

# Economic and Fiscal Impacts of the State Route-30 Freeway

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Prepared for:



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# **Executive Summary**

Investments that ensure adequate and quality infrastructure are among the most fundamental components for facilitating economic growth and the development of a region. While infrastructure investments can be costly, the benefits from efficiency gains in commercial transportation and the flow of people throughout a region can outweigh the costs significantly.

These transportation enhancements lead to additional population growth and new job opportunities. Increasing population and employment levels increase economic activity and the demand for real estate development, which generates additional tax revenues for state and local governments.

The proposed SR-30 freeway represents such an investment. Located approximately 5 miles south of the I-10, it will connect the South Mountain Freeway (L-202) with the Loop 303 Freeway (L-303). This report highlights how the SR-30 can advance the population and employment growth, and real estate development in the area surrounding the freeway.

To quantify how various levels of infrastructure investment in the SR-30 can affect the growth of the area, an economic model was developed. The model estimates the economic and fiscal impacts resulting from four different investment scenarios (i.e., baseline, moderate, aggressive, and constrained) over a 20-year period.

The impacts are defined in terms of jobs, labor income (i.e., the total wages and benefits paid to employees), economic output (i.e., the value of goods and services produced) and tax revenues (i.e., the sum of state and local revenues). The impacts are categorized as either construction impacts (i.e., the impacts occurring during the construction of the projected new homes and commercial buildings) over a 20-year period or on an annual basis after year 20 once the projected population and employment levels are realized.

The study area and impacts of the four scenarios are summarized below, followed by an analysis comparing the outcomes.

# **Study Area**

Located approximately 10 miles west of the City of Phoenix, the study area consists of approximately 145 square miles surrounding the proposed SR-30 freeway route. The area is defined by McDowell Road to the north, Elliot Road to the south, 195<sup>th</sup> Avenue to the west and 51<sup>st</sup> Avenue to the east.

According to the Maricopa Association of Governments (MAG), the study area had a population of 272,600 residents and an employment base of 121,400 individuals, as of 2020. The study area currently generates approximately \$16.5B in economic output and \$1.4B in state and local tax revenues each year.

Commercial building estimates from CoStar report that there were approximately 94.6M square feet (sq. ft.) of office, retail, and industrial space (i.e., office buildings, shopping centers, warehousing facilities, etc.) as of September 2021. The U.S. Census Bureau estimates that there were 59,300 residential housing units (single family and multi-family homes) in the study area, as of 2020.



The study area is projected to experience strong growth over the next 20 years; however, this growth can be enhanced beyond initial projections if an investment is made in the SR-30 freeway.

## **Baseline Growth Scenario Summary**

The Baseline Scenario provides insight as to the impacts of the population and employment growth that is expected in the study area under current conditions and without any investment in the SR-30 freeway. This scenario supposes that growth will still occur, but development patterns may shift due to infrastructure capacity constraints.

MAG estimates that the population in the study area will grow at an average annual rate of 2.1% and employment will grow at an average annual rate of 2.3% over the next 20 years. This represents a total increase of 140,100 to the population and 69,100 to the employment base by year 20.

In order to support this growth, an additional 30,500 residential housing units and 142.7M sq. ft. of commercial office, retail and industrial development will need to be constructed in the area over the 20-year period. Construction of these homes and commercial buildings will support a total of 227,500 jobs that will earn \$11.5B in labor income over 20 years. A total of \$32.4B in economic output and \$2.5B in state and local tax revenues will be generated over the next 20-years from the construction and development activity.

After year 20, \$3.5B in annual labor income will be added to the area's current \$6.2B in labor income by the 69,100 additional workers that will be employed in the study area. Together, the 140,100 additional residents and 69,100 workers will generate \$9.4B in additional annual economic output (i.e., in addition to the \$16.5B in economic output that is currently generated in the study area) and produce \$600.0M more in state and local tax revenues each year (i.e., in addition to the \$1.4B in tax revenues that are currently generated in the study area) (Table 1).

# **Moderate Growth Scenario Summary**

The Moderate Growth Scenario examines the impacts of enhanced population and employment growth in the study area that occurs as a result of an investment in the SR-30 freeway with four lanes.

As a result of the improved infrastructure, it is assumed that the population in the study area will grow at an average annual rate of 2.3% over 20 years, increasing by 157,000 people. Employment in the study area will grow at an average rate of 2.5% per year and add 77,600 workers above the study area's current employment base over the same timeframe.

To support the study area's population and employment growth, a total of 93,400 housing units are needed (an increase of 34,100 from the current level). In order to support projected employment growth, a total of 247.9M sq. ft. of commercial development is needed (an increase of 153.3M sq. ft. from the current level).

The construction of the commercial and residential buildings will support a total of 255,300 jobs over the 20-year period. Over that same time period, the 255,300 workers will earn a total of \$12.8B in labor income, generate \$36.3B in economic output and produce \$2.8B in state and local tax revenues.



Once the projected growth is realized by year 20, the additional 77,600 workers in the study area will be paid \$3.9B in annual wages and benefits. Altogether, the additional residents and employees in the study area will generate \$10.5B in additional economic output and \$700.0M more in state and local tax revenues annually after year 20.

# **Aggressive Growth Scenario Summary**

The Aggressive Growth Scenario considers an infrastructure investment sufficient to construct a ten-lane freeway. This level of investment will further enhance the flow of traffic and commerce throughout the region, advancing the population and employment growth in the study area.

As a result, the population in the study area is estimated to grow at an average rate of 2.4%, adding 165,400 more people over the next 20 years. Employment will grow by 85,500 workers at an average rate of 2.7% per year over the same timeframe. This compares to the average annual population and employment growth of 2.1% and 2.3%, respectively, under the Baseline Scenario.

Over the next 20 years, the study area's new residents will demand 36,000 new housing units, in addition to the current 59,300 housing units. A total of 257.8M sq. ft. in commercial, office, retail and industrial space will be required to support the projected employment growth under the Aggressive Growth Scenario. This is an additional 163.2M sq. ft., compared to the 94.6M sq. ft. currently available in the study area.

The construction of these new buildings will support 277,400 jobs over the 20-year period. These workers will earn a total of \$13.6B in labor income and generate \$39.5B in economic output. Overall, the construction activity, under the Aggressive Growth Scenario, will produce \$3.1B in state and local tax revenues over 20 years.

By year 20, after the projected growth is realized, labor income in the study area will increase by \$4.3B. Together, the additional 165,400 residents and additional 85,500 workers in the study area will generate \$11.6B in economic output and produce \$800.0M in tax revenues each year, this is in addition to the current \$16.5B in economic output and \$1.4B in tax revenues that are currently produced in the study area each year.

# **Constrained Growth Scenario Summary**

While infrastructure improvements can help to advance economic growth and development, insufficient infrastructure can have the opposite effect. The Constrained Growth Scenario examines how increased traffic volumes and congestion resulting from insufficient infrastructure can potentially limit the projected growth in the study area.

Similar to the Baseline Scenario, this scenario supposes that no investment in the SR-30 freeway is made. However, as a result of the inadequate infrastructure and growing traffic congestion, the population and employment levels in the study area grow at a slower pace than under the Baseline Scenario.

Under the Constrained Growth Scenario, the population in the study area is projected to increase by 93,800 people over the next 20-years, compared to 140,100 people under the Baseline Scenario. This represents an annual growth of 1.5% per year and compares to the 2.1% annual growth that is expected under the Baseline Scenario. Employment is projected to grow by 46,300 workers over 20 years under the



Constrained Growth Scenario, compared to 69,100 under the Baseline Scenario. This represents an average annual growth rate of 1.6%, compared to the 2.3% annual growth rate that is expected under the Baseline Scenario.

This level of growth will demand a total of 20,400 new residential housing units and 114.3M new sq. ft. of commercial buildings (e.g., office space, retail stores, warehouses, etc.). The construction of these new homes and commercial buildings will support 152,400 jobs and a total of \$7.7B in labor income over the 20-year period. A total of \$21.6B in economic output is generated, and \$1.7B in state and local tax revenues are produced from the construction activity under the Constrained Growth Scenario over 20 years.

The study area's annual economic impact will increase by \$2.3B in labor income, \$6.3B in economic output and \$400.0M in tax revenues by year 20. This is in addition to the current \$6.2B in labor income, \$16.5B in economic output, and \$1.4B in tax revenues that are currently generated in the study area each year.

### **Current Estimates Compared to Growth Scenarios**

Table 1 displays the current number of residential units, commercial square footage, population, and employment estimates as well as the total impacts under the four growth scenarios in the study area. The construction impacts represent the cumulative impacts of the construction activity over the entire 20-year period – while the annual impacts displayed represent the net increase after year 20 when projections are realized on an annual basis.

For example, under the Moderate Growth Scenario, the +\$3.9B in labor income and +\$10.5B in economic output displayed in Table 1 is the net increase above the current levels of \$6.2B and \$16.5B in labor income and economic output, respectively. This means that after year 20, the study area will produce approximately \$10.1B in labor income and \$27.0B in economic output each year.

