



**MEASURE E FRESNO COUNTY SALES TAX
WITH BOND FINANCING**

IMPLAN Based Economic Analysis

May 2023

Prepared by:
PenberaParis, LLC
www.penberaparis.com
559-360-3535

Joseph J. Penbera, Ph.D., Chairman
Brian Ruditsky, M.B.A., Senior Research Associate

Table of Contents

Table of Contents	- 2 -
Table of Tables and Exhibits	- 3 -
Executive Summary of Measure E Measure Economic Analysis:	- 4 -
1. Reason for the Economic Impact Study:	- 6 -
2. The IMPLAN Methodology:	- 6 -
3. Credentials of Preparers:.....	- 8 -
4. Measure E Revenue Assumption.....	- 9 -
5. University Description:.....	- 10 -
6. Regional Information:.....	- 13 -
7. Understanding the Measure E:.....	- 17 -
8. Independent Verification of Data Inputs, Data Sources, & the Operational Status of the Business:	- 18 -
9. IMPLAN and North American Industry Classification Sectors:	- 18 -
10. Key Economic and Business Assumptions:.....	- 19 -
11. Economic Inputs for IMPLAN:	- 20 -
12. Job Creation Estimates:.....	- 20 -
13. Findings Relating to the Regional Economic Impact Analysis of Measure E:.....	- 22 -
15. Summary of Economic Impacts for the Measure:	- 31 -
16. Professional Opinions:	- 32 -

Table of Tables and Exhibits

Table 1: Summary of Economic Impacts for the Measure E Measure for the 25-Year Period..	- 5 -
Table 2 - Comparative Analysis of Measures C, B, and Z for FY 2020 - 2021	- 9 -
Exhibit 1 - Measure E Construction Projects.....	- 12 -
Table 3 - Employment Multipliers.....	- 15 -
Table 4 - Selected Data for Fresno County.....	- 16 -
Table 5 - Use of Measure E Funds.....	- 20 -
Table 6 - IMPLAN Economic Inputs.....	- 21 -
Table 7 - Jobs Created from Measure E.....	- 22 -
Table 8 - Labor Income – Measure E	- 24 -
Table 9 - Employee Compensation – Measure E.....	- 24 -
Table 10 - Proprietor Income – Measure E.....	- 25 -
Table 11 - Other Property Type Income – Measure E.....	- 25 -
Table 12 - Indirect Business Tax – Measure E.....	- 26 -
Table 13 - Total Value Added – Measure E	- 26 -
Table 14 - Total Output – Measure E	- 27 -
Table 15 - Federal, State, and County Tax Impacts for the 25 Year Period of the Measure E	- 28 -
Table 16 - Federal Tax Impacts	- 29 -
Table 17 - State Tax Impacts	- 29 -
Table 18 - County Tax Impacts	- 29 -
Table 19 - Summary of Economic Impacts by the Measure for the 25-Year Period.....	- 31 -

Executive Summary of Measure E Measure Economic Analysis:

- Measure E (“Measure” or “E”) is a ¼ cent transaction and use tax (sales tax) proposed for Fresno County, California aimed at expanding access and promoting excellence at California State University, Fresno, California (CSUF) by repairing and upgrading various academic, athletic, and housing facilities, as well as providing scholarships to local, low-income students.
- The wording of the Measure is as follows: Shall the measure expanding access to career/educational programs in nursing, agriculture, criminology, science, engineering, other fields; upgrading fire/security/safety systems; providing safe drinking water; removing asbestos, lead paint, mold; making campus accessible for students/residents with disabilities; providing scholarships for local, low-income students/veterans, by establishing a Fresno County ¼¢ sales tax providing approximately \$63,000,000 annually for 25 years with audits, public spending disclosure, be adopted?
- In addition to the proceeds from the sales tax, CSUF would sell eight (8) bonds over the first 15 years of the sales tax. Two one-hundred million dollar (\$100,000,000) twenty (20) year bonds could be sold in FY2026 and FY2029 and, starting in FY2033 and running through FY2039, six fifty million dollar (\$50,000,000) ten (10) year bonds could be sold. The proceeds from the bonds will be used for construction costs.
- Contained herein is an economic output analysis, including job creation estimate, utilizing the IMPLAN methodology first developed by the University of Minnesota (MIG, Inc.) and now maintained by the IMPLAN Group, LLC (www.implan.com). IMPLAN is considered a reasonable methodology to determine economic and job creation in defined regions. The most recent IMPLAN software (online version) was utilized, and the most recent data base was purchased (2022), to conduct this analysis. The analysis is based on projected revenues of \$63 million annually, with a projected growth rate of 3.5%, generated by Measure E.
- This study was prepared by Dr. Joseph Penbera and Mr. Brian Ruditsky. Dr. Penbera is a well-known economist and former Senior Fulbright Scholar who has both a long history of analyzing local, state, and federal economies and determining their economic health, and an in-depth understanding of Fresno County and the Central Valley of California. He has also authored and presented research comparing IMPLAN and RIMS II methodologies. Mr. Ruditsky acquired his economic training as an MBA student, and has, over the last decade, prepared IMPLAN and economic impact studies, including projects in the Central Valley, approved by the U.S. Federal government.
- In the first ten years of the tax, approximately \$50 million will be set aside for a scholarship endowment. This endowment will be used to expand access and promote excellence in high demand academic areas.
- In the first ten years of the tax, approximately \$50 million will be set aside as a maintenance reserve. The interest income from this reserve will be used by the university to provide repairs and upgrades to the overall campus as needed.
- The university is also anticipating raising in excess of \$50 million in matching funds from a capital campaign.

- The use of funds from this measure will be limited to the area bounded by a two-mile radius around the CSUF campus’s physical boundaries and similar boundaries around any additional locations within Fresno County that may be owned or leased by the university during the time that the initiative is in effect.
- This economic impact study found significant economic and job creation activity related to Measure E. Below is a summary of 25 years of the economic impact.

Table 1
Summary of Economic Impacts for Measure E for the
25-Year Period

	Impact – Jobs Created
Total Jobs Created	26,686.30
	Impact- By Category-in U.S. Dollars
Labor Income	\$2,191,246,315
Employee Compensation	\$1,758,191,796
Proprietor Income	\$433,054,519
Other Property Type Income	\$787,273,105
Indirect Business Taxes	\$146,777,723
Total Value Added	\$4,779,623,801
Total Output	\$5,701,361,028
Federal Taxes	\$456,730,564
State Taxes	\$205,505,987
County Taxes	\$30,607,277
Household Spending, Local Area	\$1,538,945,279

1. Reason for the Economic Impact Study:

To ensure taxpayer money is properly used and that there will be definable benefits from the passing of Measure E is the main reason why this economic impact study was produced.. The goal is to analyze how additional capital will impact academics, athletics, facilities, operations, and access for local low-income students, and to display job creation, household incomes, taxes and other economic outputs that emanate from applying a sophisticated economic methodology to the flow through of capital.

