

# SALT LAKE CITY INTERNATIONAL AIRPORT AIRPORT REDEVELOPMENT PROGRAM

## ECONOMIC IMPACT ANALYSIS

September 2018



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## I. INTRODUCTION

TABLE 1: TERMINAL REDEVELOPMENT PROGRAM ANALYSIS VS AIRPORT REDEVELOPMENT PROGRAM ANALYSIS

	TERMINAL REDEVELOPMENT PROGRAM (TRP) ECONOMIC IMPACT ANALYSIS (EIA)	AIRPORT REDEVELOPMENT PROGRAM (ARP) ECONOMIC IMPACT ANALYSIS (EIA)
Project Analysis Description	Economic impact of the TRP - the impact of the expenditures made by the Airport on facility updates (from 2013 to 2024) before the addition of the North Concourse to the program.  Based on estimated costs and construction schedules.	Economic impact of the ARP - the impact of the expenditures made by the Airport on facility updates (from 2013 to 2025) with the addition of the North Concourse to the program.  Based on actual costs and schedules to date and estimates for future costs and schedules.
Analysis Year	2012-2013	2017-2018
Total Expenditure	\$1.6 billion Total (including soft costs)	\$3.6 billion Total (including soft costs) \$2.9 billion in Hard Costs
Total Impact	\$3.02 billion	\$5.5 billion
Annual Job Impact	1,993	3,319

The Salt Lake City International Airport was built in the 1960s to serve approximately 10 million passengers. With the increase in passenger growth, the addition of a hub airline and aging, obsolete facilities, the Salt Lake City Department of Airports began assessing whether to expand, renovate or rebuild. The decision was made to rebuild in the late 1990s.

The project—originally named the Terminal Redevelopment Program (TRP)—broke ground in 2014. In May 2016, the decision was made to add the North Concourse to the program. The project then became known as the Airport Redevelopment Program (ARP). The ARP will update the facility to accommodate the more than 24 million passengers currently served and to address new safety and security needs. The new facility will also meet industry standards for seismic safety.

The first phase of the ARP will be operational and open to passengers in late 2020, while the second phase of the project will be completed in 2023/24. Total estimated cost for the project is \$3.6 billion, with soft costs, and includes the following:

- 3,000 space economy parking lot
- Rental car service facility
- Parking garage
- Central Terminal
- South Concourse (Concourse A)
- North Concourse (Concourse B)
- Tunnels (mid-concourse tunnel and central tunnel)
- Elevated Roadway (Separate levels to drop-off and pick-up passengers)

An analysis of the economic impact of the TRP was completed in 2013 as part of a broader analysis of the impact of passenger services at the airport. The 2013 analysis was based on estimated costs and construction schedules. The new facility has now passed the half-way point. This updated analysis is based on actual costs and schedules to date as well as the addition of the North Concourse.

## STATE OF THE UTAH ECONOMY AND SALT LAKE CITY INTERNATIONAL AIRPORT'S ROLE

According to the 2018 Economic Report to the Governor, from the Utah Economic Council, the state of the 2018 Utah economy is healthy. There was expansion in every industrial sector in 2017 and Utah saw an annual employment growth of 3.1 percent from 2016 to 2017. The national annual job growth for the same period was 1.5 percent. The strongest sectors for employment growth in Utah are Construction, at 5.4 percent, and Leisure & Hospitality, at 5.1 percent. Professional & Business Services follows closely at 4.2 percent <sup>1</sup>. The construction growth may be brought on by strong residential growth seen in many municipalities throughout the state. The Kem C. Gardner Policy Institute reported an annual rate of population change of 1.31 percent in the state of Utah in 2013, or 37,434 people, while in 2017 the annual rate of change was 1.93 percent, or 59,045 people. Utah has the third fastest population growth in the nation. This population change, in part due to net in-migration, is also heavily influenced by natural increase (births minus deaths). In 2017, 54 percent of new growth in Utah was due to natural increase.

Retail sales in Utah increased by 7.8 percent in 2017 and housing prices rose by 8.4 percent. Consumer confidence mirrors this growth. Consumer optimism can also be traced to strong job and wage growth in the state. The strong job growth seen in 2017 is paired with a very low unemployment rate of 3.5 percent. This unemployment rate corresponds to a labor shortage in the state, pushing wage growth upward. Due to indicators like these, the Gardner Institute forecasts another year of growth for the Utah economy in 2018.

The airport plays an important role in supporting business and economic growth in the state. Its operations are a key component in providing affordable access to worldwide destinations for business and individuals. To that end, improved operations of the airport will offer more efficient access to global markets and an opportunity to continue to add value to Utah's economy by strengthening the ties of local institutions to their global peers (such as universities, hospitals, the arts, etc.), sustaining existing business, providing access to new business opportunities outside of the state and attracting new business to the state. Further, tourism benefits from improved air access in an increasingly competitive industry. As estimated in this report, the 13-year impact of new construction for the Airport Redevelopment Program, increasing visitor capacity as well as convenience and sustainability, is estimated at \$5.5 billion total output to the economy of Utah and 3,300 annual jobs during the life of the project. The vastly more important contribution of airport services to business location, success and expansion—though difficult to measure—puts the airport at the center of successful growth for the state of Utah.

