

MassPensions

Public Pensions in Massachusetts

Andover 2012

Ending Deadline: 2040
Target Return: NA
Assumed Rate of Return: 7.75%
Funded Ratio: 49.7%
Funding Schedule: 4% Increasing Phase-in
Acting Trustee: NA
Investment Manager(s): 1
Consultant: NA

	Grade	Rank	Composite
Funded Ratio	F	83/105	D
Return	A	49/105	
Deadline	F	104/104	



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	Funding Deadline	Deadline Grade	Deadline Rank	Target Return	ARR	Return Grade	Return Rank	Funded Ratio	Funding Schedule	Ratio Grade	Ratio Rank	NA
<i>Adams</i>	2030	D	48/104	NA	7.5%	A	105/105	80.9%	*	B	8/105	B
<i>Amesbury</i>	2036	F	84/104	NA	8.25%	A	42/105	49.8%	*	F	81/105	D
<i>Andover</i>	2040	F	104/104	NA	7.75%	A	49/105	49.7%	*	F	83/105	D
<i>Arlington</i>	2032	D	61/104	NA	7.5%	A	81/105	48.4%	*	F	90/105	C
<i>Athol</i>	2040	F	104/104	NA	8%	A	65/105	48.7%	*	F	88/105	D
<i>Attleboro</i>	2030	D	48/104	NA	8%	A	33/105	65.1%	*	D	41/105	C
<i>Barnstable County</i>	2038	F	96/104	NA	7.88%	A	27/105	55.5%	*	F	70/105	D
<i>Belmont</i>	2027	C	21/104	NA	7.75%	A	76/105	51.3%	*	F	78/105	C
<i>Berkshire County</i>	2022	B	8/104	NA	8%	A	55/105	83.5%	*	B	7/105	B
<i>Beverly</i>	2030	D	48/104	NA	8%	A	14/105	51.1%	*	F	79/105	C
<i>Blue Hills Regional School District</i>	2032	D	61/104	NA	8%	A	58/105	68.6%	*	D	28/105	C
<i>Boston</i>	2025	C	15/104	NA	7.75%	A	77/105	61.4%	*	D	51/105	C
<i>Braintree</i>	2033	F	65/104	NA	7.88%	A	87/105	62.4%	*	D	46/105	C
<i>Bristol County</i>	2030	D	48/104	NA	8%	A	2/105	59.3%	*	F	59/105	C
<i>Brockton</i>	2030	D	48/104	NA	8%	A	90/105	72.3%	*	C	22/105	C
<i>Brookline</i>	2030	D	48/104	NA	7.75%	A	94/105	55.8%	*	F	66/105	C
<i>Cambridge</i>	2029	D	27/104	NA	8%	A	9/105	77.8%	*	C	11/105	C
<i>Chelsea</i>	2028	D	23/104	NA	8%	A	48/105	53.3%	*	F	74/105	C
<i>Chicopee</i>	2026	C	18/104	NA	8%	A	3/105	60.1%	*	D	56/105	C



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07 September 2013

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	Funding Deadline	Deadline Grade	Deadline Rank	Target Return	ARR	Return Grade	Return Rank	Funded Ratio	Funding Schedule	Ratio Grade	Ratio Rank	NA
Clinton	2029	D	27/104	NA	8%	A	72/105	65.6%	*	D	40/105	C
Concord	2030	D	48/104	NA	7.5%	A	88/105	76.7%	*	C	14/105	C
Danvers	2036	F	84/104	NA	8%	A	100/105	58.6%	*	F	63/105	D
Dedham	2034	F	67/104	NA	8%	A	26/105	71.9%	*	C	23/105	C
Dukes County	2026	C	18/104	NA	8%	A	93/105	67%	*	D	37/105	C
Easthampton	2033	F	65/104	NA	8%	A	43/105	62%	*	D	49/105	C
Essex County	2035	F	77/104	NA	8.25%	A	62/105	51.9%	*	F	77/105	D
Everett	2030	D	48/104	NA	8%	A	23/105	38.4%	*	F	104/105	C
Fairhaven	2032	D	61/104	NA	8%	A	36/105	63.4%	*	D	44/105	C
Fall River	2040	F	104/104	NA	8%	A	53/105	46.1%	*	F	95/105	D
Falmouth	2037	F	89/104	NA	8%	A	67/105	58.9%	*	F	62/105	D
Fitchburg	2035	F	77/104	NA	7.95%	A	69/105	42%	*	F	101/105	D
Framingham	2030	D	48/104	NA	8%	A	33/105	67.3%	*	D	36/105	C
Franklin County	2035	F	77/104	NA	7.88%	A	65/105	63.3%	*	D	45/105	C
Gardner	2030	D	48/104	NA	8%	A	27/105	55.3%	*	F	72/105	C
Gloucester	2037	F	89/104	NA	7.88%	A	45/105	44.3%	*	F	98/105	D
Greater Lawrence Sanitary District	2026	C	18/104	NA	8%	A	101/105	89.5%	*	B	3/105	B
Greenfield	2038	F	96/104	NA	8%	A	17/105	61.1%	*	D	52/105	C
Hampden County	2036	F	84/104	NA	8%	A	74/105	48.9%	*	F	87/105	D



