



**FOSTER & FOSTER**  
ACTUARIES AND CONSULTANTS

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January 11, 2016

VIA EMAIL

Ms. Carol Knapp, Administrator  
City of Bartow  
Municipal Police Officers' Retirement Trust Fund  
2404 West Russ Road  
Avon Park, FL 33825

Re: City of Bartow Municipal Police Officers' Retirement Trust Fund  
Senate Bill 534 (Section 112.664, Florida Statutes) Compliance

Dear Carol:

Please find enclosed the annual disclosures that satisfy the October 1, 2015 financial reporting requirements made under Section 112.664.


Our office will submit this information electronically to the Department of Management Services by the January 11, 2016 deadline. However, it is important for you to be aware that this report must also be made available on the Plan or Plan Sponsor's website, if such website exists. A deadline for this website publication is not made clear in the law.

In addition to the enclosed report, the Plan or Plan Sponsor's website must provide a link to the Division of Retirement's Actuarial Summary Fact Sheet for the Plan, and also report the previous five years' assumed and actual rates of return, along with their respective asset allocations. The Board should contact its Investment Consultant for this information.

If there are any questions, concerns, or comments about any of the items contained in this report, please feel free to contact me.

Respectfully submitted,

Foster & Foster, Inc.

By: 

Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #14-6595

PTD/lke  
Enclosures

cc via email: H. Lee Dehner, Board Attorney

CITY OF BARTOW  
MUNICIPAL POLICE OFFICERS' RETIREMENT TRUST FUND

SECTION 112.664, FLORIDA STATUTES  
COMPLIANCE

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

By: Patrick T. Donlan Date: 1/11/2016

Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #14-6595



When reviewing the following schedules, please note the following:

- 1) The purpose of producing this report is solely to satisfy the requirements set forth by Section 112.664, Florida Statutes, and is mandatory for every Florida public pension fund, excluding the Florida Retirement System (FRS).
- 2) None of the schedules shown have any impact on the funding requirements of the Plan. These schedules are for statutory compliance purposes only.
- 3) In the schedules that follow, the columns labeled “ACTUAL” represent the final recorded GASB 67/68 results. The columns labeled “HYPOTHETICAL” illustrate what the results would have been if different assumptions were used.
- 4) It is our opinion that the Plan’s actual assumptions utilized in the October 1, 2015 Actuarial Valuation Report, as adopted by the Board of Trustees, are reasonable individually and in the aggregate, and represent our best estimate of future Plan experience.
- 5) The “Number of Years Expected Benefit Payments Sustained” calculated in Section II: Asset Sustainability should not be interpreted as the number of years the Plan has left until it is insolvent. This calculation is required by 112.664, Florida Statutes, but the numeric result is irrelevant, since in its calculation we are to assume there will be no further contributions to the Fund. As long as the Actuarially Determined Contribution is made each year the Plan will never become insolvent.

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static 9/30/2015	8.00% RP-2000 Generational 9/30/2015	6.00% RP-2000 Generational 9/30/2015	10.00% RP-2000 Generational 9/30/2015
<b><u>GASB 67: Schedule of Changes in Net Pension Liability</u></b>				
<b><u>Total Pension Liability</u></b>				
Service Cost	442,729	458,526	703,957	311,822
Interest	1,472,475	1,521,602	1,458,078	1,540,311
Change in Excess State Money	-	-	-	-
Change in Funding Standard Account	-	-	-	-
Share Plan Allocation	-	-	-	-
Changes of Benefit Terms	88,018	96,345	155,603	61,738
Differences Between Expected and Actual Experience	(48,806)	(67,170)	(39,613)	(86,650)
Changes of Assumptions	-	-	-	-
Contributions - Buy Back	-	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(957,923)	(957,923)	(957,923)	(957,923)
Net Change in Total Pension Liability	996,493	1,051,380	1,320,102	869,298
Total Pension Liability - Beginning	18,413,303	19,003,273	23,979,862	15,567,670
Total Pension Liability - Ending (a)	<u>\$ 19,409,796</u>	<u>\$ 20,054,653</u>	<u>\$ 25,299,964</u>	<u>\$ 16,436,968</u>
<b><u>Plan Fiduciary Net Position</u></b>				
Contributions - Employer	709,050	709,050	709,050	709,050
Contributions - State	123,940	123,940	123,940	123,940
Contributions - Employee	67,585	67,585	67,585	67,585
Contributions - Buy Back	-	-	-	-
Net Investment Income	(213,520)	(213,520)	(213,520)	(213,520)
Benefit Payments, Including Refunds of Employee Contributions	(957,923)	(957,923)	(957,923)	(957,923)
Administrative Expenses	(68,659)	(68,659)	(68,659)	(68,659)
Other	-	-	-	-
Net Change in Plan Fiduciary Net Position	(339,527)	(339,527)	(339,527)	(339,527)
Plan Fiduciary Net Position - Beginning	15,858,500	15,858,500	15,858,500	15,858,500
Plan Fiduciary Net Position - Ending (b)	<u>\$ 15,518,973</u>	<u>\$ 15,518,973</u>	<u>\$ 15,518,973</u>	<u>\$ 15,518,973</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 3,890,823</u>	<u>\$ 4,535,680</u>	<u>\$ 9,780,991</u>	<u>\$ 917,995</u>

