



Rea & Parker Research

**ANGELES LINK PHASE 1
EMPLOYMENT IMPACT ANALYSIS
FINAL REPORT – DECEMBER 2024**

SoCalGas commissioned this Employment Impact Analysis from Rea & Parker Research. The analysis was conducted, and this report was prepared, collaboratively.

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SOUTHERN CALIFORNIA GAS COMPANY: ANGELES LINK EMPLOYMENT IMPACT ANALYSIS

EXECUTIVE SUMMARY

The purpose of this report is to estimate the economic and employment impact of the Southern California Gas Company Angeles Link project. For the purposes of this report, the Angeles Link project is assumed to be located in Los Angeles¹, Kern, Kings, and Fresno counties. The following economic and employment factors will be estimated in this report:

- Direct output and employment² impacts associated with the direct construction, operation, and maintenance of the Project
- Direct, indirect and induced impacts to the regional economic output, regional employment and regional employee compensation,
- Disadvantaged Business Enterprise (DBE) participation, based upon SoCalGas's stated policy and experience.
- Tax revenues during construction and operation, including:
 - Property taxes
 - Payroll taxes (California only)
 - Sales/Use tax

This report identifies the potential direct, indirect and induced economic and employment impacts for the four-county area in total and disaggregated by county. This executive summary provides an overview, while the body of the report provides more details.

Key Findings

Construction

- The total direct expenditure benefits for the five-year construction period are estimated to be \$9.2 billion³, which amount expands to \$13.9 billion when the multiplier effects of spending and re-spending (indirect and induced benefits) are factored into the analysis.
 - Direct impacts include employment, payroll, and revenue uniquely and specifically generated by the project's revenues and expenditures.

¹ Los Angeles County estimation includes pipeline mileage within Orange and Ventura counties.

² Employment represents full-time, part-time, and seasonal employment.

³ Construction cost estimates were provided by SoCalGas's cost estimate chapter in the Pipeline Sizing & Design Criteria study and subject to change.

- Indirect impacts are the purchases made between and among industries and government as they respond to new demands of directly impacted industries.
 - Induced impacts include the value of goods and services purchased throughout the regional economy -- goods and services not directly associated with the project, but which would otherwise not be purchased without the activity generated by that project.
- In total, there could be almost 53,000 direct construction-related jobs generated by the project.
 - The total employment impact could increase to almost 75,000 jobs when indirect and induced impacts are included.
 - Labor income during construction, including benefits, payroll taxes, and proprietor income, is estimated to equal \$3.8 billion direct (\$72,000 per job) and \$5.3 billion direct, indirect, and induced (\$71,000 per job).
 - Diverse Business Enterprises (DBEs) could directly receive \$4.0 billion in the form of construction labor and materials contracts and could create 23,000 jobs during these years.
 - State and local governments are estimated to benefit by \$213.5 million in total payroll, sales, and property taxes during construction.

Annual Operations

- The total direct annual expenditure benefits from operations are estimated to be \$109.6 million, which expands to \$166.8 million when the multiplier effects of spending and re-spending (indirect and induced benefits) are factored into the analysis.
- In total, there could be approximately 100 direct annual operations-related jobs (actual estimate=104) in the four counties. The total employment impact increases to almost 400 annual jobs (actual estimate = 399 jobs) when indirect and induced impacts are included.
- Annual labor income, including benefits, payroll taxes, and proprietor income, is estimated to equal \$21.2 million direct (an average of \$204,000 per job) and \$41.0 million direct, indirect, and induced (an average of \$103,000 per job).
- State and local governments are estimated to benefit by \$137.4 million annually in total payroll, sales, and property taxes from Angeles Link operations.

SOUTHERN CALIFORNIA GAS COMPANY: ANGELES LINK EMPLOYMENT IMPACT ANALYSIS

The purpose of this report is to estimate the economic and employment impact of the Angeles Link project. Southern California Gas Company (SoCalGas) is proposing to construct the Angeles Link project that will be a “high-pressure, non-discriminatory pipeline system that is dedicated to public use and will transport clean, renewable hydrogen from regional third-party production and storage sites to end users in Central and Southern California, including the LA Basin, inclusive of the Ports of Los Angeles and Long Beach⁴.” Construction is planned for five years (2028-2033).



This report will develop estimates for the following economic and employment factors in the four counties traversed by one potential route for Angeles Link (Los Angeles⁵, Kern, Kings, and Fresno) and for the four counties aggregated:

- Direct output and employment impacts associated with the direct construction and operation and maintenance of the Project
- Direct, indirect and induced impacts to the regional economic output, regional employment and regional employee compensation,
- Disadvantaged Business Enterprise (DBE) participation, based upon the Owner’s stated policy and experience.
- Assessment of Bureau of Labor Statistics/Census data regarding anticipated jobs and education requirements regarding Low-Income and DBE job availability.
- Tax revenues during construction and operation, including, but not limited to:
 - Property taxes
 - Payroll taxes (California only)
 - Sales/Use tax

Economic and Employment Impact Methodology

The economic and employment impacts that Angeles Link could be expected to provide to the various counties discussed herein is modeled in this report using the IMPLAN Input-

⁴ Description courtesy of SoCalGas.

⁵ Los Angeles County estimates are inclusive of pipeline mileage within Orange and Ventura counties.

Output Model. The 1976 National Forest Management Act required the USDA Forest Service to create 5-year management plans. These plans required alternative land management options to be presented, each of which would have resource and socio-economic effects on local communities. The Forest Service, in cooperation with the Federal Emergency Management Agency (FEMA), contributed considerable resources to the creation of FORPLAN (a linear programming model used to estimate land management resource outputs) and IMPLAN to estimate the economic effects of these outputs on local communities.

In 1988, the Agricultural Economics Department of the University of Minnesota made the decision to offer IMPLAN software, data, and technical support to non-Forest Service users. In 1993 Minnesota IMPLAN Group (MIG) was formed to update and improve the IMPLAN software to make it more functional and accessible to a wider range of users. This new version used a modeling system based on the creation of a Social Accounting Matrix (SAM) – an extension of the input-output accounts, and resulting SAM Multipliers. IMPLAN Pro 2.0 became available in May 1999, IMPLAN Version 3.0 was released on November 3, 2009, with an updated version 3.1 issued since. IMPLAN now operates from a Cloud platform.

IMPLAN's Social Accounting System is an input-output model that describes and estimates the industry average transactions that occur between enterprises that produce goods and services and intermediate and final consumers of those products and services. The IMPLAN Social Accounting Matrix, therefore, is designed to provide a complete and accurate “snapshot” of the economy and its spending patterns.

At the heart of economic impact models are multipliers. Multipliers are a numeric way of describing the secondary impacts stemming from an economic event. For example, an employment multiplier of 1.8 indicates that for every 10 employees hired in the given industry, 8 additional jobs would be created in other industries, such that 18 total jobs would be added to the given economic region. Industries that produce goods and services for consumer consumption must purchase products, raw materials, and services from other companies to create their product. These vendors must also procure goods

and services. This is a continuous cycle that ultimately depletes the funds from the region's economy. There are three types of effects measured with a multiplier: the direct, the indirect, and the induced effects. The direct effect is the known or predicted change in the local economy that is to be studied. The indirect effect is the business-to-business transactions required to satisfy the direct effect. Finally, the induced effect is derived from local spending on goods and services by people working to satisfy the direct and indirect effects.

