

SOUTHEAST MESA LAND USE AND TRANSPORTATION PLAN – ECONOMIC ANALYSIS

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INTRODUCTION

Rounds Consulting Group, Inc. (“RCG”) was tasked with developing an economic model to identify tax collections and the multiplier benefits resulting from the development of land for different uses (e.g., residential, office, industrial, etc.) to support a land use scenario evaluation as part of the Southeast Mesa Land Use and Transportation Plan (“SE Mesa LUTP”).

To provide perspective on the different economic and fiscal implications resulting from developments of different land uses, the model calculates the impacts generated by five different land use categories. These were identified as: 1) commercial/retail, 2) office, 3) industrial, 4) single family residential, and 5) multi-family residential.

The model assumes the different developments would occur on the same hypothetical 10-acre property. The model was developed to be incremental and is the basis for modeling different scenarios – meaning it can be scaled to match the various development scenarios. For example, if one assumes the property available for development is double in size (i.e., 20 acres) the impact estimates can be doubled. The same principle applies if one assumes a site to be smaller.

The incremental model was used to model build-out scenarios (development of all available vacant/underutilized land) for: 1) two independent sub-areas within the region, 2) the overall region with current zoning and land availability, and 3) the overall region with preferred future land uses.

MODEL METHODOLOGY DESCRIPTION

Economic and fiscal impact models are an effective way to demonstrate regional implications of a particular project, policy, business, development or other activities in a given area. The study area can range from a single neighborhood or city to an entire state or country. Typically, the level of effects resulting from the activity are estimated in terms of output, earnings, employment, and tax revenues.

RCG developed an economic and fiscal impact model to analyze the effects resulting from potential developments. The RCG model employs an input-output methodology commonly used by economists to determine impacts. This method was used to estimate the “multiplier” effects caused by the activities being analyzed. These activities were then converted into tax revenues in each of the relevant categories.

Economic Impact Model Methodology

An economic impact model provides a quantifiable method to estimate the economic effects of a particular activity in a given area. Impacts can be used to measure existing activity and to measure potential expansions/contractions of an area’s economy resulting from changes in economic activity. In general, the level of economic effects resulting from the activity are estimated in terms of output, earnings, and employment. These are defined as:



- *Output* captures the broader level of economic activity, or the total value of goods and services produced, in the region similar to how statistics like Gross Domestic Product (GDP) capture economic volume in individual states and across the country.
- *Earnings*, a component of output, represent income to employees. The earnings component is used to measure the total change in income throughout the economy due to the economic or business activity.
- *Employment* is the job count on an annualized basis.

The economic effects occurring as a direct consequence from the initial activity create additional activity in the regional economy. This relationship is known as the “multiplier” effect. The basis for multiplier effects (or “spinoff” effects) is the interdependencies between industries, how one industry impacts other sectors, and the cycle of spending and responding within the regional economy.

An input-output model is used to generate these multipliers. The multipliers quantify relationships among industries and estimate the extent that the area being analyzed can capture sales, earnings, and job impacts within the region.

Input-output models measure impacts based on their source. Direct effects are the result of the initial activity being analyzed. The multiplier effects, or secondary effects, are measured as either indirect or induced. These are defined as:

- *Direct effects, or impacts*, measure business activity at an individual site or the initial change in the economy attributed to the development under consideration. For example, if a manufacturing facility is under construction, this would include the workers that construct the facility and the manufacturing employees that later occupy the building on a regular basis.
- *Indirect impacts* capture additional output, earnings, and employment changes generated as a result of increased demand in the industries which supply services or products to the direct business or development under consideration. For example, when the direct manufacturing facility purchases goods for the production of its products, the supplier must respond to the increased demand by hiring new employees to support its operations.
- *Induced impacts* capture additional output, earnings, and employment changes generated as a result of increased spending in the local economy made by the households of both the direct and indirect employees. These induced companies respond by hiring, increasing payroll hours, and increasing wages.

A commonly used input-output model used to generate economic multipliers is IMPLAN (short for “impact analysis for planning”). Originally developed by the United States Forest Service in the 1970s, the responsibility for developing IMPLAN data sets shifted to the University of Minnesota as demand grew for regional models. Now, IMPLAN runs as its own private organization and is the leading provider of nationwide economic impact data and analytical software.



The RCG custom economic impact model employs this input-output methodology and uses area-specific IMPLAN multipliers.

Fiscal Impact Model Methodology

Fiscal impact models provide estimates for the governmental revenues that are generated by a particular project, policy, business, development, or activity in a given area. Typically, fiscal impacts examine revenues that are likely to result from a project or activity and are determined by the study area's tax structure. Fiscal impacts are categorized similar to economic impact studies and are broken down at the direct, indirect, and induced levels in which they are created. These revenues are expressed as either primary or secondary based on their source.

In general, primary revenues can be estimated by definable sources such as sales taxes calculated from construction expenditures. For example, when a contractor builds a manufacturing facility, 65% of the contractor's gross receipts are subject to Arizona's state and local construction sales taxes. Those taxes are paid to the state, and to the county and city where the construction was performed.