	Funding Deadline	Deadline Grade	Deadline Rank	Target Return	ARR	Return Grade	Return Rank	Funded Ratio	Funding Schedule	Ratio Grade	Ratio Rank	NA
<i>Hampshire County</i>	2034	F	67/104	NA	7.88%	A	12/105	55.5%	*	F	70/105	D
<i>Haverhill</i>	2032	D	61/104	NA	8%	A	86/105	49.2%	*	F	85/105	C
<i>Hingham</i>	2032	D	61/104	NA	8%	A	91/105	69.4%	*	D	26/105	C
<i>Holyoke</i>	2032	D	61/104	NA	8%	A	1/105	50.9%	*	F	80/105	C
<i>Hull</i>	2033	F	65/104	NA	7.75%	A	40/105	43.7%	*	F	99/105	D
<i>Lawrence</i>	2038	F	96/104	NA	7.75%	A	45/105	39.4%	*	F	103/105	D
<i>Leominster</i>	2016	A	2/104	NA	8%	A	6/105	78.6%	*	C	9/105	B
<i>Lexington</i>	2030	D	48/104	NA	7.75%	A	13/105	78.3%	*	C	10/105	C
<i>Lowell</i>	2032	D	61/104	NA	8.25%	A	60/105	60.1%	*	D	56/105	C
<i>Lynn</i>	2031	D	51/104	NA	8%	A	61/105	46%	*	F	96/105	C
<i>Malden</i>	2030	D	48/104	NA	8%	A	97/105	70.1%	*	C	25/105	C
<i>Marblehead</i>	2037	F	89/104	NA	8%	A	36/105	73.7%	*	C	18/105	C
<i>Marlborough</i>	2025	C	15/104	NA	8%	A	98/105	68.4%	*	D	29/105	C
<i>Mass Housing Finance Agency</i>	2022	B	8/104	NA	8%	A	89/105	77.4%	0.00%	C	12/105	B
<i>Mass Port Authority</i>	NA	NA	NA	NA	7.63%	A	70/105	89.7%	0.00%	B	2/105	NA
<i>Mass State</i>	2040	F	104/104	NA	8.25%	A	21/105	73.8%	*	C	17/105	C
<i>Mass Teachers</i>	2040	F	104/104	NA	8.25%	A	21/105	60.7%	*	D	53/105	C

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Maynard	2029	D	27/104	NA	8%	A	104/105	71.8%	*	C	24/105	C
Medford	2040	F	104/104	NA	7.5%	A	78/105	64.4%	*	D	42/105	C
Melrose	2030	D	48/104	NA	8%	A	80/105	55.7%	*	F	68/105	C
Methuen	2032	D	61/104	NA	8%	A	51/105	46.8%	*	F	92/105	C
Middlesex County	2035	F	77/104	NA	8%	A	64/105	43.7%	*	F	99/105	D
Milford	2037	F	89/104	NA	8%	A	62/105	62.1%	*	D	48/105	C
Milton	2022	B	8/104	NA	8%	A	33/105	77.3%	*	C	13/105	B
Minuteman Regional School District	2012	A	1/104	NA	8%	A	68/105	104%	0.00%	A	1/105	A
Montague	2025	C	15/104	NA	8%	A	27/105	75.6%	*	C	16/105	B
Natick	2030	D	48/104	NA	8%	A	16/105	64%	*	D	43/105	C
Needham	2030	D	48/104	NA	8%	A	51/105	72.9%	*	C	21/105	C
New Bedford	2036	F	84/104	NA	7.75%	A	11/105	41.6%	*	F	102/105	D
Newburyport	2038	F	96/104	NA	8%	A	53/105	59%	*	F	60/105	D
Newton	2038	F	96/104	NA	7.75%	A	19/105	53.1%	*	F	76/105	D
Norfolk County	2031	D	51/104	NA	8.25%	A	73/105	60%	*	D	58/105	C
North Adams	2028	D	23/104	NA	8%	A	96/105	67.9%	*	D	32/105	C
North Attleboro	2033	F	65/104	NA	8%	A	94/105	73.4%	*	C	19/105	C

