

ATTACHMENT A
COMPARISON OF PENSION FUNDING PROGRESS TABLE

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COMPARISON OF PENSION FUNDING PROGRESS TABLE**

Agency	2017 Valuation		2018 Valuation					2020 Rollforward				Annualized growth 2007 -2018		Change in UAL 2017 to 2018		
	UAL	FS	AL	MVA	UAL	FS		UAL	Total Pmts	Interest as % of Total Pmts	Pmt Efficiency	AL	GF Rev	Total Increase	% Change	
City of Anaheim Total	741,068,980	70.8%	2,715,845,662	1,898,638,863	817,206,799	69.9%	↓	833,036,314	↑	1,542,601,086	46%	185%	5.8%	2.9%	76,137,819	10%
City of Brea Total	121,252,581	68.5%	415,311,268	278,113,460	137,197,808	67.0%	↓	140,810,148	↑	271,703,204	48%	193%	6.4%	1.6%	15,945,227	13%
City of Buena Park Total	39,221,940	71.1%	145,043,589	101,163,530	43,880,059	69.7%	↓	44,659,783	↑	81,487,121	45%	182%	5.6%	1.4%	4,658,119	12%
City of Costa Mesa Total	212,923,672	62.1%	598,694,764	368,109,393	230,585,371	61.5%	↓	234,013,094	↑	449,689,723	48%	192%	6.4%	1.6%	17,661,699	8%
City of Cypress* Total	18,663,147	76.1%	83,901,710	62,275,214	21,626,496	74.2%	↓	22,166,992	↑	41,210,977	46%	186%	6.2%	0.0%	2,963,349	16%
City of Fullerton Total	234,893,103	69.1%	804,066,374	547,784,717	256,281,657	68.1%	↓	263,656,687	↑	511,514,778	48%	194%	5.3%	2.7%	21,388,554	9%
City of Garden Grove Total	268,412,094	66.9%	872,909,063	573,678,566	299,230,497	65.7%	↓	305,876,304	↑	589,968,753	48%	193%	6.3%	3.2%	30,818,403	11%
City of Huntington Beach Total	403,394,647	68.2%	1,350,128,586	913,955,432	436,173,154	67.7%	↓	443,118,659	↑	834,903,132	47%	188%	6.1%	0.7%	32,778,507	8%
City of Irvine Total	154,634,662	76.1%	713,566,211	546,278,834	167,287,377	76.6%	↑	150,127,167	↓	261,916,655	43%	174%	9.5%	0.3%	12,652,715	8%
City of La Habra Total	26,498,700	75.9%	118,389,059	88,810,023	29,579,036	75.0%	↓	30,486,598	↓	56,219,402	46%	184%	6.8%	2.0%	3,080,336	12%
City of Laguna Beach Total	27,243,435	75.3%	119,568,104	89,685,511	29,882,593	75.0%	↓	29,748,805	↓	52,202,974	43%	175%	8.4%	3.3%	2,639,158	10%
City of Mission Viejo Total	19,596,811	76.3%	90,898,921	68,702,880	22,196,041	75.6%	↓	22,444,284	↑	38,486,689	42%	171%	10.8%	0.8%	2,599,230	13%
City of Newport Beach Total	319,668,962	66.0%	1,006,978,316	673,843,069	333,135,247	66.9%	↑	318,291,681	↓	514,736,400	38%	162%	6.6%	3.4%	13,466,285	4%
City of Orange Total	256,020,262	69.9%	908,632,171	628,054,657	280,577,514	69.1%	↓	287,538,115	↑	550,128,578	48%	191%	5.9%	1.8%	24,557,252	10%
City of Santa Ana Total	613,781,439	68.6%	2,079,148,456	1,398,052,116	681,096,340	67.2%	↓	695,805,669	↑	1,316,070,957	47%	189%	5.6%	1.2%	67,314,901	11%
City of Tustin Total	26,806,151	76.2%	121,641,805	91,823,298	29,818,507	75.5%	↓	29,293,129	↓	53,812,744	46%	184%	7.8%	22.8%	3,012,356	11%
City of Westminster Total	39,342,203	69.2%	136,149,175	92,765,036	43,384,139	68.1%	↓	44,136,236	↑	81,752,230	46%	185%	6.2%	3.1%	4,041,936	10%
City of Yorba Linda Total	21,183,584	69.7%	75,618,252	52,390,304	23,227,948	69.3%	↓	23,369,131	↑	44,171,593	47%	189%	6.9%	1.5%	2,044,364	10%
Irvine Ranch Water District Total	62,900,429	75.8%	283,187,278	211,486,895	71,700,383	74.7%	↓	72,558,982	↑	123,033,441	41%	170%	8.9%	6.3%	8,799,954	14%
Santa Margarita Water District Total	29,770,735	68.5%	103,849,532	70,159,847	33,689,685	67.6%	↓	34,337,181	↑	63,789,095	46%	186%	9.8%	4.3%	3,918,950	13%
Grand Total	3,637,277,537	69.4%	12,743,528,296	8,755,771,645	3,987,756,651	68.7%	↓	4,025,474,959	↑	7,479,399,532	46%	186%	6.3%	2.6%	350,479,114	10%

