

An EB-5 Economic Analysis of the Princeton Apartments Project in Princeton, TX

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I. Executive Summary

Regional Center: Encore Texas Regional Center, LLC (“Regional Center”) is an existing regional center under the U.S. Citizenship and Immigration Services Immigrant Investor Pilot Program (the “EB-5 Program”).

Project Studied in This Analysis: The EB-5 capital investment activity studied in this report consists of the development and operations of Princeton Apartments, a 306-unit, three-story, multifamily development in Princeton, TX (the “Project”).

Job Creation: In total, the development and operations of the Project are projected to create 326.6 direct, indirect, and induced jobs. As the Project is located in targeted employment area (TEA), the projected 326.6 jobs allow for a maximum EB-5 raise of \$16.0 million.

Geographic Impact Area: The Project is located in Princeton, TX within Collin County and will have an impact area consisting of the Dallas-Fort Worth, TX-OK Combined Statistical Area (CSA) (Dallas CSA). The Dallas CSA is made up of the following 20 counties: Collin, Cooke, Dallas, Denton, Ellis, Grayson, Henderson, Hood, Hopkins, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, Tarrant, and Wise in Texas and Bryan in Oklahoma (“impact area”). The RIMS II multipliers utilized in this analysis are reflective of this 20-county area. The Project location is included in the Regional Center’s current geographic designation.

Industries: The Project’s activities under study in this analysis will occur in the following industries.

Table 1: Project Industries
(NAICS and Corresponding RIMS II Designations)

Project Activity	NAICS	NAICS Industry	Corresponding RIMS II Industry
Construction	2361	Residential Building Construction	2334B0 Residential structures
Architecture/Engineering	5413	Architectural, Engineering, and Related Services	541300 Architectural, engineering, and related services
FF&E	42	Wholesale Trade	420000 Wholesale trade
Operations	5311	Lessors of Real Estate	531000 Real estate

Job Calculation Related to Construction & Development Activities: Based on the project timeline, the construction period for the Project will last less than 24 months. Therefore, consistent with USCIS guidance, this analysis only considers indirect and induced impacts resulting from development expenditures for the Project. A discussion of the indirect and induced calculation methodology is provided in Appendix A. As discussed in the detail of this report, the job creation

related to development activities relies only on hard construction, architectural and engineering, and FF&E expenditures. All other Project costs are excluded from the impact model.

Job Calculation Related to Operations: Total job creation from operations (leasing, management and maintenance of the property) for the Project analyzed in this report is determined based on the projected revenues from operations and the industry-specific RIMS II Type II final-demand employment multiplier for the impact area.

Economic Impacts Summarized: The job creation and economic impacts resulting from the Project are summarized next. The detailed estimates of employment, economic output, and household earnings for the Project found in Sections V through VII show the distribution of total impacts across 20 major industry categories. The summary table below identifies:

- (a) Employment: The permanent jobs to be created in the impact area.
- (b) Economic Output: The demand for additional services (economic output) created in the impact area.
- (c) Household Earnings: The wages and salaries, employer provided benefits, and proprietors' income in the impact area.

The table also itemizes the demand for additional services (economic output) created by the Project for the following specific categories:

- (a) Utilities: This category represents the demand for utilities such as electricity, natural gas, and water and wastewater services.
- (b) Maintenance and repair construction services: This category represents the demand for maintenance and repair services created in the impact area as a result of the Project.
- (c) Manufacturing: This category represents the additional demand for manufactured goods produced in the impact area supported by the investment and subsequent economic activity.
- (d) Business services: This category includes three industry categories as detailed by the RIMS II output related to professional business support services. The category represents the additional demand for (1) professional, scientific, and technical services, (2) management of companies and enterprises, and (3) administrative and waste management services in the regional center area supported by the investment and subsequent economic activity.

These four specific categories represent a subset of total economic output generated in the impact area.

The table below shows a summary of the impact of the development and operations of the Project.

Table 2: Economic Impact Summary

Activity (RIMS II)	Employment	Economic Output	Household Earnings
Residential structures (2334B0)*	276.1	\$39,295,204	\$11,366,925
Architectural, engineering, and related services (541300)*	2.7	\$353,471	\$113,130
Wholesale trade (420000)*	1.6	\$213,707	\$65,839
Real estate (531000)	46.3	\$6,781,421	\$1,473,165
Total	326.6	\$46,643,804	\$13,019,060

* Indirect and induced effects only.

Note: Total may not sum due to rounding.

Itemized Demand for Additional Services	Economic Output
Utilities	\$724,755
Maintenance & repair construction	\$535,447
Manufacturing	\$8,883,375
Business Services	\$5,221,426
Total for Four Categories	\$15,365,002

Terminology Clarification: This economic analysis presents “reasonable methodologies” as considered in 8 C.F.R. § 204.6(i) (4)(iii) to demonstrate job creation. As stated in the regulations, the proof of job creation in the context of regional centers is not Forms I-9, payroll records, or similar documentation, but rather “reasonable methodologies” such as this report.

Accordingly, a discussion of terminology is required. The term “direct jobs” used in this report should not be confused with the concept of direct job creation measurable by tax records, Forms I-9, or other similar documents as set forth in 8 C.F.R. § 204.6(i)(4)(i)(A). That section of the regulations considers jobs held by the actual employees of the new commercial enterprise, specifically in the non-regional center context.

When economists use the term “direct jobs” in the context of an economic impact study using RIMS II, what is typically meant are jobs created directly by expenditures or revenues (which in the EB-5 Pilot program results from an immigrant investor’s investment). The verification of job creation based in this study will be the development expenditures and operational revenues outlined in Section III.

The above is a summary of the study and the details are provided below. The report includes the following information:

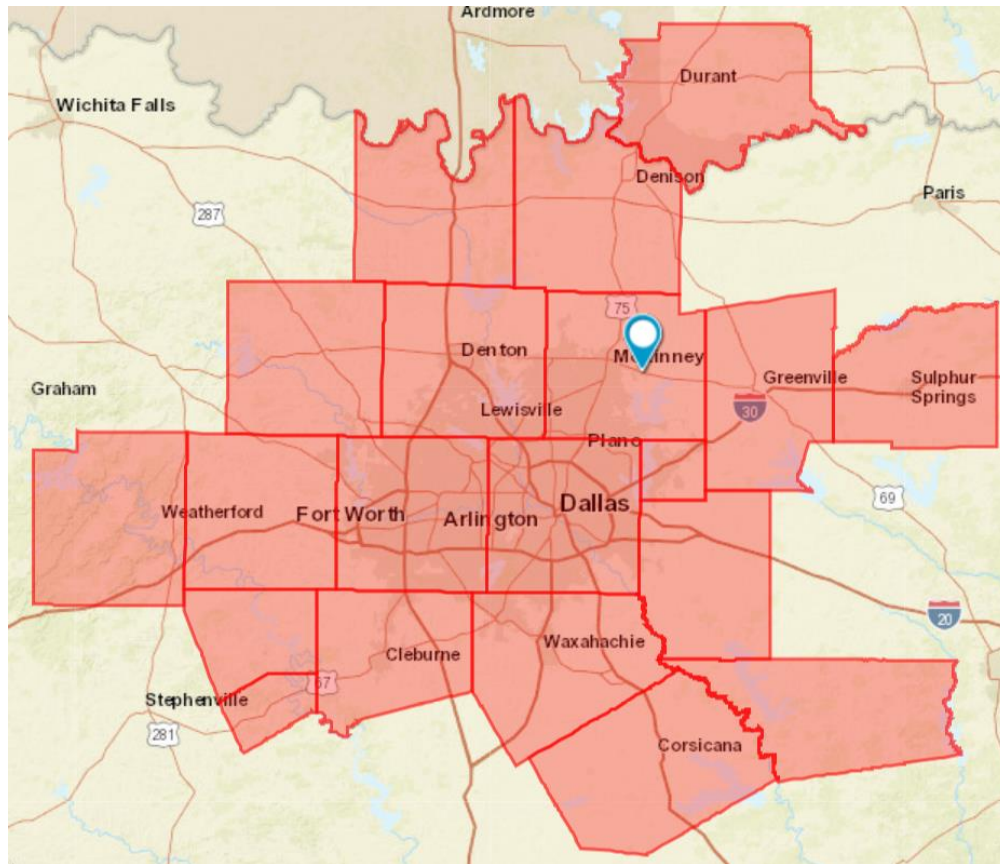
- Impact area of the project,
- Discussion of the Project including a verification of inputs for the model,
- Discussion of the RIMS II model and list of RIMS II multipliers used in the analysis,
- Presentation of the projected impacts from the Project,
- Discussion of Impact DataSource,
- Appendix A demonstrating the methodology used to isolate the indirect and induced activity related to construction activities, and
- Appendix B containing RIMS II multipliers (Type II).

II. Geographic Area Impacted

The Project is located in Princeton, TX within Collin County and will have an impact area consisting of the Dallas CSA. The Dallas CSA consists of the following 20 counties: Collin, Cooke, Dallas, Denton, Ellis, Grayson, Henderson, Hood, Hopkins, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, Tarrant, and Wise in Texas and Bryan in Oklahoma. The Project location is included in the current geographical designation of the Regional Center.

The impact area of the Project is shown in the map below, along with the approximate location of the project.

Figure 1: Map of Impact Area



The pin on the map indicates the approximate location of the Project

Princeton is located in Collin County, Texas, approximately 40 miles from Dallas and 65 miles from Fort Worth. Irving is connected to the greater impact area by Interstates 380 and 75 and TX-5 and 78. The functional economy of the Princeton area reasonably includes the counties of the impact area, as Princeton-area businesses rely on suppliers and businesses in this 20-county region. In addition, the economic ties of this area are demonstrated by the commuting patterns of the region.

CSAs are defined by the Office of Management and Budget by combining metropolitan and micropolitan statistical areas (core-based statistical areas) that have close economic ties based on employment interchange (e.g., commuting).¹ An analysis of workers commuting to Collin County from the counties of the impact area demonstrates the economic ties of the Dallas CSA. The analysis indicates that a majority (approximately 90.9%) of Collin County workers live within the impact area. The analysis is shown in the table below.

Table 3: County of Residence for Collin County, TX Workers

County	Count	Cumulative Share
Collin County, TX	157,652	43.0%
Dallas County, TX	79,819	64.8%
Denton County, TX	52,014	79.0%
Tarrant County, TX	21,883	85.0%
Grayson County, TX	5,426	86.5%
Hunt County, TX	3,392	87.4%
Rockwall County, TX	3,369	88.3%
Kaufman County, TX	2,797	89.1%
Ellis County, TX	1,856	89.6%
Johnson County, TX	1,317	90.0%
Parker County, TX	1,047	90.2%
Cooke County, TX	842	90.5%
Henderson County, TX	392	90.6%
Wise County, TX	307	90.7%
Navarro County, TX	253	90.7%
Hood County, TX	233	90.8%
Hopkins County, TX	223	90.9%
Bryan County, OK	169	90.9%
Palo Pinto County, TX	103	90.9%
Somervell County, TX	47	90.9%
Other	33,150	100.0%
Total	366,291	100.0%

Source: U.S. Census Bureau, OnTheMap 2015

Note: Total may not sum due to rounding.

¹ Office of Management and Budget, "Federal Register Part IV: 2010 Standards for Delineating Metropolitan and Micropolitan Statistical Areas." Available at https://www.whitehouse.gov/sites/default/files/omb/assets/fedreg_2010/06282010_metro_standards-Complete.pdf.

