



**IMPLAN Based Economic Analysis
For the
FRESNO STATE IMPROVEMENT ZONE FRESNO COUNTY SALES TAX MEASURE**

**Prepared by: PenberaParis, LLC
Joseph J. Penbera, Ph.D., Chairman
Brian Ruditsky, M.B.A., Senior Research Associate**

June 2022

Table of Contents

TABLE OF CONTENTS.....	- 2 -
TABLE OF TABLES	- 3 -
EXECUTIVE SUMMARY OF FSIZ MEASURE ECONOMIC ANALYSIS:.....	- 4 -
1. REASON FOR THE ECONOMIC IMPACT STUDY:	- 6 -
2. THE IMPLAN METHODOLOGY:	- 6 -
3. CREDENTIALS OF PREPARERS:.....	- 8 -
4. FSIZ MEASURE-REVENUE ASSUMPTION.....	- 9 -
5. UNIVERSITY DESCRIPTION:.....	- 10 -
6. REGIONAL INFORMATION:	- 11 -
7. UNDERSTANDING THE FSIZ MEASURE:	- 15 -
8. INDEPENDENT VERIFICATION OF DATA:.....	- 16 -
9. IMPLAN AND NAICS:	- 16 -
10. KEY ECONOMIC AND BUSINESS ASSUMPTIONS:.....	- 17 -
11. ECONOMIC INPUTS FOR IMPLAN:	- 20 -
12. JOB CREATION ESTIMATES:	- 20 -
13. FINDINGS OF THE ECONOMIC IMPACT ANALYSIS OF THE FSIZ MEASURE:...	- 22 -
15. SUMMARY OF ECONOMIC IMPACTS FOR THE MEASURE:.....	- 30 -
16. PROFESSIONAL OPINIONS:.....	- 31 -
APPENDIX A – ECONOMIC IMPACTS FROM ACADEMICS.....	- 32 -
APPENDIX B – ECONOMIC IMPACTS FROM ATHLETICS.....	- 38 -
APPENDIX C – COMBINED ECONOMIC IMPACTS W ADDITIONAL BORROWING .	- 44 -

Table of Tables

Table 1: Summary of Economic Impacts for the FSIZ Measure for the 20-Year Period, without Additional Borrowing	- 5 -
Table 2: Summary of Economic Impacts for the FSIZ Measure for the 20-Year Period, with Additional Borrowing	- 5 -
Table 3: Comparative Analysis of Measures C, B, and Z for FY 2020-2021	- 10 -
Table 4: Employment Multipliers for Key Agricultural, Criminology, Engineering/STEM, and Nursing Industries.....	- 13 -
Table 5: Selected Data for Fresno County	- 14 -
Table 6: Distribution of Funds to Each Degree Based on Anticipated Need and Growth.....	- 19 -
Table 7: Use of FSIZ Measure Funds	Error! Bookmark not defined.
Table 8: FSIZ IMPLAN Inputs.....	- 21 -
Table 9: Jobs Created from the Fresno State Improvement Zone Measure.....	- 22 -
Table 10: Labor Income -- FSIZ.....	- 24 -
Table 11: Employee Compensation – FSIZ.....	- 24 -
Table 12: Proprietor Income -- FSIZ	- 25 -
Table 13: Other Property Type Income -- FSIZ.....	- 25 -
Table 14: Indirect Business Tax – FSIZ	- 26 -
Table 15: Total Value Added - FSIZ	- 26 -
Table 16 Total Output – FSIZ.....	- 27 -
Table 17: Tax Impact for FSIZ	- 28 -
Table 18: Federal Tax Impacts -- FSIZ.....	- 29 -
Table 19: State and Local Tax Impacts – FSIZ.....	- 29 -
Table 20 – Summary of Economic Impacts for the Measure for the 20-Year Period	- 30 -
Table A1: Labor Income – Academics	- 32 -
Table A2: Employee Compensation – Academics.....	- 32 -
Table A3: Proprietor Income – Academics.....	- 33 -
Table A4: Other Property Type Income – Academics	- 33 -
Table A5: Indirect Business Tax – Academics	- 34 -
Table A6: Total Value Added – Academics	- 34 -
Table A7: Total Output – Academics	- 35 -
Table A8: Tax Impact – Academics	- 36 -
Table A9: Federal Tax Impacts – Academics	- 37 -
Table A10: State and Local Tax Impacts – Academics	- 37 -
Table B1: Labor Income -- Athletics	- 38 -
Table B2: Employee Compensation – Athletics	- 38 -
Table B3: Proprietor Income – Athletics	- 39 -
Table B4: Other Property Type Income – Athletics.....	- 39 -
Table B5: Indirect Business Tax – Athletics.....	- 40 -
Table B6: Total Value Added – Athletics.....	- 40 -
Table B7: Total Output – Athletics.....	- 41 -
Table B8: Tax Impacts – Athletics	- 42 -
Table B9: Federal Tax Impacts - Athletics	- 43 -
Table B10: State and Local Tax Impacts – Athletics	- 43 -
Table C1: Labor Income – Combined with Additional Borrowing.....	- 44 -
Table C2: Employee Compensation – Combined with Additional Borrowing	- 44 -
Table C3: Proprietor Income – Combined with Additional Borrowing	- 45 -
Table C4: Other Property Type Income – Combined with Additional Borrowing	- 45 -
Table C5: Indirect Business Tax – Combined with Additional Borrowing	- 46 -
Table C6: Total Value Added – Combined with Additional Borrowing.....	- 46 -
Table C7: Total Output – Combined with Additional Borrowing.....	- 47 -
Table C8: Tax Impact – Combined with Additional Borrowing.....	- 48 -
Table C9: Federal Tax Impact – Combined with Additional Borrowing	- 49 -
Table C10: State and Local Tax Impacts – Combined with Additional Borrowing.....	- 49 -

Executive Summary of Fresno State Economic Improvement Zone Measure

Economic Analysis:

- The Fresno State Economic Improvement Zone Measure (“FSIZ” or “Measure”) is a two-tenths percent (0.2%) 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) in career education programs, repairing and upgrading various academic and athletic facilities, and providing scholarships to local, low-income students.
- 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 \$36 million annually generated by the Fresno State Improvement Zone Measure.
- 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 for projects in the Central Valley, approved by the U.S. Federal government.
- At least two-thirds of the annual \$36 million, or approximately \$24 million dollars a year, will be used for expanding access and promoting excellence in career and education programs needed in nursing, agriculture, criminology, engineering/STEM. This will include repairing and upgrading classrooms, labs, and demonstration areas, improving campus fire and life safety, and providing safe drinking water.
- No more than one-third, or approximately \$12 million dollars a year, will be used to repair and upgrade women’s and men’s athletic facilities. This money may also be used for the cost of operations of the facilities if required.
- 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 the FSIZ. Below is a summary of 20 years of the economic impact of the total tax revenue raised (\$720 million).
- A supplemental economic impact study was also prepared applying an additional \$500 million of borrowing as a result of leveraging the sales tax revenue.

