

The Economic Capture of the Downtown Phoenix Redevelopment Area

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Rounds Consulting Group



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Section 1: Executive Summary

Rounds Consulting Group, Inc. (RCG) was retained by Downtown Phoenix Inc. (DPI) to analyze the extent the targeted redevelopment district within Downtown Phoenix captures economic activity and helps support the broader City and region. For this analysis, the Downtown study area is defined by the 1.7 square-mile Downtown Phoenix Redevelopment Area (RDA). The provided impact figures can be considered “economic capture” but the analysis is more complicated. The following points highlight this complexity:

- A portion of the economic values are derived from activity originating within the improvement district, and a portion originates outside of the immediate area but is captured downtown.
- A portion of the activity in the area is based on basic economic momentum (self-sustaining private sector development trends), and a portion is based on designed efforts to expand the economic base (induced by economic development efforts).
- To complete the analysis, several economic and fiscal impact models were created for major categories of development such as retail; restaurants and bars; office; government; education and science/technology; and multi-family housing. Additional activity was captured in separate analyses such as sports entertainment, arts and music festivals, among others. Since double counting can occur when multiple activities overlap, adjustments were required in each of the independent analyses.

Economic Capture Values

There are multiple drivers of economic activity in the Downtown area. The first is related to ongoing business and residential activity. The Downtown area is home to a diverse mix of multi-family housing, retail, restaurant, government, and general office activity. Another source of economic activity is related to visitor and tourism spending. The Downtown area hosts numerous events bringing in millions of visitors every year.

The combination of these main drivers of economic activity supports the 66,000 employees in the Downtown area according to DPI and CoStar. The total income earned by these employees is \$3.9 billion. The economic output generated by Downtown activities aggregates to \$9.7 billion.

The economic value of the 1.7 square mile redevelopment area was modeled and resulted in:



Downtown Phoenix Annual Economic Activity

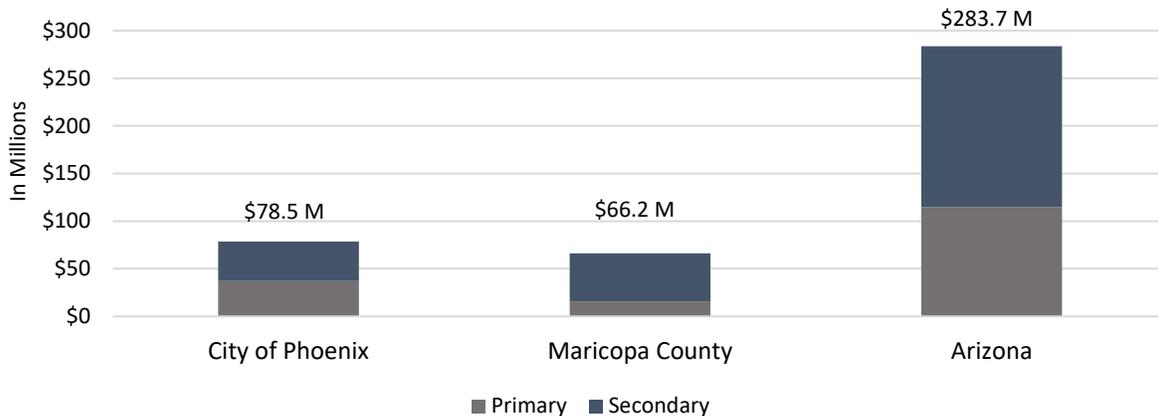
\$19.1 Billion Total Economic Output	131,361 Total Jobs	\$7.3 Billion Total Wages
\$9.7 billion direct \$9.4 billion indirect/induced	66,083 direct 65,278 indirect/induced	\$3.9 billion direct \$3.4 billion indirect/induced

May not sum to total due to rounding.

Source: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; Esri; CoStar; IMPLAN

In terms of revenues, this economic activity generates approximately \$428.5 million for the City of Phoenix, Maricopa County and the State of Arizona. This includes both primary and secondary revenues. For this analysis, primary revenues include all taxes collected within the RDA boundary and secondary revenues include all additional taxes collected outside the RDA.

Downtown Phoenix Annual Fiscal Impact



May not sum to totals due to rounding.