III. About the Project and Verification of Model Inputs

Overview

The Project consists of the Princeton Apartments, a 306-unit, three-story, multifamily development. The development will include one- and two-bedroom units, and the units are anticipated to include the following features: black appliances, disposals, washer and dryer connections, patios/balconies, and brushed nickel hardware. The community is anticipated to include a swimming pool, outdoor kitchen, landscaped courtyard, playground, and dog park.

Please see the business plan for further details.

Project Budget

The development budget for the Project is shown in the following table. The table also highlights the specific elements and amounts that are included in the RIMS II Model to project job creation and other economic impacts.

Table 4: Development Budget²

Activity	Costs	RIMS II Industry	Included in RIMS Model
Land	\$5,900,000	Not Included	-
Hard Construction			
General Conditions	\$1,875,000	2334B0	\$1,875,000
Sitework	\$4,108,062	2334B0	\$4,108,062
Concrete	\$1,954,603	2334B0	\$1,954,603
Mason/Stucco	\$400,000	2334B0	\$400,000
Metals	\$340,000	2334B0	\$340,000
Woods and Plastics	\$6,170,242	2334B0	\$6,170,242
Thermal and Moisture Protection	\$1,138,900	2334B0	\$1,138,900
Doors, Windows, Glass	\$1,025,460	2334B0	\$1,025,460
Finishes	\$3,828,800	2334B0	\$3,828,800
Specialties	\$292,950	2334B0	\$292,950

² *Talking Points from EB-5 Series: Expenses that are Includable (or Excludable) for Job Creation (June 4th, 2015)* notes that "contingency and reserve funds that adhere to acceptable industry practices to be permissible inputs into and economic model for estimating job creation." Please see the link here: <http://www.uscis.gov/sites/default/files/USCIS/Outreach/Notes%20from%20Previous%20Engagements/Talking-Points-EB-5-Interactive-Series-Expenses-6-4-15.pdf>. The hard cost contingency for this project is approximately 3.5% of hard costs, which is not outside the norm of industry standards.

Appliances	\$764,900	2334B0	\$764,900
Furnishings / Decorations	\$70,380	2334B0	\$70,380
Special Construction	\$450,000	2334B0	\$450,000
Plumbing, Mechanical	\$3,205,350	2334B0	\$3,205,350
Electrical	\$1,987,700	2334B0	\$1,987,700
General Liability	\$136,333	Not Included	-
Builders Risk Policy	\$141,576	Not Included	-
Testing	\$70,000	2334B0	\$70,000
Builders Overhead	\$1,435,842	2334B0	\$1,435,842
Performance and Payment Bond	\$220,815	2334B0	\$220,815
Contingency	\$1,104,494	2334B0	\$1,104,494
FF&E	\$210,000	420000	\$210,000
Marketing	\$70,000	Not Included	-
Hard Construction - Sub Total	\$31,001,407		
Soft Costs			
Architectural	\$60,000	541300	\$60,000
Civil Engineering	\$27,000	541300	\$27,000
Structural Engineering	\$72,000	541300	\$72,000
Mechanical/Electrical/Plumbing Eng	\$50,000	541300	\$50,000
Landscape Design	\$40,000	541300	\$40,000
Legal	\$225,000	Not Included	-
Title Insurance & Closing Costs	\$125,000	Not Included	-
Surveys	\$25,000	Not Included	-
Lender Inspections	\$19,200	Not Included	-
Owner/Consultants Costs	\$112,000	Not Included	-
Real Estate Taxes	\$200,000	Not Included	-
City Permits and Fees	\$235,000	Not Included	-
Insurance	\$50,000	Not Included	-
Tax Accounting	\$5,000	Not Included	-
Application Fee	\$17,000	Not Included	-
Appraisal	\$6,000	Not Included	-
Market Study	\$8,000	Not Included	-
Developer Overhead (% of Total Hard Cost)	\$1,215,000	2334B0	\$1,215,000
Contingency	\$350,000	Not Included	-
Soft Costs - Subtotal	\$2,841,200		
Financial Costs			
Loan Origination Fee - First Loan	\$302,500	Not Included	-
Lender Fee - First Loan	\$226,875	Not Included	-
Guaranty Fee - First Loan	\$302,500	Not Included	-
Lender Fee - Second Loan	\$30,000	Not Included	-

Other Closing Costs	\$25,000	Not Included	-
Construction Interest Budget - First Loan	\$1,512,500	Not Included	-
Construction Interest Budget - Second Loan	\$401,500	Not Included	-
Working Capital / Operating Reserve	\$706,518	Not Included	-
Financial Costs - Subtotal	\$3,507,393		
Total	\$43,250,000		\$32,117,498

The following table summarizes the expenditures included in the model by RIMS II industry.

Table 5: Summary of Expenditures by RIMS II Industry

Industry Code	Activity	Cost
2334B0	Residential structures	\$31,658,498
541300	Architectural, engineering, and related services	\$249,000
420000	Wholesale trade	\$210,000
	Not Included	\$11,132,502
Total		\$43,250,000

The projected expenditures of \$31.7 million for hard construction, \$0.2 million for architectural and engineering, and \$0.2 million for FF&E are used as the inputs into the RIMS II model to project job creation and other economic impacts resulting from the development activities of the Project.

Reasonableness of Construction Expenditures

Impact DataSource was able to verify the reasonableness of the hard construction expenditures that are used as direct inputs into the RIMS II impact model through comparison with benchmark costs. The benchmark estimates were derived using the RSMeans Online Square Foot Cost Estimate by Reed Construction Data (2018) for the McKinney area.

Since Princeton is not a location option within the RS Means tool, the location selected to derive the representative benchmark cost is McKinney, NC. McKinney is the most representative option in the RS Means tool database in terms of location—Princeton is located approximately 10 miles from McKinney—and cost of construction. By selecting the correct building type, entering the average square foot estimate per building, limiting the location to McKinney, TX, and not adding any “soft” costs such as architectural fees and user fees, the online RS Means tool can provide a representative hard cost per square foot estimate.

The following figures provide a summary of the resulting representative hard costs per square foot from the RS Means Online Square Foot Cost Estimator for 2018.

Figure 2: RS Means Benchmark

Building Type	Apartment, 1-3 Story with Brick Veneer / Reinforced Concrete
Location	MCKINNEY, TX
Stories Count (L.F.)	3.00
Stories Height	10.00
Floor Area (S.F.)	244,230.00
LaborType	OPN
Basement Included	No
Data Release	Year 2018
Cost Per Square Foot	\$112.82

The following table compares the costs used in the model (RIMS II Industry 2334B0) on a square foot basis to the benchmark estimates from RS Means.

Table 6: Hard Construction Costs Estimate Comparison to R.S. Means

Project	Total Square Feet	Project Hard Costs Per SF (RIMS II 2334B0)	R.S. Means	Difference
Princeton Apartments	244,230	\$129.63	\$112.82	14.9%

As the table above demonstrates, the hard construction costs for the Project are approximately 14.9% above the benchmark and are reasonable.

Reasonableness of Architectural and Engineering Expenditures

Besides hard construction expenditures, this analysis also projects job creation as a result of architectural and engineering expenditures. The RSMeans tool provides construction cost estimates for different types of buildings. RSMeans typically estimates architectural and engineering expenditures as 8.0% of base (hard) construction costs for the "Apartment – 1-3 Story" category.³

The budget projections for architectural and engineering expenditures for the project studied in this analysis are at a lower percentage (approximately 0.8% of the costs modeled under RIMS II 2334B0) than the benchmark. RS Means notes that "scope differences and market conditions can cause costs to vary significantly," so this lower percentage is reasonable.⁴ Furthermore, job projections are more conservative than if the percentage matched the RS Means benchmark.

³ RS Means, Construction Cost Estimate for Apartment – 1-3 Story in National, US. Available at <http://www.rsmeans.com/Square-Foot-Cost-Estimates/>. Then select "Apartment – 1-3 Story."

⁴ <http://www.rsmeans.com/Square-Foot-Cost-Estimates/>

Projected Operations Revenue

The projected revenue from “Year 3” from the table below drives the economic impacts calculated from operations. Impact DataSource utilizes industry- and region-specific RIMS II multipliers to estimate the total number of jobs to be created as well as the associated economic output and household earnings generated by the economic activity created by operations. Based on the project timeline and planned timing of investor I-526 filings, the revenue from “Year 3” in the table below has been selected to best coincide with USCIS’s requirement that job creation be demonstrated within 2.5 years after I-526 adjudication.

The following figure demonstrates the Project’s 5-year revenue projections as shown in the Business Plan.

Figure 4: 5-Year Revenue Projections

Description	Year 1	Year 2	Year 3	Year 4	Year 5
Gross Potential Market Rent	141,188.24	3,113,200.59	4,449,970.80	4,583,469.92	4,720,974.02
Less: Lease Loss	-	-	(89,709.76)	(92,401.05)	(95,173.09)
Less: Vacancy	(67,017.35)	(686,139.53)	(266,998.25)	(275,008.20)	(283,258.44)
Less: Models	(2,353.14)	(14,118.82)	(14,118.82)	(14,118.82)	(14,118.82)
Less: Employee Units	(941.25)	(5,647.53)	(5,647.53)	(5,647.53)	(5,647.53)
Less: Concession	(1,164.80)	(187,545.04)	(125,753.77)	(22,917.35)	(23,604.87)
Less: Down Units	-	-	-	-	-
Less: Bad Debt - RENT	-	(10,642.06)	(33,374.78)	(34,376.02)	(35,407.31)
Plus: Bad Debt Recovery	-	3,547.35	11,124.93	11,458.67	11,802.44
Net Rental Income	69,711.69	2,212,654.96	3,925,492.81	4,150,459.62	4,275,566.40
Other Income	5,307.74	180,463.00	334,031.71	344,615.75	354,954.23
Total Income	75,019.43	2,393,117.96	4,259,524.52	4,495,075.38	4,630,520.63

The revenues from “Year 3” in the table above, totaling \$4,259,525, have been selected as the input into the RIMS II model to project job creation and other economic impacts resulting from operations of the Project.

Reasonableness of Revenue Projections

Please see the Business Plan for support for the Project’s revenue projections.

IV. Discussion of RIMS II Methodology & Multipliers

General Discussion of the RIMS II Methodology

The economic impact estimates in this report are based on the Regional Input-Output Modeling System (RIMS II), a widely used regional input-output model developed by the U.S. Department of Commerce, Bureau of Economic Analysis. The RIMS II model is a standard tool used to estimate regional economic impacts. The economic impacts estimated using the RIMS II model are generally recognized as reasonable and plausible, assuming the data input into the model is accurate or based on reasonable assumptions. The RIMS II model is described in basic detail below.

Generally speaking, input-output modeling attempts to estimate the changes that occur in all industries based on a change in the demand for the output of an industry. An input-output model allows an analyst to identify the subsequent changes occurring in various industries within a regional economy in order to estimate the total impact on the economy. Total economic impact is the sum of three components: (1) direct, (2) indirect, and (3) induced impacts.

If the demand for the output of an industry, measured by industry sales or revenue, increases by \$1 million, total regional output increases by \$1 million. This initial change in output is called the change in direct economic output and is also referred to as the direct expenditure effect. The change in total economic output in the region resulting from the initial change does not stop with the change in direct economic output. Businesses in a variety of industries within the region will be called upon to increase their production to meet the needs of the industry where the initial increase in demand occurs. Furthermore, other suppliers must also increase production to meet the needs of the group of initial supplier firms to the industry. This increase in expenditures by regional suppliers is considered the indirect economic impact of the initial \$1 million in sales, and it is classified as indirect expenditures of the total economic impact or the change in indirect economic output.