Table 1: Summary of Economic Impacts for the FSIZ Measure for the 20-Year Period, without Additional Borrowing

Impact- Total Jobs Created	7,596.37
Impact- By Category-in U.S. Dollars	
Labor Income	\$574,410,217
Employee Compensation	\$463,928,139
Proprietor Income	\$110,482,078
Other Property Type Income	\$201,902,443
Indirect Business Taxes	\$41,129,441
Total Value Added	\$817,442,101
Total Output	\$1,361,636,171
Federal Taxes	\$166,480,019
State and Local Taxes	\$85,531,541
Household Spending, Local Area	\$502,781,263
Total Economic Impacts in U.S. Dollars¹	\$2,179,078,272

Table 2: Summary of Economic Impacts for the FSIZ Measure for the 20-Year Period, with Additional Borrowing

Impact- Total Jobs Created	19,545.77
Impact- By Category-in U.S. Dollars	
Labor Income	\$992,968,972
Employee Compensation	\$811,861,658
Proprietor Income	\$181,107,315
Other Property Type Income	\$389,670,383
Indirect Business Taxes	\$7,770,610
Total Value Added	\$1,391,409,965
Total Output	\$2,324,575,501
Federal Taxes	\$202,257,153
State and Local Taxes	\$56,886,498
Household Spending, Local Area	\$869,145,742
Total Economic Impacts in U.S. Dollars²	\$3,715,985,466

¹ The total economic impact is the sum of all the economic impacts in the study region.

² The total economic impact is the sum of all the economic impacts in the study region.

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 the FSIZ Measure, this economic impact study was conducted. 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 User Handbook, 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 growth within the various academic disciplines, and the need for these funds based on an examining data regarding area growth and population characteristics.

It should be noted that two Summary tables are included: one based on the economic impact without additional investment capital (e.g., from borrowing) (Table 1), and the other with the additional investment capital (Table 2). One important aspect of our approach is to report findings in a conservative manner; in this case, the lower range of the estimate of economic impacts would be based solely on the revenue coming from the FSIZ sales tax Measure.

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 sets³ 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.

³ The current data set is 2020.

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.

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 are 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 a long recognized user need that an economic report provides two data sets of information, “job creation” and “economic impact,” both within the geographic scope.
- IMPLAN estimates three separate effects, labeled “direct”, “indirect” and “induced”. The direct effects are based on the economics created by capital investment. The indirect and induced represent the multiplier effects; these may be combined in 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, the California Energy Investment Center. Dr, Joseph 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 work began 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. 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. Fresno State Improvement Zone Measure-Revenue Assumption

The ballot question to be posed to the voters is:

“Shall the measure to expand access and promote excellence in career/educational programs needed in nursing, agriculture, criminology, engineering/STEM; repair/upgrade deteriorating classrooms, campus fire/life safety/public safety, women’s and men’s athletic facilities; provide safe drinking water; provide scholarship for local, low-income students including veterans, by establishing a Fresno County 0.2% sales tax, providing approximately \$36,000,000 annually for 20 years with independent oversight, audits, public disclosure, be adopted?”⁴

The annual amount of revenue to be generated annually under the Measure was independently verified by a staff associate who referenced current sales tax measures and associated their revenue generation with each’s percentage of Fresno County sales tax. The sales tax generated was derived from <https://www.cdtfa.ca.gov/DataPortal/dataset.htm?url=SUTDRevDistSpD-TransUT>. The following table represents a comparative analysis of three sales tax measures. Measure Z is closest to the FSIZ Measure. Measure Z revenue is based on .1 of 1% of sales taxes and generated \$18,167,116 in 2021. The FSIZ Measure is .2 of 1%, or two times the Measure Z revenue, and, therefore, will generate an estimated amount of \$36,334,232 in revenue.

Therefore, there is a reasonable basis for assuming that \$36 million will be generated under the FSIZ Measure.

⁴ From the Fresno County Transactions and Use Tax: Fresno State Improvement Zone Measure ballot initiative.

Table 3 – Comparative Analysis of Measures C, B, and Z for FY 2020-2021 Fresno County Sales Tax Distributions by District - Measure C, B, & 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 Transactions & Use Tax (Measure B)	Fresno	\$22,842,905	1/8th of one cent
2020-2021	County District	98	Zoo Authority (Measure Z)	Fresno	\$18,167,116	1/10th of 1% of total sales

The FSIZ Measure dictates that at least two-thirds (2/3) of the revenue (\$24 million) raised will be spent on academic programs and facilities. It also dictates that no more than one-third (1/3) (\$12 million) will be used for athletic facilities.

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. 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 20th anniversary of the operative date.

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 most populous county (1,013,851-July 2021); the five counties contiguous with Fresno County -Tulare, Kings, Madera, Merced, and Mariposa—have a total combined population about equal to Fresno County (1,093,515-July 2021). 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 Fresno State’s social and economic impact direct and palpable.

California State University, Fresno continues to prioritize equity and greater student access and 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 funding and private support are insufficient to maintain and grow the University. The FSIZ will provide California State University, Fresno the following:

- 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 STEM (Science, Technology, Engineering, and Mathematics)
- Replace outdated fire, life safety, security, and public safety facilities
- Improve video security infrastructure and lighting for student safety
- Provide scholarship funds so that local low- income students can be assured greater access to a college education
- Ensure all California State University, Fresno facilities are ADA accessible for people with disabilities.

California State University, Fresno is seen by employers as an essential resource to provide students with training, knowledge, and skills necessary for employment. Graduates help grow, diversify, and support the economy and, thus contribute to improving the quality of life throughout the community. The four academic program areas identified by the Measure have been targeted as critically short of graduates in terms of the needs of 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 FSIZ Measure will be made within in the State of California to the maximum extent possible. Therefore, when conducting the study, California was used as the regional input in IM-PLAN. 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, a work group made an effort to define State regions and propose a development plan for each. While Fresno was defined as the hub county of the center of the State, the work group never completed its plans 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 was noted as moving towards the Sacramento sphere. 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 regional planning and land use issues (<https://civicwell.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. An IMPLAN study of the economic impacts of all twenty-eight counties was performed by the CSU system using 2019 data. The Central Valley campuses were identified as CSU Stanislaus, CSU Bakersfield and CSU Fresno. 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. CSUF has a very high percentage of its graduates who remain in the Central Valley after graduation.

