

# Cities of Dallas and Fort Worth, Texas Dallas/Fort Worth International Airport Joint Revenue Improvement Bonds

## Executive Summary

Kroll Bond Rating Agency (KBRA) affirms the long-term rating of AA- with a stable outlook on the Dallas/Fort Worth International Airport (DFW) Joint Revenue Improvement Bonds. This rating applies to all of the Airport's outstanding Joint Revenue Improvement bonds. As of September 30, 2014, DFW had \$6.3 billion in Joint Revenue Bonds outstanding.

This affirmation is based on KBRA's [U.S. General Airport Revenue Bond Methodology](#), published on April 23, 2014. KBRA's rating evaluation of the long-term credit quality of general airport revenue bonds focuses on six key rating determinants:

- Management
- Economics/Demographics of Service Area
- Airport Utilization
- Airport Debt/Capital Needs
- Airport Finances
- Legal Mechanics and Security Provisions

In the process of affirming the rating, KBRA reviewed multiple sources of information and spoke with airport management. Further information may be found in the [Dallas/Fort Worth International Airport Joint Revenue Improvement Bonds, Series 2014C](#) rating report published on June 9, 2014.

## Security

The Bonds are payable solely from and secured by an irrevocable first lien on and pledge of Pledged Revenues and Pledged Funds. Pledged Revenues include Gross Revenues, the revenues received by the Airport from rentals, fees and charges collected from the airlines, and from other non-airline sources, including capital transfers and special revenues. Pledged Funds include amounts on deposit in the Debt Service Fund and Debt Service Reserve Fund.

## Key Rating Strengths

- Strong management team has demonstrated an ability to effectively deal with the complexities of running a major U.S. airport.
- Growing population and economic base support origin and destination (O&D) traffic.
- Geographic location in central U.S., and operational advantages of facilities, along with ample capacity abets connecting activity.
- Significant non-airline activity diversifies revenues, and provides source of discretionary capital funding.

## Key Rating Concerns

- High debt levels on per enplanement basis.
- High concentration of American Airlines as primary DFW carrier.
- Connecting traffic is a significant component of overall enplanement activity.
- Impact of end of Wright Amendment on the potential for greater Love Field competition.

## Rating Summary

KBRA believes that DFW exhibits many favorable characteristics that have fostered its status as the fourth busiest airport in the U.S. in terms of enplanements. Its vast size at 17,200 acres (26.9 square miles) provides the needed space for extensive air-related facilities, and also substantial non-aeronautical related commercial development. DFW has seven runways, capable of four simultaneous landings, and has 24 hour operation, without slot constraints, or curfews. The Airport has five terminals, with 165 gates. DFW's location in the south-central portion of the U.S., along east-west routes, forms a natural hub. Flight frequency and destinations served is further enhanced by a growing population and diversifying economic base. The terminal configuration allows for the expeditious movement of passengers between connecting flights, and is assisted by an efficient airport transit system (Skylink).

KBRA views the siting of the Airport in 1968, followed by its opening in 1974, as a reflection of the foresight of representatives of the cities of Dallas and Fort Worth. Land acquisition of this magnitude would have been impossible several years later. KBRA believes the Cities also showed prudence in creating a management structure through the 1968 Contract and Agreement that provides for professional airport management, with virtually no outside interference. KBRA views DFW's management structure and policies as providing a strong framework for managing its operations. Management has maintained favorable relationships with airline and non-airline entities, including negotiation of the current Lease and Use Agreement, and gaining airline approval for the more than \$2.7 billion Terminal Renewal and Improvement Program (TRIP). Despite significant construction activity, day-to-day terminal operations have not been severely affected, due to management planning of phased construction.

KBRA views the DFW regional economy as strong, based on relatively low unemployment rates, a substantial corporate presence that is supportive of travel, above average wealth levels, and growing population. Population in 2014 is estimated at 6.9 million, a more than 30% increase since 2000. Housing costs are highly affordable and have rebounded to more than 100% from their pre-fiscal crisis peak. The closest competing large hub airport to DFW is Houston-Bush Intercontinental, approximately 245 miles away. Dallas Love Field (DAL) is the only other airport in the MSA that provides scheduled passenger airline service. DAL has operated under restrictions known as the Wright Amendment since 1980, which limited airplane size and destination to nearby states. The expiration of the Wright Amendment, in October 2014, nominally increased competition between the two airports. However, the impact on DFW passenger activity has been modest as DAL is capped at 20 gates. In addition, growth in American Eagle and other low cost carrier (LCC) flights may offset losses to DAL.

DFW enplanement trends since 2000 have been uneven, with sharp drops recorded during the early 2000s recession the aftermath of 9/11, and the more recent financial crisis. Connecting traffic was also affected by Delta's de-hubbing in 2005. Since 2010, there has been a rebounding led by increased international enplanements, and the introduction of service by LCCs. Growth has exceeded the U.S. as a whole, and

available seats have likewise increased. DFW is characterized by significant American Airlines concentration that now exceeds 85% of enplanements. KBRA's concerns are mitigated to a great extent by how airlines have historically treated their fortress hubs by hunkering down with respect to bankruptcy. Now that American has emerged from bankruptcy KBRA would expect the same. American appears to have improved its balance sheet, and fixed its labor issues, and is adding capacity. According to American's management, corporate headquarters will remain in Fort Worth. In addition, American's yields at DFW were more than 20% higher than its system-wide average.

DFW has successfully added a number of major international routes in recent years. International service is provided between the Airport and destinations in Asia, Australia, Canada, the Caribbean, Central America, Europe, Mexico, the Middle East, and South America. The airport currently offers nonstop international service to 58 destinations.

The Airport's current capital program covers the period between fiscal years 2011 and 2020. Spending is estimated at \$4.7 billion, with potential for upward adjustment of \$500 million to address scope changes, and costs beyond contingency set-asides. Total borrowing is in the range of \$4 billion. Additional issues are expected in the 2016-2017 period. At that point approximately \$7.7 billion is expected to be outstanding. Debt service gradually ascends to approximately \$550 million in 2035, and thereafter is reduced sharply and levels off through 2050. DFW began a debt restructuring program in 2009 that has yielded \$473 million in savings, and provided airline relief during a troublesome period.