## PAST STUDIES OF THE AIRPORT'S ECONOMIC IMPACT

Several previous studies set the stage for the current analysis of statewide economic impacts of the Salt Lake City International Airport. They include two studies specific to the economic impacts of the facility and a more recent report that considers the economic impact of the air system in Utah in its entirety. In 2013, GSBS Consulting completed the TRP Economic Impact Analysis for the Airport. The current study updates the assumptions made in the original report and incorporates the addition of the North Concourse. Consistency with previous studies allows comparison of impacts over time. Reference Appendix C for a description of each past study.

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<sup>1</sup> 2018 Economic Report to the Governor, Utah Economic Council

## II. METHODOLOGY AND FINDINGS

The IMPLAN<sup>®</sup> model was used to estimate overall statewide economic ARP impact for 2013 through 2025. IMPLAN<sup>®</sup> is an economic impact modeling system that measures the economic benefit of new investment on local and regional economies.

Inputs to the model were actual and projected expenditures for ARP construction. Statewide impact was chosen as the unit of analysis due to the large scale and radius of economic influence of the Salt Lake City International Airport. Annual impacts of each subproject of the ARP are broken out and discussed by impact type. The benefits are measured using a complex set of matrices that reflect the interrelations of economic activities in a community and are derived from data provided by the Census Bureau, Bureau of Labor Statistics, and the Bureau of Economic Analysis. The multipliers will vary depending on the spending activities and industrial sectors involved. The multipliers and relationships are regionally and industry-type specific, so the impact of \$1 million in new investment in Utah is different from the impact of \$1 million in another state. IMPLAN<sup>®</sup> estimates three different types of benefits: direct, indirect and induced.

**DIRECT:** Direct benefits are the expenditures made within the local economy from ARP activities.

**INDIRECT:** Indirect benefits include purchased goods and services from the other local industries. The impacts are calculated on the multiplier relationships between industrial classifications. The effects are payments made by the project to other business entities that are then used to pay employee wages, owner income and sales and property taxes to local and state jurisdictions.

**INDUCED:** Induced revenue benefits are generated by the expenditure of payments and salaries by individuals in the state of Utah.

### NOTE ON TERMINOLOGY:

*“Payroll”* is all forms of employee compensation, including wages and proprietor income. *“Contribution to GDP”* is gross receipts or operating income minus intermediate inputs such as goods and services purchased from other industries or imported. Contribution to GDP includes compensation, taxes, and operating surplus. *“Output”* represents the value of production. For manufactures, this is sales plus/minus inventory change. For service sectors, output is sales and for retail and wholesale trade output equals gross margin, not gross sales. For the Salt Lake City International Airport, output is the value of the infusion of new funds into the economy less locally subcontracted and purchased services and resources. The locally purchased services and resources are measured in other categories.

### DATA SOURCES

Airport construction expenditure data by project by year was provided by the Salt Lake City Airport Finance Department. These data are:

- Actual Expenditures 2013-2017, and
- Budgeted Expenditures 2018-2025.

### AIRPORT REDEVELOPMENT PROGRAM

The ARP will replace airport facilities that are 50 years old, require extensive maintenance, are not energy efficient, fail to meet current seismic standards, and do not provide current airline industry standard levels of service. The redevelopment will provide a consolidated terminal with 78 gates—6 international gates, a South Concourse with 47 new gates and a North Concourse with 31 available to expand to 46 <sup>2</sup>. The concourses will be connected by the Mid-Concourse tunnel until phase two opens, after which the Central Tunnel will be the connector, and parallel taxi lanes will connect runways.

<sup>2</sup> Salt Lake City International Airport Redevelopment Program, January 2018 Update



New features include separate arrival and departure levels, a parking garage with 3,600 public parking stalls, one central terminal and security checkpoint, and a UTAH Airport TRAX line adjacent to the terminal entrance. A Rental Car Service (RSS) and Quick Turn Around (QTA) Facility are also a part of the ARP project <sup>3</sup>. Prior to opening, the South Concourse will be renamed Concourse A and the North Concourse will be renamed Concourse B.

**IMPACT OF AIRPORT REDEVELOPMENT PROGRAM**

This analysis is an assessment of how ARP expenditures circulate in the local economy, stimulating spending and supporting full time jobs. The induced and indirect effects are estimated using IMPLAN© for the project period of 2013 to 2025. This report provides a broad estimation of the impacts of ARP construction spending on the economy of the state of Utah.

Although the overall cost of the ARP is estimated at \$3.6 billion, including soft costs; this study focuses on the impact of the \$2.9 billion in hard costs only. Soft costs consist of general conditions, pre-construction services, A&E (architectural and engineering services), project management, art, owner material testing, professional services and other miscellaneous costs. They are excluded from this study due to insufficient detail on the breakdown of expenditures. This prevents any double counting and ensures a very conservative impact estimate.

