

# ROGER H. BATES

Airport Consultant

---

December 28, 2018

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

Re: 2019 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 2019 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 2017 and year-to-date 2018 (January through October), as obtained from HAS records.

For the first 10 months of 2018, passenger originations at the Airport (the driver of rental car activity) increased by 6.6% while total passenger enplanements increased by 8.0% compared to the same period of 2017. Some of the traffic increase in 2018 is attributable to the fact that traffic in the August-September period of 2017 was adversely affected by Hurricane Harvey and its aftermath. (See the green colored box in Table 1.) 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. Flight activity at the Airport was seriously disrupted in late August and early September of 2017.

Underlying air traffic demand at the Airport has been strong and relatively stable in 2018. Excluding the months of August and September (the growth rates for which were affected by the reduced 2017 numbers), passenger enplanements have increased by an average of 4.7% per month and passenger originations by 3.5% a month in 2018, still well above recent annual averages. This performance reflects a robust national economy with general economic (GDP) growth that has been well above recent annual trends. The passage of federal tax legislation in late 2017 lowered business tax rates and stimulated overall business activity in the U.S. economy and most likely had a concomitant positive effect on rental car demand throughout the U.S.

In Houston, both air traffic and rental car demand is particularly affected by economic conditions and business activity in the oil & gas industry. For most of 2018, the price of oil has ranged between \$50-\$70 a barrel—approximately 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.<sup>1</sup> Oil prices have fallen back towards \$50 a barrel in the fall of 2018, suggesting a softening in oil markets worldwide, and the effect of that softening may soon be reflected in local economic trends. 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.

---

<sup>1</sup> "Oil Producers Extend Cuts Through 2018," The Wall Street Journal, December 1, 2017.

Table 1

**RECENT TRENDS IN AIR TRAFFIC ACTIVITY**  
**Calendar Years 2018 and 2017**  
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
<b>2018</b>					
Jan	1,605,972	-2.4%	835,380	-0.7%	52.0%
Feb	1,524,115	3.2%	785,515	0.4%	51.5%
Mar	1,841,731	4.2%	982,567	3.9%	53.4%
Apr	1,774,853	7.8%	934,935	5.8%	52.7%
May	1,888,218	3.6%	1,048,005	2.2%	55.5%
Jun	2,053,835	5.9%	1,147,541	4.0%	55.9%
Jul	2,109,433	6.7%	1,159,653	3.9%	55.0%
Aug	1,903,924	27.9%	1,047,760	23.4%	55.0%
Sep	1,639,626	19.9%	915,942	19.2%	55.9%
Oct	1,826,245	8.1%	1,002,901	7.3%	54.9%
	<b>18,167,952</b>	<b>8.0%</b>	<b>9,860,199</b>	<b>6.6%</b>	<b>54.3%</b>
Nov					
Dec					
<b>Total 2018</b>					
<b>2017</b>					
Jan	1,644,772	-3.7%	840,926	1.3%	51.1%
Feb	1,476,581	-5.6%	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%	1,103,381	2.7%	56.9%
Jul	1,976,302	1.7%	1,115,946	6.9%	56.5%
Aug	1,488,888	-14.4%	848,970	-8.3%	57.0%
Sep	1,367,932	-13.6%	768,567	-9.2%	56.2%
Oct	1,689,743	-0.8%	934,915	5.3%	55.3%
	<b>16,820,345</b>	<b>-3.2%</b>	<b>9,250,204</b>	<b>1.0%</b>	<b>55.0%</b>
Nov	1,709,728	3.3%	926,376	6.3%	54.2%
Dec	1,854,411	2.4%	1,003,588	3.4%	54.1%
	<b>3,564,139</b>	<b>2.9%</b>	<b>1,929,964</b>	<b>4.8%</b>	<b>54.1%</b>
<b>Total 2017</b>	<b>20,384,484</b>	<b>-2.2%</b>	<b>11,180,168</b>	<b>1.7%</b>	<b>54.8%</b>

### **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 2018 and 2017. Actual CFC revenues and transaction days for 2018 are then compared with the 2017 actual amounts and with the projections for 2018 prepared in December 2017.

The first 10 months of 2018, the total number of transaction days increased 5.8% over the same period of 2017, generally tracking the increase in originating passenger demand (+6.6%).