Although it may be reasonably assumed that the six core counties may realize 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, as such, the economic impacts extend to all areas of the state in terms of purchasing and value-added activities including processing, packaging, warehousing, transportation, distribution, wholesaling and retailing, and the 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. Following is data from the most recent and comprehensive (2020) U. S. 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 effects local area businesses. The following table, taken directly from IMPLAN, shows the employment multipliers for the region for selected agriculture, criminology, engineering, and nursing sectors.⁵

Industry	Type I Multiplier	Indirect Multiplier	Induced Multiplier
Grain farming	8.894	7.894	2.864
Dairy cattle and milk production	3.479	2.479	1.287
Meat processed from carcasses	2.282	1.282	0.758
Wineries	1.989	0.989	0.705
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1.836	0.836	0.707
Poultry processing	1.771	0.771	0.469
Scientific research and development services	1.658	0.658	0.917
Vegetable and melon farming	1.579	0.579	0.482
Hospitals	1.560	0.560	0.670
Oilseed farming	1.469	0.469	5.383
Tree nut farming	1.439	0.439	0.355
Other support services	1.402	0.402	0.418
Architectural, engineering, and related services	1.401	0.401	0.600
Legal services	1.345	0.345	0.601
Outpatient care centers	1.344	0.344	0.561
Management consulting services	1.328	0.328	0.555
Fruit farming	1.327	0.327	0.338
Offices of physicians	1.317	0.317	0.574
Custom computer programming services	1.316	0.316	0.729
Environmental and other technical consulting services	1.298	0.298	0.541
Office administrative services	1.251	0.251	0.434
Nursing and community care facilities	1.233	0.233	0.295
Other ambulatory health care services	1.225	0.225	0.380
Business support services	1.212	0.212	0.348
Landscape and horticultural services	1.208	0.208	0.283
All other crop farming	1.166	0.166	0.183
Residential mental retardation, mental health, substance abuse and other facilities	1.161	0.161	0.267
Computer systems design services	1.153	0.153	0.655
Medical and diagnostic laboratories	1.133	0.133	0.485
Home health care services	1.092	0.092	0.265
Offices of other health practitioners	1.082	0.082	0.264
Individual and family services	1.074	0.074	0.138
Veterinary services	1.057	0.057	0.292
Average	1.834	0.864	0.747

The following table provides data which differentiates Fresno County and contiguous counties from the rest of the State in several key respects relevant to the need for the FSIZ Measure.

⁵ For employment multipliers, each direct job created by the project would create X number of jobs in the indicated industry.

Table 5: 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 ⁶	53.8 %	39.4%
Asian	11.1%	15.5%
American Indian ⁷	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	33.7%	36.9%
Median Value Home, Owner Occupied ⁸	\$405,800	\$884,080
<u>Median Monthly</u>		
Owner Cost/w Mortgage ⁹	\$2485	\$3,976
Median Mo. Gros Rent ¹⁰	\$1675	\$2,274
Building permits/Population	25.8% > State ⁽¹¹⁾	
Household	312,604	13,379,828
Persons/Household ¹¹	3.2	2.91
Median Household Income ¹²	\$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 ¹³	17.48%	8.92%
Per Capita Income	25,757	38,576
Establishments/ Population	1.7%	2.6%
Employment Growth	2.3%	1.3%
Unemployment % ⁽¹⁴⁾	6.0%	3.8%

⁶ Includes Latino

⁷ Include Alaska Native

⁸ <https://www.redfin.com/county/312/CA/Fresno-County/housing-market> & <https://www.noradarealestate.com/blog/california-housing-market/>

⁹ Calculated by dividing the 2022 home price median value by the 2021 Census estimate median value, the Census cost.

¹⁰ <https://www.zumper.com/rent-research/fresno-ca>, June 2022 \$1675 (2-bedroom apartment) <https://www.rentdata.org/states/california/2022> (2-bedroom apartment)

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

¹² <https://www.healthyfresnocountydata.org/demographicdata?id=247§ionId=9368.2022>

¹³ [https://www.labormarketinfo.edd.ca.gov/file/lfmonth/frsn\\$pd.pdf](https://www.labormarketinfo.edd.ca.gov/file/lfmonth/frsn$pd.pdf)

Salient factors indicating a generalized need for the FSIZ Measure include:

- Area 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 even as Fresno is suburbanizing
- 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
- High school graduation rates are, in proportion to the population, 7.8% fewer 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 rate is more than 1.5 times greater than that of the State.

7. Understanding the Fresno State Improvement Zone Measure:

The Fresno State Improvement Zone Measure seeks to:

“expand access and promote excellence in career/education programs needed in nursing, agriculture, criminology, engineering/STEM; repair/upgrade deteriorating classrooms, campus fire/life safety/public safety systems; women’s and men’s athletic facilities; provide safe drinking water; provide scholarships for local, low-income students including veterans, by establishing a Fresno County 0.2% sales tax, providing approximately \$36,000,000 annually for 20 years with independent oversight, audits, publish disclosure.”¹⁴

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 Fresno State Improvement Zone 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. Additionally, at least two-thirds of the revenue raised by the measure must be spent on academic programs and facilities (\$24 million annually) and no more than one-third of the funds can be used for athletic facilities (\$12 million annually).

A Citizen's Oversight Committee will be formed to ensure the revenue raised through the ordinance is used for the specified purposes. The Oversight Committee will be appointed by the Board of Supervisors and each of the five members will be appointed for terms of four years, with

¹⁴ From the ballot initiative text.

members serving no more than three terms. The 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 FSIZ:

During the creation of this study, the following people have been consulted for information relevant to key economic assumptions:

- Tim Orman (former Chief of Staff, Fresno Mayor’s Office) provided financial information with regard to the revenues from similar Measures and the expected funds to be generated from the FSIZ measure. This data was subject to independent review and was verified as accurate as described in Section 4 above.
- Debbie Adishian-Astone (CSUF Vice President for Administration and Chief Financial Officer) has provided information on degrees awarded and faculty staffing in the target academic areas, as well as information relative to the CSU system-wide IMPLAN Study which included regional clusters of campuses.

9. IMPLAN and North American Industry Classification Sectors:

There are multiple IMPLAN/North American Industry Classification Sectors (NAICS) primarily affected by the FSIZ Measure.

- Academics
 - Agriculture
 - 541715 (Research and Development in the Physical, Engineering, and Life Sciences)
 - This U.S. industry comprises establishments primarily engaged in conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other allied subjects.
 - Criminology
 - 5411 (Legal Services)
 - This industry group comprises establishment primary engaged in offering legal services, such as those offered by offices of lawyers, offices of notaries, and title abstract and settlement offices, and paralegal services.
 - Engineering
 - 541330 (Engineering Services)
 - This industry comprises establishments primarily engaged in applying physical laws and principles of engineering in the design, development, and utilization of machines, materials, instruments, structures, processes, and systems. The assignments undertaken by these establishments may involve any of the following activities: provision of advice, preparation of

feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, and related services.

- Nursing
 - 621399 (Offices of All Other Miscellaneous Health Practitioners)
 - This U.S. industry comprises establishments of independent health practitioners (except physicians; dentists; chiropractors; optometrists; mental health specialists; physical, occupational, and speech therapists; audiologists; and podiatrists). These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.
- Athletics
 - Sports Construction
 - 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.

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.

- Athletics
 - All money goes to the construction and maintenance of athletic facilities to serve both men's and women's athletics.
- Academics
 - Money is distributed to the varying degree programs based on award of degrees and projected growth rates.
 - Growth Rates
 - Agriculture
 - Over the previous ten years (2012-2021) CSUF degrees awarded in Agriculture have grown by 29.0% and accounts for 37.0% of the total degrees awarded between the four measure areas. The Bureau of Labor and Statistics (BLS)

anticipates a 9% growth rate¹⁵ over the next ten years in this field.

