

Economic Implications of the San Diego Airport Site Selection Program Decision Document: An Update

Master's Capstone Project
College of Business Administration
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Chapter I: EXECUTIVE SUMMARY

In 2006, Ricondo & Associates created the “Airport Site Selection Program Decision Document” (Decision Document) for the San Diego County Regional Airport Authority (SDCRAA). The Team updated the Financial Benchmarking analysis in Ricondo report, using comparable airports to forecast operational metrics for a new San Diego airport. Using the forecasted operational metrics, the net present value (NPV) of the cash flows for the first five years was calculated. The construction and development costs were updated and forecasted out to 2030 for the five sites in the Decision Document. The analysis of opportunity costs from not replacing San Diego International Airport (SDIA) was updated to current dollars.

SDIA operates at high efficiency levels compared to other large airports. They boast one of the best records for on-time departures & arrivals. Their average airfares are moderate and competitive. They charge airlines a comparatively low cost per enplaned passenger (CPEP). However, no amount of efficiency can compensate for the limitations of a single, 9400 ft. runway on 661 bounded acres.

SDIA will reach maximum operational capacity of 275,000 operations around the years 2033-2034. This is at least 11 to 18 years later than Hamilton, Rabinovitz, & Alschuler (HR&A) predicted in their 2001 “The Impacts of Constrained Air Transportation Capacity on the San Diego Regional Economy” (ICATCSD). SDIA will reach maximum capacity for air cargo tonnage in 2013. This is 6 years later than HR&A predicted in their 2001 ICATCSD

Opportunity costs to the San Diego region in the year 2030 if no action is taken would be: \$3.9 to \$7.2 Billion dollars in lost Gross Regional Product (GRP) (1997\$), 20 to 38,000 jobs lost, and \$1.7 to \$3.1 Billion dollars of personal income lost (1997\$).

Construction costs are increasing at an exponential rate, leading to a development cost nearly 4 times higher in 2030. Construction costs have seen a sharper rise in skilled labor costs compared to materials costs. On the revenue side, baseline NPV of cash flows for 2025-2030 of new airport operations is \$33 million (in 2013 dollars).

Since 2008, San Diego's economy has been recovering from the global recession. The San Diego economy is currently growing faster than the California average, but slower than the national economy. San Diego's population is also growing at a very slow pace, due to cost of living and doing business being high.

The following are economic justifications for building a new airport: tap into international market, continue benefitting from cargo market, capitalize on industry trend toward larger jets, increased number of longer routes, increased diversification of airlines, increased business travel, and increased tourism travel. SDIA will have the best chance for success if they work with the airlines to leverage their common interests in order to optimize return on investment.

Chapter II: REVIEW OF THE LITERATURE

In June 1990, the San Diego Association of Governments (SANDAG) published the “San Diego Air Carrier Airport Site Selection Study” at the request of the City of San Diego. The study suggested that the City government pursue NAS Miramar and Brown Field in Otay Mesa as alternative air carrier sites to SDIA. An addendum to the final report was published in October 1991. SANDAG followed this report with the “Review of Alternative Air Carrier Sites

and Technologies” in December 1991 in which they evaluated the pros and cons of sixteen potential sites.

In October 2002, Landrum & Brown produced the “Air Transportation Action Project Technical Report: Existing Airspace Issues” and the accompanying “Initial Screening of Scenarios” at the request of the San Diego County Regional Airport Authority (SDCRAA). This report said the complexity of selecting an appropriate site for a new international airport is exacerbated by the proximity of the U.S.-Mexico border and the potential involvement of Congress and the Department of Defense in approving a site.

In 2004 a new document was prepared for the SDCRAA by SH&E International Air Transport Consultancy (SH&E Consultancy, 2004), which prepared updated constrained and unconstrained forecasts of aviation activity due to changes in travel demand as a result of regional and national economic changes including the events that took place on September 11, 2001.

In 2006, Ricondo & Associates created the “Airport Site Selection Program Decision Document” (Decision Document) for the SDCRAA in compliance with a state legislative mandate. The Decision Document recommended that the SDCRAA choose among five sites—MCAS Miramar, NAS North Island/SDIA, MCB Camp Pendleton, Imperial County, and Campo/Boulevard.

The Decision Document relied on the ICATCSD study published by HR&A in January 2001. This study quantified the economic impact to the region when SDIA reaches full capacity and is unable to service any additional passengers without significant delays or decline in service quality.

The Decision Document also relied on a 2000 study published by the Center for Continuing Study of the California Economy (CCSCE), “California Economic Growth Study”. An updated version was released in 2008.

Ricondo and Associates joined with Eclat Consulting to generate the “Accessibility & Market Demand Analysis” study in April 2006. This study analyzed the feasibility of seven alternative airport sites from a consumer market point-of-view. Eclat concluded that regional air travelers would likely rank their airport site preferences as: 1) MCAS Miramar, 2) NAS North Island/SDIA, and 3) MCB Camp Pendleton. The study went on to say that remote sites, such as Campo and Imperial County are not viable locations for the region’s commercial air traveler needs.

In March 2011, Jacobs Consultancy published the “Regional Aviation Strategic Plan (RASP)” report for the SDCRAA and SANDAG. The RASP is the San Diego region’s long-range plan to meet the air travel demand through 2035. The 2011 Plan describes several alternative projects to improve and maximize SDIA’s capacity in the short-term while the site selection process continues..

Chapter III: CONCEPTUAL FRAMEWORK

The economic forces influencing airport operations such as: consumer confidence, jet fuel prices, and heightened security costs, present an array of conflicting priorities for airport managers. Various stakeholders including: employee labor unions, local governments, and the Federal Aviation Administration (FAA), add to the demands of an airport. An airport’s primary operational mission is to provide passengers an unobstructed and convenient path between the

parking lot or drop-off curb and the airline's gate. At the same time, the airport attempts to provide aircraft with unobstructed runways for take offs and landings, and an unimpeded path between the runway and the gate. Once aircraft and passengers converge on a gate, the airport is expected to facilitate the smooth flow of: passenger baggage, aircraft supplies, and fuel, in compliance with the airlines' flight schedules.

An airport has several economic objectives. First, an airport wants to optimize gate utilization (the percentage of a day that each gate is occupied with revenue-generating flights) and gate turnover (the quantity of aircraft a gate services each day). Once the terminal is built and costs are "sunk", every minute that a gate is idle translates into a lost revenue opportunity. Accordingly, airports typically want to attract fully loaded, large capacity planes that bring the maximum number of passengers up to the point where the airport itself reaches optimal capacity.

Airports, however, must balance the desire for having its gates occupied with the expectation from airlines that enough gates are available for the stream of incoming aircraft. Ground delays stemming from runway or gate congestion hurt the airlines' performance, and ultimately, their bottom line. Airlines pass the cost of delays onto passengers via airfare which then drives demand downward.

Airlines have significant leverage in their partnerships with airports. Airlines determine the following: which airports they will operate from, what capacity aircraft will utilize which airports, and how often they will land. Airlines exercise considerable influence over the number of paying customers they transport through an airport. In contrast, air carriers view airports as quasi-monopolies. When passengers purchase a ticket to SAN, the airline must land and utilize the services of Lindbergh Field regardless of potential costly delays or premium fees.

In terms of attracting or dissuading airlines from using their facilities, airports have a limited set of tools under their control: landing fees, terminal & hangar rental rates, passenger facility charges (PFC), and airline lease agreements. Airports may also have direct operational control over passenger parking and baggage handling. In some instances, airports have control of aircraft refueling services.

Airlines are motivated by profit and return on investment; so they often pursue strategies that run contrary to an airport's goals. For example, during the economic downturn from 2007-2009 airlines experienced: lower passenger demand, downward pressure on airfares, but also increasing fuel costs. In response, airlines reduced their capacity by cutting the number of flights and filling more seats per flight. When deciding which routes and airports to cut back on, the airlines looked to those airports with the lowest passenger demand and the highest cost to the airlines—fees, rents, and delays. (Ricondo & Associates, 2012)

In addition to airlines consolidating their routes during the economic downturn, several consolidated their assets and merged into a single airline. Southwest bought AirTran Airlines in 2010. Delta acquired Northwest Airlines in 2008. United purchased Continental Airlines in 2010. American Airlines and US Airways are expected to complete a deal in December 2013 to become the world's largest airline. These mergers reduce the number of carrier choices for travelers, which decreased an airports' bargaining power with airlines.

Airlines may determine which airports and routes they will service, however, passenger demand exerts even greater influence on whether airlines will travel through a particular airport. Passenger demand also influences airfares as they relate to both airlines and airports. Travelers have some choice between airlines and incur negligible switching costs. This competition drives down airfares. Travelers to and from the San Diego metropolitan area also have a choice as to

which airport the fly through; SDIA, Los Angeles International (LAX), John Wayne Santa Ana (SNA); or Tijuana, Mexico (TIJ).

In the end, airlines and airports share certain common interest—satisfied passengers, maximized revenues, competitive costs, and high value for services rendered. (Delta Airlines, 2010) If these common interests are pursued aggressively by airports and airlines in partnership, then all the major players can prosper. Building a new San Diego airport affords management an opportunity to reset and strengthen vital industry relationships to the airport’s maximum long-term advantage.

Chapter IV: METHODOLOGY

Opportunity Cost Analysis

Estimates of the economic impact (opportunity costs) on the San Diego region cited in the Decision Document were performed by HR&A and published in 2001 under the title "The Impacts of Constrained Air Transportation Capacity on the San Diego Regional Economy" (Hamilton, Rabinovitz & Alschuler, 2001). These estimates were reached through the application of econometric models, specifically through the use of proprietary software from Regional Economic Models, Inc. (REMI). Lacking access to the full version of the REMI software, the challenge of quantifying the economic impacts to the regional economy from the non-expansion of the SDIA was overcome with a new approach. The Team identified all the variables used in prior analyses, updated historical and forecast values for those variables with more recent data, and estimated future values using trend analysis and linear regression analysis. Once historical data for all the relevant variables was collected and updated, the Team proceeded to compare the values for each variable across the various data sources. This process assisted the Team in identifying the various growth assumptions used in prior studies. The Team then corroborated its forecast assumptions by comparing them to growth rates used in past reports, and to establish new baseline values with which to conduct its analysis.

Once new baseline estimates were defined, the Team proceeded to standardize all financial variables to 2012 dollars using the U.S. Consumer Price Index (CPI). The resulting values (called constant dollars) were free from inflation bias and enabled comparisons of data across a broad range of years. **Appendix O** lists the CPI values utilized in the analysis.

Data for updating baseline estimates related to economic variables was accessed mostly via web portals supported by government agencies. Historical data on: population, employment, personal income, and GRP are readily available through different: federal, state, and local government agencies. In addition, prior studies regarding SDIA as well as other published economic reports also provided valuable historical and forecast data for the Team’s analysis.

Construction Costs

The Team separated the construction/development costs into two main groups: Airport Facilities, and Airport Preparation/Utilities. The purpose of this separation was to make the updated costs as accurate as possible by avoiding the under and/or over allocation of costs among different types of construction. Airport Facilities consists of the following items: Airside/Runways, Terminals, General Access and Parking, Cargo Areas, General Aviation, and

Ancillary/Support. Airport Preparation consists of the following items: Land Acquisition, Demolition, Earthwork, Roadway/Highway Improvements, High Speed Transit System, and Utilities.

For all but the High Speed Transit Systems of the Campo and Imperial County sites, most of the construction costs come from Airport Facilities. Since Airport Facilities consists mainly of buildings; the Team feels finding a historical construction cost index would allow use to update and project costs with confidence. The Construction Cost Index that the Team used is produced by Engineering News-Record (ENR), a subsidiary of McGraw-Hill (Table x).

Airport Preparation costs are a lot more varied in scope of work, and cost structure. So the Team feels using a historical construction cost index would lead to under or over costing a component of this cost center. The Team focused on finding subject matter experts in the field of airport, transportation, and infrastructure construction.

As with any monetary value, the time value of money must be considered when looking at the costs over a period of time. Using the CPI, the Team will bring the 2006 construction cost values to 2013 dollars.

Financial Analysis

The following is a description of contemporary data sources that provide the bulk of the aviation data for the analyses.

FAA's Air Traffic Activity System web site <http://aspm.faa.gov/opsnet/sys/Main.asp>.

U. S. Department of Transportation (DoT) web site for the Bureau of Transportation Statistics (BTS) <http://www.rita.dot.gov/bts/>.

FAA's Compliance Activity Tracking System (CATS) <http://cats.airports.faa.gov/Reports/reports.cfm> web site.

FAA's Airline Service Quality Performance System (ASQP) <https://aspm.faa.gov/asqp/sys/> web site.

FAA's Aviation System Performance Metrics (ASPM) <https://aspm.faa.gov/aspm/entryASPM.asp> web site.

BTS's TranStats web site <http://www.transtats.bts.gov/>.

SDCRAA's Regional Airport Strategic Plan (RASP) web site http://www.san.org/sdcraa/airport_initiatives/rasp/default.aspx.

The Financial Benchmarking Study in the Decision Document calculated standard industry performance metrics for thirteen airports that share various characteristics with a new San Diego international airport. The thirteen airports are grouped in three categories: Capital Development, Similar Enplanements, and West Coast. The Capital Development group consists of Miami International (MIA), Chicago O'Hare (ORD), Seattle-Tacoma International (SEA), San Francisco International (SFO), and Denver International (DEN). The Similar Enplanements group consists of Chicago Midway International (MDW), Tampa International (TPA), Portland International (PDX), Oakland International (OAK), and Ronald Reagan Washington National (DCA). The West Coast group consists of Los Angeles International (LAX), John Wayne Santa Ana (SNA), San Francisco International (SFO), Norman Mineta San Jose International (SJC), Oakland International (OAK), Portland International (PDX), and Seattle-Tacoma (SEA). The Capital Development group airports underwent major construction projects recently. The Similar Enplanements airports share similar patterns of: passenger volume, aircraft types, and flight volume. The West Coast group airports experience similar mileage constraints for

passengers traveling to/from East Coast and Asian locations. The Financial Benchmarking Study is relevant because it sets parameters within which a new San Diego international airport would most likely operate.

The Team added one more group for addition comparative analysis, Attractions Group: Orlando (MCO), New York LaGuardia (LGA), Boston Logan International (BOS), and Fort Lauderdale-Hollywood International (FLL). According to the National Plan of Integrated Airport Systems Report to Congress 2013-17, SDIA shares two specific traits with these four airports. Their passenger base is fed primarily by the local community and visitors traveling for a particular attraction, event, or purpose. (Federal Aviation Administration, 2013) Because San Diego's economy relies on tourism, and the San Diego Convention Center is actively drawing new conventions to the city; including the Attractions group is appropriate for setting a baseline of a new San Diego airport.

The Team also added the Large Hub group to certain charts. Large Hub airports, as defined by the FAA, each account for 1% or more of total U.S. enplanements. Twenty-nine airports, including all those mentioned above, are considered large hub facilities. (Federal Aviation Administration, 2013)

The Team used the Report 5100-127 (Report 127) from the FAA CATS web site for the seventeen airports for the years 2003-2012. Report 127 consisted of airport's annual financial operating results data. Since the Team bases conclusions on a comparative analysis, the Team points out that some airports report their data on a calendar year basis while others report on a fiscal year basis. However, each year does represent twelve months of activity, and any differences between fiscal and calendar year for a given airport are deemed as immaterial for the analyses.

In addition to income statement data, the CATS data includes operational metrics, such as: enplanements, airplane operations, full-time equivalent employees, and cost per enplaned passenger, starting with 2009. The Team accumulated these metrics for 2003-2008 from various secondary sources including airport web sites, audited financial statements, and the California Airport Council (CAC). The CAC contributed these statistics from LAX, SJC, and SNA. (Johnson, 2013)

The number of Passengers and Revenue Passenger Miles for domestic and international passengers for October, 2002 – June, 2013 was also drawn from the TranStats web site. This data was summarized by year and included it with the other operational metrics.

The Team computed Revenue Miles per Passenger, domestic and international, by dividing Revenue Passenger Miles by Passengers. The mean and standard deviation of these rates were calculated for each airport across the months October 2002 – June 2013 and used to establish a domestic and international Revenue/Mile/Passenger rate for the new airport (Table 1). The rates of 1,045 miles per domestic passenger and 2,284 miles per international passenger were selected as the benchmarks for a new San Diego airport. They closely the FAA averages for all U.S. commercial air carriers (Table 2).

Table 1
Revenue Miles Per Passenger (2002-12)

Revenue Miles per Passenger				
Oct. 2002-July 2013				
	Domestic		International	
	Mean	Std Dev	Mean	Std Dev
SAN	1,045	33	1,545	791
Large Hub	968	16	3,239	124
SFO	1,455	52	4,827	124
LAX	1,441	33	4,668	192
SJC	832	45	2,307	838
SNA	875	30	1,331	415
SEA	1,236	27	3,095	220
PDX	999	37	2,545	640
OAK	806	72	1,655	121
West	1,092	42	2,918	364
SEA	1,236	27	3,095	220
MIA	1,064	13	2,108	104
SFO	1,455	52	4,827	124
DEN	918	13	2,027	145
ORD	893	18	3,676	182
Construction	1,113	24	3,147	155
PDX	999	37	2,545	640
OAK	806	72	1,655	121
TPA	847	18	2,186	342
DCA	681	35	475	47
MDW	881	25	1,256	555
Similar	843	37	1,623	341
MCO	915	13	2,829	435
LGA	756	24	408	40
FLL	988	31	828	167
BOS	1,032	36	2,614	113
Attraction	923	26	1,670	189
Average	978	31	2,284	275

SOURCE: Bureau of Transportation Statistics, T-300 Segment data

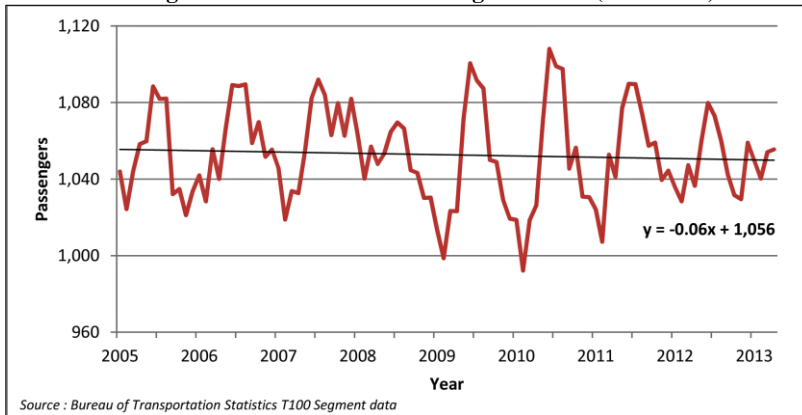
Table 2
FAA Avg Passenger Trip Length (2006-33)

U.S. Commercial Air Carriers		
Average Passenger Trip Length (Miles)		
Fiscal Year	Domestic	International
2006	871.4	2,911.5
2007	870.2	2,939.0
2008	873.5	2,985.2
2009	869.7	3,008.1
2010	875.0	2,983.8
2011	880.1	2,992.7
2012	883.6	2,949.7
2013	890.8	2,923.5
2014	890.7	2,934.7
2015	888.8	2,942.5
2016	889.3	2,950.2
2017	891.8	2,958.3
2018	894.4	2,966.5
2019	897.0	2,973.6
2020	899.9	2,979.4
2021	902.7	2,984.9
2022	905.6	2,988.8
2023	908.4	2,992.0
2024	911.3	2,995.0
2025	914.1	2,997.6
2026	917.3	3,000.6
2027	920.4	3,003.2
2028	923.6	3,005.3
2029	926.8	3,007.1
2030	930.0	3,007.8
2031	933.3	3,008.2
2032	936.6	3,008.5
2033	939.8	3,008.6

Source: FAA Aerospace Forecast Fiscal Years 2013-2033

The rate of miles per domestic passenger at SDIA (FAA Code: SAN) has averaged about 1,050 miles since 2005 (Figure 1). The Team’s analysis includes the assumption that a new San Diego airport would operate at or above the current capacity of SAN. In this regard, the Team chose SAN’s domestic average of 1,045 per Table 1 as the benchmark, instead of the average of all comparison airports (978).

Figure 1
Average Miles Per Domestic Passenger – SDIA (2005-2013)

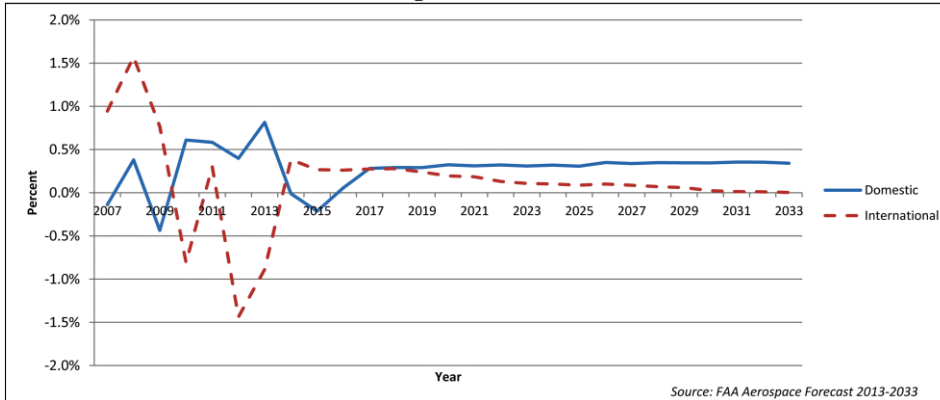


The Team’s analysis also includes the assumption that the length of international trips at a new San Diego airport would be significantly greater than at SDIA. Based on this, the average of all comparative airports (2,284) was selected as a reasonable rate of miles per international passenger.

The Team prorated each year’s total Aeronautical Passenger Revenue per the Report 127 data between domestic and international revenue, based on the proportion of domestic and international passenger miles. The prorated Passenger Revenue was then divided by passenger miles to arrive at the Revenue per Mile per Passenger rate for domestic and international air travel for each year 2003-2012. The Team used the mean and standard deviation across the four most recent years, 2009-12, to represent the rate of revenue per passenger mile for 2013 and beyond.

Projected revenue passenger miles for 2014-2030 were used from the FAA’s 2013-2033 Forecast. The base year in the forecast model was set to 2013 and the domestic and international miles per passenger as 1,045 and 2,284. The same year-over-year growth rates in miles per passenger that exist in the FAA’s forecast were applied to the base year, represented by the graph in Figure 2.

Figure 2
Miles Per Passenger Growth Rate (2007-2033)



The Team also projected passengers for 2014-2030 using the FAA’s 2013-2033 Forecast. Actual enplanements for 2012 served as the baseline that the 2013-22 growth rates were applied too as shown in Table 3 along with the three levels of optimism.

Table 3
FAA Forecast - Average Annual Growth Rates in Enplanements (2013-2022)

FAA Forecast of Percentage Average Annual Growth Rates					
Passengers	Scenario	2012-13	2013-14	2013-18	2013-22
Domestic					
Revenue Passenger Miles	Pessimistic	1.0%	0.2%	0.4%	1.1%
	Baseline	7.0%	2.7%	2.5%	2.4%
	Optimistic	1.0%	6.5%	4.9%	3.6%
Enplanements	Pessimistic	1.1%	0.1%	0.6%	1.1%
	Baseline	-0.1%	2.7%	2.4%	2.2%
	Optimistic	1.4%	5.9%	4.4%	3.2%
International					
Revenue Passenger Miles	Pessimistic	-2.1%	1.3%	2.9%	2.9%
	Baseline	-1.0%	4.2%	4.6%	4.5%
	Optimistic	1.5%	3.5%	5.0%	5.0%
Enplanements	Pessimistic	-1.3%	0.7%	2.7%	2.8%
	Baseline	-3.1%	3.8%	4.4%	4.3%
	Optimistic	2.2%	2.7%	4.8%	4.7%

Source: FAA Aerospace Forecast Fiscal Years 2013-2033

The Team forecasted Non-Passenger (Cargo) Revenue for 2014-2030 by combining the FAA’s growth rate per domestic cargo ton-mile (Table 4) and the benchmark ratio of cargo revenue to passenger revenue. The airport financial data from the Report 127 does not distinguish cargo revenue from domestic and international. Moreover, much of Southern California’s cargo air traffic flows through LAX, which has established significant economies of scale and learning. The more conservative domestic growth rate was selected as the benchmark for a new San Diego airport.

Table 4
FAA Forecast - Average Annual Growth Rates in Cargo Ton Miles (2013-2022)

FAA Forecast of Percentage Average Annual Growth Rates					
Cargo	Scenario	2012-13	2013-14	2013-18	2013-22
<i>Domestic</i>					
Revenue Ton Miles	Baseline	0.3%	-0.8%	1.0%	0.8%
<i>International</i>					
Revenue Ton Miles	Baseline	7.6%	1.5%	6.4%	5.9%

Source: FAA Aerospace Forecast Fiscal Years 2013-2033

The Team established additional rates to project annual Non-Aeronautical Revenue as a percentage of Aeronautical Revenue. Similarly, Operating Expenses and Other Income/Expenses were projected as percentages of Total Operating Revenue. The annual airport operating results were the foundation for this analysis (Federal Aviation Administration). The 10-year averages for each airport were organized into groups for comparison: West Coast, Similar Enplanements, Attractions, Capital Development, Large Hub, and SDIA. Along with the empirical data, the Team considered the operating characteristics shared by each group and SDIA. Using this holistic approach, the Team established a range within which a new San Diego international airport will operate. For example, a newly constructed airport will probably show considerable outstanding debt and interest expense on its books. Interest Expense is included in "Other Income/Expense". The Team concluded that Other Income/Expenses of the new airport should mimic the Other Income/Expenses of the Capital Development Group.

Annual Revenue/Mile/Passenger rates, projected miles, and passenger data were entered into a Crystal Ball simulation worksheet. The following parameters were set to define the probability distributions of the critical variables (Table 5).