Year to date, the total number of transaction days in 2018 are 4.5% ahead of the projection prepared in December 2017.

The CFC rate in 2018 was \$4.00 per transaction day.

During the first 10 months of 2018 CFC revenues accrued increased by 12.5% over the same period of 2017. Again a significant portion of this increase is attributable to the effects of Hurricane Harvey in 2017 which substantially reduced CFC revenues in August and September of that year. Also, a portion of rental car transactions in the early months of 2017 were charged at the earlier lower rate of \$3.00 per transaction day.

Year-to-date, CFC revenues in 2018 are 4.5% ahead of the projection prepared in December 2017.



Table 2A

**2018 TRANSACTION DAYS<sup>1</sup>**  
**Consolidated Rental Car Facility**  
 George Bush Intercontinental Airport / Houston

Applicable Month	Month of Payment	Total Transaction Days		Increase (Decrease)	Percentage Change	2018 Projection	Actual 2018 vs. Projection	Percentage Change
		Actual 2018	Actual 2017					
Jan	Feb	313,639	297,465	16,174		323,000	(9,361)	
Feb	Mar	337,630	339,072	(1,442)		356,000	(18,370)	
Mar	Apr	398,690	385,066	13,624		400,000	(1,310)	
Apr	May	398,347	364,191	34,156		377,000	21,347	
May	Jun	411,280	374,602	36,678		370,000	41,280	
Jun	Jul	360,665	325,103	35,562		316,000	44,665	
Jul	Aug	341,535	321,346	20,189		315,000	26,535	
Aug	Sep	360,961	308,169	52,792		299,000	61,961	
Sep	Oct	326,425	296,094	30,331		292,000	34,425	
Oct	Nov	381,086	421,356	(40,270)		425,000	(43,914)	
		<b>3,630,258</b>	<b>3,432,464</b>	<b>197,794</b>	<b>5.8%</b>	<b>3,473,000</b>	<b>157,258</b>	<b>4.5%</b>
Nov	Dec		376,154			358,000		
Dec	Jan		325,105			322,000		
			<b>701,259</b>			<b>680,000</b>		
		<b>3,630,258</b>	<b>4,133,723</b>			<b>4,153,000</b>		

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

Table 2B

**2018 CFC REVENUES<sup>1</sup>**  
**Consolidated Rental Car Facility**  
 George Bush Intercontinental Airport / Houston

CFC Rate

	2018	2017
Jan - Mar	\$4.00	\$3.00
Apr - Dec	\$4.00	\$4.00

Month of Accrual	Month of Payment	Total CFC Revenues		Increase (Decrease)	Percentage Change	2018 Projection	Actual 2018 vs. Projection	Percentage Change
		Actual 2018	Actual 2017					
Jan	Feb	\$1,254,556	\$970,423	\$284,133		\$1,292,000	(\$37,444)	
Feb	Mar	\$1,350,520	\$1,107,317	\$243,203		\$1,424,000	(\$73,480)	
Mar	Apr	\$1,594,760	\$1,256,508	\$338,252		\$1,600,000	(\$5,240)	
Apr	May	\$1,593,388	\$1,391,355	\$202,033		\$1,508,000	\$85,388	
May	Jun	\$1,645,120	\$1,495,339	\$149,781		\$1,480,000	\$165,120	
Jun	Jul	\$1,442,660	\$1,300,210	\$142,450		\$1,264,000	\$178,660	
Jul	Aug	\$1,366,140	\$1,285,346	\$80,794		\$1,260,000	\$106,140	
Aug	Sep	\$1,443,844	\$1,232,709	\$211,135		\$1,196,000	\$247,844	
Sep	Oct	\$1,305,700	\$1,184,314	\$121,386		\$1,168,000	\$137,700	
Oct	Nov	\$1,524,344	\$1,685,387	(\$161,043)		\$1,700,000	(\$175,656)	
		<b>\$14,521,032</b>	<b>\$12,908,908</b>	<b>\$1,612,124</b>	<b>12.5%</b>	<b>\$13,892,000</b>	<b>\$629,032</b>	<b>4.5%</b>
Nov	Dec	\$0	\$1,504,614			\$1,432,000		
Dec	Jan	\$0	\$1,300,420			\$1,288,000		
		\$0	<b>\$2,805,034</b>			<b>\$2,720,000</b>		
		<b>\$14,521,032</b>	<b>\$15,713,942</b>			<b>\$16,612,000</b>		

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 2018," 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 2018 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 \$17,533,000 in 2018—an 11.6% increase from actual CFC revenues in 2017 and a 5.5% increase from the projection of 2018 CFC revenues made last December.

