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# Public Safety Personnel Retirement System Corrections Officer Retirement Plan Elected Officials' Retirement Plan

Fiscal Year 2012 Financial Report

as of June 30, 2012

**Excerpts  
courtesy of  
Jim Hacking,  
PSPRS Executive  
Director**

# Total Plan Statistics

## Defined Benefit Plan

Active Members	34,378
Terminated Vested Members	2,497
Drop	1,496
Retired	14,270
Normal	10,883
Beneficiaries	1,918
Disability	1,469
Total Participants	52,641

## Three Plans:

- Police / Fire
- Corrections
- Elected

# Total Plan Statistics

## Defined Benefit Plan

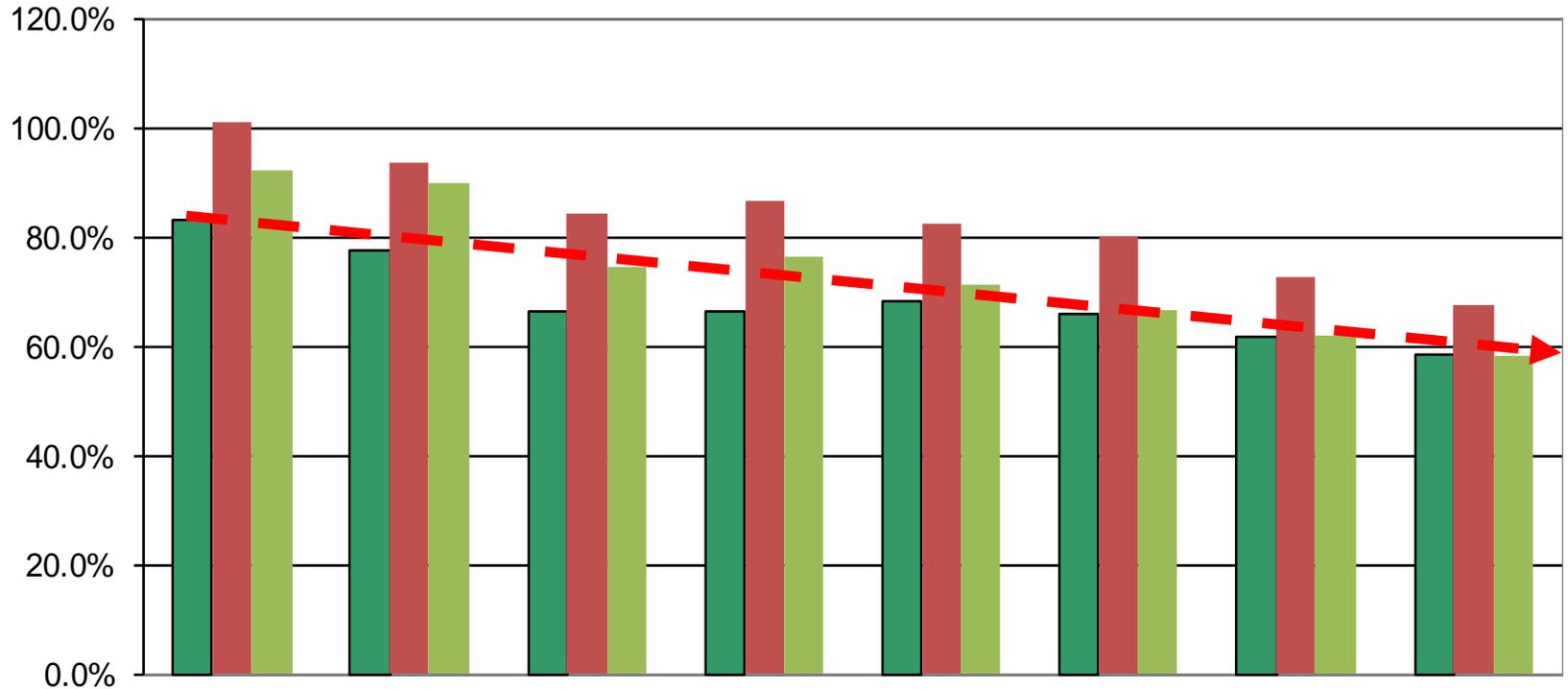
	<u>Total</u> <u>Plans</u>	<u>PSPRS</u>	<u>CORP</u>	<u>EORP</u>
<u>Non-Retired</u>				
Active Members	34,378	18,542	14,991	845
Terminated Vested Members	2,497	1,264	1,101	132
DROP	1,496	1,496	0	0
Total Non-Retired Members	38,371	21,302	16,092	977
<u>Retired</u>				
Normal	10,883	7,219	2,879	785
Beneficiaries	1,918	1,239	486	193
Disability	1,469	1,344	111	14
Total Retired Members	14,270	9,802	3,476	992
Total Participants	52,641	31,104	19,568	1,969
Percentage Retired	27.1%	31.5%	17.8%	50.4%

# PSPRS Changing Financial Status (in 000s)

<b>FYE</b>	<b><u>Actuarial Asset Value</u></b>	<b><u>Actuarial Liabilities</u></b>	<b><u>Funded Ratio</u></b>	<b><u>Market Value*</u></b>	<b><u>Funded Ratio</u></b>
<b>2000</b>	\$4,260,168	\$3,415,157	124.7%	\$4,516,110	132.2%
<b>2001</b>	\$4,661,941	\$3,674,758	126.9%	\$3,759,164	102.3%
<b>2002</b>	\$4,684,386	\$4,144,211	113.0%	\$3,193,862	77.1%
<b>2003</b>	\$4,781,377	\$4,739,613	100.9%	\$3,364,413	71.0%
<b>2004</b>	\$4,774,313	\$5,167,333	92.4%	\$3,741,116	72.4%
<b>2005</b>	\$4,886,963	\$5,951,937	82.1%	\$4,070,529	68.4%
<b>2005R</b>	\$4,886,963	\$5,872,736	83.2%	\$4,070,529	69.3%
<b>2006</b>	\$4,999,911	\$6,495,012	77.0%	\$4,415,684	68.0%
<b>2007</b>	\$4,829,521	\$7,268,291	66.4%	\$4,868,862	67.0%
<b>2008</b>	\$5,095,645	\$7,662,779	66.5%	\$4,519,329	59.0%
<b>2009</b>	\$5,445,497	\$7,989,451	68.2%	\$3,830,087	47.9%
<b>2010</b>	\$5,591,304	\$8,491,822	65.8%	\$4,310,574	50.8%
<b>2011</b>	\$5,795,945	\$9,365,261	61.9%	\$5,048,313	53.9%
<b>2012</b>	\$6,051,595	\$10,325,530	58.6%	\$5,074,688	49.1%

