



# DEPARTMENT OF REVENUE

Presentation to Senate Finance  
Committee

Pension Obligation Bond Transaction

September 29, 2016



# Presentation Team

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# **GFOA Pension Obligation Bond Advisory Bulletin**

## **Concerns and POBC Mitigation**

<b>Might Fail to Earn Bond Interest Rate</b>	<ul style="list-style-type: none"><li>• Interest rate is the one variable POB Issuers can control</li><li>• The lower the rate the higher the expectation of success over the 23 year life</li><li>• The PERS and TRS have an assumed rate of return of 8% for the prefunding of the pension trusts</li><li>• The bond interest rate is expected to be below 4.0% including all costs of issuance</li></ul>
<b>POBs are Complex Instruments with Considerable Risk</b>	<ul style="list-style-type: none"><li>• The POBC has only authorized fixed rate debt, the most simple means of issuing bonds</li><li>• No derivatives or variable rate products are allowed</li></ul>
<b>Potentially Uses Debt Capacity</b>	<ul style="list-style-type: none"><li>• With implementation of GASB 68 the portion of the unfunded actuarially assumed pension liability in PERS and TRS annual payment that is funded by the State has been added to the State's balance sheet as a debt</li><li>• The concept of soft liability versus hard liability is no longer viable</li><li>• The POBC issue will replaces the existing liability</li></ul>
<b>POBS may Defer Principal Payment or Extend Repayment</b>	<ul style="list-style-type: none"><li>• The POB payments are based on the latest actuarial analysis with no extension of amortization</li><li>• Annual payments will be level after a 2-4 year ramp up period, creating budget stability and pushing savings into the future</li><li>• All annual payments are tailored to be less than the current actuarial analysis projects</li></ul>
<b>Rating Agencies May View POBs Negatively</b>	<ul style="list-style-type: none"><li>• The POBC has structured the bonds as conservatively as possible</li><li>• The POBC transaction is expected to be neutral to positive for the State's rating</li></ul>



# Preliminary Transaction Structure

***The proposed transaction will be structured as a single series of fixed rate bonds and will benefit both TRS and PERS funding.***

## Sources and Uses of Funds & Summary Statistics\*

	<b>POS Case</b>	<b>Maximum Case</b>
Par Amount	\$2,352,980,000	\$3,329,155,000
Term (Years)	23	23
Capitalized Interest	41,207,474	85,141,034
<b>Plan Funding</b>		
<b>TRS</b>		
Total Deposit	\$981,762,000	\$981,762,000
Refunded UAAL	\$981,979,330	\$981,979,330
<b>PERS</b>		
Total Deposit	\$1,318,238,000	\$2,245,600,000
Refunded UAAL	\$1,318,552,063	\$2,246,080,607
<b>Summary Statistics</b>		
TIC	3.782%	3.794%
All-In Cost	3.831%	3.842%
Average Life (Years)	13.70	14.01
Average Annual Payment Reduction	\$81,183,822	\$130,224,584
<b>TRS - Cash Flow Difference</b>		
Gross Scheduled UAAL Payments	\$2,298,278,000	\$2,298,278,000
Total Net Debt Service	\$1,512,186,221	\$1,518,935,860
<b>Gross Cash Flow Difference</b>	<b>\$786,091,780</b>	<b>\$779,342,140</b>
<b>PV of Cash Flow Difference</b>	<b>\$490,774,163</b>	<b>\$490,311,707</b>
<b>Difference as % of UAAL Deposit</b>	<b>50.0%</b>	<b>49.9%</b>
<b>PERS - Cash Flow Difference</b>		
Gross Scheduled UAAL Payments	\$3,112,457,000	\$5,727,161,000
Total Net Debt Service	\$2,031,320,863	\$3,511,337,705
<b>Gross Cash Flow Difference</b>	<b>\$1,081,136,138</b>	<b>\$2,215,823,295</b>
<b>PV of Cash Flow Difference</b>	<b>\$668,661,493</b>	<b>\$1,271,699,219</b>
<b>Difference as % of UAAL Deposit</b>	<b>50.7%</b>	<b>56.6%</b>

\*Preliminary, subject to change. As of September 2016.

