

ROGER H. BATES

Airport Consultant

December 21, 2017

Mr. Kenneth Gregg
Assistant Director – Financial Planning & Analysis
Houston Airport System
16930 JFK Boulevard
Houston, TX 77032

Re: 2018 Annual Rate Report—Consolidated Rental Car Facility

Dear Mr. Gregg:

Acting in the capacity of the City's designated Independent Rate Consultant, I am pleased to submit this Annual Rate Report for Calendar Year 2018 regarding the Consolidated Rental Car Facility (the Project or the Facility) at George Bush Intercontinental Airport / Houston (the Airport).

In March 2001, the City of Houston (the City) issued *\$130,250,000 City of Houston, Texas, Airport System Special Facilities Taxable Revenue Bonds (Consolidated Rental Car Facility Project), Series 2001* (the Bonds) to finance the Project. The Bonds are secured in large part by a pledge of CFC Revenues—revenues derived from a Customer Facility Charge imposed by the City and collected by the rental car operators (the Operators). The Operators have been collecting CFC revenues and forwarding those revenues to the Trustee since April 2001. The City imposed a \$3.00 Customer Facility Charge at the Airport as of April 1, 2001, and the CFC rate has subsequently been adjusted as follows:

- Increased to \$3.50 effective July 1, 2003,
- Reduced to \$3.25 effective April 1, 2005,
- Reduced to \$3.00 effective July 1, 2006,
- Increased to \$3.75 effective November 1, 2009,
- Increased to \$4.25 effective April 1, 2011,
- Reduced to \$4.00 effective April 1, 2013,
- Reduced to \$3.00 effective April 1, 2016, and
- Increased to \$4.00 effective April 1, 2017

In connection with the issuance of the Bonds, the City (as the Issuer of the Bonds) entered into a Trust Indenture, dated March 1, 2001, with Chase Manhattan Bank (now The Bank of New York Mellon Trust Company, N.A.) as Trustee. This Report is required under Section 7.2 of the Trust Indenture.

Requirements of the Trust Indenture

The specific requirements for the Rate Report are set forth in the Trust Indenture.

Section 7.2.a of the Trust Indenture states:

The City shall cause the Customer Facility Charge to be calculated, established and imposed as herein provided so long as any Bonds remain Outstanding, and the City shall use diligence to cause the Customer Facility Charge to be collected by the Operators in accordance with the terms of the Agreement and deposited with the Trustee directly by the Operators. The Customer Facility Charge shall be established initially and reviewed and adjusted (if necessary) annually by the Director based upon the Rate Reports from the Independent Rate Consultant (or, with the consent of the LLC, by the City) at rates estimated to generate CFC revenues, along with other Pledged Revenues, in such calendar year equal to not less than:

(1) 125% of the debt service requirements on the Bonds for such calendar year;
and

(2) the amounts necessary to fund in each calendar year all transfers from the Revenue Fund as required by Article IV of this Indenture.

This provision is referred to as the Rate Covenant.

Section 7.2.b of the Trust Indenture goes on to state:

The Director [the City's Director of Aviation] shall cause the Rate Reports to be prepared and to be filed with the trustee prior to each calendar year, based upon the Transaction Day and other rental information required to be provided annually to the Independent Rate Consultant by the Operators pursuant to the Agreement.

The Trust Indenture defines "Rate Reports" as follows:

"Rate Reports" shall mean the written reports and recommendations of the Independent Rate Consultant...which shall include the following information:

- (1) the recommended Customer Facility Charge for the ensuing calendar year (or other stated period);
- (2) the recommended transfers to the Revenue Fund from the CFC Stabilization Account or from other amounts in the Facility Improvement Fund;
- (3) pro forma Customer Facility Charge collection data for the ensuing calendar year (or other stated period) on a monthly basis, together with calculations showing 90% and 80% of such monthly amounts;
- (4) the estimated Administrative Cost Requirement for the ensuing calendar year (or other stated period); and
- (5) any additional documentation to support the recommended CFC rate and reflecting the anticipated disposition of the CFC revenues among the funds established and maintained under the Indenture.

The Houston Rental Car Operators

The Houston rental car market is served by four companies operating twelve brands: *Advantage Opco, LLC* (operating Advantage and EZ), *Avis Budget Group, Inc.* (operating Avis, Budget, Payless and Zipcar), *Enterprise Holdings Inc.* (operating Enterprise, Alamo and National) and *The Hertz Corporation* (operating Hertz, Dollar and Thrifty).

Recent Trends in Air Traffic Demand

Table 1 on the following page shows recent trends in air traffic activity at the Airport by month for calendar year 2016 and year-to-date 2017 (through October) as obtained from HAS records.

For the first 10 months of 2017, passenger originations at the Airport (the driver of rental car activity) increased by 1.1% while total passenger enplanements decreased by 3.3% compared to the same period of 2016.