Secondary revenues are generated by the wages, residency, and spending of those direct, indirect, and induced employees who are supported by the business or economic activity. For example, this would include sales tax revenues generated when the manufacturing employees purchase dinner on their way home from work.

The RCG custom fiscal impact model employs this methodology. The model was designed to produce revenue information for the City of Mesa ("Mesa," or "City").

Model Assumptions

Economic and fiscal implications of an activity are determined by the interaction of a number of factors including business characteristics (e.g., type of businesses, number of employees, etc.), location and study area characteristics (e.g., state and local tax structure), taxable activity (e.g., area retail sales), and by the nature of any economic or demographic effects resulting from the activity (e.g., new employment/population added to area). Typical analyses involve the short-term (e.g., effects from construction) and the ongoing (operational) regional economic impacts of a particular project or activity.

Short-term impacts are typically analyzed as construction impacts. Effects related to construction impacts are generally related to on- and off-site construction employment and the other industries that support construction.

Ongoing impacts typically analyze the annual operational impacts. Effects related to ongoing impacts are generally related to the day-to-day operations of a particular activity or business. Inputs needed to calculate operational impacts vary by the type of activity. In general, impacts can be derived from employment counts and annual salaries, and by the type of business or industry the activity is in.

Impacts were calculated based on the assumptions derived from industry standards. These estimates were based on currently available information and tax structures. Such information was compiled from a



variety of sources and is subject to uncertainty and variation. Therefore, actual impacts may vary, and some impacts may not materialize due to unanticipated events, locations, and changing circumstances.

POTENTIAL LAND USE IMPACTS

An economic and fiscal impact model was developed for this assignment to provide perspective on the different economic and fiscal implications resulting from various development types on different land uses. The following land use categories were identified to provide perspective on the different impacts of developments for each type: 1) commercial/retail, 2) office, 3) industrial, 4) single family residential, and 5) multi-family residential.

To use the various impacts as comparisons, the model assumes the different developments would occur on the same hypothetical property (i.e., the same size of property but designated by a different land use category). For this assignment, the example property is a 10-acre site located within the study area. This incremental impact model can then be scaled to match various development scenarios.

Building assumptions are based on the City of Mesa's Zoning Ordinances and Development Standards. Market statistics for vacancies, rental rates, home prices, floor area ratios, construction costs, etc. are based on current Mesa estimates from CoStar, Cromford Associates LLC, Maricopa County Assessor's Office, Maricopa Association of Governments ("MAG"), Matrix Design Group, Inc. ("Matrix"), and various other sources.

Commercial/Retail Impacts

Using industry standards, it is estimated that 113,256 square feet of commercial/retail space could be built on the 10-acre property.

Construction of this type of development would directly support 70 persons earning a combined \$5.0 million in wages and generate an economic output of \$11.2 million. Another 57 employees, \$3.0 million in wages, and \$8.3 million in economic output are supported by the spinoff benefits. In total, an estimated 126 jobs, \$8.0 million in wages, and \$19.4 million in economic output is generated by construction of commercial/retail space on a 10-acre site. The City of Mesa collects an estimated \$173,700 from construction activity.

Once construction is completed, the commercial/retail space supports 207 direct jobs annually. These employees earn \$8.0 million in wages and generate an economic output of \$18.2 million. Annually, 111 indirect and induced jobs are supported with \$5.3 million in wages and produce an economic output of \$15.6 million. In total, 319 jobs, \$13.3 million in wages, and \$33.8 million in economic output is generated by commercial/retail operations. Each year, the City of Mesa collects \$560,400 from the commercial/retail development.

Impacts for construction are summarized in **Table 1** and impacts for annual operations are summarized in **Table 2**.



Table 1: Commercial/Retail Impacts - Construction

Commercial/Retail Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	70	57	126
Wages	\$4,976,700	\$2,984,800	\$7,961,400
Economic Output	\$11,151,500	\$8,291,800	\$19,443,300
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$126,800	-	\$126,800
Retail Sales Tax	\$19,500	\$9,800	\$29,300
Property Tax	-	\$6,300	\$6,300
State Shared Revenues	\$2,100	\$9,200	\$11,300
Totals	\$148,400	\$25,300	\$173,700

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 2: Commercial/Retail Impacts - Annual Operations

Commercial/Retail Development – Example 10-Acre Site			
Economic & Fiscal Impacts – Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	207	111	319
Wages	\$7,962,500	\$5,336,800	\$13,299,300
Economic Output	\$18,226,600	\$15,580,200	\$33,806,800
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$462,400	\$19,200	\$481,600
Lease Tax	\$24,200	-	\$24,200
Property Tax	\$18,600	\$15,800	\$34,400
State Shared Revenues	\$11,500	\$8,700	\$20,200
Totals	\$516,700	\$43,700	\$560,400

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Office Impacts

Using industry standards, it is estimated that 130,700 square feet of office space could be built on the 10-acre property.