The total economic impact of the \$1 million in sales includes one more component, which is the induced impact. All economic activity, whether direct or indirect, that results from the initial increase in demand of \$1 million requires workers, and these workers must be paid for their labor. This means that part of the direct and indirect expenditures is actually in the form of wages and salaries paid to workers in the various affected industries. These wages and salaries will in turn be spent, in part, on goods and services produced locally in the region. This spending is another piece of the regional economic impacts referred to as induced impacts and is classified as induced expenditures or the change in induced economic output.

Based on the initial direct impact, the RIMS II model can be used to estimate the direct, indirect, and induced impacts on economic output, value added, earnings, and employment in a given region. Economic output is gross output and is the sum of the intermediate inputs and final use. This is a duplicative total, in that goods and services will be counted multiple times if they are used in the production of other goods and services. Value added is defined as the value of gross output less intermediate inputs. Household earnings, or earnings, consist of wages and salaries, employer-provided benefits, and proprietors' income. Employment consists of a count of jobs that include both full-time and part-time workers.

The RIMS II model is based on regional multipliers, which are summary measures of economic impacts generated from changes in direct expenditures, earnings, or employment. Multipliers show the overall impact to a regional economy resulting from a change in demand in a particular industry. Multipliers can vary widely by region. Multipliers are higher for regions with a diverse industry mix. Industries that buy most of their materials from outside the state or region tend to have lower multipliers. Multipliers tend to be higher for industries located in larger areas because more of the spending by the industry stays within the area.

The RIMS II model generates six types of multipliers for more than 400 industrial sectors for any region in the United States. The multipliers include four "final-demand" multipliers and two "direct-effect" multipliers. Final-demand multipliers indicate the impact of changes in final demand for the output of a particular regional industry on total regional output, earnings, employment, and value added. Direct-effect multipliers indicate the impact of changes in regional earnings or employment within a particular industry on total employment or earnings within a region.

Final-demand output multipliers indicate the total regional output (direct, indirect, and induced expenditures) that results from an increase in direct expenditures for a good produced by a particular regional industry. For example, if an industry in a particular region is said to have a final-demand output multiplier of 2, this tells us that a \$1 increase in final demand for the good produced by that industry results in a \$2 increase in total output or expenditures within the regional economy. Final-demand earnings multipliers indicate the impact of an increase in final demand for the good of a particular regional industry on the total earned income of households within the region. Final-demand employment multipliers indicate the increase in total regional employment that results from a \$1 million increase in final demand for the good produced by a particular regional industry. Final-demand value-added multipliers indicate the increase in total regional value added that results from a \$1 million increase in final demand for the good produced by a particular regional industry. Direct-effect earnings multipliers indicate the impact of a \$1 change in earnings within a particular regional industry on total earnings in all industries within a

region. Direct-effect employment multipliers indicate the impact of a change in employment in a particular regional industry on total employment in all industries within a region.

Theoretically, changes in final demand drive the total change in economic output, earnings, and employment. However, these multiplier relationships can be used to estimate impacts in other ways if only limited information is known about a project. For example, the multiplier relationships can be used to estimate the increase in direct economic output based on a given level of employment in a specific industry.

Employment, Household Earnings, and Economic Output Created in the Impact Area

The economic activity directly created by the Project will generate additional economic impacts in the region. The direct activities will result in spin-off economic impacts in the form of indirect and induced economic output, employment, and household earnings. Indirect impacts will be created in new or existing area firms in the area that supply goods and services to the direct businesses. Induced impacts will be created in new or existing local businesses in the area, such as retail stores, gas stations, banks, restaurants, and service companies that may supply goods and services to direct and indirect workers and their families.

The geographic area impacted by the Project will be the impact area described in Section II. This analysis uses RIMS II multipliers for this specific impact area and for the stated industries, as shown in the table below, specific to this Project.

Industries Impacted and RIMS II Multipliers Used in This Analysis

The table below lists the NAICS industries and corresponding RIMS II categories impacted by the Project.

Table 7: Project Industries

Project Activity	NAICS	NAICS Industry	Corresponding RIMS II Industry	
Construction	2361	Residential Building Construction	2334B0	Residential structures
Architecture/Engineering	5413	Architectural, Engineering, and Related Services	541300	Architectural, engineering, and related services
FF&E	42	Wholesale Trade	420000	Wholesale trade
Operations	5311	Lessors of Real Estate	531000	Real estate

The following table shows the RIMS II multipliers for the impact area for these industries.

Table 8: RIMS II Multipliers Used in Analysis

2334B0 Residential structures	Type II
Final-demand Output (dollars)	2.3008
Final-demand Earnings (dollars)	0.6718
Final-demand Employment (number of jobs)	13.9878
Direct-effect Earnings (dollars)	2.2733
Direct-effect Employment (number of jobs)	2.8852
541300 Architectural, Engineering, & Related Services	Type II
Final-demand Output (dollars)	2.4877
Final-demand Earnings (dollars)	0.8733
Final-demand Employment (number of jobs)	16.1545
Direct-effect Earnings (dollars)	2.1989
Direct-effect Employment (number of jobs)	3.2640
420000 Wholesale trade	Type II
Final-demand Output (dollars)	2.0665
Final-demand Earnings (dollars)	0.6426
Final-demand Employment (number of jobs)	11.9973
Direct-effect Earnings (dollars)	2.0463
Direct-effect Employment (number of jobs)	2.8791
531000 Real estate	Type II
Final-demand Output (dollars)	1.7847
Final-demand Earnings (dollars)	0.3877
Final-demand Employment (number of jobs)	12.1734
Direct-effect Earnings (dollars)	2.5506
Direct-effect Employment (number of jobs)	1.9326

The Type II multipliers above show the direct, indirect, and induced impacts that result from economic activity in the specified industries and impact area. In addition, the RIMS II multipliers include the distribution of the total impact across 20 major industry categories, which provides the information needed to identify the jobs, household earnings, and economic output generated in various industries.

Price Deflator

The RIMS II multipliers obtained for this study assume final demand (economic output) in 2015 prices. Impact DataSource makes price index adjustments based on price data from the Bureau of Economic Analysis ("BEA") in order to use the 2015 multipliers and presents the results in 2015 dollars.

Development Expenditures: 2018 Dollars to 2015 Dollars

According to the BEA Price Indexes for Gross Domestic Product (revised on December 21, 2017), the gross domestic price index in 2015 was 110.012. The projected price index for 2018 is 115.239.⁵ Accordingly, the price deflator is $1.048 = \left(\frac{115.239}{110.012}\right)$. This factor is used to deflate the Projects' development expenditures discussed in Section III to 2015 dollars to use the 2015 RIMS II multipliers.

Operations Revenue: Selected Year of Operations Dollars to 2015 Dollars

According to the BEA Price Indexes for Gross Domestic Product (revised on December 21, 2017), the gross domestic price index in 2015 was 110.012. The projected price index for the selected year of operations is 123.277.⁶ Accordingly, the price deflator is $1.121 = \left(\frac{123.277}{110.012}\right)$. This factor is used to deflate the Projects' operational revenue discussed in Section III to 2015 dollars to use the 2015 RIMS II multipliers.

⁵ The BEA provides price index data through 2016. Impact DataSource assumes a 1.70% annual price escalation for years beyond which price index data are available from the BEA, consistent with recent annual price increases observed. In this case, the 2016 price index was 111.419 and the 2018 index was estimated by applying two years of 1.70% annual price escalation to the 2016 index value. Overall, the deflators used in this analysis imply approximately 1.58% annual price escalation over the total period.

⁶ The BEA provides price index data through 2016. Impact DataSource assumes a 1.70% annual price escalation for years beyond which price index data are available from the BEA, consistent with recent annual price increases observed. In this case, the 2016 price index was 111.419 and the index for the selected year of operations was estimated by applying four years of 1.70% annual price escalation to the 2016 index value. Overall, the deflators used in this analysis imply approximately 1.61% annual price escalation over the total period.

V. Development Impacts

The tables below summarize the job creation estimated from the Project's development activity. The impacts related to development will be combined with the jobs created from operations to represent the total impact from the Project; the combined impacts are discussed in Section VII. A detailed discussion of the inputs to the model for the calculation of impacts related to construction and development is provided in Section III and the multipliers and price deflator are described in Section IV. The method for disaggregating direct, indirect, and induced impacts from the total impact is described in Appendix A.

The following table summarizes the deflation of expenditures to 2015 dollars prior to implementing the RIMS II multipliers.

Table 9: Development Expenditures Deflated

Industry (RIMS II)	Projected Expenditures (\$2018, Million)	Price Deflator	Projected Expenditures (\$2015, Million)
Residential structures (2334B0)	\$31.7	1.048	\$30.2
Architectural, engineering, and related services (541300)	\$0.25	1.048	\$0.24
Wholesale trade (420000)	\$0.21	1.048	\$0.20

The following table summarizes the job creation estimated from the Project's development activity.

Table 10: Indirect & Induced Job Creation from Development Expenditures

Industry (RIMS II)	Projected Expenditures (\$2015, Million)	Multiplier*	Direct Jobs Created	Indirect & Induced Jobs Created	Total
Residential structures (2334B0)	\$30.2	9.1397	-	276.1	276.1
Architectural, engineering, and related services (541300)	\$0.24	11.2052	-	2.7	2.7
Wholesale trade (420000)	\$0.20	7.8303	-	1.6	1.6
Total				280.3	280.3

*RIMS II Type II Final Demand Employment Multiplier adjusted to include only indirect and induced impacts.

Note: Total may not sum due to rounding.

Impact from Development Expenditures

The price-adjusted development expenditures discussed above serve as the direct input in the impact model for job creation resulting from Project development. Impact DataSource utilizes industry- and region-specific RIMS II multipliers to estimate the total number of indirect, and induced jobs to be created as well as the associated indirect and induced economic output and household earnings generated by these development expenditures associated with the Project.

Table 11: Increase in Employment, Economic Output, and Household Earnings from Development Expenditures

NAICS Group	Industry Title	Jobs	Output	Earnings
11	Agriculture, forestry, fishing, and hunting	0.6	\$45,846	\$12,241
21	Mining	1.2	\$537,596	\$91,134
22	Utilities	0.8	\$606,962	\$91,966
23	Construction	1.9	\$338,240	\$110,696
32-33	Durable goods manufacturing	23.2	\$5,795,249	\$1,185,289
31-32	Nondurable goods manufacturing	8.6	\$2,875,720	\$489,400
42	Wholesale trade	11.3	\$2,701,288	\$848,661
44-45	Retail trade	64.4	\$5,153,156	\$1,807,518
48-49	Transportation and warehousing	13.1	\$1,932,692	\$611,280
51	Information	5.0	\$1,528,587	\$314,577
52	Finance and insurance	18.3	\$3,475,906	\$948,803
53	Real estate and rental and leasing	28.9	\$4,769,054	\$762,984
54	Professional, scientific, and technical services	17.2	\$2,681,917	\$1,169,435
55	Management of companies and enterprises	3.8	\$766,594	\$321,486
56	Administrative and waste management services	17.1	\$1,236,769	\$551,499
61	Educational services	5.0	\$297,926	\$141,296
62	Health care and social assistance	22.2	\$2,391,753	\$1,090,112
71	Arts, entertainment, and recreation	4.9	\$298,395	\$110,791
721	Accommodation	2.3	\$274,282	\$77,064
722	Food services and drinking places	14.9	\$934,336	\$308,506
81	Other services	12.8	\$1,220,115	\$473,497
	Households	2.6	\$0	\$27,659
	Total	280.3	\$39,862,382	\$11,545,895

Total may not sum due to rounding.

Impact DataSource calculations based on RIMS II relationships.