Table 5
Parameters for Simulation of Net Present Value Cash Flows

Parameters for Simulation of Net Present Value of Cash Flows (2013-2030)	
Variable Description	Distribution / Parameters
Aeronautical Revenue per Mile per Passenger - Domestic	Normal (0.0127, 0.0047)
Miles per Passenger - Domestic	Normal (1,045; 33)
Passengers Annual Growth Rate - Domestic	Triangular (1.1%, 2.2%, 3.2%)
Aeronautical Revenue per Mile per Passenger - International	Normal (0.0018, 0.0028)
Miles per Passenger - International	Normal (2,284; 275)
Passengers Annual Growth Rate - International	Triangular (2.8%, 4.3%, 4.7%)
Cargo Annual Growth Rate	Triangular (0.5%, 0.6%, 0.8%)
Non-Aeronautical Revenue as % of Total Aeronautical Revenue	Uniform (10.4%, 16.8%)
Operating Expense as % of Total Operating Revenue	Uniform (87.0%, 94.6%)
Other Income/Expense as % of Total Operating Revenue	Uniform (-10.5%, 2.2%)

A total of 1,000 simulations were executed and generated a total cumulative NPV of operating cash flows for the new airport for 2025-2030. The Team chose the year 2025 as the opening of a new airport, providing ten years to complete the lengthy approval and construction process. The annual net cash flows were discounted back to 2013 using the Decision Document rate of 6.5% in order to calculate the NPV of the first five years of service.

The economic justification analysis for a new airport is based on data from the BTS T-100 Segment database. The Team used detailed records of every flight taking off or landing at a U.S. airport for 2006-2012 and loaded them into a Microsoft Access database. The relational nature of the Microsoft Access database provided considerable flexibility in comparing multiple variables in differing combinations.

Chapter V: Findings and Discussion

San Diego County Economic Forecast

San Diego County is the second most populated county in California with a population of just over 3.1 million people (State & County QuickFacts, 2013). The County defines Greater San Diego as the metropolitan statistical area of San Diego-Carlsbad-San Marcos. It is also part of the San Diego-Tijuana metropolitan area where about five million people reside. Between the United States and Mexico, this metropolitan area is the largest and most important as far as economy between two countries.

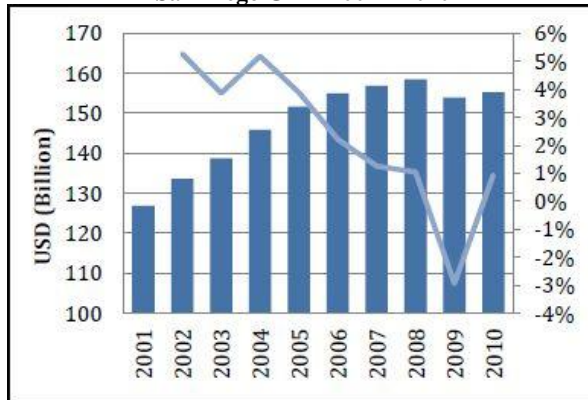
The Team based the research mainly on California County Level Economic Forecast 2012-2040. In addition, San Diego Metropolitan Export Initiative: Market Assessment is used to understand the current conditions in San Diego County. Even though San Diego metropolitan area is considerably large compare to others in the nation, the county does not have the broadest business sectors. The largest sectors of San Diego's economy are defense/military, tourism, international trade, and research/manufacturing, respectively and these sectors are a good percentage of all the jobs in the metropolitan area. The U.S. Navy is the largest employer. County reported 1.2 million wage and salary jobs. The average salary per worker is \$74,539, while the per capita income is \$49,418 (Padilla & Schniepp, 2012).

Gross Metropolitan Product (GMP) and Population

Gross Metropolitan Product (GMP) is simply the Gross Domestic Product (GDP) by metropolitan area. One of the reasons for using GMP instead of GDP is that some of the airport sites that are mentioned in the Decision Document are outside of City of San Diego, such as Carlsbad, or Pendleton near San Marcos. The second reason is that a possible upgraded airport or a new one would not just affect the San Diego but the whole San Diego-Carlsbad-San Marcos region.

San Diego's GMP has grown steadily over the past decade. According to the most current report from the Bureau of Economic Analysis (BEA), GDP by metropolitan area was \$171 billion in 2011 and \$177 billion in 2012 (Woodruff & Wang, 2013). The numbers finally passed the ones before the recession as a proof of improving economy in the area. San Diego's most competitive industries, as indicated by their location quotients, have been growing rapidly in the last year.

Figure 3
San Diego GMP 2001 – 2010



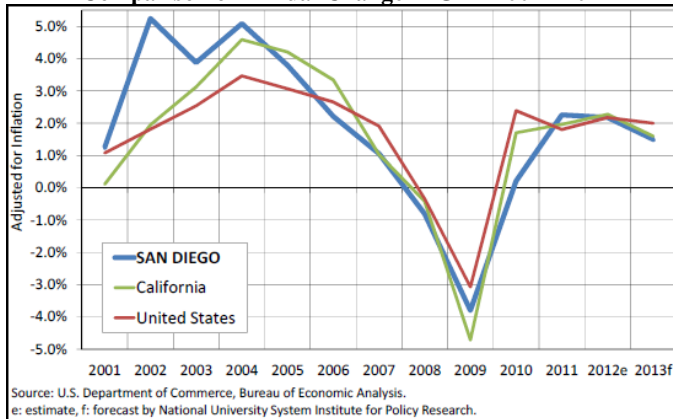
Source: San Diego Metropolitan Export Initiative: Market Assessment, May 2013

The main business sectors of San Diego's economies are real estate, military, business services, tourism, information, and government. Such industry concentrations give the metro area a competitive advantage compared to the national economy. After the recent recession, real estate, tourism and the business services have experienced the most damage however they are regaining momentum in the last couple years. In addition, the military and information sectors have been able to hold their own. The latest information taken from the State of California Employment Development Department shows the largest employers of San Diego County are the U.S. Department of Defense, the Federal Government, the State of California, the University of California San Diego, the County of San Diego, the San Diego Unified School District, Sharp Healthcare, Scripps Health, Qualcomm, City of San Diego, San Diego State University, Kaiser Foundation and General Atomics.

Unemployment and Job Growth

From the information taken from the Bureau of Labor Statistics (BLS), San Diego's unemployment rate was lower compared to the rest of California and the U.S. prior to the recession. However the rate of unemployment began to rise in San Diego and California earlier than the rest of the nation. Unemployment rates in San Diego kept increasing over the national level but not as high as State of California's unemployment rates. In the last couple of years, the unemployment rate has begun decreasing put San Diego in same marginal position between the U.S. and California. San Diego's economy continues to grow despite many challenges the city has encountered. Figure X demonstrates the position of San Diego compared to California and United States as far as annual change in GDP.

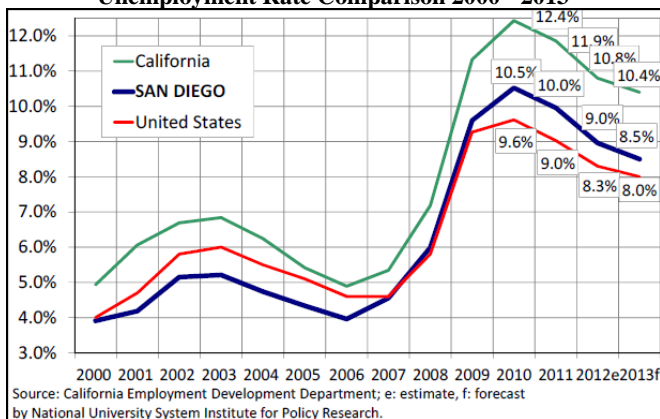
Figure 4
Comparison of Annual Change in GDP 2001 - 2012



According to the California County Level Economic Forecast during 2011, San Diego experienced job growth of 0.6 percent, compared to 0.7 percent growth across all of Southern California. Over the past year, San Diego County added a total of 7,900 wage and salary jobs, and the unemployment rate dropped from 10.5 percent to 10.0 percent. Among the major employment areas, gains and losses were mixed. The largest gains occurred in the region's core industries, including professional services (+3,800 jobs), education and healthcare (+3,600 jobs), and leisure and hospitality (+2,100 jobs). Retail trade added an additional 1,500 jobs. The largest losses were in government (-2,000 jobs), information (-1,000 jobs), agriculture (-500 jobs), and transportation and utilities (-400 jobs) (Padilla & Schniepp, 2012). The Team believes that a more capable airport could have a strong impact on jobs lost in the transportation and utilities sectors and long term improvements in professional services and leisure and hospitality jobs.

From the forecast, the Team concludes that San Diego's growth is going to slow in 2013 as California's economic improvement falls behind the rest of the nation as well. This year, 1400 payroll jobs that are projected to be added are fewer than in 2012 (Research, 2013). It has been 4 years since the recovery from the great recession started, but San Diego could replace about one half of the jobs lost during the 2007-2008 period. In addition, inflation is expected to stay at similar levels. In 2012, inflation was reported to be 1.6 percent, but in 2013 it rose to 2.2 percent (State & County QuickFacts, 2013). This means that the people of San Diego County will have to face higher commodity, food, energy and gas prices. Figure X demonstrates the position of San Diego compared to California and United States so far as annual unemployment rate.

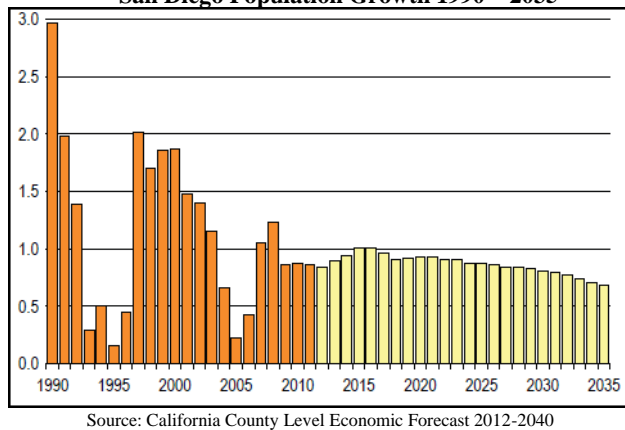
Figure 5
Unemployment Rate Comparison 2000 - 2013



Forecast Highlights, 2012 – 2017

From 2012 to 2017, total net migration is positive but moderate, averaging just over 4,600 people per year. Real per capita incomes increase at a rate of 2.2 percent in 2012. An annual compound rate of 2.4 percent is forecast from 2012 to 2017 (Padilla & Schniepp, 2012).

Figure 6
San Diego Population Growth 1990 – 2035



Regional Economic Indicators Analysis, 2013 – 2040

- Population (in number of people) is expected to increase by 12% from 2013 to 2025 and then slow down to 11% to 2040.
- Forecast for the number of households in San Diego is currently around 1.1 million and it is expected to increase 12% to 1.23 million in 2025 and another 11% for 2040.
- Per capita income for San Diego is currently averaging at \$51,000 and it is expected to increase 30%, \$15,000 by 2025 and another 20% by 2040. (see Figure 14)
- With the healing economy in United States, San Diego’s inflation rate is projected to drop 18% by 2040.
- San Diego’s industrial production is expected to increase almost 44% by 2040 with the improvements in defense, telecommunication and biotechnology industries.
- Today, San Diego’s unemployment rate is 7.8%, which is lower than its neighbor county Los Angeles and the state of California, however it is still higher than the national average. It is forecasted that this rate is going to drop to 4.4 in 2025 and another 7% decrease by 2040. It is expected that total wage and salaries are going to increase 15-17% by 2040.



- Since the population of San Diego is rising, the city is expanding. The employment for construction in the city is expected to increase by 23% by 2025 and then slow down.
- Other major employment increases are expected in transportation and utilities and professional services which are 67% and 64% respectively by 2040. (Padilla & Schniepp, 2012)

Another economic factor that can affect an airport project and get benefited from it is the San Diego city budget. After the recession in 2007-2008, like in all counties, San Diego has struggled to keep its budget balanced and predict its future. Last year the mayor announced that for the first time in seven years, the city had a structurally balanced budget and also his office

was projecting surpluses for the next five years; about \$5 million in fiscal year 2014, up to \$94 million in fiscal year 2018 (Office Of The Independent Budget Analyst Report, 2013). The primary increase of this healing is the improvement of the economy, which results in increased tax revenues.

The funding for a potential airport project is not going to be completely from the city budget. However, a failing budget with decreasing revenue balances would potentially affect the decision making process of an airport project both economically and politically. In another point of view, a failing budget is a sign to mediocre economic conditions. It also means that lower taxes collected and less chance of getting grants to fund a new airport project. Table 6 shows the summary of current reserve balances.

Table 6
General Fund Reserve Balance for FY 2013 and FY 2014

<i>(\$ in millions)</i>	Reserve	% Revenues
FY 2012 Ending Reserve Balance	\$ 167.2	
FY 2013 Projected Surplus	\$ 2.7	
FY 2013 Projected Ending Reserve Balance	\$ 169.9	14.5%
FY 2014 Use of Reserves	\$ (13.9)	
FY 2014 Projected Ending Reserve Balance	\$ 156.0	13.0%

Source: The City of San Diego, FY 2013 Year-End Budget Adjustments and Year-End Budget Monitoring

San Diego is still one of the top cities where people would like to move due to its natural environment, weather and attractions. However, this high interest in San Diego is increasing the cost of living and the cost of doing business in the area. When compared to the national average, living in San Diego is 11% more expensive and 23% more expensive to conduct business (Moody's Analytics, 2013). In other words; the high costs of doing business and real estate make San Diego less competitive with similar metro areas. Moreover, border crossing bottle necks with Tijuana and a smaller airport than its competitive metro areas are limiting the city's trade and business growth.

California fell deeper into a recession five years ago than the rest of the nation and San Diego's economy felt its impact. The economy is now healing, however the recovery is slow. Even though the city's current situation is better than its competitor metro areas and the future looks bright, the Team believes that the expansion of the airport or building a more capable airport is going to put San Diego's economy at a higher level.

Baseline Estimates Analysis

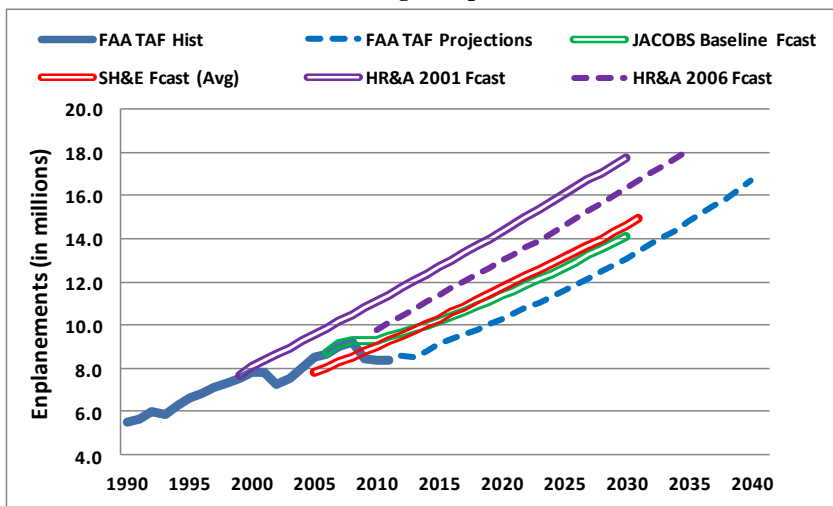
Earlier studies related to SDIA operations have focused on a similar set of variables when attempting to establish the timeframe when Lindbergh Field will approach a condition of constrained operations. Under this condition, the airport is deemed not meeting all: passenger, operation, and air cargo requirements. In order to quantify the impact to the regional economy of the non-expansion of SDIA, the Team analyzed the baseline estimates for different San Diego regions and airport specific variables utilized in earlier studies. These variables relate to: passenger enplanements, airport operations, air cargo tonnage, SDIA average airfares, regional population, regional employment, regional personal income, and regional per capita personal

income. As a result of the analysis, the Team uncovered differences in various baseline estimates, most of them likely due to the unanticipated effects of the economic recession that took hold of the U.S. economy in 2008. Most variables, particularly those related to SDIA operations, appeared significantly overstated in earlier studies in comparison to recent historical data.

Passenger Enplanements

The Team used in its analysis of passenger enplanements, forecasts generated by the FAA (Federal Aviation Administration, 2013). Baseline estimates from earlier studies for passenger enplanements at SDIA were found to display significantly overstated values when compared to the more recent FAA projections. The average differences were found to be 10.3% to 38.7% per year higher depending on the source of the data¹ over the 2013-2030 forecast projections. **Figure 8** displays the various enplanement projections by source.

Figure 8
SDIA Passenger Enplanements



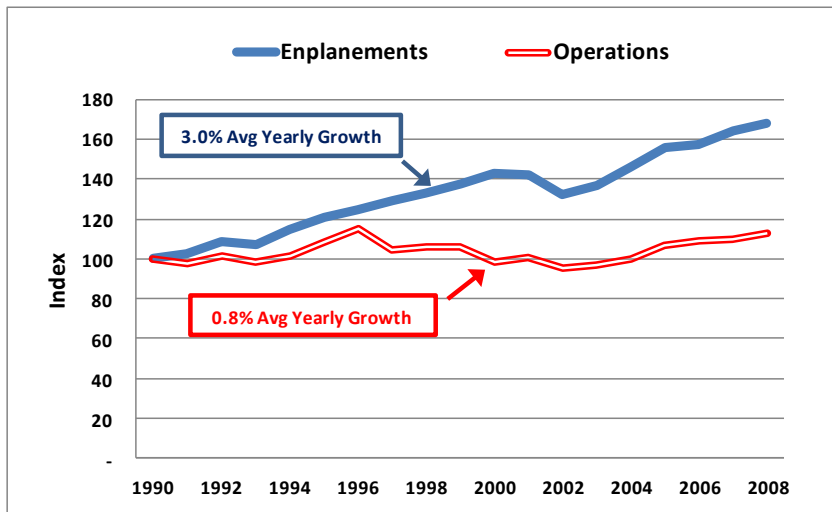
Source:
 FAA / Terminal Area Forecast report / November 2013
 JACOBS Consultancy / Destination Lindbergh Technical Report / March 2009
 SH&E SDIA / Aviation Activity Forecasts / June 2004
 HR&A / ICATCSD / January 2001
 HR&A / 2005-2035 Airport Economic Analysis / May 2006

HR&A, in their ICATCSD publication, point out a decline in airport operations at SDIA in conjunction with an increase in passenger volumes. HR&A goes on to identify the reasons for these changes as primarily attributable to the increased use of larger body aircraft combined with the decrease use of smaller regional planes (i.e., turboprops). The Team's analysis uncovered, for

¹ HR&A clarifies in their 2001 ICATCSD report their forecast values for 2000-2030 are for the San Diego region (not SDIA exclusive)

the period 1990-2008, that average yearly growth in passenger enplanements at SDIA was 3.0% per year; while average yearly growth in operations was only 0.8% per year. These figures appear to support HR&A's argument. **Figure 9** displays SDIA passenger enplanements and operations indexed to the year 1990.

Figure 9
SDIA Passenger Enplanements & Operations Indexed (1990=100)

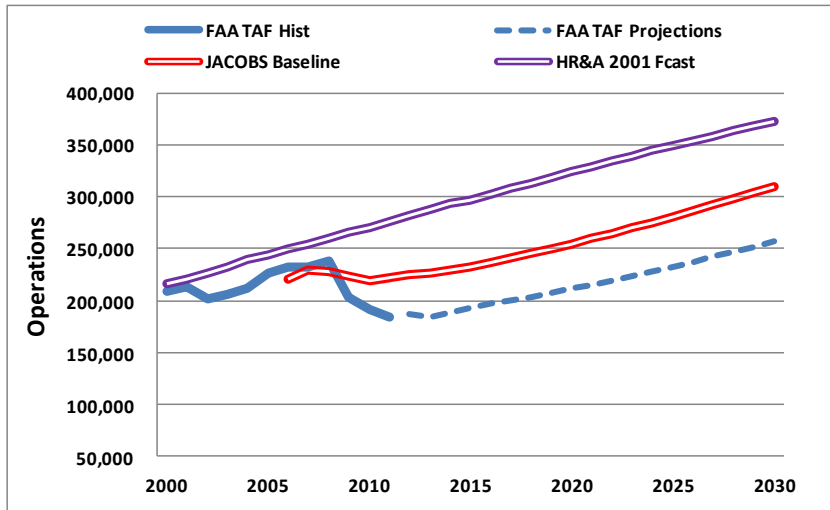


Source:
The Team

Airport Operations

Similar forecast discrepancies were identified with respect to SDIA total aircraft operations. As a result of the research, earlier baseline estimates for 2012 passenger enplanements at SDIA were found to be overstated between 13.8% and 12.2% depending on the data source, and between 15.1% and 10.5% average per year. The Team used in its analysis of operations, projections provided by the FAA (Federal Aviation Administration, 2013).

**Figure 10
SDIA Total Operations**



Source:
 FAA / Terminal Area Forecast Report / November 2013
 JACOBS Consultancy / Destination Lindbergh Technical Report / March 2009
 HR&A / ICATCSD / January 2001

Air Cargo Tonnage

Review of historical activity at SDIA with respect to air cargo tonnage revealed highly variable volumes from one year to the next. Year-over-year air cargo volumes were found to have increased by as much as 61.1% in a single year. In order to estimate future air cargo volumes, The Team performed correlation analysis on air cargo tonnage, and several other variables. The strongest correlation found was with U.S. GDP. **Table 7** lists the results of the regression analysis performed for the two variables.

**Table 7
Air Cargo Tonnage Regression Statistics and Variable Coefficients**

Regression Statistics			Coefficients	Standard Error	t Stat
R Square	0.921	Intercept	-112800.21	10356.359	-10.892
Adjusted R Square	0.918	U.S. GDP (2012 \$) Millions	0.01577	0.001	19.280
Standard Error	13179.2				

With the data from the regression analysis, the Team proceeded to generate the following estimated regression model for air cargo tonnage demand:

$$\text{Air Cargo Tonnage for Year } X = -112,800.21 + 0.01577 (\text{ U.S. GDP Dollars for Year } X)$$

Using the preceding model, air cargo tonnage demand was forecasted through the year 2030. The resulting values are listed on **Table 8**.

Table 8
Air Cargo Tonnage Estimates per Regression Model

Year	Tonnage	YOY Growth %
2014	155278	
2015	161444	3.97%
2016	167751	3.91%
2017	174204	3.85%
2018	180805	3.79%
2019	187558	3.73%
2020	194466	3.68%
2021	201533	3.63%
2022	208763	3.59%
2023	216159	3.54%
2024	223725	3.50%
2025	231465	3.46%
2026	239383	3.42%
2027	247484	3.38%
2028	255770	3.35%
2029	264247	3.31%
2030	272919	3.28%

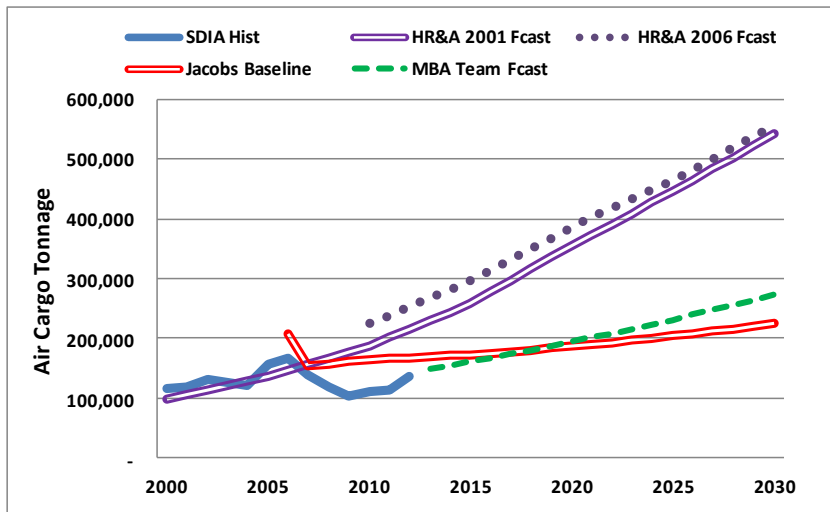
In its 2006 document (Hamilton, Rabinovitz, & Alschuler, 2006), HR&A projected an average yearly growth rate of 4.6% for air cargo tonnage out of SDIA for the period 2005-2035. The Team proceeded to forecast air cargo tonnage using HR&A's average yearly growth rate, and compare the resulting values to its own estimates per the regression model. The results of this comparison are shown in **Table 9**. When comparing the results, the Team discovered that for the period 2014-2022, the regression model estimates vary by no more than 4.0% from the estimates calculated using HR&A's annual growth rate, but the differences becoming greater as the forecasts grew beyond the year 2023.

Table 9
Air Cargo Tonnage Estimates Comparison

Year	Tonnage Estimates using Regression Model	Tonnage Estimates using HR&A Rate	Difference
2014	155278	150672	3.1%
2015	161444	157603	2.4%
2016	167751	164853	1.8%
2017	174204	172436	1.0%
2018	180805	180368	0.2%
2019	187558	188665	-0.6%
2020	194466	197343	-1.5%
2021	201533	206421	-2.4%
2022	208763	215917	-3.3%
2023	216159	225849	-4.3%
2024	223725	236238	-5.3%
2025	231465	247105	-6.3%
2026	239383	258472	-7.4%
2027	247484	270361	-8.5%
2028	255770	282798	-9.6%
2029	264247	295807	-10.7%
2030	272919	309414	-11.8%

With these results, the Team proceeded to use the more conservative regression model estimates. **Figure 11** displays the various air cargo projections by source.