Impacts specific to the ARP address activity directly associated with airport construction for the new SLC International Airport. This analysis focuses on the induced and indirect effects of ARP spending. For a description of Induced and Indirect effects see the call-out box above.

As seen in Table 2, the overall direct construction expenditures for the ARP result in an annualized effect on local related production and service sectors (Indirect Effect) of \$77 million. The Induced Effect, the effect of households spending a portion of the income earned from spending on this project, and further iterations of production spending, is over \$120 million annually.

Although the economic contribution identified in this report (and prior reports) is significant, it is only a portion of the overall economic benefit of the airport. A successful airport is a region's primary means of competing in a global economy through travel, provision of services and transport of high value goods. This report does not attempt to quantify the economic benefit and importance to local businesses resulting from access to airport passenger and cargo services or to identify the businesses and sectors that would not be present in our statewide economy if the airport was not available.

Table 2 identifies the annualized estimated impact of the ARP assuming that the impact is evenly distributed over the 13-year period of the project.

TABLE 2: ANNUALIZED ARP IMPACT

IMPACT TYPE	FULL-TIME JOBS	PAYROLL	CONTRIBUTE TO GDP	OUTPUT
Direct Effect	2,001	\$106,229,000	\$156,428,000	\$223,959,000
Indirect Effect	433	\$23,155,000	\$37,805,000	\$77,123,000
Induced Effect	885	\$35,697,000	\$67,355,000	\$120,691,000
Total Effect	3,319	\$165,081,000	\$261,588,000	\$421,773,000

Annually, the ARP will support an estimated 3,319 full time jobs with \$165 million in wages and income; \$261 million value contributed to the GDP; and \$421.8 million in total economic output.

<sup>3</sup> The New SLC Airport Redevelopment Program Fact Sheet.

## DIRECT, INDIRECT AND INDUCED IMPACTS OF THE AIRPORT REDEVELOPMENT PROGRAM

*DIRECT*

Direct benefits are the expenditures made within the local economy from a new activity. The Direct Effect row in Table 2 shows that, when annualized, approximately 2,000 jobs will be supported in direct relation to the ARP. The direct benefit from ARP spending on all projects is \$106 million in payroll annually and \$156.4 million annual contribution to GDP. The annual direct output, or the airport's average direct spending on the ARP by year, is roughly \$224 million. To see the annual direct impact of each ARP sub-project, reference Appendix B.

*INDIRECT*

Indirect effects result from purchasing goods and services from other local industries in order to support direct ARP activities. Table 2 shows 433 full-time jobs are indirectly created and supported annually in local industries that contribute to ARP construction activities. Indirect total annual labor income is over \$23 million and the indirect output total annual impact on the local economy is more than \$77 million.

These impacts are calculated based on the multiplier relationships between industrial classifications. The effects are payments made by the project to other business entities that are then used to pay employee wages, owner income and sales and property taxes to local and state jurisdictions. Benefits will be felt throughout the state of Utah depending on where various purchases are made. The likely impacts from operations and capital spending are limited to the Greater Wasatch Front (Davis, Salt Lake, Summit, Tooele, Utah and Weber counties). Reference Appendix B to see this annual indirect impact broken down by sub-project.

*INDUCED*

Induced benefits measure the economy-wide impact of spending in a region generated by the expenditure of payments and salaries by individuals working in indirectly impacted industries. Table 2 provides the annualized induced economic impacts of the ARP for the period 2013-2025. This measure recognizes that employee compensation and income recirculate through the regional economy and creates additional value.

An estimated 885 jobs are supported in industries where direct and indirect workers buy goods and services locally. These induced workers will earn approximately \$35,700,000 annually over the life of the project. The total annual induced output from the ARP is \$120.7 million. ARP sub-project induced impacts are fully covered in Appendix B.

*INDIRECT AND INDUCED*

Table 3 combines indirect and induced impacts to demonstrate the total additional average yearly impact of ARP expenditures (Direct Effects) on the Utah economy. The average yearly ARP expenditure of close to \$224 million generates an additional estimated \$198 million of annual economic output.

TABLE 3: ARP ANNUAL AVERAGE IMPACT BY YEAR

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTE TO GDP	OUTPUT
Indirect Effect	433	\$23,155,000	\$37,805,000	\$77,123,000
Induced Effect	885	\$35,697,000	\$67,355,000	\$120,691,000
Total Effect	1,318	\$58,852,000	\$105,160,000	\$197,814,000

TABLE 4: ARP TOTAL INDUCED AND INDIRECT IMPACT 2013-2025

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTE TO GDP	OUTPUT
Indirect Effect	5,630	\$301,009,000	\$491,468,000	\$1,002,594,000
Induced Effect	11,510	\$464,067,000	\$875,619,000	\$1,568,980,000
Total Effect	17,140	\$765,076,000	\$1,367,087,000	\$2,571,574,000

Table 4 is the ARP total Induced and Indirect impacts from 2013 to 2025.