Total CFC collections are now projected to be \$17,441,000 in 2018—a 13.5% increase from actual CFC collections in 2017 and a 5.3% increase from the projection of 2018 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 2018, 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, 2019:

#### Funds Available for January 2, 2019 Debt Service Payment

Balance in Debt Service Fund - October 31, 2018	\$6,485,840
Estimated CFC Collections	
November	\$1,524,344
December	\$1,616,000
	<hr/>
<b>Total funds estimated to be available</b>	<b>\$9,626,184</b>
	<hr/> <hr/>
<b>Debt service requirements--January 2, 2019</b>	
Remaining 2001 Bonds	
Principal	0
Interest	2,345,564
	<hr/>
	<b>\$2,345,564</b>
New 2014 Refunding Bonds	
Principal	5,715,000
Interest	239,447
	<hr/>
	<b>\$5,954,447</b>
	<hr/> <hr/>
<b>Total Debt Service Payment--January 2, 2019</b>	<b>\$8,300,011</b>

Table 3

**ACTUAL RENTAL CAR TRANSACTION DAYS AND CFC REVENUES  
Calendar Year 2018**

Consolidated Rental Car Facility  
George Bush Intercontinental Airport / Houston

CFC Rate	Jan-Mar	Apr-Dec
\$4.00		
\$4.00		

% Orig Pax	55.0%
------------	-------

EP Growth	5.0%
-----------	------

Key Assumptions:

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	1,605,972	-2.4%	835,380	-0.7%	52.0%	313,639	5.4%	0.375	6.1%	\$1,254,556	29.3%	\$1,300,420	36.1%
Feb	Actual	1,524,115	3.2%	785,515	0.4%	51.5%	337,630	-0.4%	0.430	-0.8%	\$1,350,520	22.0%	\$1,254,556	29.3%
Mar	Actual	1,841,731	4.2%	982,567	3.9%	53.4%	398,690	3.5%	0.406	-0.3%	\$1,594,760	26.9%	\$1,350,520	22.0%
Apr	Actual	1,774,853	7.8%	934,935	5.8%	52.7%	398,347	9.4%	0.426	3.4%	\$1,593,388	14.5%	\$1,594,760	26.9%
May	Actual	1,888,218	3.6%	1,048,005	2.2%	55.5%	411,280	9.8%	0.392	7.4%	\$1,645,120	10.0%	\$1,593,388	14.5%
Jun	Actual	2,053,835	5.9%	1,147,541	4.0%	55.9%	360,665	10.9%	0.314	6.7%	\$1,442,660	11.0%	\$1,645,120	10.0%
Jul	Actual	2,109,433	6.7%	1,159,653	3.9%	55.0%	341,535	6.3%	0.295	2.3%	\$1,366,140	6.3%	\$1,442,660	11.0%
Aug	Actual	1,903,924	27.9%	1,047,760	23.4%	55.0%	360,961	17.1%	0.345	-5.1%	\$1,443,844	17.1%	\$1,366,140	6.3%
Sep	Actual	1,639,626	19.9%	915,942	19.2%	55.9%	326,425	10.2%	0.356	-7.5%	\$1,305,700	10.2%	\$1,443,844	17.1%
Oct	Actual	1,826,245	8.1%	1,002,901	7.3%	54.9%	381,086	-9.6%	0.380	-15.7%	\$1,524,344	-9.6%	\$1,305,700	10.2%
		<b>18,167,952</b>	<b>8.0%</b>	<b>9,860,199</b>	<b>6.6%</b>	<b>54.3%</b>	<b>3,630,258</b>	<b>5.8%</b>	<b>0.368</b>	<b>-0.8%</b>	<b>14,521,032</b>	<b>12.5%</b>	<b>14,297,108</b>	<b>17.4%</b>
Nov	Estimate	1,795,000	5.0%	987,000	6.5%	55.0%	405,000	7.7%	0.410	1.0%	\$1,620,000	7.7%	\$1,524,344	-9.6%
Dec	Estimate	1,947,000	5.0%	1,071,000	6.7%	55.0%	348,000	7.0%	0.325	-7.4%	\$1,392,000	7.0%	\$1,620,000	7.7%
		<b>21,910,000</b>	<b>7.5%</b>	<b>11,918,000</b>	<b>6.6%</b>	<b>54.4%</b>	<b>4,383,000</b>	<b>6.0%</b>	<b>0.368</b>	<b>-0.5%</b>	<b>\$17,533,000</b>	<b>11.6%</b>	<b>\$17,441,000</b>	<b>13.5%</b>

