



# **Report Regarding Service Purchases Experience of the Five Ohio Retirement Systems During FY ending 2005**



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March 14, 2007*



- Ohio Retirement Study Council requested information on the cost of allowing members of the five Ohio Retirement Systems to purchase service credit.
- Milliman served as advisor to ORSC in developing the methodology for the study.
- Each System's Consulting Actuary calculated and compiled the actuarial data for each member who purchased service during the study period.

# METHODOLOGY

- Goal was to tabulate and compare the effect of service purchases on each System on an Apples-to-Apples basis.
- Each System calculated the additional actuarial liabilities attributable to the service purchases based on their actuarial assumptions and methods for their regular annual actuarial valuation.
- Each System calculated the additional liabilities for each member who purchased service credit during their fiscal year ending in 2005. That is, calendar year 2005 was used by HPRS, OP&F and PERS, while the fiscal year July 2004 through June 2005 was used by SERS and STRS.



# METHODOLOGY

- While the number of such purchases varies from year to year, each System considers FY 2005 to be roughly “typical”, with the exception of the large number of elective service purchases under PERS.
- The additional actuarial liabilities were separately reported for pension and healthcare benefits.
- The amount paid for the service purchased reflects both the amount paid by the member and employer.



# TYPES OF SERVICE PURCHASES

- Members can purchase service credit for a wide variety of circumstances. The tables summarizing the results have been grouped into rough categories.
  - Portability within Ohio Public Retirement Systems
  - Service commonly protected in private sector or under Federal Law
  - Restoration of service previously funded by both member and employer contributions
  - Non-intervening military service and other purchasable service



# IMPORTANT FACTORS

- The additional pension liabilities reflect statutorily mandated benefits.
- The additional health liabilities reflect discretionary benefits, except to the extent that Medicare Part B premium reimbursements are included.
  - If healthcare benefits are reduced in the future, some of the additional health liabilities may be eliminated.
  - If service purchases did not count toward eligibility for, or the amount of, healthcare benefits, then the additional health liabilities would be eliminated.



# IMPORTANT FACTORS

- The additional liability due to “restoration of previously funded service” is really the reversal of an actuarial “gain” that had been reported when the member terminated service and withdrew their contributions. On a cumulative basis, the net gain/(cost) to the System depends on whether the System would have earned less/(more) investment income than the interest charged to the member between when the contributions were withdrawn and when they were repaid.





**Several public policy issues may merit further consideration by the ORSC, the five Ohio Retirement Systems and the various stakeholders**

- To what extent should portability of service credit be facilitated by the Ohio Retirement Systems and which types of service credit?
- As a non-Social Security covered state with respect to public employment, to what extent should this be considered in the overall context of portability of service credit?
- Who should bear the cost of service credit purchases/transfers and how much of the cost (e.g., member, employers)?





## Several public policy issues may merit further consideration by the ORSC, the five Ohio Retirement Systems and the various stakeholders

- How much weight should be given to cost relative to other competing interests (e.g., personnel recruitment) served by the purchase/transfer of service credit in determining who should bear the cost and how much of such cost?
- How should service credit purchased or transferred be treated for purposes of retiree health care benefits?



**Summary of Service Purchases**  
**Ohio Public Employees' Retirement System**  
**Purchases from January 1, 2005 through December 31, 2005**

