

# **The Annual Economic Impact of Benefits Payments to Retirees by the City of Fresno Employees Retirement System (ERS)**

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## EXECUTIVE SUMMARY

The main goal of this study is to assess the annual economic impact from benefits payments to retirees by the Employees Retirement System (ERS) on the regional economies of the City of Fresno, Fresno County and San Joaquin Valley. The presence of the ERS in the impacted regions fosters economic growth and contributes to the stability of state and local government finances. Among the contributions to the regional economy attributable to the benefits payments to retirees, the ERS directly and indirectly supports jobs and plays an important role in the spending of dollars with local vendors. This spending generates additional sales and income for local firms and residents, which subsequently lead to further spending and income in an economic ripple effect. Thus, the ERS supports many businesses and families not directly connected to it. Key findings of the study include:

- For the fiscal year ended June 2007, the total net assets available for ERS retirees amounted to \$1.06 billion. 3.1% come from ERS members, 0.9% from employers and 95.9% of annual additions are produced by investment gains.
- The ERS provided services and benefits to 3,915 active and inactive members at the end of 2007. Of this number, 1,317 members currently receive benefits averaging \$25,433 per member annually.
- Close to 85% of ERS retirees are residents of the San Joaquin Valley. In addition, within the San Joaquin Valley, Fresno County is home of almost 94% of ERS retirees, while the City of Fresno is home to more than 83% of ERS retirees in Fresno County.
- The impact analysis shows that the \$22.93 million paid to ERS retirees residing in the City of Fresno produce a total effect of \$31.23 million in terms of output and support a total of 218 jobs in the City. The total impact on labor income, which includes employee compensation and proprietors income amounts to \$7.6 million. The impact in terms of new goods and services produced in the economy of the City to \$14.29 million and the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.06 million.
- The \$27.40 million paid to ERS retirees residing in the Fresno County produce a total effect of \$37.35 million in terms of output and support a total of 254 jobs in the County. The total impact on labor income amounts to \$8.86 million. The impact in terms of new goods and services produced in the economy of the County amounts to \$16.80 million and the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.34 million.
- The \$29.20 million paid to ERS retirees residing in the San Joaquin Valley produce a total effect of \$40.13 million in terms of output and support a total of 257 jobs. The total impact on labor income amounts to \$9.02 million. The impact in terms of new goods and services produced in the economy of the San Joaquin Valley amounts to \$17.45 million and the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.44 million.

## **I. Introduction**

### **I.1 Purpose of the Study**

The City of Fresno Retirement Systems (CFRS) consists of two systems, the Employees Retirement System (ERS) which provides retirement allowances and other benefits to the non-safety members employed by the City of Fresno, and the Fire and Police Retirement System (FPRS) which provides retirement allowances to all full-time sworn safety members employed by the City of Fresno. Both systems also provide lifetime retirement, disability, and death benefits to its members. The main goal of this study is to assess the annual economic impact from benefits payments to retirees by the Employees Retirement System (ERS) on the regional economies of the City of Fresno, Fresno County and San Joaquin Valley.

### **I.2 Scope and Methodology**

The impact attributable to the benefits payments to ERS retirees is obviously linked to the impact attributable to the ways retirees spend this income as well as the places in which they do so. Thus, it is essential to the accuracy of this study to know how much of these benefits payments is actually spent and where. Such impact is measured in four different areas:

- 1) Additional output (business sales).
- 2) Number of jobs that these benefits payments support directly and indirectly.
- 3) Additional labor income.
- 4) Additional local and state tax revenue.

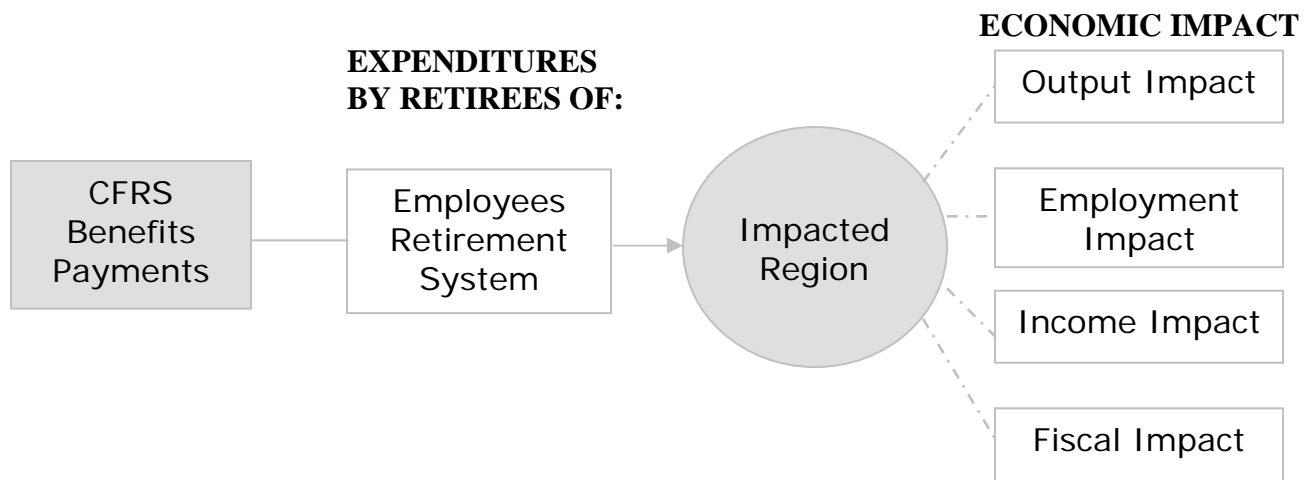
Following the North American Classification System (NAICS) code<sup>1</sup>, the distribution by industry of this impact is also assessed. For the purposes of this study there are three impacted regions to examine: the City of Fresno, Fresno County and the San Joaquin Valley (composed of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare counties). Figure 1 illustrates the conceptual framework of the