VI. Operations Impacts

The tables below summarize the job creation estimated from the on-going operations (leasing, management and maintenance) of the Project. These impacts will be combined with the jobs created during the development phase estimated in Section V to represent the total impact from the Project; the combined impacts are discussed in Section VII. The impacts are based on the projected revenues as discussed in detail in Section III. The multipliers and price deflator are described in Section IV.

The following table summarizes the deflation of revenues to 2015 dollars prior to implementing the RIMS II multipliers.

Table 12: Operations Revenue Deflated

Industry (RIMS II)	Projected Revenue (\$Year 3, Million)	Price Deflator	Projected Revenues (\$2015, Million)
Real estate (531000)	\$4.3	1.121	\$3.8

The next table summarizes the direct, indirect, and induced job creation estimated from the Project's development activity.

Table 13: Total Job Creation from Operations Activity

Industry (RIMS II)	A Projected Revenue (\$2015, Million)	B Final-Demand Multiplier*	C Direct-Effect Multiplier	D Direct Jobs Created (F/C)	E Indirect & Induced Jobs Created (F - D)	F Total (A x B)
Real estate (531000)	\$3.8	12.1734	1.9326	23.9	22.3	46.3

*RIMS II Type II Final Demand Employment Multiplier including direct, indirect, and induced impacts.

The detailed industry impacts tables are shown on the following pages. The detailed industry impact tables also show the direct, indirect, and induced jobs, household earnings, and economic output or demand for additional services created from operations.

Impacts from Operations

The price-adjusted operations revenue discussed above serves as the direct input in the impact model for job creation resulting from operations. Impact DataSource utilizes industry- and region-specific RIMS II multipliers to estimate the total number of jobs to be created as well as the associated economic output and household earnings relating to operations of the Project.

Table 14: Total Increase in Employment, Economic Output, and Household Earnings from Operations

NAICS Group	Industry Title	Jobs	Output	Earnings
11	Agriculture, forestry, fishing, and hunting	0.0	\$2,280	\$760
21	Mining	0.0	\$23,558	\$3,801
22	Utilities	0.2	\$117,792	\$17,486
23	Construction	1.1	\$197,207	\$64,622
32-33	Durable goods manufacturing	0.4	\$87,394	\$18,626
31-32	Nondurable goods manufacturing	0.4	\$125,012	\$21,667
42	Wholesale trade	0.4	\$104,873	\$33,071
44-45	Retail trade	2.2	\$181,248	\$65,002
48-49	Transportation and warehousing	0.6	\$88,534	\$27,750
51	Information	0.4	\$136,411	\$26,989
52	Finance and insurance	2.2	\$435,832	\$119,741
53	Real estate and rental and leasing	27.2	\$4,333,240	\$660,824
54	Professional, scientific, and technical services	1.3	\$195,687	\$87,810
55	Management of companies and enterprises	0.2	\$49,017	\$20,527
56	Administrative and waste management services	4.5	\$291,441	\$136,847
61	Educational services	0.4	\$21,279	\$10,264
62	Health care and social assistance	1.6	\$168,329	\$76,786
71	Arts, entertainment, and recreation	0.4	\$22,419	\$8,363
721	Accommodation	0.2	\$22,799	\$6,462
722	Food services and drinking places	1.3	\$82,835	\$27,750
81	Other services	1.0	\$94,234	\$36,112
	Households	0.2	\$0	\$1,901
	Total	46.3	\$6,781,421	\$1,473,165

Total may not sum due to rounding.

Impact DataSource calculations based on RIMS II relationships.

VII. Combined Impacts from Development and Operations

The table below combines the total job creation estimated from the development activities and ongoing operations activities for the Project. The detailed industry impact table shows the total permanent jobs, workers' earnings, and economic output or demand for additional services created from the project.

Table 15: Total Increase in Employment, Economic Output, and Household Earnings

NAICS Group	Industry Title	Jobs	Output	Earnings
11	Agriculture, forestry, fishing, and hunting	0.6	\$48,125	\$13,001
21	Mining	1.2	\$561,154	\$94,936
22	Utilities	1.0	\$724,755	\$109,452
23	Construction	3.0	\$535,447	\$175,318
32-33	Durable goods manufacturing	23.6	\$5,882,643	\$1,203,915
31-32	Nondurable goods manufacturing	9.0	\$3,000,731	\$511,068
42	Wholesale trade	11.7	\$2,806,161	\$881,732
44-45	Retail trade	66.6	\$5,334,404	\$1,872,520
48-49	Transportation and warehousing	13.8	\$2,021,226	\$639,029
51	Information	5.4	\$1,664,998	\$341,566
52	Finance and insurance	20.5	\$3,911,738	\$1,068,545
53	Real estate and rental and leasing	56.2	\$9,102,294	\$1,423,809
54	Professional, scientific, and technical services	18.4	\$2,877,604	\$1,257,246
55	Management of companies and enterprises	4.1	\$815,611	\$342,013
56	Administrative and waste management services	21.6	\$1,528,211	\$688,347
61	Educational services	5.4	\$319,205	\$151,560
62	Health care and social assistance	23.8	\$2,560,082	\$1,166,899
71	Arts, entertainment, and recreation	5.3	\$320,814	\$119,154
721	Accommodation	2.5	\$297,081	\$83,526
722	Food services and drinking places	16.3	\$1,017,171	\$336,255
81	Other services	13.8	\$1,314,349	\$509,609
	Households	2.8	\$0	\$29,560
	Total	326.6	\$46,643,804	\$13,019,060

Total may not sum due to rounding.

Impact DataSource calculations based on RIMS II relationships.

VIII. Conduct of the Analysis

This analysis was conducted by Impact DataSource. Impact DataSource is a 20-year-old Austin, Texas economic consulting, research, and analysis firm. The company has conducted over 2,500 economic impact analyses of firms, projects, and activities in most industry groups and in Texas and 26 other states. Impact DataSource has completed economic analyses for several successful regional center projects under the USCIS EB-5 program.

In addition, Impact DataSource has prepared and customized over 50 economic impact models for its clients to perform their own analyses of economic development projects. These clients include the New Mexico Economic Development and the Metro Orlando (Florida) Economic Development Commission.

The New Mexico Department of Economic Development uses Impact DataSource's computer model to project the economic impact of new or expanding firms in the state and costs and benefits for the State of New Mexico and each local taxing district. The model also calculates the amount of eligible state and local incentives and calculates a rate of return and payback period for these incentives.

The following members of Impact DataSource's team performed this analysis:

Michael Kester, economist, and
Alex Brown, economic consultant.

Michael Kester is an Impact DataSource economist. Since joining the firm in 2012, Michael has drawn from his diverse consulting background in both the healthcare and compensation spaces to help expand Impact DataSource's EB-5 business. He continues to focus on providing EB-5 consulting, services and deliverables that reflect the evolving needs of EB-5 clients and also the changing requirements of the USCIS.

Michael previously worked in New York as an actuarial healthcare consultant for Deloitte where he provided in-depth financial and claims projections to his clients. Michael has also worked as a compensation analyst at the Texas Association of School Boards where he supported compensation consulting projects and analyzed key trends in survey data.

Alex Brown is an economic consultant with Impact DataSource. In addition to her keen research and analytical skills, she offers dynamic insights to the study of economics and economic impact.

Targeting EB-5 projects, she provides consulting services and analytics that support the diversity of the clients, their ventures, and the fluid nature of the EB-5 program.

Before joining Impact DataSource in 2014, Alex worked as a Legal Fellow for Congressman Denny Heck. In that capacity, she provided research and analysis on a series of policy issues, focused particularly on financial services.

APPENDIX A

Indirect and Induced Impact Calculations

Disaggregation of Direct, Indirect and Induced Effects from the Total Impact Using RIMS II

This Appendix provides an explanation and example of how to disaggregate the direct effects and the indirect and induced effects from the total impact estimated using RIMS II multipliers. This method is needed to accurately estimate the permanent jobs created as a result of the construction activity lasting less than two years. According to guidance from the USCIS, the direct employment related to construction activity may not be counted in the total job count if the construction activity lasts less than two years, but the indirect and induced jobs may be counted. The following clarification is provided in a letter from USCIS Chief James W. McCament on January 16, 2009:

“The Indirect and induced jobs created as a result of construction jobs whether counted or not may be included in the job count. Even when the construction jobs may not be counted towards the job creation requirement, they do have indirect and induced impacts that are eligible to be included in the final job count because they are “continuous, permanent employment.”

The theory goes that a temporary construction stimulus will spur additional indirect and induced activity that will be self-sustaining and therefore the indirect and induced activity will be continuous, permanent employment. Government stimulus programs often employ this approach to spur overall demand in the economy by temporarily increasing government spending or by offering one-time tax rebates which will result in an ongoing increase in demand as new workers are employed and then re-spend earnings in the economy.

The multipliers generated from the RIMS II model provide the user with enough information to determine and isolate the direct, indirect, and induced portions comprising the total impact. The following section explains the steps necessary to isolate the indirect and induced effects using a generic set of RIMS II multipliers for the architectural, engineering, and related services industry (541300). The same steps may be utilized for any set of RIMS II multipliers and have been utilized for the relevant industries studied in this report.

Indirect & Induced Employment

The following example shows one of several algebraically equivalent ways to determine the number of indirect and induced jobs created as a result of additional demand in an industry. The example uses generic multipliers for architectural, engineering, and related services industry as a relevant example, but the procedure can be completed for any industry. The generic Type II employment multipliers for the architectural, engineering, and related services industry in this region are shown below. Recall that Type II multipliers include the direct, indirect, and induced effects.

541300 Architectural, engineering, and related services	Type II
Final-demand Employment ⁷ (number of jobs)	13.3147
Direct-effect Employment ⁸ (number of jobs)	2.4474

The final-demand employment multiplier represents the total change in the number of jobs that occurs in all industries for each addition \$1 million of output delivered to final demand by the industry. In addition, the direct-effect employment multiplier represents the total change in the number of jobs in all industries for each additional job in the industry.

The Type II Final-demand Employment multiplier could also be presented as the product of the Type II Direct-effect Employment multiplier and the Number of Direct Jobs per \$1 million of final demand.

$$\begin{aligned}
 & \textit{Type II Final demand Employment multiplier} \\
 &= (\textit{Type II Direct effect Employment multiplier}) \\
 & * (\textit{Number of Direct Jobs per \$1 million of final demand})
 \end{aligned}$$

By solving for the *Number of Direct Jobs per \$1 million of final demand*, we determine the following relationship.

$$\begin{aligned}
 & \textit{Number of Direct Jobs per \$1 million of final demand} \\
 &= \frac{\textit{Type II Final demand Employment Multiplier}}{\textit{Type II Direct effect Employment Multiplier}}
 \end{aligned}$$

By substituting the multiplier values, the *Number of Direct Jobs per \$1 million of final demand* in this instance is shown below.

$$\textit{Number of Direct Jobs per \$1 million of final demand} = \frac{13.3147}{2.4474} = 5.4403$$

The Number of Direct Jobs per \$1 million of final demand can be used to determine the Number of Indirect & Induced Jobs per \$1 million of final demand. The following relationship is used to determine this value.

$$\begin{aligned}
 & \textit{Type II Final demand Employment multiplier} \\
 &= \textit{Number of Direct Jobs per \$1 million of final demand} \\
 & + \textit{Number of Indirect & Induced Jobs per \$1 million of final demand}
 \end{aligned}$$

⁷ Each final-demand employment entry represents the total change in the number of jobs that occurs in all industries for each addition 1 million dollars of output delivered to final demand by the industry corresponding to the entry.