The analysis describes how the inputs to the IMPLAN Study relate to the Measure, traces the IMPLAN protocols utilized in accordance with the IMPLAN software and associated IMPLAN practices, and reports the specific findings as to the economic impact of the measure. This study also makes some informed assumptions about the funds to be generated from the sales tax, the allocation of funds based on input from the university regarding construction and repair projects.

2. The IMPLAN Methodology:

IMPLAN has long been accepted by many governmental agencies and the private sector for economic modeling. In 2011, Dr. Penbera proposed to Members of Congress that IMPLAN provided a richer base for studying economic outputs, and with fewer possibilities for distorting outputs if the methodology was applied appropriately. In 2012, the regional investment center he owns (the California Energy Investment Center), as well as the companies and projects he was advising, began shifting from other methodologies to IMPLAN. In 2022, the U.S. Department of Homeland Security published regulations which advised adoption of IMPLAN as the preferred method. For this study, and as is customary for all our studies, we have used the most recent software version of IMPLAN and the most current data sets¹ for the region under study. The following information is derived from the IMPLAN User Guide, and from various other professional descriptions of the methodology as applied.

As to the scientific efficacy of modeling, input/output models build on the theoretical constructs of two pioneering economists, Wassily Leontief and Leon Walras. Leontief received the Nobel Memorial Prize in Economic Sciences for development of a national and regional framework for the prediction of the effect of changes in one industry on others, and on government, consumers, and suppliers. Leontief's research actually is traceable to the general equilibrium theory espoused by Leon Walras in his seminal work, Elements of Pure Economics, published in 1874.

The theoretical formats and formulations lead to practical mathematical modeling which utilize various empirical data bases. These core precepts of a disciplined approach include demonstrating the indirect demand for goods (Walras-Assel model), market flows and growth in the economy, how money and the desire of money is a predicate for future services, and economic changes that are derived from economic choices (Pareto efficiency). When properly applied, IMPLAN modeling can also resolve certain issues crucial to job creation estimation by clarifying how final demand multipliers for output and earnings can be used to estimate direct and indirect economic impacts in the form of direct, indirect, and induced jobs.

¹ The current data set is 2020.

The IMPLAN system is a menu-driven microcomputer program that performs complex calculations used to generate social accounts and input/output multipliers. The software performs the necessary calculation -- using the study area data --to create the models. The system allows users to make in-depth examinations of regional, state, multi-county, county or sub-county economies and the impacts that proposed activities are likely to have on these economies.

The IMPLAN data base is quite rich. The accounting conventions for the IMPLAN data track the annual industry accounts produced by the U. S. Bureau of Economic Analysis. This data is reported in the U.S. Benchmark Input-Output Accounts. A benchmark input-output account is produced every five years, soon after the U. S. Economic Census is compiled jointly by the United States Census Bureau (USCB), the Bureau of Economic Analysis (BEA), and the Bureau of Labor Statistics (BLS). In addition to this benchmark input-output account, BEA produces a set of annual industry accounts. Comprehensive and detailed data coverage of the entire U.S. by county, and the ability to incorporate user supplied data at each stage of the model building process, provides a high degree of flexibility both in terms of geographic coverage and model formulation. The basic data are collected by the U.S. Department of Commerce from a variety of sources, such as the Annual Survey of Manufacturers and various annual surveys of the service sector. The data are benchmarked to the Economic Census figures every five years and then updated annually. These figures comprise the national input/output model.

All of this data is pre-processed within the IMPLAN software developed by The IMPLAN Group, LLC. The “processes and calculations” are thus embedded within the programming of the software which renders an “output” based on any “input” in the way a calculator contains mathematical rules for generating output based on data input. To fully understand the complexity of the IMPLAN software and the mathematical models utilized to generate output data requires a deep knowledge of applied economic theory, and experience in preparing and analyzing studies.

A comparative analysis of job creation results using IMPLAN and RIMS II was developed by Dr. Joseph J. Penbera, Senior Fulbright Scholar of Economics and presented at the Global Finance Association Conference in Chicago (“Comparative Analysis of IMPLAN and RIMS II Job Creation Modeling in the EB-5 Program”, GFA, May, 2012). This study compared various business projects of varying sizes, but in the same region. In terms of the empirical results, neither method is superior nor are the differences in results statistically significant; however, several practical differences create a preference for the IMPLAN model, including:

- IMPLAN data is updated more frequently than the RIMS II tables.
- IMPLAN has developed an algorithm to fill in the missing numbers where data may be missing for new enterprises because of an absence of these enterprises in a given area.
- IMPLAN generates meaningful tables in a variety of important areas providing the reader with specific economic impacts of a project thus satisfying the USCIS long recognized requirement that an economic report provides two data sets of information, “job creation” and “economic impact,” both within the geographic scope of the regional center.
- IMPLAN estimates three separate effects, labeled “direct”, “indirect” and “induced”. The direct effects are based on the economics created by a specific project. The indirect and induced represent the multiplier effects, and are usually combined in other input/output models.

Briefly, the *indirect effect* represents purchases made by businesses when their sales rise. For example, an equipment manufacturer might order more steel or engines sold in the region. The *induced effect* represents the additional household spending because income has risen. The workers of an equipment manufacturer would spend the income they earn from employment on various goods and services, some of which are produced in the region. In general, the larger the region under consideration, the larger the multipliers would be. In layman's terms, input/output modeling describes a regional or local economy under study in terms of the flow of dollars from purchaser to producers, tracks purchases of, and expenditures on, goods and services in dollars, and traces the flow of dollars between businesses and between businesses and final consumers.

The initial IMPLAN pass identifies all purchases, including imported goods and services. When regional economic accounts are created, imports to the region are removed from the initial data, allowing examination of local inter-industry transactions and final purchases. The regional economic accounts are used to construct local level multipliers. Multipliers describe the response of the economy to a stimulus (a change in demand or production). The multipliers represent the Predictive Model. Purchases for final use (final demand) drive an input/output model. Industries producing goods and services for consumption purchase goods and services from other producers. These other producers, in turn, purchase goods and services. These indirect purchases (or indirect effects) continue until leakages from the region (imports, wages, profits, etc.) represent the end of the cycle.