- **Ultimate transaction size will depend on market conditions and the State's objectives**
  - POS and initial structure anticipate a \$2.35 billion sizing, as shown to the left
  - Bonds will be sold as a single series
- **TRS Funding Objective and Structure**
  - \$981 million deposit to achieve 90% TRS funded ratio
  - Sizing based on preliminary 6/30/2016 actuarial valuation
- **PERS Funding Objective and Structure**
  - Up to \$2.25 billion deposit to reduce or eliminate State Assistance payment and improve funding ratio
  - Sizing based on preliminary 6/30/2016 actuarial valuation
- **Combined TRS and PERS**
  - The State could pursue a combined financing for up to \$3.33 billion
  - The State expects to fund to 90% of TRS and any additional amount the market will allow up to the \$2.25 billion PERS deposit



# Preliminary Transaction Structure

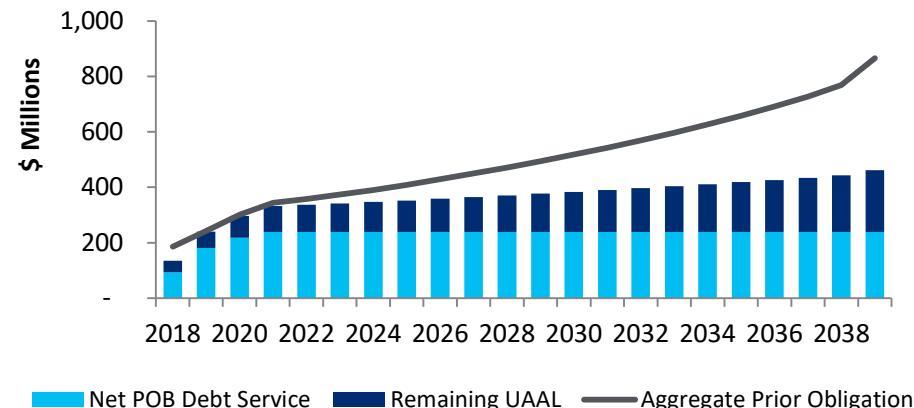
***The majority of the potential cash flow benefits back loaded.***

## Potential Cash Flow Difference\*

Fiscal Year	Base Case		Maximum Case	
	Principal Amortization	Potential Cash Flow Difference	Principal Amortization	Potential Cash Flow Difference
2017	-	-	-	-
2018	\$10,000,000	\$50,757,392	-	\$50,925,135
2019	81,350,000	7,348,392	\$61,765,000	1,649,097
2020	82,810,000	13,736,962	99,625,000	4,313,220
2021	84,515,000	20,253,567	122,880,000	11,976,532
2022	86,455,000	26,918,412	125,700,000	21,211,772
2023	88,630,000	33,443,432	128,855,000	32,073,842
2024	91,025,000	40,731,305	132,345,000	43,618,813
2025	93,635,000	48,486,620	136,130,000	56,731,880
2026	96,450,000	55,904,034	140,225,000	71,009,393
2027	99,450,000	63,630,629	144,590,000	85,453,390
2028	103,140,000	72,068,224	149,955,000	99,947,679
2029	106,965,000	80,784,718	155,515,000	117,043,010
2030	110,935,000	89,734,119	161,290,000	134,810,616
2031	115,055,000	98,671,808	167,270,000	152,718,475
2032	119,315,000	108,394,348	173,475,000	172,247,192
2033	124,190,000	117,945,400	180,550,000	193,235,972
2034	129,255,000	128,768,352	187,925,000	216,166,412
2035	134,525,000	138,818,956	195,585,000	239,884,752
2036	140,020,000	150,023,576	203,570,000	265,567,620
2037	145,725,000	161,922,392	211,870,000	293,570,276
2038	151,675,000	173,037,972	220,520,000	326,674,572
2039	157,860,000	185,847,312	229,515,000	404,335,788
<b>Total</b>	<b>\$2,352,980,000</b>	<b>\$1,867,227,917</b>	<b>\$3,329,155,000</b>	<b>\$2,995,165,435</b>

- Level debt service structure with 23 year final maturity
  - 50% of bonds are amortized within 15 years
- Majority of the transaction's potential cash flow benefits are back loaded
- The transaction is designed for budgetary stability and not near-term budgetary relief as demonstrated by the cash flow differences
  - POS Case - Only 5% of potential cash flow difference is expected in the first five years
  - Maximum Case - Only 2% of potential cash flow difference is expected in the first five years

## UAAL State Assistance payments Comparison (Max Case)



\*Preliminary, subject to change. As of September 2016.



