

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Pensions in the American Economy

Volume Author/Editor: Laurence J. Kotlikoff and Daniel E. Smith

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-45146-1

Volume URL: <http://www.nber.org/books/kotl83-1>

Publication Date: 1983

Chapter Title: The Structure of State and Local Pension Plans

Chapter Author: Laurence J. Kotlikoff, Daniel E. Smith

Chapter URL: <http://www.nber.org/chapters/c7266>

Chapter pages in book: (p. 352 - 371)

6 The Structure of State and Local Pension Plans

6.1 Number of State and Local Pension Plans and Participants

Pension plans of state and local governments currently cover approximately 11.8 million employees (table 6.1.1). The bulk of these participants (10.1 million) are concentrated in 144 plans administered at the state level. About one-third of these state plan participants are covered under plans exclusively for teachers (table 6.1.2). Most of the balance are covered under general employee plans which may or may not include teachers. The largest three state systems are California, New York, and Texas; together, these three systems cover 2.5 million employees—roughly one-quarter of the total.

The forty-four plans of the twenty largest city systems cover 651,123 participants; 94,075 of these are covered under police and fire plans; 88,704 are covered under teacher plans (table 6.1.3). The largest city system is New York City, covering over 295,000 participants. In fact, the five plans in the New York City system cover more participants than thirty-nine of the fifty state systems. The next largest city system is Philadelphia, but it is only one-fifth the size of the New York City system.

Besides the 44 plans of the twenty largest city systems, there are 271 plans in other large local systems with over 500 participants (table 6.1.4). These plans cover 769,241 employees. In addition, we estimate that there are 4,616 plans in local systems with fewer than 500 participants; these plans cover slightly more than 300,000 employees.

Table 6.1.1

Number of State and Local Pension Plans and Participants by Type of Administrator, 1978-1979		
	Number of Plans	Number of Participants
State Administered ¹ Systems	144	10,056,214
Large City Systems	44	651,123
Other Local Systems with 500 or More Members	271	769,241
Other Local Systems with Fewer than 500 Members	4,616	317,523

Sources: Frank Arnold, Estimation of State-Administered Public Employee Pension System Liabilities, NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1978), U.S. Department of Commerce, Bureau of the Census, Finances of State and Local Employee Retirement Systems, 1978-1979

Table 6.1.2
Number of State Administered Plans and Participants, by State, 1978

State	Number of Plans	Number of Participants			
		Total	General ¹	Teachers	Police and Fire
All States	144	10,056,214	6,555,937	3,323,922	176,355
Alabama	3	150,144	50,196	96,961	2,987
Alaska	2	32,220	25,306	6,914	0
Arizona	2	139,605	131,700	0	7,905
Arkansas	3	95,681	63,686	31,995	0
California	4	951,054	542,310	408,744	0
Colorado	1	94,694	94,694	0	0
Connecticut	3	98,527	50,376	48,151	0
Delaware	1	25,173	25,173	0	0
Florida	1	371,414	371,414	0	0
Georgia	5	247,301	116,650	121,587	9,064
Hawaii	1	47,480	47,480	0	0
Idaho	2	50,555	49,975	0	580
Illinois	5	427,459	247,466	179,993	0
Indiana	3	204,522	113,532	89,785	1,205
Iowa	2	156,806	156,295	0	511
Kansas	2	119,146	115,814	0	3,332
Kentucky	4	147,971	95,715	51,240	1,016
Louisiana	10	216,546	126,668	81,344	8,534
Maine	1	63,426	63,426	0	0
Maryland	3	157,674	77,165	78,967	1,542
Massachusetts	3	156,470	78,470	78,000	0
Michigan	5	329,269	98,117	228,769	2,383
Minnesota	7	226,557	140,946	80,410	5,201
Mississippi	2	184,160	183,604	0	556
Missouri	5	126,600	47,632	70,652	8,316
Montana	3	57,480	39,040	17,889	551
Nebraska	1	30,175	0	30,175	0
Nevada	1	49,831	49,831	0	0
N. Hampshire	1	30,084	14,205	13,035	2,844
New Jersey	1	340,621	200,258	111,548	28,815
New Mexico	2	88,794	34,062	54,732	0
New York	2	827,589	613,363	214,226	0
N. Carolina	1	382,744	365,764	0	16,980
N. Dakota	2	23,903	10,500	13,403	0
Ohio	5	751,655	499,495	228,019	24,141
Oklahoma	3	97,358	34,853	61,764	741
Oregon	1	112,142	112,142	0	0
Pennsylvania	3	396,037	132,244	263,793	0
Rhode Island	2	34,077	34,077	0	0
S. Carolina	2	260,979	250,000	0	10,979
S. Dakota	1	30,321	30,321	0	0
Tennessee	1	178,236	178,236	0	0
Texas	3	572,358	160,550	411,808	0
Utah	4	68,487	34,216	30,245	4,026
Vermont	3	16,501	8,381	8,120	0
Virginia	1	287,000	287,000	0	0
Washington	5	218,578	131,500	53,500	33,578
W. Virginia	3	100,898	56,901	43,430	567
Wisconsin	3	242,173	127,450	114,723	0
Wyoming	1	37,738	37,738	0	0

