Cities of Dallas and Fort Worth, Texas

Dallas Fort Worth International Airport (DFW)

Assigned	Rating	Outlook
Dallas Fort Worth International Airport Joint Revenue Refunding Bonds Series 2020A	AA	Watch-Developing
Dallas Fort Worth International Airport Joint Revenue Refunding Bonds Series 2020B	AA	Watch-Developing
Affirmed	**Rating**	**Outlook**
Dallas Fort Worth International Airport Joint Revenue Improvement Bonds	AA	Watch-Developing

Methodology:

U.S. General Airport Revenue Bond Rating Methodology

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Rating Summary KBRA has assigned an AA rating with a watch-developing outlook to the Series 2020A and Series 2020B Bonds and affirmed the AA rating on outstanding Joint Revenue Improvement Bonds. The assigned ratings reflect continued strong management performance, a growing and diversifying service area, enduring locational advantages for hubbing resulting in favorable utilization, and a footprint that accommodates future capacity needs, and non-airline revenue generation. KBRA also believes management has responded in an effective manner to the unprecedented traffic and revenue reductions associated with the COVID-19 outbreak. In KBRA's opinion, prospective debt issuance over the next ten years will hike debt metrics, however, we believe the debt will prove manageable and the capital projects undertaken will serve to further solidify DFW's preeminent position. The Bonds are payable from and secured by an irrevocable first lien on and pledge of DFW gross revenues. Bond proceeds refinance portions of four outstanding series for present value saving, and $75 million of commercial paper.

DFW was the fourth busiest airport in the U.S. in terms of enplanements and third based upon departures pre-pandemic. While the domestic network remained largely intact, international activity was sharply curtailed, but significant restoration is scheduled to begin on July 1. Similarly, passenger activity declined drastically beginning in March and bottomed out in April at a 92% year-over-year (YOY) reduction before improving to a 79% YOY decrease in May. At this juncture, there remains uncertainty regarding the trajectory of the recovery.

DFW's vast size provides space for extensive facilities and substantial non-aeronautical related commercial development. DFW has seven runways capable of four simultaneous landings and 24-hour operation, without slot constraints or curfews. The Airport has five terminals, with 164 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 are further enhanced by a growing population and diversifying economic base. In the summer of 2019, DFW served 192 domestic and 67 international destinations. The domestic network is largely intact, while the majority of the international network is scheduled to resume in July 2020.

KBRA views the DFW regional economy as strong, based on relatively low, although recently elevated, unemployment rates, a substantial corporate presence that is supportive of travel, above average wealth levels, and a growing population. The airport's service area population in 2018 is estimated at 7.5 million (fourth largest U.S. metropolitan area), a 45% increase since 2000, reflecting the addition of more than two million people. Dallas Love Field (DAL) is the only other local airport that offers scheduled passenger airline service. However, DAL is capped at 20 gates, which constrains continued growth.

In the period following the Great Recession leading up to the outset of the pandemic, DFW passenger activity had rebounded, led by increased international enplanements and the introduction of service by low cost carriers. Growth had exceeded the U.S., and available seats had likewise increased. DFW is characterized by significant American Airlines ("American") concentration that approximates 85% of enplanements. KBRA's concerns are largely mitigated by the geographic and operational advantages of DFW as a hubbing airport. American has completed the construction a new corporate headquarters on DFW property in the City of Fort Worth in September 2019.

Airport officials have implemented a series of measures to provide financial relief to airlines and concessionaires by deferring and in some cases reducing required payments. CARES Act grant funds, which totals almost $300 million, will be used as an offset to debt service. The objective is to maintain airline rates at or slightly above current levels. Growth in expenditures has been moderate, while ample liquidity is maintained to offset high debt levels. The unrestricted cash and investments at FYE 2019 were sufficient to cover 631 days of operating expenses, and 630 days at March 31, 2020 as compared to 600 days in FY 2018. Debt service coverage on both a gross revenue and current gross revenue basis is satisfactory at 1.63x and 1.28x, respectively and is projected to exceed Master Bond Ordinance (MBO) requirements in FY 2020.

Debt service requirements peak at $503 million in FY 2021, and thereafter decline gradually. This structure accommodates future bond issuance, while keeping annual debt service requirements level. Capital spending through FY 2025 is estimated at $1.7 billion for enhancement of airside, landside and facilities infrastructure, and management expects to issue approximately $900 million of commercial paper through FY 2022. Not included in these amounts is funding for a sixth terminal (Terminal F) which is presently on-hold and has an estimated cost of $3.0 billion to $3.5 billion. The timing of bond issuance has not been established but will not occur before the conclusion of negotiations for a new Lease and Use Agreement to replace the one that expires September 30, 2021. The Airport's 10-15-year infrastructure program totals $2.5 billion. Debt metrics are high on a per enplanement basis and will rise. Airline cost per enplanement (CPE) was $12.95 in FY 2019 and was budgeted at $12.96 for FY 2020 before the onset of pandemic related enplaned passenger reductions. FY 2020 CPE is now forecast at $19.39 and moderates to $17.24 in FY 2021. KBRA concerns over this heightened metric are offset by the high yield achieved by American at DFW, and the fact that DFW is American's most profitable hub. DFW has remained American's busiest hub during the pandemic. DFW has used all PFC revenues as an offset to debt service requirements, which has moderated airline costs. Officials expect this practice to continue. PFCs paid approximately one-third of total debt service in recent years, although this contribution has been reduced since March due to the sharp drop in enplanements. Furthermore, Public Facilities Improvement Corporation (PFIC) revenues, related to development of hotel and rental car facilities, also offset a portion of debt service requirements. DFW shares non-airline net revenues with the airlines under the Use and Lease Agreement, when a revenue threshold is met, which reduces the landing fee.

The Watch-Developing placement reflects the drastic COVID-19 related reductions in passenger activity and airline and non-airline revenues recorded at DFW and other U.S. airports, and the need for additional data to become available which will allow for a comprehensive assessment of revenue and operational impacts and a more fulsome analysis of management actions. The credit was first placed on Watch-Developing status on March 26, 2020.

Key Credit Considerations

KBRA continues to monitor the direct and indirect impacts of the COVID-19 virus. Click **here** to access KBRA's ongoing research on the topic.

The rating assignment reflects the following key credit considerations:

Credit Positives

- 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.
- Significant non-airline activity diversifies revenues and provides source of discretionary capital funding.

Credit Challenges

- Unprecedented passenger traffic declines due to COVID-19 pandemic containment measures.
- 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.

Rating Sensitivities

• 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.	+
• Reduced importance of DFW as an American Airlines hub. • Unanticipated large capital costs that sharply increase debt levels. • Unsteady and weak recovery from passenger volume reductions and potential additional COVID-19 related impacts.	-

ESG Considerations

When relevant to credit, ESG factors are incorporated into the credit analysis in the same manner as all other credit-relevant factors. Among the ESG factors that have impact on this rating analysis are:

- Discussions in RD 1 consider several Governance Factors. DFW's management tenure and track record, forward-thinking policies and procedures like environmental sustainability, airport/airline relations and financial management are factors pertaining to governance.
- Discussions in RD 2 reflect Social Factors. KBRA has examined the following areas for this credit: trends in population, education, income, poverty levels, employment, unemployment, and the potential impact of the COVID-19 crisis.

More information on ESG Considerations for the Public Finance sector can be found **here**.

Key Airport Ratios FYE September 30			
	2019	**2018**	**2017**
Airport Activity			
Top Carrier by Market Shares (American)	86.3%	84.3%	84.9%
DFW Enplanements ('000)	36,600	34,500	33,100
YOY Change	*6.1%*	*4.2%*	*0.9%*
Summary Statement of Income ('000)			
Operating Revenues	$ 1,023,927	$929,437	$840,899
YOY Change	10.2%	10.5%	12.8%
Operating Expenses Before Depreciation	$ 571,917	$526,434	$499,478
YOY Change	8.6%	5.4%	2.1%
Net Income	$ 452,010	$403,003	$341,421
YOY Change	12.2%	18.0%	33.2%
Per Passenger Enplanement (PPE) Operating Ratios			
Non-Airline Revenue PPE	$ 14.41	$ 13.42	$ 13.52
Operating Expenditures PPE	$ 13.57	$ 15.26	$ 15.09
Debt and Leverage Ratios			
Debt Per Total Enplanement	$ 15.39	$ 16.33	$ 17.02
Debt Service Coverage - All Current Revenues	1.32x	1.26x	1.30x
Debt Service Coverage -All Current Revenues plus Capital Transfers and Rolling Coverage	1.57x	1.51x	1.56x
Population Growth 2010-2018 (CAGR)			
Dallas-Fort Worth-Arlington, TX (MSA)			2.0%
State of Texas			1.6%
United States			0.7%

Rating Determinants (RD)	
1. Management	Favorable
2. Economics/Demographics of the Service Area	AA+
3. Airport Utilization	AA-
4. Airport Debt/Capital Needs	A
5. Airport Finances	AA-
6. Legal Mechanics and Security Provisions	AA

RD 1: Management

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 2016-20 focuses on the customer experience, and contains guiding principles of business performance, employee engagement, operational excellence and community engagement. The management team has significant industry experience, and have been proactive and transparent in their response to COVID-19 impacts, thus far.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 seven Executive Vice Presidents, with responsibility for finances, operations, administration and diversity, and revenue management, and 23 Vice Presidents. The Airport currently has approximately 2,000 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. Poinsatte, 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.