The differences in the estimates under each scenario represent gains or lost opportunities associated with the various degrees of infrastructure enhancements. As an example, the job difference between the Baseline Growth Scenario and the Constrained Growth Scenario is 22,800 jobs (i.e.,+69,100 jobs vs. +46,300 jobs). This means that under the Baseline Scenario, approximately 22,800 more jobs will be created in the study area than the Constrained Scenario (i.e., the opportunity cost of the Constrained Scenario vs. the Baseline Scenario is 22,800 jobs).



Table 1: Total Impact of the SR-30 Freeway Investment Scenarios

	Current Levels <sup>10)</sup>	Baseline Scenario <sup>11)</sup>	Moderate Scenario <sup>12)</sup>	Aggressive Scenario 13)	Constrained Scenario 14)
Residential Units 1)	59,300	+30,500	+34,100	+36,000	+20,400
Commercial Square Footage <sup>2)</sup>	94.6M	+142.7M	+153.3M	+163.2M	+114.3M
Construction Impacts 3)					
Jobs <sup>4)</sup>	-	+227,500	+255,300	+277,400	+152,400
Labor Income 5)	-	+\$11.5B	+\$12.8B	+\$13.6B	+\$7.7B
Economic Output 6)	-	+\$32.4B	+\$36.3B	+\$39.5B	+\$21.6B
Tax Revenues 7)	-	+\$2.5B	+\$2.8B	+\$3.1B	+\$1.7B
Annual Impacts 8)					
Population 9)	272,600	+140,100	+157,000	+165,400	+93,800
Jobs <sup>4)</sup>	121,400	+69,100	+77,600	+85,500	+46,300
Labor Income 5)	\$6.2B	+\$3.5B	+\$3.9B	+\$4.3B	+\$2.3B
Economic Output 6)	\$16.5B	+\$9.4B	+\$10.5B	+\$11.6B	+\$6.3B
Tax Revenues 7)	\$1.4B	+\$600.0M	+\$700.0M	+\$800.0M	+\$400.0M

- 1) Residential units is the total number of single family and multi-family housing units in the study area.
- 2) Commercial square footage is the total amount of office, retail, and industrial building square footage in the study area.
- 3) Construction impacts represent the cumulative impacts derived from construction activity in the study area over the 20-year period.
- 4) Jobs is the total number of full-time equivalent workers in the study area.
- 5) Labor income is the total employee-earned wages and benefits in the study area.
- 6) Economic output is the total value of economic activity produced in the study area.
- 7) The sum of the state and local (county and city) tax revenues generated in the study area.
- 8) Annual impacts represent the annual impacts derived after year 20 once the study area projections have been realized.
- 9) Population is the number of residents living within the study area.
- 10) Current levels represent current estimates in the study area as of 2020.
- 11) The Baseline Scenario represents estimates in the study area under current conditions without any investments in the SR-30 freeway.
- 12) The Moderate Scenario represents estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.
- 13) The Aggressive Scenario represents estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway.
- 14) The Constrained Scenario represents estimates in the study area under a scenario where increases in traffic volume and congestion limit projected growth.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: U.S. Census Bureau; CoStar; Arizona Department of Revenue; Maricopa Association of Governments; IMPLAN; Rounds Consulting Group, Inc.



# Baseline Scenario Compared to Moderate, Aggressive, and Constrained Growth Scenarios

Table 2: Impact of the SR-30 Freeway Compared to the Baseline Scenario

	Moderate Scenario 10)	Aggressive Scenario 11)	Constrained Scenario 12)
Residential Units 1)	+3,700	+5,500	-10,100
Commercial Square Footage 2)	+10.6M	+20.5M	-28.4M
Construction Impacts 3)			
Jobs <sup>4)</sup>	+27,800	+49,900	-75,100
Labor Income 5)	+\$1.3B	+\$2.1B	-\$3.8B
Economic Output 6)	+\$3.9B	+\$7.1B	-\$10.8B
Tax Revenues <sup>7)</sup>	+\$300.0M	+\$600.0M	-\$800.0M
Annual Impacts 8)			
Population 9)	+16,900	+25,400	-46,200
Jobs <sup>4)</sup>	+8,500	+16,400	-22,800
Labor Income 5)	+\$400.0M	+\$800.0M	-\$1.2B
Economic Output 6)	+\$1.1B	+\$2.2B	-\$3.1B
Tax Revenues 7)	+\$100.0M	+\$200.0M	-\$200.0M

- 1) Residential units is the total number of single family and multi-family housing units in the study area.
- 2) Commercial square footage is the total amount of office, retail, and industrial building square footage in the study area.
- 3) Construction impacts represent the cumulative impacts derived from construction activity in the study area over the 20-year period.
- 4) Jobs is the total number of full-time equivalent workers in the study area.
- 5) Labor income is the total employee-earned wages and benefits in the study area.
- 6) Economic output is the total value of economic activity produced in the study area.
- 7) The sum of the state and local (county and city) tax revenues generated in the study area.
- 8) Annual impacts represent the annual impacts derived after year 20 once the study area projections have been realized.
- 9) Population is the number of residents living within the study area.
- 10) The Moderate Scenario represents estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.
- 11) The Aggressive Scenario represents estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway.
- 12) The Constrained Scenario represents estimates in the study area under a scenario where increases in traffic volume and congestion limit projected growth.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: U.S. Census Bureau; CoStar; Arizona Department of Revenue; Maricopa Association of Governments; IMPLAN; Rounds Consulting Group, Inc.

Table 2 (above) displays the differences in the Moderate, Aggressive, and Constrained Growth Scenarios compared to the Baseline Growth Scenario. These impacts include the cumulative effects that result from the construction activity over the 20-year time period and the annual impacts that occur in the study area after the projected growth has been realized. The differences in the impacts are compared to the Baseline Scenario to provide insight as to how the SR-30 can advance economic growth.

The Moderate Growth Scenario supposes that an investment in a four-lane SR-30 freeway is made. Under this scenario, over the 20-year period, there will be an estimated 16,900 additional residents and 8,500 more workers in the study area, compared to the Baseline Scenario. This level of growth will demand an additional 3,700 new residential housing units and 10.6M new sq. ft. of commercial, office, retail and industrial buildings to be constructed.



The additional construction activity under the Moderate Scenario will support 27,800 more jobs and \$1.38 in additional labor income compared to the Baseline Scenario over the 20-year period. Overall, an additional \$3.98 in economic output and \$300.0M in state and local tax revenues will be generated over 20 years from the new construction activity in the Moderate Growth Scenario vs. the Baseline Growth Scenario.

By year 20, an investment in a four-lane SR-30 freeway (i.e., the Moderate Growth Scenario) will generate \$400.0M more in labor income, \$1.1B more in economic output and produce \$100.0M more in tax revenues *annually* than if there was no investment in the SR-30 freeway (i.e., the Baseline Growth Scenario).

Under the Aggressive Growth Scenario, an investment in the SR-30 freeway with ten lanes is made. This level of investment will further enhance the population and employment growth in the study area. As a result of the improved infrastructure, the population in the study area will increase by 25,400, and employment will increase by 16,400, compared to the Baseline Scenario over 20 years.

To accommodate for the growth under the Aggressive Scenario, an additional 5,500 residential housing units will be required to be developed along with 20.5M sq. ft. of commercial office, retail and industrial real estate over the 20-year period compared to the Baseline Scenario.

The construction activity under the Aggressive Growth Scenario will support 49,900 more jobs earning \$2.1B more in wages and benefits than what is supported under the Baseline Scenario. In total, the additional activity will generate \$7.1B more in economic output and \$600.0M more in tax revenues over the 20-year period than the Baseline Scenario.

By year 20, an investment in a ten-lane SR-30 freeway (i.e., the Aggressive Growth Scenario) will produce 16,400 additional jobs, \$800.0M in additional labor income, \$2.2B in economic output and \$200.0M in additional state and local tax revenues *each year*, compared to no investment in the SR-30 freeway (i.e., the Baseline Scenario).

The Constrained Growth Scenario presents an alternate perspective on how the study area may be impacted absent an investment in the SR-30 freeway. Under this scenario, population and employment growth are hindered as a result of increasing traffic congestion and inadequate infrastructure.

Over a 20-year time period, under the Constrained Scenario, the study area's population and employment levels are projected to grow by 46,200 and 22,800 fewer people and workers than the Baseline Scenario, respectively. This slower rate of growth will demand 10,100 *fewer* new residential housing units and 28.4M less sq. ft. of commercial office, retail and industrial facilities.

The impact of this construction activity under the Constrained Scenario is equal to 75,100 fewer jobs, \$3.8B less in labor income, and \$10.8B less in economic output compared to the Baseline Scenario. The lack of activity in the Constrained Scenario results in \$800.0M fewer tax revenues compared to the Baseline Scenario over the 20-year period.



