Hidden in Plain Sight: The Economic Contribution of Southern California Hospitals & Related Services



Los Angeles County Economic Development Corporation

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EXECUTIVE SUMMARY

Hospitals are primarily about health, healing, and wellness. They are places to conduct medical research; fight disease; treat addictions; deal with traumas great and small; repair broken bodies; usher people into the world; and ease the pain of those departing.

Hospitals are also hubs of employment; payers of wages; purchasers of goods and services; and generators of tax revenue. Imagine the economic activity that would not exist without hospitals. First, there is the direct activity: the operations of the hospitals themselves, plus the related services—all of the ambulance companies' operations, plus the hospital-related portion of activity at physicians' offices and medical laboratories. Second, there is the indirect activity generated when hospitals, physicians' offices, medical laboratories, ambulance companies, and their respective employees purchase goods and services in the local economy.

Economic Output, Employment, and Wages: The LAEDC's estimate of the total (direct plus indirect) economic contribution of 212 hospitals in Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties in 2004 is presented in the table below.

Total (Direct & Indirect) Economic Output, Employment and Wages Sustained by Hospitals and Related Services in Southern California in 2004 (Millions of Dollars and Number of Full-Time Equivalent Jobs)							
Los Angeles County Orange County Riverside County San Santa Bernardino County County Southern California							
Economic Output Hospitals Related Services	\$47,200 \$36,600 \$10,600	\$11,500 \$8,300 \$3,200	\$4,200 \$3,200 \$1,000	\$6,400 \$5,100 \$1,300	\$1,140 \$760 \$380	\$2,390 \$1,760 \$630	\$85,500 \$65,600 \$19,900
Employment Hospitals Related Services	352,000 264,000 88,000	80,000 55,000 25,000	30,700 22,000 8,700	46,300 35,800 10,500	10,100 6,800 3,300	17,100 11,900 5,200	640,000 454,000 186,000
Wages Hospitals Related Services	\$15,600 \$11,800 \$3,800	\$4,200 \$3,100 \$1,100	\$1,300 \$930 \$370	\$2,400 \$2,000 \$400	\$415 \$268 \$147	\$777 \$551 \$226	\$29,100 \$21,200 \$7,900

Sources: U.S. Department of Commerce, US Bureau of the Census; OSHPD; California EDD; County Medical Associations; LAEDC.

Hospitals underpinned economic activity that generated \$85.5 billion in economic output, contributing an astonishing 12.1 percent of the regional gross product of \$708 billion. [This showing is truly remarkable, given that the Southern California economy ranks 10th among all *countries*, just ahead of South Korea and Mexico, and just behind Canada and Spain.]

Hospitals and related businesses accounted for direct and indirect employment equivalent to 640,000 full-time jobs in the 6-county region in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many work part time. Even on an FTE basis, hospital-related employment represents 9.1 percent of *all full-time and*

part-time non-farm employment in Southern California. Combined, these workers earned \$29.1 billion in wages, representing 7.2 percent of all non-farm compensation in the region.

Government Revenues: Some people may be surprised to learn that taxes are a product of hospital operations. Yet, the direct and indirect economic activity sustained by hospitals and related services generated considerable tax revenue for the state and local governments, as shown in the table below

Tax Revenue Generated by Hospitals and Related Services in Southern California in 2004 (Millions of Dollars)							
Los Angeles County Orange County Riverside County San Santa Barbara County County Southerr California							
Government Revenues State Income Tax Sales Tax	\$1,113 \$655 \$458	\$299 \$177 \$122	\$96 \$55 \$41	\$178 \$102 \$76	\$30 \$17 \$13	\$55 \$33 \$22	\$2,039 \$1,223 \$816
Government Revenues \$1,113 \$299 \$96 \$178 \$30 \$55 \$2,039 State of California \$1,000 \$275 \$88 \$163 \$28 \$52 \$1,857 Counties \$69 \$12 \$4 \$7 \$1 \$1 \$106 Cities \$42 \$12 \$4 \$7 \$1 \$2 \$76							

Source: LAEDC.

Hospital-sustained economic activity generated more than \$2.0 billion in government revenue in 2004, including \$1.2 billion in state income taxes and \$816 million in state sales taxes. Most of the revenue – \$1.9 billion – was collected by the state government from state income and sales taxes. The six county governments and their respective transportation authorities split \$106 million from state sales taxes related to hospital activity. Cities across the region shared \$76 million in sales tax revenue related to hospitals.

Note that the actual amounts collected by each level of government in 2004 were higher than we have reported here. We have not included taxable purchases made by offices of physicians or medical laboratories, a portion of which are attributable to hospitals. Nor have we included various state and local taxes, such as unemployment and disability insurance, fuel taxes, corporate taxes, property taxes, utility taxes, and business license fees.

Construction: We have separated hospital construction from day-to-day operations because the former represents one-time-only economic activity while the latter is ongoing. Tracking the dollar value of hospital construction is difficult, so we used three different measures of construction activity. All of them indicate that many Southern California hospitals have invested, are investing, and will invest billions of dollars in their facilities. In the table on the next page, we estimate the output, jobs, wages, and taxes that will be generated during the five year period, 2005-2009.

Economic Contribution of Hospital Construction in Southern California, 2005-2009 (Millions of Dollars and Number of Full-Time Equivalent Jobs)							
Los Angeles County County San Barbara County							
Construction Spending	\$3,000	\$2,300	\$700	\$1,700	\$400	\$150	\$8,200
Economic Output	\$6,400	\$4,700	\$1,300	\$3,300	\$700	\$280	\$20,500
Employment	43,000	29,700	8,100	19,300	5,100	1,900	166,600
Wages \$1,700 \$1,200 \$320 \$770 \$200 \$78 \$6,600							
Government Revenues \$182 \$124 \$35 \$86 \$22 \$8 \$601 State Income Tax \$73 \$50 \$22 \$32 \$8 \$3 \$278 Sales Tax \$109 \$74 \$13 \$54 \$13 \$5 \$323							

Sources: Hospital Surveys; News Reports; Turner Construction; LAEDC.

Based on our survey of hospitals in the region, supplemented by media reports and conversations with Turner Construction Company, we estimate that hospitals in Southern California will spend at least \$8.2 billion on construction projects during the years 2005-2009.

This level of construction spending will generate economic output of \$20.5 billion and create 166,600 FTE one-year jobs with wages of \$6.6 billion. State and local governments will share \$601 million in state income and sales taxes generated by spending on these projects. Since our list of hospital construction projects is incomplete, the actual impact will be higher still.

6-County Results: The total economic output, employment, wages and tax revenues reported for the Southern California region is *more than the sum of the results reported for the individual counties.* [This is true of ongoing operations at hospitals and related services and also applies to the construction activity.] We used county-specific RIMS II multipliers for each individual county, and separate regional multipliers for Southern California as a whole. The multipliers for the region are larger than those for the individual counties. To understand why, consider a hypothetical hospital in Los Angeles County that orders medical equipment from a manufacturer in Orange County. The Los Angeles County multipliers are designed to capture all of the economic activity generated *within* the county. So the Los Angeles County results will not reflect the extra business revenue, job creation, wages, and tax revenue generated by the purchase in Orange County. The regional multipliers, on the other hand, capture the ripple effects of economic activity throughout Southern California. This is particularly important in a region where so many economic transactions spill across county lines.

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Introduction

Hospitals are primarily about health, healing, and wellness. They are places to conduct medical research; fight disease; treat addictions; deal with traumas great and small; repair broken bodies; usher people into the world; and ease the pain of those departing.

Hospitals are also centers of economic activity. They are hubs of employment; payers of wages; purchasers of goods and services; and generators of tax revenue. There are more than 200 hospitals in Southern California, serving more than 18 million residents. They range from small, highly specialized facilities to large, regional institutions. Together, they comprise a considerable, if frequently overlooked, economic engine.

The Hospital Association of Southern California (HASC) hired the Los Angeles County Economic Development Corporation (LAEDC) to assess the size and nature of the economic impact of the hospital industry in Southern California. Hospitals in the region are run separately or jointly by federal, state, and local governments, by universities, and by for-profit and non-profit corporations. This study covers the operations of 212 hospitals in Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties.

We begin with an overview of the health care industry in Southern California that provides context for the analysis that follows. Separately for each county and jointly for the region as a whole, this study quantifies the economic output (business revenues), jobs, wages, and state taxes generated by hospitals and hospital-related businesses. We also estimate the considerable economic impact of hospital construction throughout the region, which has been spurred by the twin pressures of state seismic upgrade regulations and rapid population growth. We have not measured the impact of basic medical research conducted at Southern California hospitals, which is an unrecognized but integral part of the region's fast-growing bio-medical industry. Businesses which commercialize the fruits of local research add economic output, jobs, wages, and tax revenues to the numbers reported in this study.

Our results are presented in seven sections: one each for Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties, and one for the entire 6-county region. For ease of exposition, the same template is used for all seven sections. Each consists of an overview plus descriptions of area hospitals' economic output, purchases, employment, wages, taxes, and construction activity. To minimize repetition, the discussion of data sources, methodology, key assumptions, and definitions for each of these topics has been consolidated in the methodology section following the industry overview. Readers who are willing to trust our assumptions without further explanation can skip directly from the overview to the results.

HEALTH CARE INDUSTRY OVERVIEW

The health care industry is changing. Most visibly, expenditures for health care services are rising rapidly, faster than the economy as a whole. Partly the increase reflects demographic change—growth in the overall population, especially the very young and the elderly. Rapid advances in the diagnosis and treatment of disease are contributing to better outcomes and longer life expectancy, but can be very expensive. On the supply side, the costs of providing health care are increasing. Who should pay the rising bills for health related goods and services has become an important issue for businesses, consumers, and all levels of government.

At present, most purchasers of health care goods and services are represented by public or private "big buyers," typically large insurance companies that use their buying power to obtain reduced charges from members of designated "networks" of health care providers—doctors, hospitals, etc. The elderly are represented by Medicare, a program sponsored by the federal government. The poor are covered by Medicaid, a joint federal/state program. Medicare and Medicaid each offer traditional fee-for-service and managed care alternatives. Health insurance companies also have established managed care programs alongside their traditional insurance offerings for the private sector. These programs enroll millions of private- and public-sector employees who pay lower fees when they utilize the health care providers in their insurer's network.

Health care providers are caught in the middle of these conflicting trends. On the one hand, demand for their products is growing. On the other, rates for their services are under continuous downward pressure from buyers who—acting on behalf of their private and public sponsors and members—negotiate the lowest prices possible. Providers accept these low-margin arrangements, albeit reluctantly, in the hope they can "make it up with volume," i.e., cover their costs by taking more patients and becoming more efficient.

Southern California hospitals face all these trends and some unique challenges as well. Several dimensions of the situation are summarized below.

- The number of patients using hospital facilities in Southern California is growing. Data collected for the six-county Southern California area (defined as Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties) show that hospitals in this area discharged 1.76 million patients and processed 17.4 million outpatient visits during 2004. That is a 17% increase from the 1.5 million patients discharged in 1995 and 10% more than the 15.8 million outpatient visits that same year.
- The Southern California population is rising, ensuring that demand for hospital services will grow even more in the future. Some 18.3 million people live in the six-county Southern California region (as of January 1, 2005). With a population exceeding 10.2 million persons, Los Angeles County is the largest of the six. However, population growth is most rapid in Riverside and San Bernardino counties, where the number of residents grew by 20.8% and 13.2%, respectively, between 2000 and 2005. The regional population is

expected to increase by 5.4%--another one million people—between 2005 and 2010.