3. Credentials of Preparers:

Dr. Joseph Penbera. Dr. Penbera is Chairman of PenberaParis LLC, and Chairman of the California Energy Investment Center. Dr. Penbera has been cited by Knight Kiplinger, editor/publisher, The Kiplinger Magazine, as one of the best forecast economists in the U.S., and (in 2017) as one of the top economists in the world by the Invest in the US Summit (broadcast by CBS Asia). His opinions are sought out on major economic policy issues facing the nation, state, region, and the world economy. He has been interviewed on iHeart Radio, the MacNeil Lehrer NewsHour, PBS, and CBS and has been quoted in U.S.A. Today, and many other newspapers. For his ability to investigate complex issues and explain them in ways that are understandable and interesting to the general public, The Business Journal has called him the "Sleuth of the Economic Truth." He published the first Statistical Abstracts for the Central Valley of California, the first Fresno area CPI, and a series of County Economic Forecasts. He served as Dean and Professor of The Craig School of Business at CSU Fresno, Eaton Fellow of The Futures Institute, and National Program Chairman of the AACSB, the accreditation body for university business schools. He also served as Senior Fulbright Scholar in Poland. He is a member of the Financial Executives Institute and the National Association of Forensic Economists (NAFE) and abides by NAFE's Statement of Ethical Principles and Professional Practices.

Brian Ruditsky, MBA. Mr. Ruditsky serves as Senior Research Associate. He received his B.S. from the U.S. Merchant Marine Academy and completed his Master of Business Administration degree at California State University, Fresno. He was trained on the application of the IMPLAN modeling by Professor George Vozikis of The Craig School of Business. Mr. Ruditsky first study came as the head of an IMPLAN MBA team that produced a study of a

bioenergy company in the Central Valley that is now producing ethanol fuel and jet fuel for the U.S. Navy green fleet initiative. Over the last several years, Mr. Ruditsky has performed many IMPLAN and RIMS II job creation studies both for regional investment centers under the auspices of the U.S. Department of Homeland Security, and for projects based in California and Hawaii. Mr. Ruditsky has worked with Dr. Penbera for more than a decade, and his work is guided by the NAFE’s Statement of Ethical Principles and Professional Practices.

Staff Associates. Staff associates have, at various times, provided verifications of key data and assumptions, and clerical support.

4. Measure E Revenue Assumption

The ballot question to be posed to the voters is:

Shall the measure expanding access to career/educational programs in nursing, agriculture, criminology, science, engineering, other fields; upgrading fire/security/safety systems; providing safe drinking water; removing asbestos, lead paint, mold; making campus accessible for students/residents with disabilities; providing scholarships for local, low-income students/veterans, by establishing a Fresno County ¼¢ sales tax providing approximately \$63,000,000 annually for 25 years with audits, public spending disclosure, be adopted?

The annual amount of revenue to be generated under the Measure was verified by a third-party who referenced current sales tax measures and associated their revenue generation with the percentage of sales tax. The sales tax generated was derived from <https://www.cdtfa.ca.gov/Data-Portal/dataset.htm?url=SUTDRevDistSpDTransUT>. The following table represents a comparative analysis of three sales tax measures. Measure Z is closest to Measure E. Measure Z revenue is based on .1 of 1% of sales taxes and generated \$18,167,116 in 2021. Measure E is ¼ cent, which will generate \$63 million in sales tax revenue.

Therefore, there is a reasonable basis for assuming that \$63 million will be generated under Measure E.

Table 2 – Comparative Analysis of Measures C, B, and Z for FY 2020 – 2021 Fresno County Sales Tax Distributions by District – Measure C, B, and Z: Fiscal Year 2020-2021						
Fiscal Year	District Type	District	District Name	County	Revenue Distributed	Sales Tax by Measure
2020 - 2021	County District	12	Transportation Authority (Measure C)	Fresno	\$93,006,871	Half Cent Sales Tax
2020 - 2021	County District	71	Public Library Transaction & Use Tax (Measure B)	Fresno	\$22,842,905	1/8 th of One Cent
2020 - 2021	County District	98	Zoo Authority (Measure Z)	Fresno	\$18,167,116	1/10 th of 1% of Total Sales

Table 2 - Comparative Analysis of Measures C, B, and Z for FY 2020 - 2021

Measure E dictates that the money raised from the tax will be used for construction and repair projects.

The Measure also requires that an oversight committee be formed. The oversight committee will consist of five members appointed by the County Board of Supervisors, plus one member appointed by the President of CSU Fresno and one member appointed by the CSU Chancellor. Each member of the committee will serve a five-year term and not more than three terms. The committee will have the power to direct and control the use of the revenues collected pursuant to the Measure. The committee will also provide an audit to the Board of Supervisors each fiscal year.

The tax will expire on the 25th anniversary of the operative date.

In addition to the proceeds from the sales tax, CSUF would sell eight (8) bonds over the first fifteen (15) years of the sales tax. Two one hundred million dollar (\$100,000,000) twenty (20) year bonds could be sold in FY2026 and FY2029, and starting in FY2033 and running through FY2039, six fifty million dollar (\$50,000,000) ten (10) year bonds could be sold. Each bond will have a selling/maintenance fee of no more than 2%. The 20-year bonds have an annual estimated interest due of 4.5% and the 10 year bonds have an annual estimated interest due of 3.5%.² The revenue from the \$100 million bonds is anticipated in the two years following their issue and the revenue from the \$50 million bonds is anticipated in the year following their issue. The proceeds from the bonds would be used for construction costs.

5. University Description:

California State University, Fresno (“CSUF” or “Fresno State” or “The University”) has been called the “Pride of the Valley” by various publications. The University draws from throughout the Central Valley and the State, as well as from other states, and internationally. Fresno is the region’s most populous county; the five counties contiguous with Fresno County - Tulare, Kings, Madera, Merced, and Mariposa—have a total combined population about equal to Fresno County. A CSU system IMPLAN study grouped CSU Fresno with CSU Stanislaus to the north and CSU Bakersfield to the south. The enrollment and spending of CSUF is three times that of these other campuses. Currently, there are 71 bachelor’s, 48 masters’, and three doctoral-level degree programs offered by CSUF. The University is nationally recognized for the quality of the education provided to students. Of the 235,000 alumni, 80% stay in the region, making California State University, Fresno’s impact direct and palpable.

California State University, Fresno continues to prioritize equity and greater student access to high quality education, all while ensuring that tuition and fees are affordable. Today, California State University, Fresno serves approximately 25,000 students. However, the levels of state-allocated general fund and private support are insufficient to maintain and facilitate growth of The University. Measure E will provide California State University, Fresno the following:

² The interest rates for the bonds have been determined through an in-depth study conducted by Dr. Penbera using similar current bond indexes, rates, ratings, and maturity dates. These rates have been confirmed by consultation with bond experts.

- Repair and modernization of academic buildings
- Safe drinking water to students, faculty, staff, and visitors
- Removal of asbestos, lead paint, and mold from older campus buildings
- Expand access to career and educational programs in nursing and upgrade classrooms and laboratories to fill the shortage of qualified nurses experienced during the COVID-19 pandemic
- Expand career and educational programs in criminology to improve public safety
- Expand access to career and education programs in agriculture and STEAM (Science, Technology, Engineering, Agriculture and Mathematics)
- Replace outdated fire, life safety, security, and public safety facilities
- Improve video security infrastructure and lighting for student safety
- Ensure all California State University, Fresno facilities are ADA accessible for people with disabilities.
- Endowment funds to be used for scholarships.
- Endowment funds to be reserved for future maintenance.