Source: Rounds Consulting Group, Inc.; Downtown Phoenix Inc.; CoStar; Esri; IMPLAN; City of Phoenix; Arizona Department of Revenue; and Maricopa County;

Downtown Phoenix produces a significant impact on the City of Phoenix and the broader region. Enhancing the overall rate of economic growth can produce major regional impacts, so coordination between the City and organizations like DPI is indeed important. However, the City and individual organizations will still need to maintain basic economic foundations such as quality infrastructure and workforce talent, and continue to coordinate and maximize the ROI of any programs that utilize public monies.



Section 2: Introduction and Purpose

Rounds Consulting Group, Inc. (RCG) was retained by Downtown Phoenix Inc. (DPI) to analyze the extent the targeted redevelopment district within Downtown Phoenix (Downtown) captures economic activity and helps support the broader City and region.

For context, DPI promotes the Downtown area to enhance the number of businesses, residents, and the overall number of visitors in the area. The organization takes a collaborative approach to enhancing the local area's economy and works closely with the City of Phoenix (City) and other economic development and community groups. Because the Downtown area is a major economic hub, the efforts benefit the immediate area but also the City of Phoenix as a whole, Maricopa County, and the State of Arizona.

2.1 Analytical Qualifiers

The provided impact figures can be considered “economic capture” but the analysis is more complicated. The following points highlight this complexity:

- A portion of the economic values are derived from activity originating within the improvement district, and a portion originates outside of the immediate area but is captured Downtown. For example, people work Downtown and live elsewhere, live Downtown and work elsewhere, live and work Downtown, or live and work elsewhere but travel to Downtown for entertainment. Each scenario requires a different analysis.
- A portion of the activity in the area is based on basic economic momentum (self-sustaining private sector development trends), and a portion is based on designed efforts to expand the economic base (induced by economic development efforts). However, economic development efforts cannot always be detached from private sector momentum since infrastructure, amenities, and economic volume all enhance development activity.
- To complete the analysis, several economic and fiscal impact models were created for major categories of development such as retail; restaurants and bars; office; government; education and science/technology; and multi-family housing. Additional activity was captured in separate analyses such as sports entertainment, arts and music festivals, among others.

It is not possible to cleanly differentiate the reason each Downtown development project occurred over the last decade. Thus, incremental economic and fiscal impact estimates that capture just the induced activities cannot be tabulated. However, the full breadth of economic and fiscal impact activity for the designated development area is provided along with impacts associated with the construction that occurred between January 2008 and December 2017.

An alternative approach to the assignment is to view economic development and community success in a more holistic way. First, a community needs to create a solid economic foundation to allow private sector activities to flourish and to encourage a higher return on investment (ROI) on any public efforts. These more foundational economic development influences include the provision of quality transportation and utility infrastructure; workforce cost, quality, and availability; the efficient use of any incentives, and even



the provision of a stable fiscal structure within the City. The provision of these economic foundations is what makes all other development efforts possible.

A community then begins to build on this economic base and approach economic development as a team, with individual organizations each taking the lead on economic development tasks as well as providing support for larger efforts. While no one organization can claim credit for advancing the region's economy, each plays a key role.

Note: This is not a review of any economic development incentives and the resulting impacts on the community.

