

"FOR DISCUSSION ONLY"

DATE:

JULY 14, 2016

TO:

AUDIT COMMITTEE OF THE BOARD OF HARBOR COMMISSIONERS

SUBJECT: ISSUANCE OF HARBOR REFUNDING REVENUE BONDS 2016

Based on the current market for municipal debt, staff is recommending that the Port refund (i.e. refinance) the following bond series in order to take advantage of lower interest rates and save on future debt service payments:

Bond Series	Outstanding Balance	Final Maturity	Coupon
Current Refunding			
2006A (AMT)	\$ 48,565,000	2024	5.00%
2006B (AMT)	60,420,000	2025	5.00%
2006C (Non-AMT)	10,260,000	2025	5.00%
Subtotal	\$ 119,245,000		
Advance Refunding			
2009B (Non-AMT)	\$ 100,000,000	2039	5.25%
Grand Total	\$ 219,245,000	65 65	

The Department regularly monitors its debt portfolio for opportunities to achieve interest expense savings by refunding previously issued debt with debt carrying lower interest rates. When evaluating refunding opportunities, the staff considers the following:

- Present value savings
- Nominal average annual debt service savings
- True-interest-cost
- Negative arbitrage
- Call date

As summarized in Transmittal 1, the present value savings from the proposed current refunding of only 2006 Series A, B & C Bonds (the "2006 Bonds") based on interest rates as of July 1st would approximate \$13.78 million or 11.56% of value of the bonds to

be refunded. This level of present value savings generates nominal average annual debt savings of \$1.6 million per year through August 2025¹. Based upon current market conditions, we estimate that the all-in true interest cost for the refunding bonds will approximate 1.35%².

In addition to a current refunding of the 2006 Bonds and due to the historically low current interest rate environment, the Port also has the opportunity to advance refund outstanding 2009 Series B Bonds (the "2009 B Bonds"). Given that the 2009B Bonds are not callable until August 1, 2019, the Port would incur negative arbitrage costs³ if an advance refunding were to occur. As summarized within Transmittal 2, the present value savings from the proposed advance refunding of 2009 Series B Bonds based on interest rates as of July 1st would approximate \$18.97 million or 18.97%. If an advance refunding of the 2009 B Bonds to occur, this level of present value savings implies nominal average annual debt savings of \$1.1 million per year through August 2039. Based upon current market conditions, we estimate that the all-in true interest cost for the advance refunding bonds will approximate 3.15%.

As provided within Transmittal 3, assuming both the current refunding of the 2006 Bonds and the advance refunding of the 2009 B Bonds were to occur simultaneously (the "Combined Transaction"), the present value savings from the Combined Transaction would approximate \$33.7 million or 15.35% of the value of the bonds to be refunded, and average annual savings of \$1.7 million per year would be realized through August 2039. It is estimated that the all-in true interest cost for the combined transaction will approximate 2.72%.

The Harbor Department's Debt Policy requires net present value savings of 3% or greater for any refunding transaction. The new refunding bonds will be issued with the same maturity date as the refunded bonds.

The 2016 refunding bonds to be issued will fund the redemption of the 2006 Series ABC and 2009 Series B Bonds, the call premium of 102% on 2006 Series ABC, and the associated costs of issuance.

¹ Present value savings adjusts for the time value of money and assumes that \$1 of savings today is worth more than \$1 of savings tomorrow, given that \$1 today could be invested to earn a return. Whereas, nominal average annual debt savings only compares debt service "prior to" and "after" the refunding, on a dollar-for-dollar basis, without adjusting for the time value of money. As part of this transaction, total nominal savings on the 2006 Bonds are expected to be \$14.4 million vs. present value savings of \$13.8 million. In this example, it is assumed that \$13.8 million of savings in today's dollars could be invested such that total nominal savings would amount to \$14.4 million over the life of the debt issuance, or \$1.6 million per year through August 2025.

² Similar to how present value savings adjusts for the time value of money, the all-in true interest cost is the time-value adjusted annual rate to be paid on borrowed funds over the life of the bond issuance, inclusive of any premium anticipated to be received at issuance. With respect to the 2006 Bonds, the all-in true interest cost is anticipated to approximate 1.35% based upon available yields as of July 1, 2016.

³ Given that the 2009B Bonds cannot be called (i.e. paid off) until August 1, 2019, refunding proceeds related to the 2009B Bonds will be invested at a rate lower than the rate at which interest will be paid on the 2009B Bonds until they are called. The difference between the interest earned on invested funds and the interest paid on the 2009B Bonds is expected to total approximately \$3.3 million through the August 1, 2019 call date, assuming a Combined Transaction.