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<sup>1</sup> NAICS replaced the U.S. Standard Industrial Classification (SIC) system and was developed jointly by the U.S., Canada, and Mexico to provide new comparability in statistics about business activity across North America.

economic impact analysis. The main tool employed for this investigation is IMPLAN, a computer software package that consists of procedures for estimating input-output models, which are techniques for quantifying interactions between firms, industries, and social institutions within a regional economy.<sup>2</sup> The economic data for IMPLAN come from the system of national accounts for the United States based on data collected by the U. S. Department of Commerce, the U.S. Bureau of Labor Statistics, and other federal and state government agencies.

**Figure 1: Conceptual Framework**



The total economic impact of the benefits payments to retirees in the impacted regions, also known as the multiplier effect, is equal to the sum of three components: the *direct* effect, the *indirect* effect and the *induced* effect. The direct effect is the immediate upshot caused by retirees’ expenditures. Due to the interactions between firms, industries, and social institutions that naturally occur within the local economy, the direct effect initiates a series of iterative rounds of income creation, spending and re-spending that result in indirect and induced effects. The indirect effects are changes in production, employment and income that result from the inter-industry purchases triggered by the direct effect. Finally, induced effects arise due to changes in household income and

<sup>2</sup> Minnesota IMPLAN Group, Inc. or MIG, Inc was founded in 1993 by Scott Lindall and Doug Olson as an outgrowth of their work at the University of Minnesota starting in 1984. Currently, there are over 1,500 active users of IMPLAN databases and software in the United State as well as internationally.

spending patterns caused by direct and indirect effects. Since the total impact of retirees' expenditures is a multiple of the initial expenditures, the total effect is expressed as a multiplier effect, that is, the sum of the direct, indirect and induced effects. Therefore, the total impact of retirees' expenditures on the impacted economy as estimated by IMPLAN is larger than the initial expenditures. For example, an output multiplier of 1.5 indicates that for every million dollars spent (direct expenditure) an additional 0.5 million dollars is generated within the regional economy. Similarly, an employment multiplier of 1.6 indicates that for each job created by direct expenditure, an additional 0.6 jobs are created or supported.

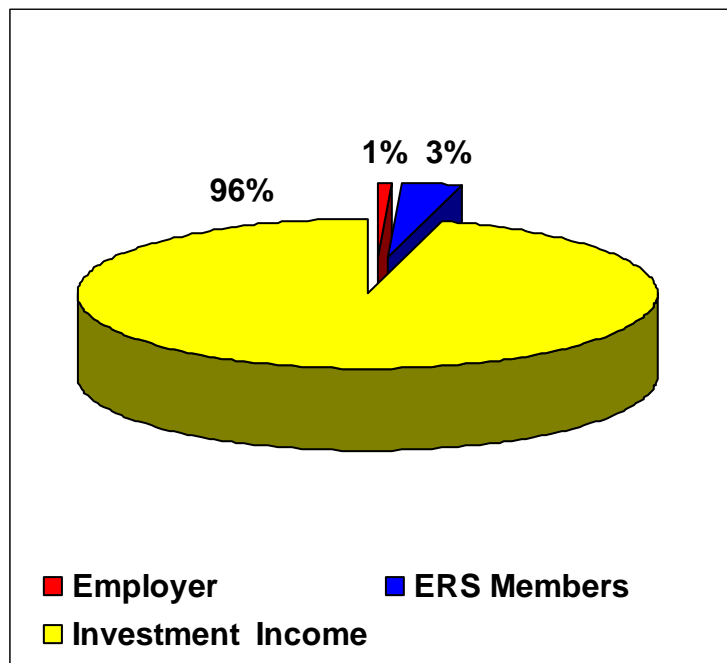
It is also important to underline that the increases in economic activity resulting from the multiplier process become smaller with each round due to leakages from the spending stream. To be exact, spending on goods and services that are not produced within the regional economy do not generate additional local spending. Therefore, the multiplier process traces the flows of spending and re-spending until the initial expenditures have completely leaked out to other regions. To properly estimate the effects at the regional level, an adjustment known as the regional purchase coefficient is implemented within the IMPLAN system. The regional purchase coefficient represents the proportion of the total supply of a good or service used to fulfill the demands of a region that is supplied by the region to itself. For example, a regional purchase coefficient of 0.7 for peaches, indicates that 70% of the demand by peach processors, peach wholesalers and retailers, foreign exports, and all other demands for peaches are met by local producers. Thus, 30% of the demand leaves the region to buy "imports". Typically, since the leakage is larger the smaller the impacted regions is, it is expected that the economic impact be relatively small for the City of Fresno and relatively larger for the whole SJV region.

