adoption of an ordinance accepting these provisions. Over time, 20 California counties opted to adopt such an ordinance, and now also provide pension programs to an additional 138 local agencies. These counties banded together and formed SACRS.

The counties range from heavily populated Los Angeles County to the northernmost SACRS County of Mendocino, with a population of 83,400. The 20 member funds are:

- **Alameda County Employees' Retirement Association**
- **Contra Costa County Employees' Retirement Association**
- **Fresno County Employees' Retirement Association**
- **Imperial County Employees' Retirement System**
- **Kern County Employees' Retirement Association**
- **Los Angeles County Employees' Retirement Association**
- **Marin County Employees' Retirement Association**
- **Mendocino County Employees' Retirement Association**
- **Merced County Employees' Retirement Association**
- **Orange County Employees' Retirement System**
- **Sacramento County Employees' Retirement System**
- **San Bernardino County Employees' Retirement Association**
- **San Diego County Employees' Retirement Association**
- **San Joaquin County Employees' Retirement System**
- **San Mateo County Employees' Retirement Association**
- **Santa Barbara County Employees' Retirement System**
- **Sonoma County Employees' Retirement Association**
- **Stanislaus County Employees' Retirement Association**
- **Tulare County Employees' Retirement Association**
- **Ventura County Employees' Retirement Association**

Except for the Board of Investment in Los Angeles County and the statutory duties of the County Treasurer, the management of each county retirement system is vested in the Board of Retirement, consisting of nine members. Four are employees (2 general, 1 safety, 1 retired, all elected by their peers for three year terms); four are appointed to 3-year terms by the Board of Supervisors; and one is the County Treasurer. The Boards of Retirement, or Board of Investment for Los Angeles County, has fiduciary responsibility for and control of the investment of the employees' retirement fund.

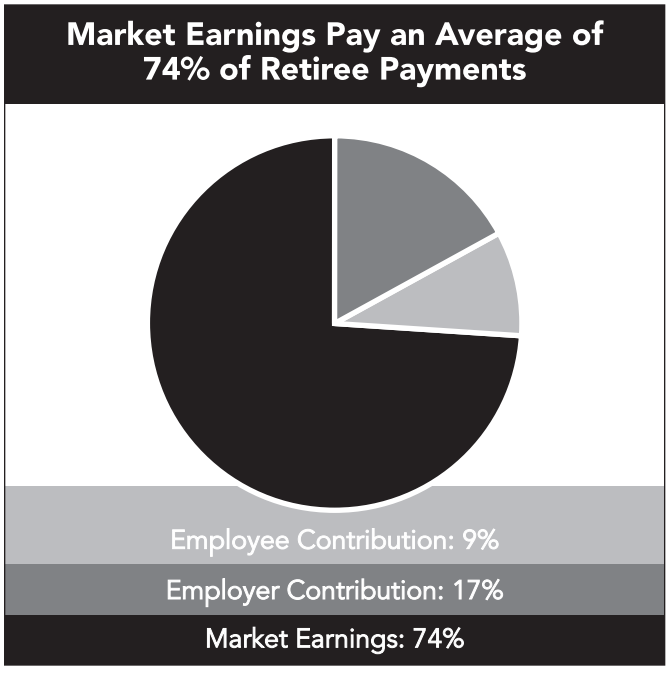
How a defined benefit pension works

Government employers want, like most other large employers, to guarantee a stable, dignified retirement to loyal, dedicated and hardworking employees after the end of their service. Providing for public employees' long term economic stability is not just humane, but is good human resources and public policy. Secure retirement prevents having to provide expensive social services to impoverished public employees. Stable income that prevents elder poverty is especially important for public employers, many of whom by law must provide safety net services to others, and must cope daily with the effects of elder and disability poverty. Such benefits also help recruit competent staff, and then to retain them over long periods of time, reducing human resources and training costs for community programs.

SACRS members administer "defined benefits" pension programs. A defined benefit pension fund collects, manages and invests contributions from both employees and the local agencies who hire them. The pension plan in generally incorporated under state or federal laws, has a separate fiduciary board charged first and foremost with protecting retirees' and future retirees' interests, and holds these dollars in a pool that is separated from employers' budgets.