Underlying air traffic demand at the Airport has been relatively stable in 2017, except for the period of late August to early September when demand was materially affected by Hurricane Harvey (see below and colored box in Table 1). In addition, general economic (GDP) growth nationwide improved in 2017 to about 3% from the 1%-2% levels of the immediately prior years. As a result, economic and business conditions in the Houston economy generally improved as well. The improvement in business climate was offset somewhat by moderate reductions in airline service, particularly by United, the major hub carrier at the Airport. In March 2016, United announced a new flight schedule that reduced the number of scheduled seats at the airport by about 5%. While other airlines have continued to increase service in moderate amounts, the net overall reduction in scheduled seats (i.e., capacity) in 2016 and early 2017 contributed to the moderate decline in enplaned passenger demand (-3.3%) at the Airport in 2017.

Hurricane Harvey was a Category 4 hurricane that hit the gulf coast region of Texas on August 25, 2017 and remained mostly stalled in the area for six days. The storm caused an estimated \$200 billion in damage, making it the costliest natural disaster ever in the United States. In Houston, two feet of rain fell in the first 24 hours and a total of 43 inches of rain over the storm's duration. At its peak on September 1, 2017, one-third of Houston was underwater. Overall, flooding covered an area of southeast Texas the size of the state of New Jersey.¹ In a four-day period, many areas received more than 40 inches of rain as the system slowly meandered over eastern Texas and adjacent waters, causing catastrophic flooding. Harvey is the wettest hurricane on record in the United States. The resulting floods inundated hundreds of thousands of homes, displaced more than 30,000 people, and prompted more than 17,000 rescues.

¹ "Harvey Is a 1,000-year Flood Unprecedented in Scale," The Washington Post, August 31, 2017.

Table 1

RECENT TRENDS IN AIR TRAFFIC ACTIVITY
Calendar Years 2017 and 2016
George Bush Intercontinental Airport / Houston

Year / Month	Enplaned Passengers		Originating Passengers		
	Number	% Change from Prior Year	Number	% Change from Prior Year	% of Total Enplaned Passengers
2017					
Jan	1,644,772	-3.7%	840,926	1.3%	51.1%
Feb	1,477,333	-5.5%	782,307	2.8%	53.0%
Mar	1,768,175	-0.1%	946,098	1.5%	53.5%
Apr	1,647,158	1.6%	883,453	2.3%	53.6%
May	1,822,126	0.4%	1,025,641	3.7%	56.3%
Jun	1,938,668	0.4%	1,107,315	3.1%	57.1%
Jul	1,976,302	1.7%	1,119,442	7.2%	56.6%
Aug	1,488,888	-14.4%	851,634	-8.0%	57.2%
Sep	1,367,932	-13.6%	771,364	-8.9%	56.4%
Oct	1,678,154	-1.4%	923,326	3.9%	55.0%
	16,809,508	-3.3%	9,251,506	1.1%	55.0%
Nov					
Dec					
	0	0	0	0	0
Total 2017					
2016					
Jan	1,707,466	4.6%	830,308	7.4%	48.6%
Feb	1,563,352	4.0%	760,665	5.7%	48.7%
Mar	1,769,232	-1.5%	932,551	0.5%	52.7%
Apr	1,621,857	-4.6%	863,233	-0.3%	53.2%
May	1,814,452	-2.1%	988,571	1.8%	54.5%
Jun	1,930,232	-2.1%	1,074,370	3.8%	55.7%
Jul	1,942,331	-6.7%	1,044,080	-3.8%	53.8%
Aug	1,739,026	-5.4%	925,498	-1.7%	53.2%
Sep	1,584,038	-1.6%	846,762	3.2%	53.5%
Oct	1,702,519	-5.4%	888,269	-4.2%	52.2%
	17,374,505	-2.3%	9,154,307	1.0%	52.7%
Nov	1,654,441	-7.0%	871,355	-4.8%	52.7%
Dec	1,810,305	-4.6%	970,414	-0.7%	53.6%
	3,464,746	-11.6%	1,841,769	-5.6%	53.2%
Total 2016	20,839,251	-2.9%	10,996,076	0.3%	52.8%

At the Airport, Hurricane Harvey significantly disrupted airline flight operations during the last week of August and on into September, as evidenced by the following airline aircraft landing statistics:

Airline Aircraft Landings				
	2017	2016	Change	% Change
Jan	18,224	18,912	(688)	-3.6%
Feb	16,466	18,078	(1,612)	-8.9%
Mar	19,011	19,615	(604)	-3.1%
Apr	17,405	18,053	(648)	-3.6%
May	18,762	19,360	(598)	-3.1%
Jun	19,177	19,578	(401)	-2.0%
Jul	19,543	19,839	(296)	-1.5%
Aug	15,643	19,330	(3,687)	-19.1%
Sep	15,764	17,521	(1,757)	-10.0%
Oct	18,153	18,640	(487)	-2.6%
	178,148	188,926	(10,778)	-5.7%

However, by October, airline aircraft landings had recovered to reflect recent normal levels and trends.