Construction of office space would directly support 117 persons earning a combined \$8.4 million in wages and generate an economic output of \$18.7 million. The indirect and induced effects bring the total number of jobs to 212. These employees earn \$13.4 million in wages and generate \$32.7 million in economic output. The City of Mesa collects \$292,000 in tax revenues from a hypothetical office complex built on a 10-acre site.

Once operational, the office development supports an estimated 400 direct jobs each year. These employees earn \$25.4 million in wages and generate an economic output of \$51.0 million. In total, 780 jobs, \$43.9 million in wages, and \$101.0 million in economic output is generated by office operations (includes direct, indirect, and induced impacts). Annually, the City collects \$200,000 from taxes levied on activity derived from the office development.

Impacts for construction are summarized in **Table 3** and impacts for annual operations are summarized in **Table 4**.

Table 3: Office Impacts - Construction

Office Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	117	95	212
Wages	\$8,361,300	\$5,014,700	\$13,376,000
Economic Output	\$18,735,600	\$13,931,000	\$32,666,600
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$213,100	-	\$213,100
Retail Sales Tax	\$32,800	\$16,500	\$49,300
Property Tax	-	\$10,500	\$10,500
State Shared Revenues	\$3,500	\$15,600	\$19,100
Totals	\$249,400	\$42,600	\$292,000

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Table 4: Office Impacts - Annual Operations

Office Development – Example 10-Acre Site Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	400	380	780
Wages	\$25,374,200	\$18,549,700	\$43,923,900
Economic Output	\$50,968,500	\$50,048,100	\$101,016,700
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$12,600	\$56,400	\$69,000
Lease Tax	\$35,200	-	\$35,200
Property Tax	\$31,600	\$38,800	\$70,400
State Shared Revenues	\$300	\$25,300	\$25,600
Totals	\$79,700	\$120,500	\$200,200

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Industrial Impacts

Using industry standards, it is estimated that 139,400 square feet of industrial space could be built on the 10-acre property.

About 124 total jobs are supported by construction activity. This includes 68 direct and 56 indirect and induced jobs. The combined wages earned by total construction jobs equals \$7.8 million and generates \$19.1 million in economic output. The City of Mesa collects \$170,700 in tax revenues from an industrial development on the example 10-acre site.

Each year the industrial facility directly employs 247 persons with \$14.1 million in wages. The economic output produced by those jobs equals \$76.5 million. Another 297 indirect/induced jobs are supported by annual operations. In total, 544 jobs, \$30.5 million in wages, and \$123.3 million in economic output is generated by industrial operations. Each year, the City of Mesa collects \$133,000 in tax revenues from the industrial development.

Impacts for construction are summarized in **Table 5** and impacts for annual operations are summarized in **Table 6**.



Table 5: Industrial Impacts - Construction

Industrial Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	68	56	124
Wages	\$4,886,400	\$2,930,600	\$7,817,100
Economic Output	\$10,949,200	\$8,141,400	\$19,090,700
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$124,500	-	\$124,500
Retail Sales Tax	\$19,200	\$9,700	\$28,900
Property Tax	-	\$6,200	\$6,200
State Shared Revenues	\$2,000	\$9,100	\$11,100
Totals	\$145,700	\$25,000	\$170,700

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 6: Industrial Impacts - Annual Operations

Industrial Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	247	297	544
Wages	\$14,070,100	\$16,402,100	\$30,472,200
Economic Output	\$76,501,600	\$46,831,600	\$123,333,200
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$13,200	\$39,200	\$52,400
Lease Tax	\$17,700	-	\$17,700
Property Tax	\$19,800	\$27,100	\$46,900
State Shared Revenues	\$200	\$15,800	\$16,000
Totals	\$50,900	\$82,100	\$133,000

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Single Family Residential Impacts

Using industry standards, it is estimated that 50 single family residential units could be built on the 10-acre property.

Construction of this type of development would directly support 79 persons earning a combined \$4.9 million in wages and generate an economic output of \$12.0 million. Another 89 employees, \$4.2 million in wages, and \$11.7 in economic output is supported by spinoff activity. In total, an estimated 168 jobs, \$9.1 million in wages, and \$23.7 million in economic output is generated from construction. The City of Mesa collects an estimated \$164,700 in tax revenues from construction of the 50 single family homes.

Residents who later occupy the newly constructed housing units support a total of 84 jobs, \$3.5 million in wages, and \$8.9 million in economic output each year. Of the total, 55 workers are employed as a direct result of household spending and another 29 workers are supported by spinoff activity. Annually, Mesa collects \$60,400 from taxes levied on the spending of the 50 households and the spending of the employees supported by residents.

Impacts for construction are summarized in **Table 7** and impacts for annual operations are summarized in **Table 8**.