ATTACHMENT A-1
STANDARD FUNDING OPTIONS SUMMARY

ATTACHMENT A-1
STANDARD FUNDING OPTIONS SUMMARY

			STANDARD FUNDING OPTIONS (SFO)		
			SFO 1	SFO 2	SFO 3
Year	Val Year	Pmt Yr	Default	Current	\$5 Mill One-time Surplus
1	2018	2021	\$ 29,190,322	\$ 35,000,000	\$ 40,000,000
2	2019	2022	\$ 29,993,056	\$ 35,000,000	\$ 35,000,000
3	2020	2023	\$ 30,817,865	\$ 35,000,000	\$ 35,000,000
4	2021	2024	\$ 31,665,356	\$ 35,000,000	\$ 35,000,000
5	2022	2025	\$ 32,536,153	\$ 35,000,000	\$ 35,000,000
6	2023	2026	\$ 33,430,898	\$ 35,000,000	\$ 35,000,000
7	2024	2027	\$ 34,350,247	\$ 35,000,000	\$ 35,000,000
8	2025	2028	\$ 35,294,879	\$ 35,000,000	\$ 35,000,000
9	2026	2029	\$ 36,265,488	\$ 35,000,000	\$ 35,000,000
10	2027	2030	\$ 37,262,789	\$ 35,000,000	\$ 35,000,000
11	2028	2031	\$ 38,287,516	\$ 35,000,000	\$ 35,000,000
12	2029	2032	\$ 39,340,423	\$ 35,000,000	\$ 35,000,000
13	2030	2033	\$ 40,422,284	\$ 35,000,000	\$ 35,000,000
14	2031	2034	\$ 41,533,897	\$ 20,194,897	\$ 8,145,672
15	2032	2035	\$ 1,493,823	\$ -	\$ -
16	2033	2036	\$ 1,534,903	\$ -	\$ -
17	2034	2037	\$ 1,577,113	\$ -	\$ -
18	2035	2038	\$ 1,620,484	\$ -	\$ -
19	2036	2039	\$ 1,665,047	\$ -	\$ -
20	2037	2040	\$ 1,710,836	\$ -	\$ -
Totals			\$ 499,993,381	\$ 475,194,897	\$ 468,145,672
Savings over default				\$ 24,798,485	\$ 31,847,710
NPV@3%			\$ 408,169,030	\$ 397,141,882	\$ 393,936,946
Efficiency			161%	153%	151%
Interest % of Total			38%	35%	34%

ATTACHMENT A-2
ANTICIPATORY PREFUNDING OPTIONS SUMMARY

**ATTACHMENT A-2
ANTICIPATORY PREFUNDING OPTIONS SUMMARY**

			ANTICIPATORY PREFUNDING OPTIONS (APO)		
			APO 1	APO 2	APO 3
Year	Val Year	Pmt Yr	\$2 Mill Extra/Yr	\$5 Mill for 5 Yrs, \$2 Mill Extra Thereafter	\$5 Mill Extra/Yr Ongoing
1	2018	2021	\$ 37,000,000	\$ 40,000,000	\$ 40,000,000
2	2019	2022	\$ 37,000,000	\$ 40,000,000	\$ 40,000,000
3	2020	2023	\$ 37,000,000	\$ 40,000,000	\$ 40,000,000
4	2021	2024	\$ 37,000,000	\$ 40,000,000	\$ 40,000,000
5	2022	2025	\$ 37,000,000	\$ 40,000,000	\$ 40,000,000
6	2023	2026	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
7	2024	2027	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
8	2025	2028	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
9	2026	2029	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
10	2027	2030	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
11	2028	2031	\$ 37,000,000	\$ 37,000,000	\$ 40,000,000
12	2029	2032	\$ 37,000,000	\$ 8,280,924	\$ 314,676
13	2030	2033	\$ 7,954,194	\$ 8,508,650	\$ 323,330
14	2031	2034	\$ 8,172,934	\$ 8,742,638	\$ 332,221
15	2032	2035			
16	2033	2036			
17	2034	2037			
18	2035	2038			
19	2036	2039			
20	2037	2040			
Totals			\$ 460,127,127	\$ 447,532,212	\$ 440,970,228
NPV@3%			\$ 390,491,374	\$ 384,672,223	\$ 381,888,446