- Direct impacts include employment, payroll, and revenue uniquely and specifically generated by the project's revenues and expenditures.
- Indirect impacts are the changes in inter-industry purchases and government expenditures as they respond to new demands of directly affected industries.
- Induced impacts include the value of goods and services purchased by money generated by direct and indirect impacts throughout the regional economy -- goods and services not directly associated with the project, but which would otherwise not be purchased without the activity generated by that project.

Two distinct economic impacts could occur due to the project: 1) construction of the project could generate economic and employment activity, and 2) post-construction on-going operations of Angeles Link could generate additional economic and employment activity for years to come. These impacts are the focus of the balance of this report.

Economic and Employment Impact of Construction

The economic impact of the construction of Angeles Link is estimated using the IMPLAN category of Construction of New Power and Communications Structures. The IMPLAN Industry Schemes represent rollups of North American Industry Classification System (NAICS) descriptions, and each IMPLAN Industry has its own spending pattern derived from Bureau of Economic Analysis (BEA) expenditures patterns. **Table 1** shows the multipliers and economic impact factors for the four counties. Application of these multipliers to the total construction cost of approximately \$9.2 billion is discussed below

and reflected in summary form in **Table 2** and in individual impact detail in **Charts 1, 2, 3, and 4⁶**.

Table 1 IMPLAN Multipliers SoCalGas Angeles Link: Construction				
	Fresno County	Kern County	Kings County	Los Angeles County
Direct, Indirect and Induced Output Multiplier	1.513158	1.430898	1.228683	1.646880
Direct Jobs⁷ per \$1 million output	5.33	5.23	6.31	5.84
Direct, Indirect, and Induced jobs per \$1 million output	8.07	7.44	7.55	8.72
Direct Labor Income⁸ per \$1 million output	\$443,373	\$435,486	\$381,944	\$420,037
Direct, Indirect, and Induced Labor Income per \$1 million output	\$605,943	\$564,282	\$441,121	\$633,060

⁶ Construction cost estimates shown in Table 2 and reflected in Charts 1, 2, 3, and 4 were provided by SoCalGas's cost estimate chapter in the *Pipeline Sizing & Design Criteria study* in total and for each county.

⁷ An Industry-specific mix of full-time, part-time, and seasonal employment. An annual average that accounts for seasonality and follows the same definition used by the Bureau of Labor Statistics (BLS) and BEA. In IMPLAN, Employment is not equal to full time equivalents (FTE). For these pipeline transportation jobs, FTE is 97.15% of the IMPLAN total. Therefore, IMPLAN methodology has estimated 49,932 direct annual construction and construction-related jobs, whereas an FTE estimate would be 48,509 FTE jobs. This difference is considered by this report to be insignificant and likely within IMPLAN's margin of error.

⁸ Labor Income consists of two parts. The first, Employee Compensation, is the total payroll cost of wage and salary employees to the employer. This includes wages and salaries, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment insurance taxes, etc.). It is also referred to as fully-loaded payroll. The second piece of Labor Income is Proprietor Income (PI). PI consists of payments received by self-employed individuals and unincorporated business owners.

**Table 2
Economic and Employment Impact of SoCalGas Angeles Link: Construction**

	Fresno County	Kern County	Kings County	Los Angeles County	Four-County Total
Direct Economic Impact (=Construction Cost)	\$481,917,244	\$2,120,435,874	\$1,819,041,255	\$4,742,672,536	\$9,164,066,910
Direct, Indirect and Induced Economic Impact⁹	\$729,216,913	\$3,034,127,451	\$2,300,519,647	\$7,810,612,546	\$13,874,476,577
Direct Construction Jobs¹⁰	2,569	11,090	11,478	27,697	52,834
Direct, Indirect and Induced Jobs during Construction¹¹	3,889	15,776	13,734	41,536	74,755
Direct Labor Income during Construction¹²	\$213,669,094	\$923,420,625	\$694,772,130	\$1,992,099,462	\$3,823,961,310
Direct, Indirect and Induced Labor Income during Construction¹³	\$292,014,812	\$1,196,524,877	\$802,417,607	\$3,002,395,375	\$5,293,352,721
Direct Labor Income per Job Created¹⁴	\$83,184	\$83,267	\$60,530	\$71,924	\$72,377
Labor Income per Total Direct, Indirect, and Induced Jobs	\$75,086	\$75,844	\$58,427	\$72,599	\$70,809

⁹ Construction Cost * Output Multiplier for each county

¹⁰ Construction Cost * Direct Jobs per \$ million Multiplier for each county

¹¹ Construction Cost * Direct, Indirect and Induced Jobs Multiplier for each county.

¹² Construction Cost * Direct Labor Income Multiplier for each county

¹³ Construction Cost * Direct, Indirect and Induced Labor Income Multiplier for each county

¹⁴ Labor Income/Jobs Created—includes benefits and proprietor income

Economic Impact of Construction

Table 2 shows that the four counties assumed to be traversed by Angeles Link in this analysis are estimated to directly benefit by an amount equal to the construction costs of \$9,164,066,910, with Los Angeles County receiving more than one-half of these expenditures (approximately \$4.7 billion), followed by Kern County (more than 2.1 billion), Kings County (more than \$1.8 billion), and Fresno County (just shy of \$0.5 billion). When indirect and induced factors are introduced, this amount of economic impact is estimated to increase by \$4.7 billion to 13.9 billion. Los Angeles County is estimated to account for more than one-half of the activity (more than (\$7.8 billion). Kern County (more than \$3.0 billion), Kings County (\$2.3 billion), and Fresno County (approximately three-fourths of one billion dollars) follow. **Chart 1** presents a graphical depiction of this economic impact.

Construction Period Jobs

Utilizing the IMPLAN job generation model “power structure construction” category from **Table 1**, Angeles Link can be expected to generate between 5.23 direct jobs per million dollars of construction cost (Kern County) and 6.31 Jobs per \$ million (Kings County)—equaling a total of 52,834 direct jobs during the planned construction period.

Again, Los Angeles County’s 27,697 jobs are estimated to account for more than one-half of direct job creation, followed by Kings County (11,478 jobs), Kern County (11,090 jobs) and Fresno County (2,569 jobs). This number of jobs increases to almost 75,000 when Indirect and induced impacts are added. Kern County demonstrates a greater multiplier than does Kings County and moves ahead of Kings County when indirect and induced jobs are included. These data are found in **Table 2** and **Chart 2**.