### I.3 The Employees Retirement System (ERS)

The Employees Retirement System (ERS) was established on June 1, 1939, under Charter Section 910 and is governed by Article 18 of Chapter 2 of the City of Fresno Municipal Code. The System provides retirement allowances and other benefits to the non-safety members employed by the City of Fresno. The System also provides lifetime retirement, disability, and death benefits to its members.

The Employees Retirement System Retirement Board has five (5) members, two (2) management employees who are appointed by the Mayor and confirmed by the City Council, one (1) employee who is elected by the members representing the manual workers of the System, and one (1) employee who is elected by the members representing the clerical or supervisory workers of the System, both of which serve a four-year term. The fifth and final member of the Board is a qualified elector of the City, not connected with its government, elected by the previously designated four members. The Retirement Board is responsible for the prudent investment of member and employer contributions, and defraying reasonable expenses of administration.

**Figure 2: Contributions by Source for FY Ended June 30, 2007**



SOURCE: Author's calculations based on CFRS data.

As of June 2007, the total net assets available for ERS retirees amounted to \$1.06 billion. Employers and employees share in supporting this retirement fund. Figure 2 shows the composition of contributions for fiscal year ended June 30 2007 to the retirement fund by source. 3.1% come from ERS members, 0.96% from employers and 95.9% of annual additions are produced by investment gains.

The ERS provided services and benefits to 3,915 active and inactive members at the end of 2007. Of this number, 1,317 members currently receive benefits averaging \$25,433 per member annually. Table 1 shows the geographical distribution of benefits payments to ERS retirees in 2007. Close to 85% of ERS retirees are residents of the San Joaquin Valley which means that most of the total benefits paid -87.3%- stay within this region. In addition, within the San Joaquin Valley, Fresno County is home of almost 94% of ERS retirees, while the City of Fresno is home to more than 83% of ERS retirees in Fresno County. On the other hand, it is worth mentioning that 8.1% of the total benefits are paid to residents to states other than California and 0.2% is paid to Canadian residents. Finally, in terms of the size of the average benefits paid, ERS retirees in the City of Fresno rank third with \$26,450 annually, after the ERS retirees in Canada (\$34,502) and Tulare County (\$26,475).

**Table 1: Geographical Distribution of Benefits Payments to ERS Retirees**

Region	Total Number of Receptients	Total Amount Paid	Average Benefits	% of Total Receptients
<b>United States</b>	1,315	\$33,457,389	\$25,443	100.0%
<b>California</b>	1,208	\$31,166,390	\$25,800	91.9%
<b>San Joaquin Valley</b>	1,116	\$29,205,564	\$26,170	84.9%
<b>Other U.S States</b>	107	\$2,290,999	\$21,411	8.1%
<b>Canada</b>	2	\$69,004	\$34,502	0.2%
				<b>% of Total Receptients in San Joaquin Valley</b>
<b>San Joaquin Valley</b>	1,116	\$29,205,564	\$26,170	100.0%
<b>Fresno County</b>	1,043	\$27,406,363	\$26,276	93.5%
<b>Kings County</b>	6	\$132,870	\$22,145	0.5%
<b>Kern County</b>	3	\$70,576	\$23,525	0.3%
<b>Madera County</b>	50	\$1,252,555	\$25,051	4.5%
<b>Merced County</b>	4	\$84,267	\$21,067	0.4%
<b>Stanislaus County</b>	3	\$73,607	\$24,536	0.3%
<b>San Joaquin County</b>	0	\$0	\$0	0.0%
<b>Tulare County</b>	7	\$185,327	\$26,475	0.6%
				<b>% of Total Receptients in Fresno County</b>
<b>City of Fresno</b>	867	\$22,932,480	\$26,450	83.1%

SOURCE: Author's calculations based on CFRS data.

### III. The Impacted Regional Economies in Perspective

This section presents a brief overview of the regional economies of the City of Fresno, Fresno County and the San Joaquin Valley, which are the impacted areas under examination. The aim is to provide an overview of the size and main characteristics of these regional economies in order to gain a better perspective on the magnitude of the economic impacts presented in the following sections. All data shown are for 2006, the most recent year for which detailed data are available.

Table 2 shows an overview of the economy of the City of Fresno.