Hypothetically, had the storm not taken place and had August and September passenger traffic at the Airport in 2017 equaled 2016 levels:

- Enplaned passengers for the first 10 months of 2017 would have been 17.28 million (instead of the actual 16.81 million), a **0.6% decrease** from 2016 (instead of the actual **3.3% decrease**) and
- Originating passengers for the first 10 months of 2017 would have been 9.40 million (instead of the actual 9.25 million), a **2.7% increase** over 2016 (instead of the actual **1.1% increase**).

In Houston, both air traffic and rental car demand are affected by major changes in economic conditions and business activity in the oil & gas industry. Throughout 2017, the price of oil stabilized somewhat in the \$50-\$60 a barrel range—approximately 20%-25% higher than the prices that prevailed in the 2015-2016 period (\$40-\$50 a barrel). In late 2016 the Organization of Oil Producing Countries (OPEC) and Russia reached an agreement to establish limits on oil production which contributed to stabilizing oil markets worldwide. Limitations in output help stabilize and support oil prices. Then on November 30, 2017, OPEC and Russia agreed to keep limiting their output of oil through the end of 2018, with the hope of stabilizing oil prices at around \$60 a barrel in 2018.² The price of crude oil closed at \$57.40 on that date. Going forward, with the oil & gas industry comprising a major segment of the area economy, local air traffic and rental car demand will continue to be affected by fluctuations in oil prices and economic trends in the oil & gas industry.

The recent passage of federal tax legislation, that will lower business tax rates in 2018 and beyond, is expected to stimulate overall business activity in the U.S. economy and should have a concomitant positive effect on rental car demand throughout the U.S.

² “Oil Producers Extend Cuts Through 2018,” The Wall Street Journal, December 1, 2017.

Recent Trends in Transaction Days and CFC Revenues

Tables 2A and 2B on the following page show (1) rental car transaction days and (2) CFC revenues, respectively, for the first 10 months of Calendar Years 2017 and 2016. Actual CFC revenues and transaction days for 2017 are then compared with the 2016 actual amounts and with the projections for 2017 prepared in December 2016.

The first 10 months of 2017 saw a small increase in rental car demand at the Airport in spite of the disruption caused by Hurricane Harvey. Overall originating passenger demand (the driver of rental car activity) was relatively stable (+1.1% for the first 10 months of the year). The increase in the total number of transaction days for the first 10 months of the year (+1.4%) generally tracked that of originating passenger demand (+1.1%). The total number of transaction days for the first 10 months of the year also exceeded the projection made in December 2016 by the same percentage (+1.4%).

The adverse effect of Hurricane Harvey on rental car demand at the Airport was less than what might have been expected in part because the storm produced a significant increase in local rental car demand throughout the region. In the Gulf area, it is estimated that up to 500,000 vehicles owned by private individuals were ruined beyond repair by flooding, according to the auto data firm Black Book. This resulted in a temporary surge in private rental car demand throughout the region, some of which was accommodated by the rental car operators at the Airport.

In the aftermath of the storm, rental car demand at the Airport recovered sharply. The number of transaction days increased nearly 18% in October 2017 compared to October 2016.

HAS increased the CFC rate from \$3.00 per transaction day to \$4.00 per transaction day effective April 1, 2016. All of the Operators put the rate change in effect as of that date.³

In the first 10 months of 2017 CFC revenues increased by 3.2% over the same period of 2016 and 3.4% over the projection of 2017 CFC revenues prepared in December of 2016. The increase in CFC revenues is largely attributable to the increase in the CFC rate, offset somewhat by the disruptions caused by Hurricane Harvey.

³ In contrast, the previous year HAS reduced the CFC rate from \$4.00 to \$3.00 effective April 1, 2016, but some of the Operators delayed implementing the rate change and others did not change the rate at all.

Table 2A

2017 TRANSACTION DAYS¹
Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston

Applicable Month	Month of Payment	Total Transaction Days		Increase (Decrease)	Percentage Change	2017 Projection	Actual 2016 vs. Projection	Percentage Change
		Actual 2017	Actual 2016					
Jan	Feb	297,465	321,335	(23,870)		347,000	(49,535)	
Feb	Mar	339,072	323,878	15,194		350,000	(10,928)	
Mar	Apr	385,066	357,916	27,150		357,000	28,066	
Apr	May	364,191	353,076	11,115		348,000	16,191	
May	Jun	374,602	376,212	(1,610)		362,000	12,602	
Jun	Jul	325,103	324,657	446		307,000	18,103	
Jul	Aug	321,346	324,045	(2,699)		317,000	4,346	
Aug	Sep	308,169	332,706	(24,537)		329,000	(20,831)	
Sep	Oct	296,094	313,824	(17,730)		309,000	(12,906)	
Oct	Nov	421,356	357,150	64,206		360,000	61,356	
		3,432,464	3,384,799	47,665	1.4%	3,386,000	46,464	1.4%
Nov	Dec		319,781			336,000		
Dec	Jan		292,233			299,000		
			612,014			635,000		
		3,432,464	3,996,813			4,021,000		