Just as important from the hospitals' point of view, the number of residents at least 65 years old is growing more rapidly than the population as a whole. People in this age group utilize health care services much more intensively than the rest of the population. Currently, there are 1.96 million persons in this age group in the six Southern California counties. This figure is projected to increase to 2.1 million by 2010, an increase of 9.1%.

- Big buyers play a large role in Southern California health care. Together, Medicare and Medi-Cal account for about 55% of total hospital net patient revenue. Both government programs offer traditional and managed care insurance. In California, managed care has always been an important factor in private health plans. Adding in government-sponsored managed care, an estimated 43% of Southern California hospitals' patient revenue comes from patients enrolled in plans that strive to negotiate the lowest possible rates for their clients.
- Hospital costs are rising. Hospitals are impacted by rising prices as much as their patients. A recent study by the AHA and Lewin Group estimated that 52% of the increase in spending on hospital care between 1998 and 2003 was due to the rising cost of goods and services purchased by hospitals in order to provide care to their patients. Rising wages and salaries accounted for three-quarters of this increase. Southern California hospitals face a growing shortage of skilled workers, nurses in particular. Other categories showing significant increases were prescription drugs, professional fees, and professional liability insurance. ¹
- What does this mean for the bottom line? Many hospitals operate at the very margin of profitability. In fact, 107 Southern California hospitals, out of 212 in total, reported operating losses during 2004. In the aggregate, hospitals in the six-county region reported total operating revenues of \$20.6 billion in 2004. Operating expenses came to \$21.4 billion, which implies that regional hospitals as a group lost \$800 million that year. Note: Some of the losses are attributable to the rising cost of caring for patients who cannot pay, many of whom are uninsured. The losses must be made up by non-operating revenues (investment income, contributions, etc.) or by dipping into reserves.
- Southern California hospitals are investing in new facilities. To keep up with advances in diagnosis and treatment, hospitals must invest continuously in new equipment and facilities, despite their often-weak financial position. Hospitals in Southern California face additional challenges in the form of stricter State seismic regulations. The changes were drawn up after severe damage to hospitals was caused by earthquakes in 1971 (Sylmar) and 1994

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¹American Hospital Association & The Lewin Group, *The Costs of Caring: Sources of Growth in Spending for Hospital Care*, pp. 1 & 6.

(Northridge). Current regulations require that structures used as hospitals meet a series of increasingly stringent standards in 2008, 2013, and 2030. Newer hospitals already meet many of these standards. However, many older hospitals in Los Angeles and Orange counties—those built before 1971—must be retrofitted for extra strength or replaced altogether.

Rebuilding Southern California's hospitals will be a financial burden, especially for hospitals in weaker financial shape. Each and every hospital in the Southern California region must make some stark choices. As a result, there is considerable turmoil in the industry. Some hospitals are choosing to merge their operations with those of other hospitals, hoping to broaden their service offerings and gain economies of scale. Some have decided to close altogether, rather than pay for such an expensive undertaking. Others are plunging ahead, designing smaller-but-more-flexible modern hospital facilities better able to meet the future needs of their communities. Many in the latter group are not certain they can meet the new standards on time. It looks as if the turmoil will continue for some time.

METHODOLOGY

This section lays out the template used to present the results of our economic impact analysis of hospitals in each of the six counties and the region as a whole. We describe our data sources and discuss the details underpinning our analysis.

Overview: Here we present summary data from the State of California Office of Statewide Health Planning and Development (OSHPD), the most comprehensive source for California hospitals. Not all hospitals are included in the OSHPD data; notable omissions are federal Veterans' Administration hospitals. In counties with hospitals not covered by OSHPD data, the number of beds, patient days, discharges, and outpatient visits reported in the overview table is an *undercount* due to incomplete data. The information on occupancy rates and average length of stay are also based on the incomplete OSHPD data, but there is no reason to believe that it is biased in a particular direction because of the omissions. For our economic analysis, we have supplemented the OSHPD data with our own survey of HASC members; estimates extrapolated from OSHPD averages; and alternative sources. Wherever possible we have used calendar year 2004 numbers. All of the OSHPD data is from the *fiscal year ending* in 2004, meaning that some of the data includes part of calendar year 2003.

Economic Output: Here we report the direct, indirect and total economic output, also called business revenues, attributable to hospital operations.

The *direct economic output* is made up of two components. First, it is the sum of all business revenues from the operations of the hospitals themselves. The LAEDC started with two reports from the U.S. Department of Commerce, U.S. Bureau of the Census. We took revenue estimates for general medical and surgical hospitals from the *2002 Economic Census* and adjusted them to 2004 levels based on the *Services Annual Survey: 2004*.

The second component of the direct economic output consists of the hospital-related portion of business revenues from doctors' offices and medical laboratories. For offices of physicians, the LAEDC started by asking: What portion of the doctors' office revenues would not exist without a hospital? We used County Medical Association data to divide the doctors in each area into three groups: primary care physicians, surgeons, and "other specialists." Based on physician interviews, we assumed that 30 percent of business revenues in the offices of primary care doctors; 80 percent in the offices of surgeons; and 15 percent in the offices of all other specialists are derived in whole or in part from the physicians' ties to hospitals. Next, we created a weighted average based on the mix of primary care physicians, surgeons, and other specialists in each county to determine the overall percentage of business revenues from the offices of physicians that should be considered hospital-related.

The hospital-related portion of medical and diagnostic laboratories' business revenues was much easier to determine. We know from *Services Annual Survey: 2004* that 9.4 percent of lab revenues in the U.S. are generated by hospitals. We used the same figure for Southern California.

Almost all ambulance revenues are related to moving patients to, from, and between hospitals; so we counted 100 percent of business revenues from private ambulance services in each county.

The small portion of non-hospital-related ambulance revenues captured here are more than offset by our omission of government ambulance services, notably those operated by fire departments. We estimated ambulance business revenues by multiplying revenues per employee in 5-County Southern California from *2002 Economic Census* (inflation-adjusted to 2004) by California Employment Development Department (California EDD) employment numbers, supplemented by LAEDC estimates where necessary.

Indirect business revenues are generated when hospitals, physicians' offices, medical laboratories, ambulance companies, and their respective employees purchase goods and services in the local economy. The LAEDC measured this multiplier effect using the Regional Input-Output Modeling System (RIMS II), which was developed by the U.S. Department of Commerce, Bureau of Economic Analysis.

Purchases: Here we add substance to the economic output discussion by highlighting the purchases made by hospitals as part of their ongoing operations. [Purchases of capital equipment and any construction costs are not included.] The purchase estimates are based on OSHPD data. This presents some difficulty since not all hospitals report to OSHPD, and even among those that do, not all of them report financial data. The LAEDC used countywide averages from the existing OSHPD data to produce estimates for the missing values.

Employment: Here we calculate the direct, indirect and total employment related to hospital operations. *Direct workers* are the people who work for the hospitals in some capacity, such as nurses, x-ray technicians, janitors, parking attendants, and doctors. [In some hospitals doctors are salaried employees; in others they have "privileges" (meaning they are not employees but use the hospital facilities) and bill patients separately for their services.] The *indirect workers* are the people who owe their jobs to the purchases of goods and services made by the hospitals and by their employees.

For the hospitals themselves, we estimated direct employment using OSHPD data, and hospital interviews. We used RIMS II direct effects multipliers to estimate total hospital and ambulance employment. For the hospital-related employment at physicians' offices and research and medical labs, we applied RIMS II final demand multipliers to their respective business revenues, as described during the discussion of economic output. This gave us an estimate of total hospital-related employment in these industries, but did not allow us to distinguish direct and indirect workers.

All of the job estimates are reported in *annual full-time equivalents* (FTEs), or one year's worth of full-time work. One nurse working 40 hours per week and four nurses consistently working 10 hours per week would each count as one FTE worker. The drawback to using annual full-time equivalents is that it understates the actual number of people holding the jobs, and the undercount gets worse as the proportion of part-time workers increases. The non-farm county employment totals used for context are from the Californian EDD, and include both full-time and part-time jobs.

Wages: The LAEDC estimated the wages earned by all of the people in employment sustained by hospital-related economic activity. For hospital employees, we used OSHPD data,

supplemented by LAEDC estimates for those facilities where no financial data was available. We also drew on the results of a survey we sent to all HASC members to estimate the employer share of the cost of employees' health coverage, a necessary component of salaries and wages when using RIMS II direct effects multipliers to estimate total compensation. We estimated total wages related to ambulance services by applying RIMS II direct effects multipliers to countywide ambulance wage data from the California EDD.

To estimate the wages generated by hospital-related employment at physicians' offices and research and medical labs, we again applied RIMS II final demand multipliers to the business revenues from the economic output discussion. This gave us an estimate of total wages generated by these industries, but did not allow us to distinguish the wages of direct and indirect workers. The non-farm county wage totals used for context are from the Californian EDD.

Taxes: Hospitals generate considerable tax revenue for state and local governments. Here the LAEDC used an in-house, customized version of the RIMS II model to estimate annual state income and sales taxes generated by hospital-related economic activity. First, we estimated the state income taxes paid by all workers described in the employment discussion. For the same workers, we also estimated their annual taxable spending and the resulting sales tax revenue. To these sales taxes, we added the sales taxes paid by the hospitals themselves on their purchases of taxable goods. We estimated sales and use taxes paid by hospitals by combining information from our hospital surveys with OSHPD data and LAEDC estimates for hospitals lacking the relevant OSHPD financial data.

We used the relevant sales tax percentage for Los Angeles (8.25%), Orange (7.75%), Riverside (7.75%), San Bernardino (7.75%), Santa Barbara (7.75%), and Ventura (7.25%) counties. The difference between the rates is related to the number of 0.50-percentage point county transportation surcharges: there are two such surcharges in LA, none in Ventura, and one each in the rest of the counties. For the six-county Southern California region, we used a weighted average (8.05%) based on the location where the wages were earned.

Overall, our estimates of tax revenues generated by hospital operations are low because we have only counted state income and sales taxes. [Indeed, we have not even included taxable purchases made by offices of physicians or medical laboratories, a portion of which are attributable to hospitals.] Nor have we included property tax revenue. Even non-profit hospitals typically pay property tax on *some* portion of their holdings, such as a gift shop. [We were able to obtain property tax information for about half of the hospitals in Los Angeles, for example, (from OSHPD, the Los Angeles County Tax Assessor website, and our own surveys) showing \$9.7 million in taxes paid.]

We have also omitted local taxes and fees that vary from city to city, such as utility taxes and business license fees. Hospitals each spend tens of thousands, hundreds of thousands, and even one million or more dollars per year on electricity, telephone and other heavily taxed local services, so the tax revenue generated is not trivial. Nor have we included the state unemployment insurance and California disability insurance that will be paid by direct and indirect workers in hospital-related jobs. Finally, we have not estimated various state taxes that

will be generated by hospital-related economic activity, such as state fuel taxes, and state corporate taxes. [Even if a hospital is not itself subject to corporate tax, the companies to which it contracts out its food, janitorial, and IT services may well be.]

Hospital Construction: We have separated hospital construction from day-to-day operations because the former represents one-time-only economic activity while the latter is ongoing. Comprehensive data on hospital construction is difficult to obtain, an unfortunate situation at a time when seismic retrofitting has prompted a spate of new hospital construction. Here we try to convey the importance and scale of hospital construction by estimating output, jobs, wages, and taxes using three separate measures.