2.2 Tabulating Development Activities

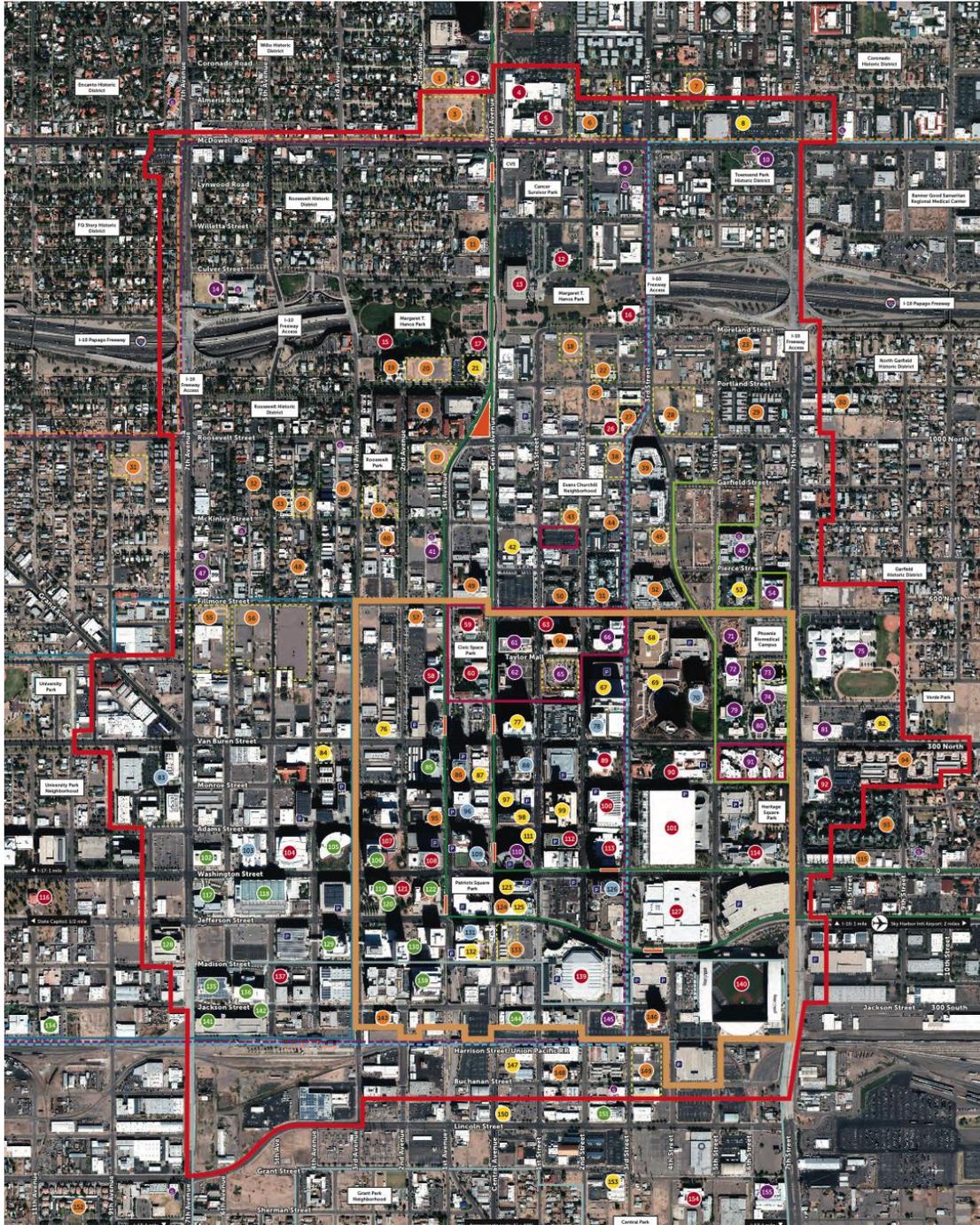
The Downtown Phoenix study area in this analysis is defined by the 1.7 square-mile Downtown Phoenix Redevelopment Area (RDA). A map of the area is displayed on the following page.

There are two different types of economic activity tabulated. The first value is the full and current economic output of this specific area of Downtown Phoenix as of 2017. The second value, the incremental construction growth from January 1st, 2008 to December 31st, 2017, is modeled by type of construction.

Downtown Phoenix produces a significant impact on the City of Phoenix and the broader region. Enhancing the overall rate of economic growth can produce major regional impacts, so coordination between the City and organizations like DPI is indeed important. However, the City and individual organizations will still need to maintain the listed economic foundations, and continue to coordinate and maximize the ROI of any programs that utilize public monies.



Study Area: Downtown Phoenix



Source: Downtown Phoenix Inc.



Section 3: Methodology & Assumptions

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. Impact models can provide information to demonstrate value, influence policy decisions, inform public concerns, determine benefits, predict outcomes, and measure activity.

RCG developed a number of custom models to estimate the economic and fiscal impacts of activities in the areas determined by DPI. The RCG models employ an input-output model methodology commonly used by economists to determine impacts. This method was used to estimate the “multiplier” effects caused by the activities being analyzed. Activity was then converted into tax revenues in each of the relevant categories.

3.1 Economic Impact Model 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 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 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 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 the economic or business activity.
- *Employment* is the total net new jobs created in the economy 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 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. 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 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. For example, the additional wages received by the direct manufacturing employees and the indirect supplier employees induce spending at grocery stores, gas stations, clothing stores, etc.