Defined benefits funds take thousands of individual contributions and invest them together in a diversified portfolio. The funds employ sophisticated analytical tools to create an "asset allocation" and hire skilled managers with proven expertise in the particular asset classes in the diversification mix. This pooling reduces individual risk, and the scale of these nonprofit operations helps keep the cost of investment operations per individual retiree well below that of the mutual fund industry.

Collectively, the Retirement Systems' assets are in excess of $100 billion, with the median county having $1.5 billion in assets. According to research conducted by the National Association of State Retirement Administrators (NASRA) and National Council for Teacher Retirement (NCTR), over the past two decades, earnings on investments have averaged a healthy 9.5%.



Because of low costs and this track record of strong returns, investment earnings now provide for about 74% of retiree income benefits paid in 2006. Employer contributions only account for 17% of retiree pay checks. These findings are consistent with recent research by the California Public Employees Retirement System (CalPERS) and the California State Teachers Retirement System (CalSTRS).

Defined benefit retirement plans provide benefits based on a member's years of service, age and highest compensation. Normally these factors, and the rates at which employees and employers contribute to the fund are defined in labor contracts.

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, SACRS pension funds enables 20 counties and over 138 local agencies to attract and retain qualified and experienced educators.

SACRS member funds disbursed benefit payments in 2006 to 121,042 retirees, survivors and disabled employees. The average SACRS fund member retiree received annual benefit payment checks totalling about $28,605 per year or about $2,383 per month. The average SACRS fund general member retired in 2006 at age 58 after 19 years of service and received monthly benefit payment checks of $1,833. The average SACRS fund safety member retired at age 52 after almost 22 years of service and received monthly benefit payment checks of $3,715.

Purpose of this report

During the early years, the 20 individual retirement systems were isolated. The County Treasurers, through their association, worked together on legislation affecting the systems. In the early 1970s, a wider confederation was formed which evolved into SACRS. The Constitution of SACRS states that the purpose of the Association is to provide forums for disseminating knowledge of, and developing expertise in, the 1937 Act retirement systems; and further, that the Association foster and take an active role in the legislative process as it affects SACRS retirement systems.

SACRS now meets as an organization twice a year with all 20 counties participating through attendance by Trustees, Administrators, Treasurers, and staff. Education and legislation are the principle focus of these meetings, particularly education in the investment and fiduciary responsibility area.

This report was requested by the Board of SACRS as a tool for better understanding how the member funds that comprise SACRS effect the state's economy. The funds successfully provide a secure and affordable retirement for local public employees at the end of their years of service as deputy sheriffs, fire fighters, public health nurses, sanitation and public health workers and in dozens of other jobs.

But as these funds have reached new proportions and economic strength, they also generate ancillary impacts that merit study and policy examination. As long time savers, defined benefits plans create an economic asset that helps balance our current national trade deficit. As investors, the funds frequently assist in creating new jobs and prosperity in California. And, as investors, the funds earn from their careful, diligent investments, and bring new dollars back into California communities. The payments that retirees receive as a consequence of their employment and their contributions feed back out in to local and state economies, rippling out to create even more prosperity. This study aims to measure that impact on the State's and the home County economies who sponsor SACRS member funds.

Findings

SACRS member funds have become economic power houses. Their total assets have grown over the past half century to huge proportions. The total assets of all SACRS member funds have grown to over $100 billion, not only from the contributions from employees and employers, but in large part from additions from earnings on investments. These assets are diversified so as to protect against market risk, although funds are strongly affected by up-and-downturns in the US economy.

SACRS Member Funds Average 86% Funding

One commonly used measure of the overall strength of a defined benefit pension is "fundedness." This is a statement that refers to the proportion of assets available at any given time to meet all long term obligations to future retirees. At the end of the 2005/2006 fiscal year, SACRS member funds were, on average, 86% funded. Put in different terms, that's comparable to a homebuyer having cash and secured investments on hand to pay off over 25 years of a typical 30 year mortgage on their home.