⁸ Each direct-effect employment entry represents the total change in the number of jobs in all industries for each additional job in the industry corresponding to the entry.

Subtracting the Number of Direct Jobs per \$1 million of final demand from both sides of the equation we determine the Number of Indirect & Induced Jobs per \$1 million of final demand as shown below.

$$\begin{aligned} & \text{Number of Indirect \& Induced Jobs per \$1 million of final demand} \\ & = \text{Type II Final demand Employment Multiplier} \\ & - \text{Number of Direct Jobs per \$1 million of final demand} \end{aligned}$$

$$\text{Number of Indirect \& Induced Jobs per \$1 million of final demand} = 13.3147 - 5.4403 = 7.8744$$

Therefore, \$1 million of additional output or final demand in the architectural, engineering, and related services industry will create 7.8744 indirect and induced jobs in this example. This relationship, like other RIMS II multipliers, is linear and can be used to estimate the number of indirect and induced jobs created as a result of expenditures for the architectural, engineering, and related services industry final demand.

Indirect & Induced Household Earnings

Similar calculations shown above for employment can be followed to determine the earnings paid to indirect and induced workers.

541300 Architectural, engineering, and related services	Type II
Final-demand Earnings ⁹ (dollars)	0.6806
Direct-effect Earnings ¹⁰ (dollars)	1.7293

The Type II Final-demand Earnings multiplier could also be presented as the product of the Type II Direct-effect Earnings multiplier and the Direct Earnings per \$1 of final demand.

$$\begin{aligned} & \text{Type II Final demand Earnings multiplier} \\ & = (\text{Type II Direct effect Earnings multiplier}) \\ & * (\text{Direct Earnings per \$1 of final demand}) \end{aligned}$$

By solving for the *Direct Earnings per \$1 of final demand*, we determine the following relationship.

$$\text{Direct Earnings per \$1 of final demand} = \frac{\text{Type II Final demand Earnings Multiplier}}{\text{Type II Direct effect Earnings Multiplier}}$$

⁹ Each final-demand earnings entry represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the entry corresponding to the entry.

¹⁰ Each direct-effect earnings entry represents the total change in the number of jobs in all industries for each additional job in the industry corresponding to the entry.

By substituting the multiplier values, the *Direct Earnings per \$1 of final demand* in this instance is shown below.

$$\text{Direct Earnings per \$1 of final demand} = \frac{0.6806}{1.7293} = 0.3936$$

The *Direct Earnings per \$1 of final demand* can be used to determine the *Indirect & Induced Earnings per \$1 of final demand*. The following relationship is used to determine this value.

$$\begin{aligned} \text{Type II Final demand Earnings multiplier} \\ &= \text{Direct Earnings per \$1 of final demand} \\ &+ \text{Indirect \& Induced Earnings per \$1 of final demand} \end{aligned}$$

Subtracting the Direct Earnings per \$1 of final demand from both sides of the equation we determine the Indirect & Induced Earnings per \$1 of final demand as shown below.

$$\begin{aligned} \text{Indirect \& Induced Earnings per \$1 of final demand} \\ &= \text{Type II Final Demand Earnings Multiplier} \\ &- \text{Direct Earnings per \$1 of final demand} \end{aligned}$$

$$\text{Indirect \& Induced Earnings per \$1 of final demand} = 0.6806 - 0.3936 = 0.2870$$

As mentioned before, this relationship is linear and can be used to determine the number of indirect and induced household earnings created as a result of expenditures for the architectural, engineering, and related services final demand. Therefore, \$1 million of additional output or final demand in the architectural, engineering, and related services industry in this example will create \$287,000 in earnings for indirect and induced workers.

Indirect & Induced Economic Output

The indirect and induced economic output generated can be obtained directly by subtracting 1, the direct effect, from the Type II Final-demand Output multiplier. Therefore, for each \$1 million of additional output or final demand in the architectural, engineering, and related services industry in this example, \$884,600 in indirect and induced economic output or demand will be created.

541300 Architectural, engineering, and related services	Type II
Final-demand Output ¹¹ (dollars)	1.8846

¹¹ Each final-demand output entry represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

APPENDIX B

RIMS II Multipliers (Type II)

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry
Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
1111C0 Oilseed and grain farming	1.9872	0.4320	12.2234	0.7126	2.8835	2.0713
111200 Vegetable and melon farming	1.6835	0.4657	17.9875	1.0640	1.7685	1.3735
111300 Fruit and tree nut farming	1.7731	0.5495	23.1524	1.1188	1.7163	1.3196
111400 Greenhouse, nursery, and floriculture production	1.9608	0.6788	26.4814	1.1459	1.7430	1.4066
111900 Other crop farming	1.8409	0.5086	18.9654	1.0020	1.9320	1.4401
1121A0 Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1.7390	0.3576	10.8136	0.7223	2.3292	1.8069
112120 Dairy cattle and milk production	1.8930	0.4424	14.0088	0.8616	2.3953	1.6990
112A00 Animal production, except cattle and poultry and eggs	1.5657	0.3681	11.1974	1.0110	1.8180	1.5453
112300 Poultry and egg production	1.8913	0.4220	12.3015	0.7242	2.4217	1.7952
113000 Forestry and logging	1.7671	0.5838	18.1795	0.9977	1.6751	1.4684
114000 Fishing, hunting and trapping	1.8146	0.5372	23.3127	1.1550	1.8376	1.3322
115000 Support activities for agriculture and forestry	2.1186	0.9456	33.3052	1.3786	1.5506	1.3317
211000 Oil and gas extraction	1.6684	0.3573	5.3678	1.0987	2.0962	3.6209
212100 Coal mining	1.7850	0.3638	6.1506	0.9639	2.5138	3.9558
2122A0 Iron, gold, silver, and other metal ore mining	1.6973	0.3425	6.0097	0.9340	2.3664	3.2324
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212310 Stone mining and quarrying	1.7550	0.3802	7.6889	1.0635	2.4642	2.7685
2123A0 Other nonmetallic mineral mining and quarrying	1.8653	0.4301	8.0867	1.0748	2.4402	3.0358
213111 Drilling oil and gas wells	1.9041	0.5308	9.2482	1.1871	2.0617	2.9874
21311A Other support activities for mining	1.9151	0.5526	9.9434	1.2146	1.9955	2.8109
2211A0 Electric power generation, transmission, and distribution*	1.8200	0.3881	6.6495	1.0542	2.6030	4.8143
221200 Natural gas distribution	2.0530	0.4300	6.8925	1.0699	2.8840	5.5806
221300 Water, sewage and other systems	1.9025	0.4786	10.0010	1.1971	2.3681	2.5953
23030A Maintenance and repair	2.1449	0.6578	13.6720	1.2043	2.0014	2.4015
2332C0 Nonresidential structures	2.2928	0.8515	16.7840	1.3230	1.7722	2.0975
233293 Highways and streets	2.1876	0.6149	11.9265	1.1652	2.1581	2.6055
2334B0 Residential structures	2.3008	0.6718	13.9878	1.1863	2.2733	2.8852
321100 Sawmills and wood preservation	1.8171	0.4018	9.1108	0.7066	2.5762	2.4827
321200 Veneer, plywood, and engineered wood product manufacturing	2.0509	0.4617	9.9839	0.8253	2.8341	2.8280
321910 Millwork	2.1391	0.5633	13.7816	0.9494	2.4320	2.1818
3219A0 All other wood product manufacturing	2.0850	0.5267	13.3386	0.9245	2.4740	2.1403
327100 Clay product and refractory manufacturing	2.1986	0.6350	13.1317	1.1767	2.2176	2.4079
327200 Glass and glass product manufacturing	2.2242	0.5623	11.1200	1.0706	2.6182	3.0286
327310 Cement manufacturing	1.9241	0.4065	7.3213	1.0218	2.7177	4.0799
327320 Ready-mix concrete manufacturing	2.3944	0.5419	10.5117	1.0525	3.1513	3.7395
327330 Concrete pipe, brick, and block manufacturing	2.1714	0.5270	10.7243	1.1080	2.6676	3.0137

(Continued)

Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2015 data, the output delivered to final demand should be in 2015 dollars.

4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
327390 Other concrete product manufacturing	2.3300	0.6119	12.8264	1.1397	2.6661	2.9239
327400 Lime and gypsum product manufacturing	2.0253	0.4271	8.1434	0.9281	2.8549	3.4982
327910 Abrasive product manufacturing	1.6913	0.3508	7.0537	0.9533	2.3451	2.6450
327991 Cut stone and stone product manufacturing	2.2325	0.6530	14.2232	1.1568	2.2648	2.4001
327992 Ground or treated mineral and earth manufacturing	1.9444	0.4148	7.7131	0.9700	2.7727	3.7877
327993 Mineral wool manufacturing	2.0157	0.4804	9.3540	1.0386	2.4088	2.8379
327999 Miscellaneous nonmetallic mineral products	2.2609	0.5665	11.7754	1.1114	2.5954	2.7474
331110 Iron and steel mills and ferroalloy manufacturing	2.0030	0.4290	8.2953	0.7878	2.8678	3.4927
331200 Steel product manufacturing from purchased steel	1.8812	0.3968	7.7082	0.7312	2.6390	3.2620
33131A Alumina refining and primary aluminum production	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331314 Secondary smelting and alloying of aluminum	2.1622	0.4843	10.0781	0.8152	3.2377	3.3984
33131B Aluminum product manufacturing from purchased aluminum	1.9858	0.4228	8.6666	0.6900	2.8265	3.1489
33141A Primary smelting and refining of nonferrous metal (except aluminum)	1.5202	0.3018	5.3715	0.5496	2.0178	2.8052
331420 Copper rolling, drawing, extruding, and alloying	1.9890	0.4007	7.9926	0.6358	2.6788	3.0497
331490 Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	1.8400	0.3839	7.3503	0.7382	2.5666	3.2606
331510 Ferrous metal foundries	2.0595	0.5485	11.6240	1.0079	2.3384	2.5136
331520 Nonferrous metal foundries	1.9409	0.4855	11.0688	0.9177	2.3163	2.2829
33211A All other forging, stamping, and sintering	1.9031	0.4515	8.8199	0.8500	2.3492	2.9867
332114 Custom roll forming	1.8177	0.3696	7.3727	0.6577	2.4710	2.8739
33211B Crown and closure manufacturing and metal stamping	2.0270	0.4856	9.9176	0.9090	2.3912	2.7023
332200 Cutlery and handtool manufacturing	2.0504	0.5683	11.9263	1.0640	2.1701	2.3912
332310 Plate work and fabricated structural product manufacturing	2.0781	0.5240	10.6903	0.9136	2.4364	2.9076
332320 Ornamental and architectural metal products manufacturing	2.1691	0.5523	11.8010	0.9549	2.4818	2.6312
332410 Power boiler and heat exchanger manufacturing	2.0431	0.5097	9.3375	0.9643	2.2762	3.1064
332420 Metal tank (heavy gauge) manufacturing	1.9503	0.4430	8.7950	0.8878	2.5342	3.1270
332430 Metal can, box, and other metal container (light gauge) manufacturing	2.2129	0.4534	8.7282	0.7982	3.0312	3.8789
332500 Hardware manufacturing	2.0293	0.4683	9.7266	0.9494	2.6834	3.0117
332600 Spring and wire product manufacturing	2.2122	0.6028	12.6845	1.0394	2.3133	2.5204
332710 Machine shops	2.2335	0.6943	14.2398	1.1618	2.0812	2.3834
332720 Turned product and screw, nut, and bolt manufacturing	1.8974	0.4197	8.7181	0.9577	2.5547	2.8452
332800 Coating, engraving, heat treating and allied activities	2.0519	0.5103	10.7637	0.9998	2.3272	2.4811
33291A Valve and fitting (except plumbing) manufacturing	1.9865	0.4642	8.8607	0.9585	2.4880	3.2251
332913 Plumbing fixture fitting and trim manufacturing	2.1255	0.4353	8.8893	0.9608	2.9097	3.2026