Table 7: Single Family Residential Impacts - Construction

Single Family Residential Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	79	89	168
Wages	\$4,881,500	\$4,193,000	\$9,074,500
Economic Output	\$12,000,000	\$11,691,000	\$23,691,000
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$110,900	-	\$110,900
Retail Sales Tax	\$21,000	\$11,900	\$32,900
Property Tax	-	\$8,300	\$8,300
State Shared Revenues	\$1,900	\$10,700	\$12,600
Totals	\$133,800	\$30,900	\$164,700

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Table 8: Single Family Residential Impacts - Annual Operations

Single Family Residential Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	55	29	84
Wages	\$2,100,100	\$1,407,600	\$3,507,700
Economic Output	\$4,807,300	\$4,109,300	\$8,916,600
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$27,600	\$5,000	\$32,600
Lease Tax	\$4,900	-	\$4,900
Property Tax	\$15,800	\$4,200	\$20,000
State Shared Revenues	\$600	\$2,300	\$2,900
Totals	\$48,900	\$11,500	\$60,400

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Multi-Family Residential Impact

Using industry standards, it is estimated that 200 multi-family residential units could be built on the 10-acre property.

Construction of the multi-family complex directly supports 138 persons earning a combined \$8.6 million in wages and generates an economic output of \$21.0 million. The indirect and induced effects bring the total number of jobs supported to 294. These employees earn \$15.9 million in wages and generate \$41.5 million in economic output. The City of Mesa collects \$288,600 in tax revenues from a multi-family development at the 10-acre site.

Each year the completed multi-family complex supports 183 persons with \$7.7 million in wages. The economic output produced by those jobs equals \$19.4 million. This includes the direct jobs who are employed at the development, the jobs supported by residential spending, and the spinoff effects created by those jobs. Each year, the City collects \$168,400 in tax revenues from the multi-family complex.

Impacts for construction are summarized in **Table 9** and impacts for annual operations are summarized in **Table 10**.



Table 9: Multi-Family Residential Impacts - Construction

Multi-Family Residential Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	138	156	294
Wages	\$8,552,200	\$7,346,100	\$15,898,300
Economic Output	\$21,023,700	\$20,482,400	\$41,506,200
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$194,300	-	\$194,300
Retail Sales Tax	\$36,800	\$20,700	\$57,500
Property Tax	-	\$14,700	\$14,700
State Shared Revenues	\$3,300	\$18,800	\$22,100
Totals	\$234,400	\$54,200	\$288,600

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 10: Multi-Family Residential Impacts - Annual Operations

Multi-Family Residential Development – Example 10-Acre Site			
Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	119	64	183
Wages	\$4,576,600	\$3,067,400	\$7,644,000
Economic Output	\$10,476,100	\$8,955,000	\$19,431,100
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$60,800	\$11,100	\$71,900
Lease Tax	\$52,500	-	\$52,500
Property Tax	\$28,500	\$9,100	\$37,600
State Shared Revenues	\$1,500	\$4,900	\$6,400
Totals	\$143,300	\$25,100	\$168,400

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Impact Comparisons

The development of the 10-acre property into industrial, commercial/retail, or office space will yield a minimum of 113,256 square feet of utilized space. A hypothetical commercial/retail development will occupy 113,256 square feet of space, an industrial development will occupy 139,400 square feet, and an office development will occupy 130,700 square feet.

Construction impacts vary for the type of development. An industrial facility's construction would support a total of 124 jobs with combined wages of \$7.8 million and an economic output of \$19.1 million. The construction of an office development would support 212 jobs earning \$13.4 million in wages with an economic output of \$32.7 million. Finally, the construction of a commercial/retail development would support 126 jobs earning \$8.0 million in wages with an economic output of \$19.4 million. The City would see significant tax revenues from each type of development. Mesa will collect \$170,700 in tax revenues from the construction of an industrial development, \$292,000 in tax revenues from the construction of an office development, and \$173,700 from the construction of a commercial/retail development.

The operational impacts from each type of development are significant for the City. An industrial facility would support, through direct, indirect, and induced employment, 544 jobs annually earning \$30.5 million in wages with an economic output of \$123.3 million. An office development would support 780 jobs earning \$43.9 million in wages with an economic output of \$101.0 million. A commercial/retail development would support 319 jobs earning \$13.3 million in wages with an economic output of \$33.8 million. The City will collect \$133,000 in tax revenues from an industrial development, \$200,000 in tax revenues from an office development, and \$560,400 in tax revenues annually from a commercial/retail development.

The development of the 10-acre property into either multi-family or single-family residential units will also generate impacts for the City. Approximately 200 multi-family residential units can be constructed on the 10-acre site. The construction of approximately 200 multi-family units would support 294 total jobs earning \$15.9 million in wages with an economic output of \$41.5 million. The City would collect \$288,600 in tax revenues from the construction of multi-family units on the property. It is estimated that 50 single-family residential units could be built on the 10-acre property. The construction of 50 single-family units would support 168 total jobs earning \$9.1 million in wages with an economic output of \$23.7 million. The City would collect \$164,700 in tax revenues from the construction of 50 single-family residential units.

The multi-family residential development would support 183 total jobs annually once built. Those jobs would include individuals employed at the property, jobs supported by residents' spending, and the additional effects created by those jobs. The 183 jobs would earn \$7.7 million with an economic output of \$19.4 million. The City would collect \$168,400 in tax revenues annually from the spending of a multi-family residential development. The single-family residential development would support 84 total jobs earning \$3.5 million in wages with an economic output of \$8.9 million. The City would collect \$60,400 in tax revenues annually from the spending of a single-family residential development.