The plan of finance as well as the selection of the financing team will be presented to the Board of Harbor Commission on August 4th, and the financing documents will be presented to the Board during August 18th, 2016 meeting.

TRANSMITTALS:

- 1. Projected Savings from Current Refunding of 2006 Series A, B, and C Bonds
- 2. Projected Savings from Advance Refunding of 2009 Series B Bonds
- 3. Projected Savings of the Combined Transactions

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Executive Director

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Port of Los Angeles Issuance of Harbor Refunding Revenue Bonds Calculation of Present Value Savings - 2006 Bonds Only

	Refunded In	formation - Out	standing Callal	ole Balance		Debt Service		Savings
Date	2006A	2006B	2006C	Total	Refunded (Old)	Refunding (New)	Nominal Difference	PV Savings (\$)
2/1/2017		*	-		2,981,125	1,701,483	1,279,642	1,274,479
8/1/2017	8,930,000	3,095,000	930,000	12,955,000	15,936,125	13,919,975	2,016,150	1,996,169
2/1/2018		20	-	2	2,657,250	2,318,525	338,725	333,390
8/1/2018	9,990,000	12,855,000	980,000	23,825,000	26,482,250	24,313,525	2,168,725	2,121,973
2/1/2019				2	2,061,625	1,878,625	183,000	177,999
8/1/2019	-	13,485,000	1,035,000	14,520,000	16,581,625	15,328,625	1,253,000	1,211,566
2/1/2020		7.	::::		1,698,625	1,542,375	156,250	150,192
8/1/2020	10,190,000	14,995,000	1,080,000	26,265,000	27,963,625	25,717,375	2,246,250	2,146,422
2/1/2021			· ·		1,042,000	938,000	104,000	98,792
8/1/2021	9	15,760,000	1,130,000	16,890,000	17,932,000	16,653,000	1,279,000	1,207,781
2/1/2022	5	*	·	×	619,750	545,125	74,625	70,054
8/1/2022	2,740,000	25	1,190,000	3,930,000	4,549,750	3,305,125	1,244,625	1,161,495
2/1/2023		2	· ·	2	521,500	476,125	45,375	42,095
8/1/2023	9	8	1,250,000	1,250,000	1,771,500	1,561,125	210,375	194,014
2/1/2024		-		9	490,250	449,000	41,250	37,818
8/1/2024	16,715,000	5,000	1,305,000	18,025,000	18,515,250	17,229,000	1,286,250	1,172,265
2/1/2025					39,625	29,500	10,125	9,173
8/1/2025	≥	225,000	1,360,000	1,585,000	1,624,625	1,209,500	415,125	373,887
Total	48,565,000	60,420,000	10,260,000	119,245,000 A	143,468,500	129,116,008	14,352,492	13,779,562

Avg. Annual Savings

1,594,721

13,779,562
119,245,000
11.56%
1.35%
68,632 🥻
99.50%

Port of Los Angeles Issuance of Harbor Refunding Revenue Bonds Calculation of Present Value Savings - <u>2009B Bonds Only</u>