TABLE 5: TOTAL IMPACT AIRPORT REDEVELOPMENT PROGRAM 2013-2025

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTE TO GDP	OUTPUT
Direct Effect	26,008	\$1,380,971,000	\$2,033,559,000	\$2,911,471,000
Indirect Effect	5,630	\$301,009,000	\$491,468,000	\$1,002,594,000
Induced Effect	11,510	\$464,067,000	\$875,619,000	\$1,568,980,000
Total Effect	43,148	\$2,146,048,000	\$3,400,647,000	\$5,483,045,000

The infusion of \$2.9 billion in hard costs for the ARP is estimated to result in 17,140 additional jobs, more than \$765 million in payroll, a \$1.37 billion contribution to GDP and \$2.57 billion in output over the life of the project.

Table 5 identifies all impacts resulting from the ARP over the duration of the project. Direct impacts of construction during the redevelopment program include over 26,000 full-time jobs, nearly \$1.4 billion in payroll, with approximately \$2 billion in contribution to state GDP. When induced and indirect effects are included, total economic output is \$5.4 billion for the 13-year period, almost \$2.6 billion in additional economic output.

For every dollar spent for the ARP, an additional 0.88 dollars are generated in the economy as a result of the indirect and induced effects of the original expenditure.

#### ESTIMATED BENEFIT BY INDUSTRY

Implan© estimates the benefit to specific industry types based on the multiplier relationship between the type of new spending and the structure of the specific regional economy. For instance, a new investment through construction will impact the economy in a different way than new investment through additional manufacturing production. Table 6 identifies the economic sectors within the State of Utah with the highest impacts by employment from the ARP.

TABLE 6: TOP TEN INDUSTRIES IMPACTED STATEWIDE BY EMPLOYMENT

INDUSTRY
Construction of other new nonresidential structures
Construction of new commercial structures, including farm structures
Real estate
Limited-service restaurants
Wholesale trade
Hospitals
Full-service restaurants
Retail - General merchandise stores
Offices of physicians
Retail - Food and beverage stores

Source: Implan

TABLE 7: TOP TEN INDUSTRIES IMPACTED STATEWIDE BY TOTAL OUTPUT

**INDUSTRY**

Construction of other new nonresidential structures  
 Construction of new commercial structures, including farm structures  
 Owner-occupied dwellings  
 Real estate  
 Wholesale trade  
 Hospitals  
 Monetary authorities and depository credit intermediation  
 Limited-service restaurants  
 Petroleum refineries

*Source: Implan*

Table 7 lists the top ten industries impacted by total output from the ARP.

### III. CONCLUSIONS AND IMPLICATIONS

The Salt Lake City International Airport has been an economic catalyst for decades. It has generated opportunity for individuals and businesses throughout the state. Historically, studies have focused on the economic impact from the Department of Airports overall operations, the operations of on-airport tenants and business and leisure visitors arriving in the area through the airport.

This analysis has focused on quantifying the economic impact that the ARP will and does have on the state of Utah. The ARP will result in a significant economic benefit of nearly \$5.5 billion in addition to providing a state-of-the-art facility to the state of Utah. It is important to note, as well, that all expenditures for the ARP are being paid for entirely by airport cash, federal grants, passenger facility charges, rental car user fees, and airport revenue bonds.

It is not easy to quantify the vital impact of the business environment resulting from the presence of the airport. Many businesses would not be located in the state if the Salt Lake City International Airport did not provide opportunity to move customers, business partners, products, and materials between Utah and the rest of the world. The ARP will help maintain Utah's current competitive position for attracting and retaining business and investment in a highly competitive environment.