Code Section	Type of Purchase	Number of Members Purchasing	Number of Years Purchased	Increase in Actuarial Accrued Liabilities			Amount Paid	Increase in Unfunded Actuarial Accrued Liabilities			% of Increase in UAAL covered by Amount Paid			Increase in Actuarial Accrued Liabilities per Year Purchased		
				Pension	Health	Total		Pension	Health	Total	Pension	Health	Total	Pension	Health	Total
<b><u>Portability within Ohio Public Retirement Systems</u></b>																
145.295	OP&F	50	174.86	2,282,397	1,028,067	3,310,463	681,325	1,601,072	1,028,067	2,629,138	29.9%	0.0%	20.6%	13,053	5,880	18,933
145.295	HPRS	5	10.80	124,678	57,823	182,501	44,562	80,116	57,823	137,939	35.7%	0.0%	24.4%	11,547	5,355	16,903
145.2911	Cincinnati Retirement System	2	5.61	24,614	22,430	47,044	11,647	12,966	22,430	35,397	47.3%	0.0%	24.8%	4,384	3,995	8,380
145.2911	Cincinnati Retirement System	23	57.38	877,119	159,885	1,037,004	155,123	721,996	159,885	881,880	17.7%	0.0%	15.0%	15,286	2,786	18,072
145.2913	PERS service from OP&F/HPRS	46	287.24	2,921,915	2,268,056	5,189,971	1,077,687	1,844,227	2,268,056	4,112,284	36.9%	0.0%	20.8%	10,173	7,896	18,069
145.37	Coordination with SERS	512	1,179.23	11,999,940	4,821,061	16,821,001	1,682,805	10,317,135	4,821,061	15,138,197	14.0%	0.0%	10.0%	10,176	4,088	14,264
145.37	Coordination with STRS	488	1,344.04	18,704,486	5,346,046	24,050,532	3,912,460	14,792,026	5,346,046	20,138,073	20.9%	0.0%	16.3%	13,917	3,978	17,894
<b><u>Service commonly protected in private sector or under Federal Law</u></b>																
145.01(HI)(1)	Workers Compensation	428	236.98	2,301,213	1,321,738	3,622,951	0	2,301,213	1,321,738	3,622,951	0.0%	0.0%	0.0%	9,711	5,578	15,288
145.291	Leave of absence/pregnancy resignation	318	122.65	2,580,851	777,630	3,358,482	491,274	2,089,578	777,630	2,867,208	19.0%	0.0%	14.6%	21,042	6,340	27,383
145.30	Interrupted military	59	65.89	717,876	367,890	1,085,766	0	717,876	367,890	1,085,766	0.0%	0.0%	0.0%	10,896	5,584	16,479
145.331	Disability converted to service retirement	93	577.92	955,362	0	955,362	0	955,362	0	955,362	0.0%	0.0%	0.0%	1,653	0	1,653
145.362	Former disability recipient credit	9	25.59	231,295	75,756	307,051	0	231,295	75,756	307,051	0.0%	0.0%	0.0%	9,040	2,961	12,001
145.47	Employer fails to transmit contributions	19	3.58	51,572	9,535	61,108	11,802	39,771	9,535	49,306	22.9%	0.0%	19.3%	14,414	2,665	17,079
145.483	Employer fails to deduct contributions	638	794.85	10,063,153	4,561,862	14,625,015	2,429,762	7,633,391	4,561,862	12,195,253	24.1%	0.0%	16.6%	12,660	5,739	18,400
<b><u>Restoration of Service previously funded by both full member and employer contributions</u></b>																
145.31	Restoration of withdrawn service	3,428	5,806.02	65,408,623	32,247,812	97,656,435	19,894,013	45,514,610	32,247,812	77,762,422	30.4%	0.0%	20.4%	11,266	5,554	16,820
<b><u>Non-intervening military service and other purchasable service</u></b>																
145.20	Prior elected	43	103.99	422,529	360,191	782,719	266,019	156,510	360,191	516,701	63.0%	0.0%	34.0%	4,063	3,464	7,527
145.201	Additional 35% elected	758	1,558.95	17,729,923	8,397,575	26,127,498	5,445,715	12,284,208	8,397,575	20,681,783	30.7%	0.0%	20.8%	11,373	5,387	16,760
145.28	Exempted	504	339.92	6,055,445	2,532,832	8,588,277	3,378,558	2,676,887	2,532,832	5,209,719	55.8%	0.0%	39.3%	17,814	7,451	25,265
145.29	Prior	13	13.20	391,202	9,604	400,806	7,541	383,661	9,604	393,265	1.9%	0.0%	1.9%	29,637	728	30,364
145.293	Out of state	646	940.67	15,256,190	4,778,604	20,034,793	5,083,736	10,172,453	4,778,604	14,951,057	33.3%	0.0%	25.4%	16,218	5,080	21,298
145.299	School board	7	13.01	37,291	130,927	168,219	38,550	-1,259	130,927	129,669	103.4%	0.0%	22.9%	2,867	10,067	12,934
145.301	Military	1,928	2,203.06	29,774,382	14,004,187	43,778,569	10,329,661	19,444,721	14,004,187	33,448,907	34.7%	0.0%	23.6%	13,515	6,357	19,872
<b>Total</b>		<b>10,017</b>	<b>15,865.43</b>	<b>188,912,055</b>	<b>83,279,511</b>	<b>272,191,566</b>	<b>54,942,240</b>	<b>133,969,815</b>	<b>83,279,511</b>	<b>217,249,326</b>	<b>29.1%</b>	<b>0.0%</b>	<b>20.2%</b>	<b>11,907</b>	<b>5,249</b>	<b>17,156</b>