1. Source: Obtained from the Operators' annual certification reports.

Table 2B

2017 CFC REVENUES¹
Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston

CFC Rate		
	2017	2016
Jan - Mar	\$3.00	\$4.00
Apr - Dec	\$4.00	\$3.00

Month of Accrual	Month of Payment	Total CFC Revenues		Increase (Decrease)	Percentage Change	2017 Projection	Actual 2017 vs. Projection	Percentage Change
		Actual 2017	Actual 2016					
Jan	Feb	\$970,423	\$1,285,340	(\$314,917)		\$1,041,000	(\$70,577)	
Feb	Mar	\$1,107,317	\$1,295,512	(\$188,195)		\$1,050,000	\$57,317	
Mar	Apr	\$1,256,508	\$1,431,664	(\$175,156)		\$1,071,000	\$185,508	
Apr	May	\$1,391,355	\$1,304,613	\$86,742		\$1,392,000	(\$645)	
May	Jun	\$1,495,339	\$1,350,966	\$144,373		\$1,448,000	\$47,339	
Jun	Jul	\$1,300,210	\$1,168,275	\$131,935		\$1,228,000	\$72,210	
Jul	Aug	\$1,285,346	\$1,154,245	\$131,101		\$1,268,000	\$17,346	
Aug	Sep	\$1,232,709	\$1,182,466	\$50,243		\$1,316,000	(\$83,291)	
Sep	Oct	\$1,184,314	\$1,113,233	\$71,081		\$1,236,000	(\$51,686)	
Oct	Nov	\$1,685,387	\$1,222,931	\$462,456		\$1,440,000	\$245,387	
		\$12,908,908	\$12,509,245	\$399,663	3.2%	\$12,490,000	\$418,908	3.4%
Nov	Dec		\$1,047,152	(\$1,047,152)		\$1,344,000	(\$1,344,000)	
Dec	Jan		\$955,837	(\$955,837)		\$1,196,000	(\$1,196,000)	
		\$0	\$2,002,989	(\$2,002,989)		\$2,540,000	(\$2,540,000)	
		\$12,908,908	\$14,512,234	(\$1,603,326)		\$15,030,000	(\$2,121,092)	

1. Source: As reported by the Operators to the Trustee and confirmed by the Operators' annual certification reports. CFC payments are required to be sent to the Trustee by the 20th day of the month following collection. Therefore, for example, the May payments to the Trustee represent CFC revenues accrued in April.

Projection of Air Traffic Activity and Rental Car Demand

Table 3, “Actual Rental Car Transaction Days and CFC Revenues—Calendar Year 2017,” on the following page, shows relationships between air traffic activity, rental car transaction days and CFC revenues and CFC collections for the first 10 months of 2017 and develops projections of CFC revenues and CFC collections for the full year.

In Table 3, CFC revenues are projected for the months of November and December based on assumptions regarding *passenger traffic growth*, the *percentage of originating passengers to total enplaned passengers*, and *transaction days per originating passenger* shown at the top of the table.

Total CFC revenues are projected to be \$15,510,000 in 2017—a 6.9% increase from actual CFC revenues in 2016 and a 3.2% increase from the projection of 2017 CFC revenues made last December.

Total CFC collections are now projected to be \$15,491,000 in 2017—a 4.5% increase from actual CFC collections in 2016 and a 5.2% increase from the projection of 2017 CFC collections made last December.

Availability of Funds for Upcoming Debt Service Payment

In September 2014, HAS refunded a portion of the outstanding Bonds in a financing transaction that generated material savings in annual debt service over the seven year period, 2014-2020. Projected CFC collections for November and December of 2017, together with moneys currently available in the Debt Service Account, are projected to be more than sufficient to provide for the debt service payments coming due on January 2, 2018:

Funds Available for January 2, 2018 Debt Service Payment

Balance in Debt Service Fund - October 31, 2017	\$6,333,404
Projected CFC Collections--November and December 2017	\$3,044,387
	<hr/>
Total resources projected to be available January 2, 2018	\$9,377,791

Debt service requirements--January 2, 2018

Remaining 2001 Bonds	
Principal	0
Interest	2,345,564
	<hr/>
	\$2,345,564
New 2014 Refunding Bonds	
Principal	5,490,000
Interest	292,040
	<hr/>
	\$5,782,040
	<hr/>
Total Debt Service Payment--January 2, 2018	\$8,127,604

Table 3

ACTUAL AND ESTIMATED RENTAL CAR TRANSACTION DAYS AND CFC REVENUES

Calendar Year 2017

Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston

Key Assumptions:

