### ECONOMIC IMPACT ANALYSIS salt lake city international airport

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The economic impact of the Salt Lake City International Airport begins with the actual spending of the Department of Airports, airport tenants and visitors passing through the airport and spreads through the area and state economy creating additional jobs and value. In order to measure the additive effect of airport-based spending, the IMPLAN© modeling program was used.<sup>1</sup> This analysis focuses on the economic impact of commercial passenger traffic, including airport operations, non-airline tenant activities, capital investments and visitor spending. The effect of cargo traffic and general aviation, as well as the broader impacts of businesses that locate in the area, in part, because of the presence of the airport, were not studied, although previous efforts provide estimates of these effects. Airfare expenditures also are not included in this analysis; the impact of airfare expenditures specifically within the Utah economy requires a much-more refined level of data, which were not available for the current investigation.

The impact of the airport has been evaluated periodically to quantify the overall impact on the state's economy. This, most current, study was undertaken to quantify the impact of current operations and activity, as well as the impact of the planned terminal redevelopment. This report is based on 2009-2011 actual, 2012 budgeted and 2013-2014 projected spending. The estimated economic impact of the Terminal Redevelopment Program is also included for the period 2013-2024.

#### **ONGOING AIRPORT OPERATIONS**

The airport currently generates an estimated \$1.1 billion in wages and income annually from an estimated 35,290 full-time jobs. Taking all spending into account, the airport contributes an estimated \$1.9 billion annually to Utah's GDP. This is 1.5 percent of the 2011 total GDP by State for Utah and 2.8 percent of the 2010 GDP by MSA for Salt Lake City. For comparison, Arts, Entertainment & Recreation expenditures represent less than 1 percent of the 2011 GDP by State for Utah and Mining represents 2.1 percent of the 2010 GDP by MSA for Salt Lake City.

Total economic output – a broader measure than the percentage-of-GDP calculation – of the airport contributes \$3.3 billion annually to the state's economy. This impact is a result of Department of Airports and non-airline tenant operations, the Airport's annual capital improvements program, and spending by visitors who arrive by air. The impact includes funds spent directly by the airport and its tenants, wages and spending by airport suppliers and contractors, and wages spent by airport employees in the broader economy. Approximately 4 percent of the full-time jobs generated by the Airport are Department of Airports employees; the remainder of the estimated 35,290 jobs are in area businesses that do business at or with the Airport or are in the general economy providing goods and services to employees and subcontractors of the Airport and its non-airline tenants.

<sup>1</sup> IMPLAN© is an economic impact modeling system that measures the economic benefit of new investment using a set of matrices derived from data provided by the Census Bureau, Bureau of Labor Statistics and the Bureau of Economic Analysis.

The Salt Lake City International Airport Annual Economic Impact:

- 35,290 full-time jobs
- \$1.1 billion in wages/income
- \$1.9 billion to GDP
- \$3.3 billion in total economic output

This represents 1.5 percent of the 2011 GDP by State for Utah

And 2.8 percent of the 2010 GDP by MSA for the Salt Lake City area.

The annualized effects of the Terminal Redevelopment Program are:

- 1,993 full-time jobs
- \$89.1 million in wages/income
- \$126.1 million to GDP
- \$251.7 million in total economic output

TRP total economic impact (total twelve year period):

- 23,919 full-time jobs
- \$1 billion in wages/income
- \$1.5 billion to GDP
- \$3 billion in total economic output



Table 1 provides the annualized total economic impact from the following sources:

- Airport operations
- Capital investments (not including Terminal Redevelopment Program)
- Non-airline tenant operations
- Visitor spending including business and tourism travel enplaned at the airport

#### TABLE 1: ANNUAL ECONOMIC IMPACTS-CURRENT AIRPORT

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airport Operating Budget	1,481	\$74,998,067	\$103,732,861	\$138,764,196
Airport CIP	511	\$21,449,794	\$32,732,100	\$63,471,273
Non-Airline Airport Tenants	4,138	\$130,029,903	\$250,800,226	\$440,307,380
Visitor Spending	29,161	\$875,382,215	\$1,487,533,177	\$2,669,195,847
Total Annual	35,290	\$1,101,859,980	\$1,874,798,363	\$3,311,738,696

Source: Department of Airports Operating and CIP 2009-2011 actual, 2012 budgeted and 2013-2014 projected expenditures; Airport Tenant reported gross sales; 2011 visitor spending estimates

#### IMPACT OF TERMINAL REDEVELOPMENT PROGRAM

The TRP will generate an estimated additional 23,919 full-time jobs, \$1 billion in wages and income, make a \$1.5 billion contribution to GDP and result in \$3 billion in total economic output over the life of the project. Table 2 identifies the annualized estimated impact of the TRP assuming that the impact is evenly distributed over the twelve year period of the project.

