



## **The Impact of Shifting Ohio State Workers from Defined Benefit Plans to Defined Contribution Plans**

Mary McCleary

In 1997, Michigan ended the use of defined benefit plans for new state workers and placed them in defined contribution plans. Using Michigan's actual transition data from 1998 to 2010, we extrapolated future state budget savings for Ohio if the state follows Michigan's transition trend. Based on historical inflation, we assumed a yearly increase of 3 percent both for Ohio's payroll and for the individual state worker. The starting salary for a new state worker in 2010 is from the Buckeye Institute's report *The Grand Bargain is Dead: The Compensation of State Government Workers Far Exceeds Their Private-Sector Neighbors*.

Under the current defined benefit system, taxpayers pay 14 percent of each employee's paycheck into the pension fund. For our analysis, we used two possible rates for the taxpayer portion of the defined contribution plan. The first rate is 10.2 percent, which represents the 6.2 percent private sector employer payment into Social Security plus the 4 percent average private sector 401(k) match in Ohio. The second rate is 7.1 percent, which represents half of the 6.2 percent private sector employer payment into Social Security plus the 4 percent average private sector 401(k) match in Ohio. We used this figure because private sector employees who receive Social Security at the income levels of state government workers will not "get back" 100 percent of the employer share.

Our analysis, detailed in the tables below, shows that, from 2010 to 2039, taxpayers would experience significant savings by moving workers to a defined contribution system. If the taxpayer contribution rate were 10.2 percent, taxpayers would save \$3.3 billion over this time period. Similarly, if the taxpayer contribution rate were 7.1 percent, budget savings over the 30-year period would be \$6 billion.

Under the new system, assuming a worker retires at age 52, his retirement account would total \$383,087 (10.2%) or \$266,659 (7.1%). If this worker waits to retire until age 65, his account would total \$918,393 (10.2%) or \$639,274 (7.1%). **It is important to note that these figures only include the taxpayer's share of funds set aside for each employee. These figures do not include the required 10 percent contribution that employees must make to their own retirement.** If the employee's additional 10 percent were included, the defined contribution accounts would roughly double in size.

True pension reform would, at a minimum, shift new government workers **at the state and local levels** into defined contribution plans as outlined herein. Such a shift would alleviate budget crises in the long term without hurting new workers. The real debate should focus on how to reduce the unfunded pension liabilities for current state and local workers. Our *Grand Bargain* report contains several options that would substantially solve this problem.