The first is OSHPD's construction-in-progress totals for fiscal year 2004, which represents the "accumulated cost of construction" that was in progress, but not completed, during the year. The measure is useful because it is fairly comprehensive, but limited because projects are reclassified as capital assets upon completion at which point they drop out of the picture. This makes it impossible to gauge the total value of construction during a given period.

Our second and third measures were adopted in an effort to more closely reflect the total value of hospital construction projects during the preceding and coming five year periods, 2000-2004 and 2005-2009. These measures are based on our survey of hospitals in the region, supplemented by our collection of media reports on hospital projects and conversations with Turner Construction Company, the nation's leading healthcare construction company with \$1.3 billion in healthcare construction in 2004. Where construction extends from one period into the next, we have estimated the approximate share of the project cost expended in each.

Our measures remain incomplete: our lists do not include all planned, current and recently completed hospital projects. This means our estimates are low (and in some counties much too low).

Approach: At the LAEDC, *our estimates typically represent the lower bound of probable economic impact*. Our results are understated because of data limitations and constraints inherent in economic impact analysis work. We must rely on estimates for many of our inputs, introducing a level of uncertainty in our results. To compensate, when faced with a choice among plausible estimates, we prefer to adopt the one(s) that will produce the *lowest* impact in terms of jobs, wages, and taxes. Occasionally, we will omit economic activity we *know* exists, if we are not able to document a satisfactorily narrow (and hence credible) range of plausible estimates. Throughout, our goal has been to solidly establish a baseline of economic activity. Accordingly, the results detailed below should be read with an implied "not less than" or "at least" preceding all employment and tax impact estimates.

6-County Results: The total economic output, employment, wages and tax revenues reported for the Southern California region will be *more than the sum of the results reported for the individual counties.* The LAEDC used county-specific RIMS II multipliers for each individual county, and separate regional multipliers for Southern California as a whole. The multipliers for the region are larger than those for the individual counties. To understand why, consider a hypothetical hospital in Los Angeles County that orders medical equipment from a manufacturer

in Orange County. The Los Angeles County multipliers are designed to capture all of the economic activity generated *within* the county. So the Los Angeles County results will not reflect the extra business revenue, job creation, wages, and tax revenue generated by the purchase in Orange County. The regional multipliers, on the other hand, capture the ripple effects of economic activity throughout Southern California. This is particularly important in a region where so many economic transactions spill across county lines.

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

Los Angeles County

LOS ANGELES COUNTY OVERVIEW

Los Angeles County, home to more than 10 million people, boasts Cedars-Sinai, UCLA, and LA County-USC Medical Centers, as well as more than 100 other hospitals. Table 1.1 provides an overview of 116 hospitals in Los Angeles County for fiscal year 2004. The economic analysis that follows covers 122 hospitals, with the addition of six other facilities not found in the OSHPD data: federal VA hospitals in Long Beach and Los Angeles, plus Catalina Island Medical Center, East Valley Hospital, Pacific Hospital of Long Beach, and Rancho Los Amigos National Rehabilitation Center in Downey.

Table 1.1 Los Angeles County Hospitals (FY 2004)				
Hospitals Included in this summary data Included in the analysis that follows	116 122			
Beds Licensed Available	30,901 28,419			
Occupancy Rates Licensed Beds Available Beds	59% 64%			
Patient Days Acute Care (70.1%) Psychiatric (12.1%) Chemical Dependency (1.3%) Rehabilitation (2.4%) Long-term Care (12.7%) Residential & Other (0.7%) Total (100%)	4,697,051 805,075 88,713 160,783 840,769 43,505 6,635,896			
Average Length of Stay Excluding Long-term Care Including Long-term Care	5.7 days 6.4 days			
Discharges	1,038,554			
Outpatient Visits Emergency Room (25.5%) All Other Outpatients (74.5%) Total (100%)	2,498,080 <u>7,294,499</u> 9,792,579			

Source: State of California Office of Statewide Health Planning and Development; LAEDC

For the 116 reporting hospitals, OSHPD recorded almost 31,000 licensed beds in Los Angeles County. The 28,419 beds that were actually available had an average occupancy rate of 64 percent. These hospitals combined for 6.6 million inpatient days, with acute care accounting for 4.7 million (70%) of the days. The average length of stay for patients kept at least one night was 6.4 days, 5.7 days if recipients of long-term care are excluded. The 1.0 million discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 9.8 million outpatient visits to these 116 hospitals. One-quarter of the outpatient visits (2.5 million) were to emergency rooms. The other 7.3 million outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

Los Angeles County's total economic output (gross product) was \$398 billion in 2004. The area's 122 hospitals were directly or indirectly responsible for generating \$47.2 billion this output, accounting for 11.9 percent of the county total. [This showing is truly remarkable, given that Los Angeles County economy ranks 17th among all *countries*.] Table 1.2 breaks out direct and indirect hospital-related business revenues in Los Angeles County by source.

Table 1.2 Hospital-Related Business Revenues in Los Angeles County (FY 2004, Millions of Dollars)					
	Direct	Indirect	Total		
Hospitals	\$16,6000	\$20,000	\$36,600		
Offices of Physicians	\$4,700	\$5,000	\$9,700		
Medical & Diagnostic Laboratories	\$159	\$175	\$334		
Ambulance Services	\$251	\$308	\$559		
Total*	\$21,700	\$25,500	\$47,200		

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Los Angeles County Medical Association; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Los Angeles County had revenues of \$16.6 billion in fiscal year 2004. Offices of physicians had \$11.1 billion in revenues, of which we estimate \$4.7 billion (42 percent) was dependent on physicians' access to hospitals. Medical and diagnostic laboratories owed \$159 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had revenues of \$251 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$20.0 billion, for a total of \$36.6 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$5.0 billion in indirect activity, for a total of \$9.7 billion in economic output. Hospital-related lab work generated indirect business revenues of \$175 million, for a total of \$334 million in economic output. Ambulance services generated \$308 million in indirect activity, for a total economic output of \$559 million. Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$21.7 billion and total business revenues of \$47.2 billion in Los Angeles County.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 1.3 provides estimates of the combined value of purchases made by 122 Los Angeles County hospitals in fiscal year 2004.

Table 1.3 Purchases Made by Los Angeles County Hospitals (FY 2004, Millions of Dollars)				
Services	\$2,080			
Supplies	\$2,640			
Utilities, Telephone, Non-Liability Insurance & Misc.	\$730			
Leases & Rentals (Buildings, Equipment & Improvements)	\$240			
Professional Liability Insurance (Incl. Self-Insured)	\$240			
Total*	\$5,920			

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Los Angeles County spent \$2.1 billion on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$2.6 billion on medical supplies, drugs, food, and office supplies, plus \$730 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$240 million on the lease and rental of buildings, equipment, and leasehold improvements, and a similar amount on professional liability insurance.

All told, we estimate Los Angeles hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$5.9 billion annually. Much of this money was spent in Los Angeles County.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Los Angeles County ranges from very few – the full-time equivalent (FTE) of barely more than 20 people each at Vista Specialty Hospital of San Gabriel Valley, La Casa Psychiatric Health Facility, and San Vicente Hospital – to the equivalent of a large town – 5,300 FTE at UCLA Medical Center, 6,900 FTE at Los Angeles County/USC Medical Center and 7,400 FTE at Cedars-Sinai Medical Center. Forty-two other hospitals in the county employ 1,000 or more FTE workers. Table 1.4 summarizes the amount of employment in Los Angeles County dependent on hospital operations in 2004.

Table 1.4 Hospital-Related Employment in Los Angeles County (FY 2004, Full-time Equivalents)					
	Direct	Indirect	Total		
Hospitals	132,000	132,000	264,000		
Offices of Physicians			79,000		
Medical & Diagnostic Laboratories			2,000		
Ambulance Services 6,000					
Total*			352,000		

*May not sum due to rounding. Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Los Angeles County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Los Angeles County directly employed the full-time equivalent of 132,000 people, roughly the population of the City of Lancaster or Palmdale in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 132,000 jobs, thus sustaining total FTE employment of 264,000 jobs. We also estimate the private ambulance services sustained 6,000 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 1.2, we estimate that offices of physicians (79,000) and medical labs (2,000) between them sustained hospital-related employment of 81,000 FTE iobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 352,000 jobs in Los Angeles. This is an *understatement* of the actual number of workers engaged in hospitalrelated employment, because many work part time. Even on an FTE basis, hospital-related employment represents 8.8 percent of all full-time and part-time non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Los Angeles County provide wages for the full-time equivalent of 352,000 workers in 2004. Table 1.5 summarizes the Los Angeles County wages dependent on hospital-related operations.

Table 1.5 Hospital-Related Wages in Los Angeles County (FY 2004, Millions of Dollars)					
	Direct	Indirect	Total		
Hospitals	\$6,700	\$5,100	\$11,800		
Offices of Physicians			\$3,500		
Medical & Diagnostic Laboratories			\$113		
Ambulance Services			\$160		
Total*			\$15,600		

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Los Angeles County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Los Angeles County paid \$6.7 billion in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect wages of a further \$5.1 billion, for total annual compensation of \$11.8 billion. Private ambulance services generated total annual compensation of \$160 million. Applying RIMS II final demand multipliers to the business revenues in Table 1.2, we estimate that offices of physicians (\$3.5 billion) and medical labs (\$113 million) between them sustained hospital-related wages of \$3.6 billion.

All told, hospitals and related businesses accounted for \$15.6 billion in wages in Los Angeles, representing 6.5 percent of all non-farm compensation in the county.

HOSPITAL-RELATED TAXES

Hospitals in Los Angeles County are an economic engine powering direct and indirect activities that in 2004 sustained \$47.2 billion in business revenues, 352,000 FTE jobs, and \$15.6 billion in wages. All of this economic activity generated considerable tax revenue for the state and local governments. Table 1.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 1.2 through 1.5.

Table 1.6 Tax Revenue Generated by Hospitals in Los Angeles County (FY 2004, Millions of Dollars)				
Tax Revenue By Type of Tax				
State Income Tax	\$655			
Sales Tax (8.25%) State Share City Share County Share Transportation Authority Share Subtotal*	\$347 \$42 \$14 <u>\$55</u> \$458			
Total*	\$1,113			
Tax Revenue By Level of Governme	ent			
State of California	\$1,000			
Los Angeles County	\$69			
Cities	\$42			
Total*	\$1,113			

*May not sum due to rounding.

Source: LAEDC

The workers in Los Angeles County whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$655 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$458 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$1.1 billion in income and sales taxes for the state and local governments in 2004. Most of the revenue – \$1 billion – was collected by the state government from state income and sales taxes. Los Angeles County, including the Metropolitan Transportation Agency, collected \$69 million from its respective share of state sales taxes related to hospital activity. Cities in Los Angeles County shared \$42 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

There is a great deal of hospital construction recently completed, underway, or planned in Los Angeles County, including major projects at UCLA, LA County/USC, Children's Hospital of Los Angeles, Kaiser Hospitals, and Cedars-Sinai. Tracking the total dollar value of all hospital construction in the county is difficult, so we present three different measures of construction activity in Table 1.7. The message from all three measures is the same: many Los Angeles County hospitals have invested, are investing, and will invest billions of dollars in their facilities.