By year 20, under the Constrained Growth Scenario, a lack of investment in the SR-30 freeway will result in 22,800 *fewer* people working within the study area than the Baseline Scenario. This also means there will be \$1.2B in lost annual labor income, \$3.1B in forgone economic output each year and \$200.0M less annual tax revenues that will be collected in the Constrained Scenario when compared to the Baseline Scenario.

The following table summarizes the differences between the growth scenarios compared to the Baseline Growth Scenario. For example, under the Aggressive Scenario, the +5,500 residential units indicate that 5,500 more residential units will be built over 20 years under the Aggressive Scenario than the Baseline Scenario. As another example, the -46,200 population estimate under the Constrained Scenario indicates that there will be 46,200 fewer people living within the study area by year 20 under the Constrained Scenario than the Baseline Scenario.

Furthermore, extending the SR-30 freeway 5 miles to the west to the SR-85 would magnify the previously estimated impacts, making the entire SR-30 freeway (including the extension) a critical component for the future economic success of the region and the I-11 corridor.

The I-11 corridor will improve cross border trade with Canada and Mexico, and further drive population and employment growth in the West Valley. In order to support this growth, additional transportation infrastructure is needed that will connect the future I-11 freeway to the municipalities and employment centers of the area. The proposed SR-30 freeway, if extended, can provide this needed infrastructure.

The SR-30 freeway extension will improve connectivity, reduce traffic congestion, facilitate business recruitment, create demand for new housing, and enhance economic development efforts, thereby bringing additional jobs to the area, further enhancing the population and employment growth of the region.

The magnitude of the additional impact that the SR-30 extension will have is dependent on the level of investment made in the SR-30 freeway. This study reviews the effect of the SR-30 extension under the Moderate Growth (i.e., a four-lane freeway) and the Aggressive Growth Scenario (i.e., ten-lane freeway). The extension, under the Moderate Scenario, would increase the impacts by approximately 18.4% and 19.5% under the Aggressive Scenario.



# Introduction

In order to demonstrate how investments in projects like the SR-30 freeway can be critical components of the advancement and development of local and regional economies, Rounds Consulting Group, Inc. (RCG) contracted with the West and Southeast Realtors of the Valley (WeSERV) to develop an economic model that analyzes the economic and fiscal impacts of the proposed SR-30 freeway under varying levels of infrastructure investment.

Investments in transportation infrastructure generate significant benefits beyond improving traveling conditions or alleviating traffic congestion. They also drive economic activity by facilitating growth and enhancing business and real estate development. This leads to additional growth in population, new job opportunities, and tax revenues for the state and local governments.

The Phoenix-Mesa-Scottsdale Metropolitan Statistical Area (Phoenix MSA) is one of the fastest-growing metros in the nation. However, the region still has significant growth potential, and its ability to realize this potential will be determined by how well it adheres to economic development fundamentals. These fundamentals include competitive tax rates, a skilled workforce, quality education and transportation infrastructure, among many others.

This report summarizes the findings of the economic model and provides context on the extent to which varying degrees of infrastructure improvements could impact the local economy.

A study area was first identified and evaluated to allow the model to focus on the region that will be most impacted by the proposed SR-30 freeway. An evaluation of the region provides context on the current growth trends and its economic potential. To demonstrate how infrastructure investment can have a significant impact on the advancement of the study area's economy, the economic model quantifies the impacts under four different growth scenarios.

The benchmark scenario for the analysis, the Baseline Scenario, examines the projected 20-year economic growth of the study area under current conditions without the construction of the SR-30 freeway. Although significant growth is expected, growth will be limited compared to the scenarios that consider an investment in the SR-30 freeway.

The second scenario, the Moderate Growth Scenario, provides context on the enhanced impacts that result from the construction of a four-lane freeway. According to the Arizona Department of Transportation (ADOT), there are various versions of the SR-30 freeway that are currently being considered. Each version has a different number of lanes and has a varying level of vehicle capacity.

The four-lane version of the SR-30 freeway is considered the initial phase of the project and has the most limited capacity. This can be considered a moderate investment in transportation infrastructure and the additional economic growth that can be realized with the development of the four-lane version of the SR-30 freeway is examined in the Moderate Growth Scenario.

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<sup>&</sup>lt;sup>1</sup> The U.S. Census Bureau



The third scenario, the Aggressive Growth Scenario, provides context on the expected impacts of advances in growth and high-value development beyond the above-mentioned scenarios that could occur given a full investment in a ten-lane version of the SR-30 freeway. According to ADOT, this version will have the highest traffic capacity and represents a full infrastructure investment.

The impacts from this level of investment are examined in the Aggressive Growth Scenario and will highlight the additional opportunities for growth that can be realized with proper infrastructure investments.

The fourth scenario, the Constrained Growth Forecast, examines the possible negative impacts from increased traffic volumes and congestion that could occur as the area grows without additional investment in transportation infrastructure. This provides an alternative perspective as to the lost opportunities for growth and their associated costs without an investment in the SR-30 freeway.

Although the impacts analyzed in the report focus on the region that will be most impacted by the development of the SR-30 freeway, the impacts will likely be far greater and positively affect the State's entire economy as the freeway will connect with the I-11 corridor improving cross border trade with Canada and Mexico. The development of the SR-30 freeway will be a catalyst for enhancing economic growth throughout the State and specifically the West Valley.



# State Route-30 Study Area

Totaling approximately 92,000 acres, the study area for this analysis includes the West Valley region surrounding the proposed SR-30 freeway route and portions of several municipalities, including Avondale, Buckeye, Goodyear, Phoenix, and Tolleson, as well as the Gila River Indian Reservation. The study area is illustrated in Figure 1.

The proposed SR-30 freeway is designed to accommodate the projected population and employment growth in the region by alleviating traffic congestion and providing alternative routes for personal and commercial commuters. The freeway is expected to increase travel efficiency, enhance the entire Phoenix MSA's connectivity, improve cross border trade with Canada and Mexico as it will connect with the I-11 corridor, and increase economic development in the area.

The entire proposed SR-30 freeway is a 29-mile road located south of and running parallel to the I-10, connecting the SR-85 to the I-17. However, the study area for this analysis is focused on the region surrounding the 13-mile central segment of the freeway planned to be located between the State Loop 303 and State Loop 202 freeways (Figure 2).

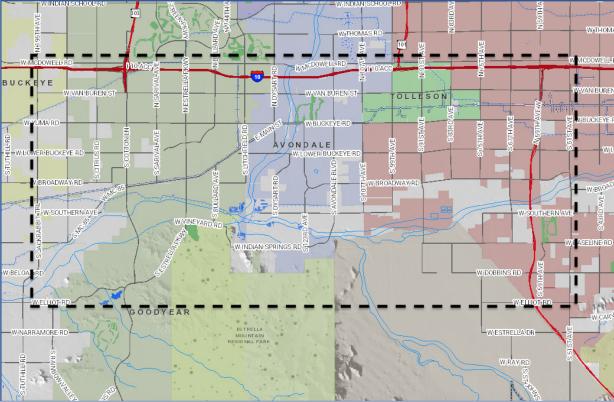


Figure 1: SR-30 Freeway Study Area

Source: Maricopa County Assessor's Office



Figure 2: Proposed Route for the Central Section of the SR-30 Freeway



Source: Arizona Department of Transportation



# **Study Area Economic Overview**

The Phoenix MSA and the study area maintain their place among the best performing markets for job and population growth. The region's relative affordability and abundant job opportunities are attracting people from across the country. As of 2020, Maricopa County (the county that encompasses the study area) was one of the fastest growing counties in the United States, according to the U.S. Census Bureau.

The influx of new residents and businesses will continue to advance the local economy over the coming decades. As of 2020, there were approximately 272,600 people living and 121,400 people employed in the study area, according to estimates from the Maricopa Association of Governments (MAG). By 2040, MAG projects that the population in the study area will increase by 51.4% to approximately 412,700 (140,100 new residents) and employment in the study area will increase by 56.8% to approximately 190,500 (69,100 new jobs).

The population in the study area is expected to grow at an average rate of 2.1% per year over the next 20 years. This is faster than the total Phoenix MSA population growth, which is expected to grow at an average rate of 1.4% per year. Employment in the study area is expected to grow at an average rate of 2.3% per year over the next 20 years, compared to 1.6% per year in the Phoenix MSA.

450,000 412,700 400,000 350,000 300,000 272,600 250,000 190,500 200,000 150,000 121,400 100,000 50,000 0 **Population Employment 2020** 2040

Figure 3: Current Population and Employment Levels and Projections for the Study Area

Source: Maricopa Association of Governments; Rounds Consulting Group, Inc.



According to the U.S. Census Bureau, there were an estimated 59,300 residential units in the study area in 2020. Approximately 75.7% (44,900) of those units were single family homes, while 24.3% (14,400) were multi-family units.

Table 3: Current and Projected Real Estate Development for the SR-30 Study Area

Residential Units	2020	2040	Net Change
Single family	44,900	68,000	+23,100
Multi-family	14,400	21,800	+7,400
Total Residential Units	59,300	89,800	+30,500

Commercial Square Footage	2020	2040	Net Change
Industrial	80,143,400	204,379,200	+124,235,700
Office	2,560,600	6,180,900	+3,620,200
Retail	11,910,800	26,758,700	+14,847,900
Total Commercial Sq. Ft.	94,614,800	237,318,800	+142,704,000

Source: U.S. Census Bureau; CoStar; Rounds Consulting Group, Inc.