#### TABLE 2: ANNUALIZED TERMINAL REDEVELOPMENT PROGRAM IMPACTS

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	954	\$47,485,574	\$57,541,994	\$132,771,584
Indirect Effect	434	\$20,525,236	\$29,766,076	\$53,751,700
Induced Effect	605	\$21,094,875	\$38,759,161	\$65,198,493
Total Effect	1,993	\$89,105,685	\$126,067,231	\$251,721,777
Total Annual	35,290	\$1,101,859,980	\$1,874,798,363	\$3,311,738,696

Source: Salt Lake City International Airport Terminal Redevelopment Program, Environmental Assessment, May 2012

#### **ONGOING AIRPORT OPERATIONS + TERMINAL REDEVELOPMENT PROGRAM**

During the period of the TRP, the combined annual economic impact of current airport operations and the program are estimated to be:

- 37,283 full-time jobs
- \$1.2 billion in wages/income
- \$2.0 billion to GDP
- \$3.6 billion in total economic impact.

#### AIRPORT-LEVEL ECONOMIC IMPACTS ANALYSIS

Airport-level impacts address activity directly associated with the airport, including Department of Airports operations, non-airline businesses operating at the airport and the visitors traveling through the airport. From the direct spending associated with airport operations and projects, multiplier effects are evaluated as wages and other spending are re-spent in the local economy. Using the IMPLAN© model, this report estimates the impact of spending associated with Department of Airports' and airport tenants' wages paid and purchases made. This report also provides a broad estimation of the spending impacts of airport-related tourist and business travel on the state economy. The analysis includes a fiscal assessment of how these airport businesses and visitors affect local and state tax revenues.

For the purposes of this study, three main drivers of economic impacts are investigated. The areas include operations of the airport (including facility operations and non-airline tenant operations), capital expenditures (including the future terminal redevelopment program), and visitor impacts on the state of Utah. Visitor travel represents only the direct spending of tourist and business air travelers. This report relies on several prior studies to establish travel activity and spending estimates. Prior studies included figures derived from surveys that either are not currently conducted on a regular basis or were conducted as part of a much broader investigation. Estimated direct expenditures by airport activities are reported by year and their indirect and induced effects are estimated using IMPLAN© for the period between 2009 and 2015. The aim of this report is to quantify the activities related to air travel at Salt Lake City International Airport, excluding cargo and general aviation that impact the state of Utah's economy. Although the economic contribution identified in this report (and prior reports) is significant, it is only a portion of the overall economic benefit of airport operations. 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 identify the businesses and sectors that would not be present in our statewide economy if the airport was not available.

#### NOTE ON TERMINOLOGY:

"PAYROLL" is all forms of employee compensation, including wages and proprietor income. "CONTRIBUTION ΤO 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 manufacturers, 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.

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

Economic conditions continue to improve in Utah; the state is climbing out of recession at a somewhat quicker rate than the rest of the country. Year-over-year employment growth of 2.3 percent as of October 2012<sup>2</sup> was lower than the 2.7 percent 2012 growth forecast at the end of 2011. National rates were 1.2 percent in 2011 and 1.4 percent for 2012<sup>3</sup>. January to June 2012 employment growth was 3.6 percent.<sup>4</sup> Between 2010 and 2011, the professional and business service sector and the leisure and hospitality sectors saw employment gains of 3.5 percent and 3.0 percent respectively, suggesting these markets are an important component of recovery. In fact, the ski industry saw its second-best ski season ever, with 4.23 million skier-days. As of September 2012, the professional and business service sector continued year-over-year job gains of 7.0 percent, making up almost half of new jobs, according to the Utah Division of Workforce Services. Job growth in the last month suggests that a broader recovery is underway. These sectors of the economy are highly dependent on the airport's services and underscore the facility's importance to the state's economic well-being.

In another sign of improvement, Utah exports grew 37 percent between 2010 and 2011. Notably, 11 percent of exports in 2011 were in the computer and electronics sector. However, growth is still largely contingent on global trends. Sixty-four percent of exports were dependent on the growth in prices of primary metals. Likewise, growth in the energy sector depends on global demand and state economic growth. Any shocks to the broader financial markets from Europe or elsewhere could impact these areas of growth considerably. Consumer spending continues to improve from 2009, but growth is limited by consumer debt, high unemployment, low labor participation, and uncertain global economic trends. Overall economic conditions in Utah appear to be improving at a faster rate than nationally, albeit much slower than past recoveries.