			Savings		
	2009B	Refunded	Refunding	Nominal	
Date	Outstanding	(Old)	(New)	Difference	PV Savings (\$)
2/1/2017	120	2,625,000	1,542,710	1,082,290	1,074,969
8/1/2017		2,625,000	2,257,625	367,375	361,284
2/1/2018	2	2,625,000	2,257,625	367,375	357,713
8/1/2018	-	2,625,000	2,257,625	367,375	354,178
2/1/2019	3	2,625,000	2,257,625	367,375	350,678
8/1/2019		2,625,000	2,257,625	367,375	347,212
2/1/2020		2,625,000	2,257,625	367,375	343,780
8/1/2020		2,625,000	2,257,625	367,375	340,383
2/1/2021	*	2,625,000	2,257,625	367,375	337,019
8/1/2021		2,625,000	2,257,625	367,375	333,688
2/1/2022	*	2,625,000	2,257,625	367,375	330,390
8/1/2022	*	2,625,000	2,257,625	367,375	327,125
2/1/2023	2	2,625,000	2,257,625	367,375	323,892
8/1/2023	€	2,625,000	2,257,625	367,375	320,691
2/1/2024		2,625,000	2,257,625	367,375	317,521
8/1/2024		2,625,000	2,257,625	367,375	314,383
2/1/2025	-	2,625,000	2,257,625	367,375	311,276
8/1/2025		2,625,000	2,257,625	367,375	308,200
2/1/2026	*	2,625,000	2,257,625	367,375	305,154
8/1/2026		2,625,000	2,257,625	367,375	302,138
2/1/2027		2,625,000	2,257,625	367,375	299,152
8/1/2027	3	2,625,000	2,257,625	367,375	296,196
2/1/2028	9	2,625,000	2,257,625	367,375	293,268
8/1/2028		2,625,000	2,257,625	367,375	290,370
2/1/2029	-	2,625,000	2,257,625	367,375	287,500
8/1/2029		2,625,000	2,257,625	367,375	284,659
2/1/2030		2,625,000	2,257,625	367,375	281,846
8/1/2030	7,860,000	10,485,000	9,447,625	1,037,375	787,996
2/1/2031		2,418,675	2,077,875	340,800	256,315
8/1/2031	8,270,000	10,688,675	9,622,875	1,065,800	793,664
2/1/2032	*	2,201,588	1,889,250	312,338	230,288
8/1/2032	8,705,000	10,906,588	9,814,250	1,092,338	797,427
2/1/2033	9	1,973,081	1,691,125	281,956	203,799
8/1/2033	9,160,000	11,133,081	10,006,125	1,126,956	806,518
2/1/2034		1,732,631	1,483,250	249,381	176,708
8/1/2034	9,645,000	11,377,631	10,213,250	1,164,381	816,912
2/1/2035		1,479,450	1,265,000	214,450	148,968
8/1/2035	10,150,000	11,629,450	10,430,000	1,199,450	824,965
2/1/2036		1,213,013	1,035,875	177,138	120,629
8/1/2036	10,680,000	11,893,013	10,650,875	1,242,138	837,521
2/1/2037	2	932,663	795,500	137,163	91,569
8/1/2037	11,240,000	12,172,663	10,890,500	1,282,163	847,505
2/1/2038	-	637,613	543,125	94,488	61,839
8/1/2038	11,835,000	12,472,613	11,143,125	1,329,488	861,502
2/1/2039		326,944	278,125	48,819	31,322
8/1/2039	12,455,000	12,781,944	11,403,125	1,378,819	875,896
Total	100,000,000 A	199,331,313	174,921,835	24,409,477	18,966,008
		E 2	69 56	A1 75	

Avg. Annual Savings	1,061,282	Ţ
Summary	1000 # 100	1
Total PV Savings (\$)	18,966,008	1
Divided by: Total Outstanding Callable Balance	100,000,000	1
Equals: PV Savings as a % of Original Issuance	18.97%	
All-In True Interest Cost	3,15%	8
Negative Arbitrage	3,979,491	3
Refunding Efficiency [B / (B+C)]	82.66%	

Port of Los Angeles Issuance of Harbor Refunding Revenue Bonds 2016 Calculation of Present Value Savings - <u>2006 Bonds & 2009B Bonds</u>