In order to meet the projected demand of the additional 140,100 future residents over the next 20 years, an additional 30,500 housing units will need to be constructed within the study area. By year 20, it is estimated that approximately 23,100 of the new residential units will be single family homes while 7,400 multi-family units will be built in the study area.

Demand for additional commercial development throughout the study area will be driven by the strong employment growth over the next 20 years. Commercial development in the study area is categorized as industrial, office, and retail developments.

Industrial development can be defined as land and buildings that accommodate industrial business activities, including manufacturing, warehousing, and distribution facilities, among others. Employment projections from the Arizona Office of Economic Opportunity (OEO) indicate that employment growth for industrial business activities in the Phoenix MSA will grow at an average rate of 2.8% per year over the next decade. This growth is expected to exceed overall employment for the Phoenix MSA over the same time period.

This employment growth will drive increasing demand for industrial space. According to MAG, approximately 6.7% of the land in the study area was designated for industrial use as of 2019. At full build-out, 11.2% of the land in the study area will be designated for industrial use.<sup>2</sup>

According to CoStar, there is an estimated 80.1M square feet of industrial space currently located within the study area as of September 2021. It is estimated that by 2040, approximately 124.2M square feet of

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<sup>&</sup>lt;sup>2</sup> Maricopa Association of Governments



new industrial space will need to be constructed within the study area to meet projected employment in manufacturing, warehousing, distribution, and other similar types of industries.

Office development generally includes commercial real estate that is focused on business, government, professional, medical, or financial services. According to CoStar, there was a total of approximately 2.6M square feet of office space in the study area as of September 2021. By 2040, the projected employment growth in the study area will create the demand for an additional 3.6M square feet of new office space.

By 2040, projected retail demand in the study area will require an additional 14.8M square feet of new retail space to be built in the study area. This compares to the 11.9M square feet of inventory that existed within the study area as of September 2021, according to CoStar.

These current and projected estimates for the study area are summarized in the following table.

#### **Summary**

With the anticipated demand for both residential and commercial development comes the need to supply adequate infrastructure to support the growth. Sufficient infrastructure can enhance the projected growth estimates and real estate development. An inadequate level of infrastructure can hinder future growth and keep the region from reaching its full economic potential.

The economic and fiscal impacts of various levels of transportation infrastructure investment are presented in the following section.



# Economic and Fiscal Impacts of the SR-30 Freeway

The full development of the SR-30 freeway is an important consideration as it can act as a catalyst for not only the development of residential and commercial real estate in the study area but also for the continued development throughout the region and Arizona, particularly when viewed in conjunction with the proposed I-11 pathway through Buckeye and Pinal County.

For perspective on how various levels of investment in the proposed SR-30 freeway can affect the growth of the area, an economic model was developed. The model estimates the economic and fiscal impacts resulting from the growth in the area over a 20-year period. Four different investment scenarios were modeled to provide context on how the varying degrees of infrastructure improvements can impact economic growth.

The four scenarios and resulting impacts are summarized in this section.

- <u>Baseline Growth Scenario</u>: The impacts of the study area's projected 20-year economic growth forecast are examined under current conditions and without an investment in the SR-30 freeway.
- Moderate Growth Scenario: Examines the impacts of an investment in a four-lane version of the SR-30 freeway. This level of investment improves the infrastructure in the study area enough to allow for a moderate enhancement of the projected growth that is slightly above the Baseline Scenario. However, this growth will also be limited due to capacity constraints.
- <u>Aggressive Growth Scenario</u>: Examines the impacts of the advanced growth and additional highvalue development that can occur if an investment in a ten-lane version of the SR-30 freeway is made. This level of investment enhances the flow of commerce and business activity throughout the region.
- Constrained Growth Scenario: This scenario examines how increased traffic volumes and congestion can negatively affect growth projections in the study area if no investment in the SR-30 is made. Under this scenario, it is supposed that increasing congestion hinders the growth in the study area such that the region grows at a slower pace than the Baseline Growth Scenario. The impacts of this slower growth are examined and can be considered lost economic development opportunities.

Economic and fiscal impacts 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 the area). Typical analyses involve the one-time (e.g., effects from construction) and the ongoing regional economic impacts of a particular project or activity.

One-time 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. For the purpose of this report, construction impacts refer to the cumulative impact of all construction and development activity for each growth scenario over a 20-year timeframe.



Ongoing impacts refer to the annual impacts that occur as a result of the increase in population and employment in the study area once construction is completed and the projected growth has been realized (i.e., after year 20) under each investment scenario.

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.

## **Baseline Growth Scenario: No Investment in the SR-30 Freeway**

Under the Baseline Scenario, it is assumed that no investment is made in the SR-30 freeway and that the study area will grow under current conditions. However, this growth will be limited due to capacity constraints.

As of 2020, there were approximately 272,600 people living and 121,400 employed within the study area. Over the next 20 years, without any additional investment in the SR-30 freeway, the population in the study area is projected to grow at an average annual rate of 2.1%, adding 140,100 residents compared to the current population level. Employment is expected to increase by 69,100 workers and grow at an average annual rate of 2.3% over the same time period.

The projected population growth will demand 30,500 additional residential housing units to be built over the next 20 years. This includes a mix of both single family and multi-family housing units. If current trends continue, approximately 75.7% of the 30,500 new units, approximately 23,100 homes, would be expected to be single-family homes while 24.3% or 7,400 units would be expected to be multi-family.

In order to support the projected employment growth in the study area, a total of 237.3M sq. ft. of commercial office, retail and industrial real estate development is needed (a net increase of 142.7M sq. ft.). If the current employment composition and trends continue, the development will consist of an estimated 3.6M sq. ft. of additional office space (i.e., office complexes, medical/dental offices, customer care centers, etc.), 14.8M sq. ft. of retail (i.e., shopping malls, grocery stores, hotels, restaurants, etc.) and 124.2M sq. ft. of industrial (i.e., manufacturing facilities, distribution centers, warehouses, storage facilities, etc.).

In total, an additional 142.7M new sq. ft. of commercial development is needed in the study area over the next 20 years, compared to current levels.



#### **Construction Impacts**

The construction of the projected 30,500 residential housing units will support a total of 74,200 jobs and will generate a total of \$3.6B in labor income (i.e., the income, wages and benefits earned by the 74,200 jobs) over 20 years. These one-time construction impacts will generate \$10.8B in economic output and \$647.3M in state and local tax revenues over the next 20 years.

The construction of the projected 142.7M sq. ft. of commercial space over 20 years will support a total of 153,300 jobs. These include workers that are directly employed by the construction firms who build the commercial space as well as those that are employed by supplier firms and local businesses. In total, these workers will be paid \$7.9B in wages and approximately \$21.6B in economic output will be generated by construction activity. The economic activity resulting from the construction of the commercial space will produce \$1.9B in state and local tax revenues over 20 years.

In total, the projected construction in the study area will support 227,500 jobs, produce \$11.5B in labor income, and generate \$32.4B in economic output over the next 20 years. Construction will result in a one-time impact of \$2.5B in state and local tax revenues.

Table 4: Construction Impacts in the SR-30 Study Area Under the Baseline Growth Scenario

Impact Source	Jobs 1)	Labor Income 2)	Economic Output 3)	Tax Revenues 4)
Residential Construction	74,200	\$3.6B	\$10.8B	\$647.3B
Commercial Construction	153,300	\$7.9B	\$21.6B	\$1.9B
Total Construction Impact	227,500	\$11.5B	\$32.4B	\$2.5B

<sup>1)</sup> Full-time equivalent jobs.

Note: May not sum to total due to rounding. Cumulative total over 20-years. In 2021 dollars.

Source: Arizona Department of Revenue; IMPLAN; Rounds Consulting Group, Inc.

<sup>2)</sup> Salaries and wages plus benefits.

<sup>3)</sup> Total value of economic activity produced.

<sup>4)</sup> Sum of state and local (county and city) tax collections.



#### **Annual Impacts**

Table 5: Annual Impacts in the SR-30 Study Area Under the Baseline Growth Scenario

Impact Source	Population 1)	Jobs <sup>2)</sup>	Labor Income <sup>3)</sup>	Economic Output 4)	Tax Revenues 5)
Current Levels 6)	272,600	121,400	\$6.2B	\$16.5B	\$1.4B
Impacts After Year 20 7)	412,700	190,500	\$9.7B	\$25.9B	\$2.0B
Projected Growth	+140,100	+69,100	+\$3.5B	+\$9.4B	+\$600.0M

<sup>1)</sup> Population is the number of residents living within the study area.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: Maricopa Association of Governments; Arizona Department of Revenue; IMPLAN; Rounds Consulting Group, Inc.