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.

DFW's policies and procedures, include a focus on environmental sustainability and optimizing the use of natural resources by making airport operations as efficient as possible. The Airport is the largest carbon neutral airport in the world, and DFW is working toward reaching zero waste and is partnering with others to advance sustainability practices across the airport industry.

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, apart from 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. At present, there is no variable rate debt or derivatives outstanding. Subordinate lien obligations must not exceed 10% of outstanding debt.

DFW has devoted significant attention to enterprise risk management (ERM). It 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 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.

Bankruptcy Assessment

KBRA has consulted outside counsel on bankruptcy matters and the following represents our understanding of the material bankruptcy issues. To be a debtor under the municipal bankruptcy provisions of the U.S. Bankruptcy Code (Chapter 9), a local governmental entity must, among other things, qualify under the definition of "municipality" in the Bankruptcy Code, and must also be specifically authorized to file a bankruptcy petition by the State in which it is located. DFW is owned jointly by the City of Dallas and the City of Fort Worth (collectively, the "Cities"), which jointly have appointed a board to run the Airport, so it is not a legally separate, stand-alone municipal body. Accordingly, 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 Cities, however, is a "municipality" as defined under the Bankruptcy Code. As to specific authorization, Texas state law specifically authorizes any municipality in the state having the power to incur indebtedness to file a Chapter 9 petition through the action of the municipality's governing body. Thus, both the Cities have the authority under Texas state law to incur indebtedness and, hence, both are specifically authorized under Texas state law to file a Chapter 9 petition, subject of course to the further threshold requirements in Federal law (the Bankruptcy Code) for commencement of a Chapter 9 case.

A. Pledged Revenues as Special Revenues under the Bankruptcy Code

Because the Pledged Revenues are generated by DFW, KBRA understands that the Pledged Revenues will qualify as "special revenues" as that term is defined in the Bankruptcy Code. There are separate protections for revenue bonds that fall within those special revenues definitions. Assuming there is no shortfall of funds to make debt service, given that the Bonds are revenue bonds secured by a pledge of special revenues it is KBRA's understanding that if either or both of the Cities were to file for protection under Chapter 9, such filing(s) should have little to no effect on the payment of the Bonds during a bankruptcy case.

That stated, there are several additional issues that arise. If either or both of the Cities were to become a debtor in a proceeding under Chapter 9 of the Bankruptcy Code, the bankruptcy court could possibly decide that (i) post-bankruptcy revenue bond payments by DFW are merely optional and not mandatory under the special revenues provisions of the Bankruptcy Code and/or (ii) the automatic stay exception for special revenues in those provisions does not apply (including to possible enforcement action by the Trustee) or is limited to amounts then on hand with the Trustee or the Airport. If the bankruptcy court were to interpret the Bankruptcy Code in that (or a similar) fashion, the parties to the proceedings may be prohibited for an unpredictable amount of time from taking any action to collect any amount from DFW, or from enforcing any obligation of DFW, without the bankruptcy court's permission. However, it is KBRA's understanding that such a ruling would be contrary to historical experience in Chapter 9, and the clear intent of Congress regarding the continued payment of municipal revenue bonds post-bankruptcy, as expressed in the legislative history for the special revenues amendments to Chapter 9 and as interpreted in properly-reasoned existing (albeit limited) case precedent under Chapter 9.

Assuming the revenues pledged are in fact determined to be "special revenues," the Bankruptcy Code provides that, to keep revenue-generating municipal assets operating, special revenues can be applied to necessary operating expenses of the project or system ahead of all other obligations – including bondholder payments. This rule applies regardless of contrary provisions of the transaction documents, if such governing documents do not adequately provide for payment of necessary operating expenses. In determining necessary operating expenses for the Airport, in a Chapter 9 case the bankruptcy court thus may not be limited by the provisions governing the flow of funds or that define Operation and Maintenance expenses, in the Master Bond Ordinance or any other Ordinance or bond issuance document. In addition, while there is no case law from which to make a definitive judgment, it is possible that, in the context of confirming a plan of adjustment in a Chapter 9 case where the plan has not received the requisite consent of the holders of the Bonds, a bankruptcy court may confirm a plan that adjusts the timing of payments on the Bonds or the interest rate or other terms of the Bonds, provided that (i) the bondholders retain their lien on the special revenues and (ii) the payment stream has a present value equal to the value of the special revenues subject to the lien.

B. Possible effect of an airline bankruptcy

Given that a material portion of the Pledged Revenues are derived from rentals, fees and charges imposed upon the Signatory Airlines pursuant to Use Agreements, the bankruptcy of a Signatory Airline, particularly a dominant one, could have an effect on the ability of the Airport to make debt service. In the event a bankruptcy case is filed with respect to an airline operating at the Airport, the lease or permit governing such airline's use of Airport space would constitute an executory contract or unexpired lease pursuant to the Bankruptcy Code. In Chapter 11 cases, the debtor in possession (or a trustee, if one is appointed) has 120 days from the date of filing of the bankruptcy petition to decide whether to keep ("assume") or jettison ("reject") a nonresidential lease, such as a Use Agreement. The 120-day period may be extended by court order for an additional 90 days for cause. Any additional extensions are prohibited unless the debtor airline (or a trustee acting on behalf of the airline) obtains the Airport's consent and a court order.

Under the Bankruptcy Code, were a bankruptcy trustee or the airline as debtor in possess to elect to reject an executory contract or unexpired lease of non-residential real property, the rejection is deemed to be a default immediately before the date of the filing of the bankruptcy petition. Under the Bankruptcy Code, upon rejection of an unexpired lease the airline debtor must surrender the relevant non-residential real property to the lessor. As a result, the rejection of an unexpired lease by an airline debtor may result in the Airport unexpectedly regaining control of the applicable facilities (including gates and boarding areas). The Airport could then lease or permit such facilities to other airlines. The Airport's ability to lease such facilities to other airlines, of course, may depend on the state of the airline industry in general, on the nature and extent of the increased capacity at the Airport resulting from the departure of the debtor airline, and on the need for such facilities.

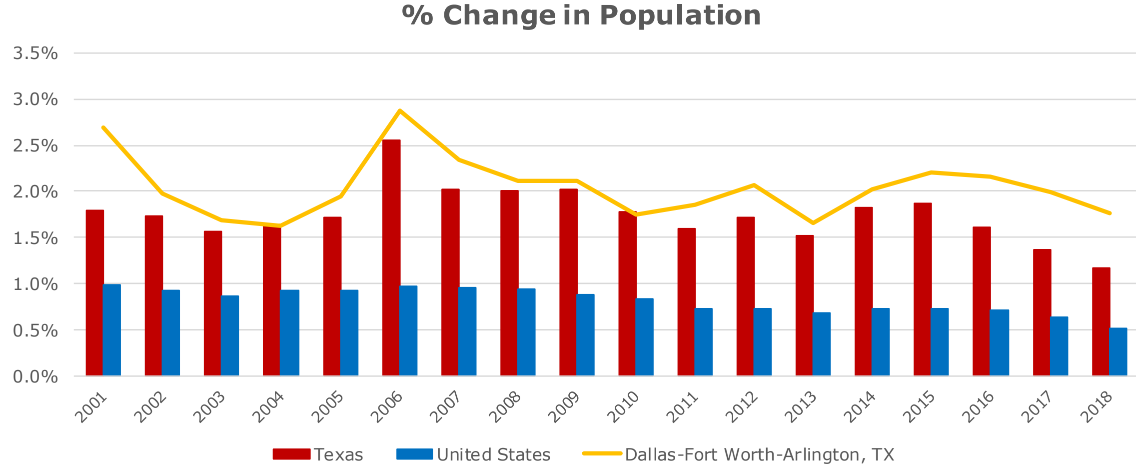
Under the Bankruptcy Code, any rejection of a lease or other agreement could also result in a claim by the Airport for rejection damages against the debtor airline. Such claim would be in addition to all pre-bankruptcy amounts owed by the debtor airline. With respect to leases, a rejection damages claim for the future rent due under a lease is capped under the Bankruptcy Code at the greater of one year, or 15%, not to exceed three years, of the remaining term of the lease. Rejection damages claims are generally treated as a general unsecured claim; however, the amount ultimately received in the event of a rejection of a Use Agreement or other airline agreement could be considerably less than the maximum amounts allowed under the Bankruptcy Code. Nonetheless, the Airport may have rights against any faithful performance bond or letter of credit required of an airline to secure its obligations under the Use Agreements and/or the right to set off against credits owed to the airline under other relevant agreements.