**Table 2: The Economy of the City of Fresno, 2006**

Industry 2-digit NAICS	Output	Employment	Employee Compensation	Total Value Added
Ag, Forestry, Fish & Hunting	\$473	9,254	\$198	\$286
Mining	\$16	46	\$3	\$9
Utilities	\$679	966	\$82	\$269
Construction	\$2,856	21,492	\$888	\$1,335
Manufacturing	\$6,293	19,164	\$851	\$1,650
Wholesale Trade	\$1,934	12,761	\$681	\$1,304
Transportation & Warehousing	\$1,408	12,035	\$459	\$785
Retail trade	\$2,204	31,297	\$795	\$1,463
Information	\$923	3,860	\$235	\$418
Finance & insurance	\$2,379	13,650	\$634	\$1,355
Real estate & rental	\$2,002	10,331	\$141	\$1,284
Professional-scientific & tech services	\$1,799	15,842	\$520	\$930
Management of companies	\$413	2,669	\$165	\$213
Administrative & waste services	\$1,038	18,772	\$455	\$636
Educational services	\$226	4,956	\$87	\$113
Health & social services	\$3,040	36,668	\$1,386	\$1,884
Arts- entertainment & recreation	\$133	3,638	\$48	\$80
Accommodation & food services	\$978	19,137	\$308	\$476
Other services	\$1,243	23,075	\$443	\$632
Government	\$5,038	45,626	\$2,887	\$4,589
<b>TOTAL</b>	<b>\$35,073</b>	<b>305,236</b>	<b>\$11,267</b>	<b>\$19,712</b>

**NOTE:** Output, Employee Compensation and Total Value Added data are in millions of dollars.

**SOURCE:** IMPLAN

Total business sales and government revenues (labeled “Output”) was about \$35.07 billion. Of this amount, the value of all goods and services produced in the economy of the City –the equivalent to Gross Domestic Product for the nation- totaled \$19.71 billion. This amount represents almost 70% of the total value added for Fresno

County. In 2006, there were about 305,236 full and part-time jobs, earning a total compensation of approximately \$11.26 billion. In addition, Table 2 shows that in terms of output, manufacturing and the government sectors are the largest with 17.9% and 14.3% respectively. In terms of employment, the government, health and social services, retail trade and construction sectors support almost 45% of the total jobs in the City. Finally, in terms of value added (new value created in the local economy), the government (23.2%), health and social services (9.5%) and manufacturing (8.3%) are the largest contributors.

Table 3 shows an overview of the economy of the County of Fresno.

**Table 3: The Economy of Fresno County, 2006**

<b>Industry 2-digit NAICS</b>	<b>Output</b>	<b>Employment</b>	<b>Employee Compensation</b>	<b>Total Value Added</b>
Ag, Forestry, Fish & Hunting	\$4,730	60,033	\$1,266	\$2,632
Mining	\$64	187	\$12	\$37
Utilities	\$1,069	1,712	\$143	\$442
Construction	\$3,981	29,880	\$1,234	\$1,860
Manufacturing	\$10,305	29,514	\$1,360	\$2,566
Wholesale Trade	\$2,363	15,592	\$832	\$1,593
Transportation & Warehousing	\$1,707	14,735	\$561	\$949
Retail trade	\$3,165	44,202	\$1,145	\$2,092
Information	\$1,156	4,593	\$280	\$526
Finance & insurance	\$2,644	15,190	\$708	\$1,530
Real estate & rental	\$2,296	12,304	\$169	\$1,479
Professional-scientific & tech services	\$2,167	19,219	\$614	\$1,097
Management of companies	\$473	3,060	\$189	\$243
Administrative & waste services	\$1,181	21,157	\$509	\$716
Educational services	\$259	5,678	\$99	\$130
Health & social services	\$3,799	45,015	\$1,739	\$2,348
Arts- entertainment & recreation	\$193	4,815	\$69	\$116
Accomodation & food services	\$1,364	26,552	\$428	\$664
Other services	\$1,536	28,134	\$522	\$786
Government	\$7,226	63,504	\$4,018	\$6,577
<b>TOTAL</b>	<b>\$51,678</b>	<b>445,076</b>	<b>\$15,897</b>	<b>\$28,383</b>

**NOTE:** Output, Employee Compensation and Total Value Added data are in millions of dollars.

**SOURCE:** IMPLAN

Total business sales and government revenues (labeled “Output”) was about \$51.67 billion. Of this amount, the value of all goods and services produced in the economy of the County totaled \$28.38 billion, which represent more than 25% of the

total value added in the whole San Joaquin Valley. In 2006, there were about 445,076 full and part-time jobs, earning a total compensation of approximately \$15.89 billion.

In addition Table 3 shows that, similar to the City of Fresno, in terms of output, manufacturing and the government sectors are the largest with 19.9% and 13.9% of total County output respectively. In terms of employment, the agriculture, forestry, fishing and hunting sector alone represents more than 13.4% of the total. This sector together with the government, health and social services, and retail trade support almost 48% of the total jobs in the County. Finally, in terms of value added (new value created in the County's economy), the government (23.1%), agriculture, forestry, fishing and hunting (9.2%) and manufacturing (9.0%) are the largest contributors.

Table 4 shows an overview of the economy of the San Joaquin Valley.