Below is a list of projects being considered for funding by Measure E's tax revenue. It should be noted that the projects list includes spending of sales tax revenue, but it does not identify projects which would use bond funds.

Exhibit 1		
Measure E Construction Projects		
Construction Projects	Amount	IMPLAN Sector
Critical Facilities Renewal		
Fire Alarm Replacement	\$ 38,400,000	60
Campus wide HVAC Replacement	\$ 30,000,000	60
Elevator Replacement	\$ 13,500,000	60
Electrical Renewal	\$ 40,000,000	60
Plumbing Renewal	\$ 20,000,000	60
Exterior Building Systems Replacement (Years 1-5)	\$ 21,500,000	60
Deferred Maintenance Campus wide (Years 6-25)	\$ 140,000,000	60
Total Construction Projects	\$ 303,400,000	
Capital Infrastructure Improvements		
ADA Upgrades	\$ 7,500,000	56
Health and Safety Upgrades	\$ 12,000,000	56
Telecommunications Infrastructure Improvements	\$ 7,500,000	56
Capital and Infrastructure Improvements	\$ 20,000,000	56
Total Capital Infrastructure Improvements	\$ 47,000,000	
Academic Projects		
Concert Hall	\$ 45,000,000	56
Grosse Industrial Tech Modernization/Lab School	\$ 35,000,000	56
Lyles College of Engineering Expansion	\$ 60,000,000	56
New School of Nursing Building	\$ 60,000,000	56
Farm Laboratory Modernization	\$ 48,750,000	56
John Wright Theater Renovation	\$ 35,000,000	56
Ag Innovation Center / Water Institute	\$ 40,000,000	56
Social Sciences / Criminology Expansion	\$ 50,000,000	56
Future Academic Expansions	\$ 60,000,000	56
Total Academic Projects	\$ 433,750,000	
Athletic Projects		
Stadium Modernization Phase 1	\$ 10,000,000	56
Stadium Modernization Phase 2	\$ 150,000,000	56
Duncan Athletic Center Facility Modernization	\$ 47,000,000	56
Ricchiuti Center for Academic Excellence Upgrades	\$ 5,000,000	56
Beiden Field Locker Room & Video Board	\$ 4,000,000	56
Margie Wright Women's Basketball and Volleyball Upgrades	\$ 4,000,000	56
Track/Soccer Stadium Locker Room & Scoreboard	\$ 3,500,000	56
Tennis Stadium Additional Seating & Scoreboard	\$ 1,500,000	56
SMC Men's & Women's Basketball and Volleyball Upgrades	\$ 15,000,000	56
Total Athletic Projects	\$ 240,000,000	
Student Housing and Parking		
Affordable Student Housing Phase 2	\$ 60,000,000	58
Affordable Student Housing Phase 3	\$ 60,000,000	58
Parking Lot Repairs/Solar Canopies	\$ 20,000,000	56
Parking Structure	\$ 20,000,000	56
Total Student Housing and Parking	\$ 160,000,000	
Endowments		
Scholarships	\$ 50,000,000	
Maintenance	\$ 50,000,000	
Matching Funds for Future Capital Campaigns	\$ 50,000,000	
Total Endowments	\$ 150,000,000	
Contingency for Future Projects	\$ 244,344,163	56
Total of All Construction Projects	\$ 1,578,494,163	
Minus Endowments	\$ 1,428,494,163	

California State University, Fresno is seen by employers as an essential resource to provide students with training, knowledge, and skills necessary for employment. Graduates with the proper training and motivation help grow, diversify and support the economy in ways that are essential to improving the quality of life throughout Fresno County and the region.

6. Regional Information:

A. Study Region Defined:

The economic impacts of CSUF – a large public university in a growing region – are felt in the entire state of California. It is assumed that the purchases made with the proceeds from the Measure will be done within in the State of California to the maximum extent possible. Therefore, when conducting the study, California was used as the regional input in IMPLAN. However, it is important to note that the capital investment is to be within a defined area surrounding CSUF.

It is also important to note that as Fresno and the mid-section of the State began to experience significant population and commercial growth, there have been attempts to define the counties that should be included in a definition of the Central Valley region. Some of these definitions included all counties touched by the San Joaquin River. Others seemed to be motivated by attempts to give rural areas a greater political voice and included almost half of the state's 58 counties stretching the region from as far north as Shasta all the way south to Los Angeles County. In the late 1990's, there was an effort to define the regions and develop a development plan for each and while Fresno was defined as the hub county of the center of the State, the work group never completed its work or even clarified the area to be studied. Various government agencies drew boundaries based upon some sense of how services would be administered. For example, the definition by medical services includes four counties: Fresno, Kings, Tulare, and Madera counties; on the other hand, the Courts of Appeals -5th District includes nine counties: Fresno, Kings, Tulare, Kern, Madera, Merced, Mariposa, Tuolumne, and Stanislaus.

Appointed as Eaton Fellow in the first think-tank in the CSU system, the Futures Institute, Dr. Penbera studied data sets on social, economic and political characteristics of counties, and authored the initial Statistical Abstracts defining the region as consisting of six core counties – Fresno, Tulare, Kings, Merced, Madera, and Mariposa counties, three extended counties- Kern, Stanislaus, and Tuolumne counties, and one county, San Joaquin, which has been transitioning towards the Sacramento region. It should be noted that the identification of the core counties is consistent with that of the Central Valley Community Foundation's geographic definition of the Central Valley (<https://www.fresnoregfoundation.org/communitiesweserve/overview.html>) and has been adopted by various organizations studying some of the major planning and land use issues (<https://civiewell.org/wp-content/uploads/2022/01/Central-Valley-Regional-Profile.pdf>).

It is reasonable to assume that CSU Fresno draws considerable enrollment from the core counties and beyond. A CSU system-wide IMPLAN study of the economic impacts of all CSU campuses grouped CSU Stanislaus, CSU Bakersfield and CSU Fresno campuses into a Central Valley region and showed that CSUF Fresno has about twice the enrollment of the other campuses. On the basis of the number of degree programs, CSUF has the most diversified offerings, a very

high percentage of its graduates who remain in the area after graduation, and the highest economic impact to the region.

Although it may be reasonably assumed that the six core counties will see the bulk of the economic impacts and job creation, the tables in this study show that the economic impacts extend to the entire state since the purchases related to the Measure will be conducted in California to the maximum extent possible. It is important to note that the region is the most productive agricultural region in the nation and the world, and the economic impacts extend to all areas of the state in terms of such things as value-added activities (for example, in processing, packaging, warehousing, transportation, distribution, wholesaling and retailing, and attendant investment and output in each activity). The area outputs also extend outside of the State, for example, the State of Hawaii is highly dependent on Central California for its food supply.