- Criminology
 - Over the previous ten years (2012-2021) CSUF degrees awarded in Criminology have grown by 17.9% and accounts for 28.8% of the total degrees awarded between the four measure areas. The Bureau of Labor and Statistics (BLS) anticipates a 7% growth rate¹⁶ over the next ten years in this field.
- Engineering
 - Over the previous ten years (2012-2021) CSUF degrees awarded in Engineering have grown by 18.8% and accounts for 17.4% of the total degrees awarded between the four measure areas. The Bureau of Labor and Statistics (BLS) anticipates a 4% growth rate¹⁷ over the next ten years in this field.
- Nursing
 - Over the previous ten years (2012-2021) CSUF degrees awarded in Nursing have decreased by 21.0% and accounts for 15.4% of the total degrees awarded between the four measure areas. The Bureau of Labor and Statistics (BLS) anticipates a 9% growth rate¹⁸ over the next ten years in this field.
 - It should be noted that the decrease in degrees awarded shows an urgent need for more nurses in the region, especially given the recent COVID-19 global pandemic.
- Distribution of Measure Funds
 - There are many different ways to look at how to distribute funds to each of the academic fields. Ultimately, the Oversight Committee will determine the distribution of funds. The following inputs and assumptions were looked to determine the distribution of funds.
 - Growth in degrees at California State University – Fresno. Each academic category was analyzed over the last ten years for growth. This represents the demand from the students and the community for each academic field. However, as seen in the nursing category, that category experienced negative growth. This does not mean that demand has decreased; the opposite is true. Demand has gone up, but other market and program capacity factors are pushing students to other degree fields. COVID-19 has shown that there is a greater demand for nurses than before.

¹⁵ <https://www.bls.gov/OOH/life-physical-and-social-science/agricultural-and-food-scientists.htm>

¹⁶ <https://www.bls.gov/ooh/protective-service/police-and-detectives.htm>

¹⁷ <https://www.bls.gov/ooh/architecture-and-engineering/industrial-engineering-technicians.htm>

¹⁸ <https://www.bls.gov/ooh/healthcare/registered-nurses.htm>

- Growth according to the Bureau of Labor Statistics (“BLS”). BLS analyzes the need of each occupation in the United States in the Occupational Outlook Handbook and determines the job outlook for the next ten years. This represents the nation-wide demand.
- In order to distribute funds, the number of degrees awarded were increased by national demand. This created a conservative amount of growth across the four academic areas. Funds were then distributed based on volume of degrees awarded in each category from the last ten years. Table 6 shows the distribution of funds at the beginning of each period.

Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042
Agriculture	37.55%	40.09%	42.50%	44.77%
Criminology	28.62%	27.85%	26.92%	25.85%
Engineering	18.16%	15.33%	12.85%	10.70%
Nursing	15.66%	16.72%	17.73%	18.67%

¹⁹ For ease of data presentation, the 20 year period of the measure has been broken down into four summary periods of five (5) years each.

11. Economic Inputs for IMPLAN:

Table 2 represents the revenues the Fresno State Improvement Zone Measure for the four periods based on anticipated distributions:

Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042
Sports Construction	\$60,000,000	\$60,000,000	\$60,000,000	\$60,000,000
Academics Totals	\$120,000,000	\$120,000,000	\$120,000,000	\$120,000,000
Agriculture	\$ 23,147,730	\$ 24,640,823	\$ 26,053,815	\$ 27,380,534
Criminology	\$ 16,998,271	\$ 16,495,320	\$ 15,899,516	\$ 15,232,089
Engineering	\$ 10,199,117	\$ 8,586,208	\$ 7,179,663	\$ 5,966,999
Nursing	\$ 9,654,882	\$ 10,277,649	\$ 10,867,006	\$ 11,420,378
Academic Construction	\$60,000,000	\$60,000,000	\$60,000,000	\$60,000,000

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 the Fresno State Improvement Zone Measure and the IMPLAN User’s Manual.²⁰

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.

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

- a. Construction of Athletic Facilities

It is not reasonable for the FSIZ Measure to speculate on particular

²⁰ IMPLAN Group, LLC, *IMPLAN Professional, Social Accounting and Impact Analysis Software User Guide*, 3rd ed. (Stillwater, MI: MIG, Inc., 2004).

projects, and therefore, no project pro-formas are available. In the absence of specific project information, it is assumed that allocations of FSIZ Measure funds would be spent on the construction and maintenance of sports facilities and that the facilities would be self-sufficient from an operations standpoint.

b. Academic Programs

Money would be split between the different majors depending on greatest need and based on current and future student enrollment, local, state, and national demand, and Oversight Committee determinations.

Table 8 represents key data inputs to the IMPLAN model to determine the overall economic impact to the region from the FSIZ measure.

Table 8				
FSIZ IMPLAN Inputs				
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042
Sports Construction	\$60,000,000	\$60,000,000	\$60,000,000	\$60,000,000
Agriculture	\$ 23,147,730	\$ 24,640,823	\$ 26,053,815	\$ 27,380,534
Criminology	\$ 16,998,271	\$ 16,495,320	\$ 15,899,516	\$ 15,232,089
Engineering	\$ 10,199,117	\$ 8,586,208	\$ 7,179,663	\$ 5,966,999
Nursing	\$ 9,654,882	\$ 10,277,649	\$ 10,867,006	\$ 11,420,378
Academic Construction	\$60,000,000	\$60,000,000	\$60,000,000	\$60,000,000

Table 9 below reflects the number of jobs created by the FSIZ in the four periods.

Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042
Sports Construction	607.4	607.4	607.4	607.4
Agriculture	195.4	208.0	220.0	231.2
Criminology	143.3	139.1	134.0	128.4
Engineering	107.1	90.2	75.4	62.7
Nursing	113.9	121.3	128.3	134.8
Academic Construction	733.4	733.4	733.4	733.4
Totals	1900.5	1899.4	1898.5	1897.9

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

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.²¹

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.²²

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 Employment and Wage data (known as ES202 data) and REIS data.²³

Proprietary Income – Proprietary income consists of payments received by self-employed

²¹ IMPLAN Group, LLC, Version 3.0 User’s Guide (MIG, Inc., Stillwater, 2010), 267.

²² Ibid. 356

²³ IMPLAN Professional, Social Accounting and Impact Analysis Software User’s Guide, 3rd. edition (MIG, Inc., Stillwater, 2004), 125.

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.²⁴

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.²⁵

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.²⁶

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 entity identification data. SAM is a set of regional economic accounts, which describe transfers between institutions, as well as, value added components.²⁷ 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.^{28,29}

²⁴ Ibid., 125

²⁵ Ibid., 126

²⁶ Ibid., 126

²⁷ Ibid., 288

²⁸ Ibid., 401

²⁹ Note that the IMPLAN study was conducted for the four periods and includes academics and athletics. Economic impacts from academics are available in Appendix A and economic impacts from athletics are available in Appendix B.