(Continued)

Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

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INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
332991 Ball and roller bearing manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33299A Ammunition, arms, ordnance, and accessories manufacturing	1.8971	0.5218	9.7168	0.9982	1.9809	2.5511
332996 Fabricated pipe and pipe fitting manufacturing	1.8812	0.4592	8.9138	0.8946	2.1903	2.6983
33299B Other fabricated metal manufacturing	2.0718	0.5226	10.7521	0.9450	2.3201	2.5849
333111 Farm machinery and equipment manufacturing	1.8574	0.3938	8.3819	0.8425	2.6329	2.7118
333112 Lawn and garden equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333120 Construction machinery manufacturing	1.9592	0.4244	8.3183	0.8333	2.7351	3.2901
333130 Mining and oil and gas field machinery manufacturing	2.0709	0.5497	10.5344	0.9484	2.3187	3.1017
3332A0 Industrial machinery (except semiconductor machinery) manufacturing	2.2159	0.6048	11.4174	1.0540	2.4188	3.1395
333295 Semiconductor machinery manufacturing	2.0553	0.4826	8.3807	0.9436	2.8876	5.2218
33331B All other commercial and service industry machinery manufacturing	2.1681	0.6530	12.2646	1.0730	2.0706	2.5845
333314 Optical instrument and lens manufacturing	2.2893	0.7568	13.4053	1.1891	2.0312	2.8827
333315 Photographic and photocopying equipment manufacturing	2.1651	0.7448	15.2232	1.2458	1.8420	2.0214
33341A Air purification and ventilation equipment manufacturing	2.0704	0.5282	11.6285	1.0074	2.2499	2.2455
333414 Heating equipment (except warm air furnaces) manufacturing	2.1320	0.4995	10.0207	1.0096	2.8357	3.3108
333415 Air conditioning, refrigeration, and warm air heating equipment manufacturing	2.0716	0.4552	8.9737	0.8975	2.8074	3.2734
333511 Industrial mold manufacturing	2.1722	0.7538	16.5304	1.1994	1.8534	1.9413
33351A Metal cutting and forming machine tool manufacturing	2.0779	0.6171	12.7813	1.0879	2.0856	2.3110
333514 Special tool, die, jig, and fixture manufacturing	2.1447	0.6875	14.2708	1.1416	1.9936	2.1973
33351B Cutting and machine tool accessory, rolling mill, and other metalworking machinery manufacturing	2.0706	0.5956	11.6108	1.0396	2.1423	2.5593
333611 Turbine and turbine generator set units manufacturing	1.9074	0.4437	7.8840	0.8554	2.4190	3.6080
333612 Speed changer, industrial high-speed drive, and gear manufacturing	2.0135	0.5246	10.6254	1.0173	2.2492	2.5957
333613 Mechanical power transmission equipment manufacturing	1.9669	0.4737	9.7697	0.9672	2.4365	2.6946
333618 Other engine equipment manufacturing	2.0954	0.4548	8.9092	0.8224	3.0406	3.8532
33391A Pump and pumping equipment manufacturing	1.8930	0.4067	7.6396	0.9341	2.7188	3.7397
333912 Air and gas compressor manufacturing	1.9846	0.4249	7.8285	0.9251	2.8178	3.9815
333920 Material handling equipment manufacturing	1.9181	0.4132	7.9389	0.8819	2.7624	3.4809
333991 Power-driven handtool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33399A Other general purpose machinery manufacturing	2.0423	0.4956	9.7597	0.9444	2.5266	3.0155
333993 Packaging machinery manufacturing	1.9918	0.5348	10.7557	0.9908	2.2593	2.5649

(Continued)

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Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
333994 Industrial process furnace and oven manufacturing	1.9896	0.5895	10.9800	1.0235	1.9894	2.4926
33399B Fluid power process machinery	2.0417	0.5408	9.8573	0.9724	2.2824	3.0938
334111 Electronic computer manufacturing	1.9217	0.5769	8.1515	1.0418	1.8889	3.7338
334112 Computer storage device manufacturing	1.9793	0.5977	9.3747	1.0703	1.9685	3.1763
33411A Computer terminals and other computer peripheral equipment manufacturing	2.0765	0.6178	10.3864	1.0937	2.0571	3.0731
334210 Telephone apparatus manufacturing	2.1194	0.5366	8.6038	1.1065	2.5611	4.7301
334220 Broadcast and wireless communications equipment	1.9435	0.4460	7.5273	1.0566	2.6582	4.7260
334290 Other communications equipment manufacturing	2.2079	0.7138	12.4177	1.2246	2.0240	2.8406
334300 Audio and video equipment manufacturing	2.0794	0.5099	9.1346	1.0288	2.5027	3.5456
33441A Other electronic component manufacturing	2.1210	0.6521	12.4058	1.1675	2.0225	2.4641
334413 Semiconductor and related device manufacturing	1.8803	0.5259	7.9963	1.1540	2.0212	3.9838
334418 Printed circuit assembly (electronic assembly) manufacturing	2.2369	0.5010	9.6407	1.0114	3.3495	3.6537
334510 Electromedical and electrotherapeutic apparatus manufacturing	1.9718	0.4828	8.2169	1.0974	2.3612	3.7570
334511 Search, detection, and navigation instruments manufacturing	2.0649	0.5964	9.8261	1.1606	2.1887	3.7593
334512 Automatic environmental control manufacturing	2.2055	0.7616	16.1129	1.2469	1.8892	2.0143
334513 Industrial process variable instruments manufacturing	2.2621	0.7881	14.0948	1.2437	1.9085	2.5298
334514 Totalizing fluid meter and counting device manufacturing	1.9474	0.4176	7.7371	0.9149	2.7916	3.7110
334515 Electricity and signal testing instruments manufacturing	2.1554	0.6547	11.8077	1.1629	2.1161	2.9377
334516 Analytical laboratory instrument manufacturing	2.0279	0.5054	8.8422	1.0678	2.4391	3.7162
334517 Irradiation apparatus manufacturing	2.1069	0.5350	9.3669	0.9680	2.4870	3.7044
33451A Watch, clock, and other measuring and controlling device manufacturing	2.0089	0.5509	11.0921	1.0971	2.1921	2.4755
334610 Manufacturing and reproducing magnetic and optical media	2.1122	0.5504	9.2191	1.1261	2.3334	3.8045
335110 Electric lamp bulb and part manufacturing	2.3142	0.5546	10.5670	1.0843	3.1695	4.1240
335120 Lighting fixture manufacturing	1.9844	0.4679	9.3969	0.9960	2.5084	2.8510
335210 Small electrical appliance manufacturing	2.1001	0.5133	9.6622	0.9707	2.4641	3.0367
335221 Household cooking appliance manufacturing	1.9716	0.4165	9.1782	0.8309	2.7844	2.6527
335222 Household refrigerator and home freezer manufacturing	1.9448	0.3997	9.3349	0.8820	2.6718	2.2815
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335311 Power, distribution, and specialty transformer manufacturing	1.9813	0.4540	9.8645	0.9183	2.4074	2.4100
335312 Motor and generator manufacturing	1.9066	0.4235	8.1271	0.8380	2.4801	2.9833

(Continued)

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335313 Switchgear and switchboard apparatus manufacturing	1.9165	0.4305	8.1980	0.9156	2.5404	3.1339
335314 Relay and industrial control manufacturing	2.0781	0.5918	11.2078	1.0953	2.1433	2.6013
335911 Storage battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335912 Primary battery manufacturing	1.7940	0.3843	7.1065	0.8383	2.2955	2.9787
335920 Communication and energy wire and cable manufacturing	2.4599	0.5061	9.5105	0.8835	3.3835	4.5862
335930 Wiring device manufacturing	1.9177	0.4609	9.0472	1.0135	2.2682	2.6286
335991 Carbon and graphite product manufacturing	2.0669	0.4414	8.8052	0.9788	2.8787	3.1137
335999 All other miscellaneous electrical equipment and component manufacturing	2.1237	0.5397	10.5929	1.0324	2.6292	3.0912
336111 Automobile manufacturing	1.9086	0.3956	7.1034	0.7140	2.6448	3.8023
336112 Light truck and utility vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336120 Heavy duty truck manufacturing	1.9308	0.4080	8.3071	0.6768	2.7273	2.9876
336211 Motor vehicle body manufacturing	2.0525	0.4581	9.8143	0.8199	2.7922	2.8176
336212 Truck trailer manufacturing	2.1240	0.4808	10.6656	0.8343	2.7313	2.6265
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing	2.0281	0.4327	9.5280	0.8138	2.8924	2.8076
336310 Motor vehicle gasoline engine and engine parts manufacturing	2.0226	0.4484	9.1643	0.8315	2.9693	3.2174
336320 Motor vehicle electrical and electronic equipment manufacturing	2.3208	0.6077	12.3814	1.0303	2.7896	3.0173
3363A0 Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2.0694	0.4675	10.0680	0.8698	2.9320	2.8884
336350 Motor vehicle transmission and power train parts manufacturing	2.0159	0.4620	10.1953	0.8346	2.7295	2.6046
336360 Motor vehicle seating and interior trim manufacturing	2.3205	0.4994	10.1715	0.8786	3.3388	3.7340
336370 Motor vehicle metal stamping	1.9600	0.4437	9.5920	0.8531	2.6031	2.5566
336390 Other motor vehicle parts manufacturing	2.0919	0.4833	9.7625	0.8577	2.7662	3.1541
336411 Aircraft manufacturing	2.0106	0.4908	8.1312	1.0255	2.4655	4.1182
336412 Aircraft engine and engine parts manufacturing	1.8590	0.4307	8.1178	0.9106	2.4346	3.1287
336413 Other aircraft parts and auxiliary equipment manufacturing	1.9647	0.4817	8.9620	1.0716	2.4779	3.3948
336414 Guided missile and space vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	2.2676	0.5096	9.9326	0.8372	3.4068	4.4057
336611 Ship building and repairing	2.2234	0.5962	11.6313	1.0858	2.5420	3.3433
336612 Boat building	2.1933	0.4984	11.0905	0.9211	3.1000	2.8606
336991 Motorcycle, bicycle, and parts manufacturing	1.9587	0.4653	11.6915	0.8749	2.4643	2.0648
336992 Military armored vehicle, tank, and tank component manufacturing	1.6098	0.3143	5.8380	0.7562	2.1012	2.6844

(Continued)