Source: U.S. Department of Commerce, Bureau of the Census, Finances of State and Local Employee Retirement Systems, 1978-1979

1. General employee pension plans may also cover teachers and police.

Table 6.1.3

Number of Large City Pension Plans and Participants,
By City, 1978

City	Number of Plans	Number of Participants			
		Total	General ¹	Teachers	Police and Fire
All States	44	651,123	468,344	88,704	94,075
Baltimore, MD	2	19,669	14,420	0	5,249
Boston, MA	2	35,152	30,052	5,100	0
Chicago, IL	4	50,509	32,978	0	17,531
Dallas, TX	2	11,907	8,289	0	3,618
Detroit, MI	2	24,578	17,601	0	6,977
Houston, TX	3	15,052	9,738	0	5,314
Indianapolis, ID	2	2,618	0	0	2,618
Jacksonville, FL	2	6,540	4,909	0	1,631
Los Angeles, CA	3	44,992	35,391	0	9,601
Memphis, TN	2	8,294	8,294	0	0
Milwaukee, WI	1	14,216	14,216	0	0
New Orleans, LA	4	9,398	7,712	0	1,686
New York, NY	5	296,543	185,935	75,684	34,924
Philadelphia, PA	1	50,587	50,587	0	0
Phoenix, AZ	1	5,940	5,940	0	0
San Antonio, TX	1	2,073	0	0	2,073
San Diego, CA	2	12,420	12,420	0	0
San Francisco, CA	1	21,697	21,697	0	0
St. Louis, MO	3	11,018	8,165	0	2,853
Washington, DC (School)	1	7,920	0	7,920	0

Source: U.S. Department of Commerce, Bureau of the Census, Finances of State and Local Employee Retirement Systems, 1978-1979