Alternatively, under the Bankruptcy Code an airline debtor can "assume" its executory contracts and unexpired leases. The Bankruptcy Code further permits an airline debtor to assume and assign its executory contracts and leases to a third party, subject to certain conditions, even if the relevant agreement prohibits assignment. If the bankruptcy trustee or the airline assumes its executory contracts or unexpired leases as part of reorganization, the airline debtor must "cure" or provide adequate assurance that the airline debtor (or its assignee) will promptly cure its prepetition defaults, including arrearages in amounts owed. Even if all such amounts owed are eventually paid, the Airport could experience delays of many months or more in collecting them.

RD 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 narrower and limited scale. The MSA has experienced historically strong population growth in comparison to the rest of Texas and the nation. That trend continued in 2018, when the MSA grew to approximately 7.5 million, which represented 26.1% of the State's population. The MSA is projected to grow another 33% and to surpass Chicago by 2031. 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 and growing 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.

FIGURE 1

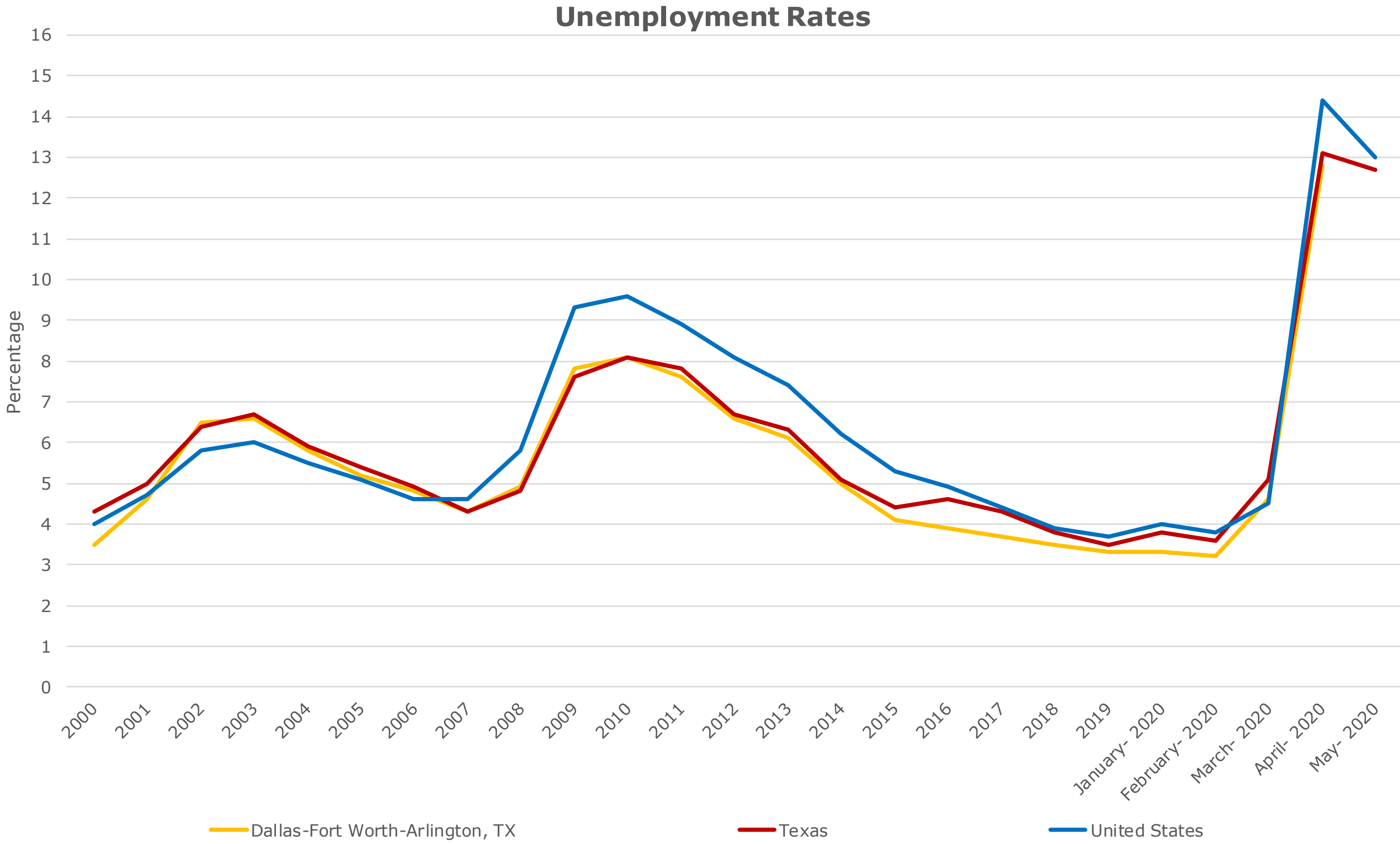


	2000	2010	2018	% Δ 2010 to 2018
Dallas-Fort Worth-Arlington, TX	5,187,122	6,392,259	7,470,158	16.9%
Texas	20,944,499	25,241,971	28,628,666	13.4%
United States	282,162,411	309,321,666	326,687,501	5.6%

Source: U.S. Bureau of Economic Analysis

Headwinds tied to the COVID-19 crisis are likely to weigh significantly on the MSA and State in the near to medium term. The MSA's April 2020 unemployment rate spiked to 12.8% from 4.6% in March while the State's spiked to 13.1% from 5.1%, reflecting the implementation of social distancing measures and stay-at-home orders in March and April. The State's May 2020 unemployment rate declined by 0.4% to 12.7% reflecting the expiration of the State's stay-at-home order on April 30th. The MSA's May unemployment rate is currently unavailable.

FIGURE 2



	Dallas-Fort Worth-	Texas	United States
April 2020	12.8	13.1	14.4
March 2020	4.6	5.1	4.5
Great Recession Peak	8.1	8.1	9.6
Point Δ Since Great Recession Peak	-3.5	-3.0	4.8

Source: U.S Bureau of Labor Statistics

FIGURE 3

Total Employment (Not Seasonally Adjusted) (In Thousands)						
	Dallas-Fort Worth-Arlington, TX	**% Δ**	**Texas**	**% Δ**	**United States**	**% Δ**
2000	2,772		9,929		136,891	
2001	2,783	0.4%	10,011	0.8%	136,933	0.0%
2002	2,758	-0.9%	10,066	0.5%	136,485	-0.3%
2003	2,759	0.0%	10,185	1.2%	137,736	0.9%
2004	2,807	1.7%	10,338	1.5%	139,252	1.1%
2005	2,867	2.1%	10,523	1.8%	141,730	1.8%
2006	2,937	2.4%	10,774	2.4%	144,427	1.9%
2007	2,975	1.3%	10,941	1.5%	146,047	1.1%
2008	2,993	0.6%	11,104	1.5%	145,362	-0.5%
2009	**2,939**	-1.8%	**11,009**	-0.9%	139,877	-3.8%
2010	3,034	3.3%	11,245	2.1%	**139,064**	-0.6%
2011	3,119	2.8%	11,535	2.6%	139,869	0.6%
2012	3,195	2.4%	11,819	2.5%	142,469	1.9%
2013	3,262	2.1%	12,053	2.0%	143,929	1.0%
2014	3,361	3.0%	12,374	2.7%	146,305	1.7%
2015	3,438	2.3%	12,506	1.1%	148,834	1.7%
2016	3,557	3.5%	12,720	1.7%	151,436	1.7%
2017	3,666	3.1%	12,990	2.1%	153,337	1.3%
2018	3,752	2.3%	13,285	2.3%	155,761	1.6%
2019	3,842	2.4%	13,552	2.0%	157,538	1.1%
Δ 2010 to 2019		**26.6%**		**20.5%**		**13.3%**
Δ Since Trough		**30.7%**		**23.1%**		**13.3%**
April- 2020	3,216	-16.3%	11,244	-17.0%	133,326	-15.4%

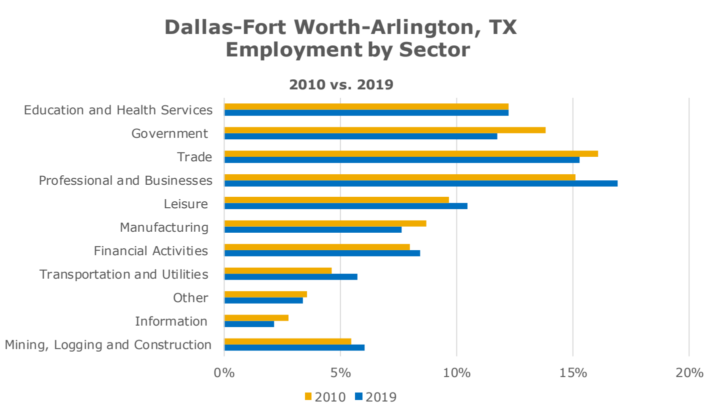
Source: U.S Bureau of Labor Statistics

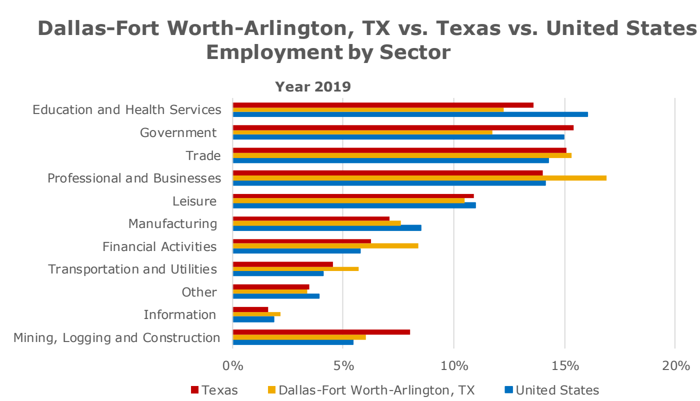
` **Bold = trough during the Great Recession (2008-2012)**

The State of Texas is home to the 3rd highest number of Fortune 500 companies behind New York and California, of which 23 are in the DFW region. The companies include American Airlines, AT&T, and Exxon. 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. Since 2010, 126 headquarters relocated to DFW, 37 of which came from California. The region's non-agricultural employment base is a key driver in the high levels of O&D enplanement activity at DFW.