Figure 11
SDIA Air Cargo Tonnage

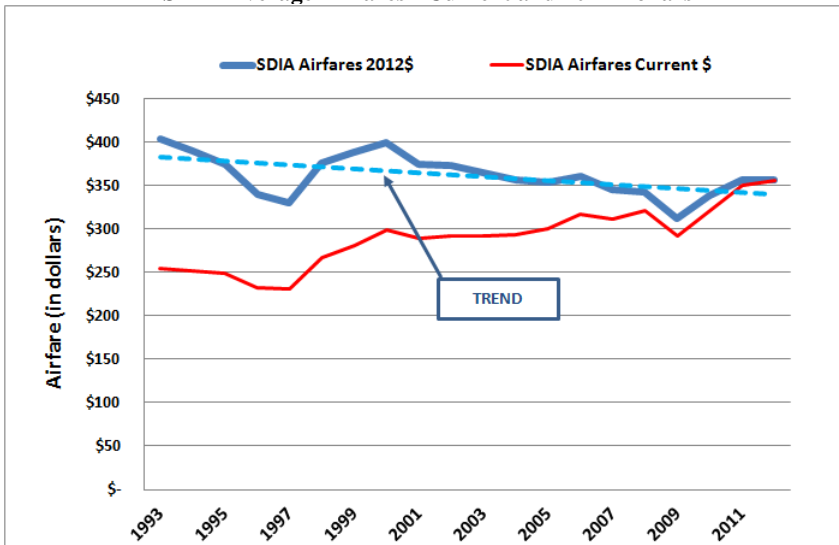


Source: FAA
 HR&A / ICATCSD / January 2001
 JACOBS Consultancy / Destination Lindbergh Technical Report / March 2009
 HR&A / 2005-2035 Airport Economic Analysis / May 2006

SDIA Average Airfares

When reviewing SDIA historical average airfares over the period 1993-2012, the data was found to exhibit a downward trend in constant dollars (2012\$). The average airfare yearly growth for the period 1993-2012 was **-0.5%**. This declining characteristic in constant dollars may explain the trend in recent years by various airlines to obtain further value from air passenger travelers via; baggage fees, preferred seating surcharges, and other miscellaneous fees.

Figure 12
SDIA Average Airfares - Current and 2012 Dollars



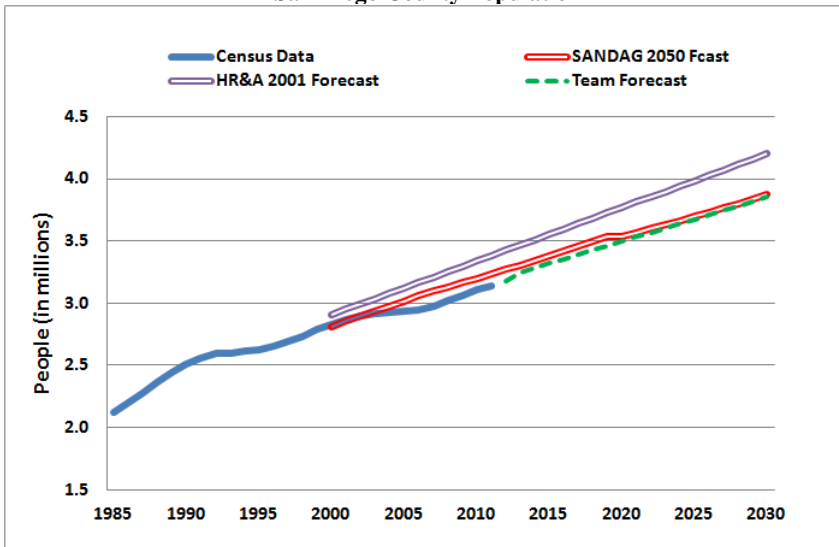
Source: U.S. Department of Transportation / Bureau of Transportation Statistics

Population

Upon reviewing the various estimates for total population for the San Diego region, the Team found HR&A's projections for the year 2030 exceed recent projections from SANDAG (SANDAG, 2010) by 10.5% for the same year. The Team also found that, for the forecast horizon 2010-2030, yearly population forecasts by HR&A exceed SANDAG's more recent projections by an average 9.0% per year. The Team generated estimates for San Diego's regional population through the year 2030 using more recent baseline data supplied by the BEA (Bureau of Economic Analysis, 2012). Using historical population growth rates for the region, the Team used population yearly growth rates of 1.1% for the period 2012-2017, 1.0% for the period 2018-2027, and 0.9% for the period 2028-2030. These rates were consistent with more recent year-

over-year population growth values for San Diego County. The Team then compared its population estimates with those provided by SANDAG and found them to differ by less than 2.0% in the year 2030. **Figure 13** illustrates historical population values for San Diego county, and the various forecasts considered in the analysis.

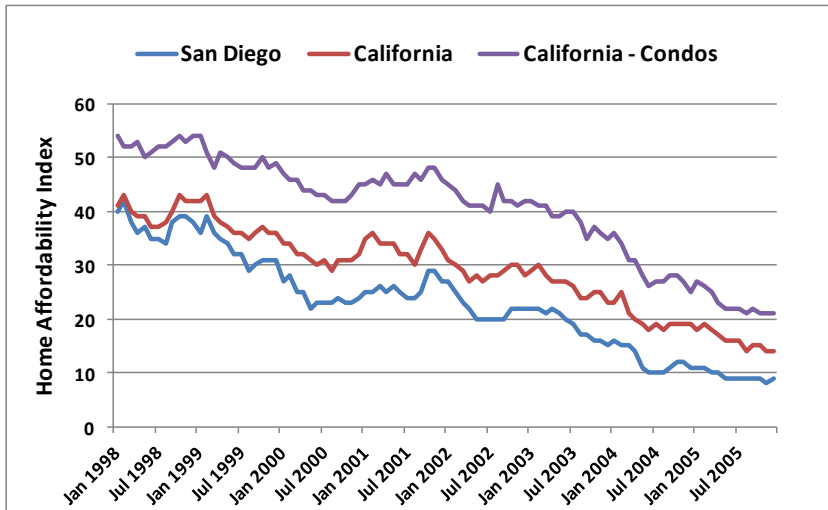
Figure 13
San Diego County Population



Source: U.S. Department of Commerce / Bureau of Economic Analysis / November 2012
 SANDAG / 2050 Regional Growth Forecast / February 2010
 HR&A / ICATCSD / January 2001
 The Team

While attempting to understand the discrepancies in population projections, the Team found that population growth in the San Diego region displays a notable reduction in year-over-year growth between the years 2003 and 2006 to an average **0.4% per year**. Compared to an average growth rate of **1.5%** for the period 1999-2002, and **1.9%** for the period 1985-2002. This deceleration in growth may be in part attributable to the dramatic increase in home prices at the national level, and then exacerbated locally in the early to mid 2000s. Large increases in median home prices during these years made home buying inaccessible to a greater percentage of the population, and could have led to greater levels of migration outflows. A measure of median home prices and its relationship to median household income is tracked by the California Realtor's Association and labeled "Home Affordability Index" or HAI (California Association of Realtors). It represents the percentage of households in the region that could afford a home at a price equal to the region's median home price. **Figure 14** displays the historical values for various home affordability indices within California.

Figure 14
Home Affordability Indices



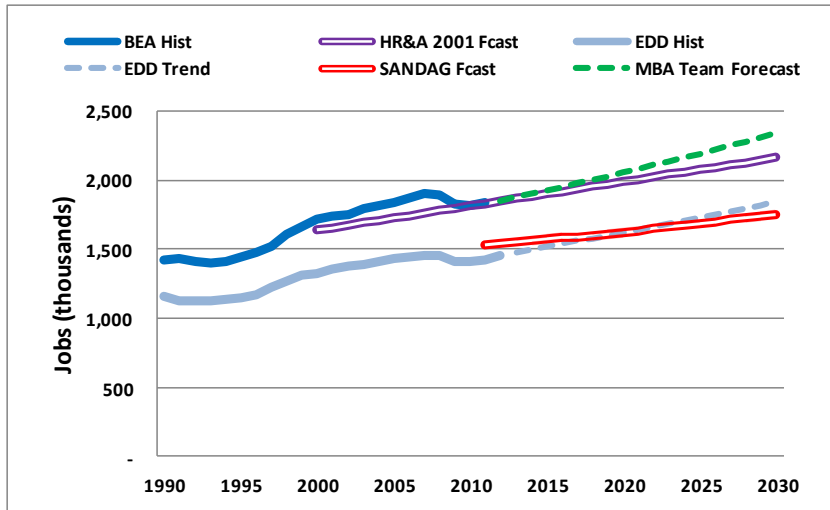
Source: California Association of Realtors / Historical Housing Affordability Index / November 2013

Employment

In their 2001 study, HR&A projected total employment in the San Diego region would reach **2,162,082 jobs** in the year 2030. As part of its analysis, the Team projected total employment through the year 2030 using data from the BEA. The employment forecasts obtained by the Team were calculated based on historical job growth rates observed for the San Diego region for the period 1990-2010. During this 20-year period, San Diego's total employment grew at an average 1.3% per year. This growth rate was used to forecast employment through the year 2030, projecting to be **2,337,640 jobs**. This forecast was 8.1% higher than the same year forecast by HR&A.

The Team identified different employment numbers provided by various sources. While HR&A uses full-time and part-time employment (due to reliance on employment data provided by BEA); SANDAG utilizes a civilian labor force number that is calculated by multiplying civilian population times a natural labor force participation rate. For consistency of analysis with regard to the work performed by HR&A, the Team utilized employment data provided by BEA.

Figure 15
San Diego County Employment



Source:
State of California / Employment Development Department / August 2013
U.S. Department of Commerce / Bureau of Economic Analysis / November 2012
HR&A / ICATCSD / January 2001
SANDAG / 2050 Regional Growth Forecast / February 2010
The Team

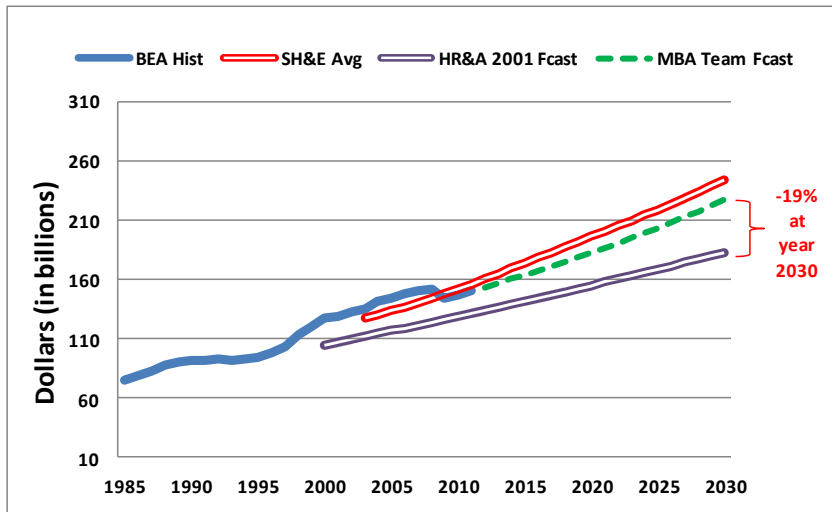
Total Personal Income

The Team reviewed historical data on San Diego county total personal income, and forecasted future values of this variable based on trend analysis. While San Diego's total personal income has grown at an average yearly rate of 2.9% since 1985, it has only grown by 1.9% on average since the year 2000. The Team projected total personal income values through the year 2030 using an annual growth rate of **2.2%**.

Using HR&A's population and per capita personal income projections through the year 2030, the Team calculated their baseline estimates of total personal income for the San Diego region. The resulting values were found to be on average 15.4% per year understated in comparison with the Team's personal income estimates for the forecast horizon 2010-2030, and **19.3%** understated for the year 2030. This underreporting of income levels appears to be a result of HR&A's per capita personal income assumption for the year 2000, which establishes a lower-than-actual baseline from which to project future growth. This is explained further in the per capita personal income analysis portion of this paper.

The Team also found that its total personal income estimate for the year 2030 is 7.3% lower than the average projected value by SH&E for the same year², as presented in their 2004 report. **Figure 16** displays historical values and the various estimates considered in the analysis.

Figure 16
San Diego Region Total Personal Income (2012\$)



Source:
 U.S. Department of Commerce / Bureau of Economic Analysis / November 2012
 SH&E / SDIA Aviation Activity Forecasts / June 2004
 HR&A / ICATCSD / January 2001
 The Team

Per Capita Personal Income

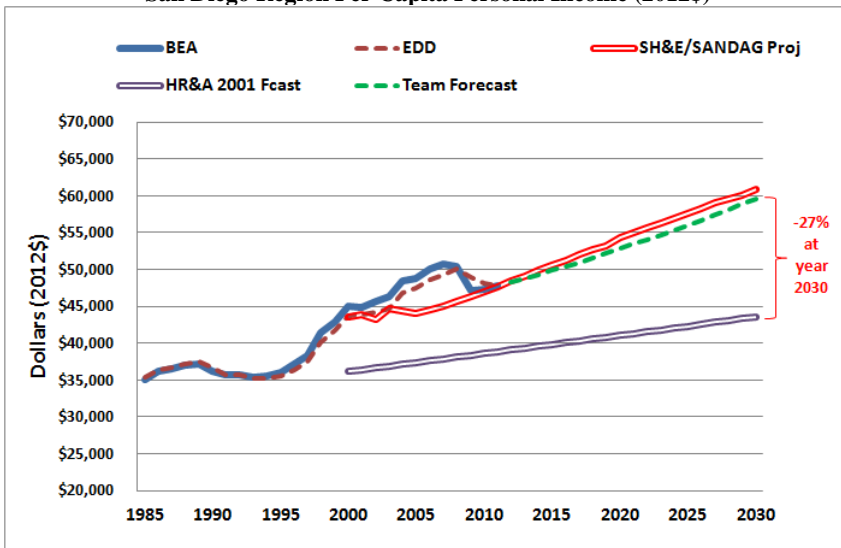
Per capita personal income projections through the year 2030 were calculated using the Team's estimates for the region's population and total personal income. The Team's per capita personal income, calculated by taking the sum of total personal income in the San Diego region and dividing by the total population. It was then compared to various other estimates of the same variable and found to closely follow projections generated by SANDAG (SH&E Consultancy, 2004). SANDAG's yearly values only exceeded the Team's estimates by 1.8% per year on average for the forecast horizon 2010-2030.

On the other hand, per capita personal income estimates from HR&A were found to be extremely understated through the full forecast horizon. Projected yearly per capita income

² SH&E provides high and low estimates of real personal income in their 2004 report. The Team calculated the average of both values for each year and used these averages for the analysis

levels provided by HR&A³ were calculated to be 22.4% understated in comparison to the projected values for the forecast horizon 2010-2030. The Team was able to identify the underlying factor behind such low estimates, which was the single starting data point HR&A utilized for the year 2000. In its "Baseline Projection of the Region's Economy to 2030" HR&A establishes different REMI model variables for the San Diego regional economy. In this baseline projection HR&A stipulates a baseline value of **\$25,255 dollars** per capita personal income (in 1997 dollars) for the year 2000. Using the CPI as a basis, The Team converted that value to year 2000 current dollars and found HR&A's baseline to be between 19.8% and 17.4% understated in relation to actual year 2000 values. **Figure 17** illustrates the various per capita personal income projections by source. **Table 10** provides a comparison of the various year 2000 per capita personal income levels also listed by source.

Figure 17
San Diego Region Per Capita Personal Income (2012\$)



Source:
 U.S. Department of Commerce / Bureau of Economic Analysis / November 2012
 State of California / Employment Development Department / Labor Market Information Division / November 2013
 SH&E / SDIA Aviation Activity Forecasts / June 2004

³ Since HR&A did not list their individual yearly estimates for per capita personal income in their 2001 document, we estimated those values using the two data points HR&A provided for the years 2000 and 2030. We assumed linear growth over the full span of 30 years, which resulted in an average yearly growth rate of 0.63%.

Table 10
Year 2000 Per Capita Personal Income Values by Source (2012\$)

Data Source	Value (2012\$)
U.S. Department of Labor / Bureau of Economic Analysis	\$ 45,037
State of California / Employment Development Department	\$ 43,723
SH&E (SANDAG) / Aviation Activity Forecasts	\$ 43,522
CCSCE / California Economic Growth	\$ 43,325
HR&A / Impacts of Constrained Air Transportation Capacity	\$ 36,123

Key Regional Economic Indicators

Table 11 displays a summary of the key variables for the San Diego region that were utilized in the analysis. **Table 12** displays the assumptions in year-over-year growth for each of the same key regional variables. Trends in yearly growth values used are in line with historical performance in each category, and reflect the estimates on the future outlook of the San Diego region.

Table 11
San Diego Region Key Variables

Year	San Diego Population	GRP in millions (2012 \$)	Per Capita Personal Income (2012\$)	TOTAL full-time and part-time Employment
Historical				
2010	3,105,115	\$ 172,546	\$ 48,041	1,813,386
2011	3,140,069	\$ 173,404	\$ 47,768	1,832,553
2012	3,174,610	\$ 177,410	\$ 48,288	1,852,711
Forecast				
2013	3,209,530	\$ 184,256	\$ 48,814	1,876,796
2014	3,244,835	\$ 189,331	\$ 49,345	1,901,195
2015	3,280,528	\$ 194,788	\$ 49,882	1,925,910
2016	3,316,614	\$ 200,658	\$ 50,424	1,950,947
2017	3,353,097	\$ 206,842	\$ 50,973	1,976,309
2018	3,386,628	\$ 212,238	\$ 51,579	2,002,001
2019	3,420,494	\$ 217,780	\$ 52,192	2,028,027
2020	3,454,699	\$ 222,581	\$ 52,812	2,054,392
2021	3,489,246	\$ 226,781	\$ 53,439	2,081,099
2022	3,524,139	\$ 230,084	\$ 54,074	2,108,153
2023	3,559,380	\$ 234,145	\$ 54,717	2,135,559
2024	3,594,974	\$ 237,449	\$ 55,367	2,163,321
2025	3,630,924	\$ 240,747	\$ 56,024	2,191,445
2026	3,667,233	\$ 244,503	\$ 56,690	2,219,933
2027	3,703,905	\$ 249,596	\$ 57,364	2,248,792
2028	3,737,240	\$ 253,107	\$ 58,103	2,278,027
2029	3,770,876	\$ 256,610	\$ 58,851	2,307,641
2030	3,804,813	\$ 260,463	\$ 59,610	2,337,640

**Table 12
San Diego Key Variables Year over Year Growth**

	Population Growth	GRP Growth	Per Capita Personal Income	Employment
Historical				
2010-2012	1.1%	0.4%	0.3%	0.4%
Forecast				
2011-2015	1.1%	2.5%	0.8%	1.2%
2016-2020	1.0%	2.7%	1.1%	1.3%
2021-2025	1.0%	1.6%	1.2%	1.3%
2026-2030	0.9%	1.6%	1.2%	1.3%

Opportunity Costs Analysis

When analyzing the effects of SDIA reaching maximum operations and air cargo capacity, HR&A quantified the impacts to the regional economy in the form of opportunity costs estimates. These estimates were cited by the Ricondo and Associates team in their 2006 Decision Document as the three economic opportunity costs to the San Diego region (**Table 13**).

**Table 13
Airport Site Selection Program Decision Document Economic Opportunity Costs**

Variable	Opportunity Cost
Gross Regional Product	Over \$4.0 Billion dollars lost
Jobs	Over 30,000 jobs lost
Personal Income	Over \$1.0 Billion dollars lost

Source: The Ricondo & Associates Team / 2006

The values for each of the three variables represent the minimum opportunity costs to the region, assuming SDIA is subject to a maximum facilities expansion scenario. Under this scenario, SDIA might incorporate a second 9,400-foot runway, additional gates up to a total of 53 jet gates, and maximum air cargo improvements that would increase maximum air cargo volumes to 300,000-325,000 tons (Hamilton, Rabinovitz & Alschuler, 2001). Additionally, HR&A provided a table (**Table 14**) of the various opportunity costs to the region under the three facilities scenarios considered in their report.

Table 14
HR&A Opportunity Costs Scenarios

Table 13 Opportunity Costs to the San Diego Region From Three Constrained Air Transportation Capacity Scenarios (dollars in constant 1997 \$)			
Opportunity Cost Measure	Differences From the Unconstrained Demand Forecast		
	Existing Facilities Scenario	Limited Expansion Scenario	Maximum Expansion Scenario
<i>In the Year 2030</i>			
Gross Regional Product (\$97 Billions)	\$8.02	\$6.22	\$4.61
Employment	56,277	44,961	34,132
Population	80,484	58,371	38,305
Households	32,192	23,346	15,293
Total Personal Income (\$97 Billions)	\$2.52	\$1.92	\$1.40
<i>Cumulatively 2000-2030</i>			
Gross Regional Product (\$97 Billions)	\$93.76	\$54.08	\$29.61
Total Personal Income (\$97 Billions)	\$29.16	\$16.39	\$8.86

Source: HR&A ICATCSD / 2001

With the preceding information, the Team was able to construct a table with the various ratios of year 2030 opportunity cost impacts versus total unconstrained values under each of the facilities scenarios (Table 15).

Table 15
HR&A Opportunity Costs as % of Total Unconstrained Year 2030 Values

Variable	Existing Facilities	Limited Expansion	Maximum Expansion
Lost GRP in year 2030 as % of Total 2030 GRP dollars (1997\$)	4.8%	3.7%	2.8%
Lost Jobs in year 2030 as % of Total 2030 Jobs	2.6%	2.1%	1.6%
Lost Personal Income in year 2030 as % of Total 2030 Pers. Income (1997\$)	2.0%	1.5%	1.1%

HR&A also provides different passenger- and air cargo-related opportunity cost contribution percentages as a result of SDIA operating under each of the three facilities scenarios (Table 16).

Table 16
HR&A Passenger and Cargo Related Shares to Opportunity Costs

Capacity Scenario	Existing Facilities Scenario		Limited Expansion Scenario		Maximum Expansion Scenario	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
<i>Gross Regional Product (Billions \$97)</i>						
Passenger-related	\$1.37	17.1%	\$1.25	20.1%	\$1.02	22.1%
Cargo-related	\$6.64	82.9%	\$4.97	79.9%	\$3.58	77.9%
Total	\$8.02	100.0%	\$6.22	100.0%	\$4.61	100.0%
<i>Employment (000's)</i>						
Passenger-related	20.43	36.3%	18.61	41.4%	15.17	44.5%
Cargo-related	35.85	63.7%	26.35	58.6%	18.96	55.5%
Total	56.28	100.0%	44.96	100.0%	34.13	100.0%

Source: HR&A ICATCSD / 2001

Upon determining SDIA will not reach its maximum operational capacity until the years 2033-2034, the Team focused its analysis on air cargo tonnage volumes. Using the Team's estimates from **Table 15**, and taking into consideration the percent contributions to total opportunity costs per HR&A, the Team was able to estimate updated opportunity costs for year 2030 (**Table 17**).

Table 17
Updated Year 2030 Opportunity Costs

Variable	Existing Facilities	Limited Expansion	Maximum Expansion
Lost GRP in year 2030 (1997\$) - Millions	\$ 7,246	\$ 5,412	\$ 3,915
Lost Jobs in year 2030	38,716	28,493	20,758
Lost Personal Income in year 2030 (1997\$) - Millions	\$ 3,124	\$ 2,378	\$ 1,728

Construction Costs

Airport Facilities

Using the ENR Construction Cost Index (Appendix-Table 34), the Team was able to calculate the 2006-2013 percent change of 122%. This came to an average yearly cost growth rate of 3.12%.

Airport Preparation

Earthwork is a big percentage of the airport preparation costs. The following are the main components of earthwork costs: unclassified excavation, embankment, borrow excavation, safety and security requirements, contractor quality control testing, mobilization, and demobilization.

The next large percentage of airport preparations costs are from utilities. The following are the main components of utility costs: water line pipes, treatment system and wastewater treatment plan and fuel, natural gas and underground electric line.

To work with more accurate and updated numbers, the Team consulted with the company Ninyo&Moore, a geotechnical and environmental sciences consultant company which provide services in: geotechnical engineering, engineering geology, and geophysics. They have completed earthwork jobs for projects such as: John Wayne Airport in Orange County, Campbell Shipyard in San Diego, and San Marcos High school in San Marcos.

Per the consultant: unclassified excavation/embankment costs, waterline costs, underground electrical line costs, and natural gas cost have doubled since 2006. Wastewater costs have increased 50%; mobilization costs have increased 5%; and contractor quality control testing increased 1.5%. Since these changes are on a per unit bases, the Team was able to apply it to all five sites in the Decision Document. The Team realized that not all construction costs has changed at the same levels with inflation and general economic conditions. Labor cost have seen a much larger increase than materials costs.

Total Costs

Forecasting the future construction cost by applying the 3.12% yearly growth rate to Airport Facilities and the increases to Airport Preparation leads to the following totals costs shown in the tables below. The Team noted the rate at which the costs are growing at is increasing as the years go on.

Table 18
Updated Construction Costs 2006-2030

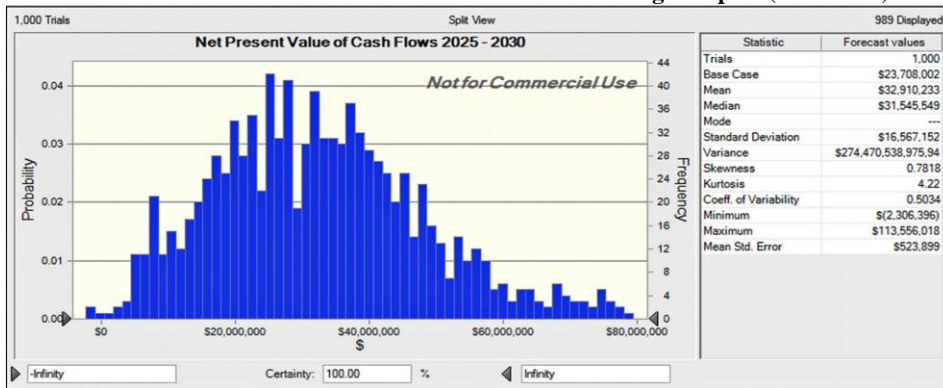
	Total Airport Development Cost				
	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
2006	\$ 16,699,000,000	\$ 17,408,000,000	\$ 5,768,999,000	\$ 6,275,280,000	\$ 5,961,536,000
2013	\$ 17,942,175,351	\$ 18,805,905,869	\$ 6,962,441,220	\$ 7,310,029,069	\$ 7,079,876,442
2015	\$ 18,404,785,479	\$ 19,320,277,597	\$ 7,377,729,326	\$ 7,675,514,823	\$ 7,475,623,184
2020	\$ 20,527,193,822	\$ 21,391,719,202	\$ 9,080,173,967	\$ 9,296,688,958	\$ 9,140,183,762
2025	\$ 24,724,425,655	\$ 26,087,203,244	\$ 12,894,920,113	\$ 12,636,853,297	\$ 12,760,462,630
2030	\$ 33,923,837,680	\$ 36,431,758,400	\$ 21,317,696,221	\$ 19,983,456,134	\$ 20,731,906,583

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Financial Analysis

The Crystal Ball simulation calculated a mean NPV of net cash flows equaling \$33 million over the five years 2025-2030 as the baseline for a new San Diego airport (Figure x). The Decision Document adjusted the projected passenger demand at three of the five alternative sites based on the market research report by Eclat. MCAS Miramar and NAS North Island/SDIA both had the same passenger demand as the base example below. MCB Camp Pendleton had a passenger demand of +1.8% above the base demand. Campo/Boulevard had a passenger demand 16% below the base demand. Imperial Valley had a passenger demand 37% below the base demand (Eclat Consulting, 2006).