Table 1.7 Hospital Construction in Los Angeles County (Number of Jobs, Millions of Dollars)			
	Work In Progress	Past 5 Years 2000-2004	Next 5 Years 2005-2009
Construction Spending	\$2,700	\$2,900	\$3,000
Business Revenues	\$5,800	\$6,100	\$6,400
Jobs	39,000	41,300	43,000
Wages	\$1,600	\$1,700	\$1,700
Tax Revenues			
State Income Tax	\$65	\$70	\$73
Sales Tax	\$98	\$105	\$109
Total*	\$164	\$175	\$182

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$2.7 billion by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$5.8 billion and created employment equivalent to 39,000 one-year full-time jobs with wages of \$1.6 billion. The resulting economic activity generated \$164 million in tax revenues, \$65 million from state income taxes and \$98 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$2.9 billion in such projects, sufficient spending to generate \$6.1 billion in business revenues and 41,300 FTE one-year jobs with wages of \$1.7 billion. State and local governments shared \$175 million in tax revenue from these projects, including \$70 million in state income taxes and \$105 million in sales taxes. Looking forward, we documented projects already started or planned that will cost \$3.0 billion during the period 2005-2009. These projects will create business revenues of \$6.4 billion and create 43,000 FTE one-year jobs with wages of \$1.7 billion. State and local governments will share \$182 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

ORANGE COUNTY

ORANGE COUNTY OVERVIEW

Orange County, home to more than 3 million people, has 32 hospitals. Table 2.1 provides an overview of Orange County hospitals in fiscal year 2004.

Table 2.1 Orange County Hospitals (FY 2004)			
Hospitals	32		
Beds Licensed Available	7,407 7,141		
Occupancy Rates Licensed Beds Available Beds	59% 61%		
Patient Days Acute Care (66.9%) Psychiatric (8.6%) Chemical Dependency (1.0%) Rehabilitation (1.6%) Long-term Care (21.8%) Residential & Other (0.0%) Total (100%)	1,075,065 138,871 16,046 25,873 351,010 0 1,606,865		
Average Length of Stay Excluding Long-term Care Including Long-term Care	4.7 days 5.9 days		
Discharges	272,011		
Outpatient Visits Emergency Room (25.9%) All Other Outpatients (74.1%) Total (100%)	708,768 2,027,490 2,736,258		

Source: State of California Office of Statewide Health Planning and Development

There were 7,407 licensed beds in Orange County in 2004. The 7,141 beds that were actually available had an average occupancy rate of 61 percent. OC hospitals combined for 1.6 million inpatient days, with acute care accounting for 1.1 million (67%) of the days. The average length of stay for patients kept at least one night was 5.9 days, 4.7 days if recipients of long-term care are excluded. The 272,011 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 2.7 million outpatient visits to OC hospitals, about 10 times as many discharges. One-quarter of the outpatient visits (708,768) were to emergency rooms. The other 2.0 million outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

Orange County's total economic output (gross product) was \$149 billion in 2004. The area's 32 hospitals were directly or indirectly responsible for generating \$11.5 billion of this economic output, accounting for 7.7 percent of the county total. Table 2.2 breaks out direct and indirect hospital-related business revenues in Orange County by source.

Table 2.2 Hospital-Related Business Revenues in Orange County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$3,900	\$4,400	\$8,300
Offices of Physicians	\$1,400	\$1,400	\$2,800
Medical & Diagnostic Laboratories	\$87	\$85	\$172
Ambulance Services	\$115	\$137	\$252
Total*	\$5,500	\$6,000	\$11,500

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Orange County Medical Association; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Orange County had revenues of \$3.9 billion in fiscal year 2004. Offices of physicians had \$3.4 billion in revenues, of which we estimate \$1.4 billion (42 percent) was dependent on physicians' ties to hospitals. Medical and diagnostic laboratories owed \$87 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$115 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$4.4 billion in 2004, for a total of \$8.3 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$1.4 billion in indirect activity, for a total of \$2.8 billion in economic output. Hospital-related lab work generated indirect business revenues of \$85 million, for a total of \$172 million in economic output. Ambulance services generated \$137 million in indirect activity, for a total economic output of \$252 million.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$5.5 billion and total business revenues of \$11.5 billion in Orange County.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 2.3 provides estimates of the combined value of purchases made by 32 Orange County hospitals in fiscal year 2004.

Table 2.3 Purchases Made by Orange County Hospitals (FY 2004, Millions of Dollars)	,
Services	\$680
Supplies	\$770
Utilities, Telephone, Non-Liability Insurance & Misc.	\$170
Leases & Rentals (Buildings, Equipment & Improvements)	\$100
Professional Liability Insurance (Incl. Self-Insured)	\$80
Total*	\$1,800

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Orange County spent \$680 million on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$770 million on medical supplies, drugs, food, and office supplies, plus \$170 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$100 million on the lease and rental of buildings, equipment, and leasehold improvements, and \$80 million on professional liability insurance.

All told, we estimate Orange County hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$1.8 billion annually. Much of this money was spent in the county.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Orange County ranges from very few – the full-time equivalent (FTE) of barely more than 40 people at Newport Bay Hospital and in the low 70s each at Children's Hospital at Mission and Healthbridge Children's Hospital – to more than 3,000 FTE at UCI Medical Center and Hoag Memorial. Nine other hospitals in the county employ 1,000 or more FTE workers. Table 2.4 summarizes the amount of employment in Orange County dependent on hospital operations in 2004.

Table 2.4 Hospital-Related Employment in Orange County (FY 2004, Full-time Equivalents)			
	Direct	Indirect	Total
Hospitals	28,000	27,000	55,000
Offices of Physicians			22,000
Medical & Diagnostic Laboratories			1,000
Ambulance Services			2,800
Total*			80,000

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Orange County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Orange County directly employed the full-time equivalent of 28,000 people in 2004, more people than lived in Seal Beach or Laguna Beach. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 27,000 jobs, thus sustaining total FTE employment of 55,000 jobs. Private ambulance services sustained 2,800 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 2.2, we estimate that offices of physicians (22,000) and medical labs (1,000) between them sustained hospital-related employment of 23,000 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 80,000 jobs in Orange County. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many work part time. Even on an FTE basis, hospital-related employment represented 5.5 percent of *all full-time and part-time* non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Orange County provided wages for the full-time equivalent of 80,000 workers. Table 2.5 summarizes the Orange County wages dependent on hospital-related operations.

Table 2.5 Hospital-Related Wages in Orange County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$1,800	\$1,300	\$3,100
Offices of Physicians			\$990
Medical & Diagnostic Laboratories			\$53
Ambulance Services			\$113
Total*			\$4,200

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Orange County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Orange County paid \$1.8 billion in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generate indirect wages of a further \$1.3 billion, for total annual compensation of \$3.1 billion. Private ambulance services generated total wages of \$113 million. Applying RIMS II final demand multipliers to the business revenues in Table 2.2, we estimate that offices of physicians (\$990 million) and medical labs (\$53 million) between them sustained hospital-related wages of \$1.4 billion.

All told, hospitals and related businesses accounted for \$4.2 billion in wages in Orange County, representing 4.8 percent of all non-farm compensation in the county.

HOSPITAL-RELATED TAXES

Hospitals in Orange County are an economic engine powering direct and indirect activities that sustained \$11.5 billion in business revenues, 80,000 FTE jobs, and \$4.2 billion in wages during 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 2.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 2.2 through 2.5.

Table 2.6 Tax Revenue Generated by Hospitals in Orange County (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$177	
Sales Tax (7.75%) State Share City Share County Share Transportation Authority Share Subtotal*	\$98 \$12 \$4 <u>\$8</u> \$122	
Total*	\$299	
Tax Revenue By Level of Government		
State of California	\$275	
Orange County	\$12	
Cities	\$12	
Total*	\$299	

*May not sum due to rounding.

Source: LAEDC

The workers in the OC whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$177 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$122 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$299 million in income and sales taxes for the state and local governments in 2004. Most of the revenue – \$275 million – was collected by the state government from state income and sales taxes. Orange County, including the Orange County Transportation Authority, collected \$12 million from its share of state sales taxes related to hospital activity. Cities in Orange County shared \$12 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

Construction activity has picked up dramatically in Orange County, with major project underway or planned Hoag, UCI, Children's Hospital, St. Joseph, and St. Jude hospitals. Tracking the total dollar value of all hospital construction in the county is difficult, so we present three different measures of construction activity in Table 2.7.

Table 2.7 Hospital Construction in Orange County (Number of Jobs, Millions of Dollars)				
	Work In Progress	Past 5 Years 2000-2004	Next 5 Years 2005-2009	
Construction Spending	\$166	\$600	\$2,300	
Business Revenues	\$340	\$1,200	\$4,700	
Jobs	2,200	7,300	29,700	
Wages	\$90	\$300	\$1,200	
Tax F	Tax Revenues			
State Income Tax	\$4	\$12	\$50	
Sales Tax	\$6	\$19	\$75	
Total*	\$9	\$31	\$124	

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$166 million by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$340 million and created employment equivalent to 2,200 one-year full-time jobs with wages of \$90 million. The resulting economic activity generated \$9 million in tax revenues, almost \$4 million from state income taxes and about \$6 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$600 million in such projects, sufficient spending to generate \$1.2 billion in business revenues and 7,300 FTE one-year jobs with wages of \$300 million. State and local governments shared \$31 million in tax revenue from these projects, including \$12 million in state income taxes and \$19 million in sales taxes. Looking forward, we documented projects already started or planned that will cost \$2.3 billion during the period 2005-2009. These projects will generate business revenues of \$4.7 billion and create 29,700 FTE one-year jobs with wages of \$1.2 billion. State and local governments will share \$124 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

RIVERSIDE COUNTY

RIVERSIDE COUNTY OVERVIEW

Riverside County, home to 1.8 million people and growing fast, has 17 hospitals. Table 3.1 provides an overview of Riverside County hospitals in fiscal year 2004. [In the economic analysis that follows, we have included Knollwood Psychiatric and Chemical Dependency Center, bringing the number of facilities to 18.]

Table 3.1 Riverside County Hospitals (FY 2004)			
Hospitals Included in this summary data Included in the analysis that follows	17 18		
Beds Licensed Available	3,387 3,158		
Occupancy Rates Licensed Beds Available Beds	62% 66%		
Patient Days Acute Care (78.7%) Psychiatric (6.5%) Chemical Dependency (4.8%) Rehabilitation (0.9%) Long-term Care (7.4%) Residential & Other (1.7%) Total (100%)	602,791 49,944 36,502 6,633 56,962 13,237 766,069		
Average Length of Stay Excluding Long-term Care Including Long-term Care	4.5 days 4.8 days		
Discharges	159,879		
Outpatient Visits Emergency Room (36.0%) All Other Outpatients (64.0%) Total (100%)	515,730 <u>916,455</u> 1,432,185		

Source: State of California Office of Statewide Health Planning and Development

There were 3,387 licensed beds in Riverside County in 2004. The 3,158 beds that were actually available had an average occupancy rate of 66 percent. Riverside hospitals combined for 766,069 inpatient days, with acute care accounting for 602,791 (79%) of the days. The average length of stay for patients kept at least one night was 4.8 days, 4.5 days if recipients of long-term care are excluded. The 159,879 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 1.4 million outpatient visits to Riverside hospitals, about 9 times as many discharges. A little more than one-third of the outpatient visits (515,730) were to emergency rooms. The

other 916,455 outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

The total economic output of the Riverside-San Bernardino metropolitan area (Riverside and San Bernardino counties combined) was \$117 billion in 2004. Riverside's 18 hospitals were directly or indirectly responsible for generating \$4.2 billion of those business revenues, accounting for 3.6 percent of the Inland Empire total. Table 3.2 breaks out direct and indirect hospital-related business revenues in Riverside County by source.