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 seven-year impact of spending by both out-of-state tourists and business travelers dependent on air travel is nearly \$18.7 billon, contributing roughly 1.5 percent to state GDP each year. Department of Airports' operations contribute approximately \$140 million in total output annually and cumulatively almost \$1 billion over the period of this study. Additionally, construction of new terminal facilities and other capital improvements will give a substantial economic boost over the next five to 10 years, amounting to \$3.0 billion in output. The vastly more important contribution of airport services to business siting, success, and expansion -- though difficult to measure -- puts the airport at the center of successful growth for the state of Utah.

<sup>2</sup> Utah Department of Workforce Services

<sup>4</sup> Bureau of Labor Statistics

<sup>&</sup>lt;sup>3</sup> Utah Governor's Office of Planning and Budget's 2012 Economic Outlook

#### 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. These reports provide a basis for some of the assumptions made in this report and the approach taken to analyze the Airport's contribution to the state's economy. Consistency with previous studies allows comparison of impacts over time.

#### 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 underrepresentative 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. Most significantly, this analysis does not include the impact of visitor spending by individuals arriving by air.

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.

#### DATA SOURCES

Sources of data for the areas of spending investigated in this report were derived from surveys of current expenditures, proposed budgets and an extrapolation of these trends where budgeting information was not available. For Airport facility impacts, data for operations and capital improvements by the facility itself was provided by the Salt Lake City Department of Airports. Operations expenditures for 2009 to 2011 were provided by the department and all future years were based on a three-year average adjusted for inflation. This more-conservative approach was taken since three years data was insufficient to base a forecasted average in operating budget growth and forecasts of economic recovery and growth remain uncertain. Capital improvements include actual amounts spent through 2011 and budgeted amounts from 2013 to 2017 averaged across future years based on their expected completion dates. This approach was taken with the budgeted figures to estimate when actual funds may be expected to be spent.

Non-airline tenant impacts were estimated using the gross sales data collected by the Department of Airports from each of the tenants. The overall impact of purchases from vendors housed at the Salt Lake City Airport was considered for the time period between 2010 and 2012. These numbers should be considered as overlapping visitor spending impacts, since a portion of expenditures at airport facilities will naturally be made both by local residents and visitors. Since accurate employment numbers, payroll figures and operational expenses were unavailable for every establishment providing vendor services at the airport, gross sales was used as a proxy to establish an estimate of these figures and their direct, indirect, and induced impacts using IMPLAN©. This approach is less desirable than having expense figures provided directly by establishments, but provides a reasonable proxy based on typical spending patterns, operations and margins taken among businesses within similar retail sectors. Industry spending patterns are estimated by the IMPLAN© software. Gross sales data was provided by the Department of Airports for the years 2010, 2011, and 2012 and establishments were classified according to the appropriate IMPLAN© industry code. The aggregation of gross sales by year across industry codes provide the basis for IMPLAN© to calculate economic output. Sales data came from all airport based private establishments, airport wide vendors (such as LSG Sky Chefs, Alliance Airport Advertising, etc.), car rental agencies and Ampco Parking. Figures for Ampco Parking were not available for 2012, and an estimate was derived using an average of gross sales from the previous two years.

Terminal Redevelopment Program figures were considered in light of their completion date or to be complete at the end of the period of analysis if no completion date had been estimated by Department of Airports.

Airport terminal reconstruction cost estimates were based on the Terminal Redevelopment Program Environmental Assessment prepared for the Salt Lake City Department of Airports by CH2MHill in 2012. The environmental assessment provides the background and details regarding the Terminal Redevelopment Program, which is treated separately in this economic analysis.

In addition to data and information provided by the Department of Airports and its tenants, inputs to the analysis include estimates of visitation and visitor spending. Studies completed for the State of Utah and other entities were the basis for the estimates. The studies reviewed include:

#### LEIGH FISCHER. 2010. AVIATION DEMAND FORECASTS, SALT LAKE CITY INTERNATIONAL AIRPORTS. PREPARED FOR FAA NORTHWEST MOUNTAIN REGION AND THE SALT LAKE CITY DEPARTMENT OF AIRPORTS.

The demand forecasts provided by Leigh Fischer estimate a percentage connecting flights and nonconnecting flights for future years. In addition to total enplanements, these proportions were used in part to estimate tourist and business travel trends in future years.