2/1/2017 8/1/2017 8/1/2018 8/1/2018 8/1/2018 8/1/2019 2/1/2020 8/1/2020 1/1/2021 8/1/2021 2/1/2022 8/1/2022 8/1/2023 8/1/2023 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2027	8,930,000 9,990,000 10,190,000 2,740,000	3,095,000 12,855,000 13,485,000 14,995,000 15,760,000	930,000 980,000 1,035,000 1,080,000	2009B	Total 12,955,000 23,825,000 14,520,000	Refunded (Old) 5,606,125 18,561,125 5,282,250 29,107,250 4,686,625	Refunding (New) 3,237,428 16,137,700 4,566,700 26,526,700 4,127,500	Nominal Difference 2,368,697 2,423,425 715,550 2,580,550 559,125	PV Savings (\$ 2,354,756 2,388,440 699,155 2,499,734
2/1/2017 8/1/2017 8/1/2018 8/1/2018 8/1/2018 8/1/2019 2/1/2020 8/1/2020 1/1/2021 8/1/2021 2/1/2022 8/1/2022 8/1/2023 8/1/2023 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2027	8,930,000 9,990,000 10,190,000	3,095,000 12,855,000 13,485,000 14,995,000	930,000 980,000 1,035,000	2009B	12,955,000	5,606,125 18,561,125 5,282,250 29,107,250 4,686,625	3,237,428 16,137,700 4,566,700 26,526,700	2,368,697 2,423,425 715,550 2,580,550	2,354,756 2,388,440 699,155
8/1/2017 2/1/2018 8/1/2018 8/1/2019 8/1/2019 8/1/2020 2/1/2020 1/2/2021 8/1/2021 8/1/2022 2/1/2022 2/1/2023 8/1/2023 2/1/2024 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2026 8/1/2027	8,930,000 9,990,000 10,190,000	3,095,000 12,855,000 13,485,000 14,995,000	930,000 980,000 1,035,000	6 6 6 6 8 8	23,825,000	18,561,125 5,282,250 29,107,250 4,686,625	16,137,700 4,566,700 26,526,700	2,423,425 715,550 2,580,550	2,388,440 699,155
2/1/2018 8/1/2018 8/1/2019 8/1/2019 8/1/2020 8/1/2020 8/1/2021 8/1/2021 8/1/2022 8/1/2022 8/1/2023 8/1/2023 2/1/2024 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2027	9,990,000	12,855,000 13,485,000 14,995,000	980,000	5 5 5 5 5	23,825,000	5,282,250 29,107,250 4,686,625	4,566,700 26,526,700	715,550 2,580,550	699,155
8/1/2018 2/1/2019 8/1/2019 2/1/2020 8/1/2020 1/1/2021 2/1/2021 2/1/2022 8/1/2022 2/1/2023 8/1/2023 8/1/2024 8/1/2024 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2027	10,190,000	13,485,000	1,035,000	50 50 50 51 52	350	29,107,250 4,686,625	26,526,700	2,580,550	
2/1/2019 8/1/2019 2/1/2020 8/1/2020 1/1/2020 1/1/2021 2/1/2022 8/1/2022 8/1/2022 2/1/2023 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2027	10,190,000	13,485,000	1,035,000	** ** **	350	4,686,625			2,499.734
2/1/2019 8/1/2019 2/1/2020 8/1/2020 1/1/2020 1/1/2021 2/1/2022 8/1/2022 8/1/2022 2/1/2023 8/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2027	10,190,000	13,485,000	1,035,000	5 5 5	350	4,686,625			
8/1/2019 2/1/2020 8/1/2020 1/2/2021 8/1/2021 8/1/2022 2/1/2022 2/1/2023 8/1/2023 2/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2026 8/1/2026 8/1/2027	50	14,995,000	1.0	** **	14,520,000			559.1 2 5	536,956
2/1/2020 8/1/2020 8/1/2021 8/1/2021 8/1/2022 8/1/2022 8/1/2023 8/1/2023 2/1/2024 8/1/2024 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2027 8/1/2027	50	14,995,000	1.0	23		19,206,625	17,557,500	1,649,125	1,570,117
8/1/2020 1/ 2/1/2021 1/ 8/1/2021 2/ 8/1/2022 8/ 8/1/2022 3/ 8/1/2023 8/ 8/1/2023 2/ 8/1/2024 1/ 2/1/2024 1/ 8/1/2025 2/ 8/1/2026 8/ 8/1/2026 2/ 8/1/2027 8/1/2027	50	95	1,080,000		:+11	4,323,625	3,791,750	531,875	502,038
2/1/2021 8/1/2021 8/1/2022 8/1/2022 8/1/2023 8/1/2023 8/1/2024 8/1/2024 1/1/2025 8/1/2025 8/1/2025 8/1/2026 8/1/2026 8/1/2026 8/1/2027	50	95	.,000,000	- 1	26,265,000	30,588,625	27,926,750	2,661,875	2,490,93
8/1/2021 2/1/2022 8/1/2022 2/1/2023 8/1/2023 2/1/2024 8/1/2024 1/2025 8/1/2025 2/1/2026 8/1/2026 8/1/2026 8/1/2027	2,740,000	15,760,000		-	20,200,000	3,667,000	3,188,375	478,625	444.03