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 1970’s, 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 models employ this input-output model methodology and use area-specific IMPLAN multipliers.

3.2 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. Impacts can be used to estimate tax revenue impacts, for return on investment evaluations, and for cost-benefit calculations, among others.

Typically, fiscal impacts examine revenues that are likely to result from a proposed 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, hotel taxes, income taxes, and property taxes. The type of activities subject to these taxes include retail and restaurant sales, hotel lodging, leases, and construction, to name a few.

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 by construction expenditures or sales taxes from on-site retail sales; whereas 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 this analysis, primary revenues include all taxes collected within the Downtown Phoenix Redevelopment Area (RDA) as defined by DPI. These include revenues from Downtown retail, restaurant, and hotel sales; property taxes from property located in Downtown; and ticket sales from Downtown events; among others.

Secondary revenues include any additional taxes collected outside of the RDA that are generated as a result of RDA activity. These include the revenues generated by the household and business spending of Downtown businesses, employees and residents.

The RCG custom fiscal impact models employ this methodology. The models were designed to produce revenue information for the City of Phoenix, Maricopa County and the State of Arizona.

3.3 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 population added to area). Typical analyses involve the short-term (e.g. effects from construction of new buildings) 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 offsite construction employment and the other industries that support construction. In order to calculate construction impacts, the type, size, and costs associated with constructing the buildings or development under consideration are utilized.

Ongoing impacts typically analyze the long-term annual 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 are 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 and changing circumstances. However, RCG and DPI have made extensive efforts to confirm the accuracy of the information contained in this study. The inputs used to estimate the impacts related to construction and ongoing activity in Downtown Phoenix are displayed in Appendix D.



Section 4: Impacts from Ongoing Activity

4.1 Economic Impact of Downtown - Ongoing Activity

There are multiple drivers of economic activity in the Downtown area. The first is related to ongoing business activity. The Downtown area is home to a diverse mix of retail, restaurant, and general office activity. These businesses operate year-round and employ thousands of Arizonans. Downtown is also a center for innovation, biomedical research, and education. Arizona's three universities maintain a Downtown campus. The day-to-day operations of these businesses/facilities and their employees generate significant economic activity in the area.

Another source of economic activity is related to visitor and tourism spending. Downtown Phoenix is home to two of the metropolitan's premier professional sports facilities. Between Talking Stick Resort Arena and Chase Field, Downtown Phoenix hosted 245 events and 3.7 million visitors in 2017 according to DPI. The Phoenix Convention Center hosts nearly 60 events and more than 211,000 attendees per year (according to the Arizona Auditor General).

Downtown Phoenix is also home to significant arts and culture activities. The Phoenix Symphony calls the area home as does Comerica Theater, Roosevelt Row (which hosts First Friday, a nationally-recognized event), the Phoenix Art Museum, the Arizona Science Center, the Heard Museum, and the Children's Museum of Phoenix, to name a few.

The combination of these two main drivers of economic activity supports 66,083 employees in the Downtown area according to DPI and CoStar. The total income earned by these employees is \$3.9 billion. The economic output generated by Downtown activities aggregates to \$9.7 billion. The impacts from these direct effects create additional activity in the regional economy.

In addition to the direct jobs, an estimated 65,278 indirect and induced jobs are also supported throughout the local economy. These jobs extend beyond the Downtown Phoenix definition though. These secondary employees earn a combined \$3.4 billion in wages and generate \$9.4 billion in economic activity annually.

In total, 131,361 jobs, \$7.3 billion in wages and \$19.1 billion in economic activity is generated by Downtown activity. The following table displays these economic impacts.



**ONGOING ACTIVITY IMPACT
ECONOMIC IMPACT SUMMARY**

Ongoing Activity	Total
Direct	
Jobs	66,083
Wages	\$3,892,098,900
Economic Output	\$9,705,263,300
Indirect & Induced	
Jobs	65,278
Wages	\$3,359,976,600
Economic Output	\$9,411,432,700
Total	
Jobs	131,361
Wages	\$7,252,075,600
Economic Output	\$19,116,695,900

In 2017 dollars. May not sum to total due to rounding.
Source: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; Esri; CoStar; IMPLAN

4.2 Fiscal Impact of Downtown - Ongoing Activity

The economic activity described in the previous section is then converted into tax revenues collected by the City of Phoenix. Tax revenues collected by Maricopa County and the State of Arizona are summarized in Appendix A and B. City revenue categories are defined in Appendix C. The revenues generated by the Downtown ongoing activity are based on the 2017 levels of economic activity.