1. Labor Income and Employee Compensation Produced

Table 10 below identifies the direct, indirect, and induced labor income generated. Column 5 represents the total labor income generated for the 20-year period, for a total of **\$574,410,217**.

Table 10					
Labor Income – FSIZ³⁰					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	86,436,504	86,313,384	86,204,607	86,109,444	345,063,939
Indirect	24,577,109	24,580,510	24,590,250	24,605,273	98,353,142
Induced	32,795,356	32,759,989	32,730,733	32,707,059	130,993,136
Totals	143,808,968	143,653,884	143,525,590	143,421,775	574,410,217

Table 11 below identifies the employee compensation generated for the 20-year period, which is a total of **\$463,928,139**.

Table 11					
Employee Compensation – FSIZ³¹					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	67,551,768	67,505,210	67,467,038	67,436,505	269,960,520
Indirect	20,640,141	20,638,895	20,643,535	20,653,136	82,575,706
Induced	27,888,023	27,857,937	27,833,047	27,812,906	111,391,913
Totals	116,079,932	116,002,042	115,943,620	115,902,546	463,928,139

³⁰ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

³¹ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

2. Proprietor and Other Property Type Income Produced.

Table 12 below identifies income generated for proprietors in the defined region. The total for the 20-year period is **\$110,482,078**.

Table 12					
Proprietor Income – FSIZ³²					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	18,884,736	18,808,175	18,737,569	18,672,939	75,103,419
Indirect	3,936,968	3,941,615	3,946,715	3,952,137	15,777,435
Induced	4,907,333	4,902,052	4,897,685	4,894,153	19,601,223
Totals	27,729,037	27,651,842	27,581,969	27,519,230	110,482,078

Table 13 below indicates the economic impacts relating to property type income for the measure for the 20-year period. This totals **\$201,902,443**.

Table 13					
Other Property Type Income – FSIZ³³					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	15,296,077	15,438,560	15,551,938	15,639,052	61,925,627
Indirect	11,915,643	11,944,549	11,971,950	11,997,716	47,829,858
Induced	23,069,562	23,044,883	23,024,493	23,008,020	92,146,959
Totals	50,281,282	50,427,992	50,548,381	50,644,789	201,902,443

³² Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

³³ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

3. Indirect Business Taxes Generated

Table 14 below identifies the indirect business tax revenues produced during the 20-year period. The total indirect business taxes generated is **\$41,129,441**.

Table 14					
Indirect Business Tax – FSIZ³⁴					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	1,743,467	1,744,131	1,742,564	1,739,113	6,969,275
Indirect	3,102,883	3,100,236	3,098,022	3,096,206	12,397,346
Induced	5,448,463	5,442,630	5,437,811	5,433,916	21,762,820
Totals	10,294,812	10,286,997	10,278,396	10,269,236	41,129,441

4. Total Value Added.

Table 15 below identifies the direct, indirect, and induced total value added during the 20-year period, for a total of **\$817,442,101**.

Table 15					
Total Value Added – FSIZ³⁵					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	103,476,048	103,496,075	103,499,108	103,487,610	413,958,840
Indirect	39,595,634	39,625,295	39,660,222	39,699,195	158,580,346
Induced	61,313,380	61,247,503	61,193,036	61,148,995	244,902,915
Totals	204,385,062	204,368,873	204,352,367	204,335,800	817,442,101

³⁴ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

³⁵ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

5. Total Output.

As indicated in Table 16, the total economic output for the measure during the 20-year period is **\$1,361,636,171**.

Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	170,580,024	170,596,278	170,608,065	170,615,893	682,400,260
Indirect	71,625,997	71,677,330	71,735,947	71,800,032	286,839,306
Induced	98,239,656	98,134,059	98,046,748	97,976,142	392,396,604
Totals	340,445,677	340,407,667	340,390,760	340,392,067	1,361,636,171

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

Following is a summary of the Federal and the State tax impacts specified by social security, personal, business, and corporate tax generated for the Measure project for the 20-year period.

³⁶ Economic breakouts for academics and athletics can be found in Appendix A and B respectively.

Table 17 - Tax Impact for Combined

Federal Tax Impact (2019 Dollars)

			5001	6001	8001		13001	
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
11001	15014	Social Ins Tax- Employee Contribution	\$42,910,976	\$1,947,172				\$44,858,148
11001	15015	Social Ins Tax- Employer Contribution	\$39,358,936					\$39,358,936
11001	15017	Tax on Production and Imports: Excise Taxes			\$2,179,992			\$2,179,992
11001	15018	Tax on Production and Imports: Custom Duty			\$1,766,956			\$1,766,956
11001	15026	Corporate Profits Tax					\$8,865,284	\$8,865,284
11001	15027	Personal Tax: Income Tax				\$69,450,703		\$69,450,703
11001	99999	Total Federal Tax	\$82,269,912	\$1,947,172	\$3,946,948	\$69,450,703	\$8,865,284	\$166,480,019

State and County Tax Impacts (2019 Dollars)

			5001	6001	8001		13001	
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution	\$1,569,460					\$1,569,460
12001	15015	Social Ins Tax- Employer Contribution	\$2,400,834					\$2,400,834
12001	15020	Tax on Production and Imports: Sales Tax			\$23,868,088			\$23,868,088
12001	15021	Tax on Production and Imports: Property Tax			\$19,927,907			\$19,927,907
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$566,227			\$566,227
12001	15023	Tax on Production and Imports: Severance Tax			\$37,135			\$37,135
12001	15024	Tax on Production and Imports: Other Taxes			\$3,648,264			\$3,648,264
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$821,932			\$821,932
12001	15026	Corporate Profits Tax					\$3,974,558	\$3,974,558
12001	15027	Personal Tax: Income Tax				\$27,204,337		\$27,204,337
12001	15030	Personal Tax: Motor Vehicle License				\$819,253		\$819,253
12001	15031	Personal Tax: Property Taxes				\$566,554		\$566,554
12001	15032	Personal Tax: Other Tax (Fish/Hunt)				\$126,992		\$126,992
12001	99999	Total State and Local Tax	\$3,970,294	\$0	\$48,869,553	\$28,717,136	\$3,974,558	\$85,531,541

The total Federal Tax impacts are as follows:

Table 18 Federal Tax Impacts	
Employee Compensation	\$82,269,912
Proprietor Income Taxes	\$1,947,172
Indirect Business Taxes	\$3,946,948
Households, Personal Income Taxes	\$69,450,703
Corporation Taxes	\$8,865,284
Total Federal Tax Impact	\$166,480,019

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

Table 19 State and Local Tax Impacts	
Employee Compensation	\$3,970,294
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$48,869,553
Household Taxes	\$28,717,136
Corporation Taxes	\$3,974,558
Total State and Local Tax Impact	\$85,531,541

The total of Federal and State tax impacts is: **\$252,011,560.**

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, a total of \$502,781,263 in household spending by local households will be generated by the project for the 20-year period.

15. Summary of Economic Impacts for the Measure:

Table 20 shown on following page summarizes the economic impacts specifically identified in each of the tables above of the IMPLAN Study for the FSIZ Measure.