Market Earnings Pay 74% of Retiree Checks

Again, defined benefits funds take thousands of individual contributions and invest them together in a diversified portfolio, compounding those returns and reinvesting them over the course of an employee's years of service. Public pension funds average earnings rate over the past two decades ending in June 2006, including the severe economic downturn at the beginning of the decade, have been a healthy 9.5%, according to research conducted by the National Association of State Retirement Administrators (NASRA) and National Council for Teacher Retirement (NCTR).

Also according to 2005 findings from NASRA and NCTR, these investment earnings now provide for about 74% of retiree income benefits paid in 2006. Employer contributions only account for 17% of retiree pay checks. The remaining 9% is paid by the employees themselves. These findings are consistent with recent research by the California Public Employees Retirement System (CalPERS) and the California State Teachers Retirement System (CalSTRS). In addition to providing an extraordinarily efficient means of providing a secure retirement, the pension funds help bring new dollars into California communities. DB plans generate a higher investment return by approximately 4% net of fees (Source: Watson Wyatt Worldwide). This efficiency means that more money is invested in national or global markets and eventually results in greater returns from outside California to the local economy.

The California Economy in Perspective

Figure 1 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.

Overview of the California Economy (Figure 1)

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 (ES202 Report).

Statewide Economic Impacts of SACRS Member Funds' Benefit Payments

Figure 2 shows the impact of the SACRS member funds' benefit payments. The benefit payments of $3.462 billion support a total output (business and government revenues) of about $5.297 billion, due to the repetitive spending of the benefit payments throughout the interrelated economy. The economic "footprint" of SACRS member funds' benefit payments — which this study has determined to be $5.297 billion annually added into the overall California economy — is substantial. In fact, SACRS member funds' benefit payments result in one-sixth of 1% of the entire California economic output. Put differently, one out of every six hundred "things" in the California economy – such as jobs, products, transactions, benefits and consequences – is either a direct or indirect consequence of SACRS member funds' benefit payments. This economic activity supports a total of 34,951 jobs, with total compensation of around $1.213 billion.

Summary of California Economic Benefits Resulting From SACRS Member County Benefit Payments (Figure 2)

State	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
California	$3,462,402,100	$5,297,922,349	$2,578,465,635	$1,213,330,463	$348,542,200	34,951

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

Return on Employer Contributions Invested

As the 2005 NASRA and NCTR research states, 74% of the payments made to public pension fund beneficiaries comes from investment earnings and another 9% comes from employee contributions. Only 17% of the total paid out comes from employer contributions. Based on these figures, on average, each dollar "invested" by local government employers who are members of SACRS in employee retirement yields a return of about $5.88 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: $348,502,200 per year is returned to state and local governments as a result of SACRS member funds' benefit payments in California. Looking at each dollar paid by public employers as invested in pension funds, then that dollar returns $0.39 in government revenues on top of other economic impacts.

Impact of Each Taxpayer Dollar "Invested" in SACRS Member Funds

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

Government Investment in SACRS member funds (Employer contribution of 17%)	Total Impact (100%)	Return on Investment (per dollar)
$900,646,799	Total Economic Impact $5,297,922,349	$5.88
	State and Local Government Revenue $348,542,200	$0.39

Additional note regarding the research methodology:

Three counties understated the amount of benefit payments given to retirees living in their County, which means the SACRS direct impact is understated by $23 million ($3,462 million versus $3,485 million; less than 1% difference in SACRS member funds' direct impacts). This amount is not considered material for the purposes of this study:

- Sacramento County's benefit payments given to retirees residing within the County are understated by $4 million due to exclusion of service connected disability payments ($122 million versus $126 million; 3% difference in Sacramento County)

- Alameda County's benefit payments given to retirees residing within the County are understated by $9 million due to exclusion of disability payments and continuances paid to beneficiaries ($100 million versus $ 109 million; 9% difference in Alameda County)

- Santa Barbara County's benefit payments given to retirees residing within the County are understated by $10 million due to exclusion of Cost of Living Adjustments ($36 million versus $46 million; 27% difference in Santa Barbara County)

Methodology

The retirement benefit payments made by SACRS member counties are sizeable in dollar value and have a correspondingly significant impact on the California economy. Also, as expected, 84.9% of retirement benefit payments made by SACRS member counties are to retirees living in the state of California. Thus, most payments made to retirees by SACRS member counties have a direct impact on the California economy.