Figure 18
Baseline Net Present Value of Cash Flows - New San Diego Airport (2025-2030)



The Team applied these adjustments to the baseline data in Crystal Ball and re-executed the simulation for three sites. In the Summary Cost Comparison (Table 19), the Team compared the NPV cash inflows to the construction development costs for 2025-2030.

Table 19
Construction Costs & Discounted Cash Flows from Operations – Five Alternative Sites

Summary Program Cost Comparison - 2025					
Component	Campo/ Boulevard	Imperial County Desert	NAS North Island/SDIA	MCB Camp Pendleton	MCAS Miramar
Site Acquisition and Preparation	\$2,775,000,000	\$179,000,000	\$708,000,000	\$1,691,000,000	\$1,052,000,000
- Land Acquisition	\$50,000,000	\$5,000,000	\$100,000,000	\$130,000,000	\$180,000,000
- Demolition of Impacted Facilities	N/A	N/A	\$243,000,000	\$12,000,000	\$84,000,000
- Earthwork	\$2,725,000,000	\$174,000,000	\$365,000,000	\$1,549,000,000	\$788,000,000
Airport Facilities	\$7,775,000,000	\$7,851,000,000	\$5,330,000,000	\$7,562,000,000	\$7,721,000,000
- Airside	\$1,264,800,000	\$1,058,900,000	\$1,678,700,000	\$1,619,800,000	\$1,778,600,000
- Terminal	\$4,048,200,000	\$4,047,700,000	\$2,335,100,000	\$4,051,300,000	\$4,051,300,000
- Access and Parking	\$1,460,500,000	\$1,737,500,000	\$955,400,000	\$956,200,000	\$956,200,000
- Cargo	\$328,500,000	\$328,200,000	\$328,200,000	\$328,200,000	\$328,200,000
- General Aviation	\$37,300,000	\$37,500,000	\$37,500,000	\$37,500,000	\$37,500,000
- Ancillary/Support	\$635,900,000	\$601,200,000	\$385,300,000	\$569,000,000	\$569,000,000
Airport Ground Access and Utilities	\$10,586,000,000	\$13,858,000,000	\$2,773,000,000	\$1,338,000,000	\$1,595,000,000
- Roadway/Highway Improvements	\$1,771,000,000	\$2,491,000,000	\$485,000,000	\$1,139,000,000	\$1,380,000,000
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$2,131,000,000	N/A	N/A
- Utilities	\$672,000,000	\$700,000,000	\$157,000,000	\$199,000,000	\$215,000,000
Total Airport Development Cost	\$21,808,000,000	\$21,888,000,000	\$8,811,000,000	\$10,591,000,000	\$10,368,000,000
NPV Operating Cash Flows 2025-2030	\$ 27,000,000	\$ 20,000,000	\$ 33,000,000	\$ 32,000,000	\$ 33,000,000

The simulation results reveal a coefficient of variability of 50%. The current net cash flow model is designed to yield a moderately conservative estimation of typical annual operations of a new San Diego airport. The Team attempted to build into the model certain financial characteristics shared by comparable airports. The model's accuracy can be improved, particularly in forecasting annual Operating Expenses. The model does not account for any specific: capital financing issues, funding or revenue sharing agreements with airlines, or additional PFC's to fund construction.

Given the economic challenges a new San Diego airport would face, some may question what economic justification exists for building it. Airlines have exercised about all cost cutting

and capacity reduction opportunities available in the U.S. market. (MIT Int'l Center for Air Transportation, 2011) Evidence of this can be found in the FAA Aeronautical Forecast 2013-2033. Total domestic and international passenger load factor is projected to increase by only 0.9% by 2033. (Federal Aviation Administration, 2013)

Figure 19 shows how the average load factor of domestic flights increased over 10% since 2002. The average load factor of international flights for the same timeframe is displayed in **Figure 20**. The two figures reveal greater variability among airports in the load factor of international flights.

Figure 19
Load Factor – Domestic Flights 2002-2013

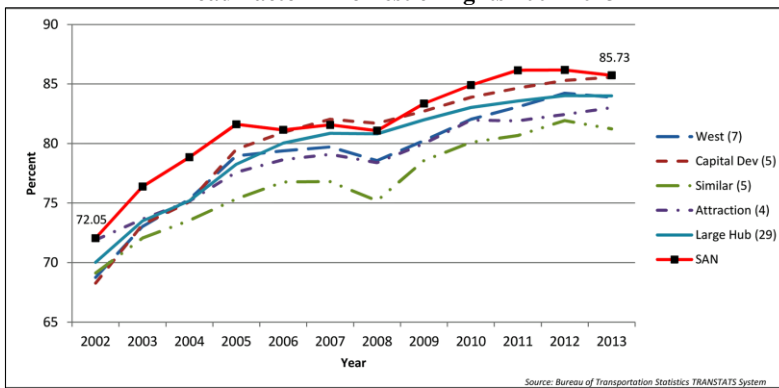
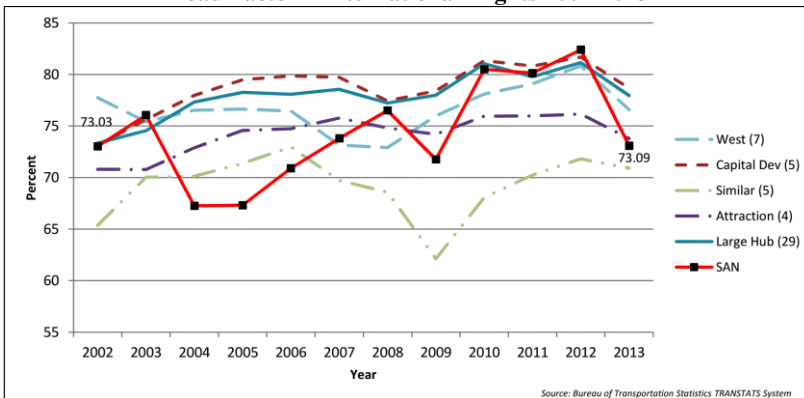


Figure 20
Load Factor – International Flights 2002-2013

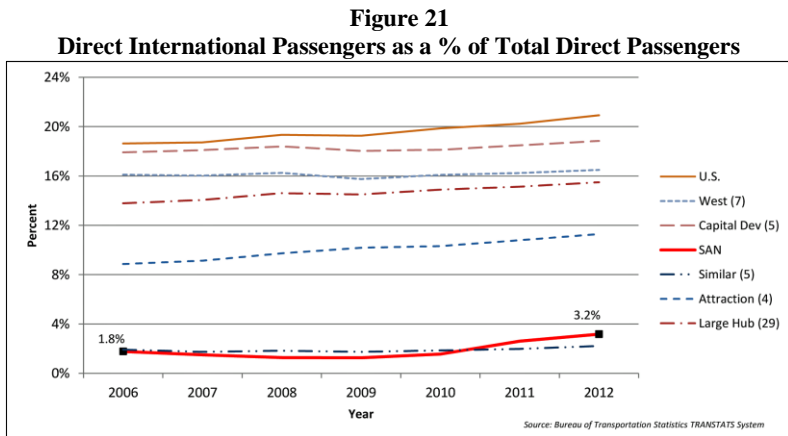


Because the domestic market offers slim margins and few growth opportunities, airlines have begun to target international travelers, and increase their percentage of international

enplanements. Airlines are seeking out international routes and markets where currency valuation in relation to the U.S. Dollar creates opportunities for volume and profit growth. (John Wensveen, 2010) U.S. airlines have entered into joint ventures with foreign carriers to access new customer markets while creating economies of scale. For example, Delta Airlines has penned agreements with Virgin Atlantic, Air France, and Alitalia Airlines to expand trans-Atlantic routes. (Delta Airlines) Since the mid-1990's, global airline alliances, such as Star Alliance, Sky Team, and oneWorld, have formed between international carriers to expand global markets. (Booz & Company, 2009)

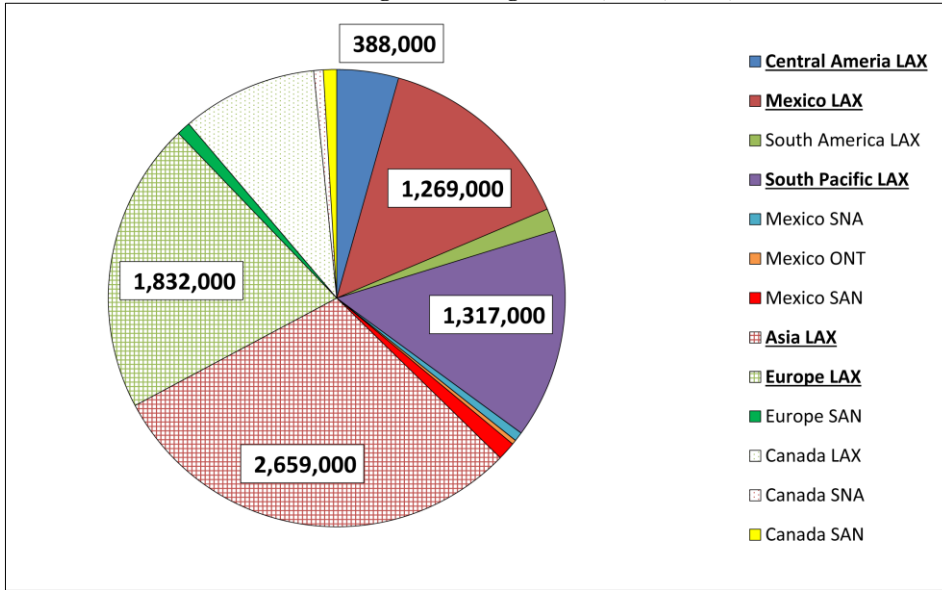
Airports can attract and accommodate additional international passengers, leveraging benefits from the current airline industry strategy. Even SDIA's own web site contends that the economic value of a single international flight is several times greater than a short-haul domestic flight. (San Diego International Airport, 2013)

Figure 21 shows that only 3.2% of all SAN passengers fly direct international routes. Except for Similar Enplanement airports, most other large airports have over 15% direct international passengers.



If a new San Diego airport is to attract a significant increase in international passengers, airport management will need to target a specific sub-market. The demographic consists of passengers currently traveling through: LAX, SNA, or Ontario Airport (ONT) from: Mexico, Central America, Europe, Asia, or the South Pacific. **Figure 22** shows the market size of potential international travelers who are the most likely to divert their travel through San Diego.

Figure 22
Direct International Passengers Arriving at LAX, SNA, ONT, SAN (2012)



SDIA has taken several steps over the years to optimize its domestic and international capacity. The Destination Lindbergh terminal expansion is the latest project to maximize the output of SDIA's 661 acres in downtown San Diego. (Jacobs Consultancy, 2009) SDIA has earned a reputation for some of the industry's best on-time performance as illustrated in **Figures 23 and 24**.

Figure 23
Percent of On-Time Gate Departures (2006-2012)

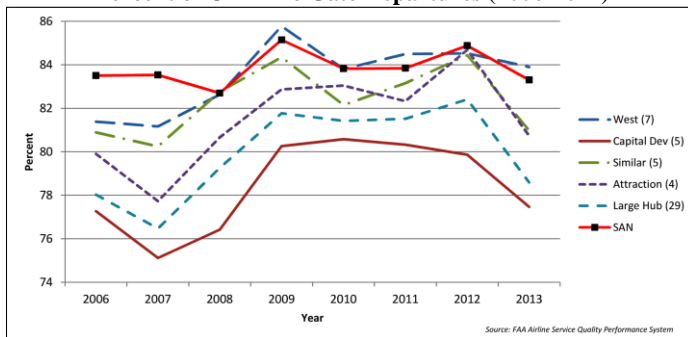
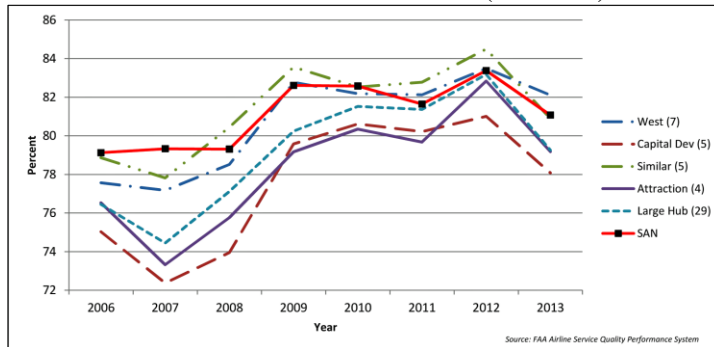


Figure 24
Percent of On-Time Gate Arrivals (2006-2012)



Cost per Enplaned Passenger (CPEP) is an industry metric that attempts to measure an airline’s total cost of operations at a particular airport. For example, airports charge airlines landing fees, fuel flowage fees, hanger rental, terminal rental, and ground services. SDIA’s CPEP for 2009-2012 is one of the lowest among the benchmark airports (**Table 20**). A new San Diego airport has some flexibility to increase its rates for services to airlines, and still remain competitive with LAX. Airport fees account for about 5% of an airline’s operating costs. Airports can negotiate different fee structures, or waive fees altogether, to entice airlines to install new non-stop routes to and from their facilities.

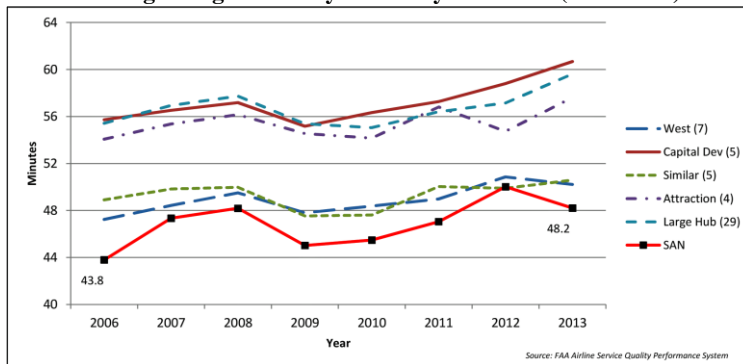
Table 20
Average Airline Cost Per Enplaned Passenger (2009-2012)

Airport/Group	Avg Airline Cost per Enplaned Passenger (CPEP) 2009-2012
MIA	18.15
LGA	17.40
SFO	15.50
BOS	14.45
Capital Devel. Group	14.27
ORD	13.31
DCA	12.91
SEA	12.22
DEN	12.20
PDX	11.56
SJC	11.51
West Coast Group	11.14
All Comparison Airports	11.00
Attraction Group	10.70
OAK	10.13
Similar Enplane Group	9.36
SNA	8.91
LAX	8.57
MDW	7.97
MCO	6.13
SAN	6.06
TPA	5.02
FLL	4.83

Source: FAA CATC Report 5100-122

One type of cost to airlines that is not included in the CPEP is delay costs stemming from airport-related issues. The average commercial jet costs an airline \$78.17 per block minute. (Jeff Schulthess, 2013). In 2013, SAN is on pace to incur over 14,600 delayed arrivals according to the FAA ASQP database, with an average delay of 48 minutes (Figure 25). This represents \$55 million of profit lost to inefficiency absorbed by airlines at one airport for one year.

Figure 25
Average Length of Delay Per Delayed Arrival (2006-2012)



In order to achieve its on-time performance and efficiency, SDIA has sacrificed flexibility in its customer base. Table 21 shows the market share of the major airlines since the Decision Document was published. Southwest Airlines serviced 38% of all passengers flying through SDIA. This is the highest concentration of market share by a single airline among the benchmark airports. Also, note SDIA’s lack of diversity in airlines with an “Other” category at 23%, significantly lower than the comparison group.

Table 21
Passenger Market Share by Airline (2006-2012)

Airline Market Share of Passengers, 2006-2012						
Air Carrier	SAN	U.S.	Capital Dev (5)	West (7)	Similar (5)	Attraction (4)
Other	23%	50%	44%	38%	34%	55%
Southwest Airlines Co.	38%	14%	6%	17%	40%	11%
United Air Lines Inc.	11%	8%	24%	16%	5%	---
Delta Air Lines Inc.	9%	11%	---	7%	8%	14%
American Airlines Inc.	8%	11%	20%	9%	6%	11%
Alaska Airlines Inc.	6%	---	6%	11%	---	---
US Airways Inc.	5%	6%	---	---	8%	9%
Total	100%	100%	100%	100%	100%	100%

SOURCE: Bureau of Transportation Statistics T-100 Segment data.

Even at optimum efficiency, no amount of effort or money can overcome the capacity limitations created by SDIA’s single, 9,400 ft. runway. The Team extracted data on required runway lengths from a 2010 study that Ricondo & Associates performed for Los Angeles

International Airport (**Figure 26**). (Ricondo & Associates, 2010) The chart reflects the appropriate future runway length to accommodate departures on runway LAX 6R-24L for the given type of long-haul aircraft that use LAX. Measurements represent aircraft that are loaded with the maximum allowable payload weight. Runway length requirements are specified in FAA Advisory Circular 150/5325-4B *Runway Length Requirements for Airport Design*.

Runway length required for take-off is determined in part by the following: aircraft's operating weight; the airport's altitude, air temperature and wind conditions. (Federal Aviation Administration, 2005) The average temperature, wind conditions, and altitude of SDIA or a new San Diego airport are similar enough to those at LAX to reasonably extrapolate runway length estimates for SDIA.

Of the 19 jumbo jets on the chart, only five types of aircraft take off and land at SDIA with any significant frequency. The remaining 14 aircraft would need to reduce payload to unreasonably low levels in order to lift off the ground within 9,400 feet. Reducing payload to these low levels is not financially viable for commercial operations.

Figure 26
Runway Take-Off Length Required for Large Aircraft – LAX 2010

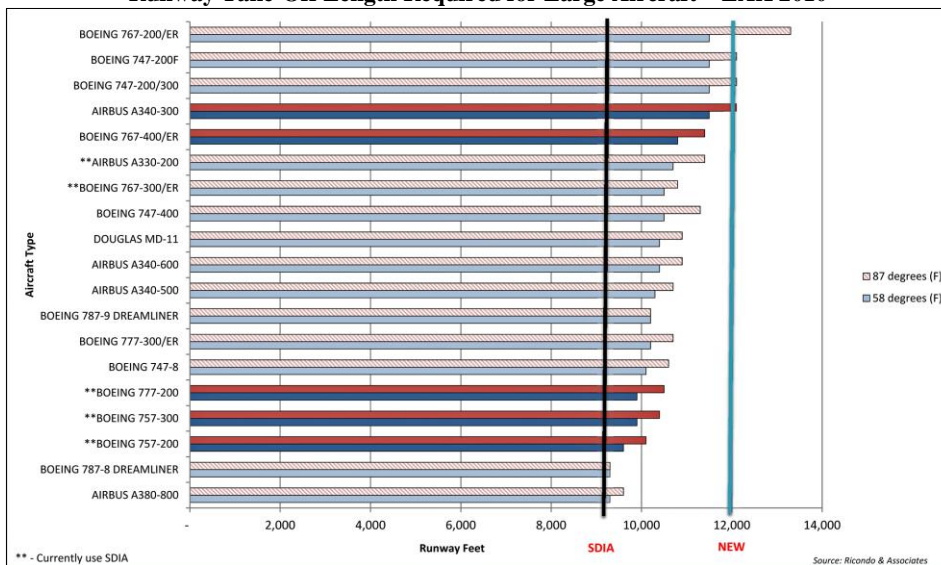
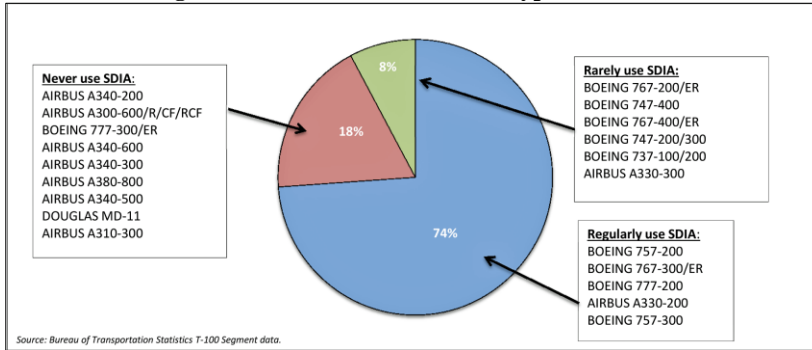


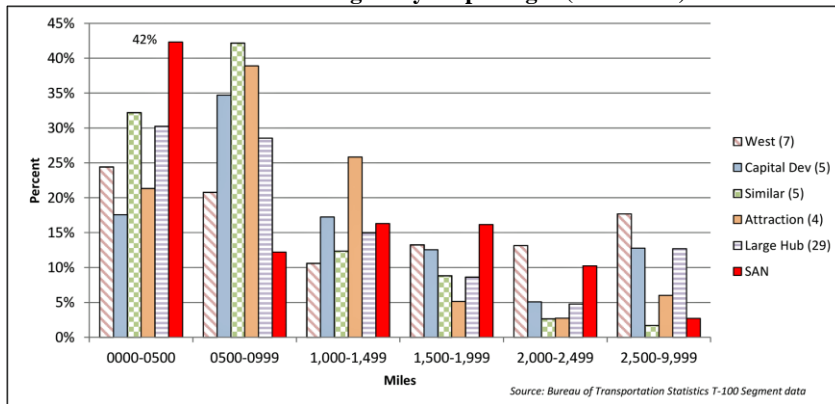
Figure 27 shows the types of aircraft flown by the 1.3 billion jumbo jet passengers at U.S. airports since the Decision Document. Almost one-quarter, 400 million, of the passengers flew on aircraft that could not fly through San Diego even if they wanted to.

Figure 27
U.S. Passengers (1.3B) on Jumbo Jets That Bypass SDIA (2006-2012)



International flights are not the only ones bypassing SDIA; many long-haul domestic flights bypass SDIA for larger neighboring airports. A new 12,000-foot runway would change the aircraft and passenger mix for domestic, as well as international flights. A new San Diego International airport would have options to grow beyond dependence on the low-cost carrier Southwest Airlines and its shorter routes. **Figure 28** shows that SDIA caters to short-haul routes more than most other large airports. Fewer passenger miles translate to lower fares and less return per passenger.

Figure 28
Percent of Passengers by Trip Length (2006-2012)



The FAA anticipates that airlines will fly large, wide body passenger and cargo jets as an increasing percentage of total fleet usage (**Table 22**).


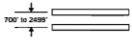
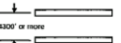
Table 22
Average Annual Growth Rates of Aircraft Used by Mainline Carriers (2013-2022)

U.S. Mainline Carriers Aircraft In Use - % Avg Annual Growth Rates					
Cargo	Scenario	2012-13	2013-14	2013-18	2013-22
<i>Large Narrowbody</i>					
2, 3, & 4-engine passenger jets	Baseline	-1.4%	-1.3%	0.3%	0.8%
Cargo jets	Baseline	-7.5%	-2.5%	0.7%	1.1%
<i>Large Widebody</i>					
2, 3, & 4-engine passenger jets	Baseline	-2.5%	0.4%	3.4%	3.4%
Cargo jets	Baseline	-2.0%	-1.5%	1.2%	1.8%
<i>Regional Jets</i>					
Regional jets in use	Baseline	12.8%	1.8%	1.4%	0.6%

Source: FAA Aerospace Forecast Fiscal Years 2013-2033

Constructing a new airport with state-of-the-art design and technology would afford the owners an extraordinary opportunity to improve their ability to provide the “unobstructed access” that aircraft and passengers expect, while also substantially increasing volume. Airfield and terminal design exerts significant influence over the airport’s capacity at which delays start occurring. **Table 23** shows the impact that runway configuration can have on an airport’s capacity to service aircraft and passengers.

Table 23
Runway Configurations & Estimated Annual Operations Capacity

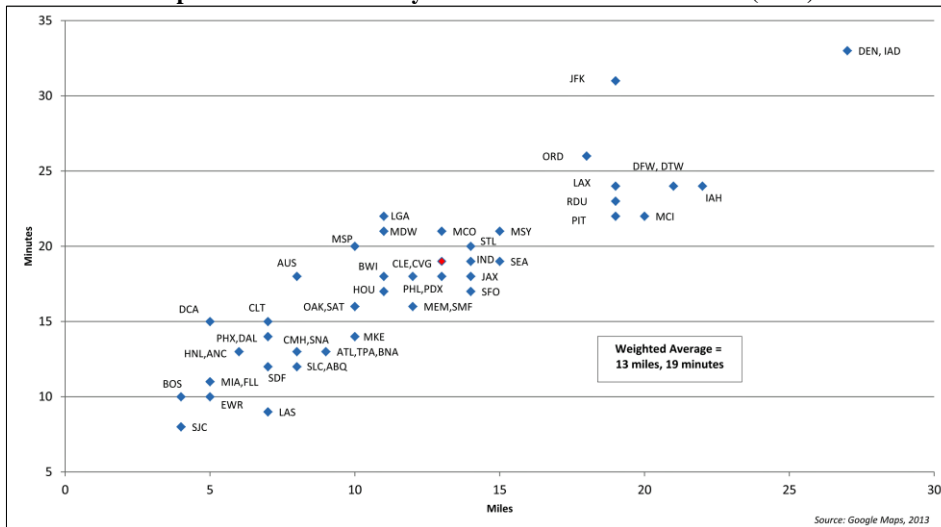
Configuration	Runway configuration diagram	Estimated Capacity - Air Operations per Year
<i>A</i> Single Runway		195,000 – 240,000
<i>B</i> Dual Lane Runways		260,000 – 355,000
<i>C</i> Independent IFR Parallels		305,000 – 370,000

In terms of attracting potential travelers, airports must focus on customer: service, convenience, and overall experience. In addition to providing: top rate ground transportation, food and beverage concessions, rental cars, and Wi-Fi, airports want to offer convenient access to: highways, commuter railways, attractions, and population centers.