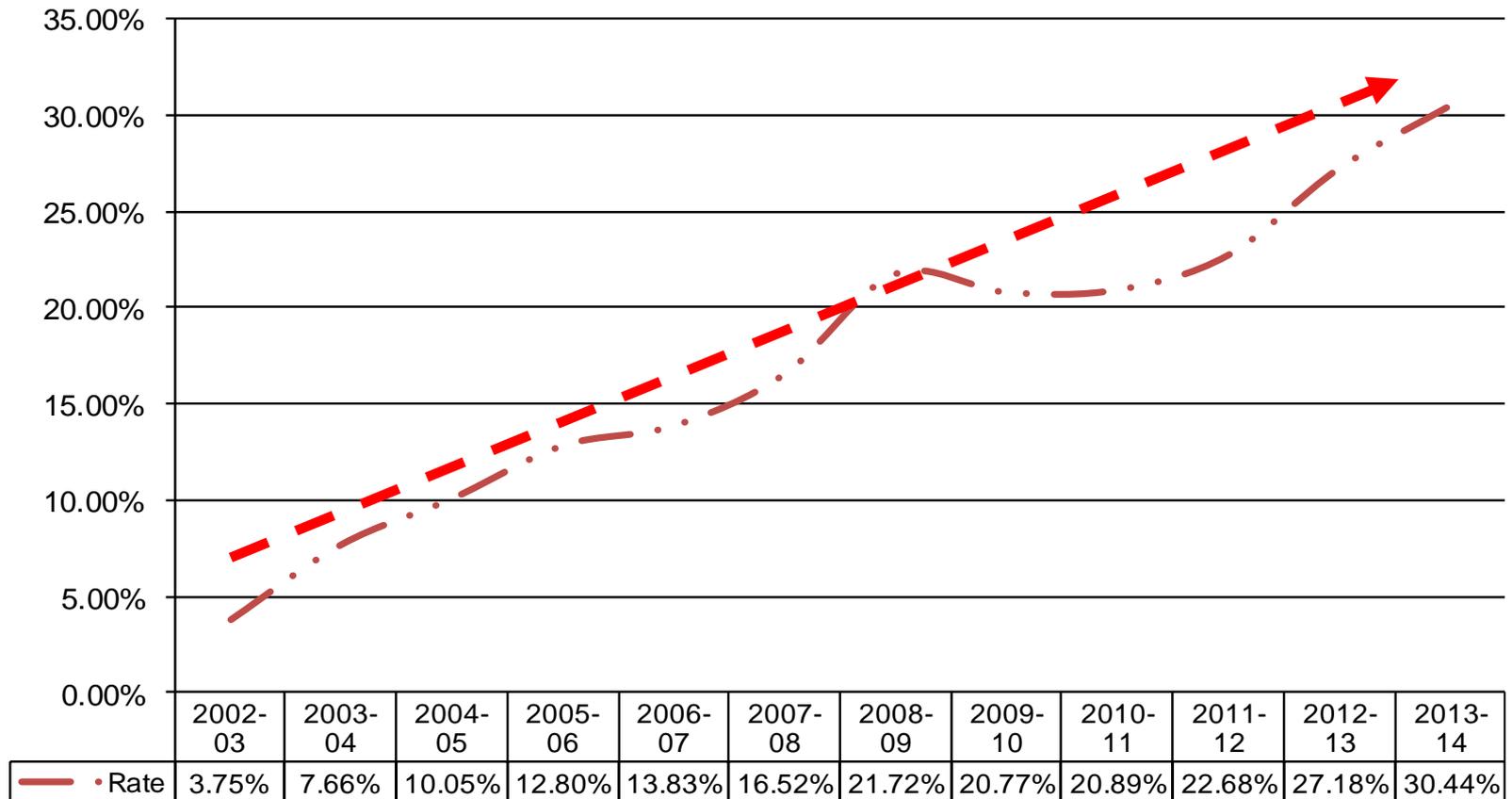
\*Market value does not include future benefit increase reserve

# Funding Levels



	6/30/2005	6/30/2006	6/30/2007	6/30/2008	6/30/2009	6/30/2010	6/30/2011	6/30/2012
■ PSPRS	83.2%	77.6%	66.4%	66.5%	68.2%	65.8%	61.9%	58.6%
■ CORP	101.1%	93.7%	84.6%	86.8%	82.6%	80.3%	73.0%	67.8%
■ EORP	92.3%	89.9%	74.6%	76.6%	71.3%	66.7%	62.1%	58.4%

# PSPRS – Aggregate Employer Rates



\*The aggregate computed contribution rates before application of the statutory minimum