The DFW MSA has a strong and diverse economy in which no single sector accounts for more than 25% of employment. Professional and business services, which generate significant air travel, represents the largest sectors in the MSA (16.9%) and has a larger employment share for the MSA than for the U.S. Professional and business services accounts for 16.2% of the approximately 355,000 non-farm job losses that occurred in the MSA between March 2020 to April 2020. Similar to the nation as a whole, employment losses in the MSA have been focused in leisure, hospitality and food services, with these sectors accounting for approximately 41.4% of continuing job losses as of April 2020 despite only accounting for 10.5% of employment in 2019.

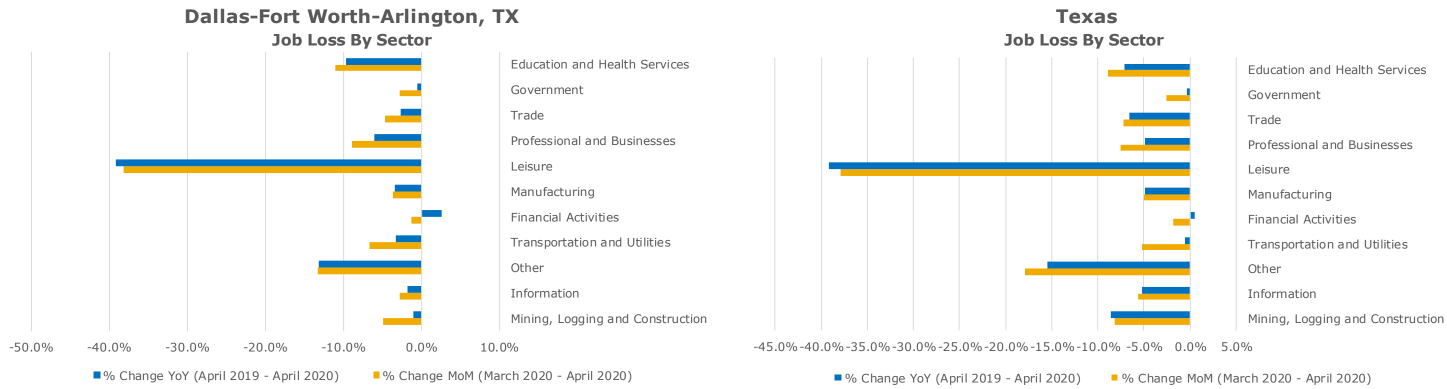
FIGURE 4





Source: U.S. Bureau of Economic Analysis

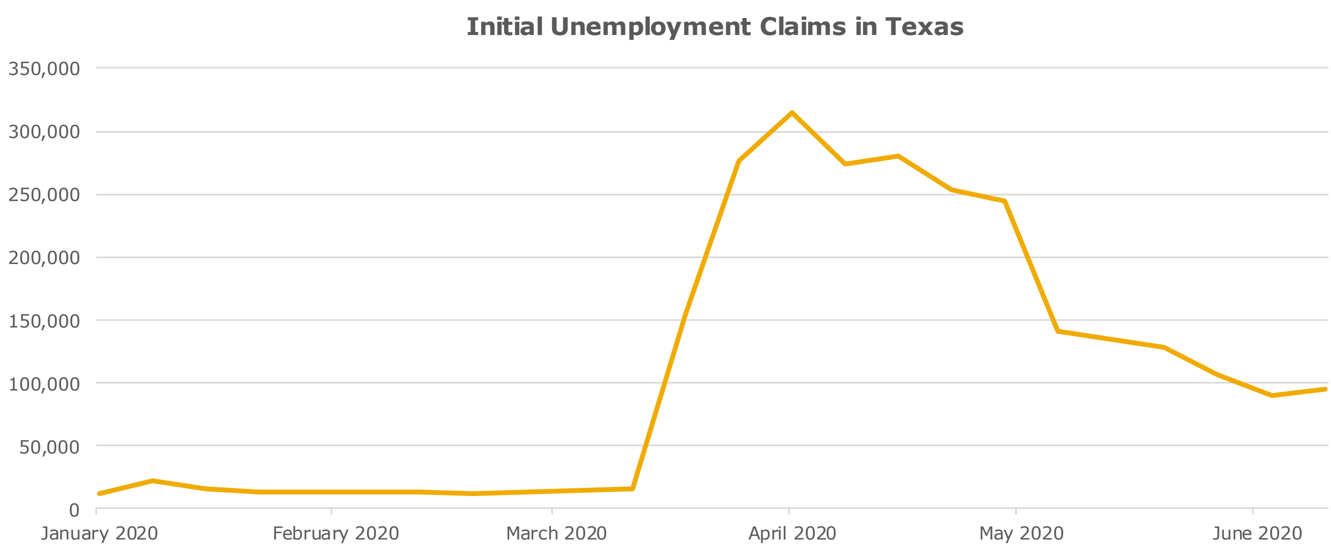
FIGURE 5



Source: U.S. Bureau of Economic Analysis

Initial weekly unemployment claims in the State of Texas ranged from 12,000 to 22,000 in 2020 through March 14th but have subsequently increased to more than 94,700 as of the week ended June 13th with the largest increase being more than 315,000 as of the week ended April 4th. While the duration and severity of COVID-related disruption remains to be seen, a pronounced recessionary environment appears increasingly likely in the near term both in Texas and nationally.

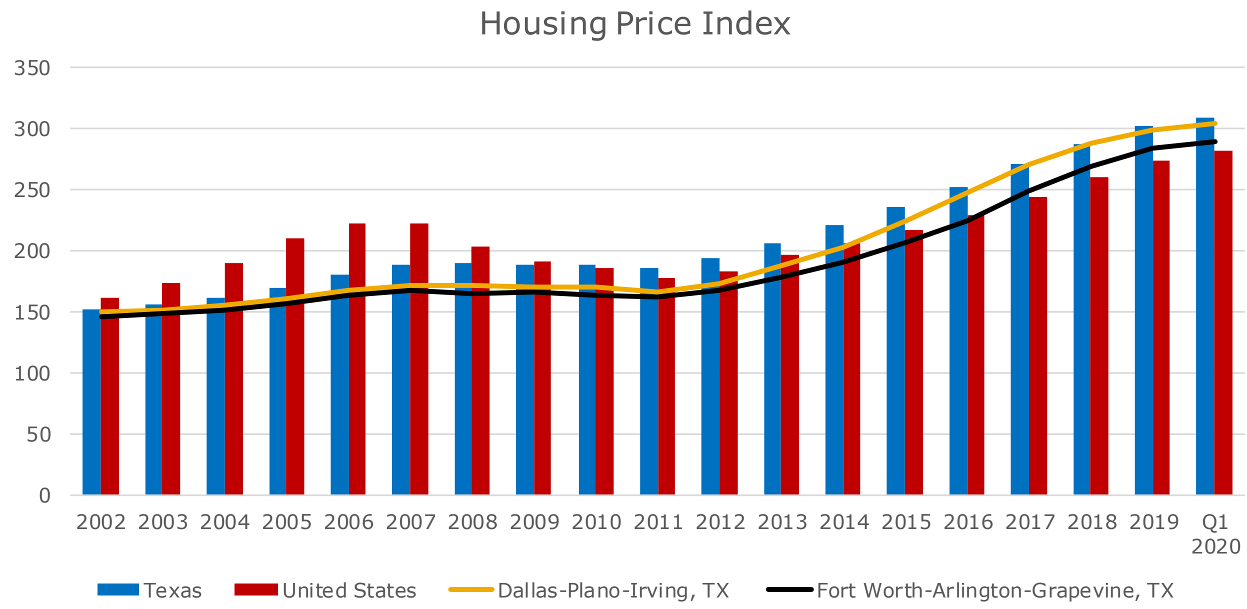
FIGURE 6



Source: Federal Reserve Economic Data (FRED)

The metropolitan area shows a much greater degree of recovery than the nation in the aftermath of the Great Recession. As of the 1st quarter of 2020, area-wide home prices had recovered to an average of 171.6% of their pre-recession peak while the national recovery over the same period was 123.2%. 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 pre-recession residential housing boom. The relatively strong rebound in housing prices contributes to a sense of wealth that may result in increased expenditures for air travel.