**Table 1: Estimated State Budget Savings from Switching from a Defined Benefit Plan to a Defined Contribution Plan**

Year	Percent of State Payroll in Defined Contribution Plan	Percent of State Payroll in Defined Benefit Plan	Defined Benefit Plan Employer Total Contribution (14%)	Combined Defined Benefit and Defined Contribution Employer Total Contribution (14%/10.2%)	Combined Defined Benefit and Defined Contribution Employer Total Contribution (14%/7.1%)	Yearly Savings from Switch to Defined Contribution Plan (10.2%)	Aggregate Savings from Switch to Defined Contribution Plan (10.2%)	Yearly Savings from Switch to Defined Contribution Plan (7.1%)	Aggregate Savings from Switch to Defined Contribution Plan (7.1%)
2010	1%	99%	\$407,363,340	\$405,749,357	\$404,432,686	\$1,613,983	\$1,613,983	\$2,930,654	\$2,930,654
2011	9%	91%	\$419,584,240	\$409,546,103	\$401,357,097	\$10,038,137	\$11,652,120	\$18,227,143	\$21,157,798
2012	16%	84%	\$432,171,767	\$413,742,546	\$398,708,181	\$18,429,222	\$30,081,342	\$33,463,586	\$54,621,384
2013	21%	79%	\$445,136,920	\$419,615,668	\$398,795,698	\$25,521,253	\$55,602,595	\$46,341,222	\$100,962,606
2014	26%	74%	\$458,491,028	\$426,295,394	\$400,030,534	\$32,195,634	\$87,798,229	\$58,460,494	\$159,423,100
2015	28%	72%	\$472,245,759	\$436,677,015	\$407,660,408	\$35,568,744	\$123,366,973	\$64,585,351	\$224,008,451
2016	32%	68%	\$486,413,132	\$443,828,070	\$409,087,624	\$42,585,062	\$165,952,035	\$77,325,508	\$301,333,959
2017	34%	66%	\$501,005,526	\$454,534,220	\$416,623,418	\$46,471,306	\$212,423,341	\$84,382,108	\$385,716,067
2018	37%	63%	\$516,035,691	\$464,255,472	\$422,013,714	\$51,780,220	\$264,203,561	\$94,021,978	\$479,738,045
2019	39%	61%	\$531,516,762	\$474,576,806	\$428,125,789	\$56,939,956	\$321,143,518	\$103,390,974	\$583,129,019
2020	48%	52%	\$547,462,265	\$476,637,852	\$418,860,042	\$70,824,413	\$391,967,930	\$128,602,223	\$711,731,242
2021	47%	53%	\$563,886,133	\$492,477,041	\$434,222,256	\$71,409,092	\$463,377,022	\$129,663,877	\$841,395,118
2022	49%	51%	\$580,802,717	\$503,672,928	\$440,751,258	\$77,129,789	\$540,506,811	\$140,051,459	\$981,446,577
2023	52%	48%	\$598,226,799	\$513,904,753	\$445,115,716	\$84,322,045	\$624,828,856	\$153,111,082	\$1,134,557,659
2024	55%	45%	\$616,173,602	\$524,297,182	\$449,345,366	\$91,876,420	\$716,705,276	\$166,828,236	\$1,301,385,895
2025	58%	42%	\$634,658,811	\$534,850,643	\$453,428,191	\$99,808,167	\$816,513,443	\$181,230,620	\$1,482,616,515
2026	61%	39%	\$653,698,575	\$545,565,444	\$457,351,574	\$108,133,131	\$924,646,574	\$196,347,001	\$1,678,963,516
2027	64%	36%	\$673,309,532	\$556,441,767	\$461,102,275	\$116,867,765	\$1,041,514,339	\$212,207,257	\$1,891,170,774
2028	67%	33%	\$693,508,818	\$567,479,661	\$464,666,401	\$126,029,157	\$1,167,543,496	\$228,842,417	\$2,120,013,191
2029	70%	30%	\$714,314,083	\$578,679,031	\$468,029,383	\$135,635,052	\$1,303,178,548	\$246,284,700	\$2,366,297,890
2030	73%	27%	\$735,743,505	\$590,039,631	\$471,175,944	\$145,703,874	\$1,448,882,422	\$264,567,561	\$2,630,865,451
2031	76%	24%	\$757,815,810	\$601,561,056	\$474,090,073	\$156,254,754	\$1,605,137,176	\$283,725,738	\$2,914,591,189
2032	79%	21%	\$780,550,285	\$613,242,731	\$476,754,990	\$167,307,553	\$1,772,444,730	\$303,795,294	\$3,218,386,483
2033	82%	18%	\$803,966,793	\$625,083,902	\$479,153,122	\$178,882,891	\$1,951,327,621	\$324,813,671	\$3,543,200,154
2034	85%	15%	\$828,085,797	\$637,083,624	\$481,266,062	\$191,002,173	\$2,142,329,794	\$346,819,735	\$3,890,019,889
2035	88%	12%	\$852,928,371	\$649,240,754	\$483,074,541	\$203,687,617	\$2,346,017,411	\$369,853,830	\$4,259,873,719
2036	91%	9%	\$878,516,222	\$661,553,937	\$484,558,389	\$216,962,285	\$2,562,979,695	\$393,957,833	\$4,653,831,552
2037	94%	6%	\$904,871,709	\$674,021,594	\$485,696,500	\$230,850,115	\$2,793,829,810	\$419,175,208	\$5,073,006,760
2038	97%	3%	\$932,017,860	\$686,641,912	\$486,466,796	\$245,375,948	\$3,039,205,758	\$445,551,063	\$5,518,557,824
2039	100%	0%	\$959,978,396	\$699,412,831	\$486,846,186	\$260,565,565	\$3,299,771,323	\$473,132,209	\$5,991,690,033