While debt metrics are high on a per enplanement basis, KBRA believes there are several mitigating factors. Non-airline revenues have grown in recent years, with further growth anticipated due to TRIP-related concession improvements. A portion of non-airline net revenues is shared with the airlines when an upper threshold is exceeded.

Growth in expenditures has been effectively contained, and with TRIP-related improvements now being undertaken, KBRA expects utility and maintenance savings to be realized going forward. KBRA believes that management is cognizant of the need to maintain ample liquidity to offset high debt levels. The ratio of unrestricted cash to operating expenses was a sizable 676 days as of September 30, 2014. DFW is far along in its capital cycle. A large proportion of the bond proceeds have been applied to renovation and improvements at the Airport's older terminals.

Based on review of the six KBRA Rating Determinants included in the KBRA Methodology for rating U.S. General Airport Revenue Bonds, KBRA has assigned a rating to each Determinant, which is summarized as follows:

- Management: Favorable
- Economics/Demographics of the Service Area: AA
- Airport Utilization: A+
- Airport Debt/Capital Needs: A
- Airport Finances: AA-
- Legal Mechanics and Security Provisions: AA

## Outlook: Stable

The stable outlook reflects KBRA's expectation that passenger traffic will grow modestly, there will be no significant increases in expected borrowing beyond that which is currently anticipated, and non-airline revenues will continue to support operations at levels achieved in recent years. KBRA also expects DFW's critical importance in American Airline's hubbing network to remain, and debt service coverage ratios to be sustained at existing levels.

In KBRA's view, the following factors may contribute to a rating upgrade:

- Ongoing population growth and strong local economic performance that results in O&D enplanement increases, and elevated rental car, parking, and concession revenues, as debt is amortized.
- Consolidation of the numerous domestic American Airlines hubs that yields augmented connecting activity, and acts to further reinforce DFW's status as a fortress hub.
- Further development of commercially available land as an indication of its true revenue potential.

In KBRA's view, the following factors may contribute to a downgrade of the rating:

- Reduced importance of DFW as an American Airlines hub.
- Unanticipated large capital costs that sharply increase debt levels.

## Bankruptcy Assessment

KBRA has consulted outside counsel on bankruptcy matters and the following represents our understanding of material bankruptcy issues relevant to DFW. For an entity to be an eligible debtor under Chapter 9 of the U.S. Bankruptcy Code (the "Bankruptcy Code"), the municipal bankruptcy provisions of the Bankruptcy Code, the entity must (i) be a "municipality" as defined under the Bankruptcy Code; (ii) be specifically authorized under state law to file a Chapter 9 petition; (iii) be insolvent (meaning that the municipality is generally not paying its undisputed debts as they come due or is unable to pay its debts as they come due); (iv) desire to adjust its debts; and (v) either have obtained agreement of certain creditors, have attempted to negotiate in good faith without obtaining agreement, be unable to negotiate because of impracticability, or believe that a creditor is attempting to obtain a preferential transfer under the Bankruptcy Code. With respect to the first requirement under the Bankruptcy Code, that a debtor be a "municipality," DFW is owned jointly by the City of Dallas and the City of Fort Worth, which have appointed a board to run the airport, and is not a separate, stand-alone municipal body. Because DFW is not a separate municipality incorporated under Texas state law, KBRA's understanding is that it is not eligible to file a municipal bankruptcy petition under Chapter 9. Each of the City of Dallas and the City of Fort Worth, however, is a "municipality" as defined under the Bankruptcy Code. In addition, Texas state law specifically authorizes any municipality in the State that has the power to incur indebtedness through the action of the municipality's governing body to file a Chapter 9 petition. Both the City of Dallas and the City of Fort Worth have the authority under Texas state law to incur indebtedness and, thus, both are specifically authorized under Texas state law to file a Chapter 9 petition. Thus, if either of these cities meet the remaining three requirements addressed above, it is likely that a court of competent jurisdiction would permit both the Cities of Dallas and Fort Worth to file Chapter 9 petitions. It is KBRA's understanding that because the bonds are secured by a pledge of special revenues, a chapter 9 bankruptcy filing by either the City of Dallas or the City of Fort Worth, or both, should have little to no effect on the bonds.

## Key Rating Determinants

### **Rating Determinant 1: Governance and Management Structure and Policies**

KBRA continues to view DFW's management team as favorable, based on the airport's firm grasp of capital planning, history of financial stability, and demonstrated relationships with airline and non-airline entities. The Airport's forward thinking formalized policies and procedures employ best practices, and along with state of the art operating and training facilities, provide essential tools for operating a major airport. DFW's strategic plan contains four major initiatives: (1) keep airline costs competitive; (2) create customer (passenger, airline, and tenant) satisfaction; (3) deliver operational excellence; (4) promote employee engagement. The management team has significant industry experience.

DFW is governed by a semi-autonomous Board of Directors, comprised of 12 members. Seven are appointed by the city council of Dallas, while Fort Worth city council appoints four. The 12th member is non-voting, and represents one of the four other cities (Coppell, Euless, Grapevine and Irving) in which the Airport is physically located, on an annual rotating basis. The Board appoints the Airport's Chief Executive Officer who is responsible for day-to-day operations of the Airport. There are currently four Executive Vice Presidents, with responsibility for finances, operations, administration and diversity, and revenue management, and 20 Vice Presidents. The Airport currently has approximately 1,800 full-time employees.

The Chief Executive Officer, Sean P. Donohue, joined DFW in October 2013, following a 28-year career in the airline industry. He brings an additional perspective to DFW, having spent the prior three years as Chief Operating Officer of Australia's second largest air carrier, and prior to that served for 25 years in a variety of roles at United Airlines. Christopher A. Poinsette, the Executive Vice President – Chief Financial Officer, has served in this role since September 2003, and earlier was CFO at Dallas Area Rapid Transit (DART). He has had significant involvement with Airports Council International-North America (ACI-NA), and has chaired its finance committee. Michael Phemister, Vice President-Treasury Management has been with DFW since 1999, and is responsible for debt management. Prior to working at DFW, he served for 11 years as CFO for the City of Rockwall, Texas.

DFW's long-range planning and decision-making stem from its Leadership System. Strategic, financial, risk management, capital planning, and employee compensation practices are addressed here. The elements of the system are: (1) Strategic Planning and Management System (strategic plan, financial plan, airport master plan, capital plan, enterprise risk management, and business unit plans); (2) the Annual Work Plan and Annual Budget; (3) cascading goals to employees; and (4) measurement (scorecards and reporting). The resultant system output is employee compensation and alignment.