The IMPLAN software has provided the following regional statistics for the Central Valley Region. This data is also consistent with the most recent data provided by the U.S. Bureau of Census.

Land Area:	17,695 square miles
Total Population:	2,088,848 (2020)
Total Personal Income:	\$100.5 billion
Total Households:	638,401
Gross Regional Product:	\$88.5 billion
Total Employed:	976,129 (2020)

B. Industries Impacted and Associated Multipliers

One of the most salient aspects of understanding the regional economy relates to the composition of industries contained within the region and how investments in the economy effect local area businesses. The following table, taken directly from IMPLAN, shows the top employment multipliers (excluding public sector employers) for the region.³

IMPLAN Sector	Industry	Type I Multipliers	Indirect Multipliers	Induced Multipliers
154	Petroleum refineries	10.448555	9.448555	4.83724
434	Wireless telecommunications carriers (except satellite)	7.594282	6.594282	2.842128
85	Creamery butter manufacturing	6.397053	5.397053	2.285542
432	Cable and other subscription programming	6.047523	5.047523	4.115383
438	Internet publishing and broadcasting and web search portals	5.783015	4.783015	4.0657
299	Computer storage device manufacturing	4.868643	3.868643	2.839574
159	Petrochemical manufacturing	4.391742	3.391742	2.148274
82	Cheese manufacturing	4.167192	3.167192	1.458267
83	Dry, condensed, and evaporated dairy product manufacturing	4.059945	3.059945	1.5479
43	Electric power generation - Wind	4.023873	3.023873	2.541685
13	Poultry and egg production	3.709101	2.709101	1.364891
320	Blank magnetic and optical recording media manufacturing	3.622341	2.622341	2.10084
167	Nitrogenous fertilizer manufacturing	3.617795	2.617795	1.5468
416	Water transportation	3.556073	2.556073	1.630999
100	Flavoring syrup and concentrate manufacturing	3.519274	2.519274	1.316287
102	Spice and extract manufacturing	3.42617	2.42617	0.957276
444	Insurance carriers, except direct life	3.391129	2.391129	1.283019
223	Nonferrous metal (exc aluminum) smelting and refining	3.390373	2.390373	1.385503
84	Fluid milk manufacturing	3.364832	2.364832	1.252972
177	Soap and other detergent manufacturing	3.359142	2.359142	1.346172

The following table provides data which differentiates Fresno County and contiguous counties from the rest of the State. It is informative in terms of demonstrating the need for the Measure in terms of promoting improvement and growth in several key social and economic dynamics affecting the Central Valley regional economy.

³ For employment multipliers, each direct job created by the project would create X number of jobs in the indicated industry.

Table 4
Selected Data for Fresno County

	County of Fresno	State of California
Population	1,013,581	38,237,836
Growth Rate	0.5%	-0.8%
Under 18	28.2%	22.5%
Hispanic ⁴	53.8 %	39.4%
Asian	11.1%	15.5%
American Indian ⁵	3.0%	1.6%
Veterans	3.6%	4.0%
Population/Sq Mile Fresno County	156.2	239.1
Population/Sq. Mile Contiguous Counties	100.7	
Housing Units/Population Median Value	33.7%	36.9%
Owner Occupied ⁶	\$405,800	\$884,080
<u>Median Monthly</u>		
Owner Cost/w Mortgage ⁷	\$2485	\$3,976
Median Mo. Gros Rent ⁸	\$1675	\$2,274
Building permits/Population	25.8% > State ⁽⁶⁾	
Households ⁹	312,604	13,379,828
Persons/Household ¹⁰	3.2	2.91
Median Household Income ¹¹	\$63,724	\$89,481
H.S. Grad., % >25 yrs. Old	77.30%	83.90%
Bachelor's, % >25 yrs. Old	22%	34.70%
% Persons in Poverty ¹²	17.48%	8.92%
Per Capita Income	25,757	38,576
Establishments/ Population	1.7%	2.6%
Employment Growth	2.3%	1.3%
Unemployment % ⁽⁹⁾	6.0%	3.8%

⁴ Includes Latino

⁵ Include Alaska Native

⁶ <https://www.redfin.com/county/312/CA/Fresno-County/housing-market> & <https://www.noradarealestate.com/blog/california-housing-market/>

⁷ Calculated by dividing the 2022 home price median value by the 2021 Census estimate median value, the Census cost.

⁸ <https://www.zumper.com/rent-research/fresno-ca>, June 2022 \$1675 (2-bedroom apartment) <https://www.rentdata.org/states/california/2022> (2-bedroom apartment)

⁹ Permits: .0039/Fresno population vs. .0031/State population.

¹⁰ <https://www.healthyfresnocountydata.org/demographicdata?id=247§ionId=9368> 2022

¹¹ <https://www.healthyfresnocountydata.org/demographicdata?id=247§ionId=9368>.2022

¹² [https://www.labormarketinfo.edd.ca.gov/file/lfmonth/frsn\\$pbs.pdf](https://www.labormarketinfo.edd.ca.gov/file/lfmonth/frsn$pbs.pdf)

Salient factors indicating a generalized need for the Measure:

- Regional population is growing even in the face of a decline in the State's population
- There is a higher percentage of pre-college-age persons versus the State
- There is a higher percentage of persons from minority groups
- About 50% the population of the region is in Fresno County
- The population density, generally, is rural, but with Fresno becoming more suburban
- There is a shortage of housing units
- Construction per capita is outpacing State construction
- Housing costs have increased more recently, but are still lower than State-wide costs
- Household size is about 10% larger than the State's household size
- Median household incomes are 28.8% lower than the State median household income
- Per capita income is 34.3% lower than the State per capita income
- The poverty rate is more than 2x that of the State rate
- High school graduation rates are, in proportion to the population, 7.8% lower vs. State
- College graduates are, in proportion to the population, 36.6% fewer vs. State
- Small business firms are fewer in proportion to population vs. the State
- The unemployment is more than 1.5 times greater than the State's

7. Understanding the Measure E:

Measure E seeks to:

*Shall the measure expanding access to career/educational programs in nursing, agriculture, criminology, science, engineering, other fields; upgrading fire/security/safety systems; providing safe drinking water; removing asbestos, lead paint, mold; making campus accessible for students/residents with disabilities; providing scholarships for local, low-income students/veterans, by establishing a Fresno County ¼¢ sales tax providing approximately \$63,000,000 annually for 25 years with audits, public spending disclosure, be adopted?*¹³

The tax will go into effect the first day of the first calendar quarter commencing more than 110 days after the adoption of the measure. Only tangible personal property will be taxed.

The areas of improvement will be generally bounded by a two-mile radius around the campus's physical boundaries and similar boundaries around any additional locations within Fresno County that may be owned or leased by the university during the time of the initiative.