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336999 All other transportation equipment manufacturing	1.9736	0.4149	9.1615	0.7577	2.7733	2.5938
337110 Wood kitchen cabinet and countertop manufacturing	2.2477	0.6668	17.2865	1.0676	2.1824	1.9296
337121 Upholstered household furniture manufacturing	2.1700	0.5501	13.2484	0.9300	2.4371	2.1895
337122 Nonupholstered wood household furniture manufacturing	2.1175	0.6150	17.6880	1.0680	2.1024	1.7086
33712A Other household nonupholstered furniture	2.1270	0.5115	13.0627	0.9336	2.6165	2.1619
337127 Institutional furniture manufacturing	2.1469	0.5417	12.3174	1.0005	2.5145	2.4137
33721A Office furniture and custom architectural woodwork and millwork manufacturing	1.9850	0.4741	11.1410	0.9954	2.4900	2.3674
337215 Showcase, partition, shelving, and locker manufacturing	2.1960	0.6469	15.7517	1.0247	2.1189	1.9695
337900 Other furniture related product manufacturing	2.3024	0.5506	13.5836	1.0499	2.8279	2.3989
339112 Surgical and medical instrument manufacturing	2.0094	0.5615	10.1562	1.1485	2.1644	2.9630
339113 Surgical appliance and supplies manufacturing	1.9890	0.5021	9.4622	1.1021	2.4403	3.2174
339114 Dental equipment and supplies manufacturing	1.9280	0.4930	9.6130	0.9906	2.3360	2.8827
339115 Ophthalmic goods manufacturing	2.1602	0.6499	13.6312	1.1994	2.1647	2.4267
339116 Dental laboratories	2.2515	0.7902	18.3736	1.2945	1.9708	1.9357
339910 Jewelry and silverware manufacturing	1.8883	0.4436	10.1010	0.8298	2.4787	2.4273
339920 Sporting and athletic goods manufacturing	2.2174	0.5520	11.4777	1.0699	2.7365	3.0103
339930 Doll, toy, and game manufacturing	2.1718	0.4818	9.7382	0.9831	3.2211	3.7172
339940 Office supplies (except paper) manufacturing	2.0905	0.5276	11.3240	1.0286	2.4762	2.5024
339950 Sign manufacturing	2.2789	0.6386	13.7248	1.1082	2.3480	2.4167
339990 All other miscellaneous manufacturing	2.2236	0.5836	12.2535	1.0473	2.5672	2.7420
311111 Dog and cat food manufacturing	2.0690	0.4299	8.8014	0.8376	2.8558	3.2185
311119 Other animal food manufacturing	1.9258	0.4091	8.1635	0.6332	2.7175	3.1008
311210 Flour milling and malt manufacturing	1.9139	0.4167	8.1162	0.6725	2.7681	3.3590
311221 Wet corn milling	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31122A Soybean and other oilseed processing	1.7986	0.3835	7.6526	0.5102	2.5474	2.9448
311225 Fats and oils refining and blending	1.9931	0.4119	7.7395	0.5664	2.7361	3.4492
311230 Breakfast cereal manufacturing	1.9307	0.4013	8.0113	0.9364	2.6661	3.0378
311300 Sugar and confectionery product manufacturing	2.1779	0.4664	9.9153	0.9043	3.0982	3.2305
311410 Frozen food manufacturing	2.1314	0.4620	11.1679	0.7895	3.0693	2.5015
311420 Fruit and vegetable canning, pickling, and drying	2.2644	0.4841	10.1759	0.8234	3.2157	3.2855
31151A Fluid milk and butter manufacturing	1.9835	0.4145	8.9278	0.6769	2.7537	3.0771
311513 Cheese manufacturing	1.8396	0.3845	8.4343	0.5634	2.5545	2.7516
311514 Dry, condensed, and evaporated dairy product manufacturing	2.1130	0.4418	8.8296	0.6915	2.9349	3.6782
311520 Ice cream and frozen dessert manufacturing	2.1535	0.4531	10.7678	0.8777	3.0100	2.5449
31161A Animal (except poultry) slaughtering, rendering, and processing	1.8427	0.3713	9.1768	0.5848	2.4664	2.4091

(Continued)

Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2015 data, the output delivered to final demand should be in 2015 dollars.

4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
311615 Poultry processing	1.7821	0.3700	9.8636	0.5892	2.4576	2.0532
311700 Seafood product preparation and packaging	1.7464	0.3755	8.8873	0.6712	2.4942	2.2559
311810 Bread and bakery product manufacturing	2.2653	0.5664	13.3468	1.0224	2.7485	2.4036
3118A0 Cookie, cracker, pasta, and tortilla manufacturing	2.2144	0.4770	11.1107	0.9464	3.1685	2.6379
311910 Snack food manufacturing	1.9605	0.4103	8.3384	0.8875	2.7258	3.1135
311920 Coffee and tea manufacturing	1.9958	0.4413	9.2494	0.7850	2.9318	3.1154
311930 Flavoring syrup and concentrate manufacturing	1.6056	0.3206	5.7951	0.9528	2.1300	2.8684
311940 Seasoning and dressing manufacturing	2.1566	0.4592	9.5071	0.8275	3.0503	3.3909
311990 All other food manufacturing	2.0550	0.4516	10.8759	0.7712	3.0000	2.5203
312110 Soft drink and ice manufacturing	2.2842	0.4907	10.2124	0.8902	3.2595	3.3674
312120 Breweries	2.0886	0.4468	8.6792	0.9907	2.9679	3.4525
312130 Wineries	2.0682	0.4697	12.9476	0.9259	3.1204	2.0748
312140 Distilleries	1.6571	0.3380	5.8215	1.0262	2.2457	3.3498
312200 Tobacco product manufacturing	1.4892	0.2958	6.4945	1.0092	1.9649	2.0050
313100 Fiber, yarn, and thread mills	1.7885	0.3747	11.1483	0.6193	2.4892	1.8449
313200 Fabric mills	1.9900	0.4587	11.6340	0.8589	2.6284	2.1057
313300 Textile and fabric finishing and fabric coating mills	2.0290	0.5229	13.1347	0.8917	2.3393	2.0048
314110 Carpet and rug mills	1.6808	0.3403	7.5327	0.6201	2.2604	2.2530
314120 Curtain and linen mills	1.9082	0.5221	15.3787	0.9168	2.0381	1.6690
314900 Other textile product mills	2.0259	0.5560	16.4606	0.9461	2.1379	1.7075
315000 Apparel manufacturing	2.1997	0.7425	26.7175	1.1799	1.9940	1.5213
316000 Leather and allied product manufacturing	2.3119	0.5989	14.9081	1.0007	2.6557	2.2619
322110 Pulp mills	1.9317	0.4141	8.4484	0.8186	2.7506	3.1156
322120 Paper mills	1.9359	0.4138	7.7556	0.8550	2.7491	3.5763
322130 Paperboard mills	1.9739	0.4253	7.5608	0.8846	2.8253	4.4075
322210 Paperboard container manufacturing	2.1024	0.4908	9.6714	0.8505	2.6510	3.0652
322220 Paper bag and coated and treated paper manufacturing	2.1228	0.4868	10.0582	0.8972	2.6177	2.7248
322230 Stationery product manufacturing	2.1153	0.4991	10.7943	0.9273	2.6033	2.5329
322291 Sanitary paper product manufacturing	1.8623	0.4453	7.9694	0.9139	2.1663	2.9485
322299 All other converted paper product manufacturing	2.0328	0.4647	9.4896	0.9030	2.7138	2.9542
323110 Printing	2.1715	0.6171	14.8020	1.1121	2.3137	2.2526
323120 Support activities for printing	2.2075	0.7647	18.9636	1.3000	1.9629	1.8801
324110 Petroleum refineries	1.7275	0.3336	4.6865	0.6956	2.2162	4.3031
324121 Asphalt paving mixture and block manufacturing	1.7947	0.3711	6.8043	0.8495	2.4650	3.1005
324122 Asphalt shingle and coating materials manufacturing	1.9644	0.4343	7.5883	0.9078	2.6774	3.9502
324190 Other petroleum and coal products manufacturing	1.8596	0.3721	6.1779	0.9670	2.4716	3.5142
325110 Petrochemical manufacturing	2.3483	0.4611	7.0971	0.8187	3.0634	5.3368

(Continued)

Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

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4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
325120 Industrial gas manufacturing	1.7727	0.3662	5.9298	0.9373	2.4325	4.1219
325130 Synthetic dye and pigment manufacturing	1.9277	0.4201	7.2779	0.8443	2.7907	4.3628
325180 Other basic inorganic chemical manufacturing	1.9209	0.4064	6.9129	0.9260	2.6998	4.4138
325190 Other basic organic chemical manufacturing	2.4235	0.5030	8.4767	0.8029	3.3417	5.3151
325211 Plastics material and resin manufacturing	2.3475	0.4839	8.1068	0.8160	3.2145	4.8427
3252A0 Synthetic rubber and artificial and synthetic fibers and filaments manufacturing	2.3303	0.4936	8.5558	0.8348	3.2793	4.5674
325310 Fertilizer manufacturing	1.9578	0.4128	7.5854	0.8194	2.7423	3.5311
325320 Pesticide and other agricultural chemical manufacturing	1.8804	0.4018	6.7856	0.9843	2.6689	4.0910
325411 Medicinal and botanical manufacturing	1.9390	0.4970	9.8940	1.0808	2.3550	2.5953
325412 Pharmaceutical preparation manufacturing	1.9219	0.4947	7.9102	1.1350	2.4211	4.3543
325413 In-vitro diagnostic substance manufacturing	2.0444	0.5591	10.9887	1.1613	2.3866	2.7169
325414 Biological product (except diagnostic) manufacturing	1.6426	0.3495	6.1846	1.0384	2.3219	3.1769
325510 Paint and coating manufacturing	2.1061	0.4499	8.0050	0.8770	2.9885	3.9992
325520 Adhesive manufacturing	2.1748	0.4721	8.9020	0.8952	3.1363	3.7715
325610 Soap and cleaning compound manufacturing	1.8527	0.3875	7.3864	0.9823	2.5739	3.1570
325620 Toilet preparation manufacturing	1.9485	0.4270	8.2783	1.0490	2.8368	3.2930
325910 Printing ink manufacturing	2.0749	0.4523	8.4712	0.9047	3.0047	3.5136
3259A0 All other chemical product and preparation manufacturing	2.2375	0.4927	8.8932	0.9491	3.2729	4.2614
326110 Plastics packaging materials and unlaminated film and sheet manufacturing	2.4060	0.4982	9.7421	0.9538	3.3099	3.4930
326120 Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	2.4259	0.5546	10.6269	1.0040	2.8310	3.1518
326130 Laminated plastics plate, sheet (except packaging), and shape manufacturing	2.1759	0.5368	10.3837	1.0331	2.3276	2.6787
326140 Polystyrene foam product manufacturing	2.2497	0.4805	10.3628	0.9229	3.0107	2.8056
326150 Urethane and other foam product (except polystyrene) manufacturing	2.1671	0.4533	9.3877	0.8820	3.0113	2.9911
326160 Plastics bottle manufacturing	2.3507	0.4818	9.6366	0.9337	3.2007	3.1478
326190 Other plastics product manufacturing	2.4199	0.5246	10.8744	0.9660	3.3219	3.2518
326210 Tire manufacturing	2.0144	0.4806	9.5937	0.8404	2.4396	2.9668
326220 Rubber and plastics hoses and belting manufacturing	2.1636	0.6107	12.1882	1.0084	2.1628	2.4770
326290 Other rubber product manufacturing	2.0710	0.4628	9.4839	0.9006	2.7315	2.9477
420000 Wholesale trade	2.0665	0.6426	11.9973	1.3115	2.0463	2.8791
441000 Motor vehicle and parts dealers	2.0043	0.7257	15.6628	1.3691	1.6932	1.9079
445000 Food and beverage stores	2.1331	0.7107	22.3073	1.3379	1.8866	1.5935
452000 General merchandise stores	2.1479	0.6745	22.6689	1.3248	2.0830	1.5902
4A0000 Other retail	2.1665	0.6880	21.1542	1.3331	2.0063	1.6717
481000 Air transportation	1.8781	0.4470	8.1892	0.9484	2.3838	3.5468

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Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

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4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