ATTACHMENT B
INVESTMENT LOSS PREFUNDING TABLE

ATTACHMENT B INVESTMENT LOSS PREFUNDING TABLE

		Expected Shortfall	
Yrs	Projected Plan Assets	1.0%	Cumulative Shortfall + Interest
CMA Outlook Term	1	718,990,555	7,189,906
	2	762,129,988	7,621,300
	3	807,857,787	8,078,578
	4	856,329,254	8,563,293
	5	907,709,010	9,077,090
	6	962,171,550	9,621,716
	7	1,019,901,843	10,199,018
	8	1,081,095,954	10,810,960
	9	1,145,961,711	11,459,617
	10	1,214,719,414	12,147,194

Repayment Term			
Ultra Aggressive	Aggressive	Less Aggressive	Min
5	10	15	20
1,275,463	545,483	308,898	195,454
2,716,737	1,161,880	657,953	416,318
4,340,019	1,856,117	1,051,088	665,073
6,162,918	2,635,724	1,492,567	944,417
8,204,565	3,508,885	1,987,023	1,257,283
10,485,742	4,484,487	2,539,491	1,606,855
13,029,014	5,572,180	3,155,433	1,996,590
15,858,870	6,782,438	3,840,782	2,430,243
19,001,886	8,126,626	4,601,973	2,911,885
22,486,886	9,617,073	5,445,989	3,445,933

		Expected Shortfall	
Yrs	Projected Plan Assets	2.0%	Cumulative Shortfall + Interest
CMA Outlook Term	1	718,990,555	14,379,811
	2	762,129,988	15,242,600
	3	807,857,787	16,157,156
	4	856,329,254	17,126,585
	5	907,709,010	18,154,180
	6	962,171,550	19,243,431
	7	1,019,901,843	20,398,037
	8	1,081,095,954	21,621,919
	9	1,145,961,711	22,919,234
	10	1,214,719,414	24,294,388

Repayment Term			
Ultra Aggressive	Aggressive	Less Aggressive	Min
5	10	15	20
2,602,383	1,143,261	666,393	434,883
5,543,077	2,435,145	1,419,418	926,300
8,855,130	3,890,173	2,267,537	1,479,775
12,574,469	5,524,127	3,219,949	2,101,312
16,740,131	7,354,157	4,286,652	2,797,433
21,394,517	9,398,888	5,478,502	3,575,225
26,583,663	11,678,548	6,807,289	4,442,380
32,357,542	14,215,088	8,285,809	5,407,249
38,770,374	17,032,328	9,927,945	6,478,893
45,880,972	20,156,106	11,748,759	7,667,141

		Expected Shortfall	
Yrs	Projected Plan Assets	3.0%	Cumulative Shortfall + Interest
CMA Outlook Term	1	718,990,555	21,569,717
	2	762,129,988	22,863,900
	3	807,857,787	24,235,734
	4	856,329,254	25,689,878
	5	907,709,010	27,231,270
	6	962,171,550	28,865,147
	7	1,019,901,843	30,597,055
	8	1,081,095,954	32,432,879
	9	1,145,961,711	34,378,851
	10	1,214,719,414	36,441,582

Repayment Term			
Ultra Aggressive	Aggressive	Less Aggressive	Min
5	10	15	20
3,982,355	1,796,562	1,077,215	724,349
8,482,415	3,826,677	2,294,469	1,542,863
13,550,758	6,113,162	3,665,441	2,464,742
19,242,359	8,680,817	5,205,002	3,499,985
25,616,955	11,556,593	6,929,312	4,659,457
32,739,430	14,769,759	8,855,921	5,954,962
40,680,236	18,352,100	11,003,886	7,399,312
49,515,842	22,338,112	13,393,892	9,006,416
59,329,219	26,765,227	16,048,382	10,791,367
70,210,368	31,674,047	18,991,702	12,770,535