By year 20, when the construction is complete and the projected growth is realized, the total population in the study area will be 412,700, adding 140,100 additional residents from the current population base of 272,600. Employment is expected to increase by 69,100, from the current level of 121,400 to 190,500.

The additional jobs will generate an additional \$3.5B in annual labor income, compared to the current level of \$6.2B. Altogether the increased economic activity from the 140,100 additional residents and 69,100 additional employees will generate \$9.4B in additional economic output and \$600.0M more in state and local tax revenues each year, compared to current estimates (Table 5).

<sup>2)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>3)</sup> Employee-earned salaries and wages plus benefits.

<sup>4)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>5)</sup> Sum of state and local (county and city) tax collections generated by residential and commercial activity in the study area.

<sup>6)</sup> Current levels represent current estimates in the study area as of 2020.

<sup>7)</sup> Represents the estimates in the study area under current conditions without any investments in the SR-30 freeway.



# Moderate Growth Scenario: Limited Investment in the SR-30 Freeway

The Moderate Growth Scenario assumes that limited investment in the SR-30 is made. This level of investment would represent the construction of a four-lane version of the SR-30 freeway. The improved infrastructure will facilitate some enhancement of current growth projections in the study area. However, the area's economic growth potential will be limited due to capacity constraints.

Under this scenario, the population in the study area will grow at an average annual rate of 2.3%, compared to the 2.1% annual growth rate under the Baseline Growth Scenario. Employment in the study area is also expected to outpace the Baseline Growth Scenario, growing at an average rate of 2.5% per year over the next 20 years, compared to 2.3%.

In order to support the projected growth, an additional 34,100 units of residential housing need to be constructed over the next 20 years (3,700 more units than the Baseline Growth Scenario). This represents a 57.6% increase from the current inventory of 59,300 units. Of the new residential construction, it is estimated that 25,900 units will be single family homes while 8,300 will be multi-family units.

The projected employment growth will demand an estimated 3.9M additional sq. ft. of office space, 16.0M sq. ft. of additional retail space, and 133.4M sq. ft. of additional industrial space. This means that from current levels, a total of 153.3M in additional sq. ft. will need to be developed over the next 20 years. This is 7.4% more than the Baseline Growth Scenario.

#### **Construction Impacts**

Table 6: Construction Impacts in the SR-30 Study Area Under the Moderate Growth Scenario

Impact Source	Jobs 1)	Labor Income <sup>2)</sup>	Economic Output 3)	Tax Revenues 4)
Residential Construction	83,100	\$4.0B	\$12.1B	\$725.4M
Commercial Construction	172,200	\$8.8B	\$24.2B	\$2.1B
Total Construction Impact	255,300	\$12.8B	\$36.3B	\$2.8B
Difference from Baseline Scenario	+27,800	+\$1.3B	+\$3.9B	+\$300.0M

<sup>1)</sup> Full-time equivalent jobs.

Note: May not sum to total due to rounding. Cumulative total over 20-years. In 2021 dollars.

Source: Arizona Department of Revenue; IMPLAN; Rounds Consulting Group, Inc.

The residential construction activity under the Moderate Growth Scenario will support a total of 83,100 jobs that will earn a total of \$4.0B in labor income over 20 years. This construction activity will generate \$12.1B in economic output and \$725.4M in state and local tax revenues over the next 20 years.

The construction of the commercial buildings will support a total of 172,200 jobs in the study area over the next 20 years. In total, these workers will earn \$8.8B in labor income and generate \$24.2B in economic

<sup>2)</sup> Salaries and wages plus benefits.

<sup>3)</sup> Total value of economic activity produced.

<sup>4)</sup> Sum of state and local (county and city) tax collections.



output. The economic activity resulting from the construction of the commercial buildings will produce \$2.1B in state and local tax revenues over the next 20 years.

In total, construction activity under the Moderate Growth Scenario will support 255,300 jobs over the next 20 years. These workers will earn \$12.8B in labor income and generate \$36.3B in economic output. These one-time construction impacts will produce an estimated \$2.8B in state and local tax revenues.

The impacts from construction activity from the Moderate Growth Scenario will support 27,800 more jobs than the activity of the Baseline Growth Scenario. The additional jobs will generate \$1.3B in additional labor income, \$3.9B in additional economic output and \$300.0M more in tax revenues over the 20 years, compared to the Baseline Growth Scenario.

#### **Annual Impacts**

Under the Moderate Scenario and after construction is completed and the projected growth is realized, the total population in the area will be 429,600, increasing by 157,000 people over the 20-year time period. Total employment in the study area will be 199,000 by year 20, an increase of 77,600 from the current employment base.

The 77,600 additional jobs will earn \$3.9B in additional labor income each year. In total, the additional 157,000 residents and 77,600 workers will generate an additional \$10.5B in annual economic output and produce \$700.0M in state and local tax revenues each year.

Table 7: Annual Impacts in the SR-30 Study Area Under the Moderate Growth Scenario

Impact Source	Population 1)	Jobs <sup>2)</sup>	Labor Income <sup>3)</sup>	Economic Output 4)	Tax Revenues 5)
Current Levels 6)	272,600	121,400	\$6.2B	\$16.5B	\$1.4B
Impacts After Year 20 7)	429,600	199,000	\$10.1B	\$27.0B	\$2.1B
<b>Projected Growth</b>	157,000	77,600	\$3.9B	\$10.5B	\$700.0M
Difference from Baseline	+16,900	+8,500	+\$400.0M	+\$1.1B	+\$100.0M

<sup>1)</sup> Population is the number of residents living within the study area.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: Maricopa Association of Governments; Arizona Department of Revenue; IMPLAN; Rounds Consulting Group, Inc.

By year 20, a limited investment in the four-lane version of the SR-30 freeway (i.e., the Moderate Growth Scenario) will result in 8,500 more jobs, \$400.0M in additional labor income, \$1.1B in additional economic output and \$100.0M more in tax revenues each year compared to the Baseline Growth Scenario.

<sup>2)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>3)</sup> Employee-earned salaries and wages plus benefits.

<sup>4)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>5)</sup> Sum of state and local (county and city) tax collections generated by residential and commercial activity in the study area.

<sup>6)</sup> Current levels represent current estimates in the study area as of 2020.

<sup>7)</sup> Represents the estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.



# **Aggressive Growth Scenario: Full Investment in the SR-30 Freeway**

The Aggressive Growth Scenario assumes that a full investment is made to construct a ten-lane version of the SR-30 freeway. This level of investment facilitates the flow of commerce and business activity throughout the region. The impacts of the advanced growth and additional high-value development beyond the above-mentioned scenarios are examined.

As a result of the infrastructure improvements under the Aggressive Growth Scenario, the population in the study area is estimated to increase by 165,400, growing at an average annual rate of 2.4%. This growth will increase the population in the study area from its current level of 272,600 to 438,000 over the next 20 years. Employment will increase by 85,500 and will grow at an average rate of 2.7% per year over the same timeframe. This compares to the average annual population and employment growth of 2.1% and 2.3%, respectively under the Baseline Scenario.

In order to support the additional 165,400 residents that are projected to move to the study area, an estimated 95,300 housing units will be demanded. This represents an increase of 36,000 units from current levels and 5,500 more units than are needed under the Baseline Scenario. If current housing trends continue, it is estimated that 27,300 of these new units will be single-family homes and 8,700 will be multi-family homes.

A total of 257.8M sq. ft. of office, retail and industrial space will be required to support the projected employment growth under the Aggressive Growth Scenario. The new employment base will require 4.2M additional sq. ft. of office space, 17.2M sq. ft. of retail space, and 141.9M sq. ft. of industrial space. Altogether, an additional 163.2M sq. ft. compared to the current level and 20.5M sq. ft. above the Baseline Growth Scenario is required to meet the projected demand.



#### **Construction Impacts**

Residential construction activity will support a total of 87,600 jobs that earn a total of \$4.2B in labor income and generate \$12.8B in economic output over the next 20 years. These one-time impacts will generate \$764.6M in state and local tax revenues.

The commercial office, retail and industrial construction activity will support 189,800 jobs over the 20-year period. These workers will earn a total of \$9.4B in labor income and generate \$26.7B in economic output. Overall, the commercial construction activity will produce \$2.3B in state and local tax revenues over 20 years.

In total, residential and commercial construction activity in the study area will support 277,400 jobs that earn \$13.6B in wages and generate \$39.5B in economic output over the next 20 years. Construction will result in a one-time impact of \$3.1B in state and local tax revenues.

Table 8: Construction Impacts in the SR-30 Study Area Under the Aggressive Growth Scenario

Impact Source	Jobs 1)	Labor Income <sup>2)</sup>	Economic Output 3)	Tax Revenues 4)
Residential Construction	87,600	\$4.2B	\$12.8B	\$764.6M
Commercial Construction	189,800	\$9.4B	\$26.7B	\$2.3B
Total Construction Impact	277,400	\$13.6B	\$39.5B	\$3.1B
Difference from Baseline	+49,900	+\$2.1B	+\$7.1B	+\$600.0M

<sup>1)</sup> Full-time equivalent jobs.