Table 3.2 Hospital-Related Business Revenues in Riverside County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$1,800	\$1,400	\$3,200
Offices of Physicians	\$570	\$390	\$960
Medical & Diagnostic Laboratories	\$7	\$5	\$12
Ambulance Services	\$39	\$31	\$70
Total*	\$2,400	\$1,800	\$4,200

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Riverside County Medical Association; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Riverside County had revenues of \$1.8 billion in fiscal year 2004. Offices of physicians had \$1.2 billion in revenues, of which we estimate \$570 million (46 percent) was dependent on physicians' ties to hospitals. Medical and diagnostic laboratories owed \$7 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$39 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$1.4 billion, for a total of \$3.2 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$390 million in indirect activity, for a total of \$960 million in economic output. Hospital-related lab work generated indirect business revenues of \$5 million, for a total of \$12 million in economic output. Ambulance services generated \$31 million in indirect activity, for a total economic output of \$70 million.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$2.4 billion and total business revenues of \$4.2 billion in Riverside County.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 3.3 provides estimates of the combined value of purchases made by 18 Riverside County hospitals in fiscal year 2004.

Table 3.3 Purchases Made by Riverside County Hospitals (FY 2004, Millions of Dollars)		
Services	\$260	
Supplies	\$300	
Utilities, Telephone, Non-Liability Insurance & Misc.	\$70	
Leases & Rentals (Buildings, Equipment & Improvements)	\$20	
Professional Liability Insurance (Incl. Self-Insured)	\$20	
Total*	\$670	

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Riverside County spent \$260 million on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$300 million on medical supplies, drugs, food, and office supplies, plus \$70 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$20 million on the lease and rental of buildings, equipment, and leasehold improvements, and a similar amount on professional liability insurance.

All told, we estimate Riverside hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$670 million annually. Much of this money was spent in Southern California, including Riverside County.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Riverside County ranges from fewer than 100 full-time equivalent (FTE) jobs at the Oasis Psychiatric Health Facility and at Riverside Center for Behavioral Medicine to more than 2,000 FTE at Riverside County Regional Medical Center. Five other hospitals in the county employ 1,000 or more FTE workers. Table 3.4 summarizes the amount of employment in Riverside County dependent on hospital operations during 2004.

Table 3.4 Hospital-Related Employment in Riverside County (FY 2004, Full-time Equivalents)			
Direct Indirect Total			
Hospitals	13,000	9,000	22,000
Offices of Physicians			7,700
Medical & Diagnostic Laboratories			70
Ambulance Services			800
Total*			30,700

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Riverside County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Riverside County directly employed the full-time equivalent of 13,000 people in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 9,000 jobs, thus sustaining total FTE employment of 22,000 jobs. Private ambulance services sustained a total of 800 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 3.2, we estimate that offices of physicians (7,700) and medical labs (70) between them sustained hospital-related employment of 7,800 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 30,700 jobs in Riverside County in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many work part time. Even on an FTE basis, hospital-related employment represents 5.7 percent of *all full-time and part-time* non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Riverside County provided wages for the full-time equivalent of 30,700 workers in 2004. Table 3.5 summarizes the Riverside County wages dependent on hospital-related operations.

Table 3.5 Hospital-Related Wages in Riverside County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$620	\$310	\$930
Offices of Physicians			\$340
Medical & Diagnostic Laboratories			\$4
Ambulance Services			\$21
Total*			\$1,300

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Riverside County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Riverside County paid \$620 million in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect wages of a further \$310 million, for total annual compensation of \$930 million. Private ambulance services generated total annual compensation of \$21 million. Applying RIMS II final demand multipliers to the business revenues in Table 3.2, we estimate that offices of physicians (\$340 million) and medical labs (\$4 million) between them sustained hospital-related wages of \$344 million.

All told, hospitals and related businesses accounted for \$1.3 billion in wages in Riverside County, representing 5.0 percent of all non-farm compensation in the county.

HOSPITAL-RELATED TAXES

Hospitals in Riverside County are an economic engine powering direct and indirect activities that sustained \$4.2 billion in business revenues, 30,700 FTE jobs, and \$1.3 billion in wages in 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 3.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 3.2 through 3.5.

Table 3.6 Tax Revenue Generated By Hospitals in Riverside County (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$55	
Sales Tax (7.75%) State Share City Share County Share Transportation Authority Share Subtotal*	\$33 \$4 \$1 <u>\$3</u> \$41	
Total*	\$96	
Tax Revenue By Level of Government		
State of California	\$88	
Riverside County	\$4	
Cities	\$4	
Total*	\$96	

*May not sum due to rounding.

Source: LAEDC

The workers in Riverside County whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$55 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$41 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$96 million in sales and income taxes for the state and local governments in 2004. Most of the revenue – \$88 million – was collected by the state government from state income and sales taxes. Riverside County, including the county transportation authority, collected \$4 million from its share of state sales taxes related to hospital activity. Cities in Riverside County shared \$4 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

The value of hospital construction in Riverside County will increase markedly during the five years, 2005-2009. Major projects are underway or planned at Eisenhower, Southwest Healthcare System – Murrietta, San Gorgonio Memorial hospitals. Tracking the total dollar value of all construction in the county is difficult, so we present three different measures of construction activity in Riverside County in Table 3.7.

Table 3.7 Hospital Construction in Riverside County (Number of Jobs, Millions of Dollars)			
Work In Past 5 Years Next 5 Years Progress 2000-2004 2005-2009			
Construction Spending	\$29	\$180	\$700
Business Revenues	\$52	\$320	\$1,300
Jobs	330	2,100	8,100
Wages	\$13	\$81	\$320
Tax Revenues			
State Income Tax	\$0.6	\$3.4	\$13
Sales Tax	\$0.9	\$5.6	\$22
Total*	\$1.5	\$9.0	\$35

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$29 million by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$52 million and created employment equivalent to 330 one-year full-time jobs with wages of \$13 million. The resulting economic activity generated \$1.5 million in tax revenues, \$0.6 million from state income taxes and \$0.9 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$180 million in such projects, sufficient spending to generate \$320 million in business revenues and 2,100 FTE one-year jobs with wages of \$81 million. State and local governments shared \$9.0 million in tax revenue from these projects, including \$3.4 million in state income taxes and \$5.6 million in sales taxes. Looking forward, we documented projects already started or planned that will cost \$700 million during the period 2005-2009. These projects will generate business revenues of \$1.3 billion and create 8,100 FTE one-year jobs with wages of \$320 million. State and local governments will share \$35 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

SAN BERNARDINO COUNTY

SAN BERNARDINO COUNTY OVERVIEW

San Bernardino County, home to nearly 2 million people and growing fast, has 23 hospitals. Table 4.1 provides an overview of San Bernardino County hospitals in fiscal year 2004. [In the economic analysis that follows, we have included the VA hospital in Loma Linda, bringing the number of facilities to 24.]

Table 4.1 San Bernardino County Hospitals (FY 2004)			
Hospitals Included in this summary data Included in the analysis that follows	23 24		
Beds Licensed Available	5,429 5,192		
Occupancy Rates Licensed Beds Available Beds	73% 77%		
Patient Days Acute Care (52.8%) Psychiatric (14.2%) Chemical Dependency (0.5%) Rehabilitation (2.0%) Long-term Care (30.5%) Residential & Other (0.0%) Total (100%)	770,128 206,736 7,316 29,521 444,294 0 1,457,995		
Average Length of Stay Excluding Long-term Care Including Long-term Care	5.6 days 7.9 days		
Discharges	185,635		
Outpatient Visits Emergency Room (29.0%) All Other Outpatients (71.0%) Total (100%)	530,743 1,294,108 1,824,851		

Source: State of California Office of Statewide Health Planning and Development

There were 5,429 licensed beds in San Bernardino County in 2004. The 5,192 beds that were actually available had an average occupancy rate of 77 percent. San Bernardino hospitals combined for about 1.5 million inpatient days, with acute care accounting for 770,128 (52.8%) of the days. The average length of stay for patients kept at least one night was 7.9 days, 5.6 days if recipients of long-term care are excluded. The 185,635 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 1.8 million outpatient visits to San Bernardino hospitals, about 10 times as many discharges. A little less than one-third of the outpatient visits (530,743) were to emergency

rooms. The other 1.3 million outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

The total economic output of the Riverside-San Bernardino metropolitan area was \$117 billion in 2004. San Bernardino County's 24 hospitals were directly or indirectly responsible for generating \$6.4 billion of those business revenues, accounting for 5.5 percent of the Inland Empire total. Table 4.2 breaks out direct and indirect hospital-related business revenues in San Bernardino County by source.

Table 4.2 Hospital-Related Business Revenues in San Bernardino County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$2,700	\$2,300	\$5,100
Offices of Physicians	\$680	\$500	\$1,180
Medical & Diagnostic Laboratories	\$10	\$7	\$17
Ambulance Services	\$78	\$66	\$144
Total*	\$3,500	\$2,900	\$6,400

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; San Bernardino County Medical Association; California EDD: OSHPD: LAEDC.

The LAEDC estimates that hospitals in San Bernardino County had revenues of \$2.7 billion in fiscal year 2004. Offices of physicians had \$1.5 billion in revenues, of which we estimate \$680 million (44 percent) was dependent on physicians' ties to hospitals. Medical and diagnostic laboratories owed \$10 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$78 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$2.3 billion, for a total of \$5.1 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$500 million in indirect activity, for a total of \$1.2 billion in economic output. Hospital-related lab work generated indirect business revenues of \$7 million, for a total of \$17 million in economic output. Ambulance services generated \$66 million in indirect activity, for a total economic output of \$144 million.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$3.5 billion and total business revenues of \$6.4 billion in San Bernardino County in 2004.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 4.3 provides estimates of the combined value of purchases made by 24 San Bernardino County hospitals in fiscal year 2004.

Table 4.3 Purchases Made by San Bernardino County Hospitals (FY 2004, Millions of Dollars)		
Services	\$340	
Supplies	\$550	
Utilities, Telephone, Non-Liability Insurance & Misc.	\$140	
Leases & Rentals (Buildings, Equipment & Improvements)	\$60	
Professional Liability Insurance (Incl. Self-Insured)	\$50	
Total*	\$1,130	

*Total may not sum due to rounding. Sources: OSHPD; LAEDC

We estimate hospitals in San Bernardino County spent \$340 million on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$550 million on medical supplies, drugs, food, and office supplies, plus \$140 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$60 million on the lease and rental of buildings, equipment, and leasehold improvements, and \$50 million on professional liability insurance.

All told, we estimate San Bernardino County hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$1,130 million in 2004. Much of this money was spent in Southern California, including San Bernardino County.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in San Bernardino County ranges from very small – just 14 full-time equivalent (FTE) jobs at the Kaiser Permanente Chemical Dependency Program – to more than 5,000 FTE jobs at Loma Linda University Medical Center. Five other hospitals – Arrowhead Regional Medical Center, Community Hospital of San Bernardino, Kaiser Foundation Hospital in Fontana, San Antonio Community Hospital, and St. Bernardine Medical Center – employ 1,000 or more FTE workers. [Redlands Community Hospital and St. Mary Regional Medical Center have just slightly fewer than 1,000 FTE jobs each.] Table 4.4 summarizes the amount of employment in San Bernardino County dependent on hospital operations.