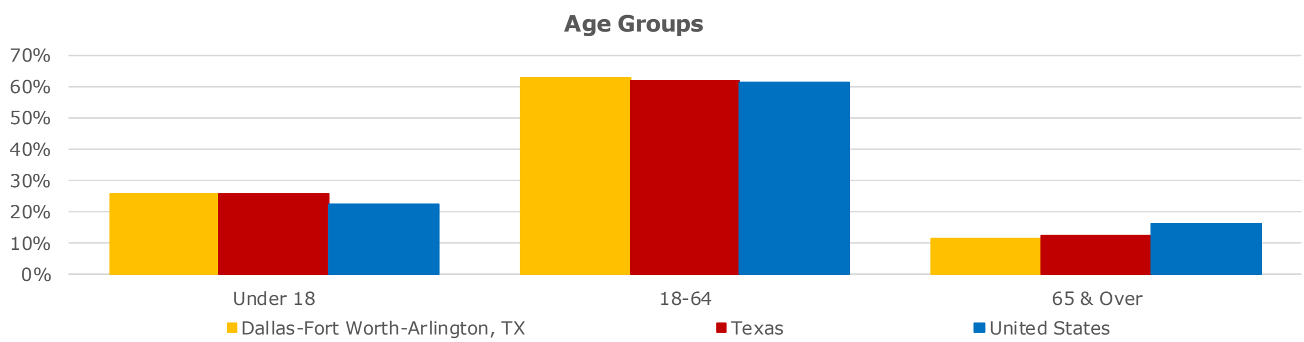
FIGURE 7



Source: Federal Housing Finance Agency

Educational attainment in the MSA exceeds the state and U.S. average, which together with a comparatively low poverty level and higher than average concentration of working age individuals has historically been supportive of strong demand for air travel.

FIGURE 8

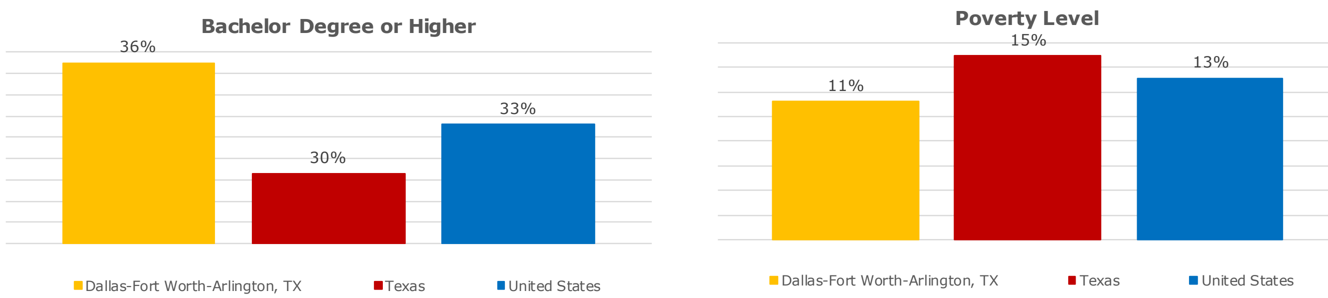


As of 2018

	Under 18	18-64	65 & Over	Age Dependency Ratio
Dallas-Fort Worth-Arlington, TX	26%	63%	11%	59.3%
Texas	26%	62%	13%	62.1%
United States	22%	62%	16%	62.5%

Source: U.S Census

FIGURE 9

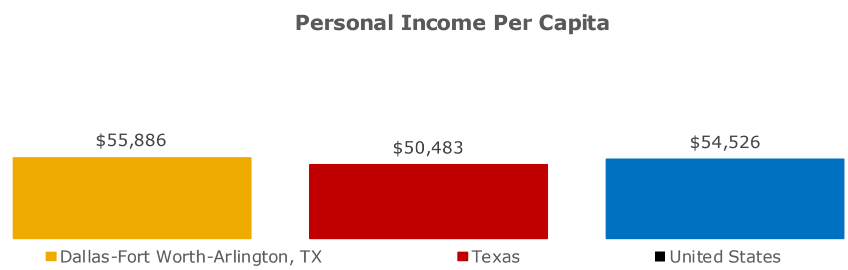


	As of 2018 Point Δ 2010 to 2018	As of 2018 Point Δ 2010 to 2018
Dallas-Fort Worth-Arlington, TX	4.4	-3.4
Texas	4.4	-3.0
United States	4.4	-2.2

Source: U.S Census
Bachelor degree or higher defined as "% of population over 25 with Bachelor's degree or higher".
Poverty level defined as "portion of population living below the poverty line".

The region's per capita personal income has historically exceeded the State and U.S. averages. Since 2010 the MSA's per capita income has grown at compound annual rate of 3.95% which is a greater rate than both the State (at 3.52%) and nation (at 3.77%).

FIGURE 10



As of 2018

	2010	2018	% Δ 2010 to 2018	Comparison
Dallas-Fort Worth-Arlington, TX	$40,994	$55,886	36.3%	-
Texas	$38,276	$50,483	31.9%	110.7% of State
United States	$40,547	$54,526	34.5%	102.5% of U.S.

Source: U.S. Bureau of Economic Analysis

Geographically Competing Facilities

There are no airports of similar size nearby. Austin and Oklahoma City, which are medium and small hubs, respectively, are located 222 and 195 miles away. Houston, a large hub, is 250 miles away. Dallas Love Field (DAL) is the only other airport in the MSA that provides scheduled passenger airline service. Southwest Airlines leases 18 of the 20 gates (and shares a gate with Delta), while Alaska Airlines leases the remaining two. Love Field had operated under restrictions known as the Wright Amendment since 1979, which limited airplane size and destination to nearby states. In 2006, an agreement was reached to repeal the Wright Amendment, effective in October 2014. While resulting 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 more than 40 new flight destinations from DAL since October 2014 but have reduced flights across its network by 20% between April 2020 and June 2020 as a result of cancellations caused by COVID-19. In calendar year 2018, enplanement activity increased by an estimated 5.5% at DAL while DFW experienced an increase of 3.2%. KBRA will continue to monitor trends in passenger activity at

DAL; however, KBRA believes that DFW's strength as a connecting hub coupled with its international activity and significant capacity are substantial strengths.

FIGURE 11

Airports in Texas and Oklahoma						
City	Airport Name	Hub	CY 18 Enplanements	CY 17 Enplanements	% Change	Miles to DFW via Car
Fort Worth	**Dallas-Fort Worth International**	**L**	**32,821,799**	**31,816,933**	**3.2%**	**NA**
Houston	George Bush Intercontinental/Houston	L	21,157,398	19,603,731	7.9%	250
Dallas	Dallas Love Field	M	8,011,221	7,593,361	5.5%	16
Austin	Austin-Bergstrom International	M	7,714,479	6,813,171	13.2%	222
Houston	William P Hobby	M	7,053,886	6,538,976	7.9%	270
San Antonio	San Antonio International	M	4,844,427	4,382,127	10.6%	285
Oklahoma City	Will Rogers World	S	2,094,708	1,894,289	10.6%	195
El Paso	El Paso International	S	1,605,486	1,450,115	10.7%	623
Midland	Midland International Air And Space Port	S	618,794	516,983	19.7%	336
Lubbock	Lubbock Preston Smith International	S	484,010	460,236	5.2%	309
McAllen	McAllen Miller International	N	347,440	336,431	3.3%	525

Source: U.S. Department of Transportation

RD 3: Airport Utilization

DFW enjoys many strategic advantages, which in KBRA's opinion, are likely to sustain its prominence. It is the highest capacity airport in the world, with the ability to grow. Its infrastructure includes five terminals, 164 gates, and seven runways. It is the only airport in the world capable of four simultaneous landings in good visibility, and three simultaneous landings in virtually all-weather conditions. Twenty four-hour operation is permitted, and there are no slot constraints nor 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 Terminal A with downtown Dallas, and Terminal B is connected with Fort Worth's Central Business District via Trinity Metro's TEXRail.

DFW's facility and capacity advantages, and its geographical location contribute to its status as a fortress hub. Likewise, the sizable and growing regional population and employment base support substantial origination and destination traffic. DFW serves as one of the top O&D markets in the United States, and excluding connecting passengers, would still rank in the top 20 of U.S. airports in terms of enplaned passengers. In addition, DFW maintains significant cargo activity serving 14 of top 20 major cargo hubs. Due to its strategic location, DFW has recorded strong compound annual growth of 7.3% since FY 2015 to 972,000 U.S. tons in FY 2019. Cargo activity has decreased by 17.1% in April 2020 comparing to April 2019.