EP Growth	% Orig Pax	Jan-Mar	CFC Rate
0.0%	55.0%	Apr-Dec	\$3.00
			\$4.00

Applicable Month	Actual or Projection	Enplaned Passengers	% Change from Prior Year	Originating Passengers	% Change from Prior Year	Percent Originating	Transaction Days	% Change from Prior Year	Transaction Days per O.P.	% Change from Prior Year	CFC Revenues	% Change from Prior Year	CFC Collections	% Change from Prior Year
Jan	Actual	1,644,772	-3.7%	840,926	1.3%	51.1%	297,465	-7.4%	0.354	-8.6%	\$970,423	-24.5%	\$1,222,931	-3.2%
Feb	Actual	1,477,333	-5.5%	782,307	2.8%	53.0%	339,072	4.7%	0.433	1.8%	\$1,107,317	-14.5%	\$970,423	-24.5%
Mar	Actual	1,768,175	-0.1%	946,098	1.5%	53.5%	385,066	7.6%	0.407	6.0%	\$1,256,508	-12.2%	\$1,107,317	-14.5%
Apr	Actual	1,647,158	1.6%	883,453	2.3%	53.6%	364,191	3.1%	0.412	0.8%	\$1,391,355	6.6%	\$1,256,508	-12.2%
May	Actual	1,822,126	0.4%	1,025,641	3.7%	56.3%	374,602	-0.4%	0.365	-4.0%	\$1,495,339	10.7%	\$1,391,355	6.6%
Jun	Actual	1,938,668	0.4%	1,107,315	3.1%	57.1%	325,103	0.1%	0.294	-2.8%	\$1,300,210	11.3%	\$1,495,339	10.7%
Jul	Actual	1,976,302	1.7%	1,119,442	7.2%	56.6%	321,346	-0.8%	0.287	-7.5%	\$1,285,346	11.4%	\$1,300,210	11.3%
Aug	Actual	1,488,888	-14.4%	851,634	-8.0%	57.2%	308,169	-7.4%	0.362	0.7%	\$1,232,709	4.2%	\$1,285,346	11.4%
Sep	Actual	1,367,932	-13.6%	771,364	-8.9%	56.4%	296,094	-5.6%	0.384	3.6%	\$1,184,314	6.4%	\$1,232,709	4.2%
Oct	Actual	1,678,154	-1.4%	923,326	3.9%	55.0%	421,356	18.0%	0.456	13.5%	\$1,685,387	37.8%	\$1,184,314	6.4%
		16,809,508	-3.3%	9,251,506	1.1%	55.0%	3,432,464	1.4%	0.371	0.3%	12,908,908	3.2%	12,446,452	-0.8%
Nov	Estimate	1,654,000	0.0%	871,000	0.0%	55.0%	339,690	6.2%	0.390	6.3%	\$1,359,000	29.4%	\$1,685,387	37.8%
Dec	Estimate	1,810,000	0.0%	970,000	0.0%	55.0%	310,400	6.2%	0.320	6.3%	\$1,242,000	29.9%	\$1,359,000	29.4%
Total 2017		20,274,000	-2.7%	11,093,000	0.9%	54.7%	4,083,000	2.2%	0.368	1.3%	\$15,510,000	6.9%	\$15,491,000	4.5%

Prior Projection (Dec 2016)	21,040,000	11,048,000	52.5%	4,021,000	0.364	\$15,030,000	\$14,722,000
Change from Projection	(766,000)	45,000	0.4%	62,000	1.5%	480,000	769,000
% Change	-3.6%	0.4%				3.2%	5.2%

CFC collections generated in excess of annual operating and debt service requirements are being, and will continue to be, transferred monthly to the Facility Improvement Fund and reserved for future capital improvements and other needs.

Trends in Transaction Days per Originating Passenger

Table 4 shows historical patterns in monthly transaction days per enplaned passenger for calendar years 2015, 2016 and year-to-date 2017, and projected monthly transaction days per originating passenger for the last two months of 2017 and all of calendar year 2018. The data in Table 4 generally show an increasing trend for average annual transaction days per originating passenger in 2017, a trend which should continue into 2018 given the generally positive outlook for the oil and gas industry and the Houston economy as a whole.

For the purposes of forecasting CFC revenues, it is assumed that the monthly transaction days per originating passenger in 2018 would remain the same as in 2017 with the same monthly demand patterns. These assumptions regarding transaction days per originating passenger are the principal drivers of the 2018 projection of transaction days and CFC revenues.

Table 4

Trends in Transaction Days per Originating Passenger
Rental Car Market
George Bush Intercontinental Airport / Houston

	2015	2016	2017	Projected 2018
				<i>assume no change from prior year</i>
Jan	0.441	0.387	0.354	0.354
Feb	0.461	0.426	0.433	0.433
Mar	0.406	0.384	0.407	0.407
Apr	0.437	0.409	0.412	0.412
May	0.411	0.381	0.365	0.365
Jun	0.336	0.302	0.294	0.294
Jul	0.339	0.310	0.287	0.287
Aug	0.376	0.359	0.362	0.362
Sep	0.408	0.371	0.384	0.384
Oct	0.446	0.402	0.456	0.456
			Projected	
Nov	0.392	0.367	0.390	0.390
Dec	0.323	0.301	0.320	0.320
Annual Average	0.394	0.363	0.368	0.368
Percent Change		-7.8%	1.3%	0.0%