Total Impacts for construction are summarized in **Table 11** and impacts for annual operations are summarized in **Table 12**.



Table 11: Impacts by Type of Development - Construction

Impact by Development Type Economic and Fiscal Impact Summaries – Construction (Totals)				
Development Type	Jobs	Wages	Economic Output	Tax Revenues
Commercial/Retail	126	\$7,961,400	\$19,443,300	\$173,700
Office	212	\$13,376,000	\$32,666,600	\$292,000
Industrial	124	\$7,817,100	\$19,090,700	\$170,700
Single-Family Res.	168	\$9,074,500	\$23,691,000	\$164,700
Multi-Family Res.	294	\$15,898,300	\$41,506,200	\$288,600

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 12: Impacts by Type of Development - Annual Operations

Impact by Development Type Economic and Fiscal Impact Summaries - Annual Operations (Totals)				
Development Type	Jobs	Wages	Economic Output	Tax Revenues
Commercial/Retail	319	\$13,299,300	\$33,806,800	\$560,400
Office	780	\$43,923,900	\$101,016,700	\$200,000
Industrial	544	\$30,472,200	\$123,333,200	\$133,000
Single-Family Res.	84	\$3,507,700	\$8,916,600	\$60,400
Multi-Family Res.	183	\$7,644,000	\$19,431,100	\$168,400

Source: IMPLAN; Rounds Consulting Group, Inc.

BUILD-OUT OF SUB-AREAS

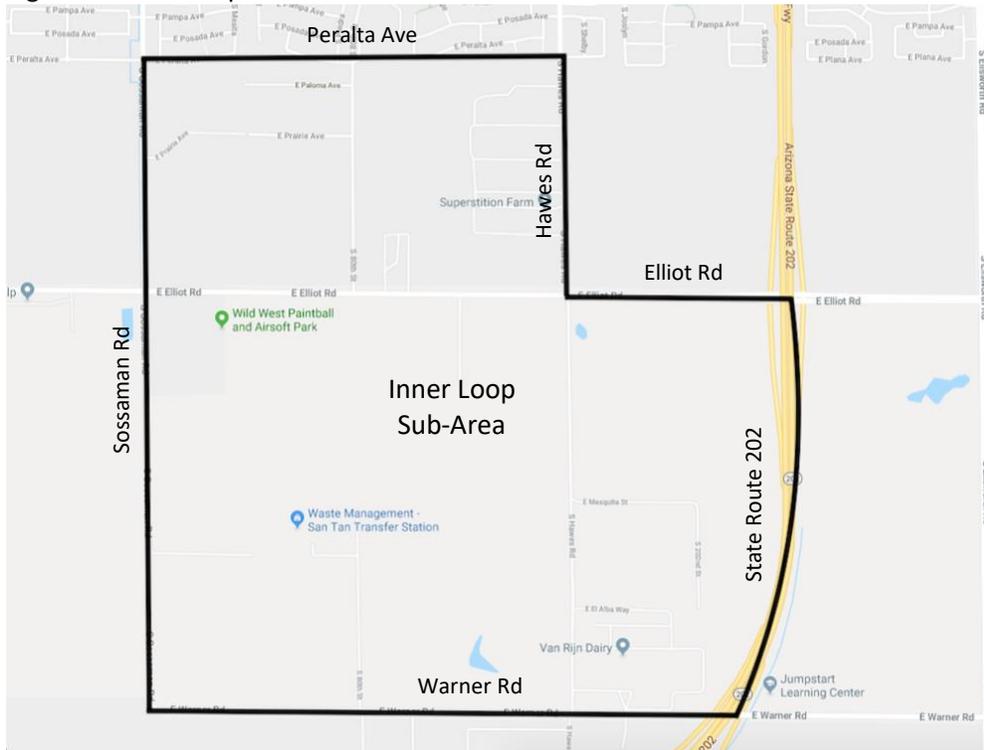
The aforementioned incremental modeling was used to estimate the economic and fiscal impacts resulting from the development of all vacant/underutilized (i.e., vacant or used for agricultural and open space) land in two independent sub-areas. The two sub-areas were identified within the Inner Loop and Logistics & Commerce Districts.

The SE Mesa LUTP study area and sub-areas are depicted in **Figure 1**, **Figure 2**, and **Figure 3**, respectively.

Building assumptions are based on the City of Mesa’s Zoning Ordinances and Development Standards. Market statistics for vacancies, rental rates, home prices, floor area ratios, construction costs, etc. are based on current Mesa estimates from CoStar, Cromford Associates LLC, MAG, Maricopa County Assessor’s Office, Matrix, and various other sources.