Approximately \$37.2 million in primary tax revenues are generated for the City of Phoenix by businesses and employees located in the Downtown area, residents who live in Downtown, and by visitor spending in Downtown. This includes revenues from taxes levied on: commercial and residential property, utility use, telecommunications use, leases, retail sales, food & drink sales, lodging, and ticket sales.

In addition to the primary revenues collected Downtown, the City of Phoenix collects another \$41.4 million from ongoing Downtown activity. This includes revenues from taxes levied on resident and employee purchases outside of Downtown, and the property taxes levied on the homes of those direct, indirect and induce employees living in Phoenix (but outside of Downtown).



In total, ongoing business and visitor activity in Downtown Phoenix generates approximately \$78.5 million in tax revenues for the City of Phoenix. The following table displays these fiscal impacts.

FISCAL IMPACT SUMMARY
FISCAL IMPACT SUMMARY - CITY OF PHOENIX

Ongoing Activity	Total
Primary Impact	\$37,153,700
Commercial Utility Sales Tax	\$1,309,300
Residential Utility Sales Tax	\$625,200
Commercial Telecommunications Tax	\$1,543,600
Residential Telecommunications Tax	\$715,900
Commercial Lease Tax	\$6,357,500
Residential Lease Tax	\$114,200
Retail, Restaurant, and Bar Sales Tax	\$10,121,600
Hotel/Motel Lodging Tax	\$7,409,100
Amusement Sales Tax	\$3,970,400
Commercial Property Tax	\$2,484,500
Residential Property Tax	\$1,251,500
State Shared Revenues	\$1,250,900
Secondary Direct Impact	\$21,674,000
Business Purchases - Retail Sales Tax	\$1,573,200
Employee Spending Sales Tax	\$4,800,700
Resident Spending Sales Tax	\$302,800
Employee Property Tax	\$7,895,800
State Shared Revenues	\$7,101,500
Secondary Indirect & Induced Impact	\$19,697,200
Employee Spending Sales Tax	\$7,858,700
Employee Property Tax	\$7,890,600
State Shared Revenues	\$3,947,900
Total Impact	\$78,524,900

In 2017 dollars. May not sum to total due to rounding.

Sources: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; City of Phoenix; Arizona Department of Revenue; Maricopa County Assessor's Office; CoStar; IMPLAN; STR, Inc.; U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. General Services Administration; Esri; Cromford Report; Zillow; and Colliers International; among others



4.3 Impact of “Crane” Activity

A healthier economy and recent aggressive economic development policies have provided a surge in momentum and there is significant new development under construction and in the pipeline. Currently there is roughly 5.5 million square feet of office, residential, retail, and hotel under construction or in pre-development.

This “crane” activity was modeled to provide additional perspective on how current activity could be impacted by future development. Once the 5.5 million square feet of commercial and residential space is completed, the annual economic output (direct, indirect, and induced) of Downtown will increase by \$835.7 million. About 6,060 additional jobs and \$354.4 million in additional wages will be supported by Downtown activity. In terms of revenues, the City would collect an additional \$5.9 million in annual primary and secondary revenues.



Section 5: Impacts from Construction

5.1 Economic Impact of Downtown – Construction (2008-2017)

Additional economic activity is generated when things are built. This also translates into tax revenues. For growing communities like the City of Phoenix, this becomes part of the economic base.

In recent years, Downtown Phoenix has realized renewed interest in office, education and research, arts, culture, sports, retail, residential, hospitality, and restaurants. Select statistics are provided below for perspective:

- **Retail:** Between January 2008 to December 2017, 192,100 square feet of retail space was constructed in Downtown Phoenix according to DPI and CoStar. The retail market consists of a diverse mix of local retail, shops, restaurants and bars. A reported 96 net new restaurants and bars have opened since 2008.
- **Office:** The Downtown Phoenix area has been the historic center of politics, finance, legal, and corporate or regional headquarters. A recent surge of investment in Downtown office space has led to 2.9 million square feet of office space to be constructional since 2008. A major driver of investment in office has been the education and research collaborations.
- **Hospitality:** Since 2008, over 2,300 hotel rooms have been added to the Downtown Phoenix area.
- **Residential:** Downtown Phoenix has experienced a renewed interest in high-density residential development. Recent development includes a mix of high/mid-rise apartments and condominiums. Since January 2008, approximately 3,000 housing units have been added to the identified Downtown market.