## APPENDIX A

Project Title	IMPLAN CODE	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Airfield Projects	58				\$3,912,635.00	\$13,460,679.00	\$27,171,472.77	\$58,750,398.00
Hydrant Fueling System	58				\$1,925,557.86	\$10,000.00	\$385,000.00	\$6,543,422.00
Terminal	58				\$13,046,912.79	\$81,570,667.85	\$106,932,211.72	\$133,113,145.38
South Concourse West	58				\$898,940.00	\$8,650,477.60	\$100,569,483.72	\$75,888,263.54
South Concourse East	58				\$328,443.00	\$1,617,038.00	\$2,363,459.75	\$5,000,000.00
North Concourse Ph I	58						\$5,000,000.00	\$275,000,000.00
North Concourse Ph II	58							
Mid Concourse Tunnel	58				\$3,150,237.99	\$1,906,971.00	\$2,493,706.00	\$8,048,238.92
Central Tunnel	58							
Connectors	58					\$157,255.00	\$141,470.00	\$5,000,000.00
Baggage Handling System	57					\$3,287,161.00	\$17,735,445.00	\$50,000,000.00
Central Utility Plant	54				\$1,303,154.09	\$7,970,717.00	\$29,804,239.68	\$18,096,801.00
Hydrant Fuel Remediation	58				\$188,277.00			
Gateway (50%)	57				\$43,129.00	\$2,388,588.00	\$7,423,899.00	\$15,000,000.00
Parking Garage	57				\$2,964,090.00	\$20,542,254.31	\$50,000,000.00	\$50,000,000.00
Eco Lot	57					\$29,375.00	\$17,411.00	
Park & Wait Lot	57				\$371,932.00	\$4,519,690.00		
C-Store Utilities	54				\$150.00	\$10,147.00		
Terminal Roadways	58				\$217,840.64	\$5,165,149.67	\$26,999,396.00	\$25,000,000.00
Parking Roadways	57					\$104,524.13	\$85,485.00	\$1,500,000.00
Quick Turn Around	57		\$23,848,019.60	\$20,999,714.00	\$3,891,729.00			
RSS (Rental Car Service Buildings)	57		\$12,301,508.68	\$10,832,269.00	\$2,007,468.00			
Gateway (50%)	57				\$43,129.00	\$2,388,588.00	\$7,423,899.00	\$15,000,000.00
RAC (Rent A Car) Fuel Remediation	58			\$411,955.00	\$215,731.27	\$403,913.54		
RAC Roadways	58					\$180,476.00	\$3,214,223.00	
South Parking Lot	57	\$360,949.97	\$5,764,089.72	\$5,655,336.31				
<b>TOTALS</b>		<b>\$360,949.97</b>	<b>\$41,913,618.00</b>	<b>\$37,899,274.31</b>	<b>\$34,509,356.64</b>	<b>\$154,363,672.10</b>	<b>\$387,760,801.64</b>	<b>\$741,940,268.85</b>

Project Title	IMPLAN CODE	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Airfield Projects	58	58,750,398.00	58,750,398.00	58,750,398.00	58,750,398.00	58,750,402.00	
Hydrant Fueling System	58	6,543,422.00	6,543,422.00	6,543,422.00	6,543,422.00	3,271,711.00	
Terminal	58	133,113,145.00	22,185,525.00				
South Concourse West	58	75,888,264.00	12,648,043.00				
South Concourse East	58	5,000,000.00	50,000,000.00	105,051,000.00	105,051,000.00	105,051,000.00	26,262,766.00
North Concourse Ph I	58	78,899,367.00					
North Concourse Ph II	58		1,000,000.00	75,000,000.00	100,000,000.00	36,535,351.00	
Mid Concourse Tunnel	58	8,048,239.00	1,341,373.00				
Central Tunnel	58		7,000,000.00	13,000,000.00	13,000,000.00	4,184,117.00	
Connectors	58	5,000,000.00	1,975,489.00				
Baggage Handling System	57	50,000,000.00	5,000,000.00	10,000,000.00	20,000,000.00	155,343.00	
Central Utility Plant	54						
Hydrant Fuel Remediation	58						
Gateway (50%)	57	20,000,000.00	1,778,315.00				
Parking Garage	57	40,000,000.00	2,641,493.00				
Eco Lot	57	1,315,680.00					
Park & Wait Lot	57						
C-Store Utilities	54						
Terminal Roadways	58	25,000,000.00	4,567,167.00				
Parking Roadways	57	1,500,000.00	554,261.00				
Quick Turn Around	57						
RSS (Rental Car Service Buildings)	57						
Gateway (50%)	57	20,000,000.00	1,778,315.00				
RAC (Rent A Car) Fuel Remediation	58						
RAC Roadways	58						
South Parking Lot	57						
<b>TOTALS</b>		<b>529,058,515.00</b>	<b>177,763,801.00</b>	<b>268,344,820.00</b>	<b>303,344,820.00</b>	<b>207,947,924.00</b>	<b>26,262,766.00</b>

## APPENDIX B

TABLE 8: TOTAL ESTIMATED ANNUAL DIRECT SPENDING FROM ALL PROJECTS

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airfield Projects	215	\$11,564,000	\$17,208,000	\$30,542,000
Hydrant Fueling System	21	\$1,115,000	\$1,659,000	\$2,947,000
Terminal	266	\$14,271,000	\$21,234,000	\$37,689,000
South Concourse West	149	\$8,009,000	\$11,899,000	\$21,119,000
South Concourse East	220	\$11,817,000	\$17,584,000	\$31,210,000
North Concourse Ph I	195	\$10,453,000	\$15,554,000	\$27,608,000
North Concourse Ph II	115	\$6,190,000	\$9,211,000	\$16,349,000
Mid Concourse Tunnel	26	\$1,372,000	\$2,040,000	\$1,922,000
Central Tunnel	20	\$1,083,000	\$1,612,000	\$2,860,000
Connectors	7	\$357,000	\$532,000	\$944,000
Baggage Handling System	89	\$4,570,000	\$6,475,000	\$12,014,000
Central Utility Plant	30	\$1,676,000	\$2,904,000	\$4,398,000
Hydrant Fuel Remediation	0	\$5,000	\$8,000	\$14,000
Gateway (50%)	68	\$3,475,000	\$4,924,000	\$3,587,000
Parking Garage	314	\$16,118,000	\$22,836,000	\$12,781,000
Eco Lot	1	\$42,000	\$59,000	\$105,000
Park & Wait Lot	3	\$150,000	\$212,000	\$376,000
C-Store Utilities	0	\$300	\$500	\$800
Terminal Roadways	180	\$9,667,000	\$14,384,000	\$6,688,000
Parking Roadways	2	\$115,000	\$163,000	\$288,000
Quick Turn Around	29	\$1,493,000	\$2,115,000	\$3,749,000
RSS (Rental Car Service Buildings)	15	\$770,000	\$1,091,000	\$1,934,000
RAC Gateway (50%)	28	\$1,429,000	\$2,024,000	\$3,587,000
RAC (Rent A Car) Fuel Remediation	1	\$30,000	\$45,000	\$79,000
RAC Roadways	2	\$99,000	\$147,000	\$261,000
South Parking Lot	7	\$358,000	\$507,000	\$906,000
<b>TOTAL ANNUAL</b>	<b>2,001</b>	<b>\$106,229,000</b>	<b>\$156,428,000</b>	<b>\$223,959,000</b>