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	Funding Deadline	Deadline Grade	Deadline Rank	Target Return	ARR	Return Grade	Return Rank	Funded Ratio	Funding Schedule	Ratio Grade	Ratio Rank	NA
Northampton	2036	F	84/104	NA	7.75%	A	102/105	60.5%	*	D	54/105	C
Northbridge	2035	F	77/104	NA	8%	A	27/105	62.2%	*	D	47/105	C
Norwood	2030	D	48/104	NA	8.25%	A	92/105	84%	*	B	6/105	B
Peabody	2036	F	84/104	NA	8.25%	A	24/105	48.5%	*	F	89/105	D
Pittsfield	2036	F	84/104	NA	8%	A	45/105	46.4%	*	F	93/105	D
Plymouth	2027	C	21/104	NA	8%	A	7/105	54.2%	*	F	73/105	C
Plymouth County	2030	D	48/104	NA	8.25%	A	85/105	56.1%	*	F	65/105	C
Quincy	2040	F	104/104	NA	8%	A	82/105	47.6%	*	F	91/105	D
Reading	2030	D	48/104	NA	7.75%	A	19/105	68%	*	D	31/105	C
Revere	2027	C	21/104	NA	8%	A	55/105	57.6%	*	F	64/105	C
Salem	2032	D	61/104	NA	8%	A	83/105	49.8%	*	F	81/105	C
Saugus	2024	C	12/104	NA	8%	A	40/105	67.8%	*	D	34/105	C
Shrewsbury	2022	B	8/104	NA	8%	A	32/105	68.4%	*	D	29/105	B
Somerville	2035	F	77/104	NA	8.25%	A	4/105	60.4%	*	D	55/105	C
Southbridge	2038	F	96/104	NA	8%	A	75/105	49.1%	*	F	86/105	D
Springfield	2037	F	89/104	NA	8.13%	A	55/105	29%	*	F	105/105	D
Stoneham	2023	C	10/104	NA	8%	A	38/105	66.1%	*	D	39/105	C
Swampscott	2030	D	48/104	NA	8%	A	5/105	46.2%	*	F	94/105	C
Taunton	2030	D	48/104	NA	8%	A	70/105	61.9%	*	D	50/105	C
Wakefield	2038	F	96/104	NA	8%	A	24/105	66.5%	*	D	38/105	C
Waltham	2031	D	51/104	NA	8.25%	A	18/105	55.8%	*	F	66/105	C
Watertown	2022	B	8/104	NA	8%	A	78/105	59%	*	F	60/105	C