**Summary of Service Purchases**  
**Ohio State Teachers' Retirement System**  
**Purchases from July 1, 2004 through June 30, 2005**

Code Section	Type of Purchase	Number of Members Purchasing	Number of Years Purchased	Increase in Actuarial Accrued Liabilities			Amount Paid	Increase in Unfunded Actuarial Accrued Liabilities			% of Increase in UAAL covered by Amount Paid			Increase in Actuarial Accrued Liabilities per Year Purchased		
				Pension	Health	Total		Pension	Health	Total	Pension	Health	Total	Pension	Health	Total
<b><u>Portability within Ohio Public Retirement Systems</u></b>																
3307.57	Coordination with PERS, SERS	692	1,241.80	33,443,478	4,708,072	38,151,550	3,128,320	30,315,158	4,708,072	35,023,230	9.4%	0.0%	8.2%	26,931	3,791	30,723
3307.76	PERS/SERS service purchased	5	1.75	31,528	8,029	39,557	14,644	16,884	8,029	24,913	46.4%	0.0%	37.0%	18,016	4,588	22,604
3307.761	OP&F and HPRS	6	20.95	301,365	114,075	415,440	64,900	236,465	114,075	350,540	21.5%	0.0%	15.6%	14,385	5,445	19,830
3307.763	Cincinnati Retirement System	4	8.38	137,630	23,570	161,200	9,059	128,571	23,570	152,141	6.6%	0.0%	5.6%	16,424	2,813	19,236
<b><u>Service commonly protected in private sector or under Federal Law</u></b>																
3307.59	Disability converted to service retirement	1	1.53	10,620	6,360	16,980	0	10,620	6,360	16,980	0.0%	0.0%	0.0%	6,941	4,157	11,098
3307.64	Former disability benefit recipient credit	12	38.09	435,537	138,946	574,483	0	435,537	138,946	574,483	0.0%	0.0%	0.0%	11,434	3,648	15,082
3307.72	Ohio non-contributing public teaching service	138	74.22	1,456,448	115,910	1,572,358	421,230	1,035,218	115,910	1,151,128	28.9%	0.0%	26.8%	19,623	1,562	21,185
3307.75	Interrupted military service	14	15.53	257,317	70,196	327,513	0	257,317	70,196	327,513	0.0%	0.0%	0.0%	16,569	4,520	21,089
3307.771	Absence due to pregnancy	638	588.67	14,001,927	2,206,334	16,208,261	3,420,687	10,581,240	2,206,334	12,787,574	24.4%	0.0%	21.1%	23,786	3,748	27,534
<b><u>Restoration of Service previously funded by both full member and employer contributions</u></b>																
3307.71	Restoration of withdrawn service	2,129	2,539.38	48,737,617	11,872,934	60,610,551	13,471,764	35,265,853	11,872,934	47,138,787	27.6%	0.0%	22.2%	19,193	4,676	23,868
<b><u>Non-intervening military service and other purchasable service</u></b>																
3307.73	Exempted	85	42.23	1,063,287	141,535	1,204,822	682,808	380,479	141,535	522,014	64.2%	0.0%	56.7%	25,178	3,352	28,530
3307.74	Teaching and public service	2,573	2,896.64	59,763,492	13,797,841	73,561,333	21,136,667	38,626,825	13,797,841	52,424,666	35.4%	0.0%	28.7%	20,632	4,763	25,395
3307.751	Military	452	484.33	11,544,129	1,845,508	13,389,637	2,090,686	9,453,443	1,845,508	11,298,951	18.1%	0.0%	15.6%	23,835	3,810	27,646
3307.77	Leaves of absences	346	186.51	5,083,005	945,297	6,028,302	4,473,399	609,606	945,297	1,554,903	88.0%	0.0%	74.2%	27,253	5,068	32,322
<b>Total</b>		<b>7,095</b>	<b>8,140.01</b>	<b>176,267,380</b>	<b>35,994,607</b>	<b>212,261,987</b>	<b>48,914,164</b>	<b>127,353,216</b>	<b>35,994,607</b>	<b>163,347,823</b>	<b>27.7%</b>	<b>0.0%</b>	<b>23.0%</b>	<b>21,654</b>	<b>4,422</b>	<b>26,076</b>