Prior Projection (Dec 2017)	20,477,000	11,262,000	4,153,000	0.364	\$16,612,000	\$16,566,000
Change from Projection	1,433,000	656,000	230,000	0.364	921,000	875,000
% Change	7.0%	5.8%	5.5%	0.364	5.5%	5.3%



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 2016, 2017 and year-to-date 2018, and projected monthly transaction days per originating passenger for the last two months of 2018 and all of calendar year 2019. The data in Table 4 generally show a stable trend for average annual transaction days per originating passenger in 2018 compared to 2017.

For the purposes of forecasting CFC revenues, it is assumed that the monthly transaction days per originating passenger in 2019 would remain the same as in 2018 with the same monthly demand patterns. These assumptions regarding transaction days per originating passenger are the principal drivers of the 2019 projection of transaction days and CFC revenues.

Table 4

**Trends in Transaction Days per Originating Passenger  
Rental Car Market**

George Bush Intercontinental Airport / Houston

	Actual			Projected
	2016	2017	2018	2019
				<i>assume no change from prior year</i>
Jan	0.387	0.354	0.375	<b>0.375</b>
Feb	0.426	0.434	0.430	<b>0.430</b>
Mar	0.384	0.407	0.406	<b>0.406</b>
Apr	0.409	0.412	0.426	<b>0.426</b>
May	0.381	0.365	0.392	<b>0.392</b>
Jun	0.302	0.295	0.314	<b>0.314</b>
Jul	0.310	0.288	0.295	<b>0.295</b>
Aug	0.359	0.363	0.345	<b>0.345</b>
Sep	0.371	0.385	0.356	<b>0.356</b>
Oct	0.402	0.451	0.380	<b>0.380</b>
			Projected	
Nov	0.367	0.406	<b>0.410</b>	<b>0.410</b>
Dec	0.301	0.351	<b>0.325</b>	<b>0.325</b>
Annual Average	<b>0.363</b>	<b>0.370</b>	<b>0.368</b>	<b>0.368</b>
Percent Change	<b>-7.8%</b>	<b>1.7%</b>	<b>-0.5%</b>	<b>0.0%</b>

### **Projected CFC Revenues and Collections at the Current CFC Rate**

Table 5, “Projected Rental Car Transaction Days and CFC Revenues—Calendar Year 2019,” extrapolates the historical relationships shown in Table 3 to produce a projection of CFC revenues and CFC collections for 2019 *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 2.5% in 2019, reflecting a tapering down of growth in passenger demand in the Houston market.
- Originating passengers would account for 55% of passenger enplanements in 2019, consistent with the average percentage experienced during the first 10 months of 2018.
- Monthly transaction days per originating passenger in 2019 would be the same as in 2018 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 \$18,200,000 and CFC collections are projected to be \$18,164,000 in 2019.

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 \$2.27, slightly more than half the current rate.

### **Recommended CFC Rate**

Recent operating results and a projected 2019 “breakeven” CFC rate of only \$2.27 suggest that HAS could consider reducing the CFC rate in 2019.

However, since early October, global oil prices have fallen significantly, falling below \$50 a barrel in mid-December. The drop in oil prices has raised concerns about a potential adverse effect on the Houston area economy (and, in turn, rental car demand), as expressed in a recent article in the Houston Chronicle.<sup>2</sup>

“Houston and Texas could lose thousands of jobs if oil prices remain below \$50 a barrel for an extended period, stalling an energy industry recovery that only a few months ago appeared to be gaining momentum. The oil sector found itself in a downward spiral since early October as growing supplies of crude and fears of a global oil glut triggered a 40 percent plunge in prices from a recent high of \$76 a barrel down to below \$46.