Figure 29 shows the distance in miles and travel time from the fifty-three busiest U.S. airports to their respective city’s center. The average distance and travel time, weighted according to average annual passengers, are approximately 13 miles and 19 minutes. Denver International

(DEN) and Washington Dulles International (IAD) are the farthest airports from their city center at twenty-five miles and 33 minutes commute time.

Figure 29
Airport Distance from City Center – Miles & Travel Time (2013)



Glossary

Air Operations – the sum of airport arrivals and departures for a given period.

Airfield – those portions of an airport, excluding both the terminal aircraft apron and cargo aircraft apron, providing for landing, taking off, and taxiing of aircraft.

Airport Capacity – the number of departures and arrivals an airport can handle safely and routinely in an hour for the most common runway configuration, for each weather condition. “Full” capacity does not represent absolute maximum, and could be exceeded occasionally under favorable conditions.

Air Cargo Tonnage – the volume of freight, express, and diplomatic bags carried on each flight stage, measured in metric tons.

Apron – a paved area on the airside of the terminal or cargo building that is designated for the parking of aircraft and support vehicles, and the loading and unloading of aircraft.

Available seat miles – Number of seats available multiplied by the number of miles flown.

Average Airfare – the average itinerary fares, based on the total ticket value, consisting of round-trip fares, unless the customer does not purchase a return trip. In that case, the one-way fare is included. It does not include other fees paid at the airport or on-board the aircraft.

Cost per Enplaned Passenger – all landing fees, airside usage fees, fuel flowage fees, terminal rents, and other airline payments to airports, divided by total enplaned passengers.

Constant Dollars – an adjusted value of currency used to compare dollar values from one period to another. Dollar values adjusted for price changes (inflation).

Current Dollars – an unadjusted value of currency. Dollar values in the year they were actually received or paid, unadjusted for price changes (inflation).

CPI - Consumer Price Index.

Debt Service – any principal, interest, premium, or other fees and amounts either paid or accrued for bonds and other financing instruments.

DLAAF - Destination Lindbergh Aviation Activity Forecast (Jacobs Consultancy Team).

Enplaned Passenger – any air revenue passenger who boards an aircraft, including any passenger that previously disembarked from another aircraft (i.e., connecting passengers).

Full-time equivalent employee – Number of total hours worked divided by number of hours in a standard work week.

GDP (Gross Domestic Product) - the monetary value of all the finished goods and services produced within a country's borders in a specific time period, usually measured during a full calendar year.

General Aviation – the activities of privately owned aircraft that are not used for commercial purposes, such as the movement of passengers or cargo.

General Fund - in government accounting, fund used to account for all assets and liabilities of a nonprofit entity except those particularly assigned for other purposes in another more specialized fund.

GMP (Gross Metropolitan Product) - market value of all final goods and services produced within a metropolitan area in a given period.

GRP (Gross Regional Product) - see "GMP".

HAI (Home Affordability Index) - measures the percentage of households that can afford to purchase the median priced home in the state and regions of California based on traditional assumptions.

ICATCSD - The Impacts of Constrained Air Transportation Capacity on the San Diego Regional Economy (HR&A).

Landing Fee – a per-plane charge for use of the airfield, typically assessed based on the 1,000 lb. maximum gross landed weight of passengers and cargo in the aircraft.

Load factor – Revenue passenger miles divided by available seat miles.

MCAS – Marine Corps Air Station.

MCB – Marine Corps Base.

Narrowbody Aircraft – single-aisle aircraft, subdivided into “large” (e.g., Boeing 757); “medium” (e.g., Douglas MD80, Boeing 737-300, 737-400); and “small” (Boeing 737-500, 737-200, Airbus A319).

NAS – Naval Air Station.

Non-Airline Revenue – all sources of airport revenue not paid by airlines. These include automobile parking, concessions, car rentals, other building and land rentals.

Non-signatory Airline – an airline that has not executed an agreement with a particular airport. These airlines may pay higher rates and charges than signatory airlines in exchange for the flexibility of not having a long-term commitment.

Passenger Facility Charges (PFC) – fees imposed by public airport operator to supplement funds available from federal Airport Improvement Program (AIP) grants to assist in airport development and expansion. They are approved by the FAA and are collected by the airlines through attaching a charge (maximum \$4.50) to each passenger ticket. PFC revenue can be used

to fund only specific capital improvement projects that will preserve or enhance safety, capacity, or security; reduce noise; or increase airline competition.

Passenger Enplanements—the total number of revenue passengers boarding an aircraft.

Per Capita Personal Income – is the income that is received by persons from all sources. This measure of income is calculated as the personal income of the residents of a given area divided by the resident population of the area.

Regional Aircraft – aircraft used for commercial services with less than 60 seats, including turboprops and regional jets.

Revenue passenger miles – Number of paying passengers multiplied by number of miles flown.

Personal Income – the income received by, or on behalf of, all persons from all sources.

REMI - Regional Economic Models, Inc.

SDIA - San Diego International Airport.

SDIAAAF - San Diego International Airport Aviation Activity Forecasts (SH&E).

Signatory Airline – An airline that executes an agreement with a particular airport in which the airline pays lower rates and charges than non-signatory airlines.

Widebody Aircraft – Twin-aisled aircraft, including the Boeing 747, 767, 777, Douglas DC10, MD11, and L1011.

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Appendices

Appendix A
Financial Benchmark Operating Results (2003-2012) (Page 1)

Financial Government Payment Report													
As of 09/20/2013 01:14:20 PM													
State													
Hub Size													
Airport Name													
LOC_ID													
FYE													
Date Filed													
Form 5100-127													
http://ats.faa.gov/													
10 Yr Avg	West Coast Airports						Capital Development Airports						Similar Enplan
	LAX	OAK	SJC	SNA	SEA	SFO	DFW	MIA	ORD	DCA	MDW		
10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	
Passenger Airline Aeronautical Revenue													
Passenger airline landing fees	21.0%	25.0%	13.6%	11.2%	10.9%	17.5%	17.9%	18.6%	10.1%	27.7%	17.3%	19.6%	
Terminal arrival fees - rents - utilities	13.5%	11.8%	19.6%	22.7%	22.1%	35.6%	32.9%	28.9%	40.4%	32.9%	35.0%	24.3%	
Terminal/International arrival area rental or other charge	4.5%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Terminal area apron charges/tiedowns	0.7%	0.2%	1.5%	0.5%	3.2%	1.2%	0.5%	0.0%	1.8%	0.0%	0.0%	0.2%	
Federal inspection fees	0.7%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Other passenger aeronautical fees	0.9%	0.1%	0.1%	0.3%	1.3%	0.1%	0.2%	8.1%	0.4%	0.8%	0.0%	0.0%	
Total Passenger Airline Aeronautical Revenue	41.3%	45.9%	34.7%	34.8%	37.5%	54.7%	51.5%	55.7%	52.7%	61.4%	52.3%	44.1%	
Non-Passenger Aeronautical Revenue													
Landing fees from cargo	0.4%	1.0%	2.5%	0.3%	0.1%	0.4%	0.2%	0.3%	0.8%	0.0%	0.0%	0.0%	
Landing fees from GA and military	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
FBO revenue - contract or sponsor-operated	0.7%	0.0%	3.1%	1.9%	2.2%	0.0%	1.5%	0.0%	0.0%	0.2%	0.2%	3.2%	
Cargo and hangar rentals	3.6%	5.9%	7.8%	0.5%	0.7%	1.8%	6.0%	0.9%	6.6%	0.6%	0.5%	1.1%	
Aviation fuel tax retained for airport use	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	0.0%	0.1%	
Fuel sales net profit/loss or fuel flowage fees	1.3%	0.1%	3.0%	1.4%	0.4%	0.0%	0.0%	0.9%	2.3%	1.4%	0.0%	1.8%	
Security reimbursement from Federal Government	0.6%	2.1%	0.1%	0.7%	2.3%	0.2%	0.2%	0.0%	0.1%	0.7%	0.2%	0.8%	
Other non-passenger aeronautical revenue	2.4%	0.4%	0.9%	1.8%	0.0%	0.4%	0.1%	0.1%	4.3%	1.3%	0.0%	6.3%	
Total Non-Passenger Aeronautical Revenue	9.3%	9.4%	17.3%	6.6%	5.7%	2.6%	7.9%	6.1%	14.1%	4.3%	0.9%	13.3%	
Total Aeronautical Revenue	50.6%	55.3%	52.1%	41.5%	43.2%	57.2%	59.3%	61.8%	66.7%	65.7%	53.2%	57.4%	
Non-Aeronautical Revenue													
Land and non-terminal facility leases and revenues	3.0%	6.9%	4.3%	1.1%	0.2%	2.0%	1.8%	0.6%	3.0%	1.0%	4.3%	0.2%	
Terminal-food and beverage	4.4%	4.4%	2.6%	2.4%	3.4%	3.0%	1.9%	3.5%	3.3%	5.6%	3.2%	6.6%	
Terminal-retail stores and duty free	4.7%	9.6%	1.5%	4.0%	3.6%	3.0%	8.0%	2.6%	7.0%	5.6%	3.3%	4.5%	
Terminal-services and other	2.7%	2.6%	0.5%	6.6%	2.1%	3.2%	3.9%	0.9%	5.2%	0.5%	2.6%	0.0%	
Rental cars-excludes customer facility charges	8.7%	8.6%	8.8%	14.7%	12.2%	9.5%	10.3%	7.8%	4.9%	3.9%	8.4%	7.4%	
Parking and ground transportation	19.0%	11.7%	24.7%	26.7%	35.2%	16.8%	13.8%	21.2%	6.8%	15.9%	21.8%	23.8%	
Hotel	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Other Non-Aeronautical Revenue	6.5%	1.0%	5.6%	3.2%	0.2%	5.4%	0.9%	1.7%	2.5%	1.7%	3.2%	0.2%	
Total Non-Aeronautical Revenue	49.4%	44.7%	48.0%	58.5%	56.8%	42.8%	40.7%	38.3%	33.3%	34.3%	46.8%	42.6%	
Total Operating Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Operating Expenses													
Personnel compensation and benefits	21.7%	42.3%	16.6%	28.9%	14.4%	23.1%	33.2%	19.5%	29.0%	20.1%	26.6%	21.8%	
Communications and utilities	7.0%	4.8%	4.1%	3.9%	3.3%	4.2%	4.2%	6.6%	7.8%	5.3%	5.0%	5.4%	
Supplies and materials	4.8%	3.6%	0.6%	1.6%	2.0%	1.6%	1.9%	3.7%	3.6%	2.4%	3.3%	1.1%	
Contractual services	20.8%	23.6%	28.0%	43.0%	35.3%	8.4%	15.9%	13.1%	17.3%	18.0%	19.9%	22.4%	
Insurance claims and settlements	1.7%	1.3%	0.9%	0.8%	2.4%	0.7%	0.9%	2.1%	1.8%	2.9%	1.9%	3.1%	
Other Operating Expenses	11.1%	1.9%	27.3%	13.1%	3.2%	15.2%	2.1%	13.3%	6.4%	15.9%	5.6%	31.3%	
Subtotal - Operating Expenses	66.9%	77.6%	77.6%	91.4%	60.6%	53.1%	58.2%	58.4%	65.7%	64.5%	62.3%	84.9%	
Depreciation	20.0%	13.0%	27.3%	27.7%	18.4%	31.0%	22.7%	31.8%	23.6%	24.5%	24.8%	30.1%	
Total Operating Expenses	86.9%	90.5%	104.9%	119.1%	79.0%	84.2%	78.4%	90.2%	91.3%	89.4%	87.2%	115.0%	
Operating Income (Loss)	13.1%	9.5%	-4.9%	-19.1%	21.0%	15.8%	21.6%	9.8%	8.7%	10.6%	12.9%	-15.0%	
Non-Operating Revenue (Expenses) & Capital													
Interest Income	5.4%	6.2%	0.3%	4.9%	4.0%	6.4%	4.5%	8.4%	2.2%	6.0%	4.9%	6.0%	
Interest expense	-17.5%	-5.2%	-8.8%	-18.0%	-5.9%	-30.1%	-37.5%	-39.9%	-28.7%	-36.3%	-28.7%	-44.0%	
Grant receipts	8.3%	6.5%	12.0%	10.4%	7.6%	17.8%	2.8%	5.1%	0.0%	8.0%	3.2%	10.7%	
Passenger Facility Charges	20.6%	17.8%	18.4%	18.6%	18.0%	18.0%	12.5%	17.3%	11.4%	21.8%	17.8%	26.4%	
Capital Contributions	2.7%	0.0%	0.0%	6.2%	0.0%	2.2%	3.3%	0.1%	4.2%	0.0%	0.0%	0.0%	
Special items (loss)	0.0%	0.0%	0.0%	-1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	
Other Non-Operating Revenue	0.8%	1.8%	4.8%	2.2%	0.6%	-0.2%	-3.4%	-1.5%	2.8%	1.9%	-2.6%	4.5%	
Total Non-Operating Revenue	20.4%	27.1%	26.5%	22.8%	17.1%	14.2%	-17.8%	-10.5%	-8.0%	2.2%	-5.5%	3.6%	
Net Assets													
Change in net assets	33.5%	36.5%	21.6%	3.8%	38.2%	30.0%	3.8%	-0.7%	0.7%	12.8%	7.4%	-11.4%	
Operational Statistics													
Enplanements	198,892,274	29,069,413	5,862,467	4,724,424	4,506,318	14,993,865	17,649,658	23,048,100	15,971,486	33,913,181	8,549,393	8,753,073	
Domestic	-	21,261,265	5,775,590	4,627,207	4,488,097	13,721,644	13,629,538	22,173,366	8,283,438	28,766,926	8,392,097	8,667,878	
International	-	7,808,149	86,878	97,217	18,221	1,272,221	4,020,121	874,734	7,688,048	5,146,255	157,296	85,195	
Annual aircraft operations	288,111,172	527,891	225,133	169,062	235,162	334,395	393,189	599,939	371,990	912,797	273,777	282,214	
Domestic	-	-	-	-	-	-	-	-	-	-	-	-	
International	-	-	-	-	-	-	-	-	-	-	-	-	
Passenger airline cost per enplanement	\$ 4.46	\$ 8.57	\$ 10.13	\$ 11.51	\$ 8.91	\$ 12.22	\$ 15.50	\$ 12.20	\$ 18.15	\$ 13.31	\$ 12.91	\$ 7.97	
Full time equivalent employees at end of year	9,308	3,185	254	345	164	786	1,289	990	1,262	1,266	540	177	
Revenue Passenger Miles - Domestic (000's)	-	30,710,821	4,753,910	3,858,903	3,940,510	17,000,960	19,832,779	20,356,484	8,813,220	25,726,803	5,733,845	7,638,044	
Revenue Passenger Miles - International (000's)	-	36,373,603	143,486	246,258	21,401	3,953,865	19,395,094	1,773,802	16,116,476	18,960,342	74,878	113,493	
Revenue Miles per Passenger - Domestic	-	1,444	811	832	878	1,240	1,460	918	1,064	894	680	881	
Revenue Miles per Passenger - International	-	4,659	1,659	2,289	436	3,098	4,822	2,029	2,096	3,682	478	1,276	
Revenue per Mile per Passenger - Domestic	-	0.006339	0.010590	0.010163	0.009814	0.010190	0.010882	0.014802	0.012307	0.012904	0.018073	0.006799	
Revenue per Mile per Passenger - International	-	0.002328	0.000372	0.000200	0.000124	0.000946	0.003223	0.000578	0.011396	0.002356	0.000339	0.000666	
Enplanements per Employee	21,367.4	22,821.0	57,758.3	13,698.0	27,427.4	63,560	13,698	58,217	31,639	38,272	39,562	70,646	
Aircraft Operations per Employee	30,952.4	165.8	887.2	480.2	972.5	1,418	122	1,515	295	1,030	1,267	2,278	
Aeronautical Revenue per Enplanement	\$ 18.05	\$ 9.66	\$ 7.88	\$ 7.88	\$ 8.49	\$ 11.87	\$ 15.62	\$ 13.00	\$ 18.37	\$ 10.96	\$ 12.08	\$ 5.96	
Aeronautical Revenue per Aircraft Operation	\$ 12.46	\$ 1,330.47	\$ 513.00	\$ 220.28	\$ 406.85	\$ 532.23	\$ 1,753.18	\$ 499.57	\$ 1,972.31	\$ 407.16	\$ 377.16	\$ 184.87	
Non-Aeronautical Revenue per Enplanement	\$ 21.56	\$ 9.40	\$ 10.89	\$ 13.25	\$ 12.86	\$ 9.28	\$ 12.35	\$ 8.94	\$ 11.61	\$ 6.13	\$ 10.82	\$ 5.75	
Non-Aeronautical Revenue per Aircraft Operation	\$ 14.88	\$ 1,293.85	\$ 708.65	\$ 370.38	\$ 616.21	\$ 416.21	\$ 1,386.14	\$ 343.41	\$ 1,345.72	\$ 272.65	\$ 337.80	\$ 178.40	
Operating Cost per Enplanement	\$ 29.23	\$ 16.32	\$ 17.62	\$ 20.68	\$ 13.71	\$ 11.53	\$ 17.67	\$ 13.65	\$ 22.93	\$ 11.50	\$ 14.40	\$ 11.47	
Operating Cost per Aircraft Operation	\$ 20.18	\$ 2,246.89	\$ 1,146.98	\$ 578.02	\$ 656.97	\$ 516.87	\$ 1,982.95	\$ 524.35	\$ 2,460.88	\$ 427.29	\$ 449.78	\$ 355.63	
Total Cost per Enplanement	\$ 45.59	\$ 20.14	\$ 25.83	\$ 31.02	\$ 19.21	\$ 24.80	\$ 35.16	\$ 30.40	\$ 41.84	\$ 22.43	\$ 26.78	\$ 21.47	
Total Cost per Aircraft Operation	\$ 31.47	\$ 2,773.05	\$ 1,681.26	\$ 866.73	\$ 920.29	\$ 1,111.87	\$ 3,946.05	\$ 1,168.06	\$ 4,490.59	\$ 833.39	\$ 836.12	\$ 666.02	
Non-Passenger Aero Rev as % of Total Aeronautical Rev	22.6%	20.5%	49.9%	19.0%	15.1%	4.8%	15.3%	11.0%	26.7%	6.9%	1.8%	30.1%	

Appendix B Financial Benchmark Operating Results (2003-2012) (Page 2)

Financial Government Payment Report																	
As of 09/20/2013 01:14:20 PM																	
State																	
Hub Size																	
Airport Name																	
LOC_ID																	
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Form 5100-127																	
http://cats.faa.gov/																	
	Inland Airports						Attraction Airports						West Coast Airports				
	PDX	TPA	BOS	FLL	LGA	MCO	LAX	OAK	SJC	SNA	PDX						
	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	10 Yr Avg	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	
Passenger Airline Aeronautical Revenue																	
Passenger airline landing fees	15.8%	7.5%	19.3%	9.4%	37.8%	9.5%	1,530,330,596	181,056,860	119,281,726	111,159,320	261,327,323						
Terminal arrival fees - rents - utilities	33.9%	23.4%	21.2%	19.4%	21.5%	20.6%	718,488,159	260,582,963	242,635,611	225,655,358	562,016,491						
Terminal/international arrival area rental or other charge	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	542,229,546	-	-	-	-						
Terminal area apron charges/fees/downtons	0.4%	0.1%	0.8%	0.7%	0.0%	1.3%	13,004,183	19,450,256	5,655,675	32,967,554	6,520,582						
Federal Inspection Fees	0.2%	0.1%	1.8%	0.8%	0.0%	0.5%	-	-	1,581,239	52,716	3,376,570						
Other passenger aeronautical fees	0.1%	-1.7%	0.0%	0.0%	0.0%	0.0%	3,338,618	878,423	3,262,325	12,865,503	2,363,216						
Total Passenger Airline Aeronautical Revenue	50.4%	29.4%	44.9%	31.1%	59.5%	31.9%	2,809,381,102	461,968,502	372,416,576	382,698,451	835,624,602						
Non-Passenger Aeronautical Revenue																	
Landing fees from cargo	0.9%	0.1%	0.4%	0.2%	0.0%	0.2%	61,200,152	32,886,184	3,055,804	1,214,356	14,366,632						
Landing fees from GA and military	0.2%	0.0%	0.2%	0.2%	0.2%	0.0%	-	-	10,800	-	3,296,031						
Airport revenue - contract or sponsor-operated	0.6%	1.3%	0.7%	2.4%	0.0%	1.2%	-	40,934,538	20,041,009	22,120,412	9,800,987						
Cargo and hangar rentals	2.9%	1.7%	4.2%	1.7%	1.5%	1.5%	362,035,835	103,498,048	5,779,375	7,460,961	65,312,530						
Aviation fuel tax retained for airport use	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-						
Fuel sales net profit/loss or fuel flowage fees	0.1%	0.2%	0.2%	0.3%	0.5%	0.2%	3,411,215	39,918,125	14,970,994	3,990,174	2,182,087						
Security reimbursement from Federal Government	0.0%	0.4%	0.6%	0.4%	0.7%	0.1%	325,797,192	879,211	7,321,196	23,182,719	15,199						
Other non-passenger aeronautical revenue	0.4%	-2.4%	0.0%	0.0%	0.0%	0.0%	22,389,444	12,568,278	19,004,983	-	2,139,492						
Total Non-Passenger Aeronautical Revenue	6.2%	1.2%	8.6%	5.0%	7.8%	3.8%	574,833,838	230,645,184	70,863,361	57,968,622	102,172,948						
Total Aeronautical Revenue	56.6%	30.6%	53.4%	36.1%	67.3%	35.7%	3,384,214,940	692,613,686	443,279,937	440,667,073	937,797,640						
Non-Aeronautical Revenue																	
Land and non-terminal facility leases and revenues	2.7%	3.6%	3.1%	2.8%	0.0%	1.0%	421,808,484	56,624,942	11,999,539	1,720,941	44,609,115						
Terminal-food and beverage	2.4%	5.7%	1.4%	4.8%	2.6%	4.0%	269,880,223	35,028,254	25,385,072	34,805,684	39,295,044						
Terminal-retail stores and duty free	2.7%	3.6%	2.9%	4.1%	1.4%	5.7%	587,437,017	19,968,998	42,373,785	36,557,577	44,743,888						
Terminal-services and other	0.7%	2.2%	1.0%	0.7%	0.1%	2.5%	158,885,557	6,689,078	70,181,814	21,259,286	11,596,945						
Rental cars-excludes customer facility charges	8.8%	18.5%	5.8%	20.4%	4.1%	20.8%	523,875,988	116,949,939	137,771,215	124,155,768	145,849,454						
Parking and ground transportation	24.7%	33.7%	25.4%	23.1%	15.1%	16.0%	712,299,168	328,923,633	285,064,072	358,695,700	409,931,254						
Hotel	0.2%	0.4%	0.7%	0.0%	0.0%	4.5%	-	-	-	-	3,721,690						
Other Non-Aeronautical Revenue	1.2%	1.8%	6.2%	8.2%	9.4%	8.9%	57,865,329	73,979,205	33,823,802	2,436,379	15,383,011						
Total Non-Aeronautical Revenue	43.4%	69.3%	46.6%	64.0%	32.7%	64.3%	2,732,049,116	638,164,049	625,999,399	579,631,335	719,130,414						
Total Operating Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	6,116,264,056	1,330,777,735	1,069,279,336	1,020,298,408	1,656,928,054						
Operating Expenses																	
Personnel compensation and benefits	19.8%	24.6%	22.8%	16.9%	25.5%	17.0%	2,585,946,659	221,081,187	308,686,314	146,884,808	325,421,182						
Communications and utilities	3.2%	7.4%	5.8%	5.6%	4.9%	5.4%	291,937,533	54,537,072	41,612,700	35,900,582	53,600,177						
Supplies and materials	2.3%	1.5%	2.0%	0.5%	9.5%	1.2%	221,570,249	8,239,235	17,348,468	20,346,640	37,365,557						
Contractual services	22.7%	12.1%	10.3%	34.0%	15.7%	25.8%	1,445,294,529	372,915,605	460,153,847	360,196,814	375,678,088						
Insurance claims and settlements	1.1%	1.9%	1.5%	3.7%	2.2%	1.4%	81,773,368	12,228,187	8,664,838	24,339,763	17,585,155						
Other Operating Expenses	1.2%	6.7%	15.2%	7.0%	17.8%	7.5%	117,895,041	363,801,816	140,547,669	82,310,218	181,802,804						
SOB - Operating Expenses	50.0%	54.2%	57.5%	67.4%	75.5%	58.3%	4,744,458,379	1,032,893,102	977,213,800	617,978,835	828,842,463						
Depreciation	34.0%	45.7%	30.4%	22.7%	12.5%	32.9%	792,138,640	363,583,540	295,889,880	187,803,763	562,778,982						
Total Operating Expenses	84.0%	99.8%	87.9%	90.4%	88.0%	91.1%	5,536,597,019	1,396,476,642	1,273,103,686	805,782,598	1,391,621,445						
Operating Income (loss)	16.0%	0.1%	12.1%	9.7%	12.1%	8.9%	579,667,037	(65,698,907)	(203,824,350)	214,515,810	265,306,609						
Non-Operating Revenue (Expenses) & Capital																	
Interest Income	3.3%	3.7%	3.4%	7.0%	0.0%	4.3%	377,362,672	3,499,832	52,838,039	40,457,005	53,931,194						
Interest expense	-17.5%	-18.9%	-14.9%	-22.1%	-3.6%	-22.2%	(318,881,884)	(117,555,262)	(192,207,832)	(59,885,689)	(289,558,498)						
Grant receipts	0.0%	13.2%	7.6%	8.9%	6.2%	10.1%	398,981,262	159,201,096	110,888,740	77,408,630	-						
Passenger Facility Charges	16.2%	22.9%	11.7%	25.5%	15.0%	18.6%	1,086,777,386	244,373,357	198,996,958	110,149,241	268,444,461						
Capital Contributions	9.3%	0.0%	0.0%	5.3%	0.0%	3.8%	-	-	65,851,526	370,000	154,784,718						
Special items (loss)	0.0%	-6.5%	0.0%	-0.9%	0.0%	0.0%	-	-	(15,609,892)	-	-						
Other Non-Operating Revenue	0.0%	2.4%	1.5%	0.9%	-0.4%	26.3%	111,277,901	63,480,874	33,071,304	6,372,659	(33,278,582)						
Total Non-Operating Revenue	9.3%	22.9%	9.2%	24.5%	17.1%	40.8%	1,655,517,337	352,999,897	244,168,843	174,871,846	154,343,293						
Net Assets																	
Change in net assets	25.3%	23.0%					2,235,184,374	287,300,990	40,344,493	389,387,656	419,649,902						
Operational Statistics																	
Enplanements	6,745,738	8,535,732					290,694,130	58,624,673	47,244,339	45,063,181	67,457,379						
Domestic	6,493,992	8,343,225					212,612,645	57,755,896	46,272,073	44,880,970	64,939,916						
International	251,746	1,992,507					78,081,485	868,777	972,166	182,211	2,517,463						
Annual aircraft operations	244,201	195,437					-	-	-	-	-						
Domestic	-	-					-	-	-	-	-						
International	-	-					-	-	-	-	-						
Passenger airline cost per enplanement	\$ 11.56	\$ 5.03	\$ 14.45	\$ 4.83	\$ 17.40	\$ 6.13	\$ 8.57	\$ 10.13	\$ 11.51	\$ 8.81	\$ 11.56						
Full time equivalent employees at end of year	361	569	739	479	200	615	3,185	254	345	164	361.00						
Revenue Passenger Miles - Domestic (000's)	6,513,283	7,086,960	11,657,296	9,101,700	8,689,545	13,857,455	307,108,206	47,539,102	38,589,032	39,405,095	65,132,825						
Revenue Passenger Miles - International (000's)	679,795	410,762	4,820,141	1,095,082	256,737	3,469,032	963,736,032	1,434,857	2,462,581	214,013	6,797,947						
Revenue Miles per Passenger - Domestic	1,603	849	1,092	987	754	915	18,441	8,114	8,324	8,779	10,025						
Revenue Miles per Passenger - International	2,651	2,133	2,633	838	407	2,821	46,589	16,595	22,892	4,358	26,508						
Revenue per Mile per Passenger - Domestic	0.012820	0.006368	0.014832	0.005363	0.020489	0.006880	0.063394	0.105897	0.101629	0.098139	0.128204						
Revenue per Mile per Passenger - International	0.000493	0.000148	0.002402	0.000754	0.001200	0.000577	0.032384	0.001717	0.001995	0.000494	0.004936						
Enplanements per Employee	46,716	37,503	18,480	22,714	59,980	27,479	22,821	57,758	13,698	27,427	46,716						
Aircraft Operations per Employee	1,522	343	484	606	1,819	497	166	887	490	573	1,522						
Aeronautical Revenue per Enplanement	\$ 12.39	\$ 5.29	\$ 14.08	\$ 4.72	\$ 14.70	\$ 5.94	\$ 9.66	\$ 7.88	\$ 7.88	\$ 8.49	\$ 12.39						
Aeronautical Revenue per Aircraft Operation	\$ 380.21	\$ 577.98	\$ 577.33	\$ 200.78	\$ 579.88	\$ 348.20	\$ 1,330.47	\$ 513.00	\$ 220.28								