1. General employee pension plans may also cover teachers and police.

Table 6.1.4

Number of Other Large Local Pension Plans and Participants, by Locality, 1978

Locality	Number of Plans	Number of Participants			
		Total	General	Teachers	Police and Fire
All Localities	310	881,705	801,068	46,229	34,408
Adams C., CO	1	863	863	0	0
Adams C., CO	1	863	863	0	0
Alameda C., CA	1	8,835	8,835	0	0
Albany, GA	1	1,068	1,068	0	0
Alexandria, LA	1	629	629	0	0
Allegheny C., PA	1	9,950	9,950	0	0
Allentown, PA	1	479	479	0	0
Ann Arbor, MI	1	976	976	0	0
Anne Arundel C., MD	1	772	0	0	772
Arlington C. School Dist., VA	1	1,689	1,689	0	0
Arlington C., VA	1	2,500	2,500	0	0
Arlington Town, MA	1	1,047	1,047	0	0
Atlanta, GA	3	15,877	14,071	0	1,806
Augusta, GA	1	694	694	0	0
Austin, TX	1	5,059	5,059	0	0
Baltimore C., MD	1	8,383	8,383	0	0
Barnstable C., MA	1	3,148	3,148	0	0
Baton Rouge, LA	1	3,064	3,064	0	0
Bay C., MI	1	859	859	0	0
Berks C., PA	1	818	818	0	0
Berkshire C., MA	1	1,242	1,242	0	0
Berrien C., MI	1	1,208	1,208	0	0
Beverly, MA	1	596	596	0	0
Birmingham, AL	2	4,134	2,851	0	1,283
Braintree, MA	1	793	793	0	0
Bristol C., MA	1	3,108	3,108	0	0
Brockton, MA	1	2,042	2,042	0	0
Brooklin Town, MA	1	1,385	1,385	0	0
Bucks C., PA	1	1,548	1,548	0	0
Burlington, VT	1	554	554	0	0
Butler C., PA	1	510	510	0	0
Cambria C., PA	1	877	877	0	0
Cambridge, MA	1	2,940	2,940	0	0
Charlotte, NC	1	598	0	0	598
Charlottesville, VA	1	706	706	0	0
Chatham C., GA	1	719	719	0	0
Chattanooga, TN	2	1,651	1,151	0	500
Chester C., PA	1	1,121	1,121	0	0
Chicago Park District, IL	1	8,674	8,674	0	0
Chicago Sanitary District, IL	1	2,485	2,485	0	0
Chicago School District, IL	1	41,261	0	41,261	0
Chicago Transit Authority, IL	1	12,849	12,849	0	0
Chickopee, MA	1	1,064	1,064	0	0
Cincinnati, OH	1	9,298	9,298	0	0
Clearwater, FL	1	882	882	0	0
Columbus, GA	1	3,491	3,491	0	0
Concord, CA	1	583	583	0	0
Concord, MA	1	509	509	0	0
Contra Costa C., CA	1	7,351	7,351	0	0
Contra Costa C., CA	1	7,351	7,351	0	0
Cook C., IL	2	15,754	15,754	0	0
Coral Gables, FL	1	735	735	0	0
Cumberland C., PA	1	590	590	0	0
Danbury, CT	1	820	820	0	0
Danvers Town, MA	1	940	940	0	0
Danville, VA	1	801	801	0	0
Dauphin C., PA	1	1,167	1,167	0	0
De Kalb C., GA	1	4,144	4,144	0	0
Dearborn, MI	1	847	847	0	0
Delaware C., PA	1	3,908	3,908	0	0
Denver School District, CO	1	6,760	6,760	0	0
Denver School District, CO	1	6,760	6,760	0	0
Denver, CO	4	13,542	11,187	0	2,355
Des Moines School Dist., IO	1	1,211	1,211	0	0
Dothan, AL	1	726	726	0	0
Duluth School Dist., MN	1	1,297	0	1,297	0
E. Bay Mun. Ut. Dist., CA	1	1,133	1,133	0	0
East Bay Mun. Ut. Dist., CA	1	1,133	1,133	0	0
East Hartford, CT	1	733	733	0	0
El Paso C., CO	1	1,179	1,179	0	0
El Paso C., CO	1	1,179	1,179	0	0
El Paso, TX	2	3,151	2,455	0	696
Erie C., PA	1	658	658	0	0
Erie, PA	1	807	807	0	0
Essex C., MA	1	2,750	2,750	0	0
Essex C., NJ	1	826	826	0	0
Everett, MA	1	801	801	0	0
Fairfax C., VA	3	14,282	12,649	0	1,633
Fall River, MA	1	2,031	2,031	0	0
Falmouth, MA	1	521	521	0	0
Fitchburg, MA	1	811	811	0	0
Flint, MI	1	4,432	4,432	0	0
Fort Lauderdale, FL	2	1,782	1,198	0	584
Fort Pierce, FL	1	629	629	0	0
Fort Worth, TX	1	4,557	4,557	0	0
Framingham Town, MA	1	1,382	1,382	0	0
Franklin C., MA	1	772	772	0	0
Fresno, CA	2	2,249	1,587	0	662
Fulton C., GA	1	3,293	3,293	0	0
Fulton C., GA (School)	1	3,949	3,949	0	0
Gavelston, TX	1	669	669	0	0
Genesee C., MI	1	1,961	1,961	0	0
Gloucester, MA	1	537	537	0	0
Grand Rapids, MI	2	1,821	1,265	0	556
Greenwich Town, CT	1	1,289	1,289	0	0
Hamden, CT	1	585	585	0	0
Hampden C., MA	1	2,754	2,754	0	0
Hampshire C., MA	1	2,671	2,671	0	0
Harrisburg, PA	1	509	509	0	0