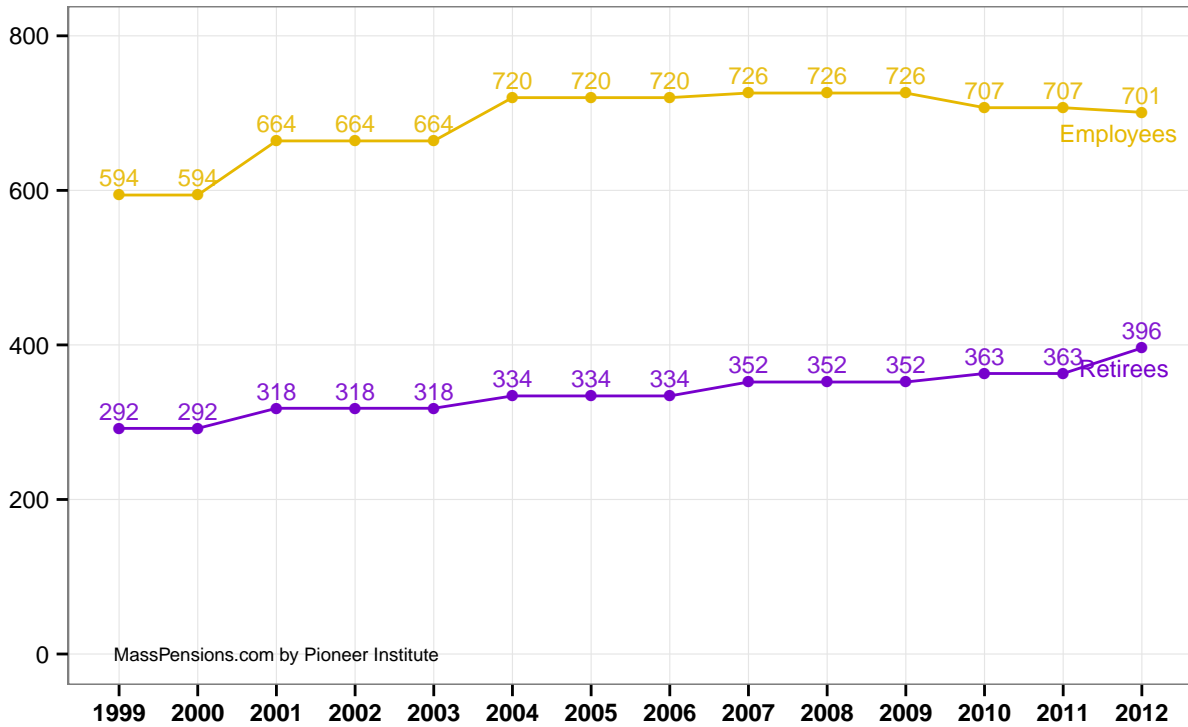
	Funding Deadline	Deadline Grade	Deadline Rank	Target Return	ARR	Return Grade	Return Rank	Funded Ratio	Funding Schedule	Ratio Grade	Ratio Rank	NA
<i>Webster</i>	2029	D	27/104	NA	8%	A	44/105	49.7%	*	F	83/105	C
<i>Wellesley</i>	2030	D	48/104	NA	7.75%	A	31/105	75.8%	*	C	15/105	C
<i>West Springfield</i>	2035	F	77/104	NA	7.75%	A	103/105	53.2%	*	F	75/105	D
<i>Westfield</i>	2032	D	61/104	NA	8%	A	7/105	68.9%	*	D	27/105	C
<i>Weymouth</i>	2035	F	77/104	NA	7.88%	A	10/105	55.6%	*	F	69/105	D
<i>Winchester</i>	2021	B	3/104	NA	8%	A	99/105	84.5%	0.00%	B	5/105	B
<i>Winthrop</i>	2023	C	10/104	NA	8%	A	84/105	73.1%	*	C	20/105	B
<i>Woburn</i>	2035	F	77/104	NA	8%	A	38/105	67.9%	*	D	32/105	C
<i>Worcester</i>	2035	F	77/104	NA	8%	A	15/105	67.7%	*	D	35/105	C
<i>Worcester County</i>	2040	F	104/104	NA	8%	A	59/105	44.4%	*	F	97/105	D

*: please refer to MassPensions.com for these data

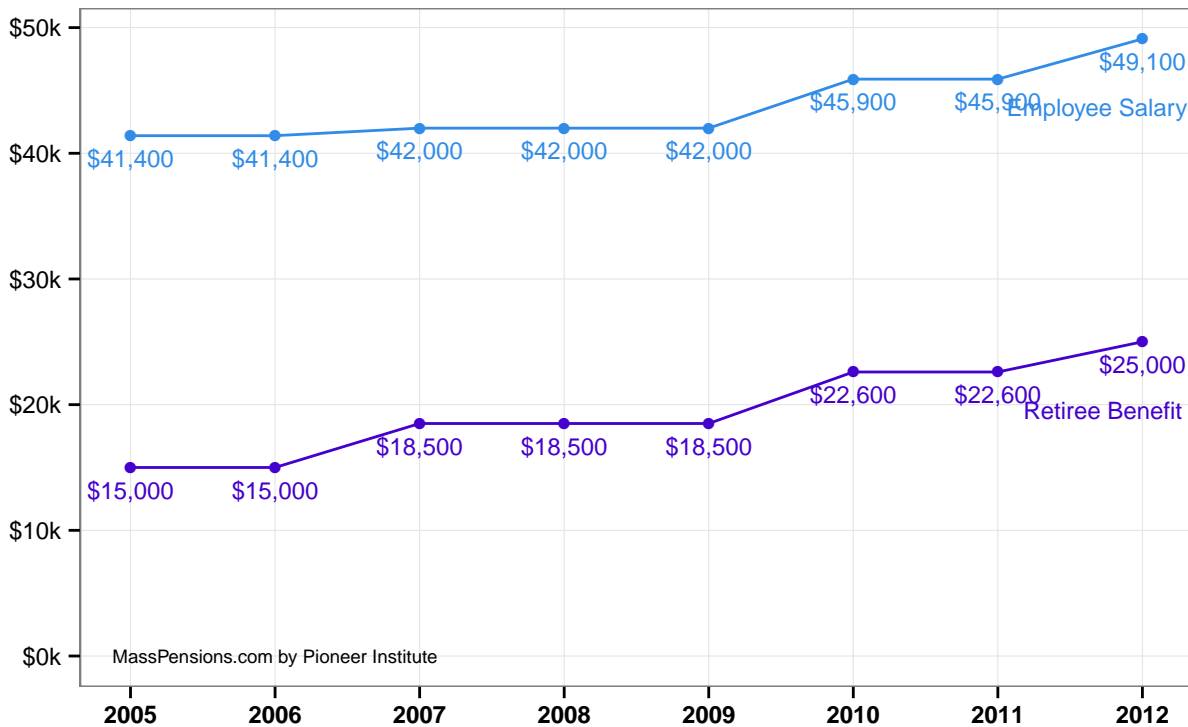
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Public Pensions in Massachusetts