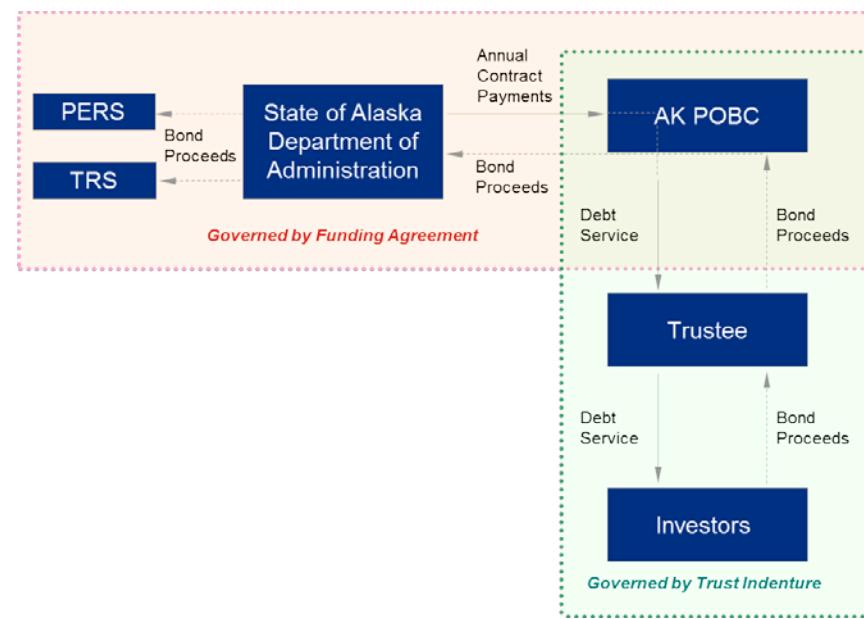
# Rolling 20-Year Experience Vs Threshold: PERS



\* Source: Callan



# Overview of POB Transaction

Overview		Transaction Diagram
Issuer	Alaska Pension Obligation Bond Corporation	
Par Amount	\$2.35 billion (POS Mailing*) \$3.32 billion (Maximum Case to achieve desired funding levels*)	
Security	Bonds are secured by a Funding Agreement between the State and the Corporation  Subject to appropriation obligation of the State of Alaska	
Bond Structure	Fixed rate bond maturities between 5/1/2018 (POS Mailing*) or 5/1/2019 (Maximum Case*) through 5/1/2039  Structured for level annual debt service with a 23-year final maturity	
Optional Redemption	Most maturities: make-whole call per market standard  Select maturities: 10-year call at par*	
Use of Funds	Fund deposits to the State's TRS and PERS retirement systems. TRS deposit to achieve 90% funding ratio and PERS deposit to reduce or eliminate State Assistance payment and improve funding ratio	
Schedule	Pricing: October 26, 2016*  Closing: November 2, 2016*	
Syndicate	Co-Senior Managers: Citi (bookrunner), BAML, Goldman Sachs  Co-Managers: JP Morgan, Key Capital, RBC Capital, Wells Fargo	 <pre> graph LR     subgraph PA [PERS &amp; TRS]         PERS         TRS     end     PA -- "Bond Proceeds" --&gt; DOA     DOA -- "Annual Contract Payments" --&gt; AKPOBC     DOA -- "Bond Proceeds" --&gt; AKPOBC     AKPOBC -- "Debt Service" --&gt; Trustee     AKPOBC -- "Bond Proceeds" --&gt; Investors     Trustee -- "Debt Service" --&gt; Investors     Investors -- "Bond Proceeds" --&gt; AKPOBC     </pre> <p><i>Governed by Funding Agreement</i></p> <p><i>Governed by Trust Indenture</i></p>

\*Preliminary, subject to change. Transaction par amount will depend on market conditions at pricing.



# Cash Flow Benefit – Rate of Return Sensitivity

**The tables below illustrate potential cash flow benefits based upon actuarial adjustments to the projected UAAL payments if the State were to earn less than 8.0% on assets.**