# Investment Portfolio Returns

June 30, 2012

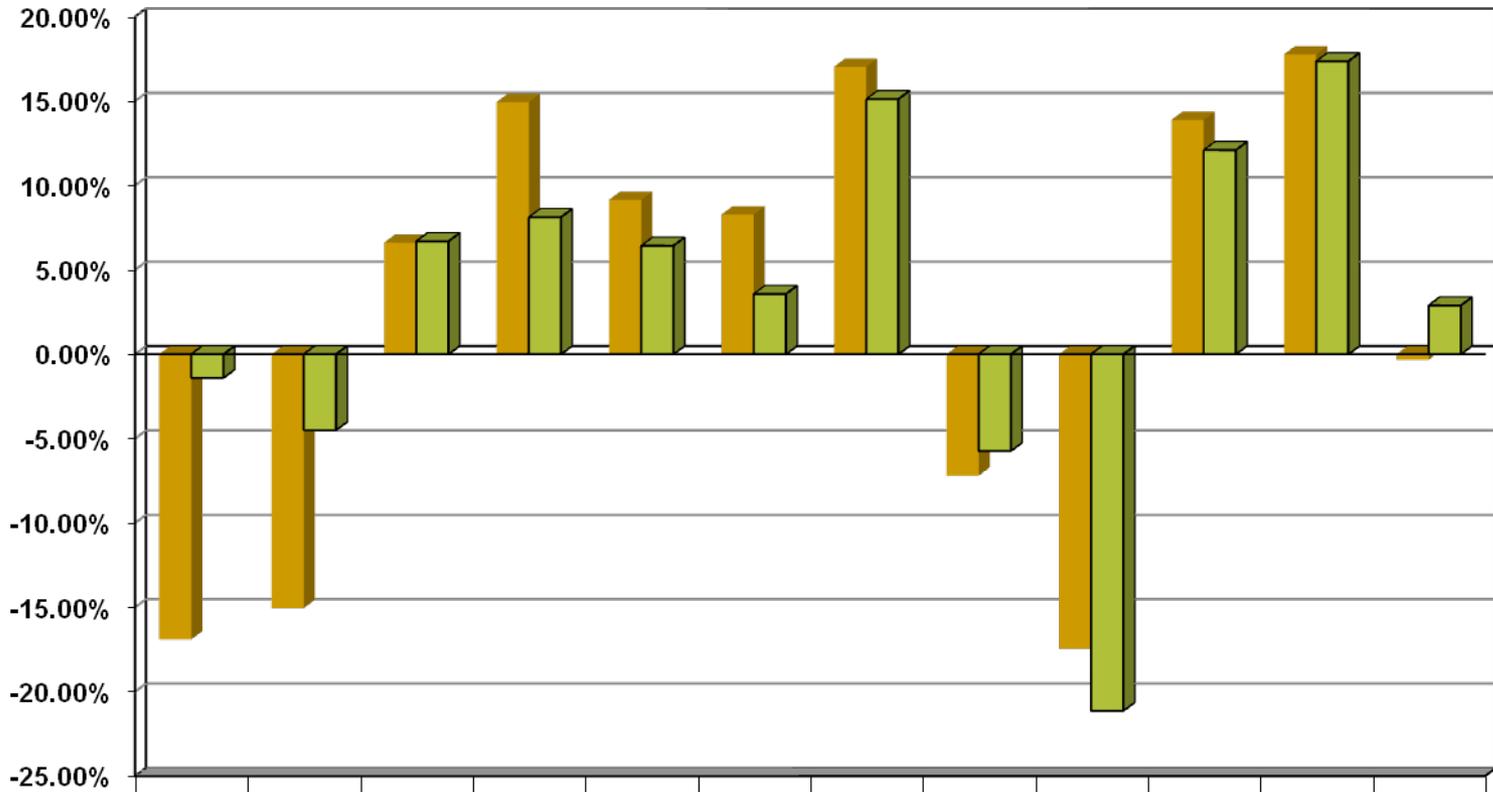
**Assumed Rate of Return 8%**

	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Total Fund*	-0.79%	9.73%	0.15%	5.51%
Benchmark**	2.89%	10.62%	0.13%	3.91%
ASRS	1.3%	13.2%	1.8%	6.3%
COPERS	-0.56%	9.72%	-0.25%	4.88%

\*Returns shown are net of fees; Returns for ASRS are net of fees and returns for COPERS are net of fees.

\*\* Benchmark 7/1/11-6/30/2012 20% Russell 3000, 15% MSCI World Ex-US, 20% BC Capital Aggregate, 8% 3-Month LIBOR +300 bps, 8% NCREIF MPI, 8% Russell 3000+100 bps, 9% ML US High Yield BB-B Rated Constrained, 6% CPI+200 bps, 4% 91-day T-Bill +200 bps and 2% 91-day T-Bill.

# Total Fund vs. Benchmark (as of June 30, 2012)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
■ Total Fund*	-16.89%	-15.04%	6.61%	14.94%	9.15%	8.28%	17.04%	-7.19%	-17.45%	13.89%	17.77%	-0.32%
■ Benchmark**	-1.40%	-4.50%	6.69%	8.12%	6.43%	3.57%	15.12%	-5.73%	-21.13%	12.10%	17.36%	2.89%

\*Total Fund returns are gross of fees

\*\* Benchmark 7/1/11-6/30/2012: 20% Russell 3000, 15% MSCI World Ex-US, 20% BC Aggregate, 8% NCREIF MPI, 8% Russell 3000+100 bps, 8% 3-Month LIBOR +300 bps, 9% BofA ML US High Yield BB-B Rated Constrained, 6% CPI+200 bps, 4% BofA ML 3-Month T-Bill +200 bps and 2% BofA ML 3-Month T-Bill.

# Implications for the Future

## Three Issues:

- COLA
- Rate of Return
- New Law

- Post Retirement Benefit Increase Reserves  
(after cost of July 1, 2011 post retirement adjustment)
  - PSPRS: \$168.3M (July 1 adjustment = \$154.8M)
  - CORP: - 0 - (July 1 adjustment = \$22.0M)
  - EORP: - 0 - (July 1 adjustment = \$8.3M)
  - Per statute, effective May 1, 2011 no more excess earnings will be transferred to the reserve accounts for the plans.

# Implications for the Future

- **Post Retirement Benefit Increase Reserves (Estimated)**  
(after cost of July 1, 2011 **maximum** post retirement adjustment **AND if excess investment earnings were allowed to be transferred into the reserve accounts**)
  - ❑ PSPRS: \$361.9M (July 1 adjustment = \$154.8M)
  - ❑ CORP: \$46.1M (July 1 adjustment = \$25.6M)
  - ❑ EORP: \$26.0 (July 1 adjustment = \$13.4M)
  - ❑ \$274.5 million in new assets would have flowed into the reserve accounts for the plans (\$193.6M for PSPRS; \$49.8M for CORP; \$31.1M for EORP) as of June 30, 2011
  - ❑ However, per statute, effective May 1, 2011 no more excess earnings will be transferred to the reserve accounts.