Chart 1

SoCalGas: Angeles Link

Economic Impact--Construction

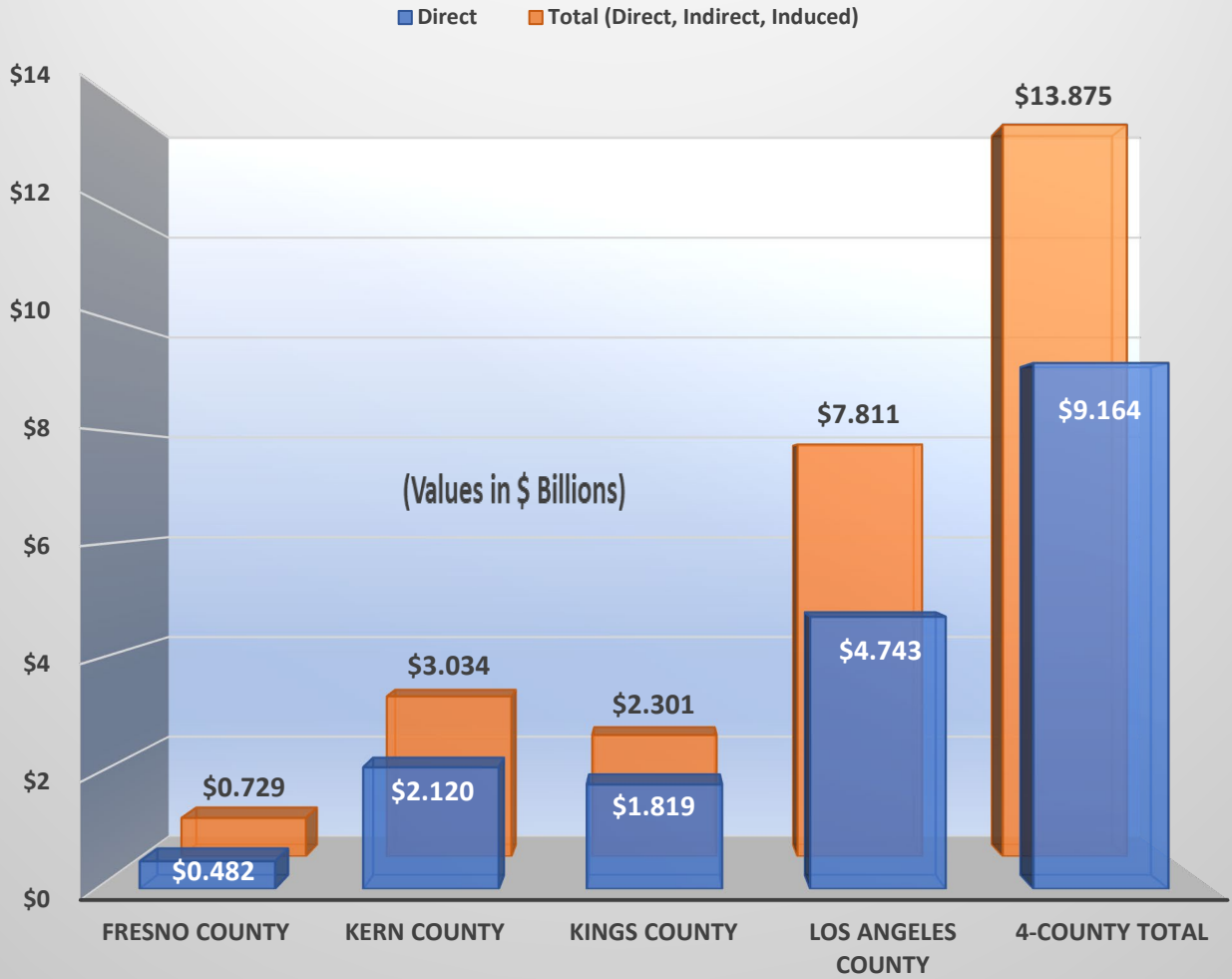
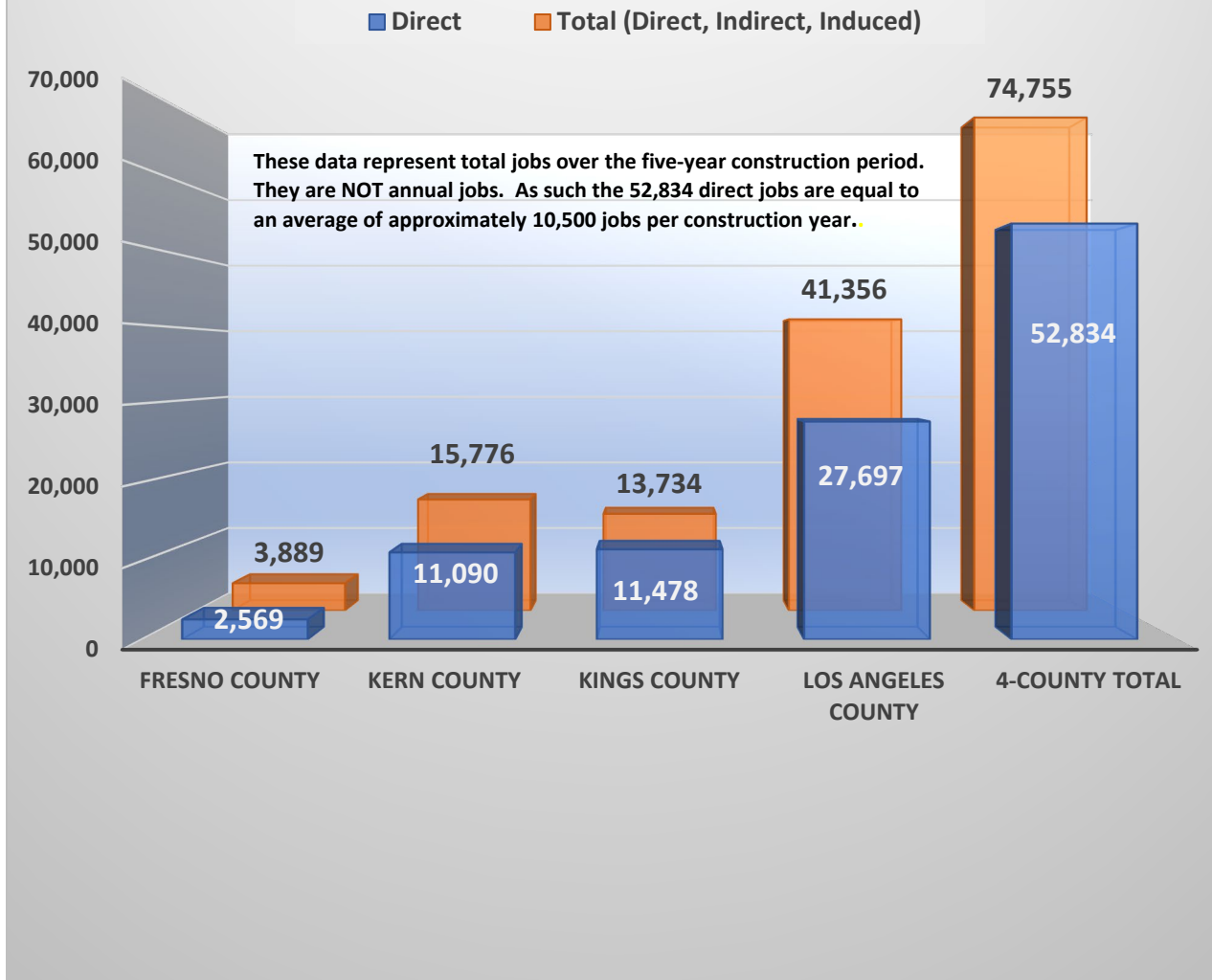


Chart 2 SoCalGas: Angeles Link Job Generation Construction Period



Labor Income during Construction

Direct labor income is estimated to total \$3.8 billion according to IMPLAN (\$72,400 per direct construction job¹⁵). The four counties are estimated to reap indirect and induced

¹⁵ Including benefits, payroll taxes, and proprietor income

labor income of almost \$1.5 billion (\$67,000 per indirect and induced job). Total construction-period labor income, therefore, is estimated to equal \$5.3 billion (\$70,800 per direct, indirect, and induced job). Kern County and Fresno County demonstrate the highest labor income per job (**Table 2** and **Charts 3 and 4**). Los Angeles County follows closely, with Kings County quite a bit lower.