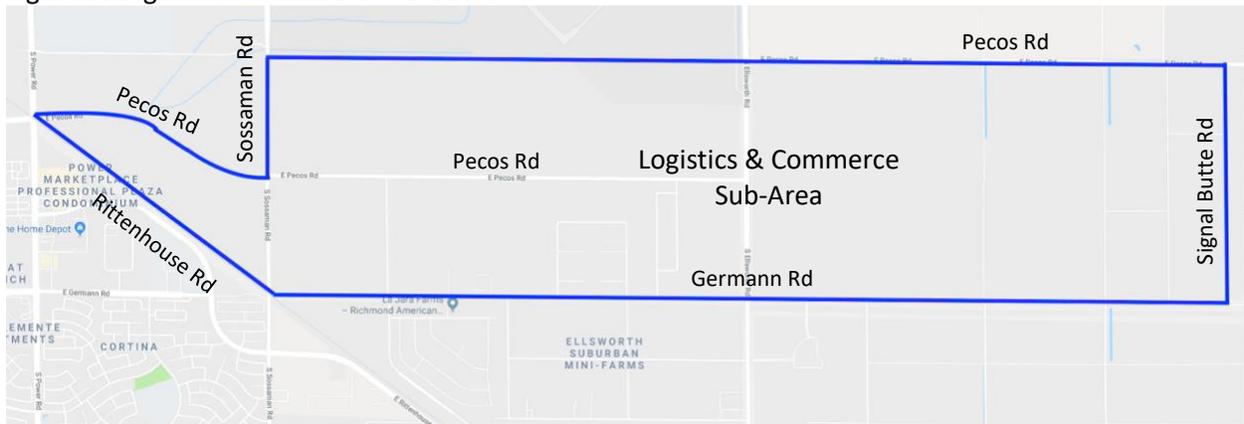


Figure 2: Inner Loop Sub-Area



Source: City of Mesa; Rounds Consulting Group, Inc.

Figure 3: Logistics & Commerce Sub-Area



Source: City of Mesa; Rounds Consulting Group, Inc.

Build-Out of the Inner Loop Sub-Area

In total, there are approximately 1,056 acres of developable land within the Inner Loop sub-area. If all available land is developed (including vacant/underutilized land located within county islands), construction directly supports 7,733 workers earning a combined \$515.9 million in wages and generates \$1.2 billion in economic output. Another 7,545 indirect and induced workers are supported by construction activity. About \$372.5 million in wages and \$1.0 billion in economic output is generated as a



result of these secondary impacts. Overall, 15,279 jobs, \$888.4 million in wages, and \$2.2 billion in economic output is generated by construction. The City of Mesa collects \$17.7 million in tax revenues from construction.

After construction, the sub-area’s developed 1,056 acres support 16,305 direct jobs with \$862.9 million in wages annually. The economic output generated by direct activities equals \$4.3 billion. An additional 17,223 indirect and induced jobs are supported by the newly constructed developments. In total, 33,528 jobs, \$1.8 billion in wages, and \$6.9 billion in economic output is generated by the build-out of the Inner Loop sub-area. Annually, the City of Mesa collects \$12.2 million in tax revenues from operational activities of the 1,056 acres that are currently vacant/underutilized in the sub-area.

Impacts for construction are summarized in **Table 13** and impacts for annual operations are summarized in **Table 14**.

Table 13: Inner Loop Sub-Area Impacts - Construction

Build-Out of the Inner Loop Sub-Area Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	7,733	7,545	15,279
Wages	\$515,898,500	\$372,519,300	\$888,417,800
Economic Output	\$1,208,957,600	\$1,036,995,900	\$2,245,953,500
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$12,475,500	-	\$12,475,500
Retail Sales Tax	\$2,115,600	\$1,129,400	\$3,245,000
Property Tax	-	\$761,900	\$761,900
State Shared Revenues	\$208,100	\$1,043,500	\$1,251,600
Totals	\$14,799,200	\$2,934,800	\$17,734,000

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



Table 14: Inner Loop Sub-Area Impacts - Annual Operations

Build-Out of the Inner Loop Sub-Area Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	16,305	17,223	33,528
Wages	\$862,946,600	\$937,786,700	\$1,800,733,200
Economic Output	\$4,258,793,400	\$2,683,508,300	\$6,942,301,700
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$3,965,400	\$2,354,800	\$6,320,200
Lease Tax	\$1,260,500	-	\$1,260,500
Property Tax	\$1,861,000	\$1,672,200	\$3,479,400
State Shared Revenues	\$91,600	\$965,700	\$1,057,300
Totals	\$7,178,500	\$4,992,700	\$12,171,200

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Build-Out of the Logistics & Commerce District Sub-Area

Within the Logistics & Commerce District sub-area, there are approximately 1,831 acres of available vacant/underutilized land. Development of the 1,831 acres supports 12,502 direct jobs with \$894.7 million in wages and generates \$2.0 billion in economic output. Another 10,174 indirect and induced jobs are supported by construction with \$536.6 million in wages. In total, 22,675 jobs, \$1.4 billion in wages, and \$3.5 billion in economic output are generated by construction of the developable land within the Logistics & Commerce District sub-area. The City of Mesa collects \$31.3 million in tax revenues from construction activity.

The newly constructed developments support 45,128 direct jobs each year. These jobs earn a combined \$2.6 billion in wages and generate \$13.9 billion in economic output. Another 54,132 indirect and induced jobs are supported annually by operations. In total, 99,260 jobs, \$5.6 billion in wages, and \$22.5 billion in economic output is generated by operations of the sub-area's 1,831 acres. Each year, the City of Mesa collects \$24.8 million in tax revenues.