During the calendar year 2006, SACRS member counties paid retirement benefits totaling in excess of $3.46 billion to more than 100,000 retirees across the state. From these payments stem an estimated $1.84 billion in indirect and induced impacts, yielding a total impact of nearly $5.3 billion on the California economy. The estimated economic multiplier for SACRS member county aggregate benefit payments is approximately 1.53, indicating that for every dollar paid in retirement benefits, the California economy realizes an additional 53 cents in economic impacts.

In addition to the statewide analysis, economic impacts are also considered at the county level. Table 1 illustrates the "home-county" total output impacts created by the individual payments of each SACRS member county. In other words, these are the total economic impacts in a particular county created specifically by that county's retirement system benefit payments.

Table 1: Home-County Total Output Impact

County Name	Total Output	County Name	Total Output
Alameda	$139,990,542	Sacramento	$160,779,010
Contra Costa	$138,372,835	San Bernardino	$175,829,608
Fresno	$138,490,448	San Diego	$309,374,178
Imperial	$13,587,227	San Joaquin	$85,715,907
Kern	$130,212,885	San Mateo	$52,099,557
Los Angeles	$1,534,056,467	Santa Barbara	$48,760,096
Marin	$36,363,789	Sonoma	$69,826,363
Mendocino	$10,433,470	Stanislaus	$60,262,480
Merced	$23,627,396	Tulare	$30,913,732
Orange	$211,287,925	Ventura	$112,970,723

Note: Any differences due to rounding.

Additional information on impacts from each SACRS member fund will shortly be available from that fund.

Data

The data used in this study are provided directly by SACRS member counties and reflect benefit payments for calendar year 2006. The data include all payments made directly to households, but do not include medical benefits or other benefits paid directly to providers. The data is tabulated by US 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 sometimes made in the conversion process.

Input-Output Model

Measuring the economic impacts created by SACRS member payments requires utilization of a model of the county economy which can show the full effects to all sectors of the economy, not just the retirees receiving pension payments. When retirees receive these benefit payments, this represents an infusion of income into the local economy which subsequently creates a chain of economic activities whose total is greater than the initial payment amount.

When the recipients use benefit payments for 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 spending increases the provider's profits, employee compensation, and supports additional workers who would not be supported without the SACRS member county 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 retirement 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. In this study, the input sector is the households which receive payments from SACRS member county retirement systems.

IMPLAN

In this study, the economic impact computations will be made using the IMPLAN model, an input-output model which can show the full range of the inter-relationships in the county and state economy which are affected by direct economic impacts, such as the payments by SACRS member counties. The USDA and the Forest Service in the mid-1970s developed IMPLAN with University of Minnesota economists for community impact analysis of federally-funded projects. The Natural Resources Inventory and Analysis (NRIA) and Social Sciences Institutes (SSI) are supporting usage of IMPLAN throughout National Resources Conservation Service (NRCS). The model is currently specified as the part of the methodology required for analysis on many Federal and State public works and natural resources projects, and is widely used in California for 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 inter-connections between them. The calibration is made using a database created by the United States Bureau of Labor Statistics called the ES-202 data, which is based on a survey of all businesses and is updated every two years. The latest data is based on the ES-202 survey completed in 2004. Note that this data base 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:

Direct Impact is the event which triggers the sequence, or in this case, the payment of retirement benefits to retirees (households).

Indirect Impact identifies the second-order effects on the economy when the retirement benefits are spent at businesses and government providers of goods and services.

Induced Impact occurs when the employees of the service providers spend their wages and profits, initiating a third-order effect.

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 impacts created by the SACRS member county retirement 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 a region equals the Gross Regional Product (GRP). It is a better measure of the real economic contribution of an activity, but is a concept which individual business firms and government agencies often 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 forms of compensation.

Employment is the count of full-time equivalent employment generated by the program 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.