**GASB 68: Pension Expense for Fiscal Year Ending September 30, 2015**

Pension Expense	<u>\$ 466,114</u>	<u>\$ 525,013</u>	<u>\$ 949,682</u>	<u>\$ 159,688</u>
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## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 1  
Plan Assumptions: 8.00% and RP-2000 Static Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2015	15,518,973	-	1,283,621	-	1,190,173	15,425,525
2016	15,425,525	-	1,137,292	-	1,188,550	15,476,783
2017	15,476,783	-	1,240,414	-	1,188,526	15,424,895
2018	15,424,895	-	1,402,931	-	1,177,874	15,199,838
2019	15,199,838	-	1,463,744	-	1,157,437	14,893,531
2020	14,893,531	-	1,497,431	-	1,131,585	14,527,685
2021	14,527,685	-	1,556,640	-	1,099,949	14,070,994
2022	14,070,994	-	1,581,104	-	1,062,435	13,552,325
2023	13,552,325	-	1,589,324	-	1,020,613	12,983,614
2024	12,983,614	-	1,618,947	-	973,931	12,338,598
2025	12,338,598	-	1,623,105	-	922,164	11,637,657
2026	11,637,657	-	1,637,904	-	865,496	10,865,249
2027	10,865,249	-	1,651,499	-	803,160	10,016,910
2028	10,016,910	-	1,648,935	-	735,395	9,103,370
2029	9,103,370	-	1,648,337	-	662,336	8,117,369
2030	8,117,369	-	1,645,156	-	583,583	7,055,796
2031	7,055,796	-	1,642,182	-	498,776	5,912,390
2032	5,912,390	-	1,643,463	-	407,253	4,676,180
2033	4,676,180	-	1,635,600	-	308,670	3,349,250
2034	3,349,250	-	1,617,106	-	203,256	1,935,400
2035	1,935,400	-	1,595,678	-	91,005	430,727
2036	430,727	-	1,568,845	-	-	-

\*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 21.27

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 8.00% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 2  
Hypothetical Assumptions: 8.00% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2015	15,518,973	-	1,283,912	-	1,190,161	15,425,222
2016	15,425,222	-	1,138,298	-	1,188,486	15,475,410
2017	15,475,410	-	1,242,554	-	1,188,331	15,421,187
2018	15,421,187	-	1,406,282	-	1,177,444	15,192,349
2019	15,192,349	-	1,468,528	-	1,156,647	14,880,468
2020	14,880,468	-	1,503,832	-	1,130,284	14,506,920
2021	14,506,920	-	1,564,870	-	1,097,959	14,040,009
2022	14,040,009	-	1,591,998	-	1,059,521	13,507,532
2023	13,507,532	-	1,602,681	-	1,016,495	12,921,346
2024	12,921,346	-	1,635,414	-	968,291	12,254,223
2025	12,254,223	-	1,643,964	-	914,579	11,524,838
2026	11,524,838	-	1,663,016	-	855,466	10,717,288
2027	10,717,288	-	1,682,010	-	790,103	9,825,381
2028	9,825,381	-	1,686,206	-	718,582	8,857,757
2029	8,857,757	-	1,692,285	-	640,929	7,806,401
2030	7,806,401	-	1,695,745	-	556,682	6,667,338
2031	6,667,338	-	1,700,071	-	465,384	5,432,651
2032	5,432,651	-	1,708,885	-	366,257	4,090,023
2033	4,090,023	-	1,708,750	-	258,852	2,640,125
2034	2,640,125	-	1,698,723	-	143,261	1,084,663
2035	1,084,663	-	1,685,712	-	-	-