# D.K SHIFLET AND ASSOCIATES LTD. 2011 AND 2004. EXECUTIVE SUMMARIES AND SPECIFIC FIGURES PROVIDED BY JIM BUCHANAN, RESEARCH COORDINATOR, UTAH OFFICE OF TOURISM AND ERIC THOMPSON, VICE PRESIDENT OF MARKETING, VISIT SALT LAKE.

These two travel studies, though not publicly available, provided key insights into developing the tourist and business travel impacts for this report. Personal communication with both Jim Buchanan and Eric Thompson helped shed light on current trends, interpreting figures from these reports, the stability of the ratio between tourist to business travel, and likely future trends in impacts from both of these travel groups.

#### **METHODOLOGY AND FINDINGS**

To measure the estimated economic impact of the Salt Lake City International Airport on the state economy, the expenditures and projected expenditures made within the state by airport facilities, capital investment and visitors were put into the IMPLAN© model for the seven-year period of 2009 to 2015. The state was chosen as the unit of analysis as Salt Lake City International handles 99 percent of state passenger traffic. The results of each activity are discussed in their own sections. IMPLAN© is an economic impact modeling system that measures the economic benefit of new investment on local and regional economies. 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. For example, according to IMPLAN©, on average for every \$1 in new wages to employees, 83¢ in new spending occurs within the state economy as a result of purchases made from local stores and service providers and additional spending from employees and proprietors of Utahbased businesses. 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© estimates three different types of benefits: direct, indirect and induced.

#### **TYPES OF BENEFITS**

#### Direct

Direct benefits are the expenditures made within the local economy from a new activity. The direct benefit from Airport spending in all classes is \$649 million in payroll annually and a more than \$1 billion contribution to GDP. Table 3 provides a breakdown of the type and amount of various locally sourced expenditures.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airport Operating Budget	881	\$53,641,835	\$65,175,862	\$73,285,466
Airport CIP	261	\$11,440,151	\$16,212,883	\$34,733,481
Non-Airline Airport Tenants	2,388	\$64,550,376	\$135,572,245	\$243,532,381
Visitor Spending	17,971	\$471,780,301	\$771,682,193	\$1,463,387,839
Total Current Facility	21,501	\$601,412,663	\$988,643,184	\$1,814,939,167
TRP (Avg 2013-2024)	954	\$47,485,574	\$57,541,994	\$132,771,584
Total Annual	22,455	\$648,898,237	\$1,046,185,178	\$1,947,710,752
Total TRP (2013-2024)	11,449	\$569,826,884	\$690,503,930	\$1,593,259,010

#### Indirect

Indirect effects include purchased goods and services from other local industries. The 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 in the state of Utah depending on where various purchases are made. This likely limits much of the impacts from operations and capital spending to the Greater Wasatch Front (Weber, Davis, Salt Lake, Summit, Tooele and Utah counties). Visitor spending will likely be more dispersed, but no attempt was made to allocate benefits by regional geography within the state. Table 4 estimates the annualized indirect effects of Airport activities.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airport Operating Budget	91	\$3,594,212	\$5,935,570	\$10,577,217
Airport CIP	104	\$4,931,641	\$7,188,973	\$13,043,090
Non-Airline Airport Tenants	867	\$34,708,479	\$58,667,703	\$101,676,418
Visitor Spending	5,246	\$196,402,206	\$335,081,839	\$565,428,949
Total Current Facility	6,308	\$239,636,537	\$406,874,086	\$690,725,673
TRP (Avg 2013-2024)	434	\$20,525,236	\$29,766,076	\$53,751,700
Total Annual	6,742	\$260,161,773	\$436,640,162	\$744,477,373
TRP (2013-2024)	5,211	\$246,302,827	\$357,192,912	\$645,020,397

#### TABLE 4: TOTAL ANNUAL INDIRECT SPENDING FROM ALL SOURCES

#### Induced

Induced benefits measure the economy-wide impact of spending in a region generated by the expenditure of payments and salaries by individuals. Table 5 provides the annualized induced economic impacts of the airport. This measure recognizes that employee compensation and income recirculates through the regional economy and creates additional value. For example, for every \$1,000 spent in the region an additional \$830 of value is created within the economy. Only dollars that would not otherwise be available for spending within the economy are counted as "input."