Between January 2008 and December 2017, 6.2 million square feet of office, retail, restaurant, residential and hotel space was built in the Downtown area according to DPI and CoStar. This construction supported an estimated 4,784 direct construction jobs earning a combined \$342.4 million in wages. The economic output supported by this construction totaled \$767.2 million.

These direct impacts supported an additional 3,893 indirect and induced jobs with wages of \$205.4 million and producing \$570.5 million in economic activity. A total of 8,677 jobs, \$547.8 million in combined wages, and \$1.3 billion in economic output was generated by Downtown construction over the ten-year period.

The following table displays these economic impacts.



**CONSTRUCTION IMPACT
ECONOMIC IMPACT SUMMARY**

Construction	Office	Retail	Hotel	Residential	Total
Direct					
Jobs	2,581	145	568	1,490	4,784
Wages	\$184,727,000	\$10,366,000	\$40,670,500	\$106,638,300	\$342,401,800
Economic Output	\$413,927,300	\$23,227,600	\$91,132,500	\$238,950,000	\$767,237,400
Indirect & Induced					
Jobs	2,100	118	462	1,213	3,893
Wages	\$110,790,900	\$6,217,100	\$24,392,300	\$63,956,900	\$205,357,200
Economic Output	\$307,779,700	\$17,271,100	\$67,762,500	\$177,673,700	\$570,487,000
Total					
Jobs	4,681	263	1,030	2,703	8,677
Wages	\$295,517,900	\$16,583,100	\$65,062,900	\$170,595,200	\$547,759,100
Economic Output	\$721,707,000	\$40,498,800	\$158,895,000	\$416,623,600	\$1,337,724,400

In 2017 dollars. May not sum to total due to rounding.

Source: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; CoStar; MAG; IMPLAN

5.2 Fiscal Impact of Downtown – Construction (2008-2017)

From 2008 to 2017, construction activity totaled 6.2 million square feet of office, retail, hotel, and residential space, according to DPI and CoStar. This generated an estimated \$11.8 million in primary revenues for the City of Phoenix. These revenues were directly generated by construction expenditures.

Direct secondary revenues (generated from the wages, spending, and residency of the direct construction employees) totaled \$2.8 million over the construction period. An additional \$1.4 million was generated by the indirect and induced employees supported by Downtown construction activity.

In total, \$16.1 million in tax revenues were generated for the City of Phoenix. The following table displays these fiscal impacts.



CONSTRUCTION IMPACT
FISCAL IMPACT SUMMARY - CITY OF PHOENIX

Construction	Office	Retail	Hotel	Residential	Total
Primary Impact	\$6,382,000	\$358,200	\$1,405,100	\$3,684,200	\$11,829,500
Construction Sales Tax	\$6,188,200	\$347,300	\$1,362,400	\$3,572,300	\$11,470,200
State Shared Revenues	\$193,800	\$10,900	\$42,700	\$111,900	\$359,300
Secondary Impact from Direct Employees	\$1,450,000	\$87,300	\$342,500	\$898,100	\$2,777,900
Employee Spending Sales Tax	\$386,500	\$26,900	\$105,400	\$276,500	\$795,300
Residential Property Tax	\$312,000	\$17,500	\$68,700	\$180,100	\$578,300
State Shared Revenues	\$751,500	\$42,900	\$168,400	\$441,500	\$1,404,300
Secondary Impact from Indirect & Induced Employees	\$788,701	\$44,248	\$173,600	\$455,271	\$1,461,820
Employee Spending Sales Tax	\$256,800	\$14,400	\$56,500	\$148,200	\$475,900
Residents Property Tax	\$253,901	\$14,248	\$55,900	\$146,571	\$470,620
State Shared Revenues	\$278,000	\$15,600	\$61,200	\$160,500	\$515,300
Total Impact from Construction	\$8,620,701	\$489,748	\$1,921,200	\$5,037,571	\$16,069,220

In 2017 dollars. May not sum to total due to rounding.