Table 6.1.4 Continued

Locality	Number of Plans	Number of Participants			
		Total	General ¹	Teachers	Police and Fire
Haverhill, MA	1	1,886	1,886	0	0
Hialeah, FL	1	880	880	0	0
Hollywood, FL	1	536	536	0	0
Holyoke, MA	1	1,514	1,514	0	0
Hudson C., NJ	1	1,800	1,800	0	0
Imperial C., CA	1	961	961	0	0
Imperial C., CA	1	961	961	0	0
Jackson C., MI	1	837	837	0	0
Jackson, MS	1	659	0	0	659
Jefferson C., AL	1	3,102	3,102	0	0
Jefferson Parish, LA	1	3,301	3,301	0	0
Jersey City, NJ	1	572	572	0	0
Kalamazoo C., MI	1	1,006	1,006	0	0
Kalamazoo, MI	1	1,121	1,121	0	0
Kansas C. Board of Uts., KS	1	739	739	0	0
Kansas City School Dist., MO	1	5,107	5,107	0	0
Kansas City, MO	3	5,708	3,511	0	2,197
Kent C., MI	1	1,689	1,689	0	0
Kern C., CA	1	4,923	4,923	0	0
Kern C., CA	1	4,923	4,923	0	0
Knoxville, TN	1	5,614	5,614	0	0
Lackawana C., PA	1	910	910	0	0
Lakeland, FL	1	1,024	1,024	0	0
Lancaster C., PA ¹	1	966	966	0	0
Lansing, MI	3	2,617	2,046	0	571
Lawrence, MA	1	1,315	1,315	0	0
Lebanon C., PA	1	647	647	0	0
Lehigh C., PA ¹	1	1,466	1,466	0	0
Lexington, KY	1	741	0	0	741
Lexington, MA	1	572	572	0	0
Livonia, MI	1	648	648	0	0
Los Angeles C., CA	1	67,060	67,060	0	0
Los Angeles C., CA	1	67,060	67,060	0	0
Louisville, KY	2	1,300	0	0	1,300
Lowell, MA	1	1,373	1,373	0	0
Luzerne C., PA	1	1,299	1,299	0	0
Lynn, MA	1	1,740	1,740	0	0
Macomb C., MI	1	2,166	2,166	0	0
Macon, GA	1	781	781	0	0
Malden, MA	1	888	888	0	0
Manchester Town, CT	1	631	631	0	0
Marblehead Town, MA	1	519	519	0	0
Marin C., CA	1	2,023	2,023	0	0
Marin C., CA	1	2,023	2,023	0	0
MBTA, MA	1	6,322	6,322	0	0
MD Natl. Cptl. Park Comm., MD	1	943	943	0	0
Medford, MA	1	1,036	1,036	0	0
Mendocino C., CA	1	749	749	0	0
Mendocino C., CA	1	749	749	0	0
Merced C., CA	1	1,907	1,907	0	0