Base Case (\$000)*					Maximum Case (\$000)*				
Fiscal Year	Principal Amortization	Potential Cash Flow Benefit 8% Return	Potential Cash Flow Benefit 7.5% Return	Potential Cash Flow Benefit 7% Return	Fiscal Year	Principal Amortization	Potential Cash Flow Benefit 8% Return	Potential Cash Flow Benefit 7.5% Return	Potential Cash Flow Benefit 7% Return
2017					2017				
2018	\$10,000	\$50,757	\$57,271	\$63,468	2018	\$	\$50,925	\$57,439	\$63,636
2019	81,350	7,348	6,690	5,537	2019	61,765	1,649	4,466	7,283
2020	82,810	13,737	12,383	10,864	2020	99,625	4,313	10,880	17,282
2021	84,515	20,254	17,732	15,736	2021	122,880	11,977	23,926	24,825
2022	86,455	26,918	23,614	20,127	2022	125,700	21,212	37,431	31,503
2023	88,630	33,443	29,316	25,190	2023	128,855	32,074	45,828	38,628
2024	91,025	40,731	34,963	29,680	2024	132,345	43,619	54,554	45,239
2025	93,635	48,487	41,387	34,194	2025	136,130	56,732	63,584	52,234
2026	96,450	55,904	47,703	39,293	2026	140,225	71,009	72,602	59,295
2027	99,450	63,631	54,143	44,439	2027	144,590	85,453	82,287	67,210
2028	103,140	72,068	60,364	49,417	2028	149,955	99,948	91,833	74,359
2029	106,965	80,785	67,405	54,907	2029	155,515	117,043	101,978	81,732
2030	110,935	89,734	74,818	59,989	2030	161,290	134,811	112,591	90,108
2031	115,055	98,672	81,527	65,774	2031	167,270	152,718	122,639	97,904
2032	119,315	108,394	88,744	71,298	2032	173,475	172,247	133,299	105,833
2033	124,190	117,945	96,174	76,918	2033	180,550	193,236	144,636	114,265
2034	129,255	128,768	104,102	81,889	2034	187,925	216,166	156,252	121,367
2035	134,525	138,819	111,874	87,586	2035	195,585	239,885	167,495	130,106
2036	140,020	150,024	120,131	92,536	2036	203,570	265,568	179,359	137,792
2037	145,725	161,922	127,830	98,309	2037	211,870	293,570	191,468	145,274
2038	151,675	173,038	136,310	102,495	2038	220,520	326,675	203,117	152,027
2039	157,860	185,847	142,341	105,077	2039	229,515	404,336	211,940	155,358
2040		(1,054)	(2,259)		2040			(1,054)	(2,259)
2041			(934)	(1,401)	2041			(934)	(1,401)
2042			(322)	(482)	2042			(322)	(482)
2043			(166)	(166)	2043			(166)	(166)
2044				(171)	2044				(171)
2045			177	178	2045			177	178
<b>Gross Total</b>	<b>\$2,352,980</b>	<b>\$1,867,228</b>	<b>\$1,534,525</b>	<b>\$1,230,424</b>	<b>Gross Total</b>	<b>\$3,329,155</b>	<b>\$2,995,165</b>	<b>\$2,267,304</b>	<b>\$1,808,958</b>
<b>Present Value</b>		<b>\$1,159,436</b>	<b>\$904,855</b>	<b>\$738,320</b>	<b>Present Value</b>		<b>\$1,762,011</b>	<b>\$1,323,129</b>	<b>\$1,075,613</b>
		<b>Difference</b>	<b>\$(254,581)</b>	<b>\$(421,116)</b>			<b>Difference</b>	<b>\$(438,882)</b>	<b>\$(686,398)</b>

\*Preliminary, subject to change. As of September 2016. Projected UAAL as reflected in Buck Consultants Financial Projection Studies, September 21, 2016. Cash Flow difference assumes annualized return as shown. Actual cash flow difference may vary with market returns. 7



# State Payment Breakdown (8% Return)

## Comparison of Potential State Payment after Transaction with 8% Return (\$000)\*

TRS-PERS (Base Case)