Impacts for construction are summarized in **Table 15** and impacts for annual operations are summarized in **Table 16**.



Table 15: Logistics & Commerce Sub-Area Impacts - Construction

Build-Out of the Logistics & Commerce Sub-Area Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	12,502	10,174	22,675
Wages	\$894,734,100	\$536,621,400	\$1,431,355,400
Economic Output	\$2,004,876,800	\$1,490,746,000	\$3,495,622,800
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$22,805,500	-	\$22,805,500
Retail Sales Tax	\$3,508,500	\$1,769,800	\$4,571,900
Property Tax	-	\$1,130,900	\$1,130,900
State Shared Revenues	\$371,400	\$1,667,700	\$2,039,100
Totals	\$26,685,400	\$4,568,400	\$31,253,800

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 16: Logistics & Commerce Sub-Area Impacts - Annual Operations

Build-Out of the Logistics & Commerce Sub-Area Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	45,128	54,132	99,260
Wages	\$2,568,918,100	\$2,990,094,500	\$5,559,012,600
Economic Output	\$13,938,488,500	\$8,537,785,600	\$22,476,274,100
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$2,941,600	\$7,160,500	\$10,102,100
Lease Tax	\$3,255,600	-	\$3,255,600
Property Tax	\$3,533,200	\$4,950,500	\$8,483,700
State Shared Revenues	\$54,500	\$2,891,100	\$2,945,600
Totals	\$9,784,900	\$15,002,100	\$24,787,000

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



BASELINE BUILD-OUT SCENARIO

A baseline build-out scenario was developed using the existing zoning of properties within the SE Mesa LUTP study area that are vacant or underutilized (i.e., used for agriculture and open space). Vacant/underutilized land located within county islands is excluded. For this baseline scenario, it is assumed all currently vacant/underutilized land would be developed under existing zoning. The aforementioned economic and fiscal impact model is used to extrapolate the baseline impacts.

In total, Matrix identified 10,391.8 acres as vacant, in agricultural production, or certain open space areas within the study area that could potentially be developed. **Table 17** summarizes the 10,391.8 acres.

Table 17: Vacant/Underutilized Land in the SE Mesa LUTP Study Area

Vacant/Underutilized Land	
Zoning	Acres
Commercial/Retail	632
Office	12
Industrial	3,991
Single Family	835
Multi-Family	118
Agricultural	1,644
Planned Community/Open Space	3,160
Total	10,391.8

May not sum to total due to rounding.

Source: Matrix Design Group, Inc.

In this baseline scenario, if all potential land is developed, construction directly supports 73,861 persons earning a combined \$5.0 billion in wages and generate an economic output of \$11.6 billion. The indirect and induced effects bring the total number of jobs supported by construction to 142,795. These employees earn \$8.5 billion in wages and generate \$21.2 billion in economic output. The City of Mesa collects \$173.4 million in tax revenues from construction.

Development of all the potential land would support 182,995 direct jobs with \$9.7 billion in wages annually. The economic output generated by direct activities equals \$47.9 billion. An additional 193,831 indirect and induced jobs are supported by the newly constructed developments. The total annual economic output generated by this build-out scenario equals \$78.1 billion. Annually, the City of Mesa collects \$152.6 million in tax revenues from the development of the 10,391.8 acres that are currently vacant/underutilized.

Impacts for construction are summarized in **Table 18** and impacts for annual operations are summarized in **Table 19**.



Table 18: Baseline Build-Out Scenario Impacts - Construction

Baseline Build-Out Scenario Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	73,861	68,934	142,795
Wages	\$5,021,253,800	\$3,456,456,500	\$8,477,710,200
Economic Output	\$11,624,758,500	\$9,617,123,600	\$21,241,881,800
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$123,232,100	-	\$123,232,100
Retail Sales Tax	\$20,343,400	\$10,699,800	\$31,043,200
Property Tax	-	\$7,121,900	\$7,121,900
State Shared Revenues	\$2,041,400	\$9,936,200	\$11,977,600
Totals	\$145,616,900	\$27,757,900	\$173,374,800

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 19: Baseline Build-Out Scenario Impacts - Annual Operations

Baseline Build-Out Scenario Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	182,995	193,831	376,826
Wages	\$9,706,307,400	\$10,555,627,600	\$20,261,934,800
Economic Output	\$47,930,206,300	\$30,200,013,900	\$78,130,220,500
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$60,396,400	\$26,484,600	\$86,881,000
Lease Tax	\$16,046,400	-	\$16,046,400
Property Tax	\$18,554,500	\$18,794,200	\$37,348,700
State Shared Revenues	\$1,427,400	\$10,859,300	\$12,286,700
Totals	\$96,424,700	\$56,138,100	\$152,562,800

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



FUTURE LAND USE SCENARIO

A future build-out scenario was developed using the preferred future land use of property within the SE Mesa LUTP study area. For this future land use scenario, it is assumed all future available vacant land would be developed under the preferred zoning presented below. The aforementioned economic and fiscal impact model is used to extrapolate the future land use impacts.