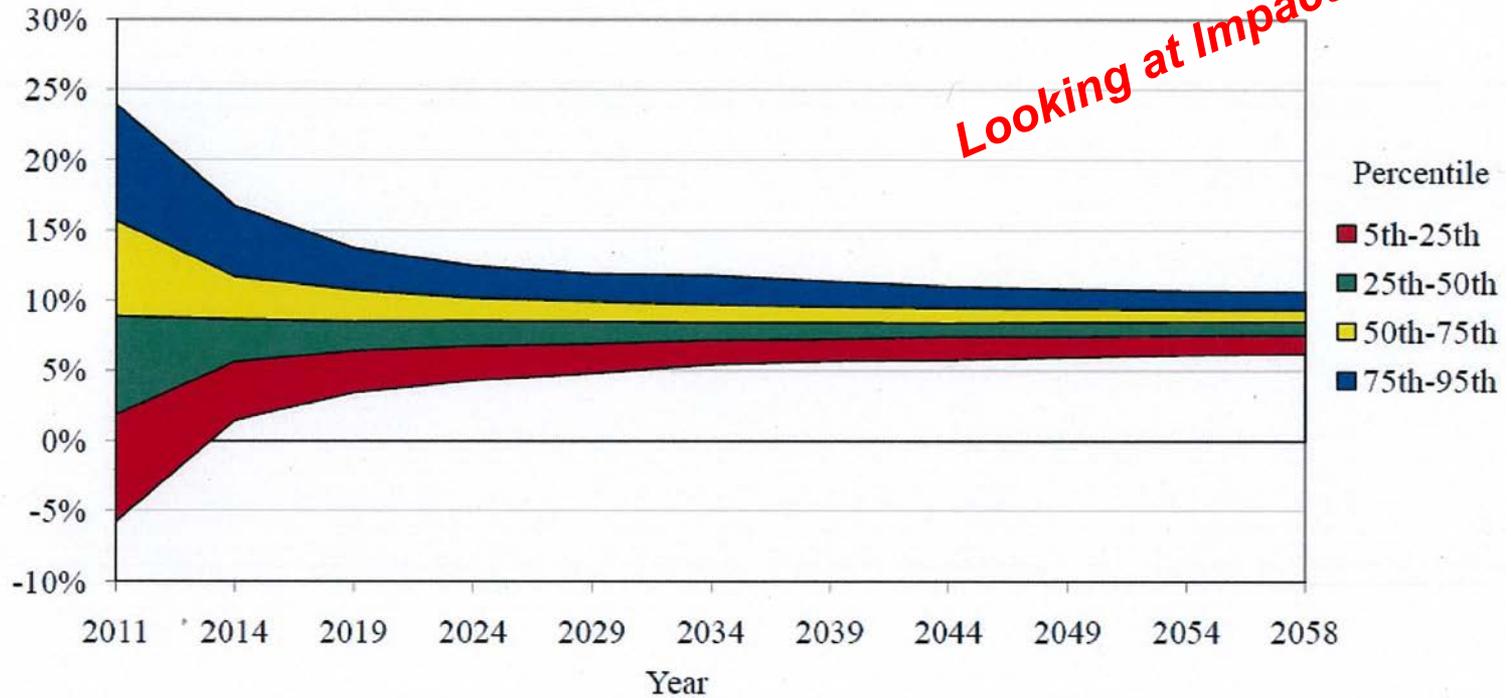
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# Funding Goal and Time Frame

**Goal:** To return the PSPRS plans to 80% funding status (or better)

**Time Frame:** 75% (or higher) probability of achieving the goal within 10 to 20 years.

Compound return wo COLA

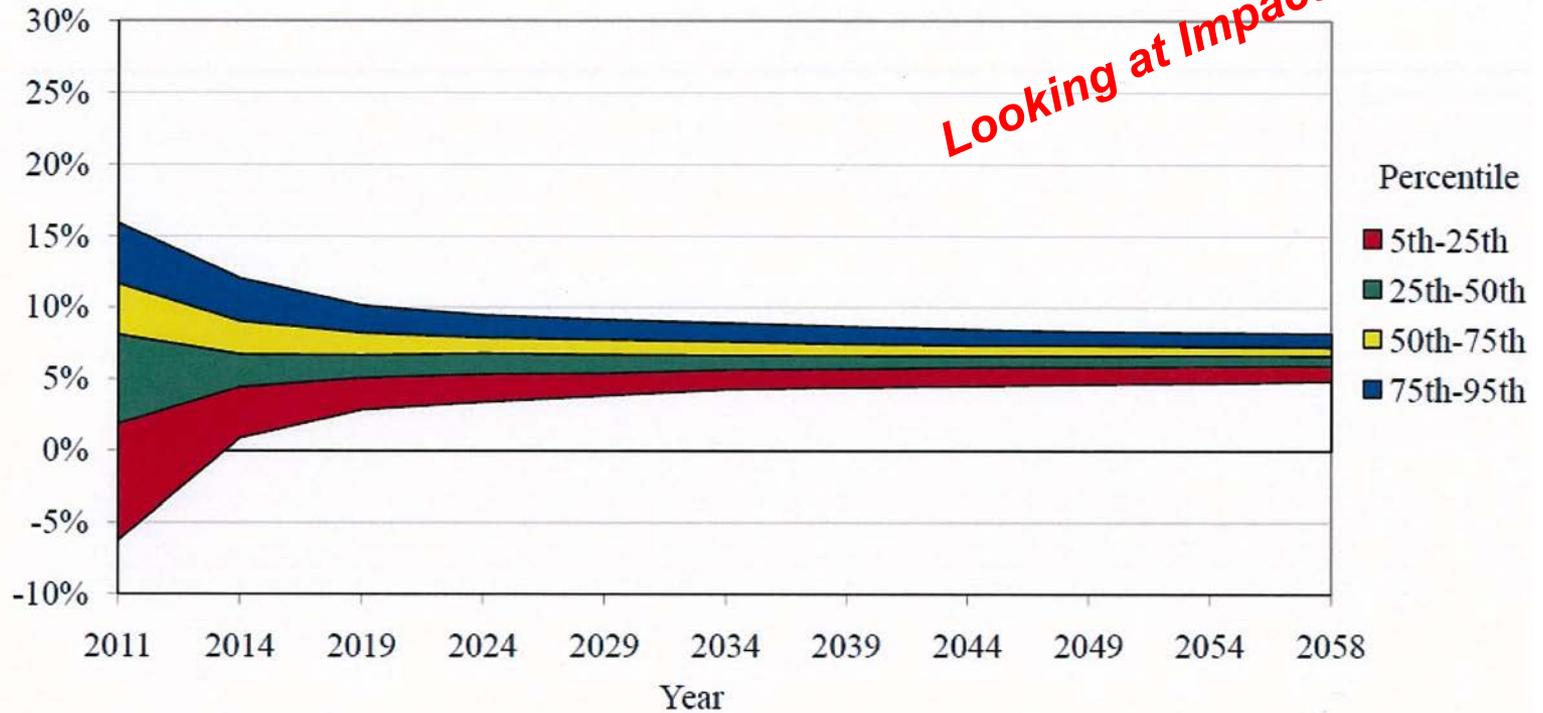


	2011	2014	2019	2024	2029	2034	2039	2044	2049	2054	2058
<b>95th Percentile</b>	23.9%	16.7%	13.7%	12.5%	11.9%	11.8%	11.4%	11.0%	10.8%	10.7%	10.6%
<b>75th Percentile</b>	15.7%	11.7%	10.8%	10.2%	10.0%	9.7%	9.6%	9.5%	9.4%	9.4%	9.3%
<b>Median</b>	8.9%	8.7%	8.5%	8.6%	8.5%	8.5%	8.5%	8.4%	8.5%	8.5%	8.5%
<b>25th Percentile</b>	1.9%	5.6%	6.4%	6.8%	6.9%	7.2%	7.3%	7.5%	7.5%	7.5%	7.6%
<b>5th Percentile</b>	-5.7%	1.5%	3.5%	4.3%	4.8%	5.5%	5.7%	5.8%	6.0%	6.1%	6.2%