Merced C., CA	1	1,907	1,907	0	0
Methuen, MA	1	590	590	0	0
Miami, FL	2	3,357	2,021	0	1,336
Middlesex C., MA	1	9,000	9,000	0	0
Milford Town, MA	1	541	541	0	0
Milford, CT	1	909	909	0	0
Milwaukee C., WI	1	10,807	10,807	0	0
Minneapolis, MN	2	7,408	6,615	0	793
Minneapolis, MN (School)	1	4,932	4,932	0	0
Mobile, AL	1	896	0	0	896
Monroe C., MI	1	682	682	0	0
Montgomery C., PA	1	2,276	2,276	0	0
Montgomery, AL	1	2,171	2,171	0	0
Multnomah C., OR	1	2,189	2,189	0	0
Nashville-Davidson, TN	2	17,771	17,771	0	0
Natick, MA	1	625	625	0	0
Nebraska Power Ret. Board, NE	1	1,295	1,295	0	0
Needham Town, MA	1	893	893	0	0
New Bedford, MA	1	2,384	2,384	0	0
New Castle C., DE	1	1,115	1,115	0	0
New Haven, CT	2	2,022	1,274	0	748
Newark, NJ	1	1,342	1,342	0	0
Newport News, VA	1	5,332	5,332	0	0
Newton, MA	1	1,923	1,923	0	0
Norfolk C., MA	1	4,019	4,019	0	0
Norfolk, VA	1	4,465	4,465	0	0
Northampton C., PA	1	949	949	0	0
Northumberland C., PA	1	651	651	0	0
Norwalk, CT	1	836	836	0	0
Norwich, CT	1	855	855	0	0
Oakland C. Road Comm., MI	1	504	504	0	0
Oakland C., MI	1	2,906	2,906	0	0
Oakland, CA	1	1,015	0	0	1,015
Ocala, FL	1	603	603	0	0
Oklahoma C., OK	1	1,030	1,030	0	0
Oklahoma City, OK	3	4,647	3,208	0	1,439
Omaha Public Power Dist., NE	1	1,776	1,776	0	0
Omaha School Dist., NE	1	4,856	4,856	0	0
Omaha, NE	2	2,996	1,873	0	1,123
Orange C., CA	1	11,189	11,189	0	0
Orange C., CA	1	11,189	11,189	0	0
Peabody, MA	1	1,373	1,373	0	0
Pensacola, FL	1	850	850	0	0
Pittsburg, PA	3	4,951	2,485	0	2,466
Pittsfield, MA	1	1,109	1,109	0	0
Plymouth, MA	1	612	612	0	0
Portland School Dist., OR	1	1,900	0	1,900	0
Portland, OR	1	1,309	1,309	0	0
Portsmouth, VA	1	1,157	1,157	0	0
Prince Georges C., MD	1	854	0	0	854
Providence, RI	1	3,443	3,443	0	0
Quincy, MA	1	2,988	2,988	0	0