Note: May not sum to total due to rounding. Cumulative total over 20-years. In 2021 dollars.

 $Source: Arizona\ Department\ of\ Revenue;\ IMPLAN;\ Rounds\ Consulting\ Group,\ Inc.$ 

The growth projections from the Aggressive Growth Scenario will result in one-time construction impacts equal to 49,900 more jobs, \$2.1B in additional income and wages, \$7.1B in economic output and \$600.0M in additional tax revenues, compared to the Baseline Growth Scenario.

<sup>2)</sup> Salaries and wages plus benefits.

<sup>3)</sup> Total value of economic activity produced.

<sup>4)</sup> Sum of state and local (county and city) tax collections.



#### **Annual Impacts**

By year 20, after the projected growth is realized, the additional 85,500 workers will increase the labor income earned in the study area by \$4.3B. Together, the 165,400 additional residents and 85,500 additional workers in the study area will generate \$11.6B in additional economic output and produce \$800.0M more in state and local tax revenues each year than current levels.

Table 9: Annual Impacts in the SR-30 Study Area Under the Aggressive Growth Scenario

Impact Source	Population 1)	Jobs <sup>2)</sup>	Labor Income <sup>3)</sup>	Economic Output 4)	Tax Revenues 5)
Current Levels 6)	272,600	121,400	\$6.2B	\$16.5B	\$1.4B
Impacts After Year 20 7)	438,000	206,900	\$10.5B	\$28.1B	\$2.2B
Projected Growth	165,400	85,500	\$4.3B	\$11.6B	\$800.0M
Difference from Baseline	+25,300	+16,400	+\$800.0M	+\$2.2B	+\$200.0M

<sup>1)</sup> Population is the number of residents living within the study area.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: Maricopa Association of Governments; Arizona Department of Revenue; IMPLAN; Rounds Consulting Group, Inc.

The results of the Aggressive Growth Scenario indicate that, by year 20, an investment in a ten-lane SR-30 freeway will produce 16,400 additional jobs, \$800.0M in additional labor income, \$2.2B in economic output and \$200.0M in additional state and local tax revenues each year, compared to no investment made in the SR-30 freeway (i.e., the Baseline Growth Scenario).

<sup>2)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>3)</sup> Employee-earned salaries and wages plus benefits.

<sup>4)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>5)</sup> Sum of state and local (county and city) tax collections generated by residential and commercial activity in the study area.

<sup>6)</sup> Current levels represent current estimates in the study area as of 2020.

<sup>7)</sup> Represents the estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway.



# **Constrained Growth Scenario: Negative Effects of Inadequate Infrastructure**

The Constrained Growth Scenario provides additional context on how inadequate transportation infrastructure can limit growth. Under this scenario, the projected population and employment in the region will continue to grow, but at a slower rate than the Baseline Scenario. This is due to increasing traffic volumes and congestion exceeding the infrastructure's capacity and reducing the area's competitive position in attracting businesses and residents to locate to the area. The limited infrastructure further results in an opportunity loss of capitalization on regional and state economies of the I-11 and the cross-border trade from Mexico to Canada.

Under the Constrained Growth Scenario, the population in the study area is projected to increase by 93,800 people over the next 20-years. This represents an annual growth of 1.5% per year and compares to the 2.1% annual growth that is expected under the Baseline Scenario.

Employment is projected to grow by 46,300 workers over 20 years under the Constrained Growth Scenario. This represents an average annual growth of 1.6%, compared to the 2.3% annual growth that is expected under the Baseline Scenario.

In order to support the projected population growth, an additional 20,400 housing units will need to be built; this is 10,100 fewer housing units than what is demanded under the Baseline Scenario. It is estimated that 15,500 of the new units will be single family homes and 4,900 of the new units will be multi-family homes.

The projected employment is expected to require a total of 5.4M sq. ft. of office space, 23.6M sq. ft of retail space and 179.9M sq. ft. of industrial space by year 20. In total, an additional 114.3M sq. ft. of commercial space will be needed over the next 20 years. This is 28.4M sq. ft. fewer than what is required under the Baseline Scenario.

#### **Construction Impacts**

The construction of the additional 20,400 residential housing units will support 49,700 jobs that pay a total of \$2.4B in wages and generate \$7.2B in economic activity over the next 20 years. These one-time construction impacts will produce a total of \$433.7M in state and local tax revenues.

The construction of the commercial space in the area will support 102,700 jobs that will earn a total of \$5.3B in wages over the next 20 years. These workers will generate \$14.4B in economic output and produce a total of \$1.3B in state and local tax revenues by 2040.

In total, over the 20-year period, the residential and commercial construction activity will support 152,400 jobs, \$7.7B labor income, \$21.6B in economic output and \$1.7B in state and local tax revenues.

The lack of growth in the Constrained Growth Scenario will dampen the impact of the construction activity compared to the Baseline Scenario. This results in 75,100 fewer jobs, \$3.8B less labor income, \$10.8B less economic output, and \$800.0M fewer tax revenues over the 20-year period.



Table 10: Construction Impacts in the SR-30 Study Area Under the Constrained Growth Scenario

Impact Source	Jobs 1)	Labor Income <sup>2)</sup>	Economic Output 3)	Tax Revenues 4)
Residential Construction	49,700	\$2.4B	\$7.2B	\$433.7M
Commercial Construction	102,700	\$5.3B	\$14.4B	\$1.3B
Total Construction Impact	152,400	\$7.7B	\$21.6B	\$1.7B
Difference from Baseline	-75,100	-\$3.8B	-\$10.8B	-\$800.0M

<sup>1)</sup> Full-time equivalent jobs.

Note: May not sum to total due to rounding. Cumulative total over 20-years. In 2021 dollars.

 $Source: Arizona\ Department\ of\ Revenue;\ IMPLAN;\ Rounds\ Consulting\ Group,\ Inc.$ 

<sup>2)</sup> Salaries and wages plus benefits.

<sup>3)</sup> Total value of economic activity produced.

<sup>4)</sup> Sum of state and local (county and city) tax collections.



#### **Annual Impacts**

Once construction is completed and the projected growth in the area is realized by year 20, the population in the study area will be 366,400, an estimated increase of 93,800 residents. Employment will grow by 46,300 workers compared to the current employment level. The 46,300 new workers will earn an estimated \$2.3B in labor income.

Altogether, the 93,800 new residents and the 46,300 new workers will generate \$6.3B in economic output each year. An estimated \$400.0M in annual tax revenues will be collected as a result of the population and employment growth.

Table 11: Annual Impacts in the SR-30 Study Area Under the Constrained Growth Scenario

Impact Source	Population 1)	Jobs <sup>2)</sup>	Labor Income <sup>3)</sup>	Economic Output 4)	Tax Revenues 5)
Current Levels 6)	272,600	121,400	\$6.2B	\$16.5B	\$1.4B
Impacts After Year 20 7)	366,400	167,700	\$8.5B	\$22.8B	\$1.8B
Projected Growth	93,800	46,300	\$2.3B	\$6.3B	\$400.0M
Difference from Baseline	-46,200	-22,800	-\$1.2B	-\$3.1B	-\$200.0M

<sup>1)</sup> Population is the number of residents living within the study area.

Source: Maricopa Association of Governments; Arizona Department of Revenue; Maricopa Association of Governments; IMPLAN; Rounds Consulting Group, Inc.

By year 20, increasing traffic congestion and inadequate infrastructure will result in 22,800 fewer jobs in the study area compared to current projections. This also means there will be \$1.2B in lost annual labor income, \$3.1B in forgone economic output each year and \$200.0M less annual tax revenues that will be collected, when compared to the Baseline Scenario.

<sup>2)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>3)</sup> Employee-earned salaries and wages plus benefits.

<sup>4)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>5)</sup> Sum of state and local (county and city) tax collections generated by residential and commercial activity in the study area.

<sup>6)</sup> Current levels represent current estimates in the study area as of 2020.

<sup>7)</sup> Represents the estimates in the study area under a scenario without any development of the SR-30 freeway and increasing traffic volumes. Note: May not sum to total due to rounding. In 2021 dollars.



# **Additional Considerations**

# Impacts of Extending the SR-30 Freeway

The findings of this report clearly demonstrate that either enhancements or limitations to economic growth and real estate development within the area that immediately surrounds the freeway can occur as a result of the SR-30 freeway or lack of investment in infrastructure. However, the area surrounding the proposed SR-30 freeway is not the only area expected to realize significant growth.

For example, the proposed I-11 corridor is expected to be constructed approximately 5 miles to the west of the SR-30 and L-303 interchange. The I-11 corridor will likely continue to drive strong population and employment growth throughout the region. In order to support this growth, additional transportation infrastructure is needed that will connect the future I-11 freeway to the municipalities and employment centers of the area. The proposed SR-30 freeway, if extended, can provide this needed infrastructure.

Extending the SR-30 freeway 5 miles to the west to the SR-85 (the SR-85 is expected to be replaced by the proposed I-11 interstate) would magnify the previously estimated impacts, making the entire SR-30 freeway (including the extension) a critical component for the future economic success of the region (Figure 4). An economic model was developed to quantify the total impact of the SR-30 freeway if the extension is built.