Prices of \$60 a barrel are considered healthy for the industry, generating enough profits for companies to spend, grow and hire. At \$50 a barrel, growth flattens, energy economists said, and below \$50, companies begin to scale back spending. Concerns about an impending global economic slowdown, which would depress demand, have added downward pressure on prices.

---

<sup>2</sup> Houston Chronicle, “Oil under \$50 cause for worry”, December 21, 2018.

In early December, the Organization of Petroleum Exporting Countries (OPEC), Russia and other allies agreed to cut production by 1.2 million barrels of oil a day for the first six months of 2019.

Still, some observers say traders have discounted the impact of the OPEC cuts too much, and they expect oil prices to rise above \$50 a barrel relatively early next year. ‘The markets are overreacting,’ said Peter Jankowski, senior economist with the Greater Houston Partnership. ‘Oil prices should stay above \$50 a barrel for most of next year.’”

On Wednesday, December 26<sup>th</sup>, oil prices rose by 8% only to fall again the following day.<sup>3</sup>

“Oil prices fell on Thursday after rebounding 8 percent in the previous session, as signs of faltering global economic growth and record production of crude pressured prices...U.S. West Texas Intermediate (WTI) crude futures were down \$1.11 at \$45.11 a barrel, a 2.4 percent drop. Prices surged on Wednesday, tracking a spike in the U.S. equities market after President Donald Trump’s administration attempted to shore up investor confidence. However, U.S. stocks retreated on Thursday, dragging oil prices down with them.

Brent and WTI have lost more than a third of their value since the beginning of October and are heading for declines of around 20 percent in 2018...Market participants have grown worried about an oversupply of crude. Three months ago it looked as if the global oil market would be undersupplied through the northern hemisphere winter as U.S. sanctions removed large volumes of Iranian crude. But other oil exporters have compensated for any shortfall, filling global inventories and depressing prices.”

The recent volatility of oil prices only confirms the current uncertain economic environment, both in Houston and globally.

Also, 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 January to November 2018, the total amount of such fees collected at IAH increased by 51% 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**

January-November 2018	\$2,854,866
January-November 2017	<u>\$1,889,429</u>
Increase	\$ 965,437
Percent Increase	51.1%

While these ride service operators compete primarily with taxi and limousine services, they could have some impact on rental car demand as well.

---

<sup>3</sup> Reuters, “Oil prices fall more than 2 percent as U.S. stock markets retreat”, December 27, 2018.



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.

Because of (1) current economic uncertainty, particularly in oil and gas markets, and the potential repercussions for the Houston area economy, (2) the uncertain longer-term effect of the rapidly growing Uber and Lyft ride services on rental car demand and (3) 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 2019**  
George Bush Intercontinental Airport / Houston

Projected CFC Collections			
	100.0%	90.0%	80.0%
January	<b>\$1,392,000</b>	\$1,252,800	\$1,113,600
February	<b>1,360,000</b>	1,224,000	1,088,000
March	<b>1,476,000</b>	1,328,400	1,180,800
April	<b>1,684,000</b>	1,515,600	1,347,200
May	<b>1,704,000</b>	1,533,600	1,363,200
June	<b>1,672,000</b>	1,504,800	1,337,600
July	<b>1,456,000</b>	1,310,400	1,164,800
August	<b>1,400,000</b>	1,260,000	1,120,000
September	<b>1,480,000</b>	1,332,000	1,184,000
October	<b>1,320,000</b>	1,188,000	1,056,000
November	<b>1,564,000</b>	1,407,600	1,251,200
December	<b>1,656,000</b>	1,490,400	1,324,800
<b>Total--Calendar Year 2019</b>	<b>\$18,164,000</b>	<b>\$16,347,600</b>	<b>\$14,531,200</b>

**PROJECTION OF RENTAL CAR TRANSACTION DAYS AND CFC REVENUES  
Calendar Year 2019**

Consolidated Rental Car Facility  
George Bush Intercontinental Airport / Houston