A Citizen's Oversight Committee will be formed to ensure the revenue raised through the ordinance is used for the specified purposes. Five members of the oversight committee will be appointed by the Board of Supervisors, one by the CSU President and one by the CSU Chancellor and each of the members will be appointed for terms of five years, with members serving no more

¹³ From the ballot initiative text.

than three terms. The Citizens Oversight Committee will have the final power to direct and control the use of the revenues collected by the measure.

8. Independent Verification of Data Inputs, Data Sources, & the Operational Status of the Business:

During the creation of this study, the following people have been consulted and have been instrumental in providing information relevant to key economic assumptions:

- Tim Orman (former Deputy Mayor of Fresno) provided financial information in regard to the revenues from similar measures and the expected funds to be generated from the Measure. This data was subject to independent review and was verified as accurate.
- Debbie Adishian-Astone (CSUF, Vice President for Administration and Chief Financial Officer) has provided information on degrees awarded and faculty staffing of the four academic areas, as well as information contained in Exhibit, the Construction Projects list.

9. IMPLAN and North American Industry Classification Sectors:

There are multiple IMPLAN/North American Industry Classification Sectors (NAICS) primarily effected by Measure E.

- Construction
 - Construction of new facilities
 - 236220 (Commercial and Institutional Building Construction)
 - This industry comprises establishments primarily responsible for the construction (including new work, additions, alterations, maintenance, and repairs) of commercial and institutional buildings and related structures, such as stadiums, grain elevators, and indoor swimming facilities. This industry includes establishments responsible for the on-site assembly of modular or prefabricated commercial and institutional buildings. Included in this industry are commercial and institutional building general contractors, commercial and institutional building for-sale builders, commercial and institutional building design-build firms, and commercial and institutional building project construction management firms.
 - Repair and upgrading of existing facilities
 - 238 (Specialty Trade Contractors)
 - The Specialty Trade Contractors subsector comprises establishments whose primary activity is performing specific activities (e.g., pouring concrete, site preparation, plumbing, painting, and electrical work) involved in building construction or other activities that are similar for all types of construction, but that are not responsible for the entire project. The work performed may include new work, additions, alterations, maintenance, and repairs. The production work performed by establishments in this subsector is usually subcontracted from establishments of the general contractor type or for-sale

builders, but especially in remodeling and repair construction, work also may be done directly for the owner of the property. Specialty trade contractors usually perform most of their work at the construction site, although they may have shops where they perform prefabrication and other work.

- Construction of affordable student housing
 - 236116 (New Multifamily Housing Construction)
 - This U.S. industry comprises general contractor establishments primarily responsible for the construction of new multifamily residential housing units (e.g., high-rise, garden, town house apartments, and condominiums where each unit is not separated from its neighbors by a ground-to-roof wall). Multifamily design-build firms and multifamily housing construction management firms acting as general contractors are included in this industry.
- Financing and Servicing of Tax Revenue and Bonds
 - Credit Intermediation
 - 5221 (Depository Credit Intermediation)
 - This industry group comprises establishments primarily engaged in accepting deposits (or share deposits) and in lending funds from these deposits. Within this group, industries are defined on the basis of differences in the types of deposit liabilities assumed and in the nature of the credit extended.

10. Key Economic and Business Assumptions:

The following are a list of key economic and business assumptions used in the creation of this economic impact study.

- Construction
 - All money goes to the construction, maintenance, and repairs of facilities as needed with oversight from the university and oversight committee
 - Job creation is based on the distribution of projects:
 - Construction of new facilities – 70.4%
 - Repair and upgrading of existing facilities – 8.4%
 - Construction of affordable student housing – 21.2%
- Endowments
 - Two endowments will be created in the first ten years of the project. The first endowment will be \$50 million and will be used for scholarships. The second endowment will also be for \$50 million and will be used for repairs and maintenance of campus facilities.
- Matching Funds
 - The university anticipates being able to raise a minimum of an additional \$250 million in capital through a capital fundraising campaign.
- Bond Issuance
 - There will be \$500,000,000 in capital raised through the issuance of two \$100,000,000 bonds and six \$50,000,000 bonds. The revenue from these bonds will be available for use in the first fiscal year following their

issuances, or in the first two fiscal years for the \$100,000,000 bond).

11. Economic Inputs for IMPLAN:

Table 5 represents the revenues of Measure E for the five periods based on anticipated distributions:

Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049
Tax Revenues	\$338,371,597	\$401,879,312	\$477,306,555	\$566,890,459	\$673,288,035
Scholarship Endowment	\$25,000,000	\$25,000,000			
Maintenance Endowment	\$25,000,000	\$25,000,000			
Bond Proceeds	\$200,000,000	\$100,000,000	\$200,000,000		
Oversight Costs ¹⁴	\$11,691,858	\$15,751,073	\$17,812,361	\$19,875,793	\$22,941,446
Net Revenues from Sales Tax for Use ¹⁵	\$286,679,739	\$349,869,915	\$474,920,022	\$564,056,007	\$669,921,595

12. Job Creation Estimates:

1. The following summarize the key methodological protocols and the data inputs previously described herein:

A. Core Documents. This economic impact study was conducted using the IMPLAN methodology and references from various documents related to Measure E and the IMPLAN User’s Manual.¹⁶

B. Data Base. In addition, the most recent IMPLAN data was used for this study (dated 2020) was utilized and has been certified by The IMPLAN Group, LLC as the most recent.

C. Region. The study area includes the state of California.

¹⁴ Sum of all oversight costs (Sales Tax and Bonds).

¹⁵ Only includes oversight costs from servicing of the sales tax revenues.

¹⁶ IMPLAN Group, LLC, *IMPLAN Professional, Social Accounting and Impact Analysis Software User Guide*, 3rd ed. (Stillwater, MI: MIG, Inc., 2004).

D. Inputs. To calculate the economic impact created the following cash flows were analyzed.

a. Construction of New Facilities

Based on information provided at the time of the creation of this study by University officials, it is assumed that each year 70.4% of the tax revenue will be spent on the construction of new facilities.

b. Repair and Maintenance of Existing Facilities

Based on information provided at the time of the creation of this study by University officials, it is assumed that each year 8.4% of the tax revenue will be spent on the repair and maintenance of existing facilities.

c. Construction of Affordable Student Housing

Based on information provided at the time of the creation of this study by University officials, it is assumed that each year 21.2% of the tax revenue will be spent on the construction of affordable student housing.

d. Servicing and Oversight Costs

This is the amount spent to service and oversee the cost of the new tax.

Table 6 represents key data inputs to the IMPLAN model to determine the overall economic impact to the region from Measure E.

Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049
New Construction	\$272,069,399	\$351,710,456	\$510,056,605	\$396,872,045	\$471,359,493
Repairs and Maintenance	\$32,482,855	\$41,991,344	\$60,896,576	\$47,383,267	\$56,276,458
Affordable Student Housing Construction	\$82,127,485	\$106,168,115	\$153,966,842	\$119,800,694	\$142,285,644
Oversight Costs ¹⁷	\$11,691,858	\$15,751,073	\$17,812,361	\$19,875,793	\$22,941,446

¹⁷ Oversight costs include the cost to administer the bonds, collect taxes, and any other activities associated with the collection or administration of the bonds and tax.