## APPENDIX B

TABLE 9: TOTAL ANNUAL INDIRECT SPENDING FROM ALL PROJECTS

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airfield Projects	61	\$3,236,000	\$5,283,000	\$10,710,000
Hydrant Fueling System	6	\$312,000	\$510,000	\$1,033,000
Terminal	76	\$3,994,000	\$6,519,000	\$13,217,000
South Concourse West	42	\$2,230,000	\$3,640,000	\$7,387,000
South Concourse East	63	\$3,307,000	\$5,398,000	\$10,945,000
North Concourse Ph I	55	\$2,926,000	\$4,775,000	\$9,681,000
North Concourse Ph II	33	\$1,732,000	\$2,828,000	\$5,733,000
Mid Concourse Tunnel	4	\$208,000	\$342,000	\$699,000
Central Tunnel	6	\$303,000	\$495,000	\$1,003,000
Connectors	2	\$100,000	\$163,000	\$331,000
Baggage Handling System	20	\$1,126,000	\$1,842,000	\$3,879,000
Central Utility Plant	7	\$372,000	\$607,000	\$1,215,000
Hydrant Fuel Remediation	0	\$2,000	\$3,000	\$5,000
Gateway (50%)	6	\$336,000	\$550,000	\$1,158,000
Parking Garage	21	\$1,198,000	\$1,959,000	\$4,126,000
Eco Lot	0	\$10,000	\$16,000	\$34,000
Park & Wait Lot	1	\$35,000	\$58,000	\$121,000
C-Store Utilities	0	\$100	\$100	\$200
Terminal Roadways	13	\$709,000	\$1,157,000	\$2,345,000
Parking Roadways	0	\$27,000	\$44,000	\$93,000
Quick Turn Around	6	\$352,000	\$575,000	\$1,210,000
RSS (Rental Car Service Buildings)	3	\$181,000	\$296,000	\$624,000
RAC Gateway (50%)	6	\$336,000	\$550,000	\$1,158,000
RAC (Rent A Car) Fuel Remediation	0	\$8,000	\$14,000	\$28,000
RAC Roadways	1	\$28,000	\$45,000	\$92,000
South Parking Lot	2	\$85,000	\$139,000	\$293,000
<b>TOTAL ANNUAL</b>	<b>433</b>	<b>\$23,155,000</b>	<b>\$37,805,000</b>	<b>\$77,123,000</b>

## APPENDIX B

TABLE 10: TOTAL ANNUAL INDUCED SPENDING FROM ALL PROJECTS

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airfield Projects	101	\$4,081,000	\$7,701,000	\$13,799,000
Hydrant Fueling System	10	\$394,000	\$743,000	\$1,331,000
Terminal	125	\$5,037,000	\$9,503,000	\$17,028,000
South Concourse West	70	\$2,824,000	\$5,328,000	\$9,547,000
South Concourse East	103	\$4,171,000	\$7,869,000	\$14,100,000
North Concourse Ph I	92	\$3,689,000	\$6,961,000	\$12,473,000
North Concourse Ph II	54	\$2,185,000	\$4,122,000	\$7,386,000
Mid Concourse Tunnel	11	\$436,000	\$822,000	\$1,473,000
Central Tunnel	9	\$382,000	\$721,000	\$1,292,000
Connectors	3	\$126,000	\$238,000	\$427,000
Baggage Handling System	39	\$1,575,000	\$2,971,000	\$5,324,000
Central Utility Plant	14	\$564,000	\$1,064,000	\$1,905,000
Hydrant Fuel Remediation	0	\$2,000	\$4,000	\$7,000
Gateway (50%)	26	\$1,054,000	\$1,988,000	\$3,563,000
Parking Garage	119	\$4,786,000	\$9,031,000	\$16,184,000
Eco Lot	0	\$14,000	\$27,000	\$48,000
Park & Wait Lot	1	\$51,000	\$97,000	\$173,000
C-Store Utilities	0	\$100	\$200	\$300
Terminal Roadways	71	\$2,860,000	\$5,396,000	\$9,668,000
Parking Roadways	1	\$39,000	\$74,000	\$132,000
Quick Turn Around	13	\$510,000	\$962,000	\$1,724,000
RSS (Rental Car Service Buildings)	7	\$263,000	\$496,000	\$889,000
RAC Gateway (50%)	12	\$488,000	\$921,000	\$1,650,000
RAC (Rent A Car) Fuel Remediation	0	\$11,000	\$20,000	\$36,000
RAC Roadways	1	\$35,000	\$66,000	\$118,000
South Parking Lot	3	\$122,000	\$231,000	\$414,000
<b>TOTAL ANNUAL</b>	<b>885</b>	<b>\$35,697,000</b>	<b>\$67,355,000</b>	<b>\$120,691,000</b>