2019	Key Assumptions:		2.5%		55.0%	% Change from Prior Year		CFC Rate				
	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	Jan-Mar Apr-Dec		
Jan	1,646,000		905,000		340,000		0.375		\$4.00			
Feb	1,562,000		859,000		369,000		0.430		\$4.00			
Mar	1,888,000		1,038,000		421,000		0.406					
Apr	1,819,000		1,000,000		426,000		0.426					
May	1,935,000		1,064,000		418,000		0.392					
Jun	2,105,000		1,158,000		364,000		0.314					
Jul	2,162,000		1,189,000		350,000		0.295					
Aug	1,952,000		1,074,000		370,000		0.345					
Sep	1,681,000		925,000		330,000		0.356					
Oct	1,872,000		1,030,000		391,000		0.380					
Nov	1,835,000		1,009,000		414,000		0.410					
Dec	1,996,000		1,098,000		357,000		0.325					
<b>Total - 2019</b>	<b>22,453,000</b>	<b>2.5%</b>	<b>12,349,000</b>	<b>3.6%</b>	<b>4,550,000</b>	<b>3.8%</b>	<b>0.368</b>	<b>3.8%</b>	<b>\$18,200,000</b>	<b>3.8%</b>	<b>\$18,164,000</b>	<b>4.2%</b>

Applicable Month	Actual or Projection
------------------	----------------------

**Operating Cash Flow**

Table 7 on the following page shows the projected operating cash flow associated with the Consolidated Rental Car Facility in 2018 and 2019 assuming continuation of the current \$4.00 CFC rate in 2019. 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 \$6.6 million in 2018 and \$7.3 million in 2019.

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:	<i>Jan-Mar</i>	<i>Apr-Dec</i>	Estimated	Projected
				2018	2019
				\$4.00	\$4.00
				\$4.00	\$4.00
Projected CFC Collections (from Tables 3 and 5)				\$17,437,000	\$18,164,000
Transfers from CFC Rate Stabilization Account				0	0
Interest Income				127,000	150,000
Total Revenues and Transfers				\$17,564,000	\$18,314,000
Replenish Administrative Costs Account (to \$48,000)				40,000	40,000
Replenish CFC Rate Stabilization Account (to \$300,000)				0	0
Transfers to Debt Service Fund					
Principal				5,715,000	5,960,000
Interest				5,170,000	5,038,000
				\$10,885,000	\$10,998,000
Total Requirement				\$10,925,000	\$11,038,000
Projected surplus @ proposed CFC rate (= estimated transfer to Facility Improvement Fund)				\$6,639,000	\$7,276,000



**Other Capital Needs**

HAS and the Operators have developed a five-year (2019-2023) capital improvement program for the Consolidated Rental Car Facility. In addition, certain other projects were completed in 2018 and 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 \$4.2 million over the six-year period, 2018-2023. All of these projects have been or are anticipated to be funded from the Facility Improvement Fund (internally generated cash flow).

**Table 8**

**2018 - 2023 CAPITAL IMPROVEMENTS**  
**Consolidated Rental Car Facility**  
George Bush Intercontinental Airport / Houston

Project	Estimated 2018	Projected					2018-2023 Total
		2019	2020	2021	2022	2023	
<b>Projects Expected to be Completed in 2018</b>							
Facility	92,341						92,341
	<b>\$92,341</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$92,341</b>
<b>Projects Planned for 2019-2023</b>							
Fire Alarm Panel Replacement		75,000					75,000
Back-up Generator CSB/BMF	45,000	750,000					795,000
Replace RTU unit #7 at Bus Maintenance Facility			95,000				95,000
Replace RTU unit #5 at Bus Maintenance Facility			9,000				9,000
Facility Signage Design & Enhancement	73,000	252,000					325,000
Exterior sign lighting and pole lighting LED upgrade			256,000				256,000
Escalator Coverage Design & Improvement	16,000	65,000					81,000
CSB Elevator Retrofit				141,000	282,000	328,000	751,000
CSB Terrazzo Floor Repairs			176,000				176,000
Chiller Replacement		338,000					338,000
BAS Controls Upgrade		74,000					74,000
CSB Restroom Renovation				45,000			45,000
Design & Landscaping Improvements			182,000				182,000
Modification of Equipment Access Ramp		90,000					90,000
Bus Level HVAC/Entrance Upgrade			473,000				473,000
Bus Level Security Barriers		9,000					9,000
FIDS Monitors					87,000	87,000	174,000
Information Booths					10,000	10,000	20,000
Survey structural repairs		40,000					40,000
Expansion joint replacement		149,000					149,000
	<b>\$134,000</b>	<b>\$1,842,000</b>	<b>\$1,191,000</b>	<b>\$186,000</b>	<b>\$379,000</b>	<b>\$425,000</b>	<b>\$4,157,000</b>
<b>Total</b>	<b>\$226,341</b>	<b>\$1,842,000</b>	<b>\$1,191,000</b>	<b>\$186,000</b>	<b>\$379,000</b>	<b>\$425,000</b>	<b>\$4,249,341</b>

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

The balance in the Facility Improvement Fund (FIF) as of October 31, 2018 (approximately \$36.5 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 2019-2023 capital improvement program.