Table 7 below reflects the number of jobs created by Measure E in the five periods.

Table 7					
Jobs Created from Measure E					
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049
Direct	1,985.25	2,565.36	3,718.75	2,894.32	3,436.88
Indirect	720.38	930.74	1,348.99	1,050.03	1,246.78
Induced	923.36	1,192.92	1,728.87	1,345.78	1,597.90
Total	3,628.99	4,689.02	6,796.62	5,290.12	6,281.56

13. Findings Relating to the Regional Economic Impact Analysis of Measure E:

Terms and Definitions Used in the Tables

Labor Income – Labor Income changes examine how changes in Employee Compensation or Proprietor Income will affect the economy. They are especially useful in general cases, when the Industry in which the compensation change is taking place is unknown, or when a range of Industries are affected by the change, but the value of the change for each Industry Sector is unknown.¹⁸

Employee Compensation – Employee compensation is the total payroll costs (including benefits) of each industry in the region. It includes the wages and salaries of workers who are paid by employers, as well as benefits such as health and life insurance, retirement payments, and non-cash compensation. Employee compensation is derived for each industry from ES202 and REIS data.¹⁹

Proprietary Income – Proprietary income consists of payments received by self-employed individuals as income. Any income received for payment of self-employed work, as reported on Federal tax forms, is counted here. This includes income received by private business owners, doctors, lawyers, and so forth.²⁰

Other Property Type Income – Other property type income consists of payments for rents, royalties, and dividends. Payments to individuals in the form of rents received on property, royalties from contracts, and dividends paid by corporations are included here as well as corporate profits earned by corporations. Other property type income numbers are derived from U.S. Bureau of Economic Analysis Gross State Product data.²¹

¹⁸ IMPLAN Group, LLC, Version 3.0 User’s Guide (MIG, Inc., Stillwater, 2010), 267.

¹⁹ IMPLAN Professional, Social Accounting and Impact Analysis Software User’s Guide, 3rd. edition (MIG, Inc., Stillwater, 2004), 125.

²⁰ Ibid., 125

²¹ Ibid., 126

Indirect Business Taxes – Indirect business taxes consist of excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses. These taxes occur during the normal operation of businesses but do not include taxes on profit or income. Indirect business tax numbers are derived from U.S. Bureau of Economic Analysis Gross State Product data.²²

Total Value Added – The Total Value Added report gives the value added to intermediate goods and services. It is equal to employee compensation plus proprietor income plus other property income plus indirect business taxes.²³

Total Output – Output represents the value of industry production. Output includes the total production of an industry or project.

Tax Impact – The Tax Impact report describes taxes related to the chosen impact analysis. These estimates are based strictly on the same data underlying the region SAM data (SAM is a set of regional economic accounts, which describe transfers between institutions, as well as, value added components).²⁴ These values are based on the average for all industries within the model; the average taxes associated with each household income class; the average taxes and transfers associated with each of the government institutions defined by the model.²⁵

²² Ibid., 126

²³ Ibid. 356

²⁴ Ibid., 288

²⁵ Ibid., 401

1. Labor Income and Employee Compensation Produced

Table 8 below identifies the direct, indirect, and induced labor income generated. Column 6 represents the total labor income generated for the 25-year period, for a total of **\$2,191,246,315**.

Table 8 Labor Income – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	166,951,425	215,691,557	312,599,014	243,330,340	288,916,476	1,227,488,812
Indirect	63,216,497	81,673,389	118,370,261	92,139,630	109,402,168	464,801,946
Induced	67,863,745	87,675,542	127,066,301	98,910,102	117,439,868	498,955,557
Totals	298,031,666	385,040,488	558,035,577	434,380,072	515,758,513	2,191,246,315

Table 9 below identifies the employee compensation generated for the 25-year period, which is a total of **\$1,758,191,796**.

Table 9 Employee Compensation – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	126,084,078	162,863,047	235,988,747	183,719,082	218,118,067	926,773,021
Indirect	54,039,610	69,817,842	101,188,877	78,765,112	93,522,328	397,333,770
Induced	59,040,587	76,276,605	110,546,079	86,050,533	102,171,201	434,085,006
Totals	239,164,275	308,957,495	447,723,703	348,534,728	413,811,596	1,758,191,796

2. Proprietor and Other Property Type Income Produced.

Table 10 below identifies income generated for proprietors in the defined region. The total for the 25-year period is **\$433,054,519**.

Table 10 Proprietor Income – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	40,867,347	52,828,511	76,610,267	59,611,258	70,798,409	300,715,792
Indirect	9,176,887	11,855,546	17,181,384	13,374,518	15,879,840	67,468,176
Induced	8,823,157	11,398,936	16,520,223	12,859,568	15,268,667	64,870,551
Totals	58,867,391	76,082,993	110,311,874	85,845,344	101,946,917	433,054,519

Table 11 below indicates the economic impacts relating to property type income for the measure for the 25-year period. This totals **\$787,273,105**.

Table 11 Other Property Type Income – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	30,934,167	39,761,486	57,312,381	44,767,142	53,023,240	225,798,417
Indirect	32,672,225	42,213,867	61,185,014	47,624,590	56,548,788	240,244,484
Induced	43,691,085	56,445,993	81,805,908	63,678,843	75,608,375	321,230,205
Totals	107,297,477	138,421,345	200,303,304	156,070,575	185,180,404	787,273,105

3. Indirect Business Taxes Generated

Table 12 below identifies the indirect business tax revenues produced during the 25-year period. The total indirect business taxes generated is **\$146,777,723**.

Table 12						
Indirect Business Tax – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	291,538	368,320	520,981	411,860	483,673	2,076,373
Indirect	11,344,358	14,662,942	21,261,111	16,544,793	19,648,630	83,461,834
Induced	8,329,299	10,760,899	15,595,523	12,139,773	14,414,023	61,239,517
Totals	19,965,195	25,792,162	37,377,615	29,096,426	34,546,327	146,777,723

4. Total Value Added.

Table 13 below identifies the direct, indirect, and induced total value added during the 25-year period, for a total of **\$4,779,623,801**.

Table 13						
Total Value Added – Measure E						
Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	198,177,130	255,821,363	370,432,377	288,509,342	1,112,940,212	2,225,880,424
Indirect	107,233,079	138,550,198	200,816,387	156,309,013	602,908,677	1,205,817,354
Induced	119,884,128	154,882,433	224,467,733	174,728,718	673,963,012	1,347,926,024
Totals	425,294,338	549,253,994	795,716,496	619,547,072	2,389,811,901	4,779,623,801

5. Total Output.

As indicated in Table 14, the total economic output for the measure during the 25-year period is **\$5,701,361,028**.