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NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
482000 Rail transportation	1.9701	0.5144	9.0967	1.0762	2.2907	3.5419
483000 Water transportation	2.1863	0.4999	9.6621	0.9743	3.4344	5.9924
484000 Truck transportation	2.2933	0.6922	14.8825	1.1854	2.3091	2.6296
485A00 Transit and ground passenger transportation*	2.3859	0.8515	33.9165	1.2601	1.9628	1.4037
486000 Pipeline transportation	2.1158	0.6184	9.8263	1.1695	2.1454	4.0361
48A000 Scenic and sightseeing transportation and support activities for transportation	2.4206	0.7765	17.4068	1.3223	2.3421	2.6283
492000 Couriers and messengers	2.2260	0.6943	20.1688	1.2288	2.1850	1.8055
493000 Warehousing and storage	2.2810	0.7639	21.2682	1.3683	2.0071	1.8274
511110 Newspaper publishers	2.1715	0.6523	15.8978	1.2211	2.2209	2.1190
511120 Periodical publishers	2.3023	0.6067	13.3119	1.2209	2.8650	3.2363
511130 Book publishers	1.6943	0.3651	7.9940	1.1465	2.4195	2.7391
5111A0 Directory, mailing list, and other publishers	1.9469	0.4415	9.0554	1.1438	2.8232	3.8033
511200 Software publishers	2.0065	0.5878	9.8204	1.2892	2.1285	3.6633
512100 Motion picture and video industries	1.8392	0.4144	12.7485	1.0384	2.4732	1.9632
512200 Sound recording industries	2.0881	0.4758	9.7168	1.1687	3.1530	4.0006
515100 Radio and television broadcasting	2.4846	0.9902	19.6850	1.4837	1.9489	2.4104
515200 Cable and other subscription programming	1.9048	0.5212	10.6405	1.1171	2.0461	2.5466
517110 Wired telecommunications carriers	1.8050	0.3760	7.2604	1.0892	2.4919	3.3650
517210 Wireless telecommunications carriers (except satellite)	2.0655	0.4536	9.0310	1.1306	3.0061	3.9699
517A00 Satellite, telecommunications resellers, and all other telecommunications	2.2038	0.7179	13.8672	1.3338	1.8984	2.3280
518200 Data processing, hosting, and related services	2.2962	0.6470	12.4421	1.2612	2.6129	4.0217
5191A0 News syndicates, libraries, archives, and all other information services	1.7767	0.5120	11.8404	1.1135	1.8538	1.9361
519130 Internet publishing and broadcasting and Web search portals	2.0372	0.5619	10.0289	1.2374	2.3734	4.1278
52A000 Monetary authorities and depository credit intermediation	2.1732	0.5923	12.6184	1.2745	2.5988	3.3852
522A00 Nondepository credit intermediation and related activities	2.4920	0.7851	15.4011	1.3631	2.4087	3.3183
523A00 Securities and commodity contracts intermediation and brokerage	2.5753	0.9268	23.7925	1.3942	2.1193	2.0129
523900 Other financial investment activities	2.8273	0.8445	21.4921	1.3806	3.1716	2.5848
524100 Insurance carriers	2.1059	0.5572	10.8154	1.2050	2.6332	3.5619
524200 Insurance agencies, brokerages, and related activities	2.5838	0.8289	17.3830	1.4204	2.4181	2.8189
525000 Funds, trusts, and other financial vehicles	3.0750	0.8034	20.2162	1.3193	5.3161	5.2181
531000 Real estate	1.7847	0.3877	12.1734	1.1730	2.5506	1.9326
532100 Automotive equipment rental and leasing	1.9052	0.4968	12.4179	1.2059	2.1650	2.0279
532A00 Consumer goods and general rental centers	2.1315	0.7681	19.9655	1.3888	1.7604	1.6921

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Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

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6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry
Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
532400 Commercial and industrial machinery and equipment rental and leasing	1.7575	0.4406	8.4962	1.1981	2.1032	2.6842
533000 Lessors of nonfinancial intangible assets	2.1950	0.5418	10.5714	1.2441	3.5640	6.2950
541100 Legal services	2.1980	0.8595	13.9685	1.4635	1.7187	2.8352
541511 Custom computer programming services	2.4212	1.0302	17.5210	1.5614	1.7995	2.8863
541512 Computer systems design services	2.4326	0.9573	16.6922	1.4873	1.8943	2.9199
54151A Other computer related services, including facilities management	2.3010	0.9105	16.1538	1.4703	1.8017	2.6320
541200 Accounting, tax preparation, bookkeeping, and payroll services	2.1248	0.8561	19.5052	1.4626	1.6722	1.7823
541300 Architectural, engineering, and related services	2.4877	0.8733	16.1545	1.3971	2.1989	3.2640
541400 Specialized design services	2.2222	0.8117	23.7973	1.3804	1.8244	1.6139
541610 Management consulting services	2.4587	0.9468	19.4999	1.4808	1.9173	2.3246
5416A0 Environmental and other technical consulting services	2.5054	0.9858	20.6415	1.5009	1.9247	2.2568
541700 Scientific research and development services	2.4158	0.7842	14.1525	1.2969	2.3635	3.7389
541800 Advertising, public relations, and related services	2.0996	0.6015	13.0908	1.2436	2.2276	2.6271
5419A0 Marketing research and all other miscellaneous professional, scientific, and technical services	2.2113	0.7761	14.1260	1.3687	1.9081	2.7362
541920 Photographic services	2.4668	0.8551	26.7321	1.3927	2.0262	1.6723
541940 Veterinary services	2.4281	0.8257	20.8893	1.3327	2.0464	1.9277
550000 Management of companies and enterprises	2.3299	0.8286	14.6078	1.3935	1.9793	2.9336
561100 Office administrative services	2.2892	1.0151	18.3028	1.5548	1.6285	2.1574
561200 Facilities support services	2.2214	0.6269	14.5506	1.2518	2.5054	2.6290
561300 Employment services	2.2689	0.9974	29.3378	1.5477	1.6670	1.5113
561400 Business support services	2.3387	0.8655	22.9163	1.4199	1.9076	1.7790
561500 Travel arrangement and reservation services	2.3978	0.6959	15.5776	1.2945	2.6130	2.8844
561600 Investigation and security services	2.3130	0.9333	29.1886	1.4793	1.7489	1.4981
561700 Services to buildings and dwellings	2.0581	0.6580	22.6141	1.2448	1.9342	1.5088
561900 Other support services	2.4772	0.8346	21.8949	1.3698	2.1706	2.0182
562000 Waste management and remediation services	2.1894	0.5976	12.1467	1.1492	2.4614	3.0359
611100 Elementary and secondary schools	2.2261	0.8618	33.4508	1.3941	1.7195	1.3801
611A00 Junior colleges, colleges, universities, and professional schools	2.2982	0.8090	21.2142	1.3771	1.8224	1.7807
611B00 Other educational services	2.4643	0.9521	31.2896	1.4532	1.8590	1.5395
621100 Offices of physicians	2.4134	0.9425	15.9642	1.4752	1.8418	2.8897
621200 Offices of dentists	2.2730	0.8335	17.6649	1.3904	1.8597	2.1236
621300 Offices of other health practitioners	2.1724	0.7814	18.1719	1.3757	1.7972	1.8819
621400 Outpatient care centers	2.2446	0.6896	14.4402	1.2910	2.1432	2.6642
621500 Medical and diagnostic laboratories	2.2608	0.8380	16.5173	1.3688	1.8544	2.2574

(Continued)

Region Definition: Bryan, OK; Collin, TX; Cooke, TX; Dallas, TX; Denton, TX; Ellis, TX; Grayson, TX; Henderson, TX; Hood, TX; Hopkins, TX; Hunt, TX; Johnson, TX; Kaufman, TX; Navarro, TX; Palo Pinto, TX; Parker, TX; Rockwall, TX; Somervell, TX; Tarrant, TX; Wise, TX

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2015 data, the output delivered to final demand should be in 2015 dollars.
4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry
Dallas CSA (Type II)

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
621600 Home health care services	2.3833	0.9670	29.8328	1.4893	1.7542	1.5341
621900 Other ambulatory health care services	2.3192	0.7856	17.7332	1.3342	1.9809	2.0796
622000 Hospitals	2.3599	0.8350	16.9158	1.3622	2.0014	2.4322
623A00 Nursing and community care facilities	2.3020	0.8386	25.4721	1.3881	1.8389	1.6096
623B00 Residential mental retardation, mental health, substance abuse and other facilities	2.2767	0.9020	26.4418	1.4478	1.6982	1.5570
624100 Individual and family services	2.3680	0.9149	34.1746	1.4497	1.7826	1.4211
624A00 Community food, housing, and other relief services, including rehabilitation services	2.4154	0.8207	27.5366	1.3245	2.0226	1.6006
624400 Child day care services	2.2886	0.8335	39.2865	1.3834	1.7840	1.3143
711100 Performing arts companies	2.2136	0.7199	37.2642	1.2763	2.0463	1.3499
711200 Spectator sports	2.2554	1.0149	24.1014	1.5453	1.6515	1.7223
711A00 Promoters of performing arts and sports and agents for public figures	2.3223	0.6736	30.5099	1.2460	2.5407	1.5642
711500 Independent artists, writers, and performers	2.1024	0.6197	22.8271	1.2296	2.3601	1.6787
712000 Museums, historical sites, zoos, and parks	2.4782	0.7583	21.6886	1.3460	2.2762	1.9753
713100 Amusement parks and arcades	1.8938	0.5647	22.7707	1.2122	1.8901	1.3924
713200 Gambling industries (except casino hotels)	2.0583	0.4824	14.0328	1.1805	3.1908	2.1427
713900 Other amusement and recreation industries	2.2570	0.6763	26.0897	1.2660	2.1550	1.5248
721000 Accommodation	2.0052	0.5890	15.7514	1.2255	2.0774	1.8571
722110 Full-service restaurants	2.2681	0.7505	24.9459	1.2539	1.9829	1.5427
722211 Limited-service restaurants	2.1338	0.6285	24.6447	1.2038	2.0824	1.4650
722A00 All other food and drinking places	2.1800	0.5247	15.7950	1.0192	2.8038	1.9919
811100 Automotive repair and maintenance	2.2371	0.8253	20.5308	1.2967	1.7775	1.7480
811200 Electronic and precision equipment repair and maintenance	2.3006	0.9121	18.1654	1.4253	1.7549	2.0958
811300 Commercial and industrial machinery and equipment repair and maintenance	2.1675	0.9304	16.8598	1.4458	1.5991	2.0451
811400 Personal and household goods repair and maintenance	1.8561	0.5249	12.6258	1.1661	1.9282	1.9418
812100 Personal care services	2.4701	1.0053	33.8400	1.5239	1.7464	1.4780
812200 Death care services	2.1774	0.8490	21.7183	1.3359	1.6869	1.6313
812300 Dry-cleaning and laundry services	2.2947	0.8774	28.2614	1.3950	1.7880	1.5242
812900 Other personal services	2.2950	0.7962	26.2631	1.3693	1.9204	1.5751
813100 Religious organizations	2.6761	0.6480	17.3067	1.2733	4.0458	3.5202
813A00 Grantmaking, giving, and social advocacy organizations	2.2639	0.8587	20.4970	1.4496	1.8373	1.9019
813B00 Civic, social, professional, and similar organizations	2.2096	0.9754	27.8279	1.5215	1.6015	1.4987
491000 Postal service	2.1953	0.9408	17.4090	1.4815	1.6158	2.0698
S00A00 Other government enterprises	2.4364	0.6627	13.6631	1.2394	2.9059	3.4324
H00000 Households	1.4116	0.4234	10.9759	0.8361	0.0000	0.0000

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NOTE.--Multipliers are based on the 2007 Benchmark Input-Output Table for the Nation and 2015 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.