Enplanement Trends

DFW currently ranks fourth in the U.S. and tenth in the world in enplanements. O&D enplanement trends have been favorable apart from declines in the aftermath of the September 11th terrorist attacks and the Great Recession; with the onset of COVID-19 pandemic, DFW is experiencing declines in enplanements like rest of the nation based on data since March 2020. For the six-month enplanement data ended on March 31, 2020, DFW experienced a decline of 2.9% in O&D but an improvement of 1% in connecting enplanement when comparing against six-month data ended on March 31, 2019.

Overall connecting and O&D activities have been stable accounting for 59% and 41% of total enplaned passengers in 2019.

FIGURE 12

Historical Origination and Destination (O&D) and Connecting Enplaned Passengers										
	Enplaned Passengers ('000)				Annual Percent Change				Percent O&D	Percent Connecting
Fiscal Year	O&D	Connecting	Total		O&D	Connecting	Total			
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%
2015	13,800	18,700	32,500		2.2%	4.5%	3.5%		42.5%	57.5%
2016	13,600	19,200	32,800		-1.4%	2.7%	0.9%		41.5%	58.5%
2017	13,700	19,400	33,100		0.7%	1.0%	0.9%		41.4%	58.6%
2018	14,500	20,000	34,500		5.8%	3.1%	4.2%		42.0%	58.0%
2019	15,100	21,500	36,600		4.1%	7.5%	6.1%		41.3%	58.7%

Source: Dallas/Fort Worth International Airport

According to management, daily passenger reached the lowest count of 14,617 on April 16 from 193,772 on March 1. However, the figure had grown by 316% to 60,752 as of June 7. Per the FAA, DFW had the most aircraft operations in the nation for the month of May. . Management estimates total aircraft operations for FY 2020 to be between 545,000 and 560,000, a 22.1% to 19.9% reduction from FY 2019 of 699,682.

Strong International Network

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. In addition to its 192 domestic destinations, the Airport offers 67 nonstop international destinations. Total international enplanements have increased 95.0% since FY 2005, and approximately 83% since FY 2010. As of the first six months ended on March 2020, DFW had 0.9 million international enplanements, which represented a 12.5% increase over the first six months of FY 2019. While international services have been limited due to COVID-19 pandemic, management expects majority of services to slowly resume starting in July.

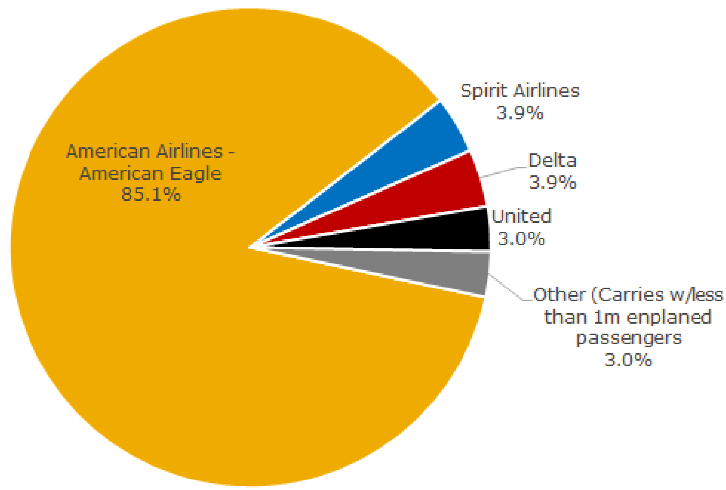
American Airlines Concentration

American represents significant concentration at DFW. Together with the merged U.S. Airways and Envoy Air (formerly American Eagle), the airline accounts for approximately 85.1% of the Airport's market share, as of FYE 2019. However, KBRA continues to believe that the level of concentration is not a critical risk. 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 the largest airline in the world and has been adding services at DFW. DFW has served for many years as the busiest connecting hub in American's route system and is currently the largest hub for American. Additionally, DFW has had less service and destination reductions on a percentage basis than any other large hub except Seattle as a result of COVID-19 pandemic. This continues to strengthen DFW's position within American's overall network strategy. While American and the airport are pausing on the development of a new terminal (Terminal F) due to the impacts of COVID-19, KBRA believes American continues to demonstrate its commitment to the region with its newly opened 300-acre Fort Worth corporate headquarters campus on DFW Airport property, which will also be home to a training center and a 600-room hotel.

DFW plays a unique role in American's route system due to its central location and high profitability where the airline has been growing its peak daily departures prior to COVID-19 pandemic. 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 above its system-wide averages.

Figure 13

Share of Total Enplaned Passengers by Airlines FY 2019



Source: Dallas/Fort Worth International Airport

RD 4: Airport Debt/Capital Needs

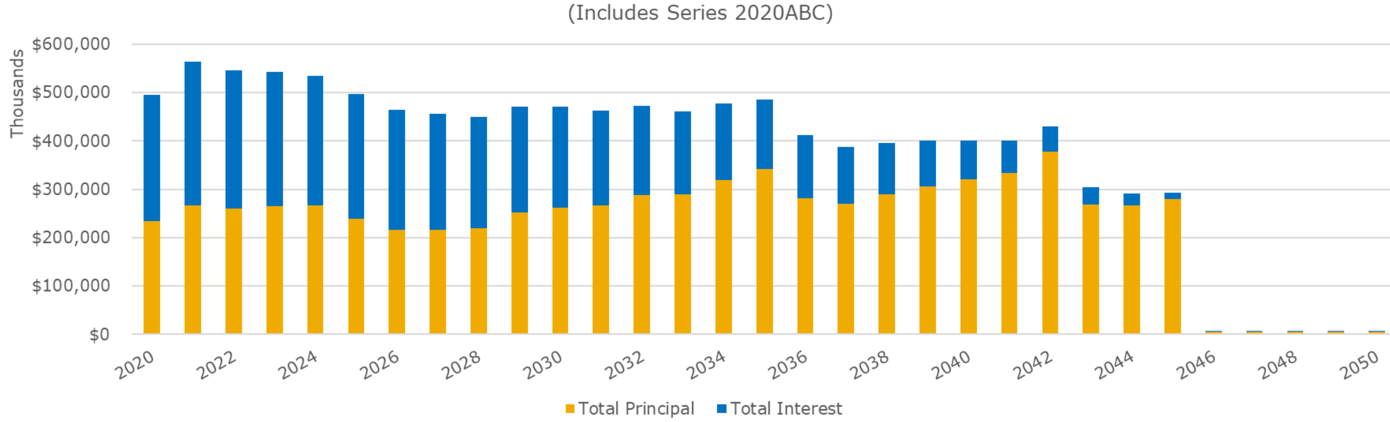
Debt Issuance Approach

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 is amortized over not more than 30 years, with generally declining debt service requirements. KBRA views these features as positive credit characteristics. There are no swaps currently in effect, nor are there any special revenue or special facility debt outstanding. The debt service reserve is fully cash funded.

Estimated net present value savings on the issuance of Series 2020A&B is approximately 19% (or $191.4 million) based on current market conditions. Principal amortization is substantially the same as the refunded bonds. Post issuance[1], the Airport will have approximately $7.2 billion in aggregate principal amount of bonds outstanding. Debt levels and annual debt service requirements are high on a per enplanement/per O&D enplanement basis, although the figures have improved compared to 2018. Nonetheless, these ratios may rise under DFW's capital program, which could significantly impact the rating determinant rating assigned to Airport Debt/Capital Needs.

Figure 14

Outstanding Obligations Proforma Debt Service Requirements (Includes Series 2020ABC)



Planned DFW Capital Program

Despite the completion of Terminal Renovation and Improvement Program[2] (TRIP) in 2018, DFW has identified significant remaining long-term needs that revolve around gate capacity. The key projects included 1) Development of a sixth terminal (Terminal F) with American Airlines, 2) Reconstruction of gates 33-39 in Terminal C, 3) Terminal F

[1] Including Series 2020A&B as well as Series 2020C to be issued later in the year
[2] A total renovation and update of three (of four) older DFW terminal

Phase 1 (construction of four swing gates), 4) Replacement and renewals for baggage handling system, 5) Rehabilitation of Runway 18R-36L, 6) Construction of a northeast perimeter taxiway, and 7) Rehabilitation of Taxiway Mike South. In addition, the Airport plans to invest approximately $3.0 billion to improve and maintain its runways, bridges, roads and utilities through 2030. Given the impacts from COVID-19, the development of Terminal F is currently on hold. Other projects are currently in progress with projected completion timeline between August 2020 and summer 2022.

Management expects to address the most critical of these needs with its proposed 10-year capital program, which ranges upward to $6.5 billion, of which approximately $5.0 billion is bond financed. The remainder of the Program is expected to be funded with cash and FAA grants. At this juncture, plans are preliminary, with negotiations with the airlines underway. The Program is likely to be adopted in conjunction with airline approval of a new Lease and Use Agreement to replace the Agreement expiring on September 30, 2021.