Compound return w COLA

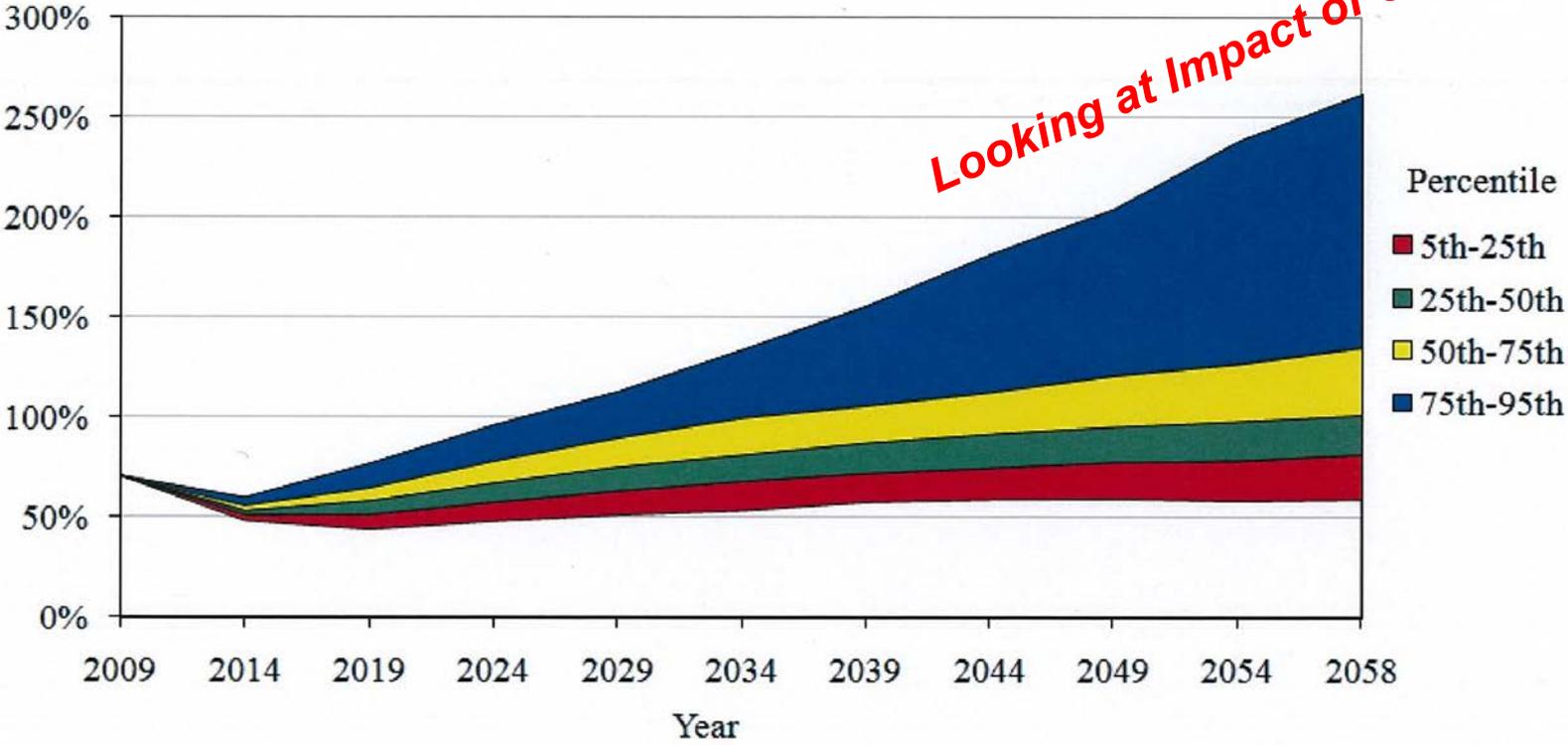
# With COLA

*Looking at Impact of COLA*



	2011	2014	2019	2024	2029	2034	2039	2044	2049	2054	2058
<b>95th Percentile</b>	15.8%	12.0%	10.1%	9.5%	9.1%	8.9%	8.7%	8.5%	8.3%	8.2%	8.2%
<b>75th Percentile</b>	11.6%	9.0%	8.2%	7.9%	7.8%	7.6%	7.5%	7.4%	7.4%	7.3%	7.2%
<b>Median</b>	8.1%	6.7%	6.7%	6.8%	6.7%	6.7%	6.6%	6.6%	6.6%	6.7%	6.6%
<b>25th Percentile</b>	1.9%	4.4%	5.1%	5.3%	5.4%	5.7%	5.7%	5.8%	5.8%	5.9%	5.9%
<b>5th Percentile</b>	-6.2%	0.9%	2.9%	3.4%	3.9%	4.3%	4.4%	4.5%	4.7%	4.7%	4.9%