ATTACHMENT C
2020-21 STANDARD FUNDING OPTIONS 1-3

ATTACHMENT C (SFO 1)

2020-21 Standard Funding Option 1 - "Default"

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Default Option Total	
			Level % of Pay no Ramp Up/Down			Level % of Pay no Ramp Up/Down				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Min Payment
				\$ -		\$ -				
				\$ -		\$ 21,419,930	\$ -	\$ 8,803,997		
1	2018	2021	\$ 296,871,751	\$ 28,168,551		\$ 13,812,400	\$ 1,021,771		\$ 310,684,151	\$ 29,190,322
2	2019	2022	\$ 288,514,998	\$ 28,943,186		\$ 13,722,340	\$ 1,049,870		\$ 302,237,337	\$ 29,993,056
3	2020	2023	\$ 278,771,983	\$ 29,739,124		\$ 13,596,910	\$ 1,078,741		\$ 292,368,893	\$ 30,817,865
4	2021	2024	\$ 267,523,633	\$ 30,556,950		\$ 13,432,835	\$ 1,108,407		\$ 280,956,468	\$ 31,665,356
5	2022	2025	\$ 254,641,933	\$ 31,397,266		\$ 13,226,589	\$ 1,138,888		\$ 267,868,522	\$ 32,536,153
6	2023	2026	\$ 239,989,284	\$ 32,260,691		\$ 12,974,375	\$ 1,170,207		\$ 252,963,659	\$ 33,430,898
7	2024	2027	\$ 223,417,816	\$ 33,147,860		\$ 12,672,110	\$ 1,202,388		\$ 236,089,926	\$ 34,350,247
8	2025	2028	\$ 204,768,651	\$ 34,059,426		\$ 12,315,398	\$ 1,235,453		\$ 217,084,049	\$ 35,294,879
9	2026	2029	\$ 183,871,112	\$ 34,996,060		\$ 11,899,513	\$ 1,269,428		\$ 195,770,625	\$ 36,265,488
10	2027	2030	\$ 160,541,884	\$ 35,958,452		\$ 11,419,372	\$ 1,304,338		\$ 171,961,256	\$ 37,262,789
11	2028	2031	\$ 134,584,105	\$ 36,947,309		\$ 10,869,510	\$ 1,340,207		\$ 145,453,615	\$ 38,287,516
12	2029	2032	\$ 105,786,398	\$ 37,963,360		\$ 10,244,055	\$ 1,377,063		\$ 116,030,454	\$ 39,340,423
13	2030	2033	\$ 73,921,841	\$ 39,007,352		\$ 9,536,694	\$ 1,414,932		\$ 83,458,536	\$ 40,422,284
14	2031	2034	\$ 38,746,851	\$ 40,080,055		\$ 8,740,646	\$ 1,453,843		\$ 47,487,497	\$ 41,533,897
15	2032	2035				\$ 7,848,625	\$ 1,493,823		\$ 7,848,625	\$ 1,493,823
16	2033	2036				\$ 6,852,806	\$ 1,534,903		\$ 6,852,806	\$ 1,534,903
17	2034	2037				\$ 5,744,786	\$ 1,577,113		\$ 5,744,786	\$ 1,577,113
18	2035	2038				\$ 4,515,542	\$ 1,620,484		\$ 4,515,542	\$ 1,620,484
19	2036	2039				\$ 3,155,388	\$ 1,665,047		\$ 3,155,388	\$ 1,665,047
20	2037	2040				\$ 1,653,928	\$ 1,710,836		\$ 1,653,928	\$ 1,710,836
21	2038	2041							\$ -	\$ -
22	2039	2042							\$ -	\$ -
23	2040	2043							\$ -	\$ -
24	2041	2044							\$ -	\$ -
25	2042	2045							\$ -	\$ -
26	2043	2046							\$ -	\$ -
27	2044	2047							\$ -	\$ -
28	2045	2048							\$ -	\$ -
29	2046	2049							\$ -	\$ -
30	2047	2050							\$ -	\$ -
31	2048	2050							\$ -	\$ -
Total Payments			\$	\$ 473,225,640	\$ -	\$	\$ 26,767,742	\$ 8,803,997	\$	\$ 499,993,381
Net Savings										
								Amortization Efficiency (AE) Ratio	161%	

ATTACHMENT C (SFO 2)