FY Date	Existing State Asst. Payment	Refinanced Portion of Re-Financed Payment	Non Re-Financed Payment	POB Debt Service	State Asst. Payment + Debt Service	Cash Flow Benefit
Totals PV	11,014,909	5,410,735	5,604,174	3,543,507	9,147,681	1,867,228 1,159,436
	[A]	[B]	[C] = [A-B]	[D]	[E] = [C+D]	[F] = [A-E]
2017	215,866	-	-	-	-	-
2018	185,612	143,880	41,732	93,123	134,855	50,757
2019	241,846	171,667	70,179	164,319	234,498	7,348
2020	300,608	178,035	122,573	164,298	286,871	13,737
2021	344,070	184,559	159,511	164,305	323,816	20,254
2022	358,051	191,220	166,831	164,302	331,133	26,918
2023	373,879	197,750	176,129	164,307	340,436	33,443
2024	390,607	205,031	185,576	164,300	349,876	40,731
2025	409,147	212,793	196,354	164,306	360,660	48,487
2026	429,602	220,207	209,395	164,303	373,698	55,904
2027	450,068	227,934	222,134	164,303	386,437	63,631
2028	470,594	236,372	234,222	164,304	398,526	72,068
2029	493,945	245,087	248,858	164,302	413,160	80,785
2030	518,178	254,038	264,140	164,304	428,444	89,734
2031	542,567	262,980	279,587	164,308	443,895	98,672
2032	568,929	272,694	296,235	164,300	460,535	108,394
2033	597,086	282,252	314,834	164,307	479,141	117,945
2034	627,095	293,073	334,022	164,305	498,327	128,768
2035	658,380	303,120	355,260	164,301	519,561	138,819
2036	691,641	314,331	377,310	164,307	541,617	150,024
2037	727,836	326,222	401,614	164,300	565,914	161,922
2038	769,492	337,342	432,150	164,304	596,454	173,038
2039	865,676	350,148	515,528	164,301	679,829	185,847

TRS-PERS (Maximum Case)

FY Date	Existing State Asst. Payment	Refinanced Portion of Re-Financed Payment	Non Re-Financed Payment	POB Debt Service	State Asst. Payment + Debt Service	Cash Flow Benefit
Totals PV	11,014,909	8,025,439	2,989,470	5,030,274	8,019,744	2,995,165 1,762,011
	[A]	[B]	[C] = [A-B]	[D]	[E] = [C+D]	[F] = [A-E]
2017	215,866	-	-	-	-	-
2018	185,612	143,880	41,732	92,955	134,687	50,925
2019	241,846	182,587	59,259	180,938	240,197	1,649
2020	300,608	221,987	78,621	217,674	296,295	4,313
2021	344,070	250,863	93,207	238,886	332,093	11,977
2022	358,051	260,092	97,959	238,880	336,839	21,212
2023	373,879	270,954	102,925	238,880	341,805	32,074
2024	390,607	282,497	108,110	238,878	346,988	43,619
2025	409,147	295,610	113,537	238,878	352,415	56,732
2026	429,602	309,885	119,717	238,876	358,593	71,009
2027	450,068	324,333	125,735	238,880	364,615	85,453
2028	470,594	338,828	131,766	238,880	370,646	99,948
2029	493,945	355,920	138,025	238,877	376,902	117,043
2030	518,178	373,693	144,485	238,882	383,367	134,811
2031	542,567	391,597	150,970	238,879	389,849	152,718
2032	568,929	411,125	157,804	238,878	396,682	172,247
2033	597,086	432,111	164,975	238,875	403,850	193,236
2034	627,095	455,050	172,045	238,884	410,929	216,166
2035	658,380	478,761	179,619	238,876	418,495	239,885
2036	691,641	504,449	187,192	238,881	426,073	265,568
2037	727,836	532,446	195,390	238,876	434,266	293,570
2038	769,492	565,556	203,936	238,881	442,817	326,675
2039	865,676	643,215	222,461	238,879	461,340	404,336

\*Preliminary, subject to change. As of September 2016. Projected UAAL as reflected in Buck Consultants Financial Projection Studies, September 21, 2016. Cash Flow difference assumes annualized return as shown. Actual cash flow difference may vary with market returns. 8