## APPENDIX B

TABLE 11: TOTAL ANNUAL INDIRECT AND INDUCED SPENDING FROM ALL PROJECTS

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airfield Projects	162	\$7,318,000	\$12,984,000	\$24,509,000
Hydrant Fueling System	16	\$706,000	\$1,252,000	\$2,364,000
Terminal	200	\$9,030,000	\$16,022,000	\$30,245,000
South Concourse West	112	\$5,054,000	\$8,968,000	\$16,934,000
South Concourse East	166	\$7,478,000	\$13,267,000	\$25,045,000
North Concourse Ph I	147	\$6,615,000	\$11,736,000	\$22,154,000
North Concourse Ph II	87	\$3,917,000	\$6,950,000	\$13,120,000
Mid Concourse Tunnel	15	\$644,000	\$1,164,000	\$2,172,000
Central Tunnel	15	\$685,000	\$1,216,000	\$2,295,000
Connectors	5	\$226,000	\$401,000	\$758,000
Baggage Handling System	59	\$2,701,000	\$4,813,000	\$9,203,000
Central Utility Plant	21	\$936,000	\$1,670,000	\$3,121,000
Hydrant Fuel Remediation	0	\$3,000	\$6,000	\$12,000
Gateway (50%)	32	\$1,390,000	\$2,538,000	\$4,721,000
Parking Garage	140	\$5,984,000	\$10,990,000	\$20,310,000
Eco Lot	1	\$24,000	\$43,000	\$82,000
Park & Wait Lot	2	\$86,000	\$154,000	\$295,000
C-Store Utilities	0	\$200	\$300	\$600
Terminal Roadways	84	\$3,569,000	\$6,553,000	\$12,014,000
Parking Roadways	1	\$66,000	\$118,000	\$225,000
Quick Turn Around	19	\$861,000	\$1,537,000	\$2,935,000
RSS (Rental Car Service Buildings)	10	\$444,000	\$793,000	\$1,514,000
RAC Gateway (50%)	18	\$824,000	\$1,470,000	\$2,808,000
RAC (Rent A Car) Fuel Remediation	0	\$19,000	\$34,000	\$64,000
RAC Roadways	1	\$63,000	\$111,000	\$210,000
South Parking Lot	5	\$207,000	\$370,000	\$706,000
<b>TOTAL ANNUAL</b>	<b>1,318</b>	<b>\$58,852,000</b>	<b>\$105,161,000</b>	<b>\$197,813,000</b>

## APPENDIX C

## PAST STUDIES OF THE AIRPORT'S ECONOMIC IMPACT

GSBS CONSULTING. 2013. ECONOMIC IMPACT ANALYSIS SALT LAKE CITY INTERNATIONAL AIRPORT.

Conducted from 2012 to 2013, this report measures the additive effect of airport-based spending utilizing the IMPLAN economic modeling program. Distinct from the current, 2018, study, this study broke down the economic impact of commercial passenger traffic into airport operations, non-airline tenant activities, capital investments and visitor spending. Airfare expenditures were not included in this analysis; quantifying airfare spending impacts within the local Utah economy would require a more refined level of data which was not available for this study. This report was based on 2009-2012 actual, 2012 budgeted, and 2013-2014 projected spending and was undertaken to quantify the impact of current operations and activity as well as the impact of planned terminal redevelopment. At this time the Terminal Redevelopment Program (TRP) timeline extended from 2013 to 2024.

This study found, at the time of the analysis, that ongoing airport operations generated an estimated \$1.1 billion in wages and income annually from an estimated 35,290 full-time jobs. Further, GSBS Consulting found that the airport contributed an estimated \$1.9 billion annually to Utah's GDP, 1.5 percent of the 2011 total GDP for the state. Beyond GDP impact, the study concluded that the total economic output of the airport contributed \$3.3 billion annually to the state's economy.

The 2013 analysis found that the TRP will generate, over its 12-year lifetime, 23,919 full-time jobs, \$1 billion in wages and income, \$1.5 billion in GDP and \$3 billion in total economic output.