Total Jobs Created	7,596.37
Economic Impacts -by Category-in U.S. Dollars	
Labor Income	\$574,410,217
Employee Compensation	\$463,928,139
Proprietor Income	\$110,482,078
Other Property Type Income	\$201,902,443
Indirect Business Taxes	\$41,129,441
Total Value Added	\$817,442,101
Total Output	\$1,361,636,171
Federal Taxes	\$166,480,019
State and Local Taxes	\$85,531,541
Household Spending, Local Area	\$502,781,263
Total Economic Impact in U.S. Dollars	\$2,179,078,272

16. Professional Opinions:

Based on the operational, economic, and financial assumptions derived from all data sources, this IMPLAN analysis demonstrates that the FSIZ Measure creates a substantial economic 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.

Appendix A – Economic Impacts from Academics

1. Labor Income and Employee Compensation Produced

Table A1 below identifies the direct, indirect, and induced labor income generated. Column 5 represents the total labor income generated for the 20-year period, for a total of **\$396,905,654**.

Table A1					
Labor Income – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	61,277,612	61,154,492	61,045,714	60,950,551	244,428,369
Indirect	15,479,894	15,483,295	15,493,035	15,508,058	61,964,282
Induced	22,675,322	22,639,956	22,610,700	22,587,026	90,513,004
Totals	99,432,827	99,277,743	99,149,449	99,045,635	396,905,654

Table A2 below identifies the employee compensation generated for the 20-year period, which is a total of **\$322,637,555**.

Table A2					
Employee Compensation – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	48,549,312	48,502,753	48,464,582	48,434,049	193,950,696
Indirect	12,925,793	12,924,546	12,929,186	12,938,787	51,718,313
Induced	19,282,181	19,252,096	19,227,206	19,207,064	76,968,547
Totals	80,757,286	80,679,395	80,620,974	80,579,900	322,637,555

2. Proprietor and Other Property Type Income Produced.

Table A3 below identifies income generated for proprietors in the defined region. The total for the 20-year period is **\$74,268,099**.

Table A3					
Proprietor Income – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	12,728,300	12,651,738	12,581,132	12,516,503	50,477,673
Indirect	2,554,101	2,558,749	2,563,849	2,569,271	10,245,969
Induced	3,393,141	3,387,861	3,383,494	3,379,961	13,544,457
Totals	18,675,542	18,598,347	18,528,475	18,465,735	74,268,099

Table A4 below indicates the economic impacts relating to property type income for the measure for the 20-year period. This totals **\$141,022,394**.

Table A4					
Other Property Type Income – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	11,568,638	11,711,121	11,824,500	11,911,614	47,015,873
Indirect	7,539,815	7,568,722	7,596,122	7,621,889	30,326,547
Induced	15,952,816	15,928,137	15,907,747	15,891,273	63,679,973
Totals	35,061,269	35,207,980	35,328,368	35,424,776	141,022,394

3. Indirect Business Taxes Generated

Table A5 below identifies the indirect business tax revenues produced during the 20-year period. The total indirect business taxes generated is **\$26,408,250**.

Table A5					
Indirect Business Tax – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	1,380,425	1,381,090	1,379,522	1,376,072	5,517,109
Indirect	1,466,468	1,463,821	1,461,608	1,459,791	5,851,688
Induced	3,767,621	3,761,788	3,756,969	3,753,075	15,039,452
Totals	6,614,514	6,606,699	6,598,099	6,588,938	26,408,250

4. Total Value Added.

Table A6 below identifies the direct, indirect, and induced total value added during the 20-year period, for a total of **\$564,336,298**.

Table A6					
Total Value Added – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	74,226,675	74,246,703	74,249,736	74,238,238	296,961,352
Indirect	24,486,177	24,515,838	24,550,765	24,589,738	98,142,518
Induced	42,395,759	42,329,881	42,275,415	42,231,373	169,232,429
Totals	141,108,611	141,092,422	141,075,916	141,059,349	564,336,298

5. Total Output.

As indicated in Table A7, the total economic output for the measure during the 20-year period is **\$901,793,307**.

Table A7					
Total Output – Academics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	113,989,720	114,005,975	114,017,762	114,025,589	456,039,047
Indirect	43,566,900	43,618,233	43,676,850	43,740,936	174,602,918
Induced	67,928,341	67,822,743	67,735,432	67,664,826	271,151,342
Totals	225,484,961	225,446,951	225,430,044	225,431,351	901,793,307

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

Following is a summary of the Federal and the State tax impacts specified by social security, personal, business, and corporate tax generated for the Measure project for the 20-year period.

Table A8 - Tax Impact for Academic Scenario

Federal Tax Impact (2019 Dollars)								
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
11001	15014	Social Ins Tax- Employee Contribution	\$21,455,488	\$973,586				\$22,429,074
11001	15015	Social Ins Tax- Employer Contribution	\$19,679,468					\$19,679,468
11001	15017	Tax on Production and Imports: Excise Taxes			\$1,089,996			\$1,089,996
11001	15018	Tax on Production and Imports: Custom Duty			\$883,478			\$883,478
11001	15026	Corporate Profits Tax					\$4,432,642	\$4,432,642
11001	15027	Personal Tax: Income Tax				\$34,725,352		\$34,725,352
11001	99999	Total Federal Tax	\$41,134,956	\$973,586	\$1,973,474	\$34,725,352	\$4,432,642	\$83,240,009
State and County Tax Impacts (2019 Dollars)								
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution	\$784,730					\$784,730
12001	15015	Social Ins Tax- Employer Contribution	\$1,200,417					\$1,200,417
12001	15020	Tax on Production and Imports: Sales Tax			\$11,934,044			\$11,934,044
12001	15021	Tax on Production and Imports: Property Tax			\$9,963,953			\$9,963,953
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$283,114			\$283,114
12001	15023	Tax on Production and Imports: Severance Tax			\$18,568			\$18,568
12001	15024	Tax on Production and Imports: Other Taxes			\$1,824,132			\$1,824,132
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$410,966			\$410,966
12001	15026	Corporate Profits Tax					\$1,987,279	\$1,987,279
12001	15027	Personal Tax: Income Tax				\$13,602,169		\$13,602,169
12001	15030	Personal Tax: Motor Vehicle License				\$409,626		\$409,626
12001	15031	Personal Tax: Property Taxes				\$283,277		\$283,277
12001	15032	Personal Tax: Other Tax (Fish/Hunt)				\$63,496		\$63,496
12001	99999	Total State and Local Tax	\$1,985,147		\$24,434,776	\$14,358,568	\$1,987,279	\$42,765,771

The total Federal Tax impacts are as follows:

Table A9 Federal Tax Impacts	
Employee Compensation	\$41,134,956
Proprietor Income Taxes	\$973,586
Indirect Business Taxes	\$1,973,474
Households, Personal Income Taxes	\$34,725,352
Corporation Taxes	\$4,432,642
Total Federal Tax Impact	\$83,240,009

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

Table A10 State and Local Tax Impacts	
Employee Compensation	\$1,985,147
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$24,434,776
Household Taxes	\$14,358,568
Corporation Taxes	\$1,987,279
Total State and Local Tax Impact	\$42,765,771

The total of Federal and State tax impacts is: **\$126,005,780.**

Appendix B – Economic Impacts from Athletics

1. Labor Income and Employee Compensation Produced

Table B1 below identifies the direct, indirect, and induced labor income generated. Column 5 represents the total labor income generated for the 20-year period, for a total of **\$177,504,563**.