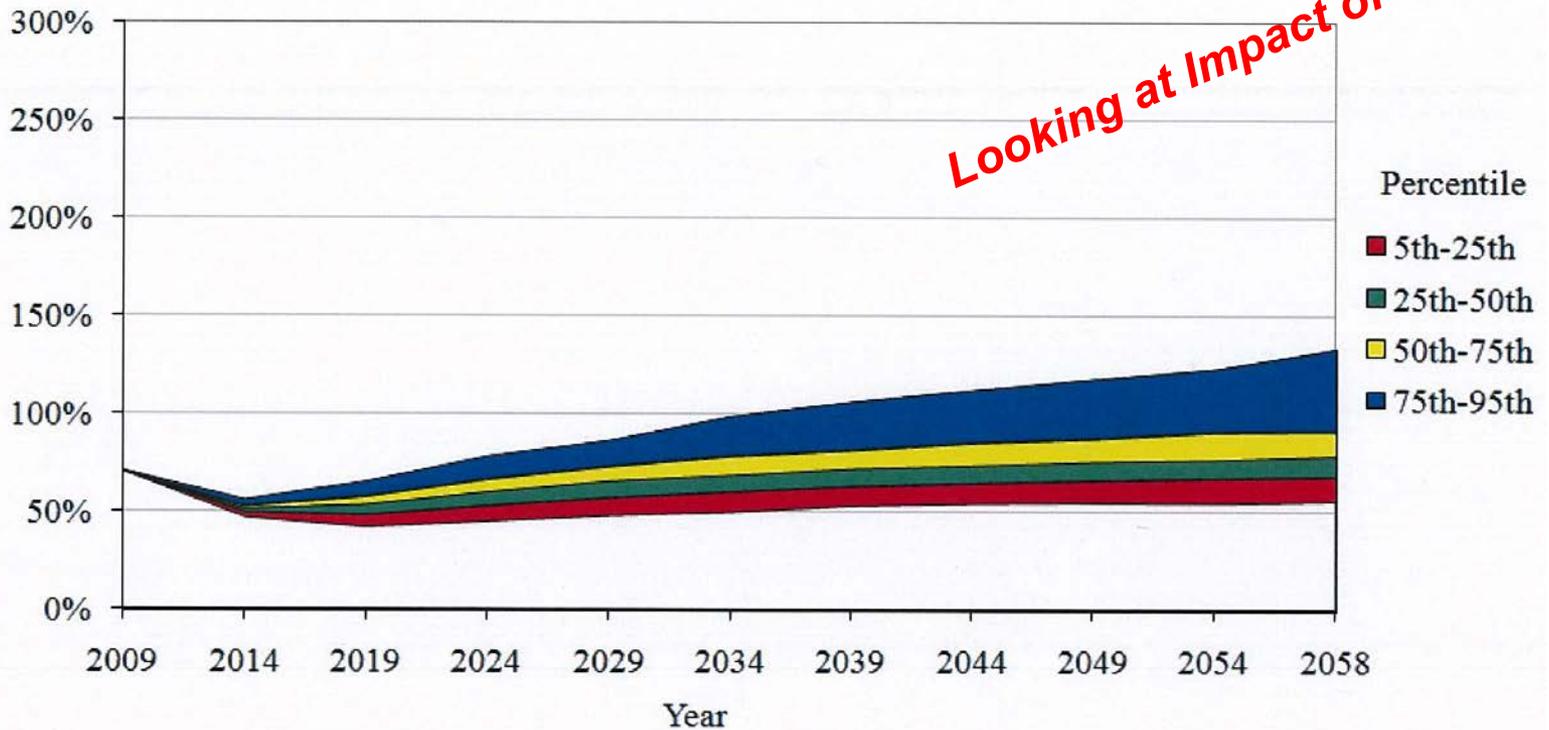
Funded Rate w/o COLA



	2009	2014	2019	2024	2029	2034	2039	2044	2049	2054	2058
<b>5th Percentile</b>	71.1%	48.8%	44.6%	48.6%	51.8%	54.1%	58.2%	59.5%	60.0%	58.9%	59.7%
<b>25th Percentile</b>	71.1%	51.5%	51.7%	57.9%	63.5%	68.4%	72.4%	75.2%	78.1%	78.9%	82.0%
<b>Median</b>	71.1%	53.4%	58.4%	67.4%	75.5%	81.5%	87.6%	92.0%	95.7%	98.5%	101.5%
<b>75th Percentile</b>	71.1%	56.2%	65.2%	78.7%	90.3%	100.4%	106.5%	113.3%	121.7%	127.6%	135.9%
<b>95th Percentile</b>	71.1%	60.3%	77.4%	96.7%	113.3%	134.4%	156.3%	182.1%	204.9%	239.0%	262.5%