Table 6.1.4 Continued

Locality	Number of Plans	Total	Number of Participants		
			General ¹	Teachers	Police and Fire
Reading, PA	1	566	566	0	0
Revere, MA	1	642	642	0	0
Richmond, VA	1	6,166	6,166	0	0
Roanoke, VA	1	1,930	1,930	0	0
S. CA Rapid Transit, CA	1	6,981	6,981	0	0
Sacramento C., CA	1	6,954	6,954	0	0
Sacramento C., CA	1	6,954	6,954	0	0
Sacramento, CA	1	2,419	2,419	0	0
Salem, MA	1	1,262	1,262	0	0
Salt River Proj., AZ	1	3,483	3,483	0	0
San Bernardino C., CA	1	7,797	7,797	0	0
San Bernardino C., CA	1	7,797	7,797	0	0
San Diego C., CA	1	11,484	11,484	0	0
San Diego C., CA	1	11,484	11,484	0	0
San Jose, CA	2	4,008	2,623	0	1,385
San Luis Obispo C., CA	1	1,518	1,518	0	0
San Luis Obispo C., CA	1	1,518	1,518	0	0
San Mateo C., CA	1	3,813	3,813	0	0
Santa Barbara C., CA	1	2,881	2,881	0	0
Santa Barbara C., CA	1	2,881	2,881	0	0
Savannah, GA	1	1,788	1,788	0	0
Schuylkill C., PA	1	940	940	0	0
Seattle, WA	3	8,192	6,735	0	1,457
Shelby C., TN	1	4,840	4,840	0	0
Shreveport, LA	1	1,512	1,512	0	0
Sioux Falls, SD	1	614	614	0	0
Sommerville, MA	1	1,406	1,406	0	0
Sonoma C., CA	1	2,542	2,542	0	0
Sonoma C., CA	1	2,542	2,542	0	0
South CA Rapid Transit., CA	1	6,981	6,981	0	0
Spokane, WA	1	1,156	1,156	0	0
Springfield, MA	1	4,134	4,134	0	0
Springfield, MO	1	395	0	0	395
St. Clair C., MI	1	768	768	0	0
St. Louis C., MO	2	4,211	3,646	0	565
St. Louis School Dist., MO	1	7,647	7,647	0	0
St. Paul School Dist., MN	1	3,068	0	3,068	0
St. Paul, MN	1	554	0	0	554
St. Petersburg, FL	1	2,234	2,234	0	0
Stamford, CT	1	892	892	0	0
Stanislaus C., CA	1	2,324	2,324	0	0
Stanislaus C., CA	1	2,324	2,324	0	0
Stoneham Town, MA	1	515	515	0	0
Stratford Town, CT	1	608	608	0	0
Tacoma, WA	1	2,159	2,159	0	0
Tallahassee, FL	1	746	746	0	0
Tampa, FL	2	4,207	3,009	0	1,198
Taunton, MA	1	963	963	0	0
Tulare C., CA	1	2,182	2,182	0	0
Tulare C., CA	1	2,182	2,182	0	0
Tulsa C., OK	1	1,194	1,194	0	0
Tulsa, OK	3	2,972	1,617	0	1,355
Tucson, AZ	1	2,550	2,550	0	0
Ventura C., CA	1	4,210	4,210	0	0
Ventura C., CA	1	4,210	4,210	0	0
WA Suburban Sanitary Comm., MD	1	1,952	1,952	0	0
Wakefield, MA	1	507	507	0	0
Waltham, MA	1	1,119	1,119	0	0
Warren, MI	1	589	589	0	0
Washington C., PA	1	682	682	0	0
Washtenaw C., MI	1	1,146	1,146	0	0
Waterbury, CT	1	2,636	2,636	0	0
Watertown Town, MA	1	586	586	0	0
Wayne C., MI	1	7,396	7,396	0	0
Wellesley, MA	1	608	608	0	0
West Hartford Town, CT	1	917	917	0	0
West Palm Beach, FL	1	663	663	0	0
West Springfield Town, MA	1	509	509	0	0
Westfield, MA	1	740	740	0	0
Westmoreland C., PA	1	1,423	1,423	0	0
Weymouth, MA	1	936	936	0	0
Wichita School District, KS	1	1,846	1,846	0	0
Wichita, KS	2	2,843	2,059	0	784
Winchester Town, MA	1	557	557	0	0
Winston-Salem, NC	1	1,698	1,698	0	0
Woburn, MA	1	628	628	0	0
Worcester C., MA	1	7,112	7,112	0	0
Wyandote, MI	1	1,432	1,432	0	0
York C., PA	1	746	746	0	0
York C., PA	1	746	746	0	0

Source: NBER CLLPS (1978)

1. General employee pension plans may also cover teachers and police.

6.2 Participation Requirements of State and Local Pension Plans

Tables 6.2.1 through 6.2.4 analyze the participation requirements of state and local pension plans. As noted in section 4.2, the initial date of plan participation is important for three reasons: it determines the number of plan participants for reporting purposes, it determines which employees are included in the calculation of plan liabilities, and it is often

treated as the date after which workers begin to acquire credited years of service for purposes of benefit accrual.