Where the 2013 study looked at airport operational impacts, visitor impacts, and TRP construction impacts, the current study is concerned specifically with the impacts of ARP construction spending on the Utah economy with updated construction expenditure data from the Salt Lake City International Airport.

WILBUR SMITH AND ASSOCIATES. 2004. UTAH AIRPORTS ECONOMIC IMPACT STUDY.

Commissioned by Utah Department of Transportation's Division of Aeronautics

This report was commissioned to quantify the economic impacts from daily operations of the Utah Airport System. The scope was much broader than the current study and included the estimated impacts of businesses located in the area that would not have located in Salt Lake City if there was not an airport of the size and scope of the Salt Lake City International Airport. The estimated impacts of these businesses were identified through a broadly distributed survey. Of particular interest to this report, the study conducted a passenger intercept survey at Salt Lake City International Airport in the summer of 2003 to determine purpose of trip, length of stay, spending, number in party and whether the passenger was a visitor. The survey indicated that approximately 60 percent of travelers to Utah's airports were visitors but did not differentiate between business and personal/tourist travelers to the state.

The study indicated that Salt Lake City International Airport contributed a total 96,112 full-time jobs, \$2.5 billion in payroll and \$4.84 billion in total output in 2003. The Wilbur Smith study included freight, general aviation activities and airport using businesses in the broader economy and is therefore not directly comparable to the current study. This study, however, provides insight into the level of magnitude of contribution from freight, general aviation and general business activities.

CRISPIN-LITTLE, JAN E. "1998. THE ECONOMIC IMPACT OF THE SALT LAKE CITY INTERNATIONAL AIRPORT". UTAH ECONOMIC AND BUSINESS REVIEW. VOLUME 58. NUMBERS 5 AND 6.

In this 1998 report, airport operating costs and capital expenditures are the basis for an economic impact analysis of the airport's role in the state of Utah's economy. The report also estimates the impact of the airport on selected taxes in the state. The report, like the 1993 report summarized below, does not consider the economic impacts of services provided by the airport (i.e. accessibility for businesses and individuals), but only the impacts of purchases and employment from facility operations, tenants and capital expenditures. In 1998, enplanements were roughly 10 million passengers, about half what they are today. At the time, forecasts indicated that by 2015 traffic would double; building on growth experienced since deregulation of the airline industry and the development of hub and spoke systems. This study estimated 1997 airport operating expenditures to be \$933.7 million, of which \$502.5 million was payroll and \$431.2 million was non-wage goods. In addition to these amounts, the study estimated \$551.5 million in earnings from operating expenditures, resulting in 19,300 full-time jobs. According to an estimated effective tax rate of 11.74 percent (total state and local tax receipts / total personal income in the state), the airport's operations resulted in almost \$65 million in annual state and local tax revenues for 1997. No attempt was made to account for state or local governmental spending to support ongoing or increased operations at the airport (i.e. road improvements, air traffic control, etc.).

Capital expenditures between 1997 and 2007 were estimated to total \$994 million in direct spending, with an economic impact of 26,513 full-time jobs and \$595.7 million in wages over the 10-year period. This was expected to result in over \$70 million in local and state taxes. The authors concluded that generated earnings from the airport and capital projects were roughly equivalent to 1.7 percent of state earnings. This, they emphasized, was significant but under-representative of the impact of airport services on attracting business and allowing the region to compete in a globalizing economy.

MORRISON, EDWARD R. AND BOYD L. FJELDSTED. 1993. "IMPACT OF THE SALT LAKE CITY INTERNATIONAL AIRPORT ON THE UTAH ECONOMY". UTAH ECONOMIC AND BUSINESS REVIEW. VOLUME 53. NUMBERS 9 AND 10.

Conducted in 1992, this study focused on the operating and capital purchases of airlines and other tenants from Utah businesses, as well as those purchases resulting from capital expenditures by the Airport Authority (now Department of Airports). Combined operating expenses were estimated to generate \$348 million annually with 13,000 full-time jobs. Capital projects were projected to generate \$392 million in economic benefits with 16,500 full-time jobs annually. The authors concede that this analysis underestimates the true economic impact since it only includes the impact of "purchases" or direct expenditures. This ignores the agglomeration effects resulting from the efficiency and accessibility provided to businesses and individuals who rely on airport services. In fact, these airport services attract businesses, providing a much broader economic impact that is very difficult to measure. The report also accounts for the purchases of tenants that have business operations at the airport, excluding a larger portion of the travel industry, taxi service, general aviation and other tenants with off-site business operations. Airport tenant spending figures were gathered through an Airport Authority-administered survey.

The report does attempt to derive a proportion of airport operations (52 percent) that are dependent on tourists originating from out-of-state and connecting passengers. No attempt was made to account for diversion of in-state funds to airport capital expenditures, thus the authors concede the benefits of these expenditures may be slightly overstated. Overall, the report concluded that total earnings from labor associated with airport operations contributed 1.8 percent to overall statewide earnings and 3.8 percent to Salt Lake County's total earnings.

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