Proposed Loop 303 Extension

Goodyear

SR-85
(Future I-11 Segment)

SR-30 Center Segment
Loop 303 to Loop 202

Potential SR-30 Freeway Extension
SR-85 to Loop 303

St Johns

Figure 4: Proposed Route for the West Extension of the SR-30 Freeway

Source: Rounds Consulting Group; Google Maps



The SR-30 freeway extension will improve connectivity, reduce traffic congestion, facilitate business recruitment, create demand for new housing, and enhance economic development efforts, thereby bringing additional jobs to the area, further enhancing the population and employment growth of the West Valley.

The magnitude of the additional impact that the SR-30 extension will have, is dependent on the level of investment made in the SR-30 freeway. The economic model reviews the effect of the SR-30 extension under the Moderate Growth (i.e., a four-lane freeway) and the Aggressive Growth Scenario (i.e., ten-lane freeway).

Under the Moderate Growth Scenario, the extension is expected to bring an additional 51,300 residents and 10,600 employees to the area. This is in addition to the projected 157,000 residents and 77,600 employees under the Moderate Growth Scenario without the extension.

The additional residents and employees under the extension scenario will support the construction of 14,600 new housing units and the development of 9.8M sq. ft. of additional commercial office, retail and industrial space (i.e., this is in addition to the Moderate Growth Scenario without the extension). This represents 42.8% more housing units and a 6.4% increase in commercial space than would be built without the SR-30 freeway extension.

Overall, the construction of the new homes and commercial space will create a total of 54,000 new jobs over the next 20-years under the Moderate Growth Scenario with the extension. These workers will earn an additional \$2.7B in labor income, generate \$7.8B more in economic output and produce \$537.9M in additional tax revenues than are created without the SR-30 extension.

After year 20 and once the growth projections are realized, the 10,600 new workers will increase the area's labor income by \$532.8M each year. In total, the additional residents and workers that can be attributed to the four-lane SR-30 freeway extension will account for \$1.4B in additional economic output and \$163.8M in additional tax revenues each year.

The Aggressive Growth Scenario assumes that a ten-lane SR-30 freeway is built, and the SR-30 extension is also ten lanes. Under this scenario, the SR-30 freeway will complement the proposed I-11 corridor in improving the flow of economic and business activity throughout the region. A ten-lane SR-30 freeway extension is expected to bring 60,200 and 12,300 more residents and workers, respectively, to the area above the scenario without the extension.

The additional residents will support the construction of the 17,100 new housing units compared to the Aggressive Scenario without the extension. In order to meet the demand of the additional employment base, a total of 11.4M sq. ft. of new commercial office, retail and industrial space will need to be developed.

This construction activity will support a total of 63,100 jobs over the next 20 years under the Aggressive Scenario with the extension. These workers will earn a total of \$3.1B in labor income. Overall, \$9.1B in additional economic output will be generated and \$628.3M in additional tax revenues will be produced from the construction activity created by a ten-lane SR-30 freeway extension over the next 20 years.



After year 20 and once the growth projections are realized under the Aggressive Growth Scenario with the extension, the 12,300 new workers will add \$619.6M in labor income to the area per year. In total, the additional residents and workers from the SR-30 freeway extension will account for \$1.7B in additional economic output and \$191.1M more in tax revenues each year, compared to what is generated by the SR-30 freeway without the extension under the Aggressive Scenario.

Table 12: Impact Scenario Totals with the West Extension

	Moderate Growth Scenario 10)		Aggressive Growth Scenario 11)	
	Without Extension	With Extension	Without Extension	With Extension
Residential Units 1)	34,100	+14,600	36,000	+17,100
Commercial Square Footage <sup>2)</sup>	153.3M	+9.8M	163.2M	+11.4M
Construction Impacts <sup>3)</sup>				
Jobs 4)	255,300	+54,000	277,400	+63,100
Labor Income 5)	\$12.8B	+\$2.7B	\$13.6B	+\$3.1B
Economic Output <sup>6)</sup>	\$36.3B	+\$7.8B	\$39.5B	+\$9.1B
Tax Revenues 7)	\$2.8B	+\$537.9M	\$3.1B	+\$628.3M
Annual Impacts 8)				
Population <sup>9)</sup>	157,000	+51,300	165,400	+60,200
Jobs <sup>4)</sup>	77,600	+10,600	85,500	+12,300
Labor Income 5)	\$3.9B	+\$532.8M	\$4.3B	+\$619.6M
Economic Output <sup>6)</sup>	\$10.5B	+\$1.4B	\$11.6B	+\$1.7B
Tax Revenues 7)	\$700.0M	+\$163.8M	\$800.0M	+\$191.1M

<sup>1)</sup> Residential units is the total number of single family and multi-family housing units in the study area.

Source: U.S. Census Bureau; CoStar; Arizona Department of Revenue; Maricopa Association of Governments; IMPLAN; Rounds Consulting Group, Inc.

<sup>2)</sup> Commercial square footage is the total amount of office, retail, and industrial building square footage in the study area.

<sup>3)</sup> Construction impacts represent the cumulative impacts derived from construction activity in the study area over the 20-year period.

<sup>4)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>5)</sup> Labor income is the total employee-earned wages and benefits in the study area.

<sup>6)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>7)</sup> The sum of the state and local (county and city) tax revenues generated in the study area.

<sup>8)</sup> Annual impacts represent the annual impacts derived after year 20 once the study area projections have been realized.

<sup>9)</sup> Population is the number of residents living within the study area.

<sup>10)</sup> The Moderate Scenario represents estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.

<sup>11)</sup> The Aggressive Scenario represents estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway. Note: May not sum to total due to rounding. In 2021 dollars.



# Impact of the SR-30 Freeway on Property Values

Transportation infrastructure has a positive effect on property values as improved infrastructure will enhance the connectivity of the region and reduce congestion.

Table 13 displays the total change in the value of all residential and all commercial, office, retail and industrial property in the study area over the short term and over the long term. This is done to provide additional perspective on how the SR-30 freeway can have an immediate and long-term impact on the property values in the study area.

The short-term figure measures the change in the total value that will occur when the proposed SR-30 freeway is completed under each of the investment scenarios. For example, the Baseline Growth Scenario and the Constrained Growth Scenario each assume that the SR-30 freeway does not get built. Therefore, the short-term change in the total property value under these scenarios is zero.

In contrast, the Moderate and Aggressive Growth Scenarios each suppose that the SR-30 freeway is built. Therefore, the short-term figure for each of these scenarios represents the change in property values that will occur once the SR-30 freeway is completed.

The short-term impact for both the Moderate and Aggressive Scenarios is equal as it is assumed that the SR-30 freeway causes population and employment growth projections to advance in the study area over a 20-year period. These advancements will drive demand for residential and commercial property and the increasing demand will cause property values to increase. The enhanced growth projection will not begin until after the SR-30 is built.

Once construction of the SR-30 freeway is complete, the total value of residential property (i.e., single family and multi-family homes) will increase by \$435.8M compared to the baseline. The total value of commercial office, retail and industrial property (i.e., office buildings, grocery stores, warehouses, etc.) is expected to increase by \$1.6B upon completion of the SR-30 freeway. Increases in property values translate into increases in property tax collections for local cities, schools, fire districts, etc.

The long-term figure represents the change in property values after the projected growth impacts are realized (i.e., after year 20). This change comes as a result of the increased demand for residential housing and commercial office, retail and industrial property as well as the increased connectivity and travel efficiency that comes as a result of the SR-30 freeway.

For example, residential property values under the Baseline Growth Scenario are estimated to increase by \$8.4B by year 20. This increase is a result of the projected new single family and multi-family homes that will occur over the next 20 years.

The value of all commercial office, retail and industrial property in the study area is expected to increase by \$1.3B as employment growth in the study area drives increasing demand for commercial property over the next 20 years.



The total value of residential property in the study area will increase by an additional \$10.0B by year 20, compared to the short-term under the Moderate Growth Scenario. The increase is a result of the enhanced population growth and residential development over the 20-year period. The enhanced employment growth and new commercial buildings will cause the total value of commercial property to increase by an additional \$2.9B above the short-term level by year 20.

As discussed previously, the ten-lane SR-30 freeway assumed in the Aggressive Growth Scenario will further enhance the population, employment and real estate growth in the study area over the next 20 years. This enhanced growth will increase residential property values by an additional \$10.5B, and commercial office, retail and industrial property values by \$3.0B compared to the short-term level.

Under the Constrained Growth Scenario, the value of residential property in the study area is expected to grow by \$5.7B over the long-term compared to the current level. This is 33.0% below what is expected in the Baseline Growth Scenario. Commercial property values are projected to increase by \$1.0B by year 20, 20.2% under the baseline. The limited increase in property values is a result of increased traffic congestion hindering the population and employment growth over the 20-year timeframe.