Funded Rate w COLA

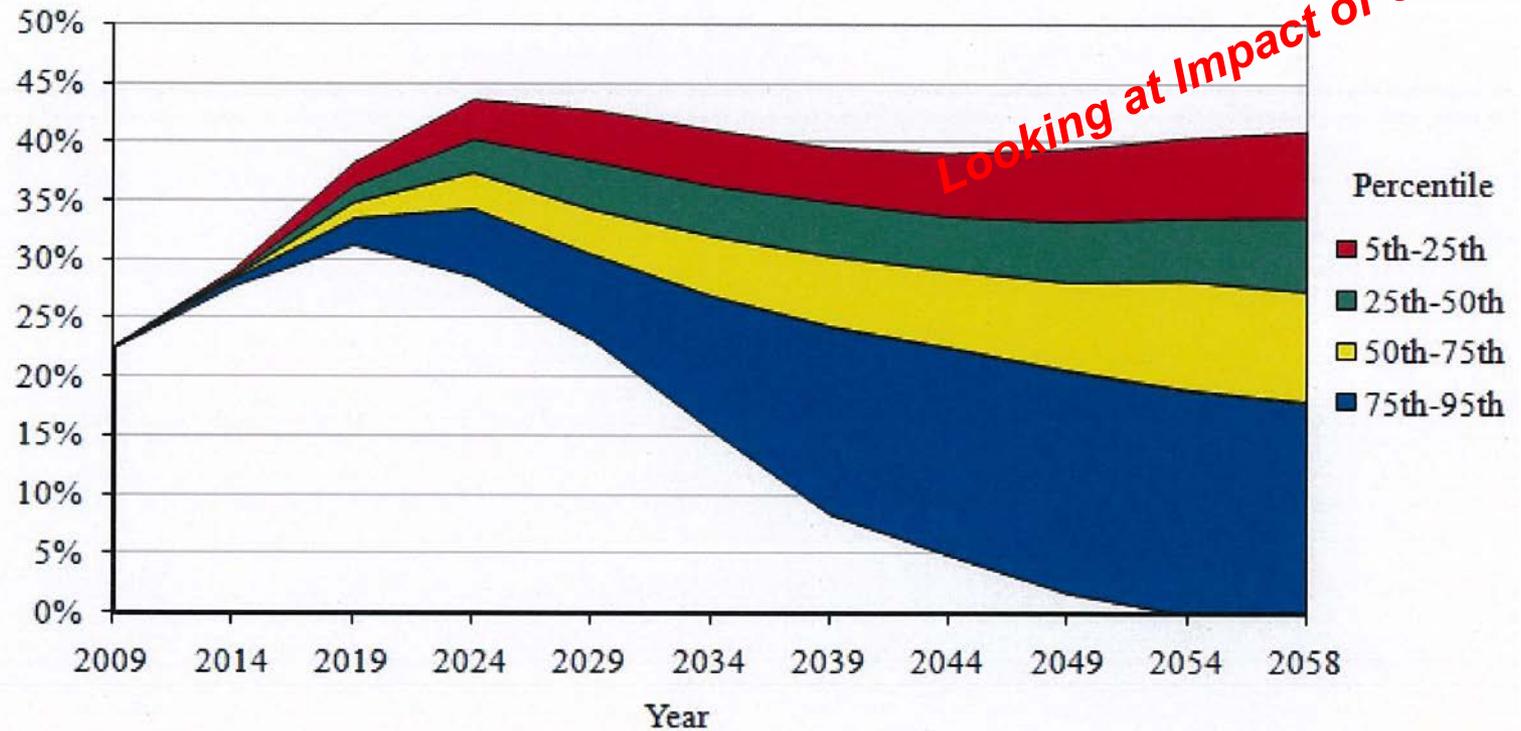
With COLA



	2009	2014	2019	2024	2029	2034	2039	2044	2049	2054	2058
<b>5th Percentile</b>	71.1%	47.6%	42.7%	45.5%	48.5%	50.4%	53.6%	54.8%	55.3%	54.9%	56.2%
<b>25th Percentile</b>	71.1%	49.9%	48.6%	53.2%	57.3%	60.4%	63.3%	65.0%	66.4%	67.5%	68.4%
<b>Median</b>	71.1%	51.5%	53.5%	60.1%	65.7%	68.7%	72.1%	73.7%	75.8%	76.8%	78.8%
<b>75th Percentile</b>	71.1%	53.0%	58.0%	66.8%	73.5%	78.9%	81.9%	85.9%	88.0%	91.5%	92.0%
<b>95th Percentile</b>	71.1%	56.3%	65.4%	78.4%	86.6%	98.9%	106.5%	112.5%	118.1%	123.3%	133.7%

Contribution w COLA

With COLA



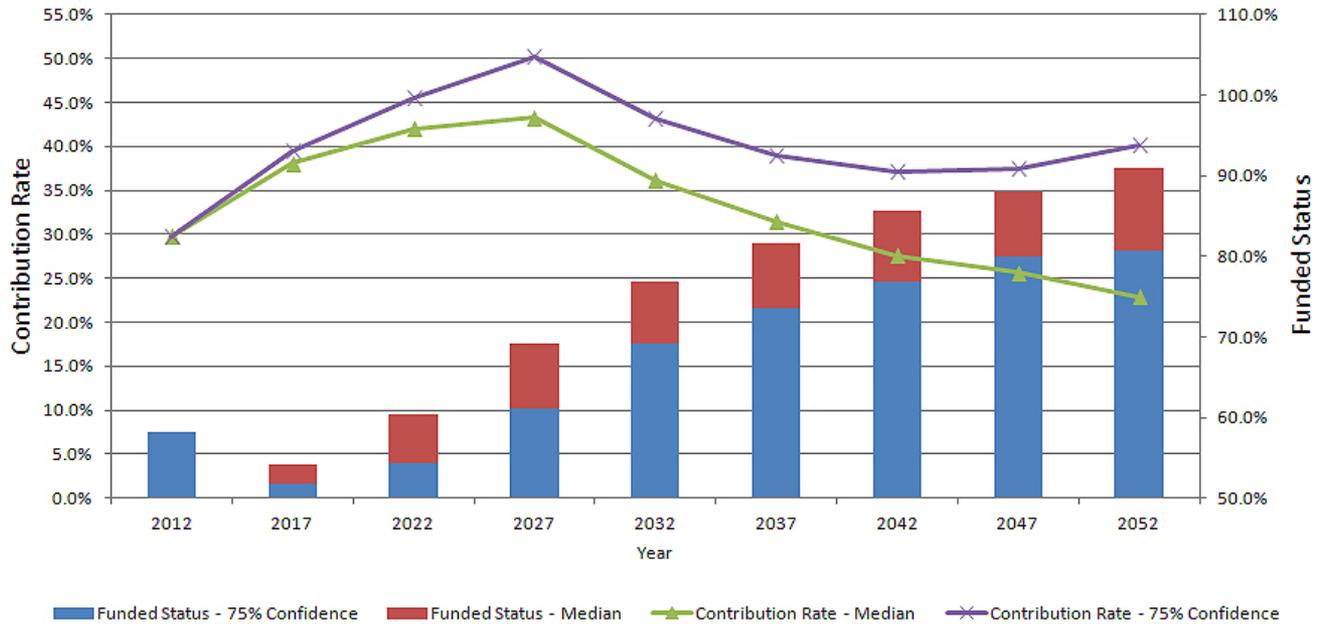
	2009	2014	2019	2024	2029	2034	2039	2044	2049	2054	2058
<b>5th Percentile</b>	22.6%	29.1%	38.3%	43.7%	42.8%	41.2%	39.6%	39.1%	39.5%	40.5%	41.0%
<b>25th Percentile</b>	22.6%	28.8%	36.4%	40.3%	38.5%	36.4%	35.0%	33.8%	33.3%	33.6%	33.7%
<b>Median</b>	22.6%	28.6%	34.9%	37.5%	34.3%	32.1%	30.4%	29.2%	28.1%	28.3%	27.4%
<b>75th Percentile</b>	22.6%	28.4%	33.6%	34.4%	30.5%	27.0%	24.4%	22.6%	20.6%	19.0%	17.9%
<b>95th Percentile</b>	22.6%	27.9%	31.4%	28.7%	23.3%	15.7%	8.5%	5.0%	1.8%	0.0%	0.0%

## Summary of 5-Year Experience Study Findings for PSPRS Average Effect on Contribution Rates (Results Based Upon June 30, 2011 Data)

	Present Demographic 8.25%/5.0%	Revised Demographic Assumptions			
		8.25%/5.0%	8.0%/5.0%	7.75%/4.5%	7.5%/4.0%
<b>Employer Contribution Rate</b>					
Employer Normal Cost	12.61%	12.32%	13.32%	13.42%	13.52%
Amortization	14.57%	14.95%	15.57%	16.95%	18.44%
Total	27.18%	27.27%	28.89%	30.37%	31.96%
<b>Funded Status</b>					
Accrued Liabilities	\$9,365,260,877	\$9,455,721,026	\$9,707,184,628	\$9,903,381,712	\$10,107,681,513
Funding Value of Assets	5,795,944,673	5,795,944,673	5,795,944,673	5,795,944,673	5,795,944,673
Funded Ratio	61.9%	61.3%	59.7%	58.5%	57.3%

The above results are presented as an aid in understanding the average combined effects of the changes in assumptions that have been proposed in this experience study. The results are approximate and indicate only the general direction and approximate average magnitude of the effects of the assumption changes. *Contribution rates for fiscal year beginning July 1, 2012 have already been scheduled based upon the June 30, 2011 valuation and are not affected by the experience study.* The experience study would begin to effect rates for the fiscal year beginning July 1, 2013.