#### TABLE 5: TOTAL ANNUAL INDUCED SPENDING FROM ALL SOURCES

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airport Operating Budget	509	\$17,762,021	\$32,621,428	\$54,901,513
Airport CIP	146	\$5,078,002	\$9,330,243	\$15,694,701
Non-Airline Airport Tenants	883	\$30,771,047	\$56,560,278	\$95,098,581
Visitor Spending	5,943	\$207,199,709	\$380,769,145	\$640,379,060
Total Current Facility	7,481	\$260,810,779	\$479,281,094	\$806,073,855
TRP (Avg 2013-2024)	605	\$21,094,875	\$38,759,161	\$65,198,493
Total Annual	8,086	\$281,905,655	\$518,040,255	\$871,272,348
TRP (2013-2024)	7,259	\$253,138,505	\$465,109,935	\$782,381,915

Table 6 shows that the infusion of more than \$1.9 billion annually in economic output from combined Department of Airport and non-airline tenant activities and visitor spending is estimated to result in almost 15,000 additional jobs, more than \$542 million in payroll, a \$955 million annual contribution to GDP and more than \$1.6 billion annually in output. Table 6 provides the combined indirect and induced impacts from all sources.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Airport Operating Budget	600	\$21,356,232	\$38,556,998	\$65,478,730
Airport CIP	250	\$10,009,643	\$16,519,217	\$28,737,791
Non-Airline Airport Tenants	1,750	\$65,479,526	\$115,227,981	\$196,774,999
Visitor Spending	11,190	\$403,601,915	\$715,850,984	\$1,205,808,008
Total Current Facility	13,789	\$500,447,317	\$886,155,180	\$1,496,799,529
TRP (Avg 2013-2024)	1,039	\$41,620,111	\$68,525,237	\$118,950,193
Total Annual	14,828	\$542,067,428	\$954,680,417	\$1,615,749,721
TRP (2013-2024)	12,470	\$499,441,332	\$822,302,847	\$1,427,402,312

#### TABLE 6: TOTAL ANNUAL INDIRECT AND INDUCED SPENDING FROM ALL SOURCES

The following five sections discuss in detail the five drivers of airport-level economic impacts in this report. Each discussion includes details on the methodology and findings for each category of impacts to the Utah economy.

#### AIRPORT FACILITY IMPACTS

#### Operations

Table 7 provides the impact of Department of Airport operations-related expenditures for the period 2009 – 2015, combining actual and projected expenditures. They are input into IMPLAN© as institutional spending. . Previous tables provided the seven year average of the 2009 – 2015 data.

TABLE 7: AIRPORT OPERATIONS (2009 - 2015)					
IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT	
Direct Effect	6,168	\$375,492,843	\$456,231,037	\$512,998,264	
Indirect Effect	634	\$25,159,481	\$41,548,992	\$74,040,520	
Induced Effect	3,563	\$124,334,146	\$228,349,995	\$384,310,589	
Total Effect	10,365	\$524,986,469	\$726,130,026	\$971,349,373	

#### TABLE 7: AIRPORT OPERATIONS (2009 - 2015)

#### **Direct Impacts for Operations**

This initial step of input-output analysis illustrates how the state economy responds to the direct employment and direct operating expenditures made by the airport. The direct impact of the employment for the sevenyear period is 6,168, which accounts for workers directly employed by the airport and additional employees generated by other direct operating expenditures. Over the course of the seven-year period this is expected to generate \$375.5 million in payroll, add \$456.2 million to the state GDP, and provide \$513 million in total output (e.g. the value of the infusion of new funds into the economy less locally subcontracted and purchased services and resources).

#### Indirect Impacts for Operations

Indirect impacts measure the amount of local economic activity generated by direct expenditures from local industries. For example, professional services such as auditing, financial advising, or other legal services may be contracted to local businesses to support operations. This second layer of spending illustrates how local industries are impacted by the purchasing behavior from other local industries. This represents the impact of spending as it cycles through the supply chain until all money is accounted for by either imports or contribution to GDP. In terms of airport operations for the seven-year period these amount to 634 full-time jobs, \$25 million in payroll, and \$41.5 million in contributions to GDP and \$74 million in total output.

#### Induced Impacts for Operations

Finally, the recirculation of dollars from payroll results in additional contributions to employment, the GDP and total output. This recognizes that labor income does not leak from the state economy but is recirculated as household spending. Over the seven-year period, the results for induced impacts are an additional 3,563 full-time jobs, \$124 million in payroll, and \$228 million in contribution to GDP and \$384 million in total output.

Total impacts of the Airport's operations are nearly \$1 billion between 2009 and 2015, contributing nearly 10,365 full-time jobs with a half billion dollars in payroll and nearly three quarters of a billion dollars in contribution to the state of Utah's GDP.