In total, Matrix identified 13,622 acres of developable vacant land. **Table 20** summarizes the 13,622 acres by the preferred zoning designations.

Table 20: Future Available Vacant Land for Development

Future Available Vacant Land	
Zoning	Acres
Commercial/Retail	1,816
Office	617
Industrial	6,652
Single Family	4,342
Multi-Family	182
Agricultural	-
Planned Community/Open Space	13
Total	13,622

May not sum to total due to rounding.

Source: Matrix Design Group, Inc.

In this future land use scenario, if all potential land is developed, construction directly supports 99,028 persons earning a combined \$6.7 billion in wages and generate an economic output of \$15.6 billion. The indirect and induced effects bring the total number of jobs supported by construction to 191,315. These employees earn \$11.4 billion in wages and generate \$28.5 billion in economic output. The City of Mesa collects \$232.6 million in tax revenues from construction.

Development of all the future available land would support 240,538 direct jobs with \$12.3 billion in wages annually. The economic output generated by direct activities equals \$57.6 billion. An additional 238,363 indirect and induced jobs are supported by the newly constructed developments. The total annual economic output generated by this build-out scenario equals \$94.5 billion. Annually, the City of Mesa collects \$253.9 million in tax revenues from the development of the 13,622 acres.

Impacts for construction are summarized in **Table 21** and impacts for annual operations are summarized in **Table 22**.



Table 21: Future Land Use Build-Out Scenario Impacts - Construction

Future Land Use Build-Out Scenario Economic & Fiscal Impacts - Construction			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	99,028	92,287	191,315
Wages	\$6,736,269,800	\$4,629,818,700	\$11,366,088,700
Economic Output	\$15,589,172,500	\$12,881,634,800	\$28,470,807,400
Fiscal Impact	Primary	Secondary	Totals
Construction Sales Tax	\$165,399,000	-	\$165,399,000
Retail Sales Tax	\$27,281,000	\$14,342,000	\$41,623,000
Property Tax	-	\$9,542,000	\$9,542,000
State Shared Revenues	\$2,739,400	\$13,320,500	\$16,059,900
Totals	\$195,419,400	\$37,204,500	\$232,623,900

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 22: Future Land Use Build-Out Scenario Impacts - Annual Operations

Future Land Use Build-Out Scenario Economic & Fiscal Impacts - Annual Operations			
Economic Impact	Direct	Indirect & Induced	Totals
Jobs	240,538	238,363	478,901
Wages	\$12,291,542,900	\$12,875,590,100	\$25,167,133,000
Economic Output	\$57,598,861,100	\$36,888,809,600	\$94,487,670,700
Fiscal Impact	Primary	Secondary	Totals
Retail Sales Tax	\$134,389,200	\$33,174,800	\$167,564,000
Lease Tax	\$20,773,800	-	\$20,773,800
Property Tax	\$24,755,900	\$23,885,300	\$48,641,200
State Shared Revenues	\$3,250,000	\$13,714,300	\$16,964,300
Totals	\$183,168,900	\$70,774,400	\$253,943,300

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.



BASELINE V. FUTURE LAND USE BUILD-OUT SCENARIOS

For perspective, the total impacts of the baseline scenario and future land use scenario are summarized side-by-side in **Table 23** (construction impacts) and **Table 24** (annual operations impacts).

Table 23: Baseline v. Future Land Use Build-Out Scenarios - Construction

Baseline v. Future Land Use Build-Out Scenarios Economic & Fiscal Impacts - Construction (Totals)		
Economic Impact	Baseline Scenario	Future Scenario
Jobs	142,795	191,315
Wages	\$8,477,710,200	\$11,366,088,700
Economic Output	\$21,241,881,800	\$28,470,807,400
Fiscal Impact	Baseline Scenario	Future Scenario
Construction Sales Tax	\$123,232,100	\$165,399,000
Retail Sales Tax	\$31,043,200	\$41,623,000
Property Tax	\$7,121,900	\$9,542,000
State Shared Revenues	\$11,977,600	\$16,059,900
Totals	\$173,374,800	\$232,623,900

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.

Table 24: Baseline v. Future Land Use Build-Out Scenarios - Annual Operations

Baseline v. Future Land Use Build-Out Scenarios Economic & Fiscal Impacts - Annual Operations (Totals)		
Economic Impact	Baseline Scenario	Future Scenario
Jobs	376,826	478,901
Wages	\$20,261,934,800	\$25,167,133,000
Economic Output	\$78,130,220,500	\$94,487,670,700
Fiscal Impact	Baseline Scenario	Future Scenario
Retail Sales Tax	\$86,881,000	\$167,564,000
Lease Tax	\$16,046,400	\$20,773,800
Property Tax	\$37,348,700	\$48,641,200
State Shared Revenues	\$12,286,700	\$16,964,300
Totals	\$152,562,800	\$253,943,300

May not sum to total due to rounding.

Source: IMPLAN; Rounds Consulting Group, Inc.