\*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 20.64

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 8.00% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 3  
Hypothetical Assumptions: 6.00% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2015	15,518,973	-	1,283,912	-	892,621	15,127,682
2016	15,127,682	-	1,138,298	-	873,512	14,862,896
2017	14,862,896	-	1,242,554	-	854,497	14,474,839
2018	14,474,839	-	1,406,282	-	826,302	13,894,859
2019	13,894,859	-	1,468,528	-	789,636	13,215,967
2020	13,215,967	-	1,503,832	-	747,843	12,459,978
2021	12,459,978	-	1,564,870	-	700,653	11,595,761
2022	11,595,761	-	1,591,998	-	647,986	10,651,749
2023	10,651,749	-	1,602,681	-	591,025	9,640,093
2024	9,640,093	-	1,635,414	-	529,343	8,534,022
2025	8,534,022	-	1,643,964	-	462,722	7,352,780
2026	7,352,780	-	1,663,016	-	391,276	6,081,040
2027	6,081,040	-	1,682,010	-	314,402	4,713,432
2028	4,713,432	-	1,686,206	-	232,220	3,259,446
2029	3,259,446	-	1,692,285	-	144,798	1,711,959
2030	1,711,959	-	1,695,745	-	51,845	68,059
2031	68,059	-	1,700,071	-	-	-

\*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 16.04

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 6.00% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 4  
Hypothetical Assumptions: 10.00% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2015	15,518,973	-	1,283,912	-	1,487,702	15,722,763
2016	15,722,763	-	1,138,298	-	1,515,361	16,099,826
2017	16,099,826	-	1,242,554	-	1,547,855	16,405,127
2018	16,405,127	-	1,406,282	-	1,570,199	16,569,044
2019	16,569,044	-	1,468,528	-	1,583,478	16,683,994
2020	16,683,994	-	1,503,832	-	1,593,208	16,773,370
2021	16,773,370	-	1,564,870	-	1,599,094	16,807,594
2022	16,807,594	-	1,591,998	-	1,601,160	16,816,756
2023	16,816,756	-	1,602,681	-	1,601,542	16,815,617
2024	16,815,617	-	1,635,414	-	1,599,791	16,779,994
2025	16,779,994	-	1,643,964	-	1,595,801	16,731,831
2026	16,731,831	-	1,663,016	-	1,590,032	16,658,847
2027	16,658,847	-	1,682,010	-	1,581,784	16,558,621
2028	16,558,621	-	1,686,206	-	1,571,552	16,443,967
2029	16,443,967	-	1,692,285	-	1,559,782	16,311,464
2030	16,311,464	-	1,695,745	-	1,546,359	16,162,078
2031	16,162,078	-	1,700,071	-	1,531,204	15,993,211
2032	15,993,211	-	1,708,885	-	1,513,877	15,798,203
2033	15,798,203	-	1,708,750	-	1,494,383	15,583,836
2034	15,583,836	-	1,698,723	-	1,473,447	15,358,560
2035	15,358,560	-	1,685,712	-	1,451,570	15,124,418
2036	15,124,418	-	1,667,807	-	1,429,051	14,885,662
2037	14,885,662	-	1,647,086	-	1,406,212	14,644,788
2038	14,644,788	-	1,623,811	-	1,383,288	14,404,265
2039	14,404,265	-	1,594,035	-	1,360,725	14,170,955
2040	14,170,955	-	1,560,246	-	1,339,083	13,949,792
2041	13,949,792	-	1,522,947	-	1,318,832	13,745,677
2042	13,745,677	-	1,482,400	-	1,300,448	13,563,725
2043	13,563,725	-	1,437,593	-	1,284,493	13,410,625
2044	13,410,625	-	1,387,567	-	1,271,684	13,294,742
2045	13,294,742	-	1,335,241	-	1,262,712	13,222,213
2046	13,222,213	-	1,281,626	-	1,258,140	13,198,727
2047	13,198,727	-	1,226,229	-	1,258,561	13,231,059
2048	13,231,059	-	1,170,057	-	1,264,603	13,325,605
2049	13,325,605	-	1,113,508	-	1,276,885	13,488,982
2050	13,488,982	-	1,056,572	-	1,296,070	13,728,480
2051	13,728,480	-	999,869	-	1,322,855	14,051,466
2052	14,051,466	-	943,696	-	1,357,962	14,465,732
2053	14,465,732	-	887,832	-	1,402,182	14,980,082
2054	14,980,082	-	832,497	-	1,456,383	15,603,968
2055	15,603,968	-	777,754	-	1,521,509	16,347,723
2056	16,347,723	-	723,712	-	1,598,587	17,222,598
2057	17,222,598	-	670,495	-	1,688,735	18,240,838
2058	18,240,838	-	618,149	-	1,793,176	19,415,865
2059	19,415,865	-	566,766	-	1,913,248	20,762,347
2060	20,762,347	-	516,502	-	2,050,410	22,296,255
2061	22,296,255	-	467,729	-	2,206,239	24,034,765
2062	24,034,765	-	420,534	-	2,382,450	25,996,681
2063	25,996,681	-	375,286	-	2,580,904	28,202,299
2064	28,202,299	-	332,387	-	2,803,611	30,673,523
2065	30,673,523	-	291,703	-	3,052,767	33,434,587
2066	33,434,587	-	253,423	-	3,330,788	36,511,952