#### **Capital Improvements**

Table 8 identifies the impacts from the Airport's capital improvements program. Capital improvements, aside from those budgeted in the Terminal Redevelopment Program, account for total output just below a half billion dollars and a total of 3,574 full-time jobs from 2009 to 2015.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	1,826	\$80,081,058	\$113,490,183	\$243,134,369
Indirect Effect	729	\$34,521,486	\$50,322,814	\$91,301,630
Induced Effect	1,020	\$35,546,017	\$65,311,703	\$109,862,909
Total Effect	3,574	\$150,148,561	\$229,124,700	\$444,298,908

#### TABLE 8: AIRPORT CIP (2009 - 2015)

Data for these estimates were provided by the Department of Airports and recoded by major spending categories in IMPLAN© to reflect expenditures on the airfield, land acquisition, landside operations, runway deicing improvements, and the terminals. These figures include already-expended monies in the last three years and anticipated spending identified in the five-year Capital Improvements Plan. Expenditures that are part of the Terminal Redevelopment Program are estimated in the next section. IMPLAN© generalizes expenditures into construction of new nonresidential commercial structures, construction of other new nonresidential structures (i.e. airport runways and related work, parking areas, other non-building construction, etc.), consulting services, and activities related to real estate transactions.

#### DIRECT, INDIRECT AND INDUCED IMPACTS OF THE CAPITAL IMPROVEMENTS PROGRAM

These combined activities lead to an estimated average direct effect of 1,826 full-time jobs with a total \$80 million in payroll, \$113 million in contribution to GDP, and \$243 million in total output. Indirect effects of local purchasing accounted for 729 full-time jobs yielding \$34.5 million in payroll, \$50 million in contribution to GDP, and \$91 million in total output. The induced effect of household spending accounted for by this activity results in 1,020 full-time jobs with payroll estimated to be near \$35.5 million, contribution to GDP of \$65 million and \$110 million in total output.

#### NON-AIRLINE TENANT OPERATIONS IMPACTS

Table 9 identifies the direct, indirect and induced impacts of non-airline tenant sales at the Salt Lake City International Airport. Based on IMPLAN© multipliers related employment, wages, contribution to GDP and total economic output were estimated from the gross sales data reported to the Department of Airports for 2010, 2011 and 2012. Previous tables included the annual average contributions from this economic activity.

#### TABLE 9: NON-AIRLINE TENANT SALES (2010-2012)

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	2,388	\$193,651,129	\$406,716,735	\$730,597,143
Indirect Effect	867	\$104,125,437	\$176,003,109	\$305,029,253
Induced Effect	883	\$92,313,142	\$169,680,834	\$285,295,744
Total Effect	4,138	\$390,089,708	\$752,400,678	\$1,320,922,140

Direct impacts from the shops and service providers located at the airport are significant and resulted in a total estimated output of \$1.3 billion for the three year period 2010-2012. This activity is in addition to the operational costs of running the airport and visitor spending that occurs off-airport.

#### VISITOR IMPACTS - TOURISM AND BUSINESS TRAVEL

Overall visitor spending impacts were based on estimates of visitor travel through Salt Lake City International Airport. Three sources of information were used to create these visitor estimates: Leigh Fischer air travel demand forecast from 2010; DK Shifflet tourism surveys from 2004 and 2010; and Wilbur Smith Utah airports economic impacts study. Wilbur Smith survey figures suggest about 60 percent of non-connecting travel is made up of visitors. This includes business travelers, though the report does not explicitly distinguish them from leisure travelers. Shifflet's 2004 report claims that 9 percent of travelers arrive in the state by air and 18 percent in the county by air (according to current FAA statistics, Salt Lake City handles about 99 percent of statewide traffic). The most recent Shifflet report indicates the upper end of tourist travel via air was as high as 26.1 percent in 2010., Applying the Shifflet growth to the lower statewide estimate of 2004 results in estimated air arriving visitation of 13 percent. The current report applies the historical ratio of 0.38 of business to leisure travelers (as indicated in the 2004 report) for 2010, resulting in an assumption that 12.5 percent of tourists arrived in the state by air (which is close to the 13 percent mentioned above). According to this estimate, in 2010, approximately 2.5 million tourists arrived via airplane in Utah, most of who arrived in Salt Lake City. Leigh Fischer estimated that 44 percent of enplanements at Salt Lake City International are on connecting flights. This proportion is held constant on forecasted future enplanements.