2020-21 Standard Fund Option 2 - Current Strategy

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Option 2	
			Level % of Pay Without ADP			Level % of Pay With ADP				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Payment
				\$ -			\$ -	\$ 8,803,997		
	2017	2020		\$ -			\$ -	\$ 8,803,997		
1	2018	2021	\$ 296,871,751	\$ 28,168,551			\$ 1,021,771	\$ 5,809,678	\$ 310,684,151	\$ 35,000,000
2	2019	2022	\$ 288,514,998	\$ 28,943,186		\$ 7,712,762	\$ 590,089	\$ 5,466,725	\$ 296,227,760	\$ 35,000,000
3	2020	2023	\$ 278,771,983	\$ 29,739,124	\$ 3,205,054	\$ 1,987,438	\$ 157,678	\$ 1,898,144	\$ 280,759,422	\$ 35,000,000
4	2021	2024	\$ 264,208,299	\$ 30,178,267	\$ 4,821,733	\$ -	\$ -	\$ -	\$ 264,208,299	\$ 35,000,000
5	2022	2025	\$ 246,498,599	\$ 30,393,195	\$ 4,606,805	\$ -	\$ -	\$ -	\$ 246,498,599	\$ 35,000,000
6	2023	2026	\$ 227,549,219	\$ 30,588,428	\$ 4,411,572	\$ -	\$ -	\$ -	\$ 227,549,219	\$ 35,000,000
7	2024	2027	\$ 207,273,383	\$ 30,752,556	\$ 4,247,444	\$ -	\$ -	\$ -	\$ 207,273,383	\$ 35,000,000
8	2025	2028	\$ 185,578,239	\$ 30,867,460	\$ 4,132,540	\$ -	\$ -	\$ -	\$ 185,578,239	\$ 35,000,000
9	2026	2029	\$ 162,364,434	\$ 30,902,709	\$ 4,097,291	\$ -	\$ -	\$ -	\$ 162,364,434	\$ 35,000,000
10	2027	2030	\$ 137,525,663	\$ 30,803,238	\$ 4,196,762	\$ -	\$ -	\$ -	\$ 137,525,663	\$ 35,000,000
11	2028	2031	\$ 110,948,177	\$ 30,458,549	\$ 4,541,451	\$ -	\$ -	\$ -	\$ 110,948,177	\$ 35,000,000
12	2029	2032	\$ 82,510,268	\$ 29,610,300	\$ 5,389,700	\$ -	\$ -	\$ -	\$ 82,510,268	\$ 35,000,000
13	2030	2033	\$ 52,081,706	\$ 27,482,668	\$ 7,517,332	\$ -	\$ -	\$ -	\$ 52,081,706	\$ 35,000,000
14	2031	2034	\$ 19,523,143	\$ 20,194,897	\$ -	\$ -	\$ -	\$ -	\$ 19,523,143	\$ 20,194,897
15	2032	2035								
16	2033	2036								
17	2034	2037								
18	2035	2038								
19	2036	2039								
20	2037	2040								
21	2038	2041								
22	2039	2042								
23	2040	2043								
24	2041	2044								
25	2042	2045								
26	2043	2046								
27	2044	2047								
28	2045	2048								
29	2046	2049								
30	2047	2050								
31	2048	2050								
Total Payments				\$ 409,083,130	\$ 51,167,682		\$ 1,769,537	\$ 21,978,545		\$ 475,194,897
Net Savings									Amortization Efficiency (AE) Ratio 153%	

ATTACHMENT C (SFO 3)