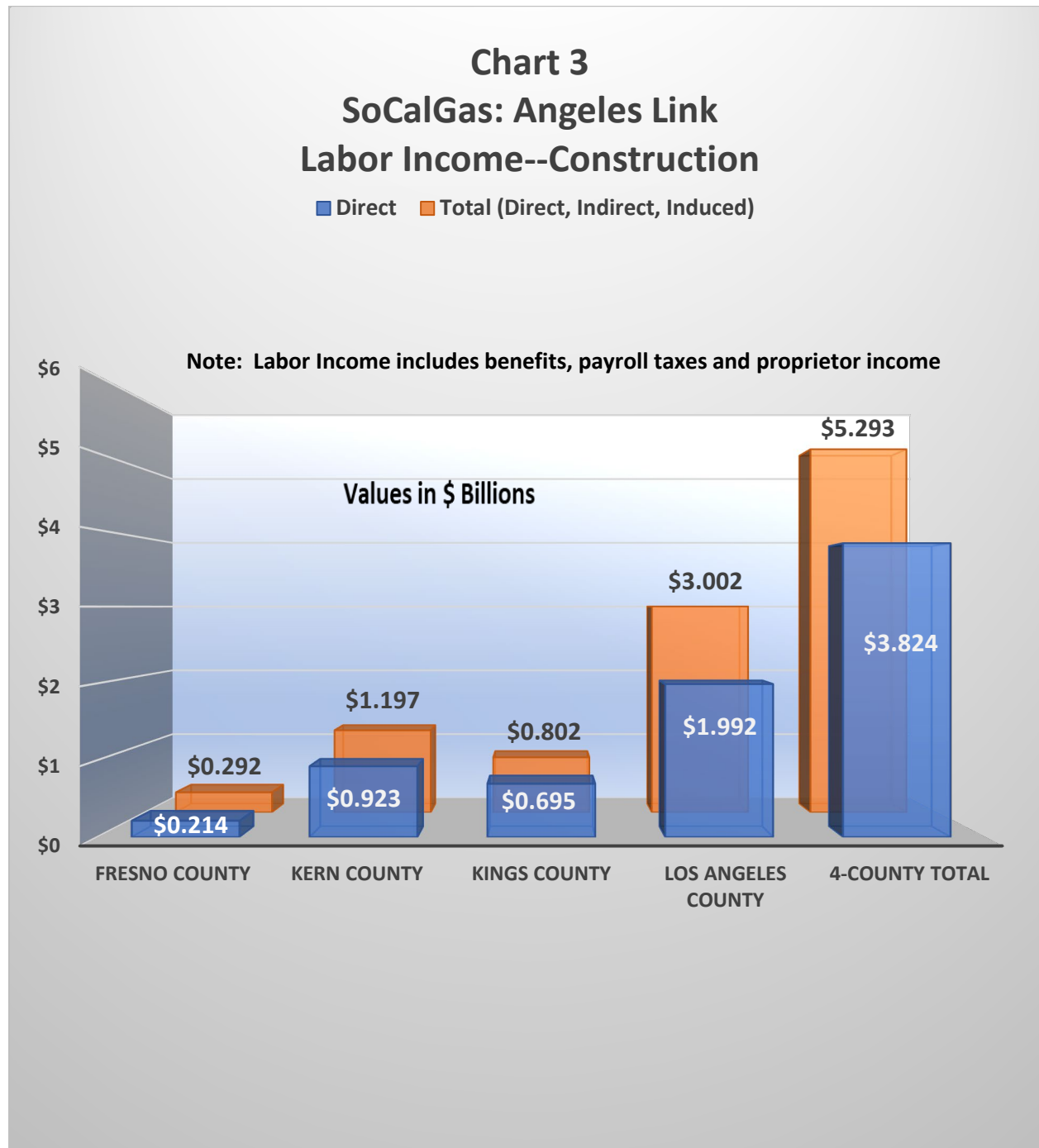
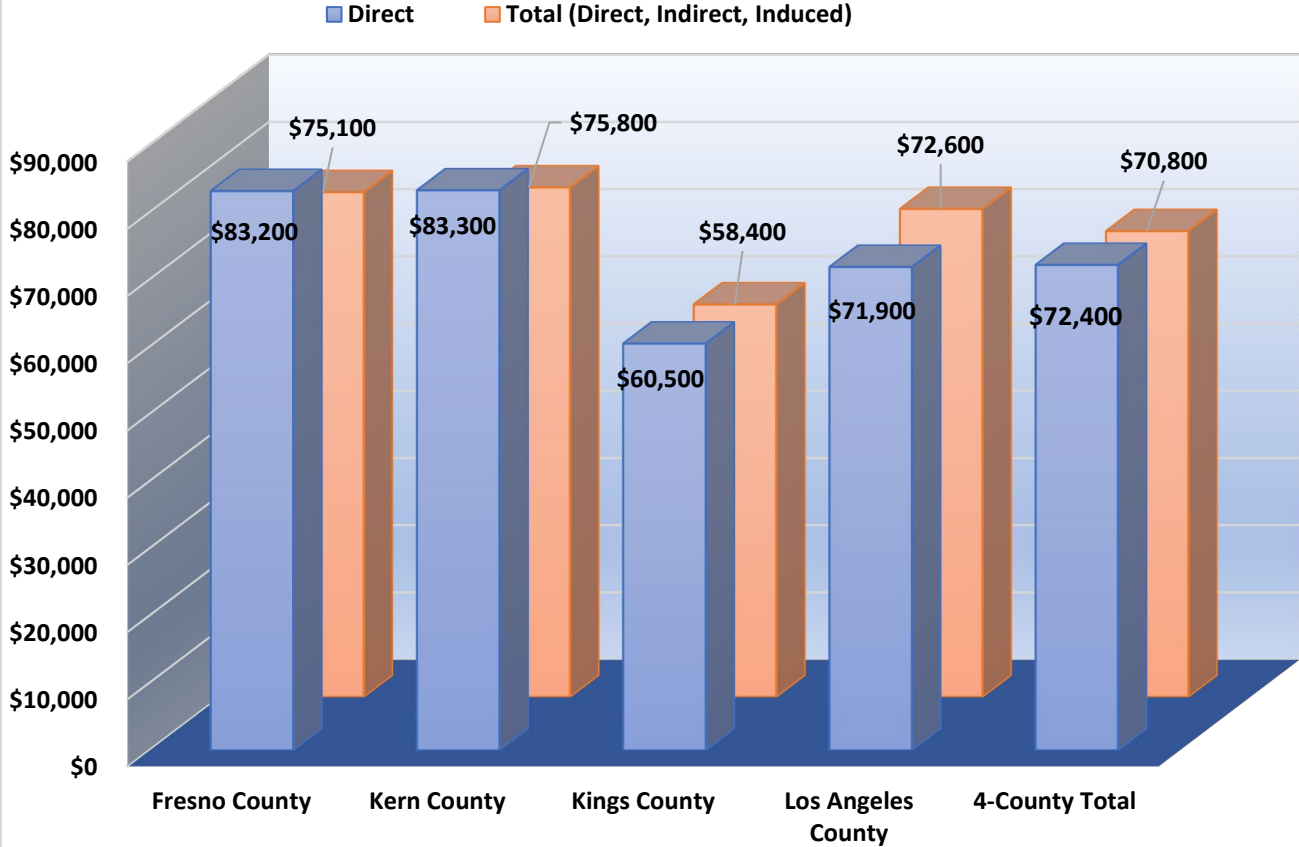