Projected CFC Revenues and Collections at the Current CFC Rate

Table 5, “Projected Rental Car Transaction Days and CFC Revenues—Calendar Year 2018,” extrapolates the historical relationships shown in Table 3 to produce a projection of CFC revenues and CFC collections for 2018 *assuming continuation of the current \$4.00 CFC Rate*. The forecast of CFC revenues is also based on the following key assumptions:

- Overall air traffic activity (passenger enplanements) would increase by 1% in 2018, with no growth in passenger demand in the Houston market.
- Originating passengers would account for 55% of passenger enplanements in 2018, consistent with the average percentage experienced during the first 10 months of 2016.
- Monthly transaction days per originating passenger in 2018 would be the same as in 2017 and would be consistent with the seasonal patterns of the past year.

Assuming no change in the CFC rate, CFC revenues are projected to be \$16,612,000 and CFC collections projected to be \$16,566,000 in 2018.

Although not shown in this report, the computed “breakeven” CFC rate for 2018 (the rate required to cover only debt service requirements and fund replenishments) is \$1.93, less than half the current rate.

Recommended CFC Rate

The Houston rental car market has stabilized and the outlook for the oil and gas industry and the Houston economy is generally positive for 2018. Also, recent operating results and a projected 2018 “breakeven” CFC rate of only \$1.93 suggest that HAS could consider reducing the CFC rate in 2018.

However, new competition in ground transportation services has emerged in the airport industry and at IAH in the last few years in the form of *Uber and Lyft ride services*. Uber and Lyft compete primarily with taxis and other ground transportation services at the Airport but also, to a lesser undefined extent, with rental car companies, owing in part to the flexibility and convenience of such ride services. In July 2015, HAS instituted a fee of \$2.75 for each pick up at IAH and HOU by these ride services. During the period July to November 2017, the total amount of such fees collected at IAH increased by nearly 66% over the same period in 2017, indicating that the market for such ride services is growing rapidly:

Ride Pick-Up Fees Collected from Uber and Lyft

July-November 2017	\$957,267
July-November 2016	<u>\$578,218</u>
Increase	\$379,049
Percent Increase	65.6%

In addition, the ratings services have expressed concern about frequent CFC rate changes on debt service coverage margins and perceived credit worthiness, and as a result HAS now seeks rate stability as a goal, even where moderate rate reductions might otherwise be supportable.

Table 5

**PROJECTION OF RENTAL CAR TRANSACTION DAYS AND CFC REVENUES
Calendar Year 2018**

Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston

2018	Key Assumptions:		55.0%		1.0%		55.0%		55.0%		CFC Rate			
	Applicable Month	Actual or Forecast	Enplaned Passengers	% Change from Prior Year	Originating Passengers	% Change from Prior Year	Transaction Days	% Change from Prior Year	Transaction Days per O.P.	% Change from Prior Year	CFC Revenues	% Change from Prior Year	CFC Collections	% Change from Prior Year
Jan	Projection		1,561,000	1.0%	914,000	8.7%	323,000	8.6%	0.354	0.0%	\$1,292,000	33.1%	\$1,242,000	1.6%
Feb	Projection		1,492,000	1.0%	821,000	4.9%	356,000	5.0%	0.433	0.0%	\$1,424,000	28.6%	\$1,292,000	33.1%
Mar	Projection		1,786,000	1.0%	982,000	3.8%	400,000	3.9%	0.407	0.0%	\$1,600,000	27.3%	\$1,424,000	28.6%
Apr	Projection		1,564,000	1.0%	915,000	3.6%	377,000	3.5%	0.412	0.0%	\$1,508,000	8.4%	\$1,600,000	27.3%
May	Projection		1,840,000	1.0%	1,012,000	-1.3%	370,000	-1.2%	0.365	0.0%	\$1,480,000	-1.0%	\$1,508,000	8.4%
Jun	Projection		1,958,000	1.0%	1,077,000	-2.7%	316,000	-2.8%	0.294	0.0%	\$1,264,000	-2.8%	\$1,480,000	-1.0%
Jul	Projection		1,996,000	1.0%	1,098,000	-1.9%	315,000	-2.0%	0.287	0.0%	\$1,260,000	-2.0%	\$1,264,000	-2.8%
Aug	Projection		1,504,000	1.0%	827,000	-2.9%	299,000	-3.0%	0.362	0.0%	\$1,196,000	-3.0%	\$1,260,000	-2.0%
Sep	Projection		1,382,000	1.0%	760,000	-1.5%	292,000	-1.4%	0.384	0.0%	\$1,168,000	-1.4%	\$1,196,000	-3.0%
Oct	Projection		1,695,000	1.0%	932,000	0.9%	425,000	0.9%	0.456	0.0%	\$1,700,000	0.9%	\$1,168,000	-1.4%
Nov	Projection		1,671,000	1.0%	919,000	5.5%	358,000	5.4%	0.390	0.0%	\$1,432,000	5.4%	\$1,700,000	0.9%
Dec	Projection		1,828,000	1.0%	1,005,000	3.6%	322,000	3.7%	0.320	0.0%	\$1,288,000	3.7%	\$1,432,000	5.4%
Total - 2018			20,477,000	1.0%	11,262,000	1.5%	4,153,000	1.7%	0.368	2.0%	\$16,612,000	7.1%	\$16,566,000	6.9%

Because of (1) the unknown longer term effect of the Uber and Lyft ride services on rental car demand and (2) HAS's desire to maintain stable CFC rates and coverage margins, HAS has decided to keep the current \$4.00 CFC rate in place in 2018. I concur with this decision.