2020-21 Standard Fund Option 3 - \$5M One-Time Payment

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Option 2	
			Level % of Pay Without ADP			Level % of Pay With ADP				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Payment
				\$ -			\$ -	\$ 8,803,997		
	2017	2020		\$ -			\$ -			
1	2018	2021	\$ 296,871,751	\$ 28,168,551		\$ 13,812,400	\$ 1,021,771	\$ 10,809,678	\$ 310,684,151	\$ 40,000,000
2	2019	2022	\$ 288,514,998	\$ 28,943,186	\$ 3,428,671	\$ 2,540,722	\$ 194,386	\$ 2,433,757	\$ 291,055,720	\$ 35,000,000
3	2020	2023	\$ 275,225,338	\$ 29,360,771	\$ 5,639,229	\$ -	\$ -	\$ -	\$ 275,225,338	\$ 35,000,000
4	2021	2024	\$ 258,286,831	\$ 29,501,908	\$ 5,498,092	\$ -	\$ -	\$ -	\$ 258,286,831	\$ 35,000,000
5	2022	2025	\$ 240,162,627	\$ 29,611,972	\$ 5,388,028	\$ -	\$ -	\$ -	\$ 240,162,627	\$ 35,000,000
6	2023	2026	\$ 220,769,730	\$ 29,677,091	\$ 5,322,909	\$ -	\$ -	\$ -	\$ 220,769,730	\$ 35,000,000
7	2024	2027	\$ 200,019,329	\$ 29,676,293	\$ 5,323,707	\$ -	\$ -	\$ -	\$ 200,019,329	\$ 35,000,000
8	2025	2028	\$ 177,816,401	\$ 29,576,424	\$ 5,423,576	\$ -	\$ -	\$ -	\$ 177,816,401	\$ 35,000,000
9	2026	2029	\$ 154,059,267	\$ 29,321,992	\$ 5,678,008	\$ -	\$ -	\$ -	\$ 154,059,267	\$ 35,000,000
10	2027	2030	\$ 128,639,135	\$ 28,812,818	\$ 6,187,182	\$ -	\$ -	\$ -	\$ 128,639,135	\$ 35,000,000
11	2028	2031	\$ 101,439,592	\$ 27,848,162	\$ 7,151,838	\$ -	\$ -	\$ -	\$ 101,439,592	\$ 35,000,000
12	2029	2032	\$ 72,336,082	\$ 25,959,110	\$ 9,040,890	\$ -	\$ -	\$ -	\$ 72,336,082	\$ 35,000,000
13	2030	2033	\$ 41,195,327	\$ 21,738,103	\$ 13,261,897	\$ -	\$ -	\$ -	\$ 41,195,327	\$ 35,000,000
14	2031	2034	\$ 7,874,718	\$ 8,145,672	\$ -	\$ -	\$ -	\$ -	\$ 7,874,718	\$ 8,145,672
15	2032	2035								
16	2033	2036								
17	2034	2037								
18	2035	2038								
19	2036	2039								
20	2037	2040								
21	2038	2041								
22	2039	2042								
23	2040	2043								
24	2041	2044								
25	2042	2045								
26	2043	2046								
27	2044	2047								
28	2045	2048								
29	2046	2049								
30	2047	2050								
31	2048	2050								
Total Payments				\$ 376,342,055	\$ 77,344,025		\$ 1,216,157	\$ 22,047,432		\$ 468,145,672
Net Savings									Amortization Efficiency (AE) Ratio 151%	

ATTACHMENT D
ANTICIPATORY PREFUNDING OPTIONS 1-3

**ATTACHMENT D
(APO 1)**

Anticipatory Prefunding Option 1 - \$2 Million extra per year

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Option 2	
			Level % of Pay Without ADP			Level % of Pay With ADP				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Payment
	2017	2020		\$ -			\$ -	\$ 8,803,997		
1	2018	2021	\$ 296,871,751	\$ 28,168,551		\$ 21,419,930	\$ -	\$ 8,803,997	\$ 310,684,151	\$ 37,000,000
2	2019	2022	\$ 288,514,998	\$ 28,943,186	\$ 2,218,671	\$ 13,812,400	\$ 1,021,771	\$ 7,809,678	\$ 294,158,944	\$ 37,000,000
3	2020	2023	\$ 276,476,972	\$ 29,494,294	\$ 7,505,706	\$ 5,643,946	\$ 431,807	\$ 5,406,336	\$ 276,476,972	\$ 37,000,000
4	2021	2024	\$ 257,557,263	\$ 29,418,576	\$ 7,581,424	\$ -	\$ -	\$ -	\$ 257,557,263	\$ 37,000,000
5	2022	2025	\$ 237,313,173	\$ 29,260,635	\$ 7,739,365	\$ -	\$ -	\$ -	\$ 237,313,173	\$ 37,000,000
6	2023	2026	\$ 215,651,998	\$ 28,989,138	\$ 8,010,862	\$ -	\$ -	\$ -	\$ 215,651,998	\$ 37,000,000
7	2024	2027	\$ 192,474,540	\$ 28,556,895	\$ 8,443,105	\$ -	\$ -	\$ -	\$ 192,474,540	\$ 37,000,000
8	2025	2028	\$ 167,674,660	\$ 27,889,536	\$ 9,110,464	\$ -	\$ -	\$ -	\$ 167,674,660	\$ 37,000,000
9	2026	2029	\$ 141,138,789	\$ 26,862,847	\$ 10,137,153	\$ -	\$ -	\$ -	\$ 141,138,789	\$ 37,000,000
10	2027	2030	\$ 112,745,407	\$ 25,252,913	\$ 11,747,087	\$ -	\$ -	\$ -	\$ 112,745,407	\$ 37,000,000
11	2028	2031	\$ 82,364,488	\$ 22,611,483	\$ 14,388,517	\$ -	\$ -	\$ -	\$ 82,364,488	\$ 37,000,000
12	2029	2032	\$ 49,856,904	\$ 17,892,051	\$ 19,107,949	\$ -	\$ -	\$ -	\$ 49,856,904	\$ 37,000,000
13	2030	2033	\$ 15,073,790	\$ 7,954,194	\$ -	\$ -	\$ -	\$ -	\$ 15,073,790	\$ 7,954,194
14	2031	2034	\$ 7,901,073	\$ 8,172,934	\$ -	\$ -	\$ -	\$ -	\$ 7,901,073	\$ 8,172,934
15	2032	2035								
16	2033	2036								
17	2034	2037								
18	2035	2038								
19	2036	2039								
20	2037	2040								
21	2038	2041								
22	2039	2042								
23	2040	2043								
24	2041	2044								
25	2042	2045								
26	2043	2046								
27	2044	2047								
28	2045	2048								
29	2046	2049								
30	2047	2050								
31	2048	2050								
Total Payments			\$	\$ 339,467,232	\$ 105,990,304	\$	\$ 1,453,578	\$ 22,020,011	\$	\$ 460,127,127
Net Savings										Amortization Efficiency (AE) Ratio 148%