**Table 4: The Economy of the San Joaquin Valley, 2006**

<b>Industry 2-digit NAICS</b>	<b>Output</b>	<b>Employment</b>	<b>Employee Compensation</b>	<b>Total Value Added</b>
Ag, Forestry, Fish & Hunting	\$22,366	240,129	\$5,110	\$10,833
Mining	\$4,832	10,644	\$1,126	\$3,041
Utilities	\$3,870	5,713	\$485	\$2,036
Construction	\$16,165	119,621	\$4,811	\$7,632
Manufacturing	\$49,476	116,395	\$6,370	\$10,741
Wholesale Trade	\$7,925	51,581	\$2,721	\$5,344
Transportation & Warehousing	\$8,184	71,438	\$2,773	\$4,664
Retail trade	\$13,208	177,273	\$4,654	\$8,692
Information	\$4,110	16,585	\$879	\$1,791
Finance & insurance	\$7,887	43,815	\$2,101	\$4,605
Real estate & rental	\$8,447	46,523	\$639	\$5,517
Professional-scientific & tech services	\$7,082	60,891	\$2,059	\$3,599
Management of companies	\$1,837	12,470	\$711	\$915
Administrative & waste services	\$4,367	83,840	\$1,839	\$2,685
Educational services	\$742	15,615	\$327	\$395
Health & social services	\$13,038	159,937	\$6,024	\$8,101
Arts- entertainment & recreation	\$764	16,855	\$255	\$448
Accommodation & food services	\$4,908	96,270	\$1,516	\$2,387
Other services	\$5,529	99,423	\$1,780	\$2,817
Government	\$29,236	254,066	\$15,867	\$26,399
<b>TOTAL</b>	<b>\$213,973</b>	<b>1,699,084</b>	<b>\$62,047</b>	<b>\$112,642</b>

**NOTE 1:** Output, Employee Compensation and Total Value Added data are in millions of dollars.

**NOTE 2:** SJV is composed of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare.

**SOURCE:** IMPLAN

Total business sales and government revenues (labeled “Output”) was about \$213.97 billion. Of this amount, the value of all goods and services produced in the economy of the Valley totaled \$112.64 billion, which represents almost 6.5% of the total value added for the State of California. In 2006, there were about 1,699,084 full and part-time jobs, earning a total compensation of approximately \$62.04 billion.

In addition Table 4 shows that, similar to Fresno County, manufacturing and the government sectors are the largest with 23.1% and 13.6% of total output in the Valley respectively. In terms of employment, the agriculture, forestry, fishing and hunting sector alone represents more than 14.3% of the total. This sector together with the government, health and social services, and retail trade support almost 49% of the total jobs in the Valley. Finally, in terms of value added (new value created in the local economy), the government (23.4%), agriculture, forestry, fishing and hunting (9.6%) and manufacturing (9.5%) are the largest contributors.

#### IV. Annual Economic Impacts in the City of Fresno

The impact analysis shows that the \$22.93 million paid to ERS retirees residing in the City of Fresno produce a total effect of \$31.23 million in terms of output (see Table 5). Output is measured by the total value of purchases by intermediate and final consumers. Therefore output can also be thought as the value of total business sales. In addition, expenditures attributable to benefits paid to ERS retirees in the City of Fresno support a total of 218 full-time and part-time jobs in the City. The total impact on labor income, which includes employee compensation and proprietors income amounts to \$7.6 million. The impact in terms of new goods and services produced in the economy of the City (value added) amounts to \$14.29 million. Finally, the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.06 million. IMPLAN does not produce separate reports for the state and local government. Due to the complexity of the fiscal structure in California as well as its changing nature, it is very difficult to estimate how much of this total tax revenue is retained by or returned to cities or counties. However, based on state and county local government information from the U.S. Census Bureau, it is possible to calculate the percentage of total tax revenue that Fresno County captures from the state's total (2.3%). Therefore, the state and local tax revenue calculated by IMPLAN can be decomposed into \$47,404 for the City (approximately) and \$2.01 million for the state.

**Table 5: Annual Economic Impacts of ERS Benefits Paid to City of Fresno Retirees**

City of Fresno	Direct	Indirect	Induced	Total
<b>Total Output</b>	\$22,932,480	\$4,194,433	\$4,108,373	\$31,235,286
<b>Value Added</b>	\$9,450,796	\$2,325,635	\$2,514,261	\$14,290,692
<b>Labor Income</b>	\$4,803,620	\$1,450,866	\$1,358,442	\$7,612,928
<b>Employment</b>	143	36	39	218
<b>State and Local Taxes</b>				\$2,061,057
<b>Local Taxes</b>				\$47,404
<b>State taxes</b>				\$2,013,653

Source: Author's calculations based on IMPLAN

The magnitude of this economic impact can be better illustrated by comparing the value added produced by the ERS benefits with other industries. Although it is possible to also compare employment or labor income figures, value added represents the value of new goods and services produced in a given year. Therefore, using value added figures seems more meaningful in terms of assessing the relative magnitude of the economic impact. As can be seen from Table 2, the total value added (\$14.29 million) produced by the ERS benefits is only larger than the mining sector when disaggregating industries at the 2 digit level NAICS code. However, when disaggregating industries at the 3 digit level, the comparison is more revealing. Table 6 shows that the total value added produced by the ERS benefits is larger than the value added produced by an assorted list of industries, including Textile Products Manufacturing, Livestock and even Internet and data process services.