Given an estimate of 12.5 percent of all tourists arriving in Utah by air, this would imply that tourist arrivals would account for about 44 percent of non-connecting arrivals (or just over 2.5 million arrivals of 5.7 million) in 2010. Based on the Wilbur Smith estimate that 60 percent of all non-connecting arrivals are out of state visitors of all types, the remaining 16 percent (or just fewer than 1.0 million arrivals) are business travelers. Since no other source for Utah business spending was available, figures from the 2004 Shifflet report were used as a starting point. Eric Thompson, Visit Salt Lake Vice President of Marketing, concurred that the estimated percentage split of business to tourist travelers has remained constant; although he felt economic impacts have probably grown about 10 percent since the 2004 study. These assumptions in spending were incorporated into the estimates.

Using the number of enplanements at Salt Lake City International Airport multiplied by the proportions derived from prior studies, direct spending for each group was estimated by multiplying average annual spending days (average daily expenditures X average number of days per trip) by the total enplanement by type of traveler. These expenditures were proportionately broken out across spending categories suitable for use in IMPLAN© by allocating the ratio of spending across major expenditures derived from a national survey of travel spending (see U.S. Bureau of Economic Administration Travel and Tourism Satellite Accounts, Table 3: Demand for Commodities by Type of Visitor, 2010) and equating these categories to the appropriate industries represented in IMPLAN©. This methodology is similar to that undertaken to estimate the impact of tourist spending prepared by the Governor's Office of Planning and Budget analysis presented in the 2012 Economic Report to the Governor. However, in the case of this report spending on air transportation services was not included as such spending was not accounted for in either source of overall spending figures. An estimate was generated for each of the seven years under consideration from 2009 to 2015, adjusting for inflation in total spending (The Federal Reserve Bank of Cleveland reports that its latest estimate of 10-year expected inflation is 1.32 percent (9/2012)).

Table 10 provides the estimated economic impact from business visitors.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	47,461	\$1,207,298,904	\$2,006,569,436	\$3,738,080,909
Indirect Effect	13,047	\$494,337,315	\$838,550,230	\$1,433,482,651
Induced Effect	15,135	\$527,738,949	\$969,717,420	\$1,631,078,794
Total Effect	75,643	\$2,229,375,167	\$3,814,837,086	\$6,802,642,353

TABLE 10: BUSINESS VISITOR SPENDING (2009 - 2015)

Table 11 provides the estimated economic impact from tourists.

TABLE 11:	TOURIST	SPENDING	(2009 ·	- 2015)
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IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	78,339	\$2,095,163,201	\$3,395,205,915	\$6,505,633,963
Indirect Effect	23,676	\$880,478,126	\$1,507,022,642	\$2,524,519,989
Induced Effect	26,469	\$922,659,013	\$1,695,666,594	\$2,851,574,625
Total Effect	128,484	\$3,898,300,337	\$6,597,895,150	\$11,881,728,575

Table 12 combines both types of visitor spending for an estimate of the total impact of visitors deplaning at the Salt Lake City International Airport.

IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT
Direct Effect	125,800	\$3,302,462,105	\$5,401,775,351	\$10,243,714,872
Indirect Effect	36,723	\$1,374,815,441	\$2,345,572,872	\$3,958,002,640
Induced Effect	41,604	\$1,450,397,962	\$2,665,384,014	\$4,482,653,419
Total Effect	204,127	\$6,127,675,504	\$10,412,732,236	\$18,684,370,928

#### TABLE 12: TOTAL VISITOR SPENDING (2009 - 2015)

#### DIRECT, INDIRECT AND INDUCED IMPACTS OF VISITOR TRAVEL

Overall, impacts on the state economy of out-of-state visitors travelling through the airport are significant. This analysis estimates that nearly 200,000 full-time jobs over the seven year period are driven by direct spending by visitors. Total output is estimated to be nearly \$18.5 billion (over \$2.5 billion each year). Given a 24 percent to 76 percent split in visitor days between business travelers and tourists estimated to make passage through Salt Lake City International Airport it is important to note that their respective economic impacts are disproportionate. There appears to be slightly greater economic impact per business traveler over tourism.

#### TERMINAL REDEVELOPMENT PROGRAM

The Terminal Redevelopment Program (TRP) reflects a period of time in the future and is considered separately from other spending. This program will replace terminal 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<sup>5</sup>. The proposed redevelopment will consolidate passenger processing facilities into a single facility to serve all concourses as well as replace the existing parking garage, construct new terminal roadways and a new central utility plant (CUP). Improvements will increase available gates for aircraft and add approximately 644,000 square feet to the existing terminals and concourses. The number of short- and long-term garage parking spaces will be doubled from 1,834 to 3,636. Light rail and rental car services will be integrated with the new garage. A remote site for car rental operations and service and a quick-turn-around (QTA) facility for car rentals will also be built. The proposed start date of the project is 2013 and end of construction is anticipated in 2024. This analysis considers economic impacts from 2013 to 2024 at which time the redevelopment will be complete. Estimated completion dates for many of the items were not available so figures are reported in aggregate. Maps from the 2012 Environmental Assessment of current inefficiencies and the proposed alternative are in Appendix A. Table 13 provides the estimated economic impacts of the terminal redevelopment plan.