Table 13: Short- and Long-Term Changes to Property Values by SR-30 Freeway Investment Scenario

Change in Residential Property Values	Baseline Scenario <sup>1)</sup>	Moderate Scenario <sup>2)</sup>	Aggressive Scenario 3)	Constrained Scenario 4)
Short-Term <sup>5)</sup>	-	\$435.8M	\$435.8M	-
Long-Term <sup>6)</sup>	\$8.4B	\$10.0B	\$10.5B	\$5.7B
Change in Commercial Property Values	Baseline Scenario <sup>1)</sup>	Moderate Scenario <sup>2)</sup>	Aggressive Scenario 3)	Constrained Scenario 4)
Short-Term <sup>5)</sup>	-	\$1.6B	\$1.7B	-
Long-Term <sup>6)</sup>	\$1.3B	\$2.9B	\$3.0B	\$1.0B

<sup>1)</sup> The Baseline Scenario represents estimates in the study area under current conditions without any investments in the SR-30 freeway.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: Zillow; Maricopa Association of Governments; Rounds Consulting Group, Inc.

<sup>2)</sup> The Moderate Scenario represents estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.

<sup>3)</sup> The Aggressive Scenario represents estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway.

<sup>4)</sup> The Constrained Scenario represents estimates in the study area under a scenario where increases in traffic volume and congestion limit projected growth.

<sup>5)</sup> Short-term represents the change after the proposed SR-30 is completed.

<sup>6)</sup> Long-term represents the change once projected growth impacts are realized.



# **Conclusions**

Infrastructure investments are among the most important considerations for economic development leaders and policymakers. Over the next 20 years, the study area is expected to experience strong population and employment growth. MAG estimates that the population in the study area will grow at an average annual rate of 2.1% and employment will grow at an average annual rate of 2.3% over the next 20 years. This growth will exceed the projected regional growth over the same timeframe.

However, an investment in the SR-30 freeway can magnify the expected growth beyond current projections. Table 14 displays the differences in the impacts that occur in the study area from the various levels of investment in the SR-30 freeway. These impacts provide insight as to how varying levels of investment in the SR-30 can either contribute to or hinder the advancement and development of the local and regional economy.

Under the Moderate Growth Scenario (i.e., an investment in a four-lane SR-30), over the 20-year period, there will be an estimated 16,900 additional residents and 8,500 more workers in the study area, compared to the Baseline Scenario. By year 20, the Moderate Growth Scenario will generate \$400.0M more in labor income, \$1.1B more in economic output and produce \$100.0M more in tax revenues annually than if there was not an investment in the SR-30 freeway (i.e., the Baseline Growth Scenario).

Under the Aggressive Growth Scenario (i.e., an investment in a ten-lane SR-30 freeway), the population will increase by 25,400 and employment will increase by 16,400 by year 20, compared to the Baseline Scenario. By year 20, the Aggressive Growth Scenario will produce \$800.0M in additional labor income, \$2.2B in economic output and \$200.0M in additional state and local tax revenues each year, compared to if there was no investment made in the SR-30 freeway (i.e., the Baseline Growth Scenario).

Under the Constrained Growth Scenario, population and employment growth are hindered as a result of increasing traffic congestion and inadequate infrastructure. Over the 20-year time period, the study area's population and employment levels under the Constrained Growth Scenario are projected to grow by 46,200 and 22,800 fewer people than the Baseline Scenario resulting in tangible lost growth opportunities (Table 14).

By year 20, under the Constrained Growth Scenario, there will be \$1.2B in lost annual labor income, \$3.1B in forgone economic output each year and \$200.0M less annual tax revenues that will be collected, when compared to the Baseline Scenario.



Table 14: Impact of the SR-30 Freeway Compared to the Baseline Scenario

	Moderate Scenario 10)	Aggressive Scenario 11)	Constrained Scenario 12)
Residential Units 1)	+3,700	+5,500	-10,100
Commercial Square Footage <sup>2)</sup>	+10.6M	+20.5M	-28.4M
Construction Impacts 3)			
Jobs <sup>4)</sup>	+27,800	+49,900	-75,100
Labor Income 5)	+\$1.3B	+\$2.1B	-\$3.8B
Economic Output 6)	+\$3.9B	+\$7.1B	-\$10.8B
Tax Revenues 7)	+\$300.0M	+\$600.0M	-\$800.0M
Annual Impacts 8)			
Population 9)	+16,900	+25,400	-46,200
Jobs 4)	+8,500	+16,400	-22,800
Labor Income 5)	+\$400.0M	+\$800.0M	-\$1.2B
Economic Output 6)	+\$1.1B	+\$2.2B	-\$3.1B
Tax Revenues 7)	+\$100.0M	+\$200.0M	-\$200.0M

<sup>1)</sup> Residential units is the total number of single family and multi-family housing units in the study area.

Note: May not sum to total due to rounding. In 2021 dollars.

Source: U.S. Census Bureau; CoStar; Arizona Department of Revenue; Maricopa Association of Governments; IMPLAN; Rounds Consulting Group, Inc.

Furthermore, extending the SR-30 freeway 5 miles to the west to the SR-85 would magnify the previously estimated impacts, making the entire SR-30 freeway (including the extension) a critical component for the future economic success of the region. The extension, under the Moderate Scenario would increase the impacts by approximately 18.4% and 19.5% under the Aggressive Scenario.

<sup>2)</sup> Commercial square footage is the total amount of office, retail, and industrial building square footage in the study area.

<sup>3)</sup> Construction impacts represent the cumulative impacts derived from construction activity in the study area over the 20-year period.

<sup>4)</sup> Jobs is the total number of full-time equivalent workers in the study area.

<sup>5)</sup> Labor income is the total employee-earned wages and benefits in the study area.

<sup>6)</sup> Economic output is the total value of economic activity produced in the study area.

<sup>7)</sup> The sum of the state and local (county and city) tax revenues generated in the study area.

<sup>8)</sup> Annual impacts represent the annual impacts derived after year 20 once the study area projections have been realized.

<sup>9)</sup> Population is the number of residents living within the study area.

<sup>10)</sup> The Moderate Scenario represents estimates in the study area under a scenario with the development of a four-lane SR-30 freeway.

<sup>11)</sup> The Aggressive Scenario represents estimates in the study area under a scenario with the development of a ten-lane SR-30 freeway.

<sup>12)</sup> The Constrained Scenario represents estimates in the study area under a scenario where increases in traffic volume and congestion limit projected growth.



# **Appendix**

# **Economic Impact Methodology**

An economic impact model provides a quantifiable method to estimate the economic activity 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. Typically, the level of economic effects resulting from the activity is estimated in terms of *output*, *earnings*, and *employment*. This increased activity also generates additional state and local tax revenues.

- **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, represents income to employees. The earnings component is used to measure the total change in income throughout the economy due to economic or business activity.
- **Employment** is the total number of full-time (or equivalent) jobs created in the economy on an annualized basis.

The economic effects occurring as a direct consequence of the initial activity create additional activity in the regional economy. This relationship is known as the "multiplier" or "ripple" effect. The basis for multiplier effects is the interdependencies between industries, how one industry impacts other sectors, and the cycle of spending and re-spending within the regional economy.

An input-output model is used to generate these multipliers. These 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 Impacts -**

• The initial and immidiate change to the economy as a result of a new development or business activities.

## **Indirect Impacts -**

• Generated for the supply chain businesses as a result of the increased demand from the new development or business activities.

# **Induced Impacts -**

• Increased consumer spending in the local economy as a result of the wages earned from those employed at the new development and the supply chain businesses.

## Total Economic Impact -

• The sum of the direct, indirect and induced impacts.

The RCG custom economic impact model partly employs this input-output model methodology and uses Arizona-specific IMPLAN multipliers. The model is further customized to capture dynamic economic impacts that typical input-output models do not capture. The model specifically quantifies the economic and fiscal impacts of both the construction of the freeway and the impact of the new economic activity.

The fiscal impacts are of equal importance. Therefore, when evaluating the feasibility of a transportation project, the costs of the project need to be compared to the projected fiscal impacts of the project. If the new tax revenues generated by the project exceed the costs, the project should be considered.



# **Fiscal Impact Methodology**

Fiscal impact models provide estimates for the government 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.

In general, the types of government taxes analyzed include sales taxes, excise taxes, lease taxes, income taxes, and property taxes. The type of activities subject to these taxes include payroll, retail sales, utility use, leases, and construction, to name a few.

Fiscal impacts are categorized similar to economic impacts and are broken down at the direct, indirect, and induced levels in which they are created.

- **Direct tax revenues** include the revenues generated in the form of construction sales taxes, property taxes, retail sales taxes, income taxes, among others, from direct construction workers during the development of the SR-30, and the direct employees of new development brought to the area by the completion of the freeway.
- Indirect and induced (secondary) tax revenues are generated by the wages, residency, and spending of those indirect and induced employees (i.e., taxes imposed on the direct worker's household expenditures, their wages, and residency).

The RCG fiscal impact model employs this methodology. The statewide fiscal impacts of the SR-30's construction and tangential development were estimated.