**Table 6: Comparing Value Added Produced by ERS Benefits Paid to Other Industries, City of Fresno, 2006**

<b>Industry 3-digit NAICS</b>	<b>Total Value Added</b>
114 Fishing- Hunting & Trapping	\$91,000
483 Water transportation	\$307,000
316 Leather & Allied	\$358,000
113 Forestry & Logging	\$538,000
486 Pipeline transportation	\$731,000
313 Textile Mills	\$2,652,000
334 Computer & oth electron	\$3,032,000
525 Funds- trusts & other finan	\$3,962,000
331 Primary metal mfg	\$5,529,000
315 Apparel Mfg	\$5,798,000
335 Electrical eqpt & appliances	\$6,208,000
512 Motion picture & sound recording	\$6,747,000
314 Textile Products	\$7,013,000
213 Mining services	\$9,208,000
712 Museums & similar	\$9,591,000
112 Livestock	\$9,879,000
518 Internet & data process svcs	\$13,339,000
<b>ERS Benefits Paid to Retirees</b>	<b>\$14,290,692</b>

Source: Author's calculations based on IMPLAN

The total economic impact on the City of Fresno can be broken by industry. For simplicity and clarity to illustrate, the level of industry aggregation follows NAICS at the 2 digit level. Table 7 shows the results of this analysis. ERS benefits paid and related spending impact is seen primarily in the health and social services, retail trade, finance and insurance, and government sectors. These four industrial sectors amount to more than 55% of the total output impact in the City’s economy and for more than 48% of the total jobs supported.

**Table 7: Annual Economic Impact by Industry of ERS Benefits Paid to City of Fresno Retirees**

<b>Industry 3-digit NAICS</b>	<b>Output</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Total Value Added</b>
Ag, Forestry, Fish & Hunting	\$72,852	1	\$16,732	\$28,823
Mining	\$0	0	\$0	\$0
Utilities	\$372,062	1	\$47,802	\$129,302
Construction	\$194,687	1	\$67,301	\$69,235
Manufacturing	\$1,485,900	4	\$209,013	\$310,095
Wholesale Trade	\$2,033,635	10	\$573,604	\$1,021,537
Transportation & Warehousing	\$726,633	5	\$242,743	\$303,769
Retail trade	\$4,322,232	47	\$1,325,537	\$2,130,933
Information	\$924,542	3	\$174,533	\$309,358
Finance & insurance	\$2,941,323	12	\$651,002	\$1,190,335
Real estate & rental	\$1,857,460	9	\$238,161	\$927,627
Professional-scientific & tech services	\$1,322,058	9	\$438,915	\$518,431
Management of companies	\$341,391	2	\$101,700	\$131,062
Administrative & waste services	\$693,457	9	\$249,179	\$306,312
Educational services	\$461,804	8	\$154,262	\$173,314
Health & social services	\$4,976,740	44	\$1,990,548	\$2,295,386
Arts- entertainment & recreation	\$238,548	5	\$84,748	\$106,555
Accommodation & food services	\$1,879,695	28	\$465,573	\$675,887
Other services	\$1,276,918	19	\$413,946	\$503,272
Government	\$5,113,350	2	\$167,629	\$3,159,459
<b>TOTAL</b>	<b>\$31,235,286</b>	<b>218</b>	<b>\$7,612,928</b>	<b>\$14,290,692</b>

Source: Author’s calculations based on IMPLAN

## V. Annual Economic Impacts in Fresno County

The impact analysis shows that the \$27.40 million paid to ERS retirees residing in the Fresno County produce a total effect of \$37.35 million in terms of output, which can also be thought as the value of total business sales (see Table 8). In addition, expenditures attributable to benefits paid to ERS retirees in Fresno County support a total of 254 full-time and part-time jobs in the County. The total impact on labor income, which includes employee compensation and proprietors income amounts to \$8.86 million. The impact in terms of new goods and services produced in the economy of the County (value added) amounts to \$16.80 million. Finally, the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.34 million. IMPLAN does not produce separate reports for the state and local government. However, based on state and county local government information from the U.S. Census Bureau, it is possible to calculate the percentage of total tax revenue that Fresno County captures from the state's total (2.3%). Therefore, the state and local tax revenue calculated by IMPLAN can be decomposed into \$53,894 for the County and \$2.28 million for the state.

**Table 8: Economic Impacts of ERS Benefits Paid to Fresno County Retirees**

<b>Fresno County</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Total Output</b>	\$27,406,363	\$4,832,004	\$5,113,118	\$37,351,485
<b>Value Added</b>	\$11,050,983	\$2,629,020	\$3,123,925	\$16,803,928
<b>Labor Income</b>	\$5,569,887	\$1,622,352	\$1,670,876	\$8,863,115
<b>Employment</b>	165	41	48	254
<b>State and Local Taxes</b>				\$2,343,214
<b>Local Taxes</b>				\$53,894
<b>State taxes</b>				\$2,289,320

Source: Author's calculations based on IMPLAN

Similar to the previous section, the magnitude of this economic impact can be better illustrated by comparing the value added produced by the ERS benefits with other industries. As can be seen from Table 3, the total value added produced by the ERS benefits is not even larger than the mining sector when disaggregating industries at the 2 digit level NAICS code. However, when disaggregating industries at the 3 digit level, the

comparison is more revealing. Table 9 shows that the total value added produced by the ERS benefits (\$16.80 million) is larger than the value added produced by an assorted list of industries, including Apparel Manufacturing, Internet and data process services, and even Electrical equipment and appliances.