Appendix C Financial Benchmark Operating Results (2003-2012) (Page 3)

Financial Government Payment Report					Capital Development Airports (t)				
As of 09/20/2013 01:14:20 PM									
State									
Hub Size									
Airport Name									
LOC_ID									
FYE									
Date Filed									
Form S100-127									
http://oats.faa.gov/									
2)									
	SEA	SFO	Total	% of Ops Rev	SEA	SFO	DEN	MIA	ORD
	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012
Passenger Airline Aeronautical Revenue									
Passenger airline landing fees	568,504,214	961,339,803	3,732,999,842	18.9%	568,504,214	961,339,803	1,001,616,309	565,066,010	1,674,213,838
Terminal/International arrival area rentals or other charge	1,156,398,163	1,762,410,190	4,928,206,935	24.9%	1,156,398,163	1,762,410,190	1,557,260,417	2,249,366,452	1,993,022,140
Terminal area apron charges/tiedowns	37,664,060	25,003,084	100,205,394	0.7%	37,664,060	25,003,084	-	-	-
Federal Inspection Fees	14,414,384	-	19,424,909	0.1%	14,414,384	-	-	99,875,149	288,368
Other passenger aeronautical fees	2,785,247	8,574,228	34,056,076	0.2%	2,785,247	8,574,228	438,245,064	20,618,000	51,040,216
Total Passenger Airline Aeronautical Revenue	1,779,766,068	2,757,327,305	9,399,182,696	47.9%	1,779,766,068	2,757,327,305	2,997,121,790	2,934,725,611	3,716,564,562
Non-Passenger Aeronautical Revenue									
Landing fees from cargo	12,459,836	10,262,917	135,445,881	0.7%	12,459,836	10,262,917	17,816,871	44,755,807	-
Landing fees from GA and military	207,236	-	3,514,067	0.0%	207,236	-	617,541	58,249	-
FBO revenue - contract or sponsor-operated	-	77,949,163	170,906,109	0.9%	-	77,949,163	82,534	-	12,805,651
Cargo and hangar rentals	59,629,334	320,493,536	924,209,609	4.7%	59,629,334	320,493,536	46,456,045	365,226,528	38,679,254
Aviation fuel tax retained for airport use	1,003,424	-	65,476,019	0.0%	1,003,424	-	209,817,529	-	-
Fuel sales net profit/loss or fuel flowage fees	5,251,703	10,212,354	172,619,574	0.9%	5,251,703	10,212,354	47,808,527	129,452,606	83,440,217
Security reimbursement from Federal Government	13,152,055	2,547,505	77,481,757	0.4%	13,152,055	2,547,505	5,724,391	236,797,216	78,667,720
Other non-passenger aeronautical revenue	84,571,003	421,465,475	1,542,520,431	7.8%	84,571,003	421,465,475	328,323,838	783,344,043	257,515,567
Total Non-Passenger Aeronautical Revenue	1,861,551,824	3,178,792,780	10,938,917,880	55.2%	1,861,551,824	3,178,792,780	3,325,445,628	3,717,969,654	3,974,000,129
Total Aeronautical Revenue	4.8%	15.3%	16.4%		4.8%	15.3%	11.0%	26.7%	6.9%
Non-Aeronautical Revenue									
Land and non-terminal facility leases and revenues	63,373,447	97,395,834	697,532,313	3.5%	63,373,447	97,395,834	32,628,202	168,454,127	61,565,141
Terminal-food and beverage	97,585,825	102,057,830	603,937,932	3.1%	97,585,825	102,057,830	189,140,617	185,883,493	338,667,834
Terminal-retail stores and duty free	96,409,164	430,486,749	1,257,959,178	6.4%	96,409,164	430,486,749	141,884,426	388,621,158	338,950,488
Terminal-services and other	105,262,329	207,310,911	581,185,000	2.9%	105,262,329	207,310,911	47,178,686	387,991,385	321,515,607
Rental cars-excludes customer facility charges	308,913,557	551,815,657	1,928,831,590	9.7%	308,913,557	551,815,657	417,488,639	274,588,709	235,655,512
Parking and ground transportation	546,002,928	740,530,679	3,381,447,434	17.1%	546,002,928	740,530,679	1,139,695,443	379,898,840	962,308,585
Hotel	-	-	3,721,600	0.0%	-	-	-	-	6,213,219
Other Non-Aeronautical Revenue	174,221,322	50,475,166	412,181,654	2.1%	174,221,322	50,475,166	92,247,230	137,613,074	102,658,274
Total Non-Aeronautical Revenue	1,391,768,572	2,180,054,826	8,866,797,711	44.8%	1,391,768,572	2,180,054,826	2,060,263,193	1,853,578,389	2,078,024,570
Total Operating Revenue	3,253,320,396	5,558,847,606	19,805,715,591	100.0%	3,253,320,396	5,558,847,606	5,385,708,821	5,571,548,043	6,052,104,699
Operating Expenses									
Personnel compensation and benefits	749,942,629	1,779,538,692	6,117,501,471	30.9%	749,942,629	1,779,538,692	1,052,251,777	1,612,695,869	1,213,799,029
Communications and utilities	136,612,807	225,751,219	838,042,170	4.2%	136,612,807	225,751,219	356,395,330	434,419,571	318,755,539
Supplies and materials	52,099,933	100,709,096	457,679,178	2.3%	52,099,933	100,709,096	200,211,782	198,924,948	142,326,911
Contractual services	273,828,793	849,626,959	4,137,694,635	20.9%	273,828,793	849,626,959	706,490,914	963,371,347	1,088,238,726
Insurance claims and settlements	22,812,274	48,188,145	215,791,730	1.1%	22,812,274	48,188,145	112,970,869	98,374,356	177,028,303
Other Operating Expenses	493,087,219	114,879,098	1,281,754,265	6.5%	493,087,219	114,879,098	717,384,227	353,900,500	960,168,895
Subtotal - Operating Expenses	1,728,383,655	3,118,693,209	13,048,463,449	65.9%	1,728,383,655	3,118,693,209	3,145,804,899	3,661,686,582	3,900,318,003
Depreciation	1,009,910,013	1,080,837,631	4,292,942,449	21.7%	1,009,910,013	1,080,837,631	1,712,910,732	1,423,513,204	1,508,368,604
Total Operating Expenses	2,738,293,668	4,199,530,840	17,341,405,898	87.6%	2,738,293,668	4,199,530,840	4,858,715,172	5,085,199,786	5,408,686,607
Operating Income (Loss)	515,026,728	1,159,316,766	2,464,309,693	12.4%	515,026,728	1,159,316,766	526,993,649	486,348,257	643,418,092
Non-Operating Revenue (Expenses) & Capital									
Interest income	207,115,851	242,064,951	977,269,544	4.9%	207,115,851	242,064,951	452,373,088	124,251,214	363,293,899
Interest expense	(979,743,026)	(2,006,638,969)	(3,964,471,160)	-20.0%	(979,743,026)	(2,006,638,969)	(2,148,925,482)	(1,596,623,858)	(2,198,472,828)
Grant receipts	580,219,838	151,211,629	1,478,011,195	7.5%	580,219,838	151,211,629	274,805,676	-	483,853,236
Passenger Facility Charges	585,593,263	667,085,092	3,161,439,758	16.0%	585,593,263	667,085,092	933,735,046	636,875,737	1,318,634,838
Capital Contributions	72,084,061	174,851,832	467,942,137	2.4%	72,084,061	174,851,832	6,166,437	234,746,568	-
Special items (loss)	(5,085,326)	(184,266,842)	(18,269,892)	-0.1%	(5,085,326)	(184,266,842)	(81,067,000)	155,303,548	111,909,089
Other Non-Operating Revenue	(5,085,326)	(184,266,842)	(18,269,892)	-0.1%	(5,085,326)	(184,266,842)	(81,067,000)	155,303,548	111,909,089
Total Non-Operating Revenue	460,184,661	(955,592,307)	2,086,493,570	10.5%	460,184,661	(955,592,307)	(562,912,265)	(445,446,791)	131,180,380
Net Assets									
Change in net assets	975,211,389	201,724,459	4,550,803,263	23.0%	975,211,389	201,724,459	(35,918,616)	40,901,466	774,598,472
Operational Statistics									
Enplanements	149,938,649	176,496,584	12,801,024		149,938,649	176,496,584	230,480,999	159,714,860	339,131,807
Domestic	137,216,437	136,295,378	10,583,490		137,216,437	136,295,378	221,733,658	82,834,376	287,669,261
International	12,722,212	40,201,206	2,217,134		12,722,212	40,201,206	8,747,341	76,880,484	51,462,546
Annual aircraft operations			314,139						
Domestic									
International									
Passenger airline cost per enplanement	\$ 12.22	\$ 15.50	\$ 11.20		\$ 12.22	\$ 15.50	\$ 12.20	\$ 18.15	\$ 13.31
Full time equivalent employees at end of year	786	1,289	912		786	1,289	960	1,262	1,266
Revenue Passenger Miles - Domestic (000's)	170,209,602	198,327,791	123,758,808		170,209,602	198,327,791	203,564,844	88,132,198	257,268,025
Revenue Passenger Miles - International (000's)	39,538,647	193,950,939	86,876,431		39,538,647	193,950,939	17,788,021	161,164,761	189,693,424
Revenue Miles per Passenger - Domestic	12,399	14,596	10,954		12,399	14,596	9,181	10,638	8,938
Revenue Miles per Passenger - International	30,983	48,217	28,020		30,983	48,217	20,294	20,959	36,824
Revenue per Mile per Passenger - Domestic	0.101899	0.108819	0.10114		0.101899	0.108819	0.148016	0.123072	0.129035
Revenue per Mile per Passenger - International	0.009455	0.032232	0.01059		0.009455	0.032232	0.005781	0.113961	0.023559
Enplanements per Employee	63,560	13,698	35,097		63,560	13,698	58,217	31,639	38,272
Aircraft Operations per Employee	1,418	122	740		1,418	122	1,515	295	1,030
Aeronautical Revenue per Enplanement	\$ 11.87	\$ 15.62	\$ 10.54		\$ 11.87	\$ 15.62	\$ 13.00	\$ 18.37	\$ 10.96
Aeronautical Revenue per Aircraft Operation	\$ 532.23	\$ 1,753.18	\$ 733.75		\$ 532.23	\$ 1,753.18	\$ 499.57	\$ 1,397.31	\$ 407.16
Non-Aeronautical Revenue per Enplanement	\$ 9.28	\$ 12.35	\$ 11.24		\$ 9.28	\$ 12.35	\$ 8.94	\$ 11.61	\$ 6.13
Non-Aeronautical Revenue per Aircraft Operation	\$ 416.21	\$ 1,386.14	\$ 731.22		\$ 416.21	\$ 1,386.14	\$ 343.41	\$ 1,245.72	\$ 227.65
Operating Cost per Enplanement	\$ 11.53	\$ 17.67	\$ 15.69		\$ 11.53	\$ 17.67	\$ 13.65	\$ 22.93	\$ 11.50
Operating Cost per Aircraft Operation	\$ 516.87	\$ 1,982.95	\$ 1,072.26		\$ 516.87	\$ 1,982.95	\$ 524.35	\$ 2,460.88	\$ 477.39
Total Cost per Enplanement	\$ 24.80	\$ 35.16	\$ 25.87		\$ 24.80	\$ 35.16	\$ 30.40	\$ 41.84	\$ 22.43
Total Cost per Aircraft Operation	\$ 1,111.87	\$ 3,946.05	\$ 1,723.46		\$ 1,111.87	\$ 3,946.05	\$ 1,168.06	\$ 4,490.59	\$ 833.39
Non-Passenger Aero Rev as % of Total Aeronautical Rev	4.8%	15.3%	16.4%		4.8%	15.3%	11.0%	26.7%	6.9%

Appendix D Financial Benchmark Operating Results (2003-2012) (Page 4)

Financial Government Payment Report													
As of 09/20/2013 01:14:20 PM													
State													
Hub Site													
Airport Name													
LOC_ID													
FYE													
Date Filed													
Form 5100-127													
http://cats.faa.gov/													
	Total		Similar Enplanement Airports (5)										
	2003 - 2012	% of Ops Rev	DCA		MDW		OAK		POX		TPA		
	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	
Passenger Airline Aeronautical Revenue													
Passenger airline landing fees	4,770,740.174	18.6%	341,057,674	231,490,524	181,056,860	261,327,323	115,775,624	1,130,708,005				14.7%	
Terminal arrival fees - rents - utilities	8,716,457.362	34.0%	691,509,850	287,499,782	260,582,963	562,036,491	358,664,719	2,160,293,805				28.1%	
Terminal/international arrival area rental or other charge	-	0.0%	-	-	-	-	-	-				0.0%	
Terminal area apron charges/tiedowns	162,630.661	0.6%	-	2,731,110	19,450,256	6,520,582	1,572,769	30,274,717				0.4%	
Federal Inspection Fees	14,414.384	0.1%	-	-	-	3,376,570	1,103,622	4,480,192				0.1%	
Other passenger aeronautical fees	521,262.755	2.0%	-	-	878,423	2,363,726	(25,284,279)	(22,042,080)				-0.3%	
Total Passenger Airline Aeronautical Revenue	14,185,505.336	55.4%	1,032,567,524	531,721,416	461,968,502	835,624,991	451,833,505	3,303,714,639				43.0%	
Non-Passenger Aeronautical Revenue													
Landing fees from cargo	85,295.431	0.3%	507,929	-	32,686,184	14,366,632	1,607,905	49,368,650				0.6%	
Landing fees from GA and military	883,017	0.0%	333,451	-	10,800	3,296,031	-	3,640,282				0.1%	
FBO revenue - contract or sponsor-operated	90,837.348	0.4%	4,059,342	38,278,871	40,934,538	9,860,987	19,178,706	112,312,444				1.5%	
Cargo and hangar rentals	830,484.697	3.2%	10,005,196	12,430,062	103,498,048	65,312,520	25,814,777	217,060,603				2.8%	
Aviation fuel tax retained for airport use	209,817.929	0.8%	-	1,157,740	-	-	-	1,157,740				0.0%	
Fuel sales net profit/loss or fuel flowage fees	261,724.794	1.0%	-	21,200,536	39,918,125	2,182,087	2,843,577	66,244,325				0.9%	
Security reimbursement from Federal Government	66,320.408	0.3%	3,293,455	8,939,508	8,939,211	15,199	6,220,398	19,307,771				0.3%	
Other non-passenger aeronautical revenue	336,888.887	1.3%	44,564	74,702,139	32,558,278	2,139,492	(16,819,209)	57,715,264				0.8%	
Total Non-Passenger Aeronautical Revenue	1,875,119.926	7.3%	18,243,937	156,798,856	230,645,184	102,172,948	18,946,154	526,807,079				6.9%	
Total Aeronautical Revenue	16,057,840.015	62.7%	1,050,811,461	678,520,272	692,613,686	937,797,640	470,778,659	3,830,531,718				49.9%	
	13.2%		1.8%	30.1%	49.9%	12.2%	4.2%	15.9%					
Non-Aeronautical Revenue													
Land and non-terminal facility leases and revenues	413,416.751	1.7%	84,039,000	2,101,135	56,624,942	44,609,130	54,939,631	242,803,884				3.2%	
Terminal-food and beverage	913,335.599	3.6%	62,753,039	77,478,347	35,028,254	39,205,044	87,410,280	301,963,564				3.9%	
Terminal-retail stores and duty free	1,396,313.985	5.5%	65,936,542	52,932,688	19,968,998	44,743,888	55,035,859	238,617,975				3.1%	
Terminal-services and other	679,458.868	2.7%	51,975,655	409,888	6,689,078	11,596,945	33,662,762	104,334,328				1.4%	
Rental cars-excludes customer facility charges	1,788,462.074	7.0%	165,142,215	87,084,553	116,949,939	145,849,456	283,881,273	798,866,536				10.4%	
Parking and ground transportation	3,768,436.475	14.7%	431,397,273	281,389,292	328,923,633	409,931,254	516,910,128	1,968,551,380				25.6%	
Hotel	3,090.732	0.1%	-	275,656	-	3,721,690	5,299,907	9,297,253				0.1%	
Other Non-Aeronautical Revenue	557,215.066	2.2%	83,585,013	1,841,173	73,979,205	19,383,011	28,001,258	186,787,660				2.4%	
Total Non-Aeronautical Revenue	9,563,089.550	37.3%	924,824,897	503,472,332	638,164,049	739,130,414	1,065,131,088	3,850,722,780				50.1%	
Total Operating Revenue	25,621,529.565	100.0%	1,975,636,358	1,181,992,604	1,330,777,735	1,656,928,054	1,535,909,747	7,681,244,498				100.0%	
Operating Expenses													
Personnel compensation and benefits	6,408,327.987	25.0%	524,827,098	257,032,494	221,081,187	325,421,182	377,662,124	1,706,024,085				22.2%	
Communications and utilities	1,471,934.466	5.7%	96,077,083	63,709,607	54,537,072	53,690,177	113,887,115	384,901,054				5.0%	
Supplies and materials	694,372.870	2.7%	65,933,820	12,641,687	8,239,235	37,365,057	22,204,605	146,384,004				1.9%	
Contractual services	3,881,556.739	15.2%	392,987,485	264,310,384	372,915,605	375,678,088	186,469,641	1,592,361,203				20.7%	
Insurance claims and settlements	459,374.547	1.8%	37,777,066	36,389,273	12,228,187	17,585,155	29,321,820	133,301,501				1.7%	
Other Operating Expenses	2,636,425.929	10.3%	110,802,742	809,525,061	383,891,816	19,102,304	102,532,249	965,881,172				12.6%	
Subtotal - Operating Expenses	15,554,886.348	60.7%	1,231,405,294	1,003,634,506	1,032,893,102	828,842,463	832,078,554	4,928,853,919				64.2%	
Depreciation	6,735,539.725	26.3%	490,434,787	355,610,698	363,583,540	562,778,982	701,068,296	2,473,476,303				32.2%	
Total Operating Expenses	22,290,426.073	87.0%	1,721,840,081	1,359,245,204	1,396,476,642	1,391,621,445	1,533,146,850	7,402,330,222				96.4%	
Operating Income (Loss)	3,331,103.492	13.0%	253,796,277	(177,252,600)	(65,698,907)	265,106,609	2,762,897	278,914,276				3.6%	
Non-Operating Revenue (Expenses) & Capital													
Interest income	1,389,099.003	5.4%	95,911,718	70,699,129	3,499,832	53,931,194	57,424,916	281,466,789				3.7%	
Interest expense	(8,930,404.163)	-34.9%	(567,273,947)	(520,342,678)	(117,555,262)	(289,558,498)	(289,602,371)	(1,784,332,756)				-23.2%	
Grant receipts	1,408,152.469	5.8%	63,623,410	116,496,575	159,010,096	159,010,096	303,286,797	552,607,878				7.2%	
Passenger Facility Charges	4,141,923.976	16.2%	351,017,647	312,111,032	244,373,357	268,464,461	350,889,425	1,526,855,922				19.9%	
Capital Contributions	487,848.898	1.9%	325,000	-	-	154,784,718	-	155,109,718				2.0%	
Special items (loss)	53,910.056	0.2%	(51,979,144)	53,434,998	63,480,874	(33,278,582)	(7,447,812)	(7,447,812)				-0.1%	
Other Non-Operating Revenue	(1,116,561)	-0.0%	(108,375,316)	42,379,056	352,999,897	154,343,293	351,039,351	792,386,281				10.3%	
Total Non-Operating Revenue	(1,372,586.322)	-5.4%	(108,375,316)	42,379,056	352,999,897	154,343,293	351,039,351	792,386,281				10.3%	
Net Assets													
Change in net assets	1,958,517.170	7.6%	145,420,961	(134,873,544)	287,300,990	419,649,902	353,802,248	1,071,300,557				14.0%	
Operational Statistics													
Enplanements		21,115,258		85,493,933	87,530,731	58,624,673	67,457,379	85,357,316				8,145,984	
Domestic		17,314,982		83,920,969	86,678,781	57,755,896	64,939,916	83,432,248				7,974,298	
International		3,800,276		1,572,964	851,950	868,777	2,517,463	1,925,068				171,686	
Annual aircraft operations		522,462										248,907	
Domestic													
International													
Passenger airline cost per enplanement	\$	14.27	\$	12.91	7.97	10.13	11.56	5.02				\$	9.36
Full time equivalent employees at end of year		1,118		940	177	254	361	569					612
Revenue Passenger Miles - Domestic (000's)		18,350,049		57,238,449	76,380,435	47,539,102	65,132,825	70,869,600					6,740,533
Revenue Passenger Miles - International (000's)		12,041,716		748,779	1,134,930	1,434,857	6,797,947	4,107,615					319,732
Revenue Miles per Passenger - Domestic		1,115		6,799	8,814	8,114	10,025	8,487					853
Revenue Miles per Passenger - International		3,146		4,779	12,765	16,595	26,508	21,335					1,635
Revenue per Mile per Passenger - Domestic		0.012127		0.180730	0.067986	0.105897	0.128204	0.063677					0.011015
Revenue per Mile per Passenger - International		0.009700		0.003991	0.000660	0.001717	0.004926	0.001476					0.000261
Enplanements per Employee		41,077		39,562	70,646	57,758	46,716	37,503					48,607
Aircraft Operations per Employee		876		1,267	2,278	887	1,522	343					1,353
Aeronautical Revenue per Enplanement	\$	13.97	\$	12.08	5.96	7.88	12.39	5.29				\$	8.97
Aeronautical Revenue per Aircraft Operation	\$	1,032.89	\$	377.16	184.87	513.00	380.21	577.98				\$	380.05
Non-Aeronautical Revenue per Enplanement	\$	9.66	\$	10.82	5.75	10.89	10.66	12.48				\$	9.93
Non-Aeronautical Revenue per Aircraft Operation	\$	723.83	\$	337.80	178.40	708.65	327.20	1,362.50				\$	551.48
Operating Cost per Enplanement	\$	15.45	\$	14.40	11.47	17.62	12.29	9.75				\$	11.98
Operating Cost per Aircraft Operation	\$	1,182.47	\$	449.78	355.63	1,146.98	377.12	1,064.38				\$	561.73
Total Cost per Enplanement	\$	30.93	\$	26.78	21.47	25.83	24.92	21.35				\$	23.63
Total Cost per Aircraft Operation	\$	2,309.99	\$	836.12	666.02	1,681.26	764.94	2,331.63				\$	1,149.68

Appendix E Financial Benchmark Operating Results (2003-2012) (Page 5)