Table 4.4 Hospital-Related Employment in San Bernardino County (FY 2004, Full-time Equivalents)				
Direct Indirect Total				
Hospitals	21,000	14,800	35,800	
Offices of Physicians			8,800	
Medical & Diagnostic Laboratories			90	
Ambulance Services			1,600	
Total*			46,300	

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; San Bernardino County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in San Bernardino County directly employed the full-time equivalent of 21,000 people in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 14,800 jobs, thus sustaining total FTE employment of almost 36,000 jobs. Private ambulance services sustained a total of 1,600 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 4.2, we estimate that offices of physicians (8,800) and medical labs (90) between them sustained hospital-related employment of about 9,000 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 46,300 jobs in San Bernardino County in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many of work part time. Even on an FTE basis, hospital-related employment represents 7.6 percent of *all full-time and part-time* non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in San Bernardino County paid wages for the full-time equivalent of about 46,300 workers. Table 4.5 summarizes the San Bernardino County wages dependent on hospital-related operations.

Table 4.5 Hospital-Related Wages in San Bernardino County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$1,300	\$700	\$2,000
Offices of Physicians			\$400
Medical & Diagnostic Laboratories			\$5
Ambulance Services		-	\$40
Total*			\$2,400

^{*}May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; San Bernardino County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in San Bernardino County paid \$1,300 million in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect wages of a further \$700 million, for total annual compensation of \$2 billion. Private ambulance services sustained \$40 million in total wages. Applying RIMS II final demand multipliers to the business revenues in Table 4.2, we estimate that offices of physicians (\$400 million) and medical labs (\$5 million) between them sustained hospital-related wages of \$405 million.

All told, hospitals and related businesses accounted for \$2.4 billion in wages in San Bernardino County, representing 8.4 percent of all non-farm compensation in the county.

HOSPITAL-RELATED TAXES

Hospitals in San Bernardino County are an economic engine powering direct and indirect activities that sustained \$6.4 billion in business revenues, 46,300 FTE jobs, and \$2.4 billion in wages during 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 4.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 4.2 through 4.5.

Table 4.6 Tax Revenue Generated by Hospitals in San Bernardino County (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$102	
Sales Tax (7.75%) State Share City Share County Share Transportation Authority Share Subtotal*	\$61 \$7 \$2 <u>\$5</u> \$76	
Total*	\$178	
Tax Revenue By Level of Government		
State of California	\$163	
San Bernardino County	\$7	
Cities	\$7	
Total*	\$178	

*May not sum due to rounding.

Source: LAEDC

The workers in San Bernardino County whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$102 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$76 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$178 million in sales and income taxes for the state and local governments in 2004. Most of the revenue – \$163 million – was collected by the state government from state income and sales taxes. San Bernardino County, including the county transportation authority, collected \$7 million from its respective share of state sales taxes related to hospital activity. Cities in San Bernardino County shared \$7 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

San Bernardino County is witnessing a boom in hospital construction, led by a billion dollar investment by Kaiser in hospitals in Fontana and Ontario. Other major projects are underway or planned at Loma Linda, Desert Valley, and San Antonio Community hospitals. Tracking the total dollar value of all construction in the county is difficult, so we present three different measures of construction activity in Table 4.7.

Table 4.7 Hospital Construction in San Bernardino County (Number of Jobs, Millions of Dollars)			
Work In Past 5 Years Next 5 Years Progress 2000-2004 2005-2009			
Construction Spending	\$96	\$32	\$1,700
Business Revenues	\$190	\$63	\$3,300
Jobs	1,000	370	19,300
Wages	\$43	\$15	\$770
Tax Revenues			
State Income Tax	\$1.8	\$0.6	\$32
Sales Tax	\$3.0	\$1.0	\$54
Total*	\$4.8	\$1.6	\$86

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$96 million by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$190 million and created employment equivalent to 1,000 one-year full-time jobs with wages of \$43 million. The resulting economic activity generated \$4.8 million in tax revenues, \$1.8 million from state income taxes and \$3.0 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$32 million in such projects, sufficient spending to generate \$63 million in business revenues and 370 FTE one-year jobs with wages of \$15 million. State and local governments shared \$1.6 million in tax revenue from these projects, including \$0.6 million in state income taxes and \$1.0 million in sales taxes. Looking forward, we documented projects already started or planned that will cost \$1.7 billion during the period 2005-2009. These projects will generate business revenues of \$3.3 billion and create 19,300 FTE one-year jobs with wages of \$770 million. State and local governments will share \$86 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

SANTA BARBARA COUNTY

SANTA BARBARA COUNTY OVERVIEW

Santa Barbara County, home to 420,000 people, has 7 hospitals. Table 5.1 provides an overview of Santa Barbara County hospitals in fiscal year 2004.

Table 5.1 Santa Barbara County Hospitals (FY 2004)			
Hospitals 7			
Beds Licensed Available	996 908		
Occupancy Rates Licensed Beds Available Beds	62% 68%		
Patient Days Acute Care (56.3%) Psychiatric (4.82%) Chemical Dependency (0.0%) Rehabilitation (4.0%) Long-term Care (35.0%) Residential & Other (0.0%) Total (100%)	127,600 10,786 0 9,069 79,296 0 226,751		
Average Length of Stay Excluding Long-term Care Including Long-term Care	4.1 days 6.2 days		
Discharges	36,506		
Outpatient Visits Emergency Room (25.4%) All Other Outpatients (74.6%) Total (100%)	130,744 <u>383,992</u> 514,736		

Source: State of California Office of Statewide Health Planning and Development

There were 996 licensed beds in Santa Barbara County in 2004. The 908 beds that were actually available had an average occupancy rate of 68 percent. Santa Barbara hospitals combined for about one-quarter million inpatient days, with acute care accounting for 127,600 (56.3%) of the days. The average length of stay for patients kept at least one night was 6.2 days, 4.1 days if recipients of long-term care are excluded. The 36,506 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 514,736 outpatient visits to Santa Barbara hospitals, about 14 times as many discharges. One quarter of the outpatient visits (130,744) were to emergency rooms. The other 383,992 outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

The total economic output (gross product) of Santa Barbara County was \$16.4 billion in 2004. Santa Barbara's 7 hospitals were directly or indirectly responsible for generating \$1.1 billion of this output, accounting for 6.7 percent of the county total. Table 5.2 breaks out direct and indirect hospital-related business revenues in Santa Barbara County by source.

Table 5.2 Hospital-Related Business Revenues in Santa Barbara County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$412	\$348	\$760
Offices of Physicians	\$212	\$158	\$370
Medical & Diagnostic Laboratories	\$2	\$2	\$4
Ambulance Services	\$3	\$3	\$6
Total*	\$630	\$510	\$1,140

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Santa Barbara County Medical Association; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Santa Barbara County had revenues of \$412 million in fiscal year 2004. Offices of physicians had \$442 million in revenues, of which we estimate \$212 million (48 percent) was dependent on physicians' ties to hospitals. Medical and diagnostic laboratories owed \$2 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$3 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$348 million, for a total of \$760 million in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$158 million in indirect activity, for a total of \$370 million in economic output. Hospital-related lab work generated indirect business revenues of \$2 million, for a total of \$4 million in economic output. Ambulance services generated \$3 million in indirect activity, for a total economic output of \$6 million.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$630 million and total business revenues of \$1.1 billion in Santa Barbara County in 2004.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 5.3 provides estimates of the combined value of purchases made by 7 Santa Barbara County hospitals in fiscal year 2004.

Table 5.3 Purchases Made by Santa Barbara County Hospitals (FY 2004, Millions of Dollars)		
Services	\$38	
Supplies	\$88	
Utilities, Telephone, Non-Liability Insurance & Misc.	\$15	
Leases & Rentals (Buildings, Equipment & Improvements)		
Professional Liability Insurance (Incl. Self-Insured) \$7		
Total*	\$154	

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Santa Barbara County spent \$38 million on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$88 million on medical supplies, drugs, food, and office supplies, plus \$15 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$6 million on the lease and rental of buildings, equipment, and leasehold improvements, and \$7 million on professional liability insurance.

All told, we estimate Santa Barbara County hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$154 million in 2004. Much of this money was spent in Southern California, including Santa Barbara County.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Santa Barbara County ranges from about 50 full-time equivalent (FTE) jobs at the Santa Ynez Valley Cottage Hospital to almost 1,800 FTE jobs at Santa Barbara Cottage Hospital. One other hospital, Marian Medical Center, employs more than 1,000 FTE workers. Table 5.4 summarizes the amount of employment in Santa Barbara County dependent on hospital operations.

Table 5.4 Hospital-Related Employment in Santa Barbara County (FY 2004, Full-time Equivalents)				
Direct Indirect Total				
Hospitals	3,800	3,000	6,800	
Offices of Physicians			3,200	
Medical & Diagnostic Laboratories			25	
Ambulance Services			70	
Total*			10,100	

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Santa Barbara County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Santa Barbara County directly employed the full-time equivalent of 3,800 people in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 3,000 jobs, thus sustaining total FTE employment of about 6,800 jobs. Private ambulance services sustained a total of 70 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 5.4, we estimate that offices of physicians (3,200) and medical labs (25) between them sustained hospital-related employment of about 3,225 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 10,100 jobs in Santa Barbara County in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many of work part time. Even on an FTE basis, hospital-related employment represents 6.0 percent of *all full-time and part-time* non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Santa Barbara County provided wages for the full-time equivalent of about 10,100 workers in 2004. Table 5.5 summarizes the Santa Barbara County wages dependent on hospital-related operations.

Table 5.5 Hospital-Related Wages in Santa Barbara County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$172	\$96	\$268
Offices of Physicians			\$145
Medical & Diagnostic Laboratories			\$1
Ambulance Services			\$2
Total*			\$415

*May not sum due to rounding. Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Santa Barbara County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Santa Barbara County paid \$172 million in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect wages of a further \$96 million, for total annual compensation of \$268 million. Private ambulance services sustained \$2 million in total wages. Applying RIMS II final demand multipliers to the business revenues in Table 5.2, we estimate that offices of physicians (\$145 million) and medical labs (\$1 million) between them sustained hospital-related wages of \$146 million.

All told, hospitals and related businesses accounted for \$415 million in wages in Santa Barbara County, representing 4.6 percent of all non-farm compensation in the county in 2004.

HOSPITAL-RELATED TAXES

Hospitals in Santa Barbara County are an economic engine powering direct and indirect activities that sustained \$1.1 billion in business revenues, 10,100 FTE jobs, and \$415 million in wages in 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 5.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 5.2 through 5.5.

Table 5.6 Tax Revenue Generated by Hospitals in Santa Barbara County (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$17	
Sales Tax (7.75%) State Share City Share County Share Transportation Authority Share Subtotal*	\$10.2 \$1.2 \$0.4 <u>\$0.8</u> \$12.7	
Total*	\$30	
Tax Revenue By Level of Government		
State of California	\$28	
Santa Barbara County	\$1	
Cities	\$1	
Total*	\$30	

*May not sum due to rounding.