Table 6.2.1 demonstrates that very few state and local plans have requirements for plan participation. The percent of state-administered plans reporting no participation requirements is 86.71. The corresponding figures for large-city plans, other large local plans, and small local plans are 93.18, 98.21, and 79.19 percent, respectively. These figures contrast sharply with those of private pension plans, where only 20.61 percent report having no participation requirements (table 4.2.1). On a participant-weighted basis, this feature of state and local pension plans is even more pronounced. In this case, the fraction of participants in plans with no participation requirements is 90.95 percent for state plans, 98.49 percent for large-city plans, 99.39 percent for other large local plans, and 75.52 percent for small local plans.

State plans with participation requirements are more likely to specify only a service requirement (89.5 percent). Large local plans, including those of the large cities, are more likely to specify only an age requirement (100 percent). Small local plans are the most likely to specify both an age and a service requirement (51.2 percent).

Among those state and local plans with participation requirements, the requirements themselves are much more lenient when compared with their private pension counterparts. For state and large local plans specifying only an age requirement, the mean age specified is 21 while the corresponding age for similar private pension plans is about 24. The only exception appears to be small local plans that specify both an age and a service requirement for plan participation. Here the mean age and mean service requirements do not differ dramatically from the corresponding private pension figures—a mean age of 23.31 and a mean service of 1.31 for small local pension plans versus a mean age of 23.74 and a mean service of 1.41 for private pension plans.

Tables 6.2.3 and 6.2.4 demonstrate that few state and local plans have a maximum age restriction for plan participation—25.87 percent of state-administered plans, 15.91 percent of large-city plans, 22.32 percent of other large local plans, and 18.27 percent of small local plans. These figures are all lower than the corresponding figure for private pension plans, which is 31.70 percent (table 4.2.16). The mean age specified by these plans is not much different from the mean age specified by similar private pension plans except in the case of small local plans, where the age is substantially lower. On a participant-weighted basis, the mean age specified by small local plans is 53.95. The corresponding age for private plans is 61.78.

Table 6.2.1
Number of State and Local Pension Plans by Type of Administrator and Participation Requirements, 1978

	Age			Service			Age and Service				No Requirements	
	Number	Row Percent	Mean Age	Number	Row Percent	Mean Service	Number	Row Percent	Mean Age	Mean Service	Number	Row Percent
State Administered Systems	1	.70	21	17	11.89	.52	1	.70	18	.42	124	86.71
Large City Systems	3	6.82	21	0	.00	NA	0	.00	NA	NA	41	93.18
Other Local Systems with 500 or More Members	2	1.79	21	0	.00	NA	0	.00	NA	NA	110	98.21
Other Local Systems with Fewer than 500 Members	4	2.03	19.50	16	8.12	1.12	21	10.66	23.31	1.31	156	79.19

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979).

Table 6.2.2
Number of State and Local Pension Plan Participants by Type of Administrator and Participation Requirements, 1978

	Age			Service			Age and Service				No Requirements	
	Number	Row Percent	Mean Age	Number	Row Percent	Mean Service	Number	Row Percent	Mean Age	Mean Service	Number	Row Percent
State Administered Systems	741	.01	21	907,046	8.94	.51	10,500	10	18	.42	9,228,812	90.95
Large City Systems	9,851	1.51	21	0	.00	NA	0	.00	NA	NA	641,272	98.49
Other Local Systems with 500 or More Members	1,355	.61	21	0	.00	NA	0	.00	NA	NA	221,016	99.39
Other Local Systems with Fewer than 500 Members	288	2.26	18.23	1,697	13.34	1.18	1,510	11.87	22.94	1.28	9,225	72.52