Financial Government Payment Report										
As of 09/30/2013 01:14:20 PM										
State										
Hub Size										
Airport Name										
LOC_ID										
FYE										
Date Filed										
Form 5100-127										
http://ats.faa.gov/										
	Attraction Airports (4)						% of Ops Rev	S0IA % of Ops Rev	Average Groups	Average Seventeen
	BOS	FLI	LGA	MCO	Total	2003 - 2012				
	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	2003 - 2012	
Passenger Airline Aeronautical Revenue										
Passenger airline landing fees	795,625,410	149,899,647	1,127,976,107	290,912,740	2,364,413,904	20.1%	16.4%	17.4%	16.4%	
Terminal arrival fees - rents - utilities	875,044,399	309,362,353	641,191,928	626,921,991	2,452,520,671	20.9%	18.4%	29.0%	28.0%	
Terminal/International arrival area rental or other charge	-	-	-	-	-	0.0%	0.0%	0.9%	0.7%	
Terminal area apron charges/tiedowns	38,632,933	11,109,462	-	39,530,349	84,252,634	0.7%	1.0%	0.6%	0.7%	
Federal Inspection Fees	73,638,550	12,205,626	-	15,613,057	101,457,233	0.9%	0.0%	0.1%	0.1%	
Other passenger aeronautical fees	75,559,746	13,207,824	8,266,735	-	97,034,305	0.8%	0.0%	0.6%	0.8%	
Total Passenger Airline Aeronautical Revenue	1,853,491,028	495,784,912	1,777,434,770	972,968,037	5,099,678,747	43.4%	41.6%	48.6%	46.5%	
Non-Passenger Aeronautical Revenue										
Landing fees from cargo	14,681,325	2,791,937	-	5,102,149	22,575,411	0.2%	0.4%	0.6%	0.5%	
Landing fees from GA and military	8,252,755	2,573,920	6,369,891	-	17,196,566	0.2%	0.0%	0.0%	0.0%	
FBO revenue - contract or sponsor-operated	30,646,168	38,103,617	-	35,914,968	104,669,753	0.9%	0.3%	0.9%	1.1%	
Cargo and hangar rentals	188,565,971	11,337,427	44,945,033	46,000,152	290,848,583	2.5%	3.6%	3.6%	2.9%	
Aviation fuel tax retained for airport use	-	-	-	-	-	0.0%	0.0%	0.3%	0.3%	
Fuel sales net profit/loss or fuel flowage fees	7,334,982	4,904,308	13,703,672	7,286,868	33,229,830	0.3%	0.0%	0.7%	0.9%	
Security reimbursement from Federal Government	22,682,548	6,648,003	20,447,339	3,063,478	52,841,168	0.5%	2.7%	0.5%	0.6%	
Other non-passenger aeronautical revenue	81,039,669	12,934,843	147,975,499	19,120,067	261,070,078	2.2%	0.0%	0.8%	1.0%	
Total Non-Passenger Aeronautical Revenue	353,203,418	79,293,055	233,441,234	116,487,682	782,425,389	6.7%	5.4%	7.3%	7.3%	
Total Aeronautical Revenue	2,206,694,446	575,077,967	2,010,876,004	1,089,455,719	5,882,104,136	50.0%	47.0%	55.9%	53.9%	
	19.1%	16.0%	13.1%	12.0%	15.3%		12.9%	15.1%	15.8%	
Non-Aeronautical Revenue										
Land and non-terminal facility leases and revenues	128,164,673	43,959,931	1,174,408	29,965,748	203,264,760	1.7%	3.1%	2.8%	2.4%	
Terminal food and beverage	59,233,022	75,918,705	76,646,056	221,302,164	333,389,947	2.8%	4.3%	2.5%	3.7%	
Terminal retail stores and duty free	119,437,698	64,729,127	42,258,758	173,640,856	400,066,439	3.4%	3.1%	5.0%	4.5%	
Terminal services and other	41,240,715	11,610,947	2,639,160	77,405,767	132,896,589	1.1%	1.5%	2.3%	2.4%	
Rental cars-excludes customer facility charges	239,670,358	325,231,562	122,953,845	632,691,502	1,320,547,267	11.2%	16.0%	9.0%	9.5%	
Parking and ground transportation	1,051,377,514	368,176,265	450,033,354	487,940,679	2,357,527,812	20.0%	21.9%	19.1%	21.3%	
Hotel	28,816,644	-	-	136,311,100	165,127,744	1.4%	0.0%	0.1%	0.1%	
Other Non-Aeronautical Revenue	257,062,703	130,565,869	280,724,396	301,065,387	969,418,355	8.2%	3.2%	2.2%	2.2%	
Total Non-Aeronautical Revenue	1,925,293,327	1,020,192,406	976,429,977	1,960,323,203	5,882,238,913	50.0%	53.0%	44.1%	46.1%	
Total Operating Revenue	4,131,987,773	1,595,270,373	2,987,305,981	3,049,778,922	11,764,343,049	100.0%	100.0%	100.0%	100.0%	
Operating Expenses										
Personnel compensation and benefits	941,050,941	269,711,376	760,130,738	517,973,041	2,488,866,096	21.2%	23.4%	26.0%	24.6%	
Communications and utilities	237,868,031	89,052,202	144,964,457	165,681,221	637,565,911	5.4%	4.9%	5.0%	5.0%	
Supplies and materials	82,922,746	8,634,048	284,863,065	36,871,270	413,291,129	3.5%	1.5%	2.3%	2.2%	
Contractual services	426,522,969	541,909,230	467,411,834	786,006,616	2,221,850,649	18.9%	37.9%	18.9%	21.5%	
Insurance claims and settlements	40,823,442	58,256,791	66,605,869	41,833,245	237,139,347	1.9%	1.2%	1.5%	1.7%	
Other Operating Expenses	628,441,186	111,443,866	530,938,909	227,999,841	1,498,823,802	12.7%	15.3%	9.8%	11.0%	
Subtotal - Total Operating Expenses	2,377,229,315	1,079,007,513	2,254,914,872	1,776,385,234	7,487,836,934	63.7%	84.2%	63.6%	66.0%	
Depreciation	1,255,620,697	362,394,291	372,379,764	1,003,137,743	2,993,532,495	25.5%	27.4%	26.7%	27.3%	
Total Operating Expenses	3,632,850,012	1,441,401,804	2,627,294,636	2,779,522,977	10,481,369,429	89.1%	111.6%	90.3%	93.3%	
Operating Income (Loss)	499,137,761	153,868,569	360,011,345	270,255,945	1,283,273,620	10.9%	-11.6%	9.7%	6.7%	
Non-Operating Revenue (Expenses) & Capital										
Interest Income	138,574,278	110,817,964	-	131,113,080	380,505,322	3.2%	6.2%	4.7%	4.7%	
Interest expense	(613,995,826)	(352,481,228)	(107,920,000)	(677,437,662)	(1,751,834,716)	-14.9%	-3.5%	-26.0%	-24.6%	
Grant receipts	312,425,131	142,107,830	184,823,843	308,159,398	946,716,202	8.1%	4.5%	6.8%	7.5%	
Passenger Facility Charges	483,263,060	406,412,126	446,723,032	567,449,585	1,903,847,803	16.2%	26.6%	17.3%	17.7%	
Capital Contributions	-	83,974,000	-	114,581,581	198,555,581	1.7%	10.4%	2.1%	2.0%	
Special items (loss)	-	(13,686,981)	-	-	(13,686,981)	-0.1%	0.0%	0.0%	-0.1%	
Other Non-Operating Revenue	59,784,648	14,182,921	(12,562,219)	800,527,161	865,932,511	7.3%	-1.5%	0.3%	0.9%	
Total Non-Operating Revenue	380,051,291	391,326,632	510,264,656	1,244,393,143	2,526,035,722	21.5%	42.7%	5.2%	8.0%	
Net Assets										
Change in net assets								31.2%	14.9%	
									14.7%	
Operational Statistics										
Enplanements	131,135,133	104,774,390	121,533,791	163,977,645	130,355,240		8,504,165	14,020,755	14,024,834	
Domestic	112,833,542	92,174,302	115,253,550	151,458,230	117,929,906		8,354,922	11,957,723	11,894,174	
International	18,301,591	12,600,088	6,280,241	12,519,415	12,425,334		149,243	2,063,032	2,130,661	
Annual aircraft operations							210,463	361,836	366,553	
Domestic							-	-	-	
International							-	-	-	
Passenger airline cost per enplanement	\$ 14.45	\$ 4.83	\$ 17.40	\$ 6.13	\$ 10.70		\$ 6.06	\$ 11.61	\$ 11.38	
Full time equivalent employees at end of year	739	479	200	615	508		324	814	861	
Revenue Passenger Miles - Domestic (000's)	11,657,296	9,101,700	8,689,545	13,857,455	10,826,499		8,753,738	49,616,463	12,459,732	
Revenue Passenger Miles - International (000's)	4,820,141	1,095,092	256,737	3,469,032	2,410,251		247,534	33,079,293	7,559,404	
Revenue Miles per Passenger - Domestic	1,032	987	754	915	922		1,047	4,307	996	
Revenue Miles per Passenger - International	2,633	838	407	2,821	1,675		1,496	10,933	2,408	
Revenue per Mile per Passenger - Domestic	0	0	0	0	0.01893		0.005893	0.0414973	0.019927	
Revenue per Mile per Passenger - International	0	0	0	0	0.001208		0.000109	0.0046491	0.001721	
Enplanements per Employee	18,480	22,714	59,980	27,479	32,163		26,239	41,594	40,117	
Aircraft Operations per Employee	484	606	1,819	497	852		584	989	916	
Aeronautical Revenue per Enplanement	\$ 14.08	\$ 4.72	\$ 14.70	\$ 5.94	\$ 9.86		\$ 6.06	\$ 11.15	\$ 10.73	
Aeronautical Revenue per Aircraft Operation	\$ 577.33	\$ 200.78	\$ 579.88	\$ 348.20	\$ 426.55		\$ 271.95	\$ 715.56	\$ 704.25	
Non-Aeronautical Revenue per Enplanement	\$ 14.67	\$ 9.67	\$ 8.03	\$ 11.92	\$ 11.07		\$ 7.72	\$ 10.28	\$ 10.34	
Non-Aeronautical Revenue per Aircraft Operation	\$ 577.04	\$ 394.59	\$ 247.20	\$ 717.48	\$ 484.08		\$ 346.54	\$ 668.84	\$ 678.00	
Operating Cost per Enplanement	\$ 18.08	\$ 10.25	\$ 18.61	\$ 10.81	\$ 16.44		\$ 12.26	\$ 14.57	\$ 14.89	
Operating Cost per Aircraft Operation	\$ 746.55	\$ 419.14	\$ 647.90	\$ 638.72	\$ 613.08		\$ 550.29	\$ 938.82	\$ 983.70	
Total Cost per Enplanement	\$ 32.28	\$ 17.01	\$ 22.57	\$ 21.08	\$ 23.24		\$ 16.74	\$ 26.81	\$ 26.57	
Total Cost per Aircraft Operation	\$ 1,322.43	\$ 719.55	\$ 776.19	\$ 1,241.04	\$ 1,014.80		\$ 751.61	\$ 1,727.71	\$ 1,722.31	
Non-Passenger Aero Rev as % of Total Aeronautical Rev	19.1%	16.0%	13.1%	12.0%	15.3%		12.9%	15.1%	15.8%	

Appendix F Net Present Value of Cash Flows from Operations (2025-2030) (Page 1)

Net Present Value of Cash Flows 2025-2030 Simulation		Base Year	2013	2014	2015	2016
	Distribution	2012				
Aeronautical Revenue per Mile per Passenger - Domestic	Normal (0.0127, 0.0047)	0.012700	0.012700	0.012700	0.012700	0.012700
Miles Annual Growth Rate - Domestic	per FAA Forecast 2013-2033			-0.011%	-0.213%	0.056%
Miles per Passenger - Domestic	Normal (1045, 33)	1,045	1,045	1,045	1,043	1,043
Passengers Annual Growth Rate - Domestic	Triangular (1.1%, 2.2%, 3.2%)		0.0%	2.2%	2.2%	2.2%
Passengers - Domestic		8,386,867	8,386,867	8,571,378	8,759,949	8,952,667
Passenger Aeronautical Revenue - Domestic		\$ 111,306,305	\$ 111,306,305	\$ 113,742,274	\$ 115,996,637	\$ 118,615,253
Aeronautical Revenue per Mile per Passenger - International	Normal (0.0018, 0.0028)	0.001800	0.001800	0.001800	0.001800	0.001800
Miles Annual Growth Rate - International	per FAA Forecast 2013-2033			0.383%	0.266%	0.262%
Miles per Passenger - International	Normal (2284, 275)	2,284	2,284	2,293	2,299	2,305
Passengers Annual Growth Rate - International	Triangular (2.8%, 4.3%, 4.7%)		0.0%	4.3%	4.3%	4.3%
Passengers - International		264,694	264,694	276,076	287,947	300,329
Passenger Aeronautical Revenue - International		\$ 1,088,210	\$ 1,088,210	\$ 1,139,351	\$ 1,191,502	\$ 1,245,988
Total Passenger Aeronautical Revenue		\$ 112,394,515	\$ 112,394,515	\$ 114,881,625	\$ 117,188,138	\$ 119,861,241
Cargo Annual Growth Rate - Domestic	Triangular (0.5%, 0.6%, 0.8%)		0.6%	0.6%	0.6%	0.6%
Cargo Revenue - Domestic		15.7%	15.8%	15.9%	16.0%	16.1%
Total Non-Passenger Aeronautical Revenue		\$ 17,645,939	\$ 17,751,815	\$ 18,253,501	\$ 18,731,702	\$ 19,273,933
Total Aeronautical Revenue		\$ 130,040,454	\$ 130,146,330	\$ 133,135,126	\$ 135,919,840	\$ 139,135,174
Non-Aeronautical Revenue as % of Total Aeronautical Revenue	Uniform (10.4%, 16.8%)		13.6%	13.6%	13.6%	13.6%
Total Non-Aeronautical Revenue		\$ 15,285,654	\$ 15,623,901	\$ 15,937,587	\$ 16,301,129	\$ 16,801,129
Total Operating Revenue		\$ 145,431,984	\$ 148,759,027	\$ 151,857,427	\$ 155,436,303	\$ 155,436,303
Operating Expense as % of Total Operating Revenue	Uniform (87.0%, 94.6%)		90.8%	90.8%	90.8%	90.8%
Total Operating Expense		\$ (132,052,242)	\$ (135,073,197)	\$ (137,886,544)	\$ (141,136,163)	\$ (141,136,163)
Other Income/Expense as % of Total Operating Revenue	Uniform (-10.5%, 2.2%)		-4.2%	-4.2%	-4.2%	-4.2%
Total Other Income/Expense		\$ (6,108,143)	\$ (6,247,879)	\$ (6,378,012)	\$ (6,528,325)	\$ (6,528,325)
Net Income		\$ -	\$ -	\$ -	\$ -	\$ -
Cost of capital		6.5%				
Net Present Value of Cash Flows 2025 - 2030		\$ 23,708,002				

Appendix G Net Present Value of Cash Flows from Operations (2025-2030) (Page 2)

Net Present Value of Cash Flows 2025-2030 Simulation		2017	2018	2019	2020	2021
	Distribution					
Aeronautical Revenue per Mile per Passenger - Domestic	Normal (0.0127, 0.0047)	0.012700	0.012700	0.012700	0.012700	0.012700
Miles Annual Growth Rate - Domestic	per FAA Forecast 2013-2033	0.281%	0.292%	0.291%	0.323%	0.311%
Miles per Passenger - Domestic	Normal (1045, 33)	1,046	1,049	1,052	1,056	1,059
Passengers Annual Growth Rate - Domestic	Triangular (1.1%, 2.2%, 3.2%)	2.2%	2.2%	2.2%	2.2%	2.2%
Passengers - Domestic		9,149,626	9,350,918	9,556,638	9,766,884	9,981,755
Passenger Aeronautical Revenue - Domestic		\$ 121,565,575	\$ 124,602,234	\$ 127,713,668	\$ 130,945,350	\$ 134,242,542
Aeronautical Revenue per Mile per Passenger - International	Normal (0.0018, 0.0028)	0.001800	0.001800	0.001800	0.001800	0.001800
Miles Annual Growth Rate - International	per FAA Forecast 2013-2033	0.275%	0.277%	0.239%	0.195%	0.185%
Miles per Passenger - International	Normal (2284, 275)	2,311	2,318	2,323	2,328	2,332
Passengers Annual Growth Rate - International	Triangular (2.8%, 4.3%, 4.7%)	4.3%	4.3%	4.3%	4.3%	4.3%
Passengers - International		313,243	326,712	340,761	355,414	370,697
Passenger Aeronautical Revenue - International		\$ 1,303,134	\$ 1,362,936	\$ 1,424,945	\$ 1,489,116	\$ 1,556,015
Total Passenger Aeronautical Revenue		\$ 122,868,709	\$ 125,965,170	\$ 129,138,612	\$ 132,434,466	\$ 135,798,557
Cargo Annual Growth Rate - Domestic	Triangular (0.5%, 0.6%, 0.8%)	0.6%	0.6%	0.6%	0.6%	0.6%
Cargo Revenue - Domestic		16.2%	16.3%	16.4%	16.5%	16.6%
Total Non-Passenger Aeronautical Revenue		\$ 19,976,085	\$ 20,499,252	\$ 21,141,784	\$ 21,811,449	\$ 22,499,695
Total Aeronautical Revenue		\$ 142,744,794	\$ 146,464,422	\$ 150,280,396	\$ 154,245,915	\$ 158,298,252
Non-Aeronautical Revenue as % of Total Aeronautical Revenue	Uniform (10.4%, 16.8%)	13.6%	13.6%	13.6%	13.6%	13.6%
Total Non-Aeronautical Revenue		\$ 16,710,144	\$ 17,131,263	\$ 17,562,851	\$ 18,011,087	\$ 18,468,604
Total Operating Revenue		\$ 159,454,939	\$ 163,595,685	\$ 167,843,248	\$ 172,257,003	\$ 176,766,856
Operating Expense as % of Total Operating Revenue	Uniform (87.0%, 94.6%)	90.8%	90.8%	90.8%	90.8%	90.8%
Total Operating Expense		\$ (144,785,084)	\$ (148,544,882)	\$ (152,401,669)	\$ (156,409,359)	\$ (160,504,305)
Other Income/Expense as % of Total Operating Revenue	Uniform (-10.5%, 2.2%)	-4.2%	-4.2%	-4.2%	-4.2%	-4.2%
Total Other Income/Expense		\$ (6,697,107)	\$ (6,871,019)	\$ (7,049,416)	\$ (7,234,794)	\$ (7,424,208)
Net Income		\$ -	\$ -	\$ -	\$ -	\$ -
Cost of capital		6.5%				
Net Present Value of Cash Flows 2025 - 2030		\$ 23,708,002				

Appendix H Net Present Value of Cash Flows from Operations (2025-2030) (Page 3)

Net Present Value of Cash Flows 2025-2030 Simulation						
	Distribution	2022	2023	2024	2025	2026
Aeronautical Revenue per Mile per Passenger - Domestic	Normal (0.0127, 0.0047)	0.012700	0.012700	0.012700	0.012700	0.012700
Miles Annual Growth Rate - Domestic	per FAA Forecast 2013-2033	0.321%	0.309%	0.319%	0.307%	0.350%
Miles per Passenger - Domestic	Normal (1045, 33)	1,062	1,066	1,069	1,072	1,076
Passengers Annual Growth Rate - Domestic	Triangular (1.1%, 2.2%, 3.2%)	2.2%	2.2%	2.2%	2.2%	2.2%
Passengers - Domestic		10,201,354	10,415,784	10,655,151	10,889,564	11,129,135
Passenger Aeronautical Revenue - Domestic		\$ 137,636,631	\$ 141,099,555	\$ 144,664,105	\$ 148,300,979	\$ 152,094,181
Aeronautical Revenue per Mile per Passenger - International	Normal (0.0018, 0.0028)	0.001800	0.001800	0.001800	0.001800	0.001800
Miles Annual Growth Rate - International	per FAA Forecast 2013-2033	0.131%	0.107%	0.100%	0.087%	0.100%
Miles per Passenger - International	Normal (2284, 275)	2,335	2,338	2,340	2,342	2,344
Passengers Annual Growth Rate - International	Triangular (2.8%, 4.3%, 4.7%)	4.3%	4.3%	4.3%	4.3%	4.3%
Passengers - International		386,637	403,262	420,602	438,688	457,552
Passenger Aeronautical Revenue - International		\$ 1,625,044	\$ 1,696,736	\$ 1,771,470	\$ 1,849,247	\$ 1,930,695
Total Passenger Aeronautical Revenue		\$ 139,261,676	\$ 142,796,291	\$ 146,435,575	\$ 150,150,226	\$ 154,024,876
Cargo Annual Growth Rate - Domestic	Triangular (0.5%, 0.6%, 0.8%)	0.6%	0.6%	0.6%	0.6%	0.6%
Cargo Revenue - Domestic		16.7%	16.8%	16.9%	17.0%	17.1%
Total Non-Passenger Aeronautical Revenue		\$ 23,211,921	\$ 23,943,871	\$ 24,701,425	\$ 25,479,998	\$ 26,294,339
Total Aeronautical Revenue		\$ 162,473,597	\$ 166,740,162	\$ 171,137,000	\$ 175,630,224	\$ 180,319,215
Non-Aeronautical Revenue as % of Total Aeronautical Revenue	Uniform (10.4%, 16.8%)	13.6%	13.6%	13.6%	13.6%	13.6%
Total Non-Aeronautical Revenue		\$ 18,939,588	\$ 19,420,296	\$ 19,915,238	\$ 20,420,431	\$ 20,947,383
Total Operating Revenue		\$ 181,413,185	\$ 186,160,457	\$ 191,052,238	\$ 196,050,655	\$ 201,266,598
Operating Expense as % of Total Operating Revenue	Uniform (87.0%, 94.6%)	90.8%	90.8%	90.8%	90.8%	90.8%
Total Operating Expense		\$ (164,723,172)	\$ (169,033,695)	\$ (173,475,432)	\$ (178,013,995)	\$ (182,750,071)
Other Income/Expense as % of Total Operating Revenue	Uniform (-10.5%, 2.2%)	-4.2%	-4.2%	-4.2%	-4.2%	-4.2%
Total Other Income/Expense		\$ (7,619,354)	\$ (7,818,739)	\$ (8,024,194)	\$ (8,234,128)	\$ (8,453,197)
Net Income		\$ -	\$ -	\$ -	\$ 9,802,533	\$ 10,063,330
Cost of capital	6.5%					
Net Present Value of Cash Flows 2025 - 2030		\$ 23,708,002				

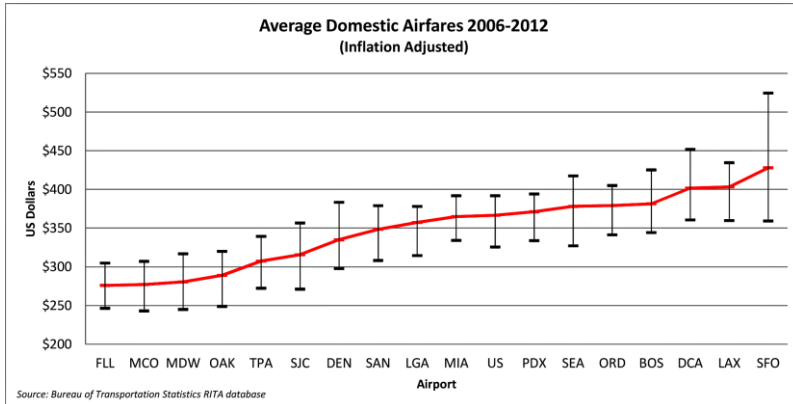
Appendix J Net Present Value of Cash Flows from Operations (2025-2030) (Page 4)

Net Present Value of Cash Flows 2025-2030 Simulation						
	Distribution	2027	2028	2029	2030	
Aeronautical Revenue per Mile per Passenger - Domestic	Normal (0.0127, 0.0047)	0.012700	0.012700	0.012700	0.012700	
Miles Annual Growth Rate - Domestic	per FAA Forecast 2013-2033	0.338%	0.348%	0.346%	0.345%	
Miles per Passenger - Domestic	Normal (1045, 33)	1,080	1,083	1,087	1,091	
Passengers Annual Growth Rate - Domestic	Triangular (1.1%, 2.2%, 3.2%)	2.2%	2.2%	2.2%	2.2%	
Passengers - Domestic		11,373,976	11,624,203	11,879,936	12,141,294	
Passenger Aeronautical Revenue - Domestic		\$ 155,965,560	\$ 159,950,986	\$ 164,036,282	\$ 168,223,915	
Aeronautical Revenue per Mile per Passenger - International	Normal (0.0018, 0.0028)	0.001800	0.001800	0.001800	0.001800	
Miles Annual Growth Rate - International	per FAA Forecast 2013-2033	0.087%	0.070%	0.060%	0.023%	
Miles per Passenger - International	Normal (2284, 275)	2,346	2,348	2,349	2,350	
Passengers Annual Growth Rate - International	Triangular (2.8%, 4.3%, 4.7%)	4.3%	4.3%	4.3%	4.3%	
Passengers - International		477,226	497,747	519,150	541,474	
Passenger Aeronautical Revenue - International		\$ 2,015,460	\$ 2,103,595	\$ 2,195,363	\$ 2,290,297	
Total Passenger Aeronautical Revenue		\$ 157,981,020	\$ 162,054,580	\$ 166,231,645	\$ 170,514,212	
Cargo Annual Growth Rate - Domestic	Triangular (0.5%, 0.6%, 0.8%)	0.6%	0.6%	0.6%	0.6%	
Cargo Revenue - Domestic		17.2%	17.3%	17.4%	17.5%	
Total Non-Passenger Aeronautical Revenue		\$ 27,131,530	\$ 27,998,106	\$ 28,892,095	\$ 29,814,250	
Total Aeronautical Revenue		\$ 185,112,550	\$ 190,052,686	\$ 195,123,740	\$ 200,328,462	
Non-Aeronautical Revenue as % of Total Aeronautical Revenue	Uniform (10.4%, 16.8%)	13.6%	13.6%	13.6%	13.6%	
Total Non-Aeronautical Revenue		\$ 21,485,419	\$ 22,039,423	\$ 22,607,504	\$ 23,189,933	
Total Operating Revenue		\$ 206,597,969	\$ 212,092,109	\$ 217,731,244	\$ 223,518,395	
Operating Expense as % of Total Operating Revenue	Uniform (87.0%, 94.6%)	90.8%	90.8%	90.8%	90.8%	
Total Operating Expense		\$ (187,590,956)	\$ (192,579,635)	\$ (197,699,970)	\$ (202,954,703)	
Other Income/Expense as % of Total Operating Revenue	Uniform (-10.5%, 2.2%)	-4.2%	-4.2%	-4.2%	-4.2%	
Total Other Income/Expense		\$ (8,677,115)	\$ (8,907,869)	\$ (9,144,712)	\$ (9,387,773)	
Net Income		\$ 10,329,898	\$ 10,604,605	\$ 10,886,562	\$ 11,175,920	
Cost of capital	6.5%					
Net Present Value of Cash Flows 2025 - 2030		\$ 23,708,002				