The total economic impact on Fresno County can be broken by industry. Table 10 shows the results of this analysis. ERS benefits paid and related spending impact is seen primarily in the health and social services, retail trade, finance and insurance, and government sectors. These industrial sectors amount to more than 55% of the total output impact in the County's economy and for close to 49% of the total jobs supported.

**Table 9: Comparing Value Added Produced by ERS Benefits Paid to Other Industries, Fresno County, 2006**

<b>Industry 3-digit NAICS</b>	<b>Total Value Added</b>
483 Water transportation	\$392,000
316 Leather & Allied	\$655,000
211 Oil & gas extraction	\$723,000
114 Fishing- Hunting & Trapping	\$1,347,000
313 Textile Mills	\$2,652,000
486 Pipeline transportation	\$3,862,000
525 Funds- trusts & other finan	\$5,283,000
113 Forestry & Logging	\$6,956,000
315 Apparel Mfg	\$7,191,000
314 Textile Products	\$7,822,000
512 Motion picture & sound recording	\$8,573,000
712 Museums & similar	\$10,580,000
331 Primary metal mfg	\$13,520,000
518 Internet & data process svcs	\$14,467,000
335 Electrical equip. & appliances	\$16,624,000
<b>ERS Benefits Paid to Retirees</b>	<b>\$16,803,928</b>

Source: Author's calculations based on IMPLAN

**Table 10: Annual Economic Impact by Industry of ERS Benefits Paid  
To Fresno County Retirees**

<b>Industry 3-digit NAICS</b>	<b>Output</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Total Value Added</b>
Ag, Forestry, Fish & Hunting	\$446,240	3	\$61,887	\$118,745
Mining	\$493	0	\$94	\$231
Utilities	\$505,406	1	\$75,350	\$185,449
Construction	\$230,889	2	\$78,955	\$81,095
Manufacturing	\$1,811,234	5	\$244,681	\$366,837
Wholesale Trade	\$2,260,797	11	\$628,079	\$1,118,553
Transportation & Warehousing	\$877,259	6	\$286,323	\$358,923
Retail trade	\$5,148,452	54	\$1,567,947	\$2,494,651
Information	\$1,090,321	3	\$200,188	\$359,265
Finance & insurance	\$3,394,022	14	\$728,092	\$1,372,527
Real estate & rental	\$2,128,750	10	\$267,901	\$1,050,550
Professional-scientific & tech services	\$1,529,298	10	\$497,156	\$591,001
Management of companies	\$315,423	2	\$92,550	\$119,269
Administrative & waste services	\$817,454	11	\$289,823	\$355,886
Educational services	\$476,338	8	\$154,292	\$176,699
Health & social services	\$5,982,741	53	\$2,360,658	\$2,722,005
Arts- entertainment & recreation	\$324,060	6	\$107,969	\$142,558
Accommodation & food services	\$2,300,835	33	\$560,577	\$814,496
Other services	\$1,493,222	22	\$465,716	\$576,346
Government	\$6,218,252	3	\$194,877	\$3,798,842
<b>TOTAL</b>	<b>\$37,351,485</b>	<b>254</b>	<b>\$8,863,115</b>	<b>\$16,803,928</b>

Source: Author's calculations based on IMPLAN

## **VI. Annual Economic Impacts in the San Joaquin Valley**

The impact analysis shows that the \$29.20 million paid to ERS retirees residing in the San Joaquin Valley produce a total effect of \$40.13 million in terms of output, which can also be thought as the value of total business sales (see Table 11). In addition, expenditures attributable to benefits paid to ERS retirees in the San Joaquin Valley support a total of 257 full-time and part-time jobs. The total impact on labor income, which includes employee compensation and proprietors income amounts to \$9.02 million. The impact in terms of new goods and services produced in the economy of the San Joaquin Valley (value added) amounts to \$17.45 million. Finally, the total estimated tax revenue generated for the State of California and its local governments is greater than \$2.44 million. IMPLAN does not produce separate reports for the state and local government. However, based on state and county local government information from the U.S. Census Bureau, it is possible to calculate the percentage of total tax revenue that the 8 San Joaquin Valley counties together capture from the state's total (10.04%). Therefore, the state and local tax revenue calculated by IMPLAN can be decomposed into \$245,725 for the counties in the Valley and \$2.20 million for the state.

Similar to the previous section, the magnitude of this economic impact can be better illustrated by comparing the value added produced by the ERS benefits with other industries. As can be seen from Table 4, the total value added produced by the ERS benefits is significantly smaller than all individual industries when disaggregating industrial activity at the 2 digit level NAICS code. However, when disaggregating industries at the 3 digit level, the comparison is more revealing. Table 12 shows that the total value added produced by the ERS benefits (\$16.80 million) is larger than the value added produced by a small list of industries, including Textile Mills and Water Transportation.