Andover Number of Employees and Retirees



Average Pay of Andover Employees and Retirees



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Public Pensions in Massachusetts

Andover 2012

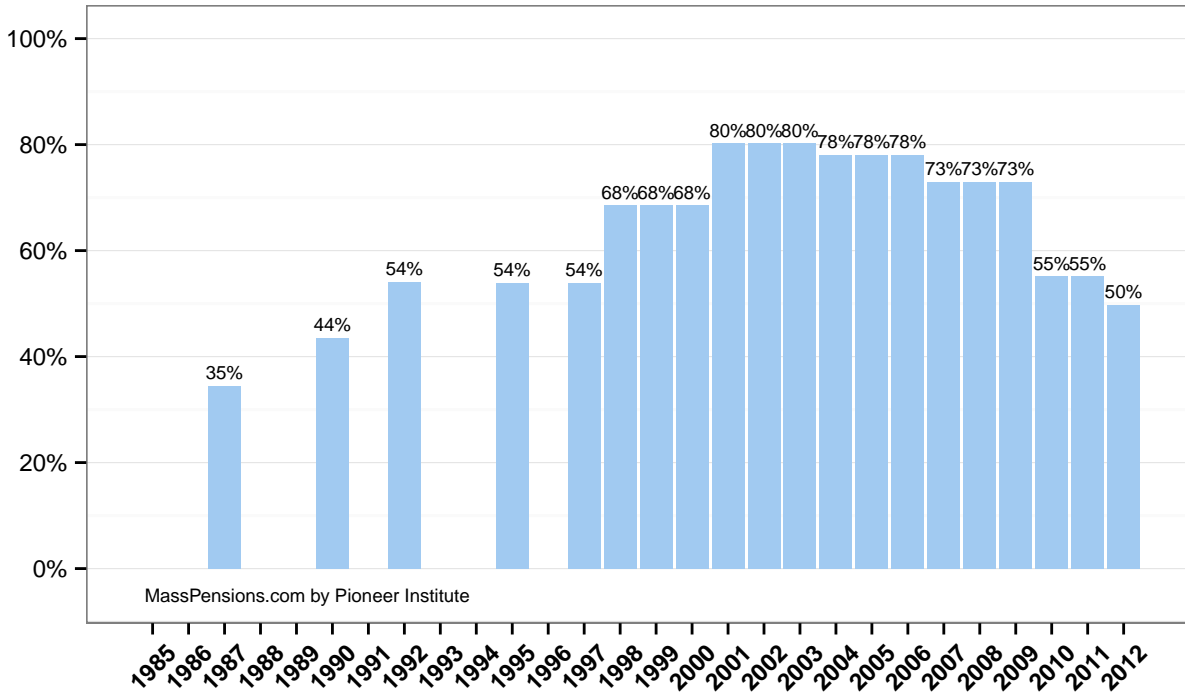
	Employees	Retirees	Salary (E)	Benefit (R)
1999	594	292	NA	NA
2000	594	292	NA	NA
2001	664	318	NA	NA
2002	664	318	NA	NA
2003	664	318	NA	NA
2004	720	334	NA	NA
2005	720	334	\$41,400	\$15,000
2006	720	334	\$41,400	\$15,000
2007	726	352	\$42,000	\$18,500
2008	726	352	\$42,000	\$18,500
2009	726	352	\$42,000	\$18,500
2010	707	363	\$45,900	\$22,600
2011	707	363	\$45,900	\$22,600
2012	701	396	\$49,100	\$25,000