Appendix K Revenue per Mile per Passenger Rates - Benchmark Airports (2003-2012)

Revenue per Mile per Passenger Annual Averages http://cmts.faa.gov/		FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007	FY 2006	FY 2005	FY 2004	FY 2003	2003-2012	ID Y Avg	Std Dev
Revenue per Mile per Passenger - Domestic														
SAH	0.0079	0.0071	0.0064	0.0061	0.0054	0.0051	0.0050	0.0048	0.0048	0.0053	0.0059	0.0589	0.0059	0.0010
Revenue per Mile per Passenger - International														
SAH	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0011	0.0001	0.0001
Revenue per Mile per Passenger - Domestic														
LAX	0.0103	0.0099	0.0087	0.0098	0.0098	0.0072	0.0058	0.0048	0.0048	0.0050	0.0048	0.0751	0.0076	0.0023
Revenue per Mile per Passenger - Domestic														
SJC	0.0151	0.0148	0.0149	0.0149	0.0143	0.0107	0.0061	0.0067	0.0066	0.0064	0.0059	0.1016	0.0102	0.0042
Revenue per Mile per Passenger - Domestic														
OKA	0.0141	0.0156	0.0144	0.0133	0.0135	0.0083	0.0074	0.0069	0.0070	0.0071	0.0154	0.1088	0.1019	0.0039
Revenue per Mile per Passenger - Domestic														
SFO	0.0109	0.0104	0.0104	0.0104	0.0097	0.0097	0.0090	0.0079	0.0079	0.0077	0.0121	0.1088	0.1019	0.0018
Revenue per Mile per Passenger - Domestic														
SEA	0.0117	0.0113	0.0119	0.0119	0.0095	0.0089	0.0079	0.0079	0.0079	0.0077	0.0087	0.0981	0.0998	0.0018
Revenue per Mile per Passenger - Domestic														
SEA	0.0117	0.0104	0.0102	0.0099	0.0107	0.0104	0.0105	0.0100	0.0094	0.0094	0.0086	0.1019	0.1019	0.0008
Revenue per Mile per Passenger - Domestic														
DFW	0.0136	0.0135	0.0149	0.0149	0.0135	0.0142	0.0135	0.0142	0.0142	0.0159	0.0177	0.1480	0.1480	0.0014
Revenue per Mile per Passenger - Domestic														
ORD	0.0165	0.0155	0.0171	0.0150	0.0148	0.0136	0.0098	0.0098	0.0096	0.0075	0.0106	0.1290	0.1290	0.0033
Revenue per Mile per Passenger - Domestic														
MIA	0.0128	0.0124	0.0122	0.0119	0.0126	0.0112	0.0112	0.0112	0.0112	0.0116	0.0111	0.1231	0.1231	0.0007
Revenue per Mile per Passenger - Domestic														
PDX	0.0120	0.0123	0.0122	0.0122	0.0127	0.0116	0.0125	0.0136	0.0136	0.0139	0.0139	0.1282	0.1282	0.0008
Revenue per Mile per Passenger - Domestic														
MDW	0.0096	0.0101	0.0106	0.0074	0.0074	0.0076	0.0047	0.0056	0.0047	0.0040	0.0037	0.0680	0.0680	0.0026
Revenue per Mile per Passenger - Domestic														
DCA	0.0188	0.0201	0.0200	0.0182	0.0161	0.0162	0.0162	0.0164	0.0164	0.0194	0.0194	0.3807	0.3807	0.0017
Revenue per Mile per Passenger - Domestic														
TPA	0.0063	0.0063	0.0063	0.0062	0.0069	0.0065	0.0064	0.0064	0.0064	0.0061	0.0066	0.0637	0.0637	0.0004
Revenue per Mile per Passenger - Domestic														
PHX	0.0053	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0386	0.0386	0.0001
Revenue per Mile per Passenger - Domestic														
BOS	0.0153	0.0153	0.0154	0.0154	0.0154	0.0154	0.0154	0.0154	0.0154	0.0154	0.0154	0.0323	0.0323	0.0001
Revenue per Mile per Passenger - Domestic														
MCO	0.0076	0.0073	0.0071	0.0074	0.0085	0.0085	0.0058	0.0057	0.0057	0.0063	0.0074	0.0688	0.0688	0.0010
Revenue per Mile per Passenger - Domestic														
LAG	0.0229	0.0250	0.0240	0.0249	0.0245	0.0158	0.0158	0.0158	0.0164	0.0164	0.0164	0.2049	0.2049	0.0036
Mean	0.0127	0.0126	0.0128	0.0128	0.0118	0.0118	0.0101	0.0099	0.0097	0.0098	0.0104	0.1123	0.1123	0.0014
Std Dev	0.0047	0.0045	0.0047	0.0047	0.0040	0.0041	0.0039	0.0039	0.0043	0.0047	0.0053	0.0418	0.0418	0.0045
Revenue per Mile per Passenger - International														
LAX	0.0037	0.0035	0.0032	0.0036	0.0038	0.0028	0.0022	0.0018	0.0018	0.0018	0.0016	0.0280	0.0280	0.0009
Revenue per Mile per Passenger - International														
SJC	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0020	0.0020	0.0001
Revenue per Mile per Passenger - International														
OKA	0.0002	0.0003	0.0003	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0017	0.0017	0.0001
Revenue per Mile per Passenger - International														
SFO	0.0030	0.0029	0.0029	0.0029	0.0028	0.0029	0.0032	0.0030	0.0034	0.0037	0.0045	0.0322	0.0322	0.0005
Revenue per Mile per Passenger - International														
SNA	0.0004	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0005	0.0001
Revenue per Mile per Passenger - International														
SEA	0.0012	0.0010	0.0010	0.0010	0.0011	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0095	0.0095	0.0001
Revenue per Mile per Passenger - International														
PHX	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0058	0.0058	0.0001
Revenue per Mile per Passenger - International														
ORD	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0001
Revenue per Mile per Passenger - International														
MIA	0.0024	0.0019	0.0013	0.0012	0.0019	0.0019	0.0019	0.0019	0.0019	0.0012	0.0015	0.0140	0.0140	0.0008
Revenue per Mile per Passenger - International														
PDX	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0049	0.0049	0.0001
Revenue per Mile per Passenger - International														
MDW	0.0002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0001
Revenue per Mile per Passenger - International														
DCA	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0034	0.0034	0.0001
Revenue per Mile per Passenger - International														
TPA	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0015	0.0015	0.0000
Revenue per Mile per Passenger - International														
FLL	0.0008	0.0009	0.0012	0.0010	0.0008	0.0006	0.0006	0.0006	0.0006	0.0004	0.0003	0.0075	0.0075	0.0003
Revenue per Mile per Passenger - International														
BOS	0.0025	0.0025	0.0024	0.0027	0.0024	0.0024	0.0024	0.0023	0.0023	0.0021	0.0021	0.0286	0.0286	0.0002
Revenue per Mile per Passenger - International														
MCO	0.0009	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0004	0.0004	0.0058	0.0058	0.0002
Revenue per Mile per Passenger - International														
LAG	0.0014	0.0012	0.0011	0.0012	0.0011	0.0009	0.0009	0.0011	0.0011	0.0010	0.0010	0.0110	0.0110	0.0001
Mean	0.0018	0.0019	0.0018	0.0017	0.0018	0.0019	0.0016	0.0016	0.0016	0.0015	0.0014	0.0165	0.0165	0.0002
Std Dev	0.0028	0.0031	0.0028	0.0027	0.0027	0.0029	0.0027	0.0029	0.0027	0.0026	0.0025	0.0273	0.0273	0.0028

Appendix L
Average Quarterly Domestic Airfares – Inflation Adjusted (2003-2012)



Appendix M
Passenger Facility Changes at Large Hub Airports Approved by FAA

Passenger Facility Charge Approved Locations (as of 09/01/13) http://www.faa.gov/airports/pfc/monthly_reports/					
Airport Name	Code	PFC per Ticket	Total (\$M)	Estimated Expiration Date	Start Date
San Diego Intl	SAN	\$4.50	\$1,364	Nov-37	Aug-03
Logan Intl	BOS	\$4.50	\$682	Dec-23	Feb-11
Logan Intl	BOS	\$4.50	**	Feb-11	Oct-05
Reagan Washington National	DCA	\$4.50	\$350	Mar-15	Jun-05
Denver Intl	DEN	\$4.50	\$80	Feb-29	Jan-26
Denver Intl	DEN	\$4.50	**	Jan-26	Apr-01
Fort Lauderdale/Hollywood Intl	FLL	\$4.50	\$1,649	Feb-31	Oct-05
Los Angeles Intl	LAX	\$3.00	\$34	Jun-19	Mar-19
Los Angeles Intl	LAX	\$4.50	\$1,638	Mar-19	Dec-05
Orlando Intl	MCO	\$4.50	\$190	Dec-28	Jun-26
Orlando Intl	MCO	\$3.00	\$306	Jun-26	Dec-19
Orlando Intl	MCO	\$4.50	\$1,168	Dec-19	Apr-07
Chicago Midway Intl	MDW	\$4.50	\$1,720	Nov-53	Nov-12
Miami Intl	MIA	\$4.50	\$2,420	Oct-37	Mar-03
Oakland Intl	OAK	\$3.00	\$70	May-23	Apr-21
Oakland Intl	OAK	\$4.50	\$497	Apr-21	Sep-03
Chicago O'Hare Intl	ORD	\$4.50	\$5,375	Nov-38	Feb-06
Portland Intl	PDX	\$4.50	\$501	Nov-34	May-16
Portland Intl	PDX	\$4.50	**	May-16	Oct-01
Seattle-Tacoma Intl	SEA	\$4.50	\$1,798	Nov-28	Mar-03
San Francisco Intl	SFO	\$4.50	\$833	Jan-17	Oct-01
Norman Y. Mineta San Jose Intl	SJC	\$4.50	\$881	May-29	Feb-02
John Wayne - Orange County	SNA	\$4.50	\$321	Jan-22	Jul-06
Tampa Intl	TPA	\$4.50	\$658	Nov-19	Jun-02

**Appendix N
Construction Cost Index**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG.
2013	9437	9453	9456	9484	9516	9542	9552	9545	9552	9689			
2012	9176	9198	9268	9273	9290	9291	9324	9351	9341	9376	9398	9412	9308
2011	8938	8998	9011	9027	9035	9053	9080	9088	9116	9147	9173	9172	9070
2010	8660	8672	8671	8677	8761	8805	8844	8837	8836	8921	8951	8952	8799
2009	8549	8533	8534	8528	8574	8578	8566	8564	8586	8596	8592	8641	8570
2008	8090	8094	8109	8112	8141	8185	8293	8362	8557	8623	8602	8551	8310
2007	7880	7880	7856	7865	7942	7939	7959	8007	8050	8045	8092	8089	7966
2006	7660	7689	7692	7695	7691	7700	7721	7722	7763	7883	7911	7888	7751
2005	7297	7298	7309	7355	7398	7415	7422	7479	7540	7563	7630	7647	7446
2004	6825	6862	6957	7017	7065	7109	7126	7188	7298	7314	7312	7308	7115
2003	6581	6640	6627	6635	6642	6694	6695	6733	6741	6771	6794	6782	6694
2002	6462	6462	6502	6480	6512	6532	6605	6592	6589	6579	6578	6563	6538
2001	6281	6272	6279	6286	6288	6318	6404	6389	6391	6397	6410	6390	6343
2000	6130	6160	6202	6201	6233	6238	6225	6233	6224	6259	6266	6283	6221
1999	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127	6059
1998	5852	5874	5875	5883	5881	5895	5921	5929	5963	5986	5995	5991	5920
1997	5765	5769	5759	5799	5837	5860	5863	5854	5851	5848	5838	5858	5826
1996	5523	5532	5537	5550	5572	5597	5617	5652	5683	5719	5740	5744	5620
1995	5443	5444	5435	5432	5433	5432	5484	5506	5491	5511	5519	5524	5471
1994	5336	5371	5381	5405	5405	5408	5409	5424	5437	5437	5439	5439	5408
1993	5071	5070	5106	5167	5262	5260	5252	5230	5255	5264	5278	5310	5210
1992	4888	4884	4927	4946	4965	4973	4992	5032	5042	5052	5058	5059	4985
1991	4777	4773	4772	4766	4801	4818	4854	4892	4891	4892	4896	4889	4835
1990	4680	4685	4691	4693	4707	4732	4734	4752	4774	4771	4787	4777	4732

ENR: Construction

Appendix O
U.S. Consumer Price Index

Year	CPI (Avg Yearly) (1982-1984 = 100)
1997	160.52
1998	163.01
1999	166.58
2000	172.20
2001	177.07
2002	179.88
2003	183.96
2004	188.88
2005	195.29
2006	201.59
2007	207.34
2008	215.30
2009	214.54
2010	218.06
2011	224.94
2012	229.59
2013	232.71
2014	245.88
2015	251.98
2016	258.15
2017	264.41
2018	270.74
2019	277.15
2020	283.63
2021	290.20
2022	296.84
2023	303.56
2024	310.35
2025	317.22
2026	324.17
2027	331.20
2028	338.31
2029	345.49
2030	352.75

Appendix P Construction Costs 2006

Costs 2006 SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$2,775,000,000	\$179,000,000	\$708,000,000	\$1,691,000,000	\$1,052,000,000
- Land Acquisition	\$50,000,000	\$5,000,000	\$100,000,000	\$130,000,000	\$180,000,000
- Demolition of Impacted Facilities	N/A	N/A	\$243,000,000	\$12,000,000	\$84,000,000
- Earthwork	\$2,725,000,000	\$174,000,000	\$365,000,000	\$1,549,000,000	\$788,000,000
Airport Facilities	\$3,338,000,000	\$3,371,000,000	\$2,287,999,000	\$3,246,280,000	\$3,314,536,000
- Airside	\$543,000,000	\$472,000,000	\$720,290,000	\$695,396,000	\$763,652,000
- Terminal	\$1,738,000,000	\$1,738,000,000	\$1,002,630,000	\$1,739,212,000	\$1,739,212,000
- Access and Parking	\$627,000,000	\$746,000,000	\$242,709,000	\$410,273,000	\$410,273,000
- Cargo	\$141,000,000	\$141,000,000	\$140,939,000	\$140,923,000	\$140,923,000
- General Aviation	\$16,000,000	\$16,000,000	\$16,022,000	\$15,974,000	\$15,974,000
- Ancillary/Support	\$273,000,000	\$258,000,000	\$165,409,000	\$244,502,000	\$244,502,000
Airport Ground Access and Utilities	\$10,586,000,000	\$13,858,000,000	\$2,773,000,000	\$1,338,000,000	\$1,695,000,000
- Roadway/Highway Improvements	\$1,771,000,000	\$2,491,000,000	\$485,000,000	\$1,139,000,000	\$1,380,000,000
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$2,131,000,000	N/A	N/A
- Utilities	\$672,000,000	\$700,000,000	\$157,000,000	\$199,000,000	\$215,000,000
Total Airport Development Cost	\$16,699,000,000	\$17,408,000,000	\$5,768,999,000	\$6,275,280,000	\$5,961,536,000

Appendix Q Updated Construction Costs 2013

UPDATED COSTS 2013 SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$2,796,016,823	\$180,370,909	\$767,849,007	\$1,707,314,827	\$1,079,925,567
- Land Acquisition	\$50,800,000	\$5,080,000	\$101,600,000	\$132,080,000	\$182,880,000
- Demolition of Impacted Facilities	N/A	N/A	\$298,541,066	\$14,742,769	\$103,199,381
- Earthwork	\$2,745,216,823	\$175,290,909	\$367,707,941	\$1,560,492,059	\$793,846,186
Airport Facilities	\$4,100,946,820	\$4,141,489,434	\$2,810,953,332	\$3,988,262,925	\$4,072,119,793
- Airside	\$667,110,283	\$579,882,235	\$884,922,404	\$854,338,530	\$938,195,399
- Terminal	\$2,135,244,330	\$2,135,244,330	\$1,231,795,180	\$2,136,733,349	\$2,136,733,349
- Access and Parking	\$770,309,663	\$916,508,786	\$298,183,554	\$504,046,661	\$504,046,661
- Cargo	\$173,227,532	\$173,227,532	\$173,152,590	\$173,132,932	\$173,132,932
- General Aviation	\$19,657,025	\$19,657,025	\$19,684,053	\$19,625,082	\$19,625,082
- Ancillary/Support	\$335,397,987	\$316,969,527	\$203,215,552	\$300,386,369	\$300,386,369
Airport Ground Access and Utilities	\$11,045,211,707	\$14,484,045,526	\$3,383,638,881	\$1,614,451,317	\$1,927,831,082
- Roadway/Highway Improvements	\$2,175,786,944	\$3,060,353,064	\$595,853,567	\$1,399,334,460	\$1,695,418,398
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$2,618,070,004	N/A	N/A
- Utilities	\$726,424,764	\$756,692,462	\$169,715,309	\$215,116,857	\$232,412,685
Total Cost Cost	\$17,942,175,351	\$18,805,905,869	\$6,962,441,220	\$7,310,029,069	\$7,079,876,442

Appendix R Updated Construction Costs 2015

UPDATED COSTS 2015 SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$2,805,485,900	\$181,034,300	\$790,905,344	\$1,716,926,086	\$1,094,528,910
- Land Acquisition	\$52,425,600	\$5,242,560	\$104,851,200	\$136,306,560	\$188,732,160
- Demolition of Impacted Facilities	N/A	N/A	\$317,295,608	\$15,668,919	\$109,682,432
- Earthwork	\$2,753,060,300	\$175,791,740	\$368,758,536	\$1,564,950,607	\$796,114,318
Airport Facilities	\$4,358,570,947	\$4,401,660,474	\$2,987,539,235	\$4,238,808,177	\$4,327,932,987
- Airside	\$709,018,581	\$616,310,811	\$940,513,801	\$908,008,629	\$997,133,439
- Terminal	\$2,269,381,757	\$2,269,381,757	\$1,309,177,348	\$2,270,964,318	\$2,270,964,318
- Access and Parking	\$818,701,014	\$974,084,460	\$316,915,637	\$535,711,198	\$535,711,198
- Cargo	\$184,109,797	\$184,109,797	\$184,030,147	\$184,009,255	\$184,009,255
- General Aviation	\$20,891,892	\$20,891,892	\$20,920,618	\$20,857,943	\$20,857,943
- Ancillary/Support	\$356,467,905	\$336,881,757	\$215,981,684	\$319,256,835	\$319,256,835
Airport Ground Access and Utilities	\$11,240,728,632	\$14,737,582,823	\$3,599,284,747	\$1,719,780,561	\$2,053,161,286
- Roadway/Highway Improvements	\$2,312,471,284	\$3,252,606,420	\$633,285,473	\$1,487,241,554	\$1,801,925,676
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$2,782,538,852	N/A	N/A
- Utilities	\$785,257,347	\$817,976,404	\$183,460,422	\$232,539,006	\$251,235,610
Total Cost	\$18,404,785,479	\$19,320,277,597	\$7,377,729,326	\$7,675,514,823	\$7,475,623,184

Appendix S Updated Construction Costs 2020

UPDATED COSTS 2020 SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$3,119,700,321	\$201,310,142	\$919,365,869	\$1,911,191,147	\$1,230,901,525
- Land Acquisition	\$58,297,267	\$5,829,727	\$116,594,534	\$151,572,895	\$209,870,162
- Demolition of Impacted Facilities	N/A	N/A	\$392,711,843	\$19,393,177	\$135,752,242
- Earthwork	\$3,061,403,054	\$195,480,415	\$410,059,492	\$1,740,225,075	\$885,279,122
Airport Facilities	\$5,394,535,522	\$5,447,866,760	\$3,697,630,881	\$5,246,307,002	\$5,356,615,396
- Airside	\$877,541,279	\$762,798,312	\$1,164,059,314	\$1,123,828,168	\$1,234,136,561
- Terminal	\$2,808,778,531	\$2,808,778,531	\$1,620,348,457	\$2,810,737,242	\$2,810,737,242
- Access and Parking	\$1,013,293,521	\$1,205,609,197	\$392,241,558	\$663,041,424	\$663,041,424
- Cargo	\$227,869,835	\$227,869,835	\$227,771,253	\$227,745,395	\$227,745,395
- General Aviation	\$25,857,570	\$25,857,570	\$25,893,124	\$25,815,551	\$25,815,551
- Ancillary/Support	\$441,194,787	\$416,953,315	\$267,317,174	\$395,139,222	\$395,139,222
Airport Ground Access and Utilities	\$12,012,957,979	\$15,742,542,301	\$4,463,177,217	\$2,139,190,808	\$2,552,666,841
- Roadway/Highway Improvements	\$2,862,109,769	\$4,025,700,415	\$783,807,588	\$1,840,735,758	\$2,230,215,404
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$3,443,905,092	N/A	N/A
- Utilities	\$1,007,848,210	\$1,049,841,886	\$235,464,537	\$298,455,050	\$322,451,436
Total Cost	\$20,527,193,822	\$21,391,719,202	\$9,080,173,967	\$9,296,688,958	\$9,140,183,762

Appendix T
Updated Construction Costs 2025

UPDATED COSTS 2025					
SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$3,183,374,591	\$205,780,542	\$1,122,092,524	\$1,978,684,137	\$1,346,282,755
- Land Acquisition	\$69,490,343	\$6,949,034	\$138,980,685	\$180,674,891	\$250,165,233
- Demolition of Impacted Facilities	N/A	N/A	\$566,022,756	\$27,951,741	\$195,662,187
- Earthwork	\$3,113,884,249	\$198,831,508	\$417,089,083	\$1,770,057,505	\$900,455,335
Airport Facilities	\$7,775,242,627	\$7,852,109,915	\$5,329,462,958	\$7,561,598,153	\$7,720,587,656
- Airside	\$1,264,816,281	\$1,099,435,147	\$1,677,779,962	\$1,619,794,075	\$1,778,783,578
- Terminal	\$4,048,343,824	\$4,048,343,824	\$2,335,437,842	\$4,051,166,950	\$4,051,166,950
- Access and Parking	\$1,460,478,468	\$1,737,666,567	\$565,344,926	\$955,653,720	\$955,653,720
- Cargo	\$328,432,957	\$328,432,957	\$328,290,869	\$328,253,600	\$328,253,600
- General Aviation	\$37,268,988	\$37,268,988	\$37,320,233	\$37,208,426	\$37,208,426
- Ancillary/Support	\$635,902,108	\$600,962,432	\$385,289,128	\$569,521,382	\$569,521,382
Airport Ground Access and Utilities	\$13,765,808,437	\$18,029,312,787	\$6,443,364,632	\$3,096,571,007	\$3,693,592,218
- Roadway/Highway Improvements	\$4,125,211,112	\$5,802,315,573	\$1,129,716,200	\$2,653,086,085	\$3,214,450,217
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$4,963,763,343	N/A	N/A
- Utilities	\$1,497,597,325	\$1,559,997,213	\$349,885,089	\$443,484,922	\$479,142,001
Total Cost	\$24,724,425,655	\$26,087,203,244	\$12,894,920,113	\$12,636,853,297	\$12,760,462,630

Appendix U
Updated Construction Costs 2030

UPDATED COSTS 2030					
SUMMARY PROGRAM COST COMPARISON					
Component	Campo/ Boulevard Site	Imperial County Desert Site	NAS North Island/SDIA Site	MCB Camp Pendleton Site	MCAS Miramar Site
Site Acquisition and Preparation	\$3,277,898,868	\$212,499,445	\$1,554,045,865	\$2,089,778,832	\$1,568,943,999
- Land Acquisition	\$88,391,716	\$8,839,172	\$176,783,431	\$229,818,461	\$318,210,176
- Demolition of Impacted Facilities	N/A	N/A	\$950,044,044	\$46,915,755	\$328,410,287
- Earthwork	\$3,189,507,152	\$203,660,273	\$427,218,389	\$1,813,044,616	\$922,323,536
Airport Facilities	\$13,050,399,255	\$13,179,417,582	\$8,945,266,760	\$12,691,806,499	\$12,958,663,315
- Airside	\$2,122,937,926	\$1,845,353,040	\$2,816,079,113	\$2,718,752,379	\$2,985,609,195
- Terminal	\$6,794,965,221	\$6,794,965,221	\$3,919,928,642	\$6,799,703,712	\$6,799,703,712
- Access and Parking	\$2,451,348,212	\$2,916,596,119	\$948,906,337	\$1,604,022,305	\$1,604,022,305
- Cargo	\$551,260,124	\$551,260,124	\$551,021,636	\$550,959,082	\$550,959,082
- General Aviation	\$62,554,340	\$62,554,340	\$62,640,353	\$62,452,690	\$62,452,690
- Ancillary/Support	\$1,067,333,432	\$1,008,688,738	\$646,690,680	\$955,916,333	\$955,916,333
Airport Ground Access and Utilities	\$17,595,539,557	\$23,039,841,373	\$10,818,383,596	\$5,201,870,803	\$6,204,299,269
- Roadway/Highway Improvements	\$6,923,983,547	\$9,738,928,863	\$1,896,178,442	\$4,453,087,104	\$5,395,311,855
- HSTS	\$8,143,000,000	\$10,667,000,000	N/A	N/A	N/A
- Airside Tunnel	N/A	N/A	\$8,331,456,205	N/A	N/A
- Utilities	\$2,528,556,009	\$2,633,912,509	\$590,748,949	\$748,783,699	\$808,987,414
Total Cost	\$33,923,837,680	\$36,431,758,400	\$21,317,696,221	\$19,983,456,134	\$20,731,906,583

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