Chart 4 SoCalGas: Angeles Link Labor Income per Job Generated during Construction

Note: Labor Income includes benefits, payroll taxes and proprietor income



Diverse Business Enterprises Workers During Construction

Diverse Business Enterprises (DBEs) could comprise a significant portion of the construction materials and labor components of the Angeles Link. In 2023, SoCalGas purchased 44% of its goods and services from diverse suppliers – enterprises owned by minorities, women, LGBT individuals, and disabled veterans¹⁶. Continuing purchases spent with diverse suppliers at a minimum of 44% is the objective for SoCalGas's Angeles Link. As such, it can be estimated that over \$4.0 billion¹⁷ will be spent with or contracted to Diverse Business Enterprises in Los Angeles County, Kern County, Kings County, and Fresno County for the first phase of the Angeles Link construction¹⁸. Direct DBE jobs are estimated to be more than 23,000, using the same 44 percent factor.

Since the proportion of these expenditures that DBE enterprises will spend with other DBE enterprises is unknown, it is not possible to precisely apply multipliers to these DBE contracted expenditures that can indicate induced and indirect DBE benefits; however, were these funds to be spent and re-spent among other DBE firms in a manner similar to that projected for direct expenditures, these expenditures could multiply to \$6.1 billion of DBE economic impact and almost 33,000 direct, indirect, and induced DBE jobs during the project construction period.

¹⁶ <https://www.socalgas.com/for-your-business/supplier-diversity>
https://www.socalgas.com/sites/default/files/2024-03/2023-24_SD_annual_report.pdf

¹⁷ Direct expenditures of \$9,164,066,910 * 44%

¹⁸ This standard can be met anywhere in the project area and cannot be delineated by County. Therefore, this determination is made for the aggregated 4-county region.

Economic and Employment Impact During Annual Operations

Angeles Link’s annual operations fall into the IMPLAN category of Pipeline Transportation. **Table 3** shows the multipliers and economic impact factors for the four counties assumed to be traversed by Angeles Link separately and aggregated, as was provided for construction estimates.

Application of these multipliers to Angeles Link’s annual operations is discussed below and reflected in **Table 4** and **Charts 5, 6, 7, and 8**.

Table 3 IMPLAN Multipliers SoCalGas Angeles Link: Annual Operations				
	Fresno County	Kern County	Kings County	Los Angeles County
Direct, Indirect and Induced Output Multiplier	1.571672	1.442175	1.209915	1.672197
Direct Jobs¹⁹ per \$1 million output	0.89	0.95	0.98	0.94
Direct, Indirect and Induced Jobs per \$1 million output	3.88	3.58	2.26	4.31
Direct Labor Income²⁰ per \$1 million output	\$211,059	\$189,733	\$186,146	\$197,599
Direct, Indirect and Induced Labor Income	\$387,569	\$440,999	\$254,239	\$443,384

¹⁹ An Industry-specific mix of full-time, part-time, and seasonal employment. An annual average that accounts for seasonality and follows the same definition used by the Bureau of Labor Statistics (BLS) and BEA. In IMPLAN, Employment is not equal to full time equivalents (FTE). For these pipeline transportation jobs, FTE is 92.16% of the IMPLAN total. Therefore, IMPLAN methodology has estimated 104 direct annual jobs operating and maintaining the pipeline and compressors; whereas an FTE estimate would be 96. This difference is considered by this report to be inconsequential.

²⁰ Labor Income consists of two parts. The first, Employee Compensation, is the total payroll cost of wage and salary employees to the employer. This includes wages and salaries, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment insurance taxes, etc.). It is also referred to as fully-loaded payroll. The second piece of Labor Income is Proprietor Income (PI). PI consists of payments received by self-employed individuals and unincorporated business owners.

per \$1 million output				
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Annual Operations Economic Impact

Table 4 Annual Economic and Employment Impact of SoCalGas Angeles Link:					
	Fresno County	Kern County	Kings County	Los Angeles County	Four-County Total
Direct Economic Impact (=Annual Operating Expenditures)	\$4,819,172	\$21,204,359	\$27,684,050	\$55,937,098	\$109,644,673
Direct, Indirect and Induced Economic Impact²¹	\$7,285,008	\$30,580,396	\$33,495,347	\$95,469,234	\$166,829,985
Direct Annual Jobs²²	4	20	27	53	104
Direct, Indirect and Induced Annual Jobs²³	19	76	63	241	399
Direct Labor Annual Income²⁴	\$1,012,643	\$4,023,171	\$5,153,362	\$11,053,100	\$21,242,176
Direct, Indirect and Induced Annual Labor Income²⁵	\$1,863,275	\$7,311,391	\$7,038,365	\$24,801,611	\$41,014,642
Direct Annual Labor Income per Job Created²⁶	\$236,099	\$199,719	\$189,944	\$210,211	\$203,698
Annual Labor Income per Total Direct, Indirect, and Induced Jobs	\$99,906	\$96,584	\$112,495	\$102,873	\$103,051

²¹ Operating Expenditures* Output Multiplier for each county

²² Operating Expenditures * Direct Jobs per \$ million Multiplier for each county

²³ Operating Expenditures * Direct, Indirect and Induced Jobs Multiplier for each county.