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Public Pensions in Massachusetts

Andover Funded Ratio



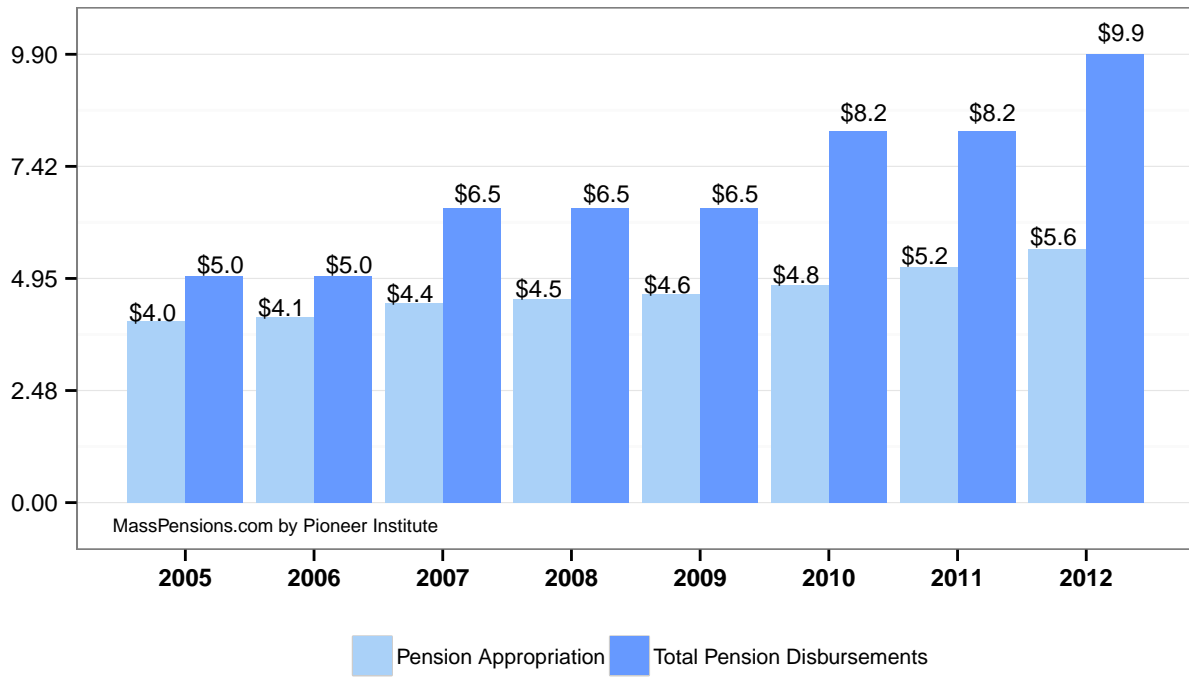
Andover Total Liability and Market Value (\$mn)



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Public Pensions in Massachusetts

Andover Pension Appropriation and Total Pension Disbursements (\$mn)



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Andover 2012

	Funded Ratio	Total Liability	Market Value
1985	NA	NA	\$7,923,000
1986	NA	NA	\$9,635,066
1987	35%	\$27,914,000	\$10,358,674
1988	NA	NA	\$12,767,386
1989	NA	NA	\$14,672,402
1990	44%	\$34,968,000	\$15,891,314
1991	NA	NA	\$22,908,526
1992	54%	\$38,731,000	\$24,732,519
1993	NA	NA	\$25,110,685
1994	NA	NA	\$24,509,551
1995	54%	\$47,529,000	\$31,126,656
1996	NA	NA	\$38,180,257
1997	54%	NA	\$49,000,000
1998	68%	\$67,930,159	\$60,000,000
1999	68%	NA	\$65,000,000
2000	68%	NA	\$72,000,000
2001	80%	\$86,747,475	\$69,000,000
2002	80%	NA	\$63,000,000
2003	80%	NA	\$72,100,000
2004	78%	\$104,114,155	\$78,800,000
2005	78%	\$104,109,589	\$84,400,000
2006	78%	\$104,109,589	\$96,400,000
2007	73%	\$136,666,667	\$95,700,000
2008	73%	\$136,666,667	\$66,900,000
2009	73%	\$136,666,667	\$77,600,000
2010	55%	\$167,483,296	\$86,300,000
2011	55%	\$167,483,296	\$87,200,000
2012	50%	\$192,445,328	\$96,900,000



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Public Pensions in Massachusetts