The Airport's debt policy, which identifies the range of debt instruments that may be employed, prohibits structuring of debt for a period that exceeds the useful life of the asset being financed. Amortization of debt must be no longer than 35 years, unless approval is obtained from the cities of Dallas and Fort Worth. No balloon or bullet maturities are allowed, with the exception of interim financing. Extensions of maturities are expected to be avoided unless there is a need to restructure outstanding debt, or provide financial relief to airlines. According to the Airport's debt policy, DFW will not have more than 20% of total outstanding debt in variable rate debt at any one time, excluding interim financing. Subordinate lien obligations must not exceed 10% of outstanding debt.

DFW's 10-year financial plan is updated annually. The Plan serves as a management tool and includes projections of revenues, expenses, capital needs, and debt service requirements. DFW has also devoted significant attention to enterprise risk management (ERM), and has established a structure that identifies risks that may affect business processes and strategic objectives, and created an enterprise-wide program to manage these risks. Management has categorized these risks in the following categories: (1) financial; (2) human capital; (3) legal and regulatory; (4) operational; (5) reputational; (6) strategic; and (7) technology. A risk council, consisting of representatives from various Airport enterprise functions, and a risk officer are part of the structure. The highest levels of airport administration, including the Chief Executive Officer, and Executive Vice Presidents have responsibility for support, implementation and application of the ERM program.

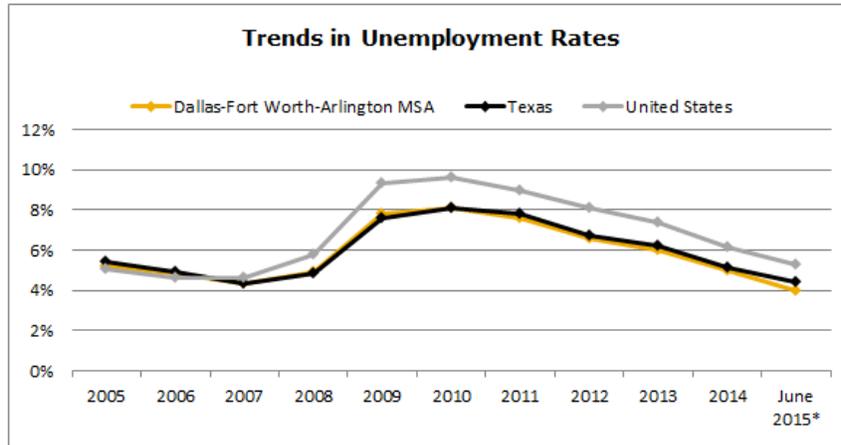
Airport management has established facilities that coordinate operational response capabilities, and aircraft rescue firefighting. The Airport Operations Center (AOC) centralizes multiple call and dispatch centers to effectively respond to a number of emergency incidents, including but not limited to hostage situations, major vehicle accidents, or severe weather events.

Based on the foregoing, KBRA continues to view the airport's governance and management structure and policies as favorable.

## **Rating Determinant 2: Economics/Demographics of the Service Area**

DFW's primary service area is the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (MSA), which includes 13 counties, encompassing 9,300 square miles. Dallas Love Field (DAL) is the only other airport in the MSA that provides scheduled passenger airline service, albeit on a much more narrow and limited scale. The estimated population of the MSA, in 2014, was 6.9 million, up from 5.2 million in 2000 and 6.5 million in 2010. MSA population represents more than 25% of the State's population. The region's large population base forms the basis for significant origin and destination traffic at the airport. The Airport's location in the south central region of the US, along with a sizable regional population base, contributes to DFW's high level of connecting enplanement activity. The Airport's central location means that it is within a four hour flight of almost all major cities in the continental U.S., Canada, and Mexico.

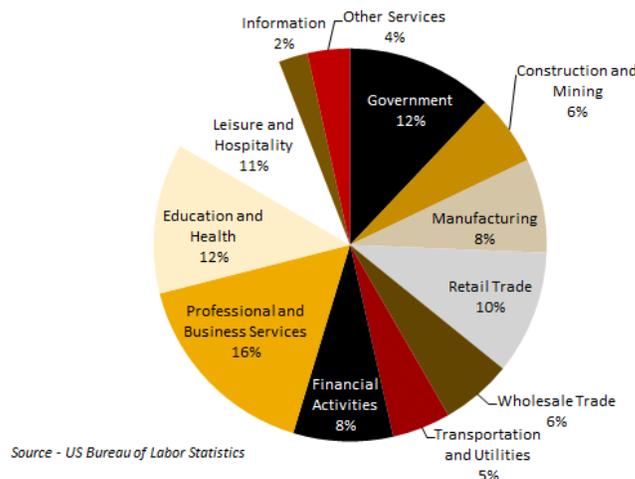
The region's non-agricultural employment base is also a key driver in high levels of O&D enplanement activity at DFW. Mirroring the U.S., services represents the largest sector in the MSA, and has grown at a proportionately faster pace than total non-agricultural employment. Professional and business services, which generate significant air travel, are a larger employment share component than the U.S. as a whole. The unemployment rate reached a peak of 8.6% in January 2010. As of June 2015, the MSA's preliminary unemployment rate was 4.0%, compared to the state and nationwide unemployment rates of 4.4% and 5.3% respectively.



Source: U.S. Bureau of Labor Statistics  
\* Preliminary figures

The metropolitan area has a widely diversified business environment. Among the largest private sector employers are 16 Fortune 500 companies, including American Airlines Group and AT&T. The scope and frequency of airline service between DFW Airport and all regions of the nation and the world are reasons for many companies to locate facilities in the MSA. In April 2014, Toyota announced it will consolidate several facilities into a new 2.1 million square foot North American headquarters in Plano, Texas. One of the reasons cited was flight frequency and scope at DFW Airport. The MSA is home to a number of higher education institutions, which also serve as key drivers of enplanement activity at DFW. Major universities include Southern Methodist University, Texas Christian University, Texas Woman’s University, the University of North Dallas, the University of Texas at Arlington, and the University of Texas at Dallas. The MSA is also a major convention destination, with approximately 75,000 hotel rooms, according to the Dallas Convention and Visitors Bureau, among the highest in the U.S. AT&T Stadium, with its retractable roof, has attracted major sporting events like the Super Bowl, and NCAA football and basketball championships.