DFW currently has $50 million of Subordinate Lien Commercial Paper (CP) outstanding as of May 31, 2020 where the Airport currently plans to issue an additional $200 million of in June 2020 subject to market conditions. The CP program was authorized up to $750 million by the Cities of Dallas and Fort Worth in August 2019 to allow for a lower coverage level (1.1x). DFW may issue additional debt or CP to reimburse itself on capital projects. The Board of Directors approved a reimbursement resolution of up to $250 million on April 9, 2020 for cash spent on capital projects from February 8, 2020 through FYE 2020. The timeframe of this reimbursement resolution can be extended.

KBRA recognizes debt issuance of the magnitude contemplated has the potential to further increase already high debt metrics. KBRA concerns are tempered by several factors, including a structure that features generally declining annual debt service requirements, which allows DFW to structure new debt while keeping overall debt service level. DFW has no plans to extend new debt issues beyond FY 2050. In addition, approximately $2.7 billion of outstanding debt will be retired by 2030. Besides the accommodating debt structure, DFW's airside/landside capacity affords ample capacity for long-term expansion needs, and while the details of the capital program remain to be finalized, debt issuance represents a moderate overall component. KBRA believes that DFW's capital planning process is systematic and comprehensive and clearly lays out the need for proposed capital projects.

RD 5: Airport Finances

DFW's financial operations are governed in large part by the Master Bond Ordinance (MBO), which was adopted by Dallas and Fort Worth in September 2010 and took effect in July 2013. The MBO establishes the flow of funds, the rate covenant, and the additional bonds test among its provisions. Operations are also a function of the Airport Lease and Use Agreement, in place through FY 2021, 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 net revenues are deposited into 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 2020, amounts deposited into the DFW Capital Account were budgeted with a lower threshold of $45.6 million and an upper threshold of $70.0 million.

Any amount in excess of $70.0 million was deposited such that 75% of the excess was 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 were less than $45.6 million, then an incremental landing fee would have been added in the following fiscal year so that the shortfall was recovered. 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 approval is needed. FY 2019 net revenues in the DFW Cost Center were $152.4 million, or $82.4 million higher than the upper threshold. This allowed DFW to share $61.8 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 was 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 MBO 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. Coverage has ranged between 1.51x and 1.68x for each of the past five years.

While debt service coverage is substantial, the Use Agreement limits the airport's ability to further improve the coverage ratio because management must use 75% of DFW Cost Center net revenues in excess of the Upper Threshold to reduce landing fees. With the advent of the current agreement, DFW 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 1.26x to 1.37x.

Dallas/Fort Worth International Airport
Debt Service Coverage
($ Millions)

Coverage Calculation - Gross Revenues	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Operating Revenues						
Airfield Cost Center	$ 184.1	$ 196.9	$ 166.2	$ 151.5	$ 149.4	$ 146.2
Terminal Cost Center	$ 402.8	$ 347.5	$ 306.4	$ 272.1	$ 225.4	$ 180.0
DFW Cost Center	$ 332.9	$ 322.4	$ 306.3	$ 289.3	$ 273.6	$ 268.3
Total Operating Revenues	**$ 919.8**	**$ 866.8**	**$ 778.9**	**$ 712.9**	**$ 648.4**	**$ 594.5**
Non-Operating Revenues	$ 165.1	$ 148.1	$ 158.4	$ 148.7	$ 141.8	$ 129.2
Rolling Coverage	$ 125.0	$ 116.8	$ 103.8	$ 90.0	$ 78.5	$ 68.6
Total Gross Revenues	**$ 1,209.9**	**$1,131.7**	**$ 1,041.1**	**$ 951.6**	**$ 868.7**	**$ 792.3**
Less Operating Expenditures	$ (499.6)	$ (464.1)	$ (438.2)	$ (416.7)	$ (392.1)	$ (376.9)
Gross Revenues Available for Debt Service [1]	**$ 710.3**	**$ 667.6**	**$ 602.9**	**$ 534.9**	**$ 476.6**	**$ 415.4**
Debt Service	$ 499.9	$ 467.3	$ 415.1	$ 359.9	$ 314.0	$ 274.5
Debt Service Coverage - Gross Revenues [1]	**1.42x**	**1.42x**	**1.45x**	**1.49x**	**1.52x**	**1.51x**
Coverage Calculation - Current Gross Revenues						
Gross Revenues Available for Debt Service	$ 710.3	$ 667.6	$ 602.9	$ 534.9	$ 476.6	$ 415.4
Less: Transfers and Rolling Coverage	$ (125.0)	$ (116.8)	$ (107.8)	$ (98.0)	$ (90.5)	$ (84.6)
Current Gross Revenues available for Debt Service	$ 585.3	$ 550.8	$ 495.1	$ 436.9	$ 386.1	$ 330.8
Debt Service	$ 499.9	$ 467.3	$ 415.1	$ 359.9	$ 314.0	$ 274.5
Coverage Ratio - Current Gross Revenues [1]	**1.17x**	**1.17x**	**1.19x**	**1.21x**	**1.23x**	**1.21x**
Coverage Calculation - All Revenue Sources						
Current Gross Revenues Available for Debt Service	$ 585.3	$ 550.8	$ 495.1	$ 437.0	$ 386.1	$ 330.8
Natural Gas Royalties, Land Sales, Interest Income	30.4	$ 11.4	$ 17.9	$ 14.6	$ 19.0	$ 21.6
PFIC	$ 73.3	$ 26.2	$ 25.8	$ 23.8	$ 15.5	$ 24.7
All Current Revenues Available for Debt Service	$ 689.0	$ 588.4	$ 538.8	$ 475.4	$ 420.6	$ 377.1
Debt Service	$ 499.9	$ 467.3	$ 415.1	$ 359.9	$ 314.0	$ 274.5
Coverage Ratio - All Current Revenues [2]	**1.38x**	**1.26x**	**1.30x**	**1.32x**	**1.34x**	**1.37x**
Coverage Ratio - All Current Revenues plus Capital Transfers and Rolling Coverage [2]	**1.63x**	**1.51x**	**1.56x**	**1.59x**	**1.63x**	**1.68x**

Source: Dallas Fort Worth International Airport

1 Gross Revenues for coverage are net of operating expenditures

2 Incorporates both pledged and non-pledged revenues for debt service

FY 2020 Financial Performance

As of March 31, 2020, DFW's financial performance, reflecting in-part the outbreak of the pandemic in March, was short of budgeted expectations. The DFW Cost Center recognized $66.8 million in net revenues, which was .10.7% lower than budget. This was primarily driven by a combination of lower than budgeted parking revenues, concessions, and PFCs, and higher than budgeted Skylink operating expenditures. Total airfield revenue was $80.5 million, which was 8.8% lower than budgeted, mainly due to a reduced transfer from the DFW Cost Center, reflecting its weaker than budgeted performance. Total terminal revenues of $202.5 million was 1.2% below budget. Combined net loss in the terminal and airfield cost centers was $7.2 million, compared to a budgeted net income level of $1.8 million.

COVID-19 Pandemic Financial Impact

DFW, as have all U.S. airports, has recorded significant declines in operating revenues associated with reduced passenger volumes and flights. Airport officials currently estimate a reduction in airline and passenger revenues of between $231 million and $248 million in FY 2020 as compared to budget, excluding the Public Facility Improvement Corporation (PFIC). In response, $78 million in cost reductions have been identified, including $25 million in debt service savings from the current offering and a subsequent taxable refinancing. DFW is eligible to receive $299.2 million in CARES Act funds and has filed an application for $250 million of the award, with an application for the balance anticipated in December. Officials currently estimate that between $154 million and $170 million of CARES Act funds will be used during Fiscal Year 2020, leaving an estimated $129 million to $145 million available for FY 2021. CARES Act funds offset expected net revenue declines in FY 2020 and FY 2021, and plans are to use the funds as a reimbursement for debt service costs incurred in both fiscal years. Non mission critical capital projects have been suspended which is estimated to result in a $100 million savings for the balance of FY 2020.

DFW officials have also acted to provide financial relief to its airlines by temporarily deferring all landing and terminal rentals, rates, fees, and charges that were billed in April and May 2020. Under the policy, the airlines would pay the deferral back to DFW in equal installments in the months of July, August, and September 2020. In April and May 2020, DFW deferred $36.6 million and $31.5 million, respectively. DFW also amended concession lease agreements to suspend the Minimum Annual Guarantee (MAG) from March 1, 2020 to September 30, 2020 for terminal and rental car concessions, with all other terms and conditions defined in the concession lease agreements remaining in effect. The revenue impact of the suspension in addition to the lost revenue due to fewer passengers is estimated between $45 million and $55 million in FY 2020.