## PROJECTION OF THE NUMBER OF YEARS ASSETS WILL SUSTAIN BENEFIT PAYMENTS

Table 4  
Hypothetical Assumptions: 10.00% and RP-2000 Generational Mortality

Fiscal Year Beginning 10/1	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments*	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2067	36,511,952	-	218,080	-	3,640,291	39,934,163
2068	39,934,163	-	185,929	-	3,984,120	43,732,354
2069	43,732,354	-	156,866	-	4,365,392	47,940,880
2070	47,940,880	-	131,046	-	4,787,536	52,597,370
2071	52,597,370	-	108,559	-	5,254,309	57,743,120
2072	57,743,120	-	89,200	-	5,769,852	63,423,772
2073	63,423,772	-	72,602	-	6,338,747	69,689,917
2074	69,689,917	-	58,635	-	6,966,060	76,597,342
2075	76,597,342	-	47,048	-	7,657,382	84,207,676
2076	84,207,676	-	37,465	-	8,418,894	92,589,105
2077	92,589,105	-	29,600	-	9,257,431	101,816,936
2078	101,816,936	-	23,269	-	10,180,530	111,974,197
2079	111,974,197	-	18,218	-	11,196,509	123,152,488
2080	123,152,488	-	14,181	-	12,314,540	135,452,847
2081	135,452,847	-	10,944	-	13,544,738	148,986,641
2082	148,986,641	-	8,397	-	14,898,244	163,876,488
2083	163,876,488	-	6,409	-	16,387,328	180,257,407
2084	180,257,407	-	4,845	-	18,025,498	198,278,060
2085	198,278,060	-	3,618	-	19,827,625	218,102,067
2086	218,102,067	-	2,676	-	21,810,073	239,909,464
2087	239,909,464	-	1,957	-	23,990,849	263,898,356
2088	263,898,356	-	1,416	-	26,389,765	290,286,705
2089	290,286,705	-	1,010	-	29,028,620	319,314,315
2090	319,314,315	-	712	-	31,931,396	351,244,999
2091	351,244,999	-	498	-	35,124,475	386,368,976
2092	386,368,976	-	344	-	38,636,880	425,005,512
2093	425,005,512	-	234	-	42,500,540	467,505,818
2094	467,505,818	-	158	-	46,750,574	514,256,234
2095	514,256,234	-	105	-	51,425,618	565,681,747
2096	565,681,747	-	70	-	56,568,171	622,249,848
2097	622,249,848	-	46	-	62,224,983	684,474,785
2098	684,474,785	-	29	-	68,447,477	752,922,233
2099	752,922,233	-	19	-	75,292,222	828,214,436
2100	828,214,436	-	11	-	82,821,443	911,035,868
2101	911,035,868	-	7	-	91,103,586	1,002,139,447
2102	1,002,139,447	-	4	-	100,213,945	1,102,353,388
2103	1,102,353,388	-	3	-	110,235,339	1,212,588,724
2104	1,212,588,724	-	1	-	121,258,872	1,333,847,595
2105	1,333,847,595	-	1	-	133,384,759	1,467,232,353
2106	1,467,232,353	-	1	-	146,723,235	1,613,955,587
2107	1,613,955,587	-	-	-	161,395,559	1,775,351,146