Assuming no change in the CFC rate, projected monthly CFC collections in 2018 are summarized in Table 6 below:

Table 6

Summary of Projected CFC Collections
Calendar Year 2018
George Bush Intercontinental Airport / Houston

	Projected CFC Collections		
	100.0%	90.0%	80.0%
January	\$1,242,000	\$1,117,800	\$993,600
February	1,292,000	1,162,800	1,033,600
March	1,424,000	1,281,600	1,139,200
April	1,600,000	1,440,000	1,280,000
May	1,508,000	1,357,200	1,206,400
June	1,480,000	1,332,000	1,184,000
July	1,264,000	1,137,600	1,011,200
August	1,260,000	1,134,000	1,008,000
September	1,196,000	1,076,400	956,800
October	1,168,000	1,051,200	934,400
November	1,700,000	1,530,000	1,360,000
December	1,432,000	1,288,800	1,145,600
Total--Calendar Year 2018	\$16,566,000	\$14,909,400	\$13,252,800

Operating Cash Flow

Table 7 on the following page shows the projected operating cash flow associated with the Consolidated Rental Car Facility in 2017 and 2018 assuming continuation of the current \$4.00 CFC rate in 2018. CFC collections, together with other available resources, are projected to be sufficient to cover all the funding requirements under the Trust Indenture and generate projected surplus cash flows of \$4.7 million in 2017 and \$5.7 million in 2018.

Table 7

PROJECTED ANNUAL CFC REQUIREMENT AND CASH FLOWS
For Calendar Years Ending December 31
Consolidated Rental Car Facility
 George Bush Intercontinental Airport / Houston

	CFC Rate:		Estimated	Projected
	<i>Jan-Mar</i>	<i>Apr-Dec</i>	2017	2018
			\$3.00	\$4.00
			\$4.00	\$4.00
Projected CFC Collections (from Tables 3 and 5)			\$15,491,000	16,566,000
Transfers from CFC Rate Stabilization Account			0	0
Interest Income			53,000	60,000
Total Revenues and Transfers			\$15,544,000	\$16,626,000
Replenish Administrative Costs Account (to \$48,000)			33,300	36,000
Replenish CFC Rate Stabilization Account (to \$300,000)			0	0
Transfers to Debt Service Fund				
Principal			5,490,000	5,715,000
Interest			5,275,208	5,170,000
			\$10,765,208	\$10,885,000
Total Requirement			\$10,798,508	\$10,921,000
Projected surplus @ proposed CFC rate (= estimated transfer to Facility Improvement Fund)			\$4,745,492	\$5,705,000

Other Capital Needs

HAS and the Operators have developed a five-year (2018-2022) capital improvement program for the Consolidated Rental Car Facility. In addition, certain other projects were completed in 2017 and several others are currently in progress. These capital projects are summarized in Table 8 on the following page. The total cost of these projects is estimated by HAS to be approximately \$5.1 million over the six-year period, 2017-2022. All of these projects have been or are anticipated to be funded from the Facility Improvement Fund (internally generated cash flow).

Table 8

2017 - 2022 CAPITAL IMPROVEMENTS
Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston

Project	Estimated 2017	Projected					2017-2022 Total
		2018	2019	2020	2021	2022	
Projects Completed in 2017							
Ready Return Reallocation	\$193,313						\$193,313
LED Signs Bus Level	\$136,933						\$136,933
	\$330,246	0	0	0	0	0	\$330,246
Projects Planned for 2018-2022							
Replace RTU Units #3 and #6 at the BMF		95,000					\$95,000
Back-up Generator CSB/BMF	\$5,436	1,750,000					\$1,755,436
Replace RTU Unit #7 at the BMF		95,000					\$95,000
Replace RTU Unit #5 at the BMF			7,500				\$7,500
Facility Signage Design & Enhancement		252,000					\$252,000
Exterior Lighting Upgrades		256,477					\$256,477
Escalator Coverage Design		65,000					\$65,000
CSB Elevator Retrofit		140,925	281,850	328,022			\$750,797
CSB Terrazzo Floor Repairs				176,200			\$176,200
Chiller Replacement			338,500				\$338,500
BAS Controls Upgrade		43,445					\$43,445
CSB Restroom Renovation					45,400		\$45,400
Design & Landscaping Improvements			182,000				\$182,000
Modification of Equipment Access Ramp			90,000				\$90,000
Bus Level HVAC/Entrance Upgrade			472,500				\$472,500
Bus Level Security Barriers		8,750					\$8,750
FIDS Monitors						86,625	\$86,625
Information Booths						10,000	\$10,000
	\$5,436	\$2,706,597	\$1,372,350	\$504,222	\$45,400	\$96,625	\$4,730,630
Total	\$335,682	\$2,706,597	\$1,372,350	\$504,222	\$45,400	\$96,625	\$5,060,876

Source: CBRE (Rental Car Center facility operator) and Houston Airport System.