Source: LAEDC

The workers in Santa Barbara County whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$17 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$12.7 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$30 million in sales and income taxes for the state and local governments in 2004. Most of the revenue – \$28 million – was collected by the state government from state income and sales taxes. Santa Barbara County, including the county transportation authority, collected \$1 million from its respective share of state sales taxes related to hospital activity. Cities in Santa Barbara County shared \$1 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

The major project underway in Santa Barbara County is the construction at Cottage Hospital. For the county as a whole, we present three different measures of construction activity in Table 5.7. The two retrospective measures suggest there has been very little construction during the past five years, but the amount is set to climb steeply through 2009.

Table 5.7 Hospital Construction in Santa Barbara County (Number of Jobs, Millions of Dollars)				
Work In Progress Past 5 Years 2000-2004 Next 5 Years 2005-2009				
Construction Spending	\$37	\$54	\$400	
Business Revenues	\$65	\$95	\$700	
Jobs	470	700	5,100	
Wages	\$19	\$27	\$200	
Tax F	Revenues			
State Income Tax \$0.8 \$1.1 \$8				
Sales Tax	\$1.2	\$1.8	\$13	
Total*	\$2.0	\$2.9	\$22	

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$37 million by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$65 million and created employment equivalent to 470 one-year full-time jobs with wages of \$19 million. The resulting economic activity generated \$2.0 million in tax revenues, \$0.8 million from state income taxes and \$1.2 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$54 million in such projects, sufficient spending to generate \$95 million in business revenues and 700 FTE one-year jobs with wages of \$27 million. State and local governments shared \$2.9 million in tax revenue from these projects. Looking forward, we documented projects already started or planned that will cost \$400 million during the period 2005-2009. These projects will generate business revenues of \$700 million and create 5,100 FTE one-year jobs with wages of \$200 million. State and local governments will share \$22 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

Hidden in Plain Sight: The Economic Contribution of So. Cal. Hospitals & Related Services

VENTURA COUNTY

VENTURA COUNTY OVERVIEW

Ventura County, home to 420,000 people, has 9 hospitals. Table 6.1 provides an overview of Ventura County hospitals in fiscal year 2004.

Table 6.1 Ventura County Hospitals (FY 2004)			
Hospitals	9		
Beds Licensed Available	1,559 1,532		
Occupancy Rates Licensed Beds Available Beds	66% 68%		
Patient Days Acute Care (67.3%) Psychiatric (13.3%) Chemical Dependency (0.0%) Rehabilitation (3.3%) Long-term Care (16.4%) Residential & Other (0.0%) Total (100%)	254,878 49,333 0 12,365 62,089 0 378,665		
Average Length of Stay Excluding Long-term Care Including Long-term Care	5.0 days 5.8 days		
Discharges	65,675		
Outpatient Visits Emergency Room (18.8%) All Other Outpatients (81.2%) Total (100%)	209,701 <u>904,586</u> 1,114,287		

Source: State of California Office of Statewide Health Planning and Development

There were 1,559 licensed beds in Ventura County in 2004. The 1,532 beds that were actually available had an average occupancy rate of 68 percent. Ventura County hospitals combined for over 378,000 inpatient days, with acute care accounting for about 255,000 (67.3%) of the days. The average length of stay for patients kept at least one night was 5.8 days, 5.0 days if recipients of long-term care are excluded. The 65,675 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were 1,114,287 outpatient visits to Ventura County hospitals. Over 18% of the outpatient visits (209,701) were to emergency rooms. The other 904,586 outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

The total economic output (gross product) of Ventura County was \$35.7 billion in 2004. Ventura's 9 hospitals were directly or indirectly responsible for generating \$2.4 billion of this output, accounting for 6.6 percent of the county total. Table 6.2 breaks out direct and indirect hospital-related business revenues in Ventura County by source.

Table 6.2 Hospital-Related Business Revenues in Ventura County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$905	\$855	\$1,760
Offices of Physicians	\$320	\$260	\$580
Medical & Diagnostic Laboratories	\$5	\$3	\$8
Ambulance Services	\$19	\$18	\$37
Total*	\$1,250	\$1,140	\$2,390

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Ventura County Medical Association; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Ventura County had revenues of \$905 million in fiscal year 2004. Offices of physicians had \$761 million in revenues, of which we estimate \$320 million (42 percent) was dependent on physicians' ties to hospitals. Medical and diagnostic laboratories owed \$5 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$19 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that area hospitals generated additional indirect business revenues of \$855 million, for a total of almost \$1.8 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$260 million in indirect activity, for a total of \$580 million in economic output. Hospital-related lab work generated indirect business revenues of \$3 million, for a total of \$8 million in economic output. Ambulance services generated \$18 million in indirect activity, for a total economic output of \$37 million.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$1.3 billion and total business revenues of \$2.4 billion in Ventura County.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 6.3 provides estimates of the combined value of purchases made by nine Ventura County hospitals in fiscal year 2004.

Table 6.3 Purchases Made by Ventura County Hospitals (FY 2004, Millions of Dollars)		
Services	\$95	
Supplies	\$148	
Utilities, Telephone, Non-Liability Insurance & Misc.	\$47	
Leases & Rentals (Buildings, Equipment & Improvements)	\$15	
Professional Liability Insurance (Incl. Self-Insured)	\$14	
Total*	\$320	

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Ventura County spent \$95 million on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$148 million on medical supplies, drugs, food, and office supplies, plus \$47 million on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$15 million on the lease and rental of buildings, equipment, and leasehold improvements, and \$14 million on professional liability insurance.

All told, we estimate Ventura County hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$320 million in 2004. Much of this money was spent in Southern California, including Ventura County.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Ventura County ranges from about 35 full-time equivalent (FTE) jobs at Pacific Shores Hospital to 1,550 FTE jobs at Ventura County Medical Center. Two other hospitals, Community Memorial Hospital – San Buenaventura and St. John's Regional Medical Center, also employ more than 1,000 FTE workers each. Table 6.4 summarizes the amount of employment in Ventura County dependent on hospital operations.

Table 6.4 Hospital-Related Employment in Ventura County (FY 2004, Full-time Equivalents)				
Direct Indirect Total				
Hospitals	6,700	5,200	11,900	
Offices of Physicians			4,700	
Medical & Diagnostic Laboratories			55	
Ambulance Services			425	
Total*			17,100	

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Ventura County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Ventura County directly employed the full-time equivalent of 6,700 people in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment for a further 5,200 jobs, thus sustaining total FTE employment of about 11,900 jobs. Private ambulance services sustained a total of 425 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 6.4, we estimate that offices of physicians (4,700) and medical labs (55) between them sustained hospital-related employment of about 4,755 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 17,100 jobs in Ventura County in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many of work part time. Even on an FTE basis, hospital-related employment represents 6.0 percent of *all full-time and part-time* non-farm employment in the county.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Ventura County provided wages for the full-time equivalent of about 17,100 workers in 2004. Table 6.5 summarizes the Ventura County wages dependent on hospital-related operations.

Table 6.5 Hospital-Related Wages in Ventura County (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$350	\$201	\$551
Offices of Physicians			\$213
Medical & Diagnostic Laboratories			\$3
Ambulance Services			\$11
Total*			\$777

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; Ventura County Medical Association; California EDD; OSHPD; LAEDC.

Hospitals in Ventura County paid \$350 million in direct wages in 2004. Using RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect wages of a further \$201 million, for total annual compensation of \$551 million. Private ambulance services sustained total wages of \$11 million. Applying RIMS II final demand multipliers to the business revenues in Table 6.2, we estimate that offices of physicians (\$213 million) and medical labs (\$3 million) between them sustained hospital-related wages of \$216 million.

All told, hospitals and related businesses accounted for \$777 million in wages in Ventura County, representing 4.4 percent of all non-farm compensation in the county in 2004.

HOSPITAL-RELATED TAXES

Hospitals in Ventura County are an economic engine powering direct and indirect activities that sustained \$2.4 billion in business revenues, 17,100 FTE jobs, and \$777 million in wages in 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 6.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 6.2 through 6.5.

Table 6.6 Tax Revenue Generated by Hospitals in Ventura County (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$32.6	
Sales Tax (7.25%) State Share City Share County Share Transportation Authority Share Subtotal	\$18.9 \$2.3 \$0.8 <u>\$0.0</u> \$21.9	
Total*	\$54.5	
Tax Revenue By Level of Government		
State of California	\$51.5	
Ventura County	\$0.8	
Cities	\$2.3	
Total*	\$54.5	

*May not sum due to rounding.

Source: LAEDC

The workers in Ventura County whose wages were sustained directly or indirectly by hospital operations in the county paid an estimated \$33 million in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$21.9 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$55 million in sales and income taxes for the state and local governments in 2004. Most of the revenue – \$52 million – was collected by the state government from state income and sales taxes. Ventura County collected \$0.8 million from its share of state sales taxes related to hospital activity. Cities in Ventura County shared \$2.3 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

We found little hospital construction activity in Ventura County, where even allowing for the incompleteness of our survey, there is clearly much less activity than in the other Southern California hospitals. Tracking the total dollar value of all hospital construction in the county is difficult, so we present three different measures of construction activity in Table 6.7.

Table 6.7 Hospital Construction in Ventura County (Number of Jobs, Millions of Dollars)			
	Work In Progress	Past 5 Years 2000-2004	Next 5 Years 2005-2009
Construction Spending	\$71	\$0	\$150
Business Revenues	\$134	\$0	\$280
Jobs	900	0	1,900
Wages	\$37	\$0	\$78
Tax Revenues			
State Income Tax	\$1.6	\$0	\$3
Sales Tax	\$2.2	\$0	\$5
Total*	\$3.7	\$0	\$8

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$71 million by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects created total business revenues in the county of \$134 million and created employment equivalent to 900 one-year full-time jobs with wages of \$37 million. The resulting economic activity generated \$3.7 million in tax revenues, \$1.6 million from state income taxes and \$2.2 million from sales taxes.

Separately, the LAEDC found no major hospital construction projects during the five-year period ending in 2004. Looking forward, we did document projects already started or planned that will cost \$150 million during the period 2005-2009. These projects will generate business revenues of \$280 million and create 1,900 FTE one-year jobs with wages of \$78 million. State and local governments will share \$8 million in state income and sales taxes generated by spending on these projects.

^{*} Totals may not add due to rounding

SOUTHERN CALIFORNIA

(LOS ANGELES, ORANGE, RIVERSIDE, SAN BERNARDINO, SANTA BARBARA, AND VENTURA COUNTIES)

6-COUNTY SOUTHERN CALIFORNIA OVERVIEW

Southern California, by itself the nation's fourth largest state, is home to more than 18 million people. The 6-county region has 212 hospitals, including some of the most prestigious medical centers in the world. Table 7.1 provides an overview of 204 hospitals in Southern California in fiscal year 2004. The economic analysis that follows covers 212 hospitals, with the addition of 8 facilities not found in the OSHPD data.