**Summary of Service Purchases**  
**Ohio Highway Patrol Retirement System**  
**Purchases from January 1, 2005 through December 31, 2005**

<u>Code Section</u>	<u>Type of Purchase</u>	<u>Number of Members Purchasing</u>	<u>Number of Years Purchased</u>	<u>Increase in Actuarial Accrued Liabilities</u>			<u>Amount Paid</u>	<u>Increase in Unfunded Actuarial Accrued Liabilities</u>			<u>% of Increase in UAAL covered by Amount Paid</u>			<u>Increase in Actuarial Accrued Liabilities per Year Purchased</u>		
				<u>Pension</u>	<u>Health</u>	<u>Total</u>		<u>Pension</u>	<u>Health</u>	<u>Total</u>	<u>Pension</u>	<u>Health</u>	<u>Total</u>	<u>Pension</u>	<u>Health</u>	<u>Total</u>
<b><u>Portability within Ohio Public Retirement Systems</u></b>																
5505.201	Transfer from OP&F	4	6.60	130,171	52,073	182,244	68,623	61,548	52,073	113,620	52.7%	0.0%	37.7%	19,719	7,888	27,607
5505.41	Transfer from PERS, STRS, SERS	41	44.17	518,083	175,000	693,083	148,006	370,077	175,000	545,077	28.6%	0.0%	21.4%	11,728	3,962	15,690
<b><u>Service commonly protected in private sector or under Federal Law</u></b>																
5505.16	Interrupted military	2	1.17	4,711	3,715	8,426	4,699	12	3,715	3,727	99.7%	0.0%	55.8%	4,029	3,177	7,205
<b><u>Non-intervening military service and other purchasable service</u></b>																
5505.25	Military	41	39.69	538,777	189,880	728,657	325,506	213,271	189,880	403,150	60.4%	0.0%	44.7%	13,575	4,784	18,359
<b>Total</b>		<b>88</b>	<b>91.63</b>	<b>1,191,742</b>	<b>420,667</b>	<b>1,612,409</b>	<b>546,834</b>	<b>644,908</b>	<b>420,667</b>	<b>1,065,575</b>	<b>45.9%</b>	<b>0.0%</b>	<b>33.9%</b>	<b>13,006</b>	<b>4,591</b>	<b>17,596</b>

**Summary of Service Purchases**  
**Ohio Police and Fire Fund**  
**Purchases from January 1, 2005 through December 31, 2005**

Code Section	Type of Purchase	Number of Members Purchasing	Number of Years Purchased	Increase in Actuarial Accrued Liabilities			Amount Paid	Increase in Unfunded Actuarial Accrued Liabilities			% of Increase in UAAL covered by Amount Paid			Increase in Actuarial Accrued Liabilities per Year Purchased		
				Pension	Health	Total		Pension	Health	Total	Pension	Health	Total	Pension	Health	Total
<b><u>Portability within Ohio Public Retirement Systems</u></b>																
742.21	Other state/municipal retirement system	206	413.92	5,660,672	1,636,204	7,296,876	3,763,656	1,897,016	1,636,204	3,533,220	66.5%	0.0%	51.6%	13,676	3,953	17,629
742.212	Cincinnati Retirement System	6	10.05	147,769	19,539	167,308	116,662	31,107	19,539	50,646	78.9%	0.0%	69.7%	14,699	1,944	16,643
742.375	HPRS	2	5.41	131,584	33,593	165,177	88,847	42,737	33,593	76,330	67.5%	0.0%	53.8%	24,330	6,211	30,541
<b><u>Service commonly protected in private sector or under Federal Law</u></b>																
742.221	Pregnancy or disability leave	1	0.13	610	-	610	1,019	-409	-	-409	167.0%	0.0%	167.0%	4,880	-	4,880
<b><u>Restoration of Service previously funded by both full member and employer contributions</u></b>																
742.371	Restoration of withdrawn OP&F service	35	80.73	1,512,836	290,289	1,803,125	538,402	974,434	290,289	1,264,723	35.6%	0.0%	29.9%	18,740	3,596	22,336
<b><u>Non-intervening military service and other purchasable service</u></b>																
742.52	Military	518	953.55	14,972,450	4,072,751	19,045,201	4,931,510	10,040,940	4,072,751	14,113,691	32.9%	0.0%	25.9%	15,702	4,271	19,973
<b>Total</b>		<b>768</b>	<b>1,463.79</b>	<b>22,425,921</b>	<b>6,052,376</b>	<b>28,478,297</b>	<b>9,440,096</b>	<b>12,985,825</b>	<b>6,052,376</b>	<b>19,038,201</b>	<b>42.1%</b>	<b>0.0%</b>	<b>33.1%</b>	<b>15,320</b>	<b>4,135</b>	<b>19,455</b>