2/1/2022 8/1/2022 2/1/2023 8/1/2023 2/1/2024 8/1/2024 2/1/2025 2/1/2026 2/1/2026 8/1/2026 2/1/2027 8/1/2027	2,740,000	10,100,000	1,130,000	3	16,890,000	20,557,000	18,873,375	1,683,625	1,548,52
8/1/2022 2/1/2023 8/1/2023 2/1/2024 2/1/2024 11/2025 8/1/2025 2/1/2026 8/1/2026 6/1/2027 8/1/2027	2,740,000		1,100,000	3	10,000,000	3,244,750	2,796,250	448,500	408,96
2/1/2023 8/1/2023 2/1/2024 8/1/2024 1/2025 8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027	2,740,000		1,190,000	3	3,930,000	7,174,750	5,536,250	1,638,500	1,481,20
8/1/2023 2/1/2024 8/1/2024 1/ 2/1/2025 8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027	-	- 10	1,130,000	5	3,330,000	3,146,500	2,727,750	418,750	375,29
2/1/2024 8/1/2024 1/ 2/1/2025 8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027			1,250,000		1,250,000	4,396,500	3,812,750	583.750	518,67
8/1/2024 1/ 2/1/2025 8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027	98		1,250,000		1,250,000		2,700,625	414,625	365,23
2/1/2025 8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027		F 000	4 005 000	- 1	40.005.000	3,115,250			
8/1/2025 2/1/2026 8/1/2026 2/1/2027 8/1/2027	16,715,000	5,000	1,305,000		18,025,000	21,140,250	19,460,625	1,679,625	1,466,81
2/1/2026 8/1/2026 2/1/2027 8/1/2027	-	005.000	4 000 000		4 505 000	2,664,625	2,281,625	383,000	331,59
8/1/2026 2/1/2027 8/1/2027	-	225,000	1,360,000		1,585,000	4,249,625	3,456,625	793,000	680,66
2/1/2027 8/1/2027	~			**	:4	2,625,000	2,252,250	372,750	317,19
3/1/2027	8	*		+0	-	2,625,000	2,252,250	372,750	314,46
	=		*	**	5-1	2,625,000	2,252,250	372,750	311,76
			9	*	(a)	2,625,000	2,252,250	372,750	309,08
2/1/2028	300		34	90	(4)	2,625,000	2,252,250	372,750	306,42
3/1/2028	8	300	-	- 6	€	2,625,000	2,252,250	372,750	303,78
2/1/2029	*	(**)	8	**		2,625,000	2,252,250	372,750	301,17
8/1/2029	*			83		2,625,000	2,252,250	372,750	298,58
2/1/2030		100	*	±:		2,625,000	2,252,250	372,750	296,01
3/1/2030	*0.0	2.00	35	7,860,000	7,860,000	10,485,000	9,427,250	1,057,750	832,77
2/1/2031	~	0.00		**		2,418,675	2,072,875	345,800	269,90
8/1/2031	-			8,270,000	8,270,000	10,688,675	9,597,875	1,090,800	844,08
2/1/2032	-		-			2,201,588	1,884,750	316,838	243,06
3/1/2032	-			8,705,000	8,705,000	10,906,588	9,789,750	1,116,838	849,42
2/1/2033	2		12	-,,,	-,,,	1,973,081	1,687,125	285,956	215,61
3/1/2033	- 3			9,160,000	9,160,000	11,133,081	9,982,125	1,150,956	860,38
2/1/2034	2		- 2	0,100,000	5,100,000	1,732,631	1,479,750	252,881	187,41
3/1/2034			- 5	9,645,000	9,645,000	11,377,631	10,189,750	1,187,881	872,77
2/1/2035		-	-	5,040,000	3,043,000	1,479,450	1,262,000	217,450	158,39
3/1/2035		529	8	10,150,000	10,150,000	11,629,450	10,402,000	1,227,450	886,40
2/1/2036		-	- 5	10,130,000	10,130,000	1,213,013	1,033,500	179,513	128,52
3/1/2036		500	-	10,680,000	10,680,000	11,893,013	10,628,500	1,264,513	897,52
2/1/2037	-			10,080,000	10,000,000		793,625	139,038	97,83
				11 240 000	11 240 000	932,663			913,21
3/1/2037	*	(30)	3	11,240,000	11,240,000	12,172,663	10,863,625	1,309,038	
2/1/2038	*		*	44 005 000	44.005.000	637,613	541,875	95,738	66,21
3/1/2038	*			11,835,000	11,835,000	12,472,613	11,116,875	1,355,738	929,59
2/1/2039	SE.	-	8			326,944	277,500 11,377,500	49,444 1,404,444	33,61 946,49
3/1/2039 Total 4		100	-	12,455,000	12,455,000	12,781,944			

Avg. Annual Savings

1,713,697

Summary	
Total PV Savings (\$)	33,654,852
Divided by: Total Outstanding Callable Balance	219,245,000
Equals: PV Savings as a % of Original Issuance	15.35%
All-In True Interest Cost	2.72%
Negative Arbitrage	3,319,725
Refunding Efficiency [B / (B+C)]	91.02%