**Status of the Facility Improvement Fund**

As of October 31, 2018, the balance in the FIF was \$36.5 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 \$37.6 million at the end of 2018 and \$43.3 million at the end of 2019.

Table 9

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

	<b>Actual YTD 2018</b>	<b>Estimated 2018</b>	<b>Projected 2019</b>
<b><u>Facility Improvement Fund (FIF)</u></b>	<i>Actual as of 1/1/18</i>	<i>Actual as of 1/1/18</i>	
Beginning balance	<b>\$30,562,015</b>	<b>\$30,562,015</b>	\$37,629,000
Transfers in (from CFC Revenue Fund)	5,582,742	6,616,744	7,276,000
Capital Expenditures	(94,254)	(94,254)	(1,842,000)
Interest income	422,367	544,840	200,000
Ending Balance	<b>\$36,472,870</b>	<b>\$37,629,345</b>	<b>\$43,263,000</b>

*Actual as of 10/31/18:*

**\$36,472,870**

*per Trustee Statement*

**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 2016, actual 2017, estimated 2018, and projected 2019.

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

	CFC Rate:	Jan - Mar			
		Apr - Jun			
		Actual 2016	Actual 2017	Estimated 2018	Projected 2019
		\$4.00	\$3.00	\$4.00	\$4.00
		\$3.00	\$4.00	\$4.00	\$4.00
CFC Collections		\$14,822,377	\$15,369,359	\$17,437,000	\$18,164,000
Additional Hertz CFC revenues received in 2018 <sup>1</sup>			300,368		
Interest Income		27,125	56,976	127,000	150,000
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	<b>A</b>	<b>\$18,018,645</b>	<b>\$18,895,846</b>	<b>\$20,733,000</b>	<b>\$21,483,000</b>
Total Annual Debt Service <sup>2</sup>					
2001 Bonds		\$4,691,128	\$4,691,128	\$4,691,128	\$4,691,128
2014 Refunding Bonds		\$5,957,835	\$6,074,080	\$6,193,893	\$6,306,534
	<b>B</b>	<b>\$10,648,963</b>	<b>\$10,765,208</b>	<b>\$10,885,021</b>	<b>\$10,997,662</b>
Debt Service Coverage Ratio	<b>A / B</b>	<b>1.69</b>	<b>1.76</b>	<b>1.90</b>	<b>1.95</b>

1. See text for discussion.

2. Debt service is shown on an accrual basis. For example, 2017 debt service equals the sum of the July 2, 2017 and January 2, 2018 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 **1.90x in 2018** (based on extrapolating 10 months year-to-date actual results) and **1.95x in 2019**—ratios that substantially exceed the 1.25x Trust Indenture requirement.

During the recovery from the devastation from Hurricane Harvey in 2017, some insurance contract car rentals were processed at the Consolidated Rental Car Facility by Hertz. At the time the rentals were processed, Hertz did not collect or submit to HAS the associated CFC fees related to these rentals. After legal review of the bond documents and the special facility lease by both Hertz and HAS, it was agreed that the insurance contract car rentals were subject to the CFC. In April 2018 Hertz remitted \$300,368 to the bank trustee for CFCs related to the insurance contract car rentals originally omitted by Hertz from 2017 CFC payments.

For the purposes of this report, the additional amount remitted by Hertz in 2018 is not included as 2018 CFC revenues since it relates to transactions that occurred in 2017. Debt service coverage for 2017 was originally reported as 1.75x and then restated in December 2018 to 1.73x to correct a computational error. Restating 2017 results to take into account the additional CFC revenue from Hertz results in 2017 debt service coverage of **1.76x**.

\* \* \* \*

### **Recommendation**

Based on the foregoing, I concur with HAS's decision to leave the CFC rate at the current \$4.00 per transaction day in 2019.

Respectfully submitted,



Roger H. Bates