²⁴ Operating Expenditures * Direct Labor Income Multiplier for each county

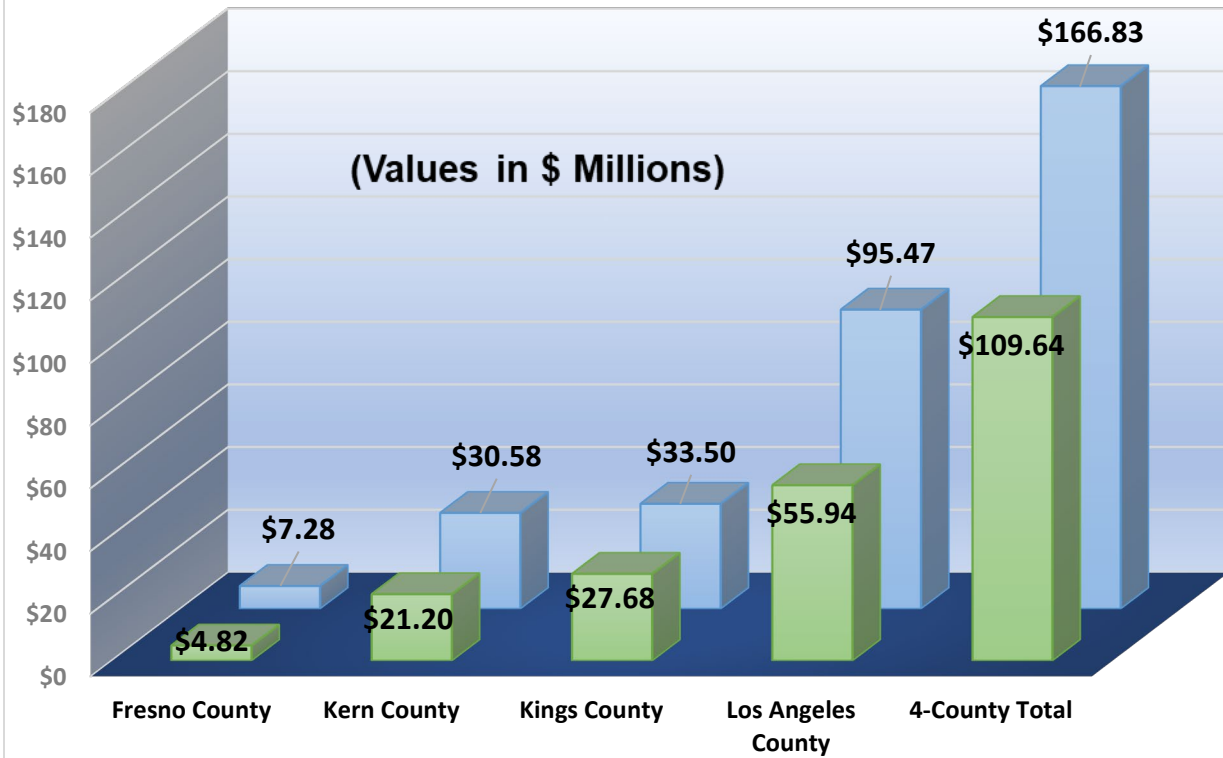
²⁵ Operating Expenditures *Direct, Indirect and Induced Labor Income Multiplier for each county

²⁶ Labor Income/Jobs Created—includes benefits and proprietor income

Table 4 shows that the estimated annual direct operating cost in these four counties totals approximately \$110 million per year (\$109,644,673). This consists of annual pipeline operating costs estimated at 1 percent of capital (construction) costs (\$91,640,669) plus variable costs for the system's compressors (\$18,004,004). The 1 percent operating costs are allocated in **Table 4** to each county in proportion to their capital costs, and compressor costs are split between Kings County (\$9,493,637) and Los Angeles County (\$8,510,367). **Chart 5** presents a visual depiction of the impacts to these counties from the annual operations of Angeles Link.

Chart 5 SoCalGas: Angeles Link Economic Impact--Annual Operations

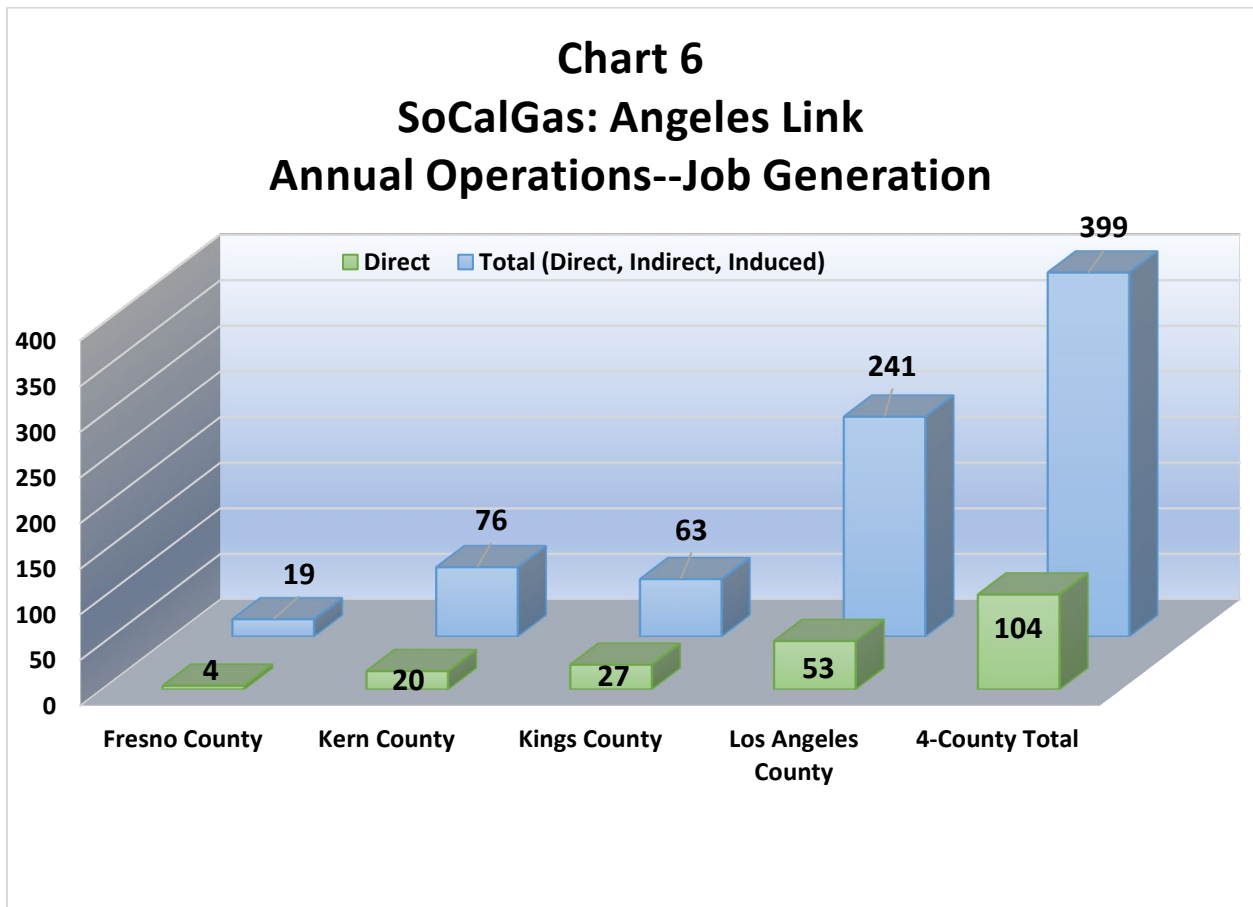
■ Direct ■ Total (Direct, Indirect, Induced)



Annual Operations Jobs

Utilizing IMPLAN job generation model pipeline transportation category (**Table 3**), Angeles Link can be expected to generate a total of 104 direct jobs annually during

operations. Again, Los Angeles County’s 53 jobs represent approximately one-half of direct job creation, followed by Kings County (27 direct jobs), Kern County (20 direct jobs) and Fresno County (4 direct jobs). This number of jobs increases almost four-fold to 399 when Indirect and induced jobs are added. Los Angeles County is dominant with over 60 percent of all direct, indirect, and induced jobs and Kern County again demonstrates a greater multiplier than Kings County and moves ahead of Kings County when indirect and induced jobs are included. These data are found in **Table 4** and **Chart 6**.



Labor Income from Annual Operations

Direct labor income is estimated to total just over \$21 million (\$21,242,176) according to IMPLAN (\$203,700 per direct annual operations job). Considering that the calculation includes benefits, payroll taxes, and income to business owners, this figure represents a broader measure of income than what is directly received by employees alone.