On June 4, 2020, the DFW Board of Directors approved an extension of the suspension of the MAG through March 31, 2021. The estimated impact of the extension of percent rent is estimated to be approximately $30 million in Fiscal Year 2021. There may be additional lost revenue from fewer passengers. Further financial relief was provided to concessionaires through a temporary deferral of operating and maintenance expense reimbursements that were to be billed in March and April 2020. The deferred amounts are to be paid back to DFW in equal July, August, and September installments. The temporary cash flow impact is $1.8 million.

Airport officials also announced on June 4, 2020 lower terminal rentals and turn fees in amounts necessary to achieve approximately $10 million of rent and fee reductions in each of the months of July, August and September 2020 to provide additional financial relief to the airlines. The $30 million is to be repaid by the airlines through a True-Up Adjustment (per the terms of the Use Agreement) in April to September 2021 and it will be recorded as a receivable at September 30, 2020. KBRA will monitor repayment of these deferred amounts.

Passenger Airline Cost Per Enplanement (CPE)

DFW had historically been among the low-cost large hub airports in the country. As recently as FY 2013, CPE was $7.20. However, over the past seven years passenger airline payments on a per enplanement basis have risen as TRIP debt service has come online. Debt service requirements rise through FY 2022. CPE increased from $9.50 in FY 2016 to $12.95 in FY 2019. In FY 2020 DFW budgeted CPE to be $12.96, but based upon the sharp reduction in passenger traffic and a total of between 45.6 million and 48.1 million FY 2019 passengers (37.6% to 34.2% reduction from FY 2019 passenger activity), CPE is forecast to rise to $19.39, and projected at $17.24 in FY 2021.

Stress Case

KBRA performed a stress case to gauge the impact of a sharp decline in enplanement activity coupled with significant planned debt issuance and revenue losses.

The stress scenario is event-driven and mirrors the passenger declines faced by DFW as a result of COVID-19 pandemic related containment measures. It assumed a very modest monthly recovery rate after the 79% year-over-year passenger decline in May 2020. Under this scenario, traffic would not recover to the pre-pandemic level for nearly 4 years. After which, nominal 1.0% annual growth is projected. The assumed recovery rate is lower than DFW recorded post-Great Recession and is also more conservative than DFW's baseline and optimistic forecasts. Non-airline revenues grow at the same rate as passenger traffic.

KBRA assumes that $170 million of the $299.2 million in CARES Act grants will be applied during FY 2020, with the balance used in FY 2022. Debt issuance through 2024 is assumed at $1.5 billion in four $375 million increments beginning in 2021. The additional debt is amortized over 30-year period, with level annual requirements, at an assumed 5% interest rate. KBRA considers these assumptions to be conservative, since the level of debt issued exceeds what has been disclosed, and it is unlikely that all the debt would be issued in such a short timeframe. DFW would strive to accommodate debt service within the existing declining annual requirements, and capitalized interest would be utilized. Operating expenses increase at a 3% annual rate. 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, with no credit given to PFCs or higher than upper threshold amounts generated by the DFW Cost Center.

Under this scenario, cost per enplanement would rise from $12.95 in FY 2019 to $28.64 in 2020 and $27.82 in FY 2021, absent further extraordinary support and circumstances. Assumed gradual recovery in passenger activity results in CPE receding to $22.66 in 2024. KBRA believes that while CPE rises sharply under this scenario, it remains manageable, particularly in an environment of elevated CPE.

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 March 31, 2020, unrestricted cash and investment were sufficient to cover 630 days of operating expenses, which KBRA considers strong. Despite the high debt levels, the ratio of debt to available resources is favorable, reflecting the favorable liquidity position.

Cash and Investment Balances (Unaudited, in millions)

	As of March 31,		As of September 30, (Fiscal Year End)				
Unrestricted Cash and Investments	**2020**	**2019**	**2019**	**2018**	**2017**	**2016**	**2015**
Operating revenue and expense fund	$ 372	$ 348	$ 354	$ 326	$ 306	$ 283	$ 248
Capital improvement fund	405	361	459	428	446	444	422
PFIC	187	156	176	113	106	88	75
Total unrestricted cash/investments	964	865	989	867	858	815	745
Unrestricted Cash and Investments/Ops Exps – Days	630	585	631	600	628	608	620

Source: DFW Airport Finance Department records.

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. Per GASB 68 reporting requirements, the Airport recognizes an aggregate unfunded actuarial accrued liability (UAAL) of $138.8 million as of January 1, 2020. The Airport has historically set annual employer contribution amounts equal to actuarially determined requirements. For the year ending December 31, 2019, the Airport contributed $21.9 million and $10.8 million to the Employee Plan (85.8% funded) and DPS (81.2% funded), respectively.

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. OPEB is overfunded as of January 1, 2020.

RD 6: Legal Mechanics and Security Provisions

Bond Security

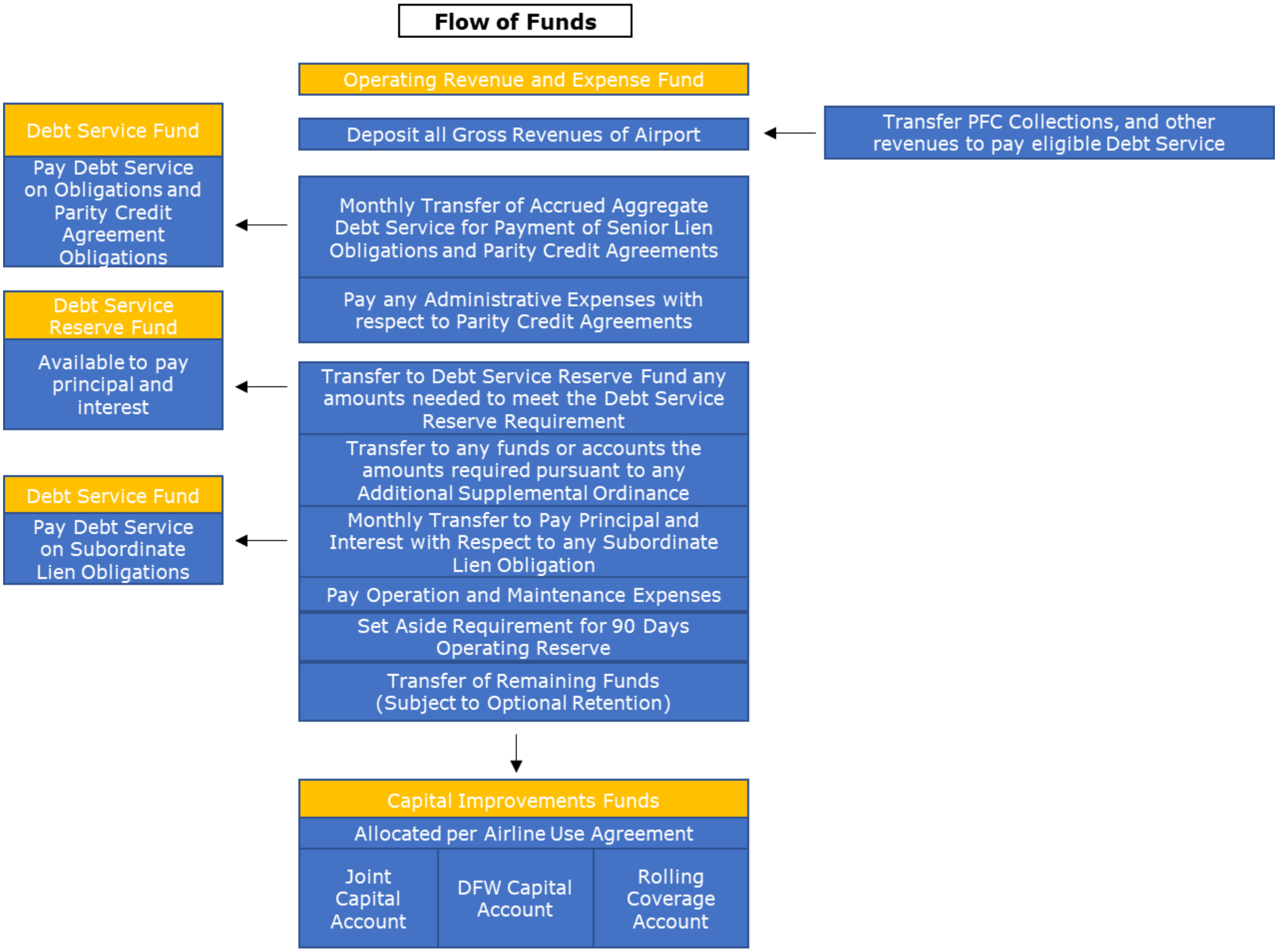
The Airport's Joint Revenue Improvement Bonds are secured by a first lien on and pledge of Pledged Revenues and Pledged Funds. Pledged Revenues include as Gross Revenues the revenues received by the Airport from the rentals, fees and charges collected from the Signatory Airlines, and other airlines and 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
DFW maintains a cash-funded debt service reserve fund equal to 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.

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. CARES Act funds are considered gross revenues in the waterfall.



Source: Dallas Fort Worth International Airport

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