**Table 11: Economic Impacts of ERS Benefits Paid to San Joaquin Valley Retirees**

<b>San Joaquin Valley</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Total Output</b>	\$29,205,564	\$5,608,186	\$5,318,190	\$40,131,940
<b>Value Added</b>	\$11,447,645	\$2,860,408	\$3,144,285	\$17,452,338
<b>Labor Income</b>	\$5,692,376	\$1,682,920	\$1,647,844	\$9,023,140
<b>Employment</b>	168	42	47	257
<b>State and Local Taxes</b>				\$2,447,458
<b>Local Taxes</b>				\$245,725
<b>State taxes</b>				\$2,201,733

Source: Author's calculations based on IMPLAN

**Table 12: Comparing Value Added Produced by ERS Benefits Paid to Other Industries, San Joaquin Valley, 2006**

<b>Industry 3-digit NAICS</b>	<b>Total Value Added</b>
114 Fishing- Hunting & Trapping	\$3,932,000
316 Leather & Allied	\$4,120,000
313 Textile Mills	\$6,440,000
483 Water transportation	\$8,336,000
<b>ERS Benefits Paid to Retirees</b>	<b>\$17,452,338</b>

Source: Author's calculations based on IMPLAN

The total economic impact on the San Joaquin Valley can be broken by industry. Table 13 shows the results of this analysis. ERS benefits paid and related spending impact is seen primarily in the health and social services, retail trade, manufacturing, and government sectors. These industrial sectors amount to more than 53% of the total output impact in the Valley's economy and for close to 46% of the total jobs supported.

**Table 13: Annual Economic Impact by Industry of ERS Benefits Paid  
To San Joaquin Valley Retirees**

<b>Industry 3-digit NAICS</b>	<b>Output</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Total Value Added</b>
Ag, Forestry, Fish & Hunting	\$686,162	4	\$94,065	\$170,301
Mining	\$499,881	1	\$96,497	\$234,523
Utilities	\$750,619	1	\$110,818	\$335,549
Construction	\$238,645	2	\$82,571	\$84,759
Manufacturing	\$3,542,869	6	\$290,538	\$459,375
Wholesale Trade	\$1,913,129	9	\$531,629	\$947,091
Transportation & Warehousing	\$946,292	6	\$304,491	\$392,453
Retail trade	\$5,282,952	55	\$1,623,408	\$2,550,356
Information	\$1,098,921	3	\$181,406	\$342,573
Finance & insurance	\$3,084,205	12	\$654,932	\$1,263,973
Real estate & rental	\$2,207,605	10	\$274,743	\$1,090,427
Professional-scientific & tech services	\$1,298,016	9	\$413,288	\$491,973
Management of companies	\$323,249	2	\$91,710	\$118,190
Administrative & waste services	\$860,741	12	\$307,205	\$378,714
Educational services	\$379,498	6	\$132,878	\$149,099
Health & social services	\$6,126,472	53	\$2,443,992	\$2,820,458
Arts- entertainment & recreation	\$344,836	6	\$105,096	\$148,995
Accommodation & food services	\$2,379,972	35	\$579,886	\$840,243
Other services	\$1,518,912	25	\$484,477	\$591,663
Government	\$6,648,963	4	\$219,510	\$4,041,623
<b>TOTAL</b>	<b>\$40,131,940</b>	<b>257</b>	<b>\$9,023,140</b>	<b>\$17,452,338</b>

Source: Author's calculations based on IMPLAN

## **About the Author**

Antonio Avalos is Assistant Professor of Economics at California State University, Fresno since 2003, and Research Director of the Center for Economic Research and Education of Central California (CERECC) since 2006. He earned his Ph.D. in Economics from Oklahoma State University with specialization in Economic Development and International Economics. His areas of expertise also include Regional Economics and Latin American Economic Development. Professor Avalos has spent several years conducting research on workforce and regional economics issues. In 1998, he was appointed Herman Kahn Fellow at the Hudson Institute in Indianapolis, Indiana working for the Center for Workforce Development. Professor Avalos assisted the Center in several applied research studies integrating economic development and workforce development at the local and regional level.

Among the international experience of Dr. Avalos as a research economist, he was selected by a panel of international economists as a visiting scholar at the Andean Corporation of Development in Caracas, Venezuela in 2002, where he conducted applied research in international trade, economic development and labor markets in Latin American economies. Dr. Avalos also assisted the Andean Corporation of Development in a study about regional and international migration of the workforce. His contribution, "Migration and Regional Integration", was presented at an international conference sponsored by the UNESCO and SELA.

Currently, Professor Avalos is investigating the dynamics of the regional economy identifying the forces shaping the Central Valley's economy. His work includes analyzing the changes in work, the workplace, compensation and occupations in recent decades and developing a scenario for the Central Valley regional economy's future.

## **About the Center for Economic Research and Education of Central California**

The Center for Economic Research and Education of Central California (CERECC) is an ancillary unit of the Department of Economics at the California State University, Fresno. The Center provides economic analysis for local business, community groups, and policymakers, and provides educational material to local educators. Recent activity of the Center has focused on analysis of the labor market in the central San Joaquin Valley, economic impact analysis, the creation of an index of economic indicators and business survey, and providing workshops for educators.



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