TABLE 13: TERMINAL REDEVELOPMENT PROGRAM						
IMPACT SOURCE	FULL-TIME JOBS	PAYROLL	CONTRIBUTION TO GDP	OUTPUT		
Direct Effect	11,449	\$569,826,884	\$690,503,930	\$1,593,259,010		
Indirect Effect	5,211	\$246,302,827	\$357,192,912	\$645,020,397		
Induced Effect	7,259	\$253,138,505	\$465,109,935	\$782,381,915		
Total Effect	23,919	\$1,069,268,217	\$1,512,806,777	\$3,020,661,320		

<sup>5</sup> Salt Lake City International Airport Terminal Redevelopment Program, Environmental Assessment, Draft May 2012

#### DIRECT, INDIRECT AND INDUCED IMPACTS OF TERMINAL REDEVELOPMENT PROGRAM

Table 13 identifies impacts of all types resulting from the planned TRP. Direct impacts of construction over the course of the redevelopment program include 11,449 full-time jobs, nearly \$570 million in payroll, with approximately \$690 million in contribution to state GDP and a total output of \$1.6 billion. Indirect and induced impacts approximately double these figures.

#### **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 Department of Airport operations, the operations of on-airport tenants and business and leisure visitors arriving in the area through the airport. The impact from these, relatively easily defined, sources are significant. The impact from airport operations, capital investments, non-airline tenants and visitor spending is more than \$1.1 billion annually according to the most recent study.

An even more important impact but less easily quantified is 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.

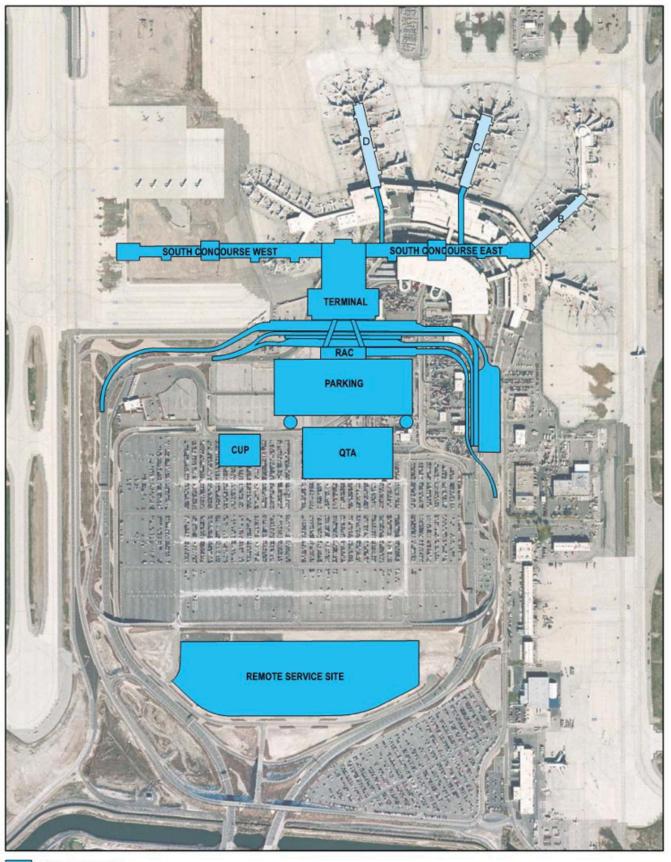
The Terminal Redevelopment Program will result in significant economic benefit of more than \$3 billion simply through investment in the building program. More importantly the TRP will help maintain Utah's current competitive position for attracting and retaining business and investment in a highly competitive environment.

APPENDIX A

Existing terminal complex is 50 years old, requires extensive ongoing maintenance, is not energy efficient, and does not provide current industry standard levels of service. Concourse layout contributes to airfield congestion, increased aircraft emissions, and increased fuel use.



Terminal configuration requires redundant facilities for passenger check-in, passenger and baggage screening, baggage claim, enplaning and deplaning curbsides, and associated mechanical systems.



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