**Summary of Service Purchases  
Ohio School Employees' Retirement System  
Purchases from July 1, 2004 through June 30, 2005**

Code Section	Type of Purchase	Number of Members Purchasing	Number of Years Purchased	Increase in Actuarial Accrued Liabilities			Amount Paid	Increase in Unfunded Actuarial Accrued Liabilities			% of Increase in UAAL covered by Amount Paid			Increase in Actuarial Accrued Liabilities per Year Purchased		
				Pension	Health	Total		Pension	Health	Total	Pension	Health	Total	Pension	Health	Total
<b>Portability within Ohio Public Retirement Systems</b>																
3309.35	Coordination with STRS, PERS	397	1,027.79	12,685,605	3,160,597	15,846,202	4,287,647	8,397,958	3,160,597	11,558,555	33.8%	0.0%	27.1%	12,343	3,075	15,418
3309.75	Cincinnati Retirement System	3	7.47	21,394	42,187	63,581	114,626	-93,232	42,187	-51,045	535.8%	0.0%	180.3%	2,865	5,650	8,515
<b>Service commonly protected in private sector or under Federal Law</b>																
3309.01(D)	Workers Compensation	68	82.17	422,601	348,892	771,493	0	422,601	348,892	771,493	0.0%	0.0%	0.0%	5,143	4,246	9,389
3309.02	Interrupted military	1	1.00	16,207	2,458	18,665	0	16,207	2,458	18,665	0.0%	0.0%	0.0%	16,207	2,458	18,665
3309.41(G)	Former disability recipient credit	17	55.74	411,385	151,653	563,038	0	411,385	151,653	563,038	0.0%	0.0%	0.0%	7,381	2,721	10,102
3309.47	Leave of absence, employer fail deduct contributions	49	60.97	1,168,634	359,416	1,528,050	216,859	951,775	359,416	1,311,191	18.6%	0.0%	14.2%	19,167	5,895	25,062
3309.48	Employer fails to deduct contributions	16	49.49	345,079	262,113	607,192	316,773	28,306	262,113	290,419	91.8%	0.0%	52.2%	6,973	5,297	12,270
<b>Restoration of Service previously funded by both full member and employer contributions</b>																
3309.26	Restoration of withdrawn service	365	672.08	3,903,792	1,984,240	5,888,031	1,564,311	2,339,481	1,984,240	4,323,720	40.1%	0.0%	26.6%	5,808	2,952	8,761
<b>Non-intervening military service and other purchasable service</b>																
3309.021	Military	170	291.74	2,161,501	0	2,161,501	870,677	1,290,824	0	1,290,824	40.3%	0.0%	40.3%	7,409	0	7,409
3309.301	Exempted	8	6.22	124,001	0	124,001	83,696	40,305	0	40,305	67.5%	0.0%	67.5%	19,926	0	19,926
3309.31	Federal & other state, other school	107	159.60	1,238,232	0	1,238,232	468,664	769,569	0	769,569	37.8%	0.0%	37.8%	7,758	0	7,758
3309.311	School board	1	1.25	4,900	5,382	10,282	4,657	242	5,382	5,624	95.1%	0.0%	45.3%	3,920	4,306	8,225
<b>Total</b>		<b>1,202</b>	<b>2,415.52</b>	<b>22,503,330</b>	<b>6,316,938</b>	<b>28,820,268</b>	<b>7,927,910</b>	<b>14,575,420</b>	<b>6,316,938</b>	<b>20,892,358</b>	<b>35.2%</b>	<b>0.0%</b>	<b>27.5%</b>	<b>9,316</b>	<b>2,615</b>	<b>11,931</b>