# State Payment Breakdown Sensitivity (7% Return)

## Comparison of Potential State Payment after Transaction with 7% Return (\$000)\*

TRS-PERS (Base Case)						
FY Date	7% Return State Asst. Payment	Refinanced Portion of Payment	Non Re-Financed Payment	POB Debt Service	State Asst. Payment + Debt Service	Cash Flow Benefit
Totals PV	19,766,785	4,773,931	14,992,854	3,543,507	18,536,361	1,230,424 738,320
	[A]	[B]	[C] = [A-B]	[D]	[E] = [C+D]	[F] = [A-E]
2017	215,866					
2018	205,474	156,591	48,883	93,123	142,006	63,468
2019	250,705	169,856	80,849	164,319	245,168	5,537
2020	321,275	175,162	146,113	164,298	310,411	10,864
2021	381,470	180,041	201,429	164,305	365,734	15,736
2022	417,178	184,429	232,749	164,302	397,051	20,127
2023	457,081	189,497	267,584	164,307	431,891	25,190
2024	499,545	193,980	305,565	164,300	469,865	29,680
2025	546,071	198,500	347,571	164,306	511,877	34,194
2026	597,749	203,596	394,153	164,303	558,456	39,293
2027	652,157	208,742	443,415	164,303	607,718	44,439
2028	709,445	213,721	495,724	164,304	660,028	49,417
2029	773,607	219,209	554,398	164,302	718,700	54,907
2030	842,532	224,293	618,239	164,304	782,543	59,989
2031	916,917	230,082	686,835	164,308	851,143	65,774
2032	999,064	235,598	763,466	164,300	927,766	71,298
2033	1,090,837	241,225	849,612	164,307	1,013,919	76,918
2034	1,192,191	246,194	945,997	164,305	1,110,302	81,889
2035	1,308,666	251,887	1,056,779	164,301	1,221,080	87,586
2036	1,445,082	256,843	1,188,239	164,307	1,352,546	92,536
2037	1,613,213	262,609	1,350,604	164,300	1,514,904	98,309
2038	1,842,327	266,799	1,575,528	164,304	1,739,832	102,495
2039	2,289,082	269,378	2,019,704	164,301	2,184,005	105,077
2040	63,092	(2,259)	65,351	-	65,351	(2,259)
2041	73,777	(1,401)	75,178	-	75,178	(1,401)
2042	73,516	(482)	73,998	-	73,998	(482)
2043	71,971	(166)	72,137	-	72,137	(166)
2044	68,701	(171)	68,872	-	68,872	(171)
2045	64,060	178	63,882	-	63,882	178

TRS-PERS (Maximum Case)						
FY Date	7% Return State Asst. Payment	Refinanced Portion of Payment	Non Re-Financed Payment	POB Debt Service	State Asst. Payment + Debt Service	Cash Flow Benefit
Totals PV	19,766,785	6,839,232	12,927,553	5,030,274	17,957,827	1,808,958 1,075,613
	[A]	[B]	[C] = [A-B]	[D]	[E] = [C+D]	[F] = [A-E]
2017	215,866					
2018	205,474	156,591	48,883	92,955	141,838	63,636
2019	250,705	188,221	62,484	180,938	243,422	7,283
2020	321,275	234,956	86,319	217,674	303,993	17,282
2021	381,470	263,711	117,759	238,886	356,645	24,825
2022	417,178	270,383	146,795	238,880	385,675	31,503
2023	457,081	277,508	179,573	238,880	418,453	38,628
2024	499,545	284,117	215,428	238,878	454,306	45,239
2025	546,071	291,112	254,959	238,878	493,837	52,234
2026	597,749	298,171	299,578	238,876	538,454	59,295
2027	652,157	306,090	346,067	238,880	584,947	67,210
2028	709,445	313,239	396,206	238,880	635,086	74,359
2029	773,607	320,609	452,998	238,877	691,875	81,732
2030	842,532	328,990	513,542	238,882	752,424	90,108
2031	916,917	336,783	580,134	238,879	819,013	97,904
2032	999,064	344,711	654,353	238,878	893,231	105,833
2033	1,090,837	353,140	737,697	238,875	976,572	114,265
2034	1,192,191	360,251	831,940	238,884	1,070,824	121,367
2035	1,308,666	368,982	939,684	238,876	1,178,560	130,106
2036	1,445,082	376,673	1,068,409	238,881	1,307,290	137,792
2037	1,613,213	384,150	1,229,063	238,876	1,467,939	145,274
2038	1,842,327	390,908	1,451,419	238,881	1,690,300	152,027
2039	2,289,082	394,237	1,894,845	238,879	2,133,724	155,358
2040	63,092	(2,259)	65,351	-	65,351	(2,259)
2041	73,777	(1,401)	75,178	-	75,178	(1,401)
2042	73,516	(482)	73,998	-	73,998	(482)
2043	71,971	(166)	72,137	-	72,137	(166)
2044	68,701	(171)	68,872	-	68,872	(171)
2045	64,060	178	63,882	-	63,882	178

\*Preliminary, subject to change. As of September 2016. Projected UAAL as reflected in Buck Consultants Financial Projection Studies, September 21, 2016. Cash Flow difference assumes annualized return as shown. Actual cash flow difference may vary with market returns. 9



# Financing Schedule

- Week of September 18, 2016      Presentation to Rating Agencies
- Week of September 25, 2016      Receipt of Ratings
- Week of October 3, 2016      Marketing in Asia
- Week of October 10, 2016      Marketing in Europe
- Week of October 17, 2016      Marketing in United States
- Week of October 24, 2016      Pricing
- Week of October 31, 2016      Closing