Table B1					
Labor Income – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	25,158,893	25,158,893	25,158,893	25,158,893	100,635,571
Indirect	9,097,215	9,097,215	9,097,215	9,097,215	36,388,860
Induced	10,120,033	10,120,033	10,120,033	10,120,033	40,480,133
Totals	44,376,141	44,376,141	44,376,141	44,376,141	177,504,563

Table B2 below identifies the employee compensation generated for the 20-year period, which is a total of **\$141,290,584**.

Table B2					
Employee Compensation – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	19,002,456	19,002,456	19,002,456	19,002,456	76,009,825
Indirect	7,714,348	7,714,348	7,714,348	7,714,348	30,857,394
Induced	8,605,842	8,605,842	8,605,842	8,605,842	34,423,366
Totals	35,322,646	35,322,646	35,322,646	35,322,646	141,290,584

2. Proprietor and Other Property Type Income Produced.

Table B3 below identifies income generated for proprietors in the defined region. The total for the 20-year period is **\$36,213,979**.

Table B3					
Proprietor Income – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	6,156,436	6,156,436	6,156,436	6,156,436	24,625,746
Indirect	1,382,867	1,382,867	1,382,867	1,382,867	5,531,466
Induced	1,514,192	1,514,192	1,514,192	1,514,192	6,056,767
Totals	9,053,495	9,053,495	9,053,495	9,053,495	36,213,979

Table B4 below indicates the economic impacts relating to property type income for the measure for the 20-year period. This totals **\$60,880,050**.

Table B4					
Other Property Type Income – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	3,727,438	3,727,438	3,727,438	3,727,438	14,909,753
Indirect	4,375,828	4,375,828	4,375,828	4,375,828	17,503,311
Induced	7,116,746	7,116,746	7,116,746	7,116,746	28,466,986
Totals	15,220,012	15,220,012	15,220,012	15,220,012	60,880,050

3. Indirect Business Taxes Generated

Table B5 below identifies the indirect business tax revenues produced during the 20-year period. The total indirect business taxes generated is **\$14,721,190**.

Table B5					
Indirect Business Tax – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	363,041	363,041	363,041	363,041	1,452,165
Indirect	1,636,414	1,636,414	1,636,414	1,636,414	6,545,658
Induced	1,680,842	1,680,842	1,680,842	1,680,842	6,723,367
Totals	3,680,298	3,680,298	3,680,298	3,680,298	14,721,190

4. Total Value Added.

Table B6 below identifies the direct, indirect, and induced total value added during the 20-year period, for a total of **\$253,105,803**.

Table B6					
Total Value Added – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	29,249,372	29,249,372	29,249,372	29,249,372	116,997,489
Indirect	15,109,457	15,109,457	15,109,457	15,109,457	60,437,829
Induced	18,917,621	18,917,621	18,917,621	18,917,621	75,670,486
Totals	63,276,451	63,276,451	63,276,451	63,276,451	253,105,803

5. Total Output.

As indicated in Table B7, the total economic output for the measure during the 20-year period is **\$459,842,863**.

Table B7					
Total Output – Athletics					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	56,590,303	56,590,303	56,590,303	56,590,303	226,361,214
Indirect	28,059,097	28,059,097	28,059,097	28,059,097	112,236,388
Induced	30,311,316	30,311,316	30,311,316	30,311,316	121,245,262
Totals	114,960,716	114,960,716	114,960,716	114,960,716	459,842,863

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

Following is a summary of the Federal and the State tax impacts specified by social security, personal, business, and corporate tax generated for the Measure project for the 20-year period.

Table B8 - Tax Impact for Sports Construction

Federal Tax Impact (2019 Dollars)								
			5001	6001	8001		13001	
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
11001	15014	Social Ins Tax- Employee Contribution	\$9,540,795	\$474,230				\$10,015,025
11001	15015	Social Ins Tax- Employer Contribution	\$8,751,037					\$8,751,037
11001	15017	Tax on Production and Imports: Excise Taxes			\$607,615			\$607,615
11001	15018	Tax on Production and Imports: Custom Duty			\$492,492			\$492,492
11001	15026	Corporate Profits Tax					\$1,913,593	\$1,913,593
11001	15027	Personal Tax: Income Tax				\$15,552,594		\$15,552,594
11001	99999	Total Federal Tax	\$18,291,832	\$474,230	\$1,100,106	\$15,552,594	\$1,913,593	\$37,332,355
State and County Tax Impacts (2019 Dollars)								
			5001	6001	8001		13001	
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution	\$348,953					\$348,953
12001	15015	Social Ins Tax- Employer Contribution	\$533,800					\$533,800
12001	15020	Tax on Production and Imports: Sales Tax			\$6,652,593			\$6,652,593
12001	15021	Tax on Production and Imports: Property Tax			\$5,554,372			\$5,554,372
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$157,821			\$157,821
12001	15023	Tax on Production and Imports: Severance Tax			\$10,350			\$10,350
12001	15024	Tax on Production and Imports: Other Taxes			\$1,016,856			\$1,016,856
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$229,091			\$229,091
12001	15026	Corporate Profits Tax					\$857,918	\$857,918
12001	15027	Personal Tax: Income Tax				\$6,088,831		\$6,088,831
12001	15030	Personal Tax: Motor Vehicle License				\$183,102		\$183,102
12001	15031	Personal Tax: Property Taxes				\$126,697		\$126,697
12001	15032	Personal Tax: Other Tax (Fish/Hunt)				\$28,433		\$28,433
12001	99999	Total State and Local Tax	\$882,752		\$13,621,084	\$6,427,063	\$857,918	\$21,788,817

The total Federal Tax impacts are as follows:

Table B9 Federal Tax Impacts	
Employee Compensation	\$18,291,832
Proprietor Income Taxes	\$474,230
Indirect Business Taxes	\$1,100,106
Households, Personal Income Taxes	\$15,552,594
Corporation Taxes	\$1,913,593
Total Federal Tax Impact	\$37,332,355

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

Table B10 State and Local Tax Impacts	
Employee Compensation	\$882,752
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$13,621,084
Household Taxes	\$6,427,063
Corporation Taxes	\$857,918
Total State and Local Tax Impact	\$21,788,817

The total of Federal and State/Local tax impacts is: **\$59,121,172.**

Appendix C – Combined Economic Impacts with Additional Borrowing

1. Labor Income and Employee Compensation Produced

Table C1 below identifies the direct, indirect, and induced labor income generated. Column 5 represents the total labor income generated for the 20-year period, for a total of **\$992,968,972**.