Andover 2012

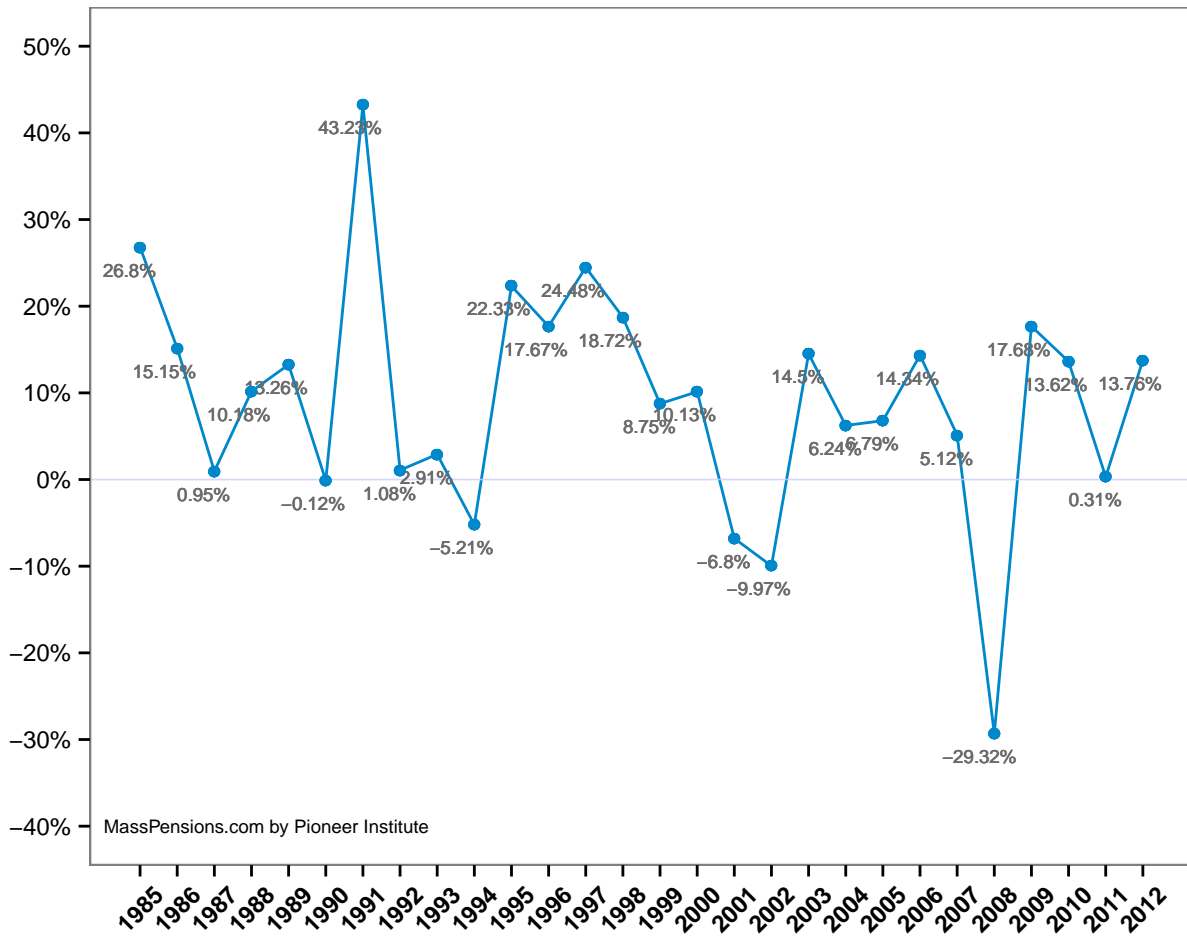
	Pension Appropriation	Total Pension Disbursements
1985	NA	NA
1986	NA	NA
1987	NA	NA
1988	NA	NA
1989	NA	NA
1990	NA	NA
1991	NA	NA
1992	NA	NA
1993	NA	NA
1994	NA	NA
1995	NA	NA
1996	NA	NA
1997	NA	NA
1998	NA	NA
1999	NA	NA
2000	NA	NA
2001	NA	NA
2002	NA	NA
2003	NA	NA
2004	NA	NA
2005	\$4,000,000	\$5,010,000
2006	\$4,100,000	\$5,010,000
2007	\$4,400,000	\$6,512,000
2008	\$4,500,000	\$6,512,000
2009	\$4,600,000	\$6,512,000
2010	\$4,800,000	\$8,203,800
2011	\$5,200,000	\$8,203,800
2012	\$5,600,000	\$9,900,000