The four counties are estimated to gain indirect and induced labor income of \$19,772,466—\$67,000 per indirect and induced job. Total annual labor income from operations is estimated to equal approximately \$41.0 million (\$103,100 per direct, indirect, and induced job). Unlike construction, where Kern County and Fresno County demonstrated the highest labor income per job and Kings County was lowest by far, Kings County demonstrates the highest annual labor income at \$112,500 per worker (**Table 2** and **Charts 7 and 8**).

Chart 7 SoCalGas: Angeles Link Annual Operations Labor Income

■ Direct ■ Total (Direct, Indirect, Induced)

Note: Labor Income includes benefits, payroll taxes and proprietor income

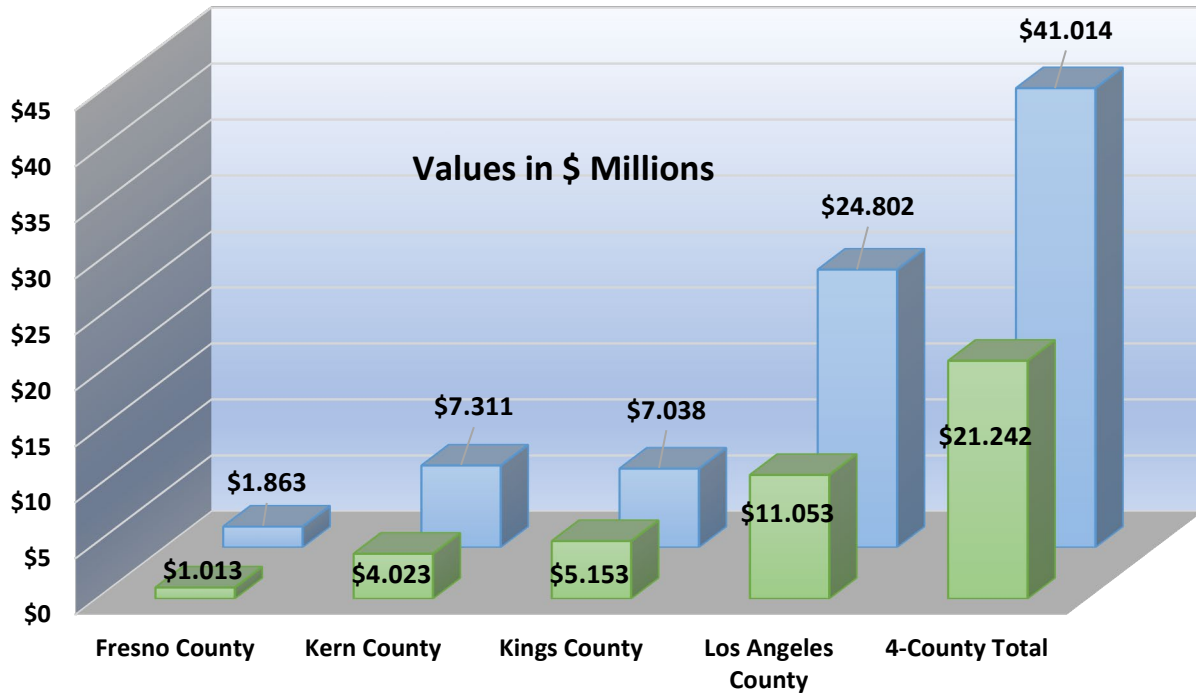


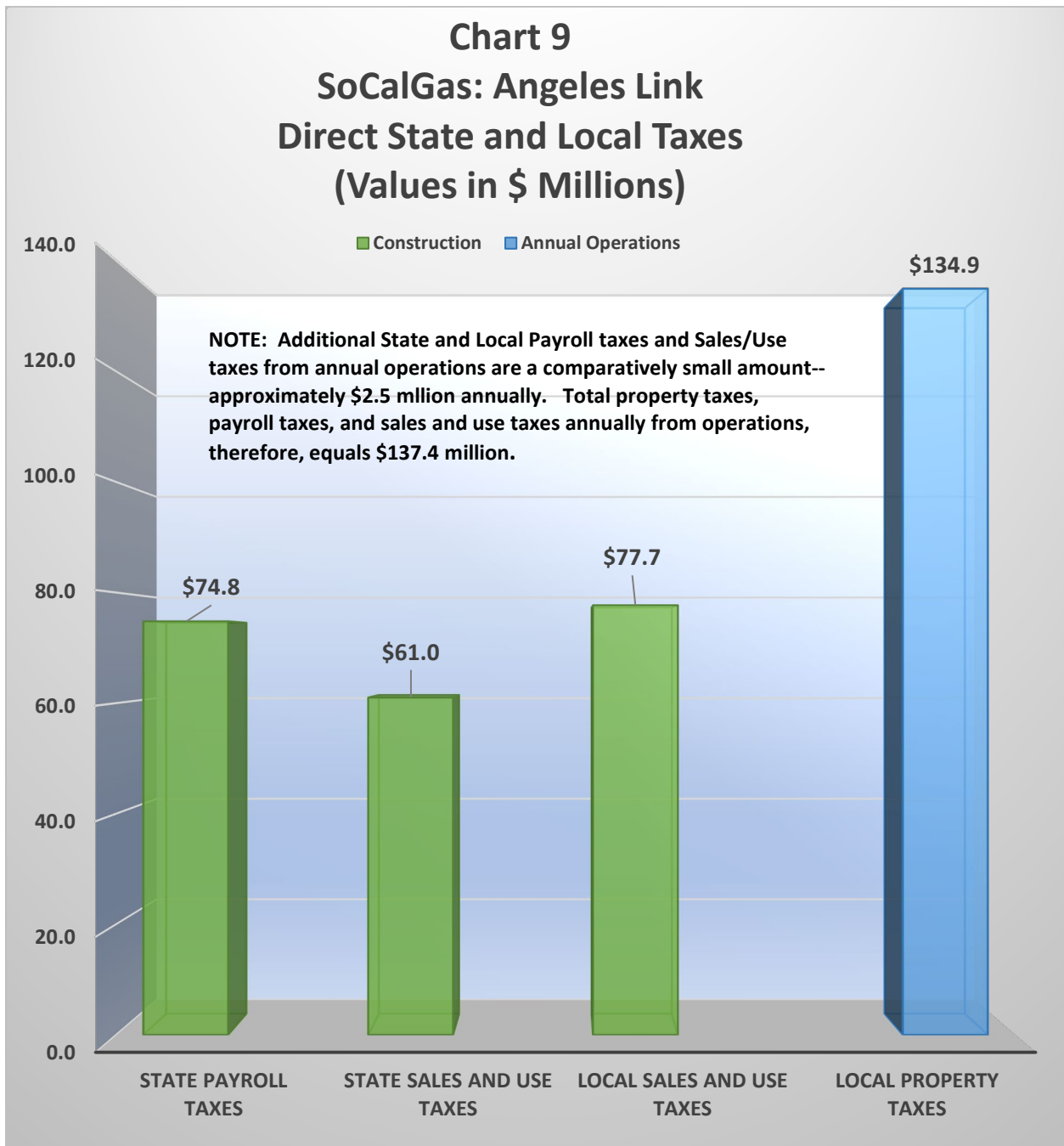
Chart 8 SoCalGas: Angeles Link Annual Operating Labor Income per Job Created

Note: Labor Income includes benefits, payroll taxes and proprietor income



Payroll, Sales, and Property Tax Revenue: State of California and Four Counties

Chart 9 indicates the payroll, sales and property tax revenue that is estimated to be received by the State and the four counties during construction and then from annual operations of Angeles Link.