Period	Period 1 FY2025 – FY2029	Period 2 FY2030 – FY2034	Period 3 FY2035 – FY2039	Period 4 FY2040 – FY2044	Period 5 FY2045 – FY2049	Totals
Direct	388,257,239	501,447,415	726,497,522	565,633,507	671,499,095	2,853,334,778
Indirect	194,812,265	251,718,742	364,862,914	283,988,365	337,212,398	1,432,594,685
Induced	192,515,209	248,717,036	360,460,188	280,587,077	333,152,057	1,415,431,566
Totals	775,584,713	1,001,883,193	1,451,820,624	1,130,208,949	1,341,863,550	5,701,361,028

6. Federal, State, and County Tax Impacts, All Tax Categories.

Following is a summary of the Federal, State, and County tax impacts specified by social security, personal, business, and corporate tax generated for the Measure project for the 25-year period.

Tax Impact for Sales Tax Revenue Only								
Federal Tax Impact (2023 Dollars)								
Institution Receipts	Transfer Type	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
11001	15014	Social Ins Tax- Employee Contribution	\$104,411,091	\$18,127,885				\$122,538,976
11001	15015	Social Ins Tax- Employer Contribution	\$94,265,241					\$94,265,241
11001	15017	Tax on Production and Imports: Excise Taxes			(\$17,972,406)			(\$17,972,406)
11001	15018	Tax on Production and Imports: Custom Duty			(\$18,733,512)			(\$18,733,512)
11001	15026	Corporate Profits Tax					\$31,284,836	\$31,284,836
11001	15027	Personal Tax: Income Tax				\$245,347,430		\$245,347,430
11001	15028	Personal Tax: Estate and Gift Tax						\$0
11001	99999	Total Federal Tax	\$198,676,332	\$18,127,885	(\$36,705,919)	\$245,347,430	\$31,284,836	\$456,730,564
Institution Receipts	Transfer Type	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution	\$4,748,478					\$4,748,478
12001	15015	Social Ins Tax- Employer Contribution	\$5,551,463					\$5,551,463
12001	15020	Tax on Production and Imports: Sales Tax			\$63,904,907			\$63,904,907
12001	15021	Tax on Production and Imports: Property Tax			\$3,375,012			\$3,375,012
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$1,996,872			\$1,996,872
12001	15023	Tax on Production and Imports: Severance Tax			\$153,771			\$153,771
12001	15024	Tax on Production and Imports: Other Taxes			\$5,671,308			\$5,671,308
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$0			\$0
12001	15026	Corporate Profits Tax					\$19,949,294	\$19,949,294
12001	15027	Personal Tax: Income Tax				\$97,587,220		\$97,587,220
12001	15030	Personal Tax: Motor Vehicle License				\$2,156,904		\$2,156,904
12001	15031	Personal Tax: Property Taxes				\$67,293		\$67,293
12001	15032	Personal Tax: Other Tax (Fish/Hunt)				\$343,466		\$343,466
12001	99999	Total State and Local Tax	\$10,299,941		\$75,101,869	\$100,154,883	\$19,949,294	\$205,505,987
County Tax Impacts (2023 Dollars)								
Institution Receipts	Transfer Type	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution						\$0
12001	15015	Social Ins Tax- Employer Contribution						\$0
12001	15020	Tax on Production and Imports: Sales Tax			\$1,855,802			\$1,855,802
12001	15021	Tax on Production and Imports: Property Tax			\$26,051,095			\$26,051,095
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$0			\$0
12001	15023	Tax on Production and Imports: Severance Tax			\$0			\$0
12001	15024	Tax on Production and Imports: Other Taxes			\$1,377,916			\$1,377,916
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$806,621			\$806,621
12001	15026	Corporate Profits Tax						\$0
12001	15027	Personal Tax: Income Tax						\$0
12001	15030	Personal Tax: Motor Vehicle License						\$0
12001	15031	Personal Tax: Property Taxes				\$515,842		\$515,842
12001	15032	Personal Tax: Other Tax (Fish/Hunt)						\$0
12001	99999	Total State and Local Tax	\$0		\$30,091,435	\$515,842	\$0	\$30,607,277

26

²⁶ Numbers in red indicates a refund, tax credit, or rebate.

The total Federal Tax impacts are as follows:

Table 16 Federal Tax Impacts	
Employee Compensation	\$198,676,332
Proprietor Income Taxes	\$18,127,885
Indirect Business Taxes	(\$36,705,919) ²⁷
Households, Personal Income Taxes	\$245,347,430
Corporation Taxes	\$31,284,836
Total Federal Tax Impact	\$456,730,564

The total State and Local Tax impacts for are as follows:

Table 17 State Tax Impacts	
Employee Compensation	\$10,299,941
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$75,101,869
Household Taxes	\$100,154,883
Corporation Taxes	\$19,949,294
Total State Tax Impact	\$205,505,987

The total County Tax impacts for are as follows:

Table 18 County Tax Impacts	
Employee Compensation	\$0
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$30,091,435
Household Taxes	\$515,842
Corporation Taxes	\$0
County Tax Impact	\$30,607,277

The total of Federal, State, and County tax impacts are: **\$692,843,828.**

²⁷ Numbers in red indicates a refund, tax credit, or rebate.

7. Local Spending-Household Income Effect.

Under the general theory that not all spending is done locally, it was determined that of the total labor payments, 87.53% are made to local households within the region (see U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys (www.bls.gov/cex/)). Based upon the labor income generated, which is the total Employee Compensation found in Table 9, a total of \$1,538,945,279 in household spending by local households will be generated by the project for the 25-year period.

15. Summary of Economic Impacts for the Measure:

Table 19 shown on following page summarizes the economic impacts specifically identified in each of the tables above of the IMPLAN Study for Measure E.

Table 19	
Summary of Economic Impacts for Measure E for the 25-Year Period	
	Impact – Jobs Created
Total Jobs Created	26,686.30
	Impact- By Category-in U.S. Dollars
Labor Income	\$2,191,246,315
Employee Compensation	\$1,758,191,796
Proprietor Income	\$433,054,519
Other Property Type Income	\$787,273,105
Indirect Business Taxes	\$146,777,723
Total Value Added	\$4,779,623,801
Total Output	\$5,701,361,028
Federal Taxes	\$456,730,564
State Taxes	\$205,505,987
County Taxes	\$30,607,277
Household Spending, Local Area	\$1,538,945,279

16. Professional Opinions:

Based on the operational, economic, and financial assumptions derived from all data sources, this IMPLAN analysis demonstrates that the Measure creates a substantial impact to California State University, Fresno, Fresno County, the Central Valley Region, and the State of California. Clearly, the Measure has substantial economic benefit to households, businesses, and governmental institutions in the region, and creates substantial employment, income, and tax benefits.