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Andover Annual Return



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Public Pensions in Massachusetts

Andover 2012

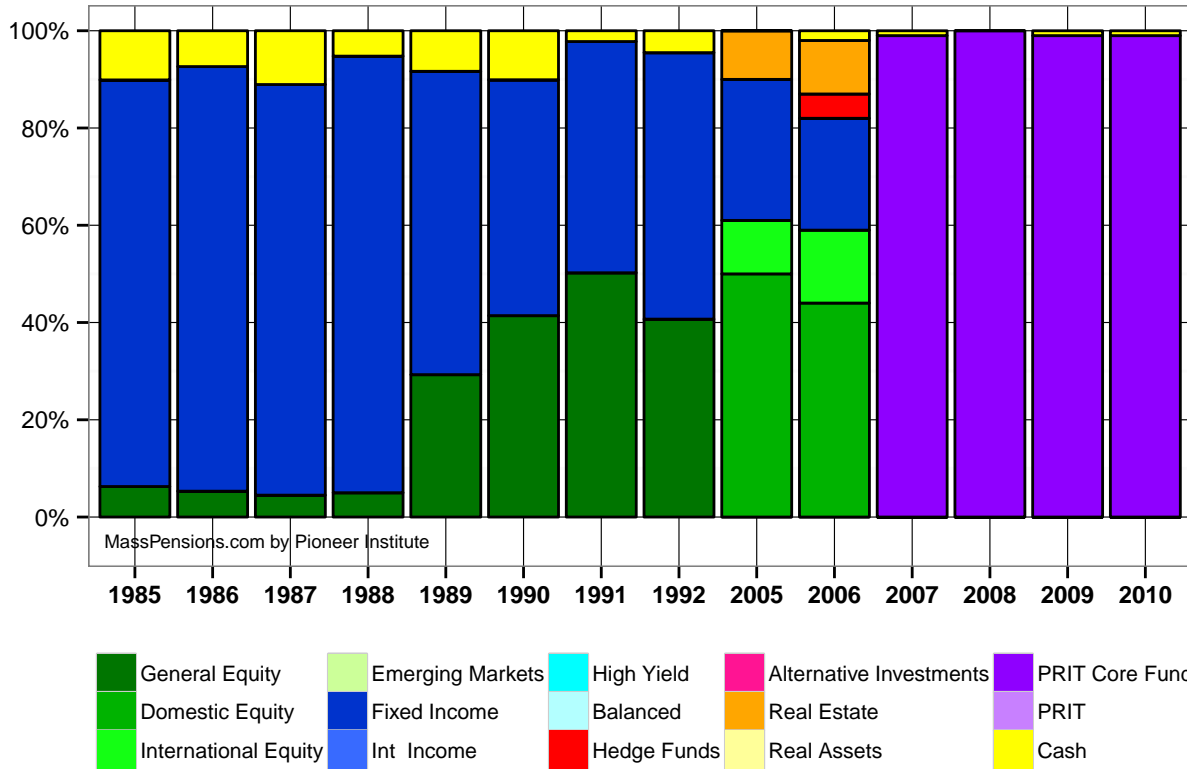
	Return
1985	26.8%
1986	15.15%
1987	0.95%
1988	10.18%
1989	13.26%
1990	-0.12%
1991	43.23%
1992	1.08%
1993	2.91%
1994	-5.21%
1995	22.33%
1996	17.67%
1997	24.48%
1998	18.72%
1999	8.75%
2000	10.13%
2001	-6.8%
2002	-9.97%
2003	14.5%
2004	6.24%
2005	6.79%
2006	14.34%
2007	5.12%
2008	-29.32%
2009	17.68%
2010	13.62%
2011	0.31%
2012	13.76%



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Andover Asset Allocation



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Public Pensions in Massachusetts

About the Authors

Iliya Atanasov is Pioneer...s Senior Fellow on Finance, leading the research tracks on pension management, data analysis and municipal performance. He is a PhD candidate in Political Science and Government and MA candidate in Statistics as well as a former Presidential Fellow at Rice University. He also holds BAs in Business Administration, Economics and Political Science/International Relations from the American University in Bulgaria.

Lingling Fan is Research Assistant to the Senior Fellow on Finance at Pioneer. Her portfolio of initiatives includes the Institute...s MassPensions and MassAnalysis online data projects. She holds an MA in Economics from Boston University and BAs in Economics and Mathematics from the University of Nebraska ... Lincoln.

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