**Diversity of Employment – Dallas-Fort Worth-Arlington MSA**



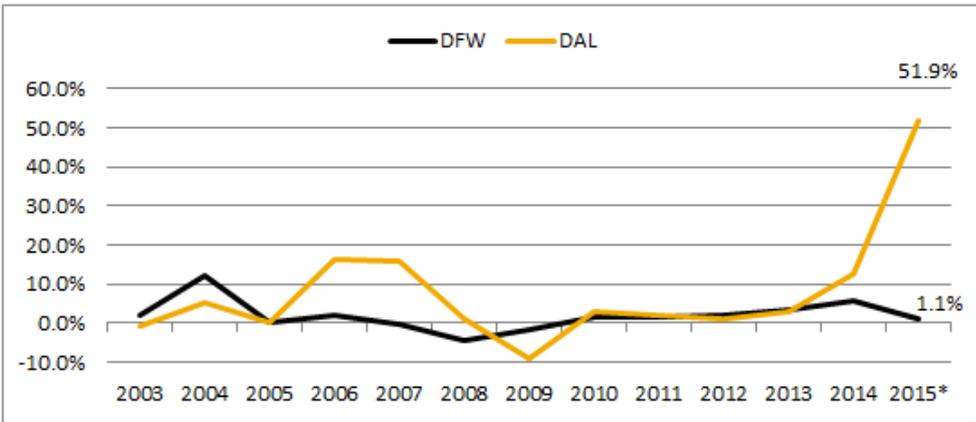
Source - US Bureau of Labor Statistics

Dallas and Fort Worth rank relatively low in housing costs, and high in affordability. The MSA shows a much greater degree of recovery than in the nation as a whole. In February 2014, MSA home prices had recovered to 105% of their pre-recession peak according to the S&P/Case Shiller, 20 City Home Price index, while for the nation peak prices were still 20% below peak prices. The better performance in housing is attributable, in part, to the fact that home prices in the MSA did not increase as much as those in the nation during the residential housing boom. The S&P/Case-Shiller Home Price Index for Dallas shows that home prices in June 2007 were 26% higher than in June 2000, whereas home prices in the nation were 77% higher. The relatively strong rebound in housing prices contributes to a sense of wealth that may result in increased expenditures for air travel. Per Capita income is 108% and 105% of the State of Texas and the U.S., respectively.

**Geographically Competing Facilities**

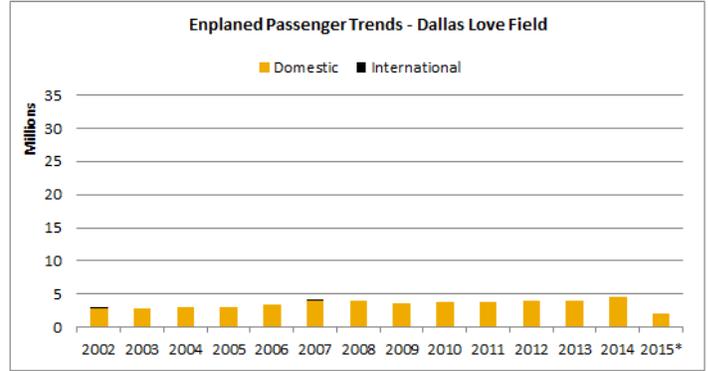
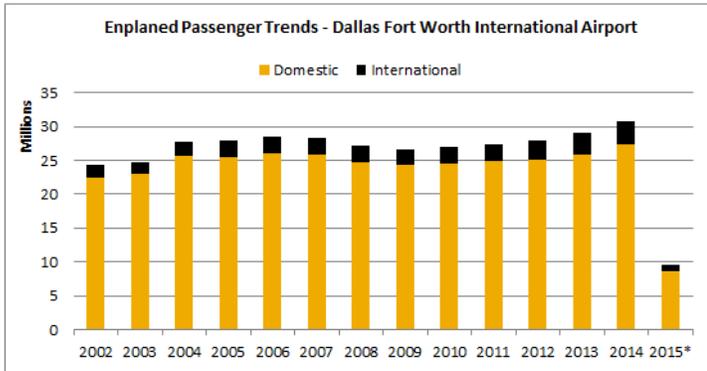
There are no airports of similar size nearby DFW. Austin and Oklahoma City, which are medium and small hubs, respectively, are located 195 and 208 miles away. Houston, a large hub, is 245 miles away. Dallas Love Field (DAL) is the only other airport in the MSA that provides scheduled passenger airline service. Southwest Airlines accounts for approximately 97.0% of daily departing seats at DAL. Love Field has operated under restrictions known as the Wright Amendment since 1980, which limited airplane size and destination to nearby states. In 2006, an agreement was reached on repeal of the Wright Amendment, effective in October 2014. While competition between the two airports has increased, the magnitude of change has been immaterial in KBRA’s opinion. Love Field is capped at 20 gates, and no international flights are permitted. Southwest has added 35 new flight destinations from DAL since October 2014 but may have to eventually drop flights to existing closer-in destinations. In airport management’s opinion, the potential loss of O&D traffic at DFW could be offset with connecting traffic. In addition, growth of American Eagle and/or low cost carriers at DFW could offset the loss of O&D traffic. Based on preliminary passenger statistics over a 12 month period, as of April 2015, overall enplanement activity has increased by an estimated 51.9% and 1.1% at DAL and DFW respectively. Despite this significant increase, the additional domestic flight options at DAL have not had a material impact on enplanement activity at DFW.

**Annual Change in Total Enplaned Passengers – DFW vs. DAL**



Source: United States Federal Aviation Administration (FAA)

\* Estimate as of April 2015



Source: United States Federal Aviation Administration (FAA)  
\* April 2015 Year to Date

Based on the foregoing, KBRA continues to view the economics/demographics of DFW’s service area as consistent with a AA Rating Determinant rating. The service area’s vibrant, diverse, and growing business environment, stable housing market, rising wealth levels, and favorable demographic trends support continued growth in enplanement activity and future demand for service.