Impact Tables

As mentioned previously, this analysis of economic impacts includes two distinct products:

1.) An aggregate analysis of the total combined impacts of all SACRS member benefit payments on the State of California economy.

2.) An individual analysis for each of the 20 SACRS member counties. Each analysis will reflect the economic impacts of an individual county retirement system on its own county. This information will shortly be available from each fund.

Both products are structured similarly and include four tables illustrating the economic impacts.

The first table gives the economic structure of the local economy, unrelated to the measurement of retirement benefit payments. This information is reported to give a baseline perspective for the magnitudes of the own county impacts.

The second table shows the aggregate economic impacts of a specific county retirement system on its own county's economy. This table shows the direct county retirement system benefit payment total for calendar year 2006, and the resulting impacts on the economy including the Total Output, Value Added, Employee Compensation, State & Local Tax Generation, and Employment generated or supported by the county retirement system benefits paid.

The third table is included to illustrate the generation of benefits via the Direct, Indirect, Induced, and Total benefits for each measure of benefit. Note that the right-hand column of Table 3 is the same as Table 2. Table 4 gives some insight into how the retirement benefits paid by the county affect the various economic sectors of the local economy. Because the retirement benefits are introduced through the recipient households, the table proportions are related to household consumption patterns. Three of the sectors with the largest observed impacts include Public Administration (government services providers), Health Care and Social Assistance, and Retail Trade.

Overview of the California Economy (Table 1)

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 (ES202 Report).

Summary of California Economic Benefits Resulting From SACRS Member County Benefit Payments (Table 2)

State	Benefit Payment	Total Output	Value Added	Employee Compensation	State and Local Government Taxes	Employment
California	$3,462,402,100	$5,297,922,349	$2,578,465,635	$1,213,330,463	$348,542,200	34,951

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

California Generation of Economic Benefits From SACRS Member County Benefit Payments (Table 3)

California Statewide	Direct	Indirect	Induced	Total
Total Output	$3,462,402,100	$884,376,770	$951,143,479	$5,297,922,349
Value Added	$1,528,970,146	$486,420,122	$563,075,367	$2,578,465,635
Employee Compensation	$690,820,824	$255,151,226	$267,358,413	$1,213,330,463
Employment	21,030	6,182	7,739	34,951
State and Local Taxes				$348,542,200

Note: Any differences due to rounding.

California Sector Distribution Of Economic Benefits Created By SACRS Member County Benefit Payments (Table 4)

NAICS Sector	Sector Name	Total Output	Employee Compensation	Employment
11	Agriculture, Forestry, Fishing and Hunting	$36,710,994	$5,023,267	315
21	Mining	$13,530,555	$1,977,558	30
22	Utilities	$75,533,963	$9,918,295	92
23	Construction	$25,472,651	$8,687,174	208
31-33	Manufacturing	$512,833,383	$76,155,364	1,427
42	Wholesale Trade	$253,385,980	$86,655,470	1,475
44-45	Retail Trade	$477,674,744	$169,501,226	6,032
48-49	Transportation and Warehousing	$110,666,813	$42,063,016	964
51	Information	$153,791,788	$33,210,794	439
52	Finance and Insurance	$402,805,484	$124,528,973	1,866
53	Real Estate and Rental and Leasing	$224,510,858	$20,283,042	1,242
54	Professional, Scientific and Technical Services	$197,856,929	$75,074,856	1,631
55	Management of Companies and Enterprises	$50,727,791	$23,486,071	267
56	Administrative and Support	$95,261,649	$40,769,528	1,612
61	Educational Services	$57,060,863	$31,390,173	1,115
62	Health Care and Social Assistance	$542,412,798	$255,361,089	6,326
71	Arts, Entertainment and Recreation	$67,837,073	$25,264,796	1,103
72	Accommodation and Food Services	$260,223,465	$86,347,348	4,855
81	Other Services	$199,784,444	$71,846,879	3,600
92	Public Administration	$590,304,499	$25,785,544	354

Note: Model adjusts for intra-state trade. Any differences due to rounding.

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 held fellowships at Harvard and Yale and received his Ph.D. from the University of California at Davis. Dr. Waste taught previously at Brown University, and 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).