**Table 2: Impact on New State Employee of Shifting from a Defined Benefit Plan to a Defined Contribution Plan**

Year	Age	Wage	Defined Benefit Yearly Employer Contribution (14%)	Defined Contribution Yearly Employer Contribution (10.2%)	Defined Contribution Individual Account Value (5% Return on Investment)	Savings Moving from Defined Benefit to Defined Contribution (10.2%)	Defined Contribution Yearly Employer Contribution (7.1%)	Defined Contribution Individual Account Value (5% Return on Investment)	Savings Moving from Defined Benefit to Defined Contribution (7.1%)
2010	22	\$36,858	\$5,160	\$3,760	\$3,760	\$1,401	\$2,617	\$2,617	\$2,543
2011	23	\$37,964	\$5,315	\$3,872	\$7,820	\$2,843	\$2,695	\$5,443	\$5,163
2012	24	\$39,103	\$5,474	\$3,988	\$12,199	\$4,329	\$2,776	\$8,492	\$7,861
2013	25	\$40,276	\$5,639	\$4,108	\$16,917	\$5,860	\$2,860	\$11,776	\$10,640
2014	26	\$41,484	\$5,808	\$4,231	\$21,995	\$7,436	\$2,945	\$15,310	\$13,502
2015	27	\$42,729	\$5,982	\$4,358	\$27,453	\$9,060	\$3,034	\$19,109	\$16,450
2016	28	\$44,010	\$6,161	\$4,489	\$33,314	\$10,732	\$3,125	\$23,189	\$19,487
2017	29	\$45,331	\$6,346	\$4,624	\$39,604	\$12,455	\$3,218	\$27,567	\$22,615
2018	30	\$46,691	\$6,537	\$4,762	\$46,346	\$14,229	\$3,315	\$32,261	\$25,837
2019	31	\$48,091	\$6,733	\$4,905	\$53,569	\$16,056	\$3,414	\$37,288	\$29,155
2020	32	\$49,534	\$6,935	\$5,052	\$61,300	\$17,939	\$3,517	\$42,670	\$32,573
2021	33	\$51,020	\$7,143	\$5,204	\$69,569	\$19,877	\$3,622	\$48,425	\$36,093
2022	34	\$52,551	\$7,357	\$5,360	\$78,408	\$21,874	\$3,731	\$54,578	\$39,719
2023	35	\$54,127	\$7,578	\$5,521	\$87,849	\$23,931	\$3,843	\$61,150	\$43,454
2024	36	\$55,751	\$7,805	\$5,687	\$97,928	\$26,050	\$3,958	\$68,166	\$47,301
2025	37	\$57,424	\$8,039	\$5,857	\$108,682	\$28,232	\$4,077	\$75,651	\$51,263
2026	38	\$59,146	\$8,280	\$6,033	\$120,149	\$30,479	\$4,199	\$83,633	\$55,344
2027	39	\$60,921	\$8,529	\$6,214	\$132,370	\$32,794	\$4,325	\$92,140	\$59,548
2028	40	\$62,748	\$8,785	\$6,400	\$145,389	\$35,179	\$4,455	\$101,202	\$63,877
2029	41	\$64,631	\$9,048	\$6,592	\$159,251	\$37,635	\$4,589	\$110,851	\$68,337
2030	42	\$66,570	\$9,320	\$6,790	\$174,003	\$40,164	\$4,726	\$121,120	\$72,930
2031	43	\$68,567	\$9,599	\$6,994	\$189,697	\$42,770	\$4,868	\$132,044	\$77,661
2032	44	\$70,624	\$9,887	\$7,204	\$206,386	\$45,454	\$5,014	\$143,661	\$82,534
2033	45	\$72,742	\$10,184	\$7,420	\$224,125	\$48,218	\$5,165	\$156,008	\$87,553
2034	46	\$74,925	\$10,489	\$7,642	\$242,973	\$51,065	\$5,320	\$169,128	\$92,723
2035	47	\$77,172	\$10,804	\$7,872	\$262,993	\$53,998	\$5,479	\$183,064	\$98,048
2036	48	\$79,488	\$11,128	\$8,108	\$284,251	\$57,018	\$5,644	\$197,861	\$103,533
2037	49	\$81,872	\$11,462	\$8,351	\$306,814	\$60,129	\$5,813	\$213,567	\$109,182
2038	50	\$84,328	\$11,806	\$8,602	\$330,757	\$63,334	\$5,987	\$230,233	\$115,001
2039	51	\$86,858	\$12,160	\$8,860	\$356,154	\$66,634	\$6,167	\$247,911	\$120,994

2040	52	\$89,464	\$12,525	\$9,125	\$383,087	\$70,034	\$6,352	\$266,659	\$127,167
2041	53	\$92,148	\$12,901	\$9,399	\$411,640	\$73,536	\$6,543	\$286,534	\$133,525
2042	54	\$94,912	\$13,288	\$9,681	\$441,904	\$77,142	\$6,739	\$307,600	\$140,074
2043	55	\$97,760	\$13,686	\$9,971	\$473,970	\$80,857	\$6,941	\$329,920	\$146,820
2044	56	\$100,693	\$14,097	\$10,271	\$507,939	\$84,683	\$7,149	\$353,566	\$153,767
2045	57	\$103,713	\$14,520	\$10,579	\$543,915	\$88,625	\$7,364	\$378,608	\$160,924
2046	58	\$106,825	\$14,955	\$10,896	\$582,007	\$92,684	\$7,585	\$405,122	\$168,294
2047	59	\$110,029	\$15,404	\$11,223	\$622,330	\$96,865	\$7,812	\$433,191	\$175,886
2048	60	\$113,330	\$15,866	\$11,560	\$665,007	\$101,172	\$8,046	\$462,897	\$183,706
2049	61	\$116,730	\$16,342	\$11,906	\$710,163	\$105,607	\$8,288	\$494,329	\$191,761
2050	62	\$120,232	\$16,833	\$12,264	\$757,935	\$110,176	\$8,536	\$527,582	\$200,057
2051	63	\$123,839	\$17,337	\$12,632	\$808,464	\$114,882	\$8,793	\$562,754	\$208,602
2052	64	\$127,554	\$17,858	\$13,011	\$861,897	\$119,729	\$9,056	\$599,948	\$217,403
2053	65	\$131,381	\$18,393	\$13,401	\$918,393	\$124,722	\$9,328	\$639,274	\$226,468