### **Rating Determinant 3: Airport Utilization**

DFW enjoys many strategic advantages, which in KBRA’s opinion, are likely to sustain its prominence among world airports. It is the highest capacity airport in the world, with the ability to grow. Its infrastructure includes five terminals, 165 gates, and seven runways. It is the only airport in the world capable of four simultaneous landings in good visibility, and onto three runways in virtually all weather conditions. Twenty four hour operation is permitted, and there are no slot constraints and no curfews. Skylink, a dedicated transit system connects the airside areas of all terminals. An extension of the Dallas Area Rapid Transit (DART) light rail system also connects DFW with downtown Dallas. DFW’s operational advantages of facility and capacity, and its geographical location contribute to its status as a fortress hub. Likewise, the sizable and growing regional population and employment bases support substantial origination and destination traffic. DFW is the seventh largest O&D market in the United States, and would rank in the top 20 of U.S. airports in terms of enplaned passengers, even without connecting passengers.

### **Enplanement Trends**

O&D enplanements have increased overall with the exception of declines in the aftermath of the September 11<sup>th</sup> terrorist attacks, and the 2008-09 financial crisis, which reduced airline seat capacity. Overall connecting activity has grown modestly, reflecting the mature nature of U.S. domestic travel. As a consequence, originating passengers have become a more important component of total enplanements. DFW is on pace for a 1.1% increase in enplaned passengers in the current calendar year, which equates to a total of approximately 31.7 million. DFW currently ranks fourth in the U.S., and eighth in the world in total enplanements. Management projects growth to 32.3 million enplanements in 2017 and 34.5 million enplanements in 2020.

<b>Historical Origination and Connection Passengers</b>									
<b>Dallas/Fort Worth International Airport</b>									
<b>Fiscal Years Ended September 30</b>									
Fiscal Year	Enplaned Passengers			Annual Percent Increase (Decrease)			Percent		
	Origination	Connecting	Total	Origination	Connecting	Total	Originating	Connecting	
2005	13,700	15,900	29,600	-	-	-	46.3%	53.7%	
2006	12,600	17,600	30,200	-8.0%	10.7%	2.0%	41.7%	58.3%	
2007	12,900	17,000	29,900	2.4%	-3.4%	-1.0%	43.1%	56.9%	
2008	13,000	16,100	29,100	0.8%	-5.3%	-2.7%	44.7%	55.3%	
2009	11,500	16,400	27,900	-11.5%	1.9%	-4.1%	41.2%	58.8%	
2010	11,500	16,700	28,200	0.0%	1.8%	1.1%	40.8%	59.2%	
2011	12,100	16,800	28,900	5.2%	0.6%	2.5%	41.9%	58.1%	
2012	12,500	16,600	29,100	3.3%	-1.2%	0.7%	43.0%	57.0%	
2013	12,800	17,300	30,100	2.4%	4.2%	3.4%	42.5%	57.5%	
2014	13,500	17,900	31,400	5.5%	3.5%	4.3%	43.0%	57.0%	

Source: Dallas/Forth Worth International Airport

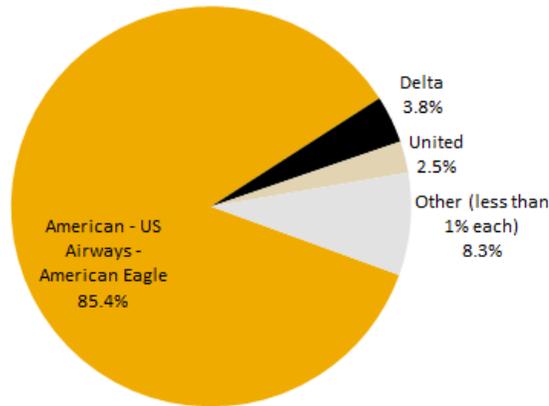
## Strong International Enplanement Growth

DFW has successfully added a number of major international routes in recent years. International service is provided between the Airport and destinations in Asia, Australia, Canada, the Caribbean, Central America, Europe, Mexico, the Middle East, and South America. Total international enplanements have increased 84.1% since CY 2002, and approximately 48.0% since CY 2009. The airport currently offers nonstop international service to 58 destinations. Recently, the airport added daily international service to Doha, Qatar and Abu Dhabi, United Arab Emirates. Additionally, American Airlines recently began nonstop daily service from DFW to Hong Kong and Shanghai.

## American Airlines Concentration

American Airlines represents significant concentration at DFW. Together with the merged U.S. Airways and American Eagle, the airline accounts for approximately 85.4% of the Airport's market share, as of FY 2014. However, KBRA continues to believe that in this particular case, the level of concentration is not a critical risk. The threat of an American bankruptcy had been present since the September 11<sup>th</sup> attacks. In airport management's opinion, American emerged from its November 2011 bankruptcy in December 2013 as a stronger airline, with synergies, mainly in the form of increased revenues due to a more extensive network, and a more diverse fleet, allowing capacity to be better matched on a route basis, and decreased expenses. American is now the largest airline in the world, and American's management has stated the airline will keep its corporate headquarters in Fort Worth. DFW has served for many years as the busiest connecting hub in American's route system, and will continue in this role post-merger.

**Share of Total Enplaned Passengers by Airline  
Fiscal Year 2014**



Source: U.S. Department of Transportation

While the merger creates multiple hubs for the consolidated airline, and KBRA believes that several of these hubs may be vulnerable to service reductions, our expectation is that DFW will not be adversely affected since it plays a unique role in American’s route system. It is a fortress hub for American Airlines, and prior history indicates that with respect to the Delta and United bankruptcies, airlines “hunker down” at their fortress hubs. American Airlines has new planes on order, and is adding seat capacity to much of its fleet, which will additionally benefit DFW. In recent years airlines have switched from a market share strategy to an emphasis on profitability. In this environment, load factors and yield have taken on greater importance. American’s load factors and yields at DFW are well above its system-wide averages, based on data obtained from InterVISTAS Consulting LLC.

Based on the review of DFW’s facilities, level of service, enplanement and available seat trends, role as an international and cargo gateway, and the value of DFW routes to carriers, KBRA continues to view the airport utilization of DFW as consistent with an A+ Rating Determinant rating.