During construction, it is anticipated that the State of California could receive at least \$74.8 million in payroll taxes and \$61.0 million in sales and use taxes. It is also anticipated that local governments could receive \$77.7 million in sales and use taxes during the construction period. Annual operations could generate \$134.9 million in local property taxes. A smaller amount of annual payroll and sales/use taxes (approximately \$2.5 million annually) could accrue to the State and local governments from operations. These estimates are based on the following facts and assumptions.

State payroll taxes consist of three components:

- Unemployment Insurance (UI) paid by the employer at a rate of 1.5%-to-6.2% of the first \$7,000 received by the employee in any given calendar year. Using the initial rate that new employers pay of 3.4%, this computes to \$238 per employee per year. Some construction workers will work in more than one year and others will be part-time. Accordingly, the estimated number of construction period direct, indirect, and induced workers (74,775) will likely be lower than the number of workers for whom the tax is ultimately payable. Assuming that there are 1.5 times more annual workers for whom unemployment insurance is paid than the IMPLAN estimate for total jobs created, it can be very conservatively estimated that approximately \$357 will be paid to the State for each of the IMPLAN estimated 74,775 workers during the five-year construction period. That computes to approximately \$26.7 million in State of California Unemployment Insurance taxes during construction and an additional \$0.14 million annually during operations.²⁷
- Employment Training Tax (ETT) for the State is 0.1% of the first \$7,000. Again, using the 1.5 worker factor for the construction period, this computes to \$7.8 million during construction.²⁸ Annual operations are a modest \$0.04 million.
- State Disability Insurance Tax (SDI). Beginning January 1, 2024, this tax is set at 1.1% of earnings, with no limit on earnings for tax purposes. As discussed above, this report estimates construction period labor income at \$5.3 billion. Recognizing

²⁷ 399 direct, indirect, and induced annual workers * \$357

²⁸ 74,755*(.01*7,000)*1.5

that this amount includes payroll taxes, benefits, and proprietor income, 75% of this total will be estimated to be taxable earnings, resulting in \$43.7 million in SDI during construction and \$0.68 million for annual operations²⁹.

- Total State payroll taxes from these three taxes during construction are, therefore, estimated to equal \$78.2 million, with an additional \$0.86 million annually from operations (**Chart 9**).

Sales and Use taxes are received by both the State and Local governments. The total amount depends upon where the goods are purchased (California county, other states, international) and if the goods are taxable at all. That said, past studies that the author has conducted for various California utilities, among others, indicates that sales and use taxes during construction have averaged approximately 1% of the total economic impact. The basic sales tax rate in California is 7.25%; however, localities can add up to 3% to this tax for local purposes. As such, the average sales tax rate in the State is presently 8.56%. Of this amount, 3.9375% goes to the State General Fund, 1% goes to the jurisdiction in which the sale took place, 1.5625% goes to counties for health and social welfare programs, 0.5% goes to cities and counties for public safety and 0.25% goes to counties for transportation. The difference between the 7.25% basic rate and 8.56% average actual sales tax rate represents an additional 1.31% for localities. As such, the 1% construction period sales and use tax estimate (\$138.7 million)³⁰ is allocated in this analysis 44% to the State (\$61.0 million) and 56% to localities (\$77.7 million)—**Chart 9**. Sales and Use taxes from annual operations is estimated to total \$1.67 million (.73 million to the State and .94 locally).

Property taxes represent the largest source of revenue for localities. The State receives almost no property tax revenue; property tax is dedicated to school districts, counties,

²⁹ A commonly used formula to calculate employee cost was first coined by Massachusetts Institute of Technology senior lecturer and Main Street Partners LLC Managing Director Joseph Hadzima. Hadzima proposes in the Boston Business Journal that the true employer cost for an employee is between 1.25 and 1.4 times the worker's base salary. This includes per-employee payroll taxes and employee benefits costs and yields an estimate of 70%-80% of the total cost being base salary.

³⁰ 1% * \$13.87 billion direct, indirect, and induced impact

and city governments, and selected special districts. Property tax rates in California are 1% of the assessed value; however, local governments may add local property tax increases subject to approval by voters. The average tax rate in Los Angeles County is 1.64%, Kern County is 1.48%, Fresno County is 1.37%, and Kings County is 1.05%³¹. Applying these percentages to the construction value and assuming no additional real property construction or acquisitions as part of the indirect and induced impacts, property taxes from annual operations are estimated to be \$134.9 million per year to local governments³².

STATEMENT OF INDEPENDENT RESEARCH

Richard A. Parker, Ph.D. is President of Rea and Parker, Incorporated dba Rea & Parker Research. Rea & Parker Research is committed to independent, nonpartisan research and publication, and to maintaining the highest level of integrity in pursuit of this mission. Results were derived from an economic impact model developed using IMPLAN economic multiplier data and methodology.

Rea & Parker Research is an economic and survey/market research consulting firm based in San Diego, California. Rea & Parker Research was founded by Richard A. Parker, Ph.D. and Louis M. Rea, Ph.D. in 1984 and has grown into a well-respected, financially stable, and substantial research organization with clients throughout the State of California and the Southwest. Dr. Parker is President of Rea & Parker Research and Dr. Rea presently serves Rea & Parker Research in an occasional “of counsel” role for survey research only.

Rea & Parker Research has extensive experience in public and urban affairs regarding the collection and analysis of economic, demographic, attitudinal, and market-related data

³¹ <https://www.ownwell.com/trends/california>

³² \$77.8 million Los Angeles County, \$31.4 million Kern County, \$19.1 million Kings County, and \$6.6 million Fresno County.

through survey research, focus group analysis, and the application of statistical impact models. Dr. Parker, in particular, is a highly regarded economic consultant, especially in the areas of economic and employment impact analysis, fiscal impact analysis, urban economic development, and site specific commercial, retail, and residential financial and economic evaluation.

THE AUTHOR

- *Richard A. Parker, Ph.D.* is President of Rea & Parker Research and is Professor Emeritus in the School of Public Affairs at San Diego State University where he continues to teach graduate and undergraduate courses in statistics, survey research, urban economic development, public policy, and finance. He possesses extensive analytical experience in statistical survey research, market analysis, land use, real estate development and valuation, and transportation and water issues.
- Dr. Parker is a graduate of Brown University and the University of California--Berkeley. He earned degrees in Business Administration from those institutions (Bachelor of Science and Master of Business Administration (MBA)). He also possesses a graduate degree in City Planning (Master of City Planning) from San Diego State University and a Ph.D. in Business from UCLA and Pacific Western University.
- Dr. Parker specializes in fiscal impact studies, urban development, economic impact modeling, job generation and socioeconomic and demographic analyses. He has consulted in these fields for many public utilities, transportation agencies, general governmental agencies and legislative bodies, private development--residential, retail, hospitality, American Indian economic development, and public/affordable housing development and finance, among many others.
- Dr. Parker has published a variety of articles, monographs, and books on these subjects, received the Bernays Mark of Merit for Special Purpose Publications, and was named as one of the top 50 alumni from the School of Public Affairs at San Diego State. He has participated in various panel discussions, delivered expert testimony to

legislatures and to courts of law, and has appeared on several radio and television programs.