Table 7.1 Southern California Hospitals (FY 2004)		
Hospitals Included in this summary data Included in the analysis that follows	204 212	
Beds Licensed Available	49,679 46,350	
Occupancy Rates Licensed Beds Available Beds	64% 67%	
Patient Days Acute Care (68.0 %) Psychiatric (11.4%) Chemical Dependency (1.3%) Rehabilitation (2.2%) Long-term Care (16.6%) Residential & Other (0.5%) Total (100%)	7,527,513 1,260,745 148,577 244,244 1,834,420 	
Average Length of Stay Excluding Long-term Care Including Long-term Care	4.9 days 6.2 days	
Discharges	1,758,260	
Outpatient Visits Emergency Room (29.0%) All Other Outpatients (71.0%) Total (100%)	4,593,766 12,821,130 17,414,896	

Source: State of California Office of Statewide Health Planning and Development

There were 49,679 licensed beds in Southern California in 2004. The 46,350 beds that were actually available had an average occupancy rate of 67 percent. Southern California hospitals combined for over 11 million inpatient days, with acute care accounting for 7.5 million (68.0%) of the days. The average length of stay for patients kept at least one night was 6.2 days, 4.9 days if recipients of long-term care are excluded. The 1,758,260 discharges – formal patient releases – in fiscal year 2004 hint at the number of inpatients, though care must be used in interpreting this number because it also includes the transfer (discharge) of inpatients from one type of care to another within a hospital.

There were more than 17 million outpatient visits to hospitals in the six-county region. Almost 30 percent of the outpatient visits (4.6 million) were to emergency rooms. The other 12.8

million outpatient visits included clinic visits, referred (ancillary service) visits, home health care visits, and day care visits where the patients were treated and released the same day.

HOSPITAL-RELATED ECONOMIC OUTPUT

The total economic output (gross product) of the 6-county Southern California region was \$708 billion in 2004. The area's 212 hospitals were directly or indirectly responsible for generating \$85.5 billion of this output, accounting for 12.1 percent of the regional total. [This showing is truly remarkable, given that Southern California economy ranks 10th among all *countries*, just ahead of South Korea and Mexico, and just behind Canada and Spain.] Table 7.2 breaks out direct and indirect hospital-related business revenues in Southern California by source.

Table 7.2 Hospital-Related Business Revenues in Southern California (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$26,300	\$39,300	\$65,600
Offices of Physicians	\$7,900	\$10,300	\$18,200
Medical & Diagnostic Laboratories	\$270	\$330	\$600
Ambulance Services	\$440	\$660	\$1,100
Total*	\$34,900	\$50,600	\$85,500

*May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; County Medical Associations; California EDD; OSHPD; LAEDC.

The LAEDC estimates that hospitals in Southern California had revenues of \$26.3 billion in fiscal year 2004. Offices of physicians had \$18.5 billion in revenues, \$7.9 billion (43 percent) of which we estimate was dependent on physicians' access to hospitals. Medical and diagnostic laboratories owed \$270 million of their business revenues (9.4 percent of the industry total) to hospitals. Private ambulance services had business revenues of \$440 million.

Using final demand multipliers from the RIMS II model, the LAEDC estimates that the region's hospitals generated additional indirect business revenues of \$39.3 billion, for a total of \$65.6 billion in economic output. Similarly, we estimate that hospital-dependent direct business revenues at offices of physicians generated a further \$10.3 billion in indirect activity, for a total of \$18.2 billion in economic output during 2004. Hospital-related lab work generated indirect business revenues of \$330 million, for a total of \$600 million in economic output. Ambulance services generated \$660 million in indirect activity, for a total economic output of \$1.1 billion.

Thus, hospital-related business revenues from the hospitals themselves, offices of physicians, medical and diagnostic laboratories, and ambulance services combined to account for direct business revenues of \$34.9 billion and total business revenues of \$85.5 billion in Southern California.

HOSPITAL PURCHASES

Hospital-related activities generate billions of dollars in business revenues each year. One way to illustrate this economic impact is to consider just the purchases of goods and services made by hospitals as part of their daily operations. Table 7.3 provides estimates of the combined value of purchases made by 212 Southern California hospitals in fiscal year 2004.

Table 7.3 Purchases Made by Southern California Hospitals (FY 2004, Millions of Dollars)		
Services	\$3,490	
Supplies	\$4,490	
Utilities, Telephone, Non-Liability Insurance & Misc.	\$1,160	
Leases & Rentals (Buildings, Equipment & Improvements)	\$440	
Professional Liability Insurance (Incl. Self-Insured)	\$410	
Total*	\$10,000	

^{*}Total may not sum due to rounding. Sources: OSHPD: LAEDC

We estimate hospitals in Southern California spent \$3.5 billion on services purchased from outside contractors and vendors, such as diagnostic imaging services, equipment repairs and maintenance, and collection services. They spent another \$4.5 billion on medical supplies, drugs, food, and office supplies, plus \$1.16 billion on utilities, telephone service, non-liability insurance, and miscellaneous items. Hospitals also spent \$440 million on the lease and rental of buildings, equipment, and leasehold improvements, and \$410 million on professional liability insurance.

All told, we estimate Southern California hospitals made recurring purchases of goods and services as part of their day-to-day operations worth \$10.0 billion in 2004.

HOSPITAL-RELATED EMPLOYMENT

Hospital employment in Southern California ranges from fewer than 50 full-time equivalent (FTE) jobs at small, specialized facilities to 5,000 FTE jobs at a handful of giant medical centers. Table 7.4 summarizes the amount of employment in Southern California dependent on hospital-related operations.

Table 7.4 Hospital-Related Employment in Southern California (FY 2004, Full-time Equivalents)			
	Direct	Indirect	Total
Hospitals	204,000	250,000	454,000
Offices of Physicians			166,000
Medical & Diagnostic Laboratories			4,800
Ambulance Services			13,900
Total*			640,000

^{*}May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; County Medical Associations; California EDD; OSHPD: LAEDC.

Hospitals in Southern California directly employed the full-time equivalent of 204,000 people in 2004. Using regional RIMS II direct effects multipliers for hospitals, we estimate that hospitals generated indirect employment of a further 250,000 jobs, thus sustaining total FTE employment of 454,000 jobs. Private ambulance services sustained a total of 13,900 FTE jobs. Applying RIMS II final demand multipliers to the business revenues in Table 7.2, we estimate that offices of physicians (166,000) and medical labs (4,800) between them sustained hospital-related employment of 170,800 FTE jobs.

All told, hospitals and related businesses accounted for the full-time equivalent of 640,000 jobs in the 6-county region in 2004. This is an *understatement* of the actual number of workers engaged in hospital-related employment, because many work part time. Even on an FTE basis, hospital-related employment represents 9.1 percent of *all full-time and part-time* non-farm employment in Southern California.

HOSPITAL-RELATED WAGES

Hospital-related jobs in Southern California provided wages for the full-time equivalent of 640,000 workers. Table 7.5 summarizes the wages dependent on hospital-related operations throughout the region.

Table 7.5 Hospital-Related Wages in Southern California (FY 2004, Millions of Dollars)			
	Direct	Indirect	Total
Hospitals	\$10,900	\$10,300	\$21,200
Offices of Physicians			\$7,300
Medical & Diagnostic Laboratories			\$230
Ambulance Services			\$400
Total*			\$29,100

^{*}May not sum due to rounding.

Sources: U.S. Department of Commerce, U.S. Bureau of the Census; County Medical Associations; California EDD; OSHPD; LAEDC.

Hospitals in Southern California paid \$10.9 billion in direct wages in 2004. Using regional RIMS II direct effects multipliers, we estimate that hospitals generated indirect wages of a further \$10.3 billion, for total annual compensation of \$21.2 billion. Private ambulance services sustained total wages of \$400 million. Applying RIMS II final demand multipliers to the business revenues in Table 7.2, we estimate that offices of physicians (\$7.3 billion) and medical labs (\$230 million) between them sustained hospital-related wages of \$7.5 billion.

All told, hospitals and related businesses accounted for \$29.1 billion in wages in Southern California, representing 7.2 percent of all non-farm compensation in the region in 2004.

HOSPITAL-RELATED TAXES

Hospitals in Southern California are an economic engine powering direct and indirect activities that sustained \$85.5 billion in business revenues, 640,000 FTE jobs, and \$29.1 billion in wages in 2004. All of this economic activity generated considerable tax revenue for the state and local governments. Table 7.6 describes the annual tax revenues sustained by the hospital-related economic activity reported in Tables 7.2 through 7.5.

Table 7.6 Tax Revenue Generated by Hospitals in Southern California (FY 2004, Millions of Dollars)		
Tax Revenue By Type of Tax		
State Income Tax	\$1,223	
Sales Tax (8.05% weighted average) State Share City Share County Share Transportation Authorities Share Subtotal	\$634 \$76 \$25 <u>\$81</u> \$816	
Total*	\$2,039	
Tax Revenue By Level of Government		
State of California	\$1,857	
Counties (Incl. transportation authorities)	\$106	
Cities	\$76	
Total*	\$2,039	

*May not sum due to rounding.

Source: LAEDC

The workers in Southern California whose wages were sustained directly or indirectly by hospital operations paid an estimated \$1.2 billion in state income taxes in 2004. Hospital purchases of taxable goods and services for operations plus the taxable purchases of direct and indirect workers spending their wages generated \$816 million in state sales taxes. Thus, hospitals sustained economic activity that generated \$2.0 billion in income and sales taxes for the state and local governments in 2004. Most of the revenue – \$1.9 billion – was collected by the state government from state income and sales taxes. The six county governments and their respective transportation authorities split \$106 million from state sales taxes related to hospital activity. Cities across the region shared \$76 million in sales tax revenue related to the ongoing operation of hospitals.

Note that the actual amounts collected by each level of government in 2004 was higher than we have reported here since there are other taxes we have not counted, as described in the methodology section.

HOSPITAL CONSTRUCTION

There is a great deal of hospital construction recently completed, underway, or planned in Southern California. Tracking the dollar value of construction is difficult, so we present three different measures of construction activity in Table 7.7. The message from all three measures is the same: many Southern California hospitals have invested, are investing, and will invest billions of dollars in their facilities.

Table 7.7 Hospital Construction in Southern California (Number of Jobs, Millions of Dollars)			
	Work In Progress	Past 5 Years 2000-2004	Next 5 Years 2005-2009
Construction Spending	\$3,100	\$3,700	\$8,200
Business Revenues	\$7,800	\$9,300	\$20,500
Jobs	63,000	74,400	166,600
Wages	\$2,500	\$3,000	\$6,600
Tax Revenues			
State Income Tax	\$106	\$126	\$278
Sales Tax	\$126	\$150	\$323
Total**	\$232	\$276	\$601

Sources: OSHPD; Hospital Surveys; news reports; Turner Construction; LAEDC.

Hospitals reporting to OSHPD had spent a cumulative \$3.1 billion by the end of fiscal year 2004 on construction projects that were in progress, but not yet complete. Projects finished during the year were not reported, nor was value of the projects still "pending", i.e. the amount that would be spent to finish the work. Spending on the in-progress projects generated total business revenues in the region of \$7.8 billion and created employment equivalent to 63,000 one-year full-time jobs with wages of \$2.5 billion. The resulting economic activity generated \$232 million in tax revenues, \$106 million from state income taxes and \$126 million from sales taxes.

Separately, the LAEDC looked at major hospital construction projects during the five-year period ending in 2004. We found \$3.7 billion in such projects, sufficient spending to generate \$9.3 billion in business revenues and 74,400 FTE one-year jobs with wages of \$3.0 billion. State and local governments shared \$276 million in tax revenue from these projects, including \$126 million in state income taxes and \$150 million in sales taxes. Looking forward, we documented projects already started or planned that will cost \$8.2 billion during the period 2005-2009. These projects will create business revenues of \$20.5 billion and create 166,600 FTE one-year jobs with wages of \$6.6 billion. State and local governments will share \$601 million in state income and sales taxes generated by spending on these projects.

^{**} Totals may not add due to rounding