**Rating Determinant 4: Airport Debt/Capital Needs**

**Debt Issuance Approach**

DFW has taken a conservative approach to debt management. The Airport’s debt issuance adheres to a written debt management policy. DFW’s debt is in the form of general airport revenue bonds (GARBs), secured by a lien on gross airport revenues. All debt is in the form of fixed rate obligations, and for the most part is amortized over 30 years. There are no swaps currently in effect, nor is there any subordinate lien or special facility debt outstanding. The debt service reserve is fully cash funded, with the exception of one remaining surety policy, which is expected to be terminated this year. As of September 30, 2014, the Airport had approximately \$6.3 billion in aggregate principal amount of bonds outstanding, and is in the midst of a large capital program, which covers the FY 2011 through FY 2020 period. Capital planning processes are in place, and the projects undertaken appear justified in that facilities are 40 years old and subject to the need for major systems replacement and obsolescence issues. Airline consensus has been reached despite ongoing scope and cost modifications. DFW does not plan on issuing additional GARBs until the latter half of FY 2016.

## Capital Program Overview

In anticipation of the large capital program and to provide airline relief, DFW began restructuring its existing debt in 2009, and has issued almost \$2.9 billion in refunding bonds. The restructuring yielded \$473 million of debt service savings, and created additional debt incurring capacity in most years. Debt service requirements ratchet up sharply from current levels, but remain relatively flat from FY 2017 until the non-Terminal Renewal and Improvement Program (TRIP) debt is retired in FY 2035. Passenger Facility Charge (PFC) revenues provide significant support. DFW is far along in its debt issuance cycle, and KBRA would expect some moderation over time as debt is retired and enplanements increase. DFW's strong liquidity position and moderate cost per enplanement are also mitigating factors.

## TRIP Program

The Airport's most significant current capital project is the Terminal Renewal and Improvement Program (TRIP), which is a total renovation and update of DFW's four (of five) older terminals between 2011 and 2019. Approximately two-thirds of the TRIP budget is applied to terminal electrical, plumbing, heating and cooling, security, fire safety, conveyances, telecommunications, lighting and information technology systems. The bulk of the remaining TRIP budget is being used to upgrade ticket halls, reconfigure TSA security checkpoints, replace certain baggage systems, and re-orient concessions for increased sales activity. Modest improvements to terminal exteriors, entrances and parking structures are also being undertaken. The improvements are proceeding in phases to avoid disruption of ongoing flight activity. As of September 30, 2014, the TRIP program budget is approximately 37.0% expended with an additional 14.0% committed but not yet paid.

During FY 2014, DFW incurred higher than expected costs related to TRIP projects, primarily driven by asbestos remediation that was higher than budgeted, and airline scope modifications. As a result, airport management along with airlines approved a budget increase of \$652 million, which included an additional \$100 million to build-out four additional gates in Terminal C. The total TRIP program budget, as a result, increased to \$2.7 billion. DFW management indicates that the additional debt and debt service will not have a material impact on the airport's financial position.

## Non-TRIP Projects

Outside of TRIP, DFW has 209 approved capital projects in process, amounting to a total of \$1.02 billion. As of September 30, 2014, approximately \$978.9 million of this total had been expended or committed. Significant projects include the reconstruction of the Terminal A Enhanced Parking Garage, reconstruction of Taxiway "L", and the construction of an Enhanced Parking Garage at Terminal E.

DFW does not anticipate additional borrowing until the latter half of FY 2016, at which point the airport plans to issue new money for TRIP-related projects in Terminal C. Further out on the horizon is the potential construction of a sixth terminal, if necessitated by passenger growth. Timing and cost estimates are not currently available. The Airport footprint is large enough to accommodate any conceivable airfield or terminal capacity needs.

Based on the foregoing, KBRA continues to view the Airport's debt and capital planning as consistent with an A Rating Determinant rating.

## **Rating Determinant 5: Airport Finances**

DFW's financial operations are governed in large part by the Master Bond Ordinance, which was adopted by Dallas and Fort Worth in September 2010, effective in July 2013, establishes the flow of funds and the rate covenant, among its provisions. Operations are also a function of the Lease and Use Agreement, in place through FY 2020, which lays out the financial obligations of both the airport and airlines, and determines the airport's rate setting and cost recovery mechanism. The Use Agreement is characterized as hybrid. It establishes three cost centers (airfield, terminal, and DFW) to account for revenues and expenses, and related rentals, fees, and charges. For the airfield and terminal, the signatory airlines pay landing fees and terminal rentals based on the net cost to provide those services.

The DFW cost center accounts for parking, concessions, the rental car facility, commercial development, ground transportation and employee transportation. After certain transfers and credits are made to the Airfield and Terminal cost centers, all remaining revenues are deposited in to the DFW Capital Account, one of three accounts (DFW Capital Account, Joint Capital Account, and Rolling Coverage Account) within the Capital Improvements Fund. In FY 2014, amounts deposited into the DFW Capital Account have a lower threshold of \$42.9 million and an upper threshold of \$64.3 million.

Any amount in excess of \$64.3 million will be deposited such that 75% of the excess will be used to offset landing fees either in the current fiscal year or the following fiscal year. At the end of the fiscal year, if the amount deposited into the DFW Capital Account is less than \$42.9 million, then an incremental landing fee will be added in the following fiscal year so that the shortfall is recovered. If the amount of cash unassigned to projects in the DFW Capital Account exceeds \$107.2 million, then 50% of the excess will be used to offset landing fees in the succeeding fiscal year, and 50% will be deposited into the Joint Capital Account. Currently all capital funds are assigned to projects. All dollar amounts are adjusted annually based on the consumer price index (CPI). DFW Capital Account funds can be used at the discretion of the Airport; no majority-in-interest (MII) approval is needed. FY 2014 net revenues in the DFW Cost Center were \$102.7 million in FY 2014, or \$38.4 million higher than the upper threshold. This allowed DFW to share \$28.8 million with the airlines to reduce landing fees.

The Joint Capital Account (JCA) is primarily funded from bond proceeds, natural gas royalties, and land sale proceeds. Funds in the JCA require DFW and airline approval before they can be spent. JCA funds are used to fund TRIP and other capital projects, capitalized interest, debt reserves, and annual transfers through 2017 to offset terminal rentals, when it is eliminated.

The Rolling Coverage Account was established as part of the Use Agreement in 2010 to implement rolling coverage. Each year, the entire Coverage Account is rolled into the Operating Revenue and Expense Fund as a source of revenue, and then transferred back into the Coverage Account at the end of the year. If new debt is issued, each cost center must generate the incremental coverage required to fund 25% of the new debt service.