**ATTACHMENT D
(APO 2)**

Anticipatory Prefunding Option 2 - \$5M for 5 Years, \$ 2 million Extra Thereafter

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Option 2	
			Level % of Pay Without ADP			Level % of Pay With ADP				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Payment
	2017	2020		\$ -			\$ -	\$ 8,803,997		
1	2018	2021	\$ 296,871,751	\$ 28,168,551		\$ 21,419,930	\$ -	\$ 8,803,997	\$ 310,684,151	\$ 40,000,000
2	2019	2022	\$ 288,514,998	\$ 28,943,186	\$ 8,428,671	\$ 13,812,400	\$ 1,021,771	\$ 10,809,678	\$ 291,055,720	\$ 40,000,000
3	2020	2023	\$ 270,053,298	\$ 28,809,023	\$ 11,190,977	\$ 2,540,722	\$ 194,386	\$ 2,433,757	\$ 270,053,298	\$ 40,000,000
4	2021	2024	\$ 247,580,707	\$ 28,279,039	\$ 11,720,961	\$ -	\$ -	\$ -	\$ 247,580,707	\$ 40,000,000
5	2022	2025	\$ 223,535,035	\$ 27,561,796	\$ 12,438,204	\$ -	\$ -	\$ -	\$ 223,535,035	\$ 40,000,000
6	2023	2026	\$ 197,806,166	\$ 26,590,202	\$ 10,409,798	\$ -	\$ -	\$ -	\$ 197,806,166	\$ 37,000,000
7	2024	2027	\$ 173,379,500	\$ 25,723,818	\$ 11,276,182	\$ -	\$ -	\$ -	\$ 173,379,500	\$ 37,000,000
8	2025	2028	\$ 147,242,967	\$ 24,491,107	\$ 12,508,893	\$ -	\$ -	\$ -	\$ 147,242,967	\$ 37,000,000
9	2026	2029	\$ 119,276,877	\$ 22,701,884	\$ 14,298,116	\$ -	\$ -	\$ -	\$ 119,276,877	\$ 37,000,000
10	2027	2030	\$ 89,353,161	\$ 20,013,477	\$ 16,986,523	\$ -	\$ -	\$ -	\$ 89,353,161	\$ 37,000,000
11	2028	2031	\$ 57,334,785	\$ 15,740,091	\$ 21,259,909	\$ -	\$ -	\$ -	\$ 57,334,785	\$ 37,000,000
12	2029	2032	\$ 23,075,122	\$ 8,280,924	\$ -	\$ -	\$ -	\$ -	\$ 23,075,122	\$ 8,280,924
13	2030	2033	\$ 16,124,526	\$ 8,508,650	\$ -	\$ -	\$ -	\$ -	\$ 16,124,526	\$ 8,508,650
14	2031	2034	\$ 8,451,827	\$ 8,742,638	\$ -	\$ -	\$ -	\$ -	\$ 8,451,827	\$ 8,742,638
15	2032	2035								
16	2033	2036								
17	2034	2037								
18	2035	2038								
19	2036	2039								
20	2037	2040								
21	2038	2041								
22	2039	2042								
23	2040	2043								
24	2041	2044								
25	2042	2045								
26	2043	2046								
27	2044	2047								
28	2045	2048								
29	2046	2049								
30	2047	2050								
31	2048	2050								
Total Payments			\$	\$ 302,554,386	\$ 130,518,234	\$	\$ 1,216,157	\$ 22,047,432	\$	\$ 447,532,212
Net Savings										Amortization Efficiency (AE) Ratio 144%