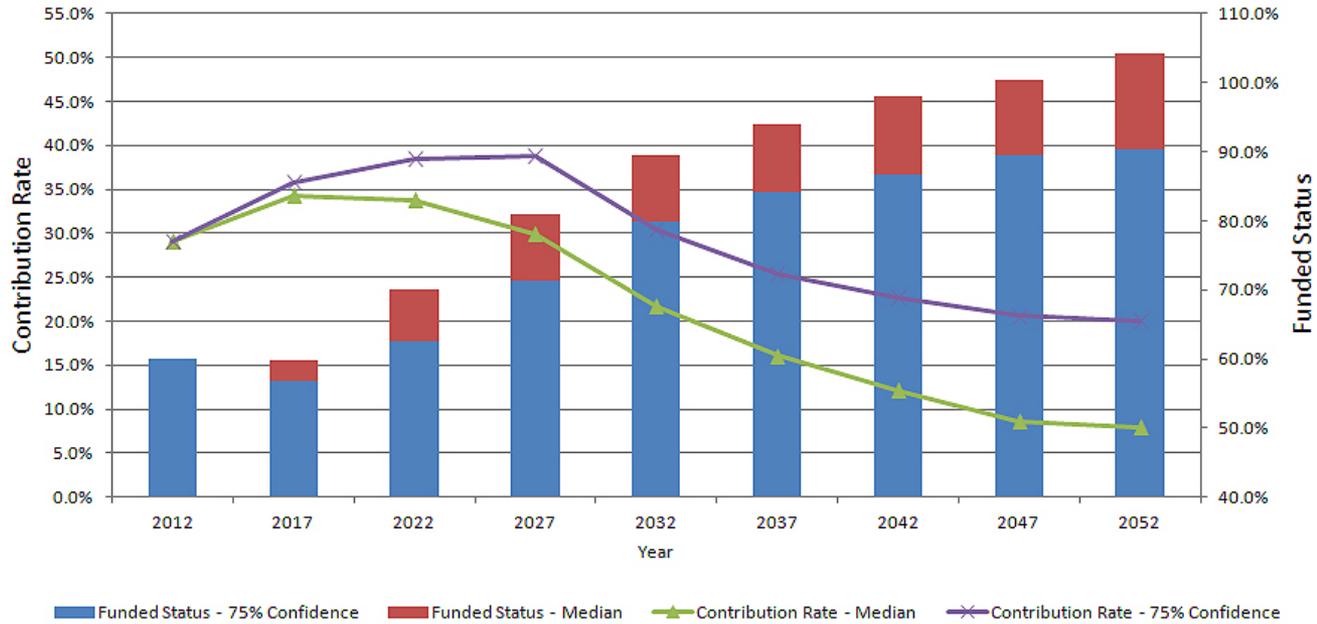
## PSPRS Projection Results Baseline



<b>Contribution Rates</b>	<b>2012</b>	<b>2017</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>	<b>2037</b>	<b>2042</b>	<b>2047</b>	<b>2052</b>
<b>95% Probability</b>	29.7%	48.4%	57.7%	68.2%	73.4%	70.2%	73.4%	87.3%	99.0%
<b>75% Probability</b>	29.7%	39.4%	45.5%	50.3%	43.1%	39.0%	37.1%	37.4%	40.1%
<b>50% Probability</b>	29.7%	38.1%	41.9%	43.3%	36.1%	31.5%	27.5%	25.6%	22.8%
<b>25% Probability</b>	29.7%	37.1%	38.2%	36.6%	27.6%	20.8%	15.0%	8.0%	8.0%
<b>5% Probability</b>	29.7%	27.2%	10.7%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
<b>Funded Rate</b>	<b>2012</b>	<b>2017</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>	<b>2037</b>	<b>2042</b>	<b>2047</b>	<b>2052</b>
<b>95% Probability</b>	58.3%	46.6%	47.3%	52.3%	59.3%	63.8%	67.2%	68.9%	69.2%
<b>75% Probability</b>	58.3%	51.7%	54.3%	61.2%	69.1%	73.6%	76.9%	80.0%	80.6%
<b>50% Probability</b>	58.3%	54.2%	60.5%	69.1%	76.9%	81.7%	85.7%	88.1%	90.9%
<b>25% Probability</b>	58.3%	56.4%	65.7%	76.6%	84.8%	91.0%	95.2%	101.3%	107.9%
<b>5% Probability</b>	58.3%	59.6%	75.8%	89.3%	102.7%	118.5%	141.0%	163.1%	182.0%



## PSPRS Projection Results New Law



<b>Contribution Rates</b>	<b>2012</b>	<b>2017</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>	<b>2037</b>	<b>2042</b>	<b>2047</b>	<b>2052</b>
<b>95% Probability</b>	29.1%	46.0%	53.2%	58.4%	57.6%	45.6%	45.8%	47.7%	46.5%
<b>75% Probability</b>	29.1%	35.8%	38.5%	38.8%	30.4%	25.5%	22.7%	20.6%	20.0%
<b>50% Probability</b>	29.1%	34.2%	33.8%	29.9%	21.8%	16.1%	12.1%	8.6%	8.0%
<b>25% Probability</b>	29.1%	32.5%	28.8%	19.9%	9.3%	8.0%	8.0%	8.0%	8.0%
<b>5% Probability</b>	29.1%	22.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%

<b>Funded Rate</b>	<b>2012</b>	<b>2017</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>	<b>2037</b>	<b>2042</b>	<b>2047</b>	<b>2052</b>
<b>95% Probability</b>	60.1%	50.7%	53.4%	60.4%	67.5%	71.8%	74.7%	76.6%	78.2%
<b>75% Probability</b>	60.1%	56.7%	62.5%	71.3%	80.0%	84.0%	86.8%	89.5%	90.3%
<b>50% Probability</b>	60.1%	59.8%	70.0%	81.0%	89.5%	93.9%	98.1%	100.5%	104.2%
<b>25% Probability</b>	60.1%	63.3%	77.7%	91.5%	100.2%	108.3%	113.3%	123.5%	131.9%
<b>5% Probability</b>	60.1%	69.0%	91.5%	108.8%	126.5%	146.9%	164.7%	184.3%	199.6%