The Master Bond Ordinance requires the Airport to set rates at levels sufficient to generate gross revenues equal to 1.25x debt service requirements, after meeting operating expenses. This ratio includes the rolling coverage amount. Prior to FY 2011 when the current Use Agreement was enacted, the coverage ratio was always 1.25x, because the airport was fully residual. For each of the past four years, coverage has exceeded 1.50x. The increase beginning in FY 2011 was due to the transfer of net revenues to the DFW Account under the new Use Agreement.

While coverage has been augmented, the new Use Agreement limits the airport's ability to further improve the coverage ratio because it must use 75% of DFW Cost Center net revenues in excess of the Upper Threshold to reduce landing fees. With the advent of the new agreement, DFW has committed all PFC revenues, to bond repayment. The Ordinance's other coverage requirement is 1.00x, without rolling

coverage, and transfers from Capital Accounts. Over the past five years coverage has ranged from 1.08x to 1.21x. The Airport internally has added an additional coverage calculation that includes revenue sources that are not defined as gross revenues under the Ordinance. These sources include net revenues from the Public Facility Improvement Corporation, which includes a hotel and consolidated rental car facility (consolidated facility charges and consolidated transportation charges only), and natural gas royalties and the sale of land. After adding these sources to gross revenues, coverage ranges from 1.36x to 1.66x with rolling coverage and 1.21x to 1.34x without rolling coverage.

<b>Dallas/Fort Worth International Airport</b>					
<b>Debt Service Coverage</b>					
<b>(Unaudited, \$ Millions)</b>					
Coverage Calculation - Gross Revenues	2010	2011	2012	2013	2014
<b>Operating Revenues</b>					
Airfield Cost Center	203.3	124.4	131.0	140.1	146.2
Terminal Cost Center	0.0	128.4	138.2	164.3	180.0
DFW Cost Center	242.4	241.2	246.5	252.7	268.3
<b>Total Operating Revenues</b>	<b>445.7</b>	<b>494.0</b>	<b>515.7</b>	<b>557.1</b>	<b>594.5</b>
Non-Operating Revenues	143.5	135.0	144.4	156.7	129.2
Rolling Coverage	0.0	57.0	61.8	70.2	68.6
<b>Total Gross Revenues</b>	<b>589.2</b>	<b>686.0</b>	<b>721.9</b>	<b>784.0</b>	<b>792.3</b>
Less Operating Expenditures	-328.2	-332.5	-344.0	-352.9	-376.9
<b>Gross Revenues Available for Debt Service</b>	<b>261.0</b>	<b>353.5</b>	<b>377.9</b>	<b>431.1</b>	<b>415.4</b>
Debt Service	208.8	233.4	247.2	280.9	274.5
<b>Debt Service Coverage - Gross Revenues</b>	<b>1.25</b>	<b>1.51</b>	<b>1.53</b>	<b>1.53</b>	<b>1.51</b>
<b>Coverage Calculation - Current Gross Revenues</b>					
Gross Revenues Available for Debt Service	261.0	353.5	377.9	431.1	415.4
Less: Transfers and Rolling Coverage	-29.6	-85.0	-85.8	-90.2	-84.6
Current Gross Revenues available for Debt Service	231.4	268.5	292.1	340.9	330.8
Debt Service	208.8	233.4	247.2	280.9	274.5
<b>Coverage Ratio - Current Gross Revenues</b>	<b>1.11</b>	<b>1.15</b>	<b>1.18</b>	<b>1.21</b>	<b>1.21</b>
<b>Coverage Calculation - All Revenue Sources</b>					
Current Gross Revenues Available for Debt Service	231.4	268.5	292.1	340.9	330.8
Natural Gas Royalties, Land Sales, Interest Income	24.0	59.3	9.9	13.7	0.0
PFIC	0	22	21.2	20.8	0.0
All Current Revenues Available for Debt Service	255.4	349.8	323.2	375.4	330.8
Debt Service	208.8	233.4	247.2	280.9	274.5
<b>Coverage Ratio - All Current Revenues</b>	<b>1.22</b>	<b>1.50</b>	<b>1.31</b>	<b>1.34</b>	<b>1.21</b>
<b>Coverage Ratio - All Current Revenues plus Capital Transfers and Rolling Coverage</b>	<b>1.36</b>	<b>1.86</b>	<b>1.65</b>	<b>1.66</b>	<b>1.51</b>

## FY 2015 Financial Performance

As of March 31, 2015, DFW's financial performance is on par and, in some instances, exceeding budgeted expectations. DFW's Cost Center recognized \$52.8 million in net revenues as of March 31, 2015, which was 2.3% higher than budgeted expectations. This is primarily driven by lower than anticipated operating expenditures and debt service. Total airfield revenue, as of March 31,

2015, was \$72.5 million, which was 1.5% higher than budgeted. Total terminal revenues of \$110.6 million were also on par with budgeted expectations. Total combined net income in the terminal and airfield cost centers was \$12.6 million, which was nearly \$4.0 million higher than anticipated.

### **Passenger Airline Cost Per Enplanement (CPE)**

DFW has historically been one of the lowest cost large hub airports in the country. Over the past five years passenger airline payments on a per enplanement basis have averaged \$6.86. However, as TRIP debt service comes on line, airline costs are rising and will become significantly higher. DFW forecasts cost per enplanement will increase to \$12.44 in FY 2020. The forecasted CPE assumes 14.6% growth in enplanements over this period. The Report of the Airport Consultant forecasts a base case CPE at \$14.04 in FY 2020, using a reasonable compound annual growth of 0.9%, and a stress test forecasted CPE of \$18.34 in FY 2020, based on an onerous 17% reduction in enplanements over that period. As discussed in our Airport Methodology dated April 23, 2014, KBRA cautions regarding over-reliance on CPE. It is a small airline cost component that is dwarfed by fuel and labor costs. American Airlines' yield at DFW exceeds its system-wide average by over 20%, which minimizes the relative importance of CPE.