\*All DROP Balances paid in 2015.

Number of Years Expected Benefit Payments Sustained: 999.99

This projection assumes no further contributions, assumes no further benefit accruals, and assumes Market Value of Assets earn 10.00% interest.

**It is important to note that as long as the Actuarially Determined Contribution is made each year, the Plan will never become insolvent. Furthermore, State and local laws mandate that the Actuarially Determined Contribution be made each year.**

ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR  
ENDING SEPTEMBER 30, 2017

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
Total Required Contribution (Fixed \$)	\$912,209	\$980,097	\$1,528,769	\$527,654
Total Required Contribution (% of Payroll)	54.2%	58.3%	90.9%	31.4%
Expected Member Contribution	67,257	67,257	67,257	67,257
Expected State Money	123,940	123,940	123,940	123,940
Expected Sponsor Contribution (Fixed \$)	\$721,012	\$788,900	\$1,337,572	\$336,457
Expected Sponsor Contribution (% of Payroll)	42.8%	46.9%	79.5%	20.0%

**ASSETS**

Actuarial Value <sup>1</sup>	16,284,455	16,284,455	16,284,455	16,284,455
Market Value <sup>1</sup>	15,518,973	15,518,973	15,518,973	15,518,973

**LIABILITIES**

## Present Value of Benefits

## Active Members

Retirement Benefits	6,971,285	7,223,677	10,334,815	5,305,671
Disability Benefits	460,156	480,933	661,596	365,954
Death Benefits	25,314	19,330	24,637	15,492
Vested Benefits	727,409	746,412	1,118,714	524,860
Refund of Contributions	20,512	20,515	21,281	19,804
Service Retirees	9,093,499	9,366,631	11,452,473	7,881,000
DROP Retirees <sup>1</sup>	2,703,561	2,788,697	3,454,214	2,329,835
Beneficiaries	157,312	163,019	186,008	144,771
Disability Retirees	707,601	736,585	896,707	621,852
Terminated Vested	558,045	577,895	735,792	468,580
Excess State Monies Reserve	0	0	0	0
Total:	21,424,694	22,123,694	28,886,237	17,677,819

Present Value of Future Salaries	9,472,592	9,481,270	10,337,139	8,768,557
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Present Value of Future Member Contributions	378,904	379,251	413,486	350,742
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Total Normal Cost	406,223	421,522	646,291	286,831
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Present Value of Future Normal Costs (Entry Age Normal)	2,214,312	2,305,657	3,866,644	1,444,215
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Total Actuarial Accrued Liability <sup>1</sup>	19,210,382	19,818,037	25,019,593	16,233,604
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Unfunded Actuarial Accrued Liability (UAAL)	2,925,927	3,533,582	8,735,138	(50,851)
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ACTUAL AND HYPOTHETICAL CONTRIBUTIONS APPLICABLE TO THE FISCAL YEAR  
ENDING SEPTEMBER 30, 2017

Valuation Date: 10/1/2015

	ACTUAL	HYPOTHETICAL		
	8.00% RP-2000 Static	8.00% RP-2000 Generational	6.00% RP-2000 Generational	10.00% RP-2000 Generational
<b><u>PENSION COST</u></b>				
Normal Cost (with interest)	422,472	438,383	665,680	301,173
Administrative Expenses (with interest)	71,405	71,405	70,719	72,092
Payment Required To Amortize UAAL (with interest)	418,332	470,309	792,370	154,389
Total Required Contribution	\$912,209	\$980,097	\$1,528,769	\$527,654

<sup>1</sup> The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2015.