The balance in the Facility Improvement Fund (FIF) as of October 31, 2017 (approximately \$29.1 million) is more than sufficient to fund the currently anticipated capital needs of the Consolidated Rental Car Facility including the remaining costs of projects in process and the new 2018-2022 capital improvement program.

Status of the Facility Improvement Fund

As of October 31, 2017, the balance in the FIF was \$29.1 million. These funds represent moneys available for planned capital projects and for capital improvements, contingencies, debt retirement, or, if needed, rate stabilization.

Table 9 shows the projected flows in the FIF in 2017 and 2018. The balance in the FIF is projected to be approximately \$30.5 million at the end of 2017 and \$33.8 million at the end of 2018.

Table 9

PROJECTED CASH FLOWS IN THE FACILITY IMPROVEMENT FUND
Consolidated Rental Car Facility
 George Bush Intercontinental Airport / Houston
 For Years Ending December 31

	Estimated 2017	Projected 2017
<u>Facility Improvement Fund (FIF)</u>	<i>Actual as of 12/31/16</i>	
Beginning balance	\$25,855,756	\$30,532,000
Transfers in (from CFC Revenue Fund)	4,745,000	5,705,000
Capital Expenditures (see Table 8)	(264,000)	(2,612,000)
Interest income	195,000	200,000
Ending Balance	<u>\$30,531,756</u>	<u>\$33,825,000</u>
	<i>Actual as of 10/31/17:</i>	
	\$29,116,941	

Other Account Balances

Under the Trust Indenture, two accounts were established in the Project Fund: the *Operators Account* used to construct the Operators' maintenance and storage facilities (referred to as the Operators Projects), and the *City Account* used to construct the site infrastructure, central facility, and rental car garage (referred to as the City Project). Both of these Projects are complete and the accounts have been closed out.

Projected Debt Service Coverage

Table 10 shows the calculation of debt service coverage on the 2001 Bonds and 2014 Refunding Bonds for actual 2015, actual 2016, estimated 2017, and projected 2018.

Pledged Revenues include CFC collections, investment income on certain funds and accounts, and transfers from the Rate Stabilization Account and the Coverage Account. In September 2015, HAS moved the investment of moneys in various Consolidated Rental Car Facility funds and accounts from JPMorgan (their money market fund) to BlackRock (their *Institutional BlackRock TemFund*), and investment performance has improved significantly since then.

Table 10

CALCULATION OF DEBT SERVICE COVERAGE
Consolidated Rental Car Facility
George Bush Intercontinental Airport / Houston
For Years Ending December 31

	Jan - Mar	Apr - Jun	Actual	Actual	Estimated	Projected
			2015	2016	2017	2018
CFC Rate:	Jan - Mar		\$4.00	\$4.00	\$3.00	\$4.00
	Apr - Jun		\$4.00	\$3.00	\$4.00	\$4.00
CFC Collections			\$17,359,920	\$14,822,377	\$15,491,000	\$16,566,000
Interest Income			3,840	27,125	53,000	60,000
Transfers from Rate Stabilization Account			0	0	0	0
Transfers from Coverage Account			3,169,143	3,169,143	3,169,000	3,169,000
Total Resources available for Debt Service	A		\$20,532,903	\$18,018,645	\$18,713,000	\$19,795,000
Total Annual Debt Service¹						
2001 Bonds			\$4,691,128	\$4,691,128	\$4,691,000	\$4,691,128
2014 Refunding Bonds			\$5,851,019	\$5,957,835	\$6,074,000	\$6,193,893
	B		\$10,542,147	\$10,648,963	\$10,765,000	\$10,885,021
Debt Service Coverage Ratio	A / B		1.95	1.69	1.74	1.82

1. Debt service is shown on an accrual basis. For example, 2015 debt service equals the sum of the July 2, 2015 and January 2, 2016 payments.

The Trust Indenture requires that Pledged Revenues provide at least 1.25x coverage of debt service each year. Debt service coverage is projected to be **1.74 in 2017** (based on 10 months year-to-date actual results) and **1.82x in 2018**—ratios that substantially exceed the 1.25x Trust Indenture requirement.

* * * *

Mr. Kenneth Gregg
December 21, 2017

18

Recommendation

Based on the foregoing, I concur with HAS's decision to leave the CFC rate at the current \$4.00 in 2018.

Respectfully submitted,

A handwritten signature in blue ink that reads "Roger H. Bates". The signature is written in a cursive style with a large initial "R" and "B".

Roger H. Bates