### **Stress Case**

In June 2014, KBRA undertook a stress case based on an extremely severe enplanement reduction to gauge the impact on CPE. KBRA's stress case is event-driven, and mirrors the effect on enplanements of the 9/11 terrorist attacks. Those attacks had a significant negative impact on the U.S. airline industry, and resulted in sharp reductions on both O&D and connecting traffic at DFW. Following 9/11 total enplanements at DFW fell by a combined 16.1%, which is the most significant level of decline recorded in DFW's history.

KBRA's stress case model covers the period from 2015 through 2020. It assumes a reduction in enplanements in 2015 and 2016 at similar levels as those that occurred at DFW after 9/11. PFC revenue declines reflect the enplanement reductions, as do non-airline revenues during the two-year period. In succeeding years, enplanements recover at an average annual rate of growth of 2.0%, as do non-airline revenues. No inflationary revenue growth is included during the forecast period. Operating expenses were assumed to increase at an average annual rate of 3.4%, with no operating savings realized from TRIP. The model does not assume the issuance of additional debt, other than what is now under consideration. CPE was calculated based on the minimum amounts that the airlines would be required to pay to meet debt service coverage requirements of the Master Bond Ordinance.

KBRA's stress model projected a CPE of \$11.83 in 2015 and \$16.36 in 2016. The CPE projected in the final year of the stress case is \$18.70, which is 33.2% higher than the Airport Consultant's baseline projection of \$14.04 that year, but in-line with the Consultant's stress case. KBRA believes that while CPE rises sharply, it would be manageable.

As noted in KBRA's Airport Methodology, CPE has analytic short-comings. It is KBRA's belief that the concept of fully loaded cost per enplanement holds promise for more effective airport-to-airport cost comparisons. As discussed in KBRA's Airport Methodology, fully loaded cost per enplanement includes factors that are currently omitted from present CPE calculations. These factors include airline costs incurred directly by airlines, and airborne, taxiing, and gate delays.

### **System Liquidity**

DFW has historically maintained substantial levels of unrestricted cash, which serves as an offset to its

high debt levels. DFW's goal is to maintain a minimum of 450 days cash on hand. As of September 30, 2014, unrestricted cash and investment were sufficient to cover 676 days of operating expenses. Despite the high debt levels, the ratio of debt to available resources is satisfactory, reflecting the favorable liquidity position.

## **Retirement Benefits**

The Airport has two defined-benefit pension plans, the Employee Plan and the Department of Public Safety (DPS) Plan, covering substantially all employees hired before January 1, 2010. As of January 1, 2010, the Employee Plan was closed to new employees. All regular employees hired after January 1, 2010 are enrolled in a defined contribution plan. As of January 1, 2014, the most recent actuarial valuation, the Employee Plan is 77.1% funded, and the DPS Plan was 72.4% funded. In addition to pension benefits, the Airport provides certain other post-retirement benefits for retired employees (OPEB). The Airport allows retired employees to participate in the Airport's health insurance plans, and provides a premium subsidy to those former employees. The benefits apply only to retired employees ages 65 and younger, and provide a maximum benefit per employee of \$400 per month.

Based on the foregoing, KBRA continues to view the Airport's finances as consistent with a AA- Rating Determinant rating.

## **Rating Determinant 6: Legal Mechanics and Security Provisions**

### **Bond Security**

The Airport's Joint Revenue Improvement Bonds are secured by a first lien on and pledge of Pledged Revenues and Pledged Funds. Pledged Revenues include as Gross Revenues the revenues received by the Airport from the rentals, fees and charges collected from the Signatory Airlines, and other airlines and from other non-airline sources, including transfers from Capital Funds and Special Revenues. Gross Revenues also include any funds transferred to the Airport's Operating Revenue and Expense Fund, including PFCs.

### **Rate Covenant**

Gross Revenues equal to (1) operation and maintenance expenses; plus (2) 1.25x debt service; plus (3) 1.00x coverage of Subordinate Lien obligations; (4) any additional amounts required by an additional supplemental ordinance; and Current Gross Revenues (excludes transfers) sufficient to pay amount in (1), (3), and (4) plus 1.00x debt service requirements.

### **Additional Bonds Test**

A Certificate by Authorized Officer that at least one of the following has been met: an Airport Consultant's written report projects Net Revenues for each of three consecutive fiscal years beginning with year debt service is due equals at least 125% of debt service requirements on all outstanding obligations, including the proposed bonds, and the rate covenant, based on current gross revenues is met; or a certificate executed by the Chief Financial Officer of the Board showing that: (1) for either the Board's most recent complete fiscal year; or (2) any 12 consecutive months out of the most recent 18 months, net revenues were at least 125% of maximum annual debt service for all outstanding obligations, including the proposed bonds, and the rate covenant, based on current gross revenues is met.

## Debt Service Reserve Fund Requirement

Average annual debt service. Ordinance permits monthly funding deposits into Reserve Fund over 60 months following bond delivery, and deficiencies are required to be restored over a 60 month period. Transfers to the Capital Improvements Fund are suspended until the deficiency is restored. The Reserve Fund is essentially fully cash funded, with the exception of one surety that is expected to be cancelled this year.

## Flow of Funds

All gross revenues are deposited into the Operating Revenue and Expense Fund, when received, then transferred monthly, on or before the last business day to the following Funds in the following order of priority: (1) Debt Service Fund; (2) administrative expenses due to a credit provider to the extent required by a supplemental ordinance; (3) Debt Service Reserve Fund; (4) Any other fund or account required by an Additional Supplemental Ordinance; (5) Subordinate Lien obligations; (6) operation and maintenance expenses; (7) operation and maintenance expenses for ensuing 90 day period; (8) Capital Improvements Fund. Gross Revenues remaining unexpended on the last day of each fiscal year, or at the discretion of an Authorized Officer, may be retained in the Operating Revenue and Expense Fund. Authorized Officer may make transfers at time to Capital Improvement Fund, if rate covenant has been met to date, and is likely to be met for balance of fiscal year. Surplus funds must remain in system.

Based on the foregoing, KBRA continues to view the airport's legal mechanics and security provisions consistent with a AA Rating Determinant rating.

KBRA affirms the long-term rating of AA- with a stable outlook on the Dallas/Fort Worth International Airport (DFW) Joint Revenue Improvement Bonds.

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**Related Publications:**

- [Joint Revenue Improvement Bonds, Series 2014C](#)
- [U.S. General Airport Revenue Bond Rating Methodology](#)

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