ATTACHMENT D (APO 3)

Anticipatory Prefunding Option 3 - \$5M Extra Per Year Ongoing

			Original 2013 Fresh Start			Partial Fresh Start - All Other Bases			Option 2	
			Level % of Pay Without ADP			Level % of Pay With ADP				
			14			20				
Yr	Val Yr	Pmt Yr	Balance	Required Pmt.	ADP	Balance	Payment	ADP	Balance	Payment
	2017	2020		\$ -			\$ -			
	2018	2021	\$ 296,871,751	\$ 28,168,551		\$ 21,419,930	\$ -	\$ 8,803,997		
1	2019	2022	\$ 288,514,998	\$ 28,943,186	\$ 8,428,671	\$ 13,812,400	\$ 1,021,771	\$ 10,809,678	\$ 310,684,151	\$ 40,000,000
2	2020	2023	\$ 270,053,298	\$ 28,809,023	\$ 11,190,977	\$ 2,540,722	\$ 194,386	\$ 2,433,757	\$ 291,055,720	\$ 40,000,000
3	2021	2024	\$ 247,580,707	\$ 28,279,039	\$ 11,720,961	\$ -	\$ -	\$ -	\$ 270,053,298	\$ 40,000,000
4	2022	2025	\$ 223,535,035	\$ 27,561,796	\$ 12,438,204	\$ -	\$ -	\$ -	\$ 247,580,707	\$ 40,000,000
5	2023	2026	\$ 197,806,166	\$ 26,590,202	\$ 13,409,798	\$ -	\$ -	\$ -	\$ 223,535,035	\$ 40,000,000
6	2024	2027	\$ 170,276,276	\$ 25,263,402	\$ 14,736,598	\$ -	\$ -	\$ -	\$ 197,806,166	\$ 40,000,000
7	2025	2028	\$ 140,819,293	\$ 23,422,649	\$ 16,577,351	\$ -	\$ -	\$ -	\$ 170,276,276	\$ 40,000,000
8	2026	2029	\$ 109,300,322	\$ 20,803,054	\$ 19,196,946	\$ -	\$ -	\$ -	\$ 140,819,293	\$ 40,000,000
9	2027	2030	\$ 75,575,023	\$ 16,927,426	\$ 23,072,574	\$ -	\$ -	\$ -	\$ 109,300,322	\$ 40,000,000
10	2028	2031	\$ 39,488,953	\$ 10,840,883	\$ 29,159,117	\$ -	\$ -	\$ -	\$ 75,575,023	\$ 40,000,000
11	2029	2032	\$ 876,858	\$ 314,676	\$ -	\$ -	\$ -	\$ -	\$ 39,488,953	\$ 40,000,000
12	2030	2033	\$ 612,734	\$ 323,330	\$ -	\$ -	\$ -	\$ -	\$ 876,858	\$ 314,676
13	2031	2034	\$ 321,171	\$ 332,221	\$ -	\$ -	\$ -	\$ -	\$ 612,734	\$ 323,330
14	2032	2035				\$ -	\$ -	\$ -	\$ 321,171	\$ 332,221
15	2033	2036								
16	2034	2037								
17	2035	2038								
18	2036	2039								
19	2037	2040								
20	2038	2041								
21	2039	2042								
22	2040	2043								
23	2041	2044								
24	2042	2045								
25	2043	2046								
26	2044	2047								
27	2045	2048								
28	2046	2049								
29	2047	2050								
30	2048	2050								
31	2048	2050								
Total Payments			\$	\$ 266,579,437	\$ 159,931,198	\$	\$ 1,216,157	\$ 22,047,432	\$	\$ 440,970,228
Net Savings									Amortization Efficiency (AE) Ratio 142%	