Table C1					
Labor Income – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	146,583,248	146,199,437	145,868,182	145,585,960	584,236,827
Indirect	46,944,811	46,879,128	46,831,728	46,800,523	187,456,189
Induced	55,492,083	55,363,418	55,255,059	55,165,396	221,275,956
Totals	249,020,141	248,441,983	247,954,969	247,551,879	992,968,972

Table C2 below identifies the employee compensation generated for the 20-year period, which is a total of **\$811,861,658**.

Table C2					
Employee Compensation – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	116,844,924	116,606,996	116,407,975	116,244,666	466,104,560
Indirect	39,212,131	39,150,405	39,105,176	39,074,590	156,542,301
Induced	47,451,743	47,341,700	47,249,022	47,172,331	189,214,796
Totals	203,508,798	203,099,102	202,762,172	202,491,586	811,861,658

2. Proprietor and Other Property Type Income Produced.

Table C3 below identifies income generated for proprietors in the defined region. The total for the 20-year period is **\$181,107,315**.

Table C3					
Proprietor Income – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	29,738,324	29,592,441	29,460,207	29,341,294	118,132,267
Indirect	7,732,680	7,728,723	7,726,552	7,725,933	30,913,888
Induced	8,040,339	8,021,718	8,006,037	7,993,065	32,061,160
Totals	45,511,344	45,342,881	45,192,797	45,060,293	181,107,315

Table C4 below indicates the economic impacts relating to property type income for the measure for the 20-year period. This totals **\$389,670,383**.

Table C4					
Other Property Type Income – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	36,756,466	37,316,669	37,790,240	38,183,904	150,047,279
Indirect	21,916,582	21,920,823	21,927,252	21,935,467	87,700,124
Induced	38,099,480	38,011,215	37,936,889	37,875,397	151,922,980
Totals	96,772,527	97,248,707	97,654,381	97,994,768	389,670,383

3. Indirect Business Taxes Generated

Table C5 below identifies the indirect business tax revenues produced during the 20-year period. The total indirect business taxes generated is **\$7,770,610**.

Table C5					
Indirect Business Tax – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct ³⁷	(7,571,821)	(7,589,855)	(7,608,525)	(7,627,499)	(30,397,699)
Indirect	3,592,598	3,590,212	3,587,859	3,585,565	14,356,233
Induced	5,971,618	5,957,791	5,946,149	5,936,518	23,812,076
Totals	1,992,396	1,958,148	1,925,483	1,894,583	7,770,610

4. Total Value Added.

Table C6 below identifies the direct, indirect, and induced total value added during the 20-year period, for a total of **\$1,390,409,965**.

Table C6					
Total Value Added – Combined with Additional Borrowing					
Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	175,767,893	175,926,252	176,049,897	176,142,365	703,886,407
Indirect	72,453,990	72,390,162	72,346,839	72,321,555	289,512,547
Induced	99,563,181	99,332,423	99,138,097	98,977,311	397,011,011
Totals	347,785,064	347,648,838	347,534,833	347,441,230	1,390,409,965

³⁷ Indirect business taxes can be negative in an industry in a given year, if the industry receives more in subsidies from the government than it paid out in taxes.

5. Total Output.

As indicated in Table C7, the total economic output for the measure during the 20-year period is **\$2,321,575,501**.

Period	Period 1 2023 – 2027	Period 2 2028 – 2032	Period 3 2033 – 2037	Period 4 2038 – 2042	Totals
Direct	295,422,159	295,411,182	295,402,015	295,394,509	1,181,629,865
Indirect	127,249,290	127,150,191	127,080,701	127,037,349	508,517,531
Induced	158,350,739	157,983,736	157,674,674	157,418,957	631,428,106
Totals	581,022,188	580,545,108	580,157,390	579,850,815	2,321,575,501

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

Following is a summary of the Federal and the State tax impacts specified by social security, personal, business, and corporate tax generated for the Measure project for the 20-year period.

Table C8 - Tax Impact for Academics/Athletics with Additional Borrowing

Federal Tax Impact (2020 Dollars)								
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
11001	15014	Social Ins Tax- Employee Contribution	\$54,758,862	\$2,659,466				\$57,418,328
11001	15015	Social Ins Tax- Employer Contribution	\$49,738,448					\$49,738,448
11001	15017	Tax on Production and Imports: Excise Taxes			(\$3,389,032)			(\$3,389,032)
11001	15018	Tax on Production and Imports: Custom Duty			(\$2,602,138)			(\$2,602,138)
11001	15026	Corporate Profits Tax					\$10,900,419	\$10,900,419
11001	15027	Personal Tax: Income Tax				\$90,191,130		\$90,191,130
11001	99999	Total Federal Tax	\$104,497,310	\$2,659,466	(\$5,991,171)	\$90,191,130	\$10,900,419	\$202,257,153
State and County Tax Impacts (2020 Dollars)								
InstitutionReceipts	TransferType	Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations	Total
12001	15014	Social Ins Tax- Employee Contribution	\$2,085,366					\$2,085,366
12001	15015	Social Ins Tax- Employer Contribution	\$2,943,377					\$2,943,377
12001	15020	Tax on Production and Imports: Sales Tax			\$6,352,030			\$6,352,030
12001	15021	Tax on Production and Imports: Property Tax			\$5,892,833			\$5,892,833
12001	15022	Tax on Production and Imports: Motor Vehicle Lic			\$149,642			\$149,642
12001	15023	Tax on Production and Imports: Severance Tax			\$7,928			\$7,928
12001	15024	Tax on Production and Imports: Other Taxes			\$1,162,402			\$1,162,402
12001	15025	Tax on Production and Imports: S/L NonTaxes			\$196,945			\$196,945
12001	15026	Corporate Profits Tax					\$4,439,902	\$4,439,902
12001	15027	Personal Tax: Income Tax				\$31,752,097		\$31,752,097
12001	15030	Personal Tax: Motor Vehicle License				\$1,004,520		\$1,004,520
12001	15031	Personal Tax: Property Taxes				\$744,324		\$744,324
12001	15032	Personal Tax: Other Tax (Fish/Hunt)				\$155,130		\$155,130
12001	99999	Total State and Local Tax	\$5,028,744		\$13,761,780	\$33,656,071	\$4,439,902	\$56,886,498

The total Federal Tax impacts are as follows:

Table C9 Federal Tax Impacts	
Employee Compensation	\$104,497,310
Proprietor Income Taxes	\$2,659,466
Indirect Business Taxes	(\$5,991,171)
Households, Personal Income Taxes	\$90,191,130
Corporation Taxes	\$10,900,419
Total Federal Tax Impact	\$202,257,153

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

Table C10 State and Local Tax Impacts	
Employee Compensation	\$5,028,744
Proprietor Income Taxes	\$0
Tax on Production and Imports	\$13,761,780
Household Taxes	\$33,656,071
Corporation Taxes	\$4,439,902
Total State and Local Tax Impact	\$56,886,498

The total of Federal and State tax impacts is: **\$259,143,651.**