Sources: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; City of Phoenix; Arizona Department of Revenue; Maricopa County Assessor's Office; CoStar; IMPLAN; STR, Inc.; U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. General Services Administration; Esri; Cromford Report; Zillow; and Colliers International; among others



Appendix A: State Fiscal Impacts – Ongoing Activity

ONGOING ACTIVITY FISCAL IMPACT SUMMARY - STATE OF ARIZONA

Ongoing Activity	Total
Primary Impact	\$114,703,700
Commercial Utility Sales Tax	\$2,398,200
Residential Utility Sales Tax	\$1,144,900
Commercial Telecommunications Tax	\$1,408,900
Residential Telecommunications Tax	\$653,400
Commercial Lease Tax	-
Residential Lease Tax	-
Retail, Restaurant, and Bar Sales Tax	\$18,878,100
Hotel/Motel Lodging Tax	\$5,399,200
Amusement Sales Tax	\$7,405,400
Commercial Property Tax	\$576,300
Residential Property Tax	\$290,300
Employee Income Tax	\$64,059,300
Unemployment Insurance Tax	\$12,489,700
Secondary Direct Impact	\$37,259,300
Business Purchases - Retail Sales Tax	\$3,260,100
Employee Spending Sales Tax	\$28,632,100
Resident Spending Sales Tax	\$1,072,900
Employee Property Tax	\$4,294,200
Secondary Indirect & Induced Impact	\$131,774,300
Employee Spending Sales Tax	\$33,851,800
Residential Property Tax	\$4,263,400
Employee Income Tax	\$81,321,700
Unemployment Insurance Tax	\$12,337,400
Total Impact from Operations	\$283,737,300

In 2017 dollars. May not sum to total due to rounding.

Sources: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; City of Phoenix; Arizona Department of Revenue; Maricopa County Assessor's Office; CoStar; IMPLAN; STR, Inc.; U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. General Services Administration; Esri; Cromford Report; Zillow; and Colliers International; among others



Appendix B: County Fiscal Impacts – Ongoing Activity

ONGOING ACTIVITY FISCAL IMPACT SUMMARY - MARICOPA COUNTY

Ongoing Activity	Total
Primary Impact	\$15,875,100
Commercial Utility Sales Tax	\$339,400
Residential Utility Sales Tax	\$162,100
Commercial Telecommunications Tax	\$229,900
Residential Telecommunications Tax	\$106,600
Commercial Lease Tax	\$1,324,500
Residential Lease Tax	-
Retail, Restaurant, and Bar Sales Tax	\$3,080,500
Hotel/Motel Lodging Tax	\$2,474,300
Amusement Sales Tax	\$1,208,400
Commercial Property Tax	\$1,611,400
Residential Property Tax	\$811,700
State Shared Revenues	\$4,526,300
Secondary Direct Impact	\$24,429,000
Business Purchases - Retail Sales Tax	\$531,900
Employee Spending Sales Tax	\$2,970,000
Resident Spending Sales Tax	\$147,400
Employee Property Tax	\$11,850,600
State Shared Revenues	\$8,929,100
Secondary Indirect & Induced Impact	\$25,924,200
Employee Spending Sales Tax	\$4,805,700
Employee Property Tax	\$11,773,900
State Shared Revenues	\$9,344,600
Total Impact from Operations	\$66,228,300

In 2017 dollars. May not sum to total due to rounding.

Sources: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; City of Phoenix; Arizona Department of Revenue; Maricopa County; Maricopa County Assessor's Office; CoStar; IMPLAN; STR, Inc.; U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. General Services Administration; Esri; Cromford Report; Zillow; and Colliers International; among others



Appendix C: City Fiscal Impact Detailed Definitions

Primary Revenues:

1. Commercial Utility Sales Tax (2.7%)
 - Revenues collected from electricity, gas, and water use of occupied commercial buildings located in Downtown Phoenix.
 - Based on average utility expenditures per square foot.
2. Residential Utility Sales Tax (2.7%)
 - Revenues collected from electricity, gas, and water use of occupied residential buildings located in Downtown Phoenix.
 - Based on average utility expenditures per household.
3. Commercial Telecommunications Sales Tax (4.7%)
 - Revenues collected from telecommunications use of companies located in Downtown Phoenix.
 - Based on average telecommunications expenditures per employee.
4. Residential Telecommunications Sales Tax (4.7%)
 - Revenues collected from telecommunications use of households living in Downtown Phoenix.
 - Based on average telecommunications expenditures per household.
5. Commercial Lease Tax (2.4%)
 - Revenues collected from leased commercial real estate in Downtown Phoenix.
 - Based on average lease rates for private occupied office, retail, and restaurant buildings.
6. Residential Lease Tax (2.3%)
 - Revenues collected from leased residential real estate in Downtown Phoenix.
 - Based on average lease rates for occupied rental units.
7. Retail, Restaurant, and Bar Sales Tax (2.3%)
 - Revenues collected from all retail, restaurant, and bar sales in Downtown Phoenix.
 - Based on average sales per square foot.
 - Includes sales generated by employees and residents of Downtown, and sales generated by visitors to Downtown.
8. Hotel/Motel Lodging Tax (5.3%)
 - Revenues collected from lodging at public and private hotels and motels in Downtown Phoenix.
 - Based on available rooms, occupancy rates, and average daily rates.



9. Amusement Sales Tax (2.3%)
 - Revenues collected from ticket sales for admissions to exhibitions, concerts, plays, sporting events, etc. in Downtown Phoenix.
 - Based on number of events, attendance, and average ticket prices.
10. Commercial Property Tax (2.1600)
 - Revenues collected from commercial real estate (excludes all government, exempt, and GPLET property) located in Downtown Phoenix.
 - Based on square footage, commercial assessment ratios, and average property values.
11. Residential Property Tax (2.1600)
 - Revenues collected from residential real estate (excludes all exempt and GPLET property) located in Downtown Phoenix.
 - Based on total square footage, the residential assessment ratio, and average property values.
12. State Shared Revenues from Primary Revenues
 - State Shared Revenues are distributed to cities and counties primarily based on their population and include income taxes, sales taxes, HURF monies, and VLT monies.

Secondary Revenues:

1. Business Purchases – Retail Sales Tax (2.3%)
 - Revenues generated from the purchases (i.e. supplies) of Downtown businesses outside of the Downtown area, but within the City of Phoenix.
 - Based on industry standards for average business expenditures per employee.
2. Employee Spending Sales Tax (2.3%)
 - Revenues generated from spending of those direct, indirect, and induced employees spending outside of Downtown, but within the City.
 - Based on incomes of employees and average expenditures.
3. Resident Spending Sales Tax (2.3%)
 - Revenues generated from the spending of Downtown residents outside of Downtown but within the City.
 - Based on incomes of residents and average household expenditures.
4. Employee Property Tax (2.1600)
 - Revenues generated from real estate property owned/rented outside of Downtown (but within the City) by those direct, indirect, and induced employees.
 - Based on incomes of employees and home values.
5. State Shared Revenues from Secondary Revenues
 - State shared revenues are distributed to cities and counties primarily based on their population and include income taxes, sales taxes, HURF monies, and VLT monies.



Appendix D: Primary Model Assumptions

The following inputs were used for to estimate the impacts related to construction and ongoing activity in Downtown Phoenix.

ONGOING ACTIVITY MODEL ASSUMPTIONS					
	Total Square Feet	Total Units / Hotel Rooms	Occupancy Rate	Taxable Sales per sq. ft.	Lease Rate / Hotel ADR
Office	14,257,153	-	87.7%	-	\$29.68
Retail	1,230,504	-	88.5%	\$404	\$30.82
Hotel	-	3,847	68.5%	-	\$163.98
Residential	-	6,473	92.1%	-	\$959.88
	Total	Average Wage	Employed and Living in the City of Phoenix		
Employment	66,083	\$58,900	43.3%		

CONSTRUCTION IMPACT MODEL ASSUMPTIONS			
	Total Square Feet Built	Total Units / Hotel Rooms	Construction Cost
Office	2,887,100	-	\$413,927,300
Retail	192,100	-	\$23,227,600
Hotel	762,800	2,347	\$91,132,500
Residential	2,400,000	3,000	\$238,950,000
Total	6,242,000	5,347	\$767,237,400

Note: Office space includes private and public space. Retail includes restaurant, bar, and retail space. Residential includes for rent and for sale units.

Source: Rounds Consulting Group, Inc.; Downtown Phoenix Inc; City of Phoenix; CoStar; STR, Inc.; Colliers International; IMPLAN; and U.S. Census Bureau