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.2.3
Number of State and Local Pension Plans with Maximum Age for Plan Participation by Type of Administrator, 1978

	With Maximum Age			Without Maximum Age	
	Number	Row Percent	Mean Age	Number	Row Percent
State Administered Systems	37	25.87	58.32	106	74.13
Large City Systems	7	15.91	57.86	37	84.09
Other Local Systems with 500 or More Members	25	22.32	61.54	87	77.68
Other Local Systems with Fewer than 500 Members	36	18.27	56.47	161	81.73

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.2.4
Number of State and Local Pension Plan Participants with Maximum Age for Plan Participation by Type of Administrator, 1978

	With Maximum Age			Without Maximum Age	
	Number	Row Percent	Mean Age	Number	Row Percent
State Administered Systems	1,912,164	18.84	61.49	8,234,935	81.16
Large City Systems	72,835	11.19	63.76	578,288	88.81
Other Local Systems with 500 or More Members	37,519	16.87	63.13	184,852	83.13
Other Local Systems with Fewer than 500 Members	3,003	23.61	53.95	9,717	76.39

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

6.3 Vesting Provisions of State and Local Pension Plans

Vesting provisions of state and local pension plans differ substantially from those of private plans. The most dramatic difference relates to "graded" vesting provisions—formulae that gradually vest participants until full vesting is achieved. While 35 percent of private pension plans report graded vesting, all the state and local plans report "cliff" vesting formulae that provide no partial vesting prior to full vesting. A second major difference between public and private pension vesting is the lack of any vesting provisions in many small local pension plans. ERISA requires all private pension plans to vest their participants within a specified length of time (see section 4.3). There is no federal regulation of the vesting practices of state and local plans. Vesting provisions are absent in 31.12 percent of small local public employee plans (table 6.3.1). Most of these plans cover local police or fire departments, many of which are volunteer.

In comparison with private pension participants, participants in state and large local pension plans are much more likely to be covered by a 5-year cliff vesting formula (table 6.3.2). The fraction of participants covered by this formula is 49.52 percent for state-administered plans, 24.18 percent for large-city plans, and 17.48 percent for other large local plans. The corresponding figure for private plans is just 2.61 percent (table 4.3.2). In large cities 15.31 percent of plan participants are covered by a cliff vesting formula where full vesting is achieved after 11 or more years of service. The percentage of state plan participants with this late cliff vesting is 1.85.

State-administered plans require, on average, about 3 fewer years of service for full vesting than do private plans (6.66 years versus 9.35 years). Small local plans, on the other hand, require almost 4 more years of service until full vesting compared with private plans. Large-city and other large local plans require roughly the same amount of service as private plans. Tables 6.3.3 and 6.3.4 present mean years until full vesting under state and local pension plans.

Table 6.3.1
Number of State and Local Pension Plans by Vesting Formulae
and Type of Administrator, 1978

	Immediate		Full at 3 years		Full at 4 Years		Full at 5 years		Full at 6-10 Years		Full at 10+ Years		None	
	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent
State Administered Systems	7	4.90	0	.00	5	3.50	53	37.06	76	53.15	2	1.40	0	0.00
Large City Systems	2	4.55	1	2.27	0	.00	8	18.18	19	43.18	14	31.82	0	0.00
Other Local Systems with 500 or More Members	1	.89	0	.00	0	.00	10	8.93	83	74.11	18	16.07	0	0.00
Other Local ¹ Systems with Fewer than 500 Members	7	3.57	1	.51	0	.00	3	1.53	69	35.20	55	28.06	61	31.12

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.3.2
Number of State and Local Pension Participants by Vesting Formulae and Type of Administrator, 1978

	Immediate		Full at 3 Years		Full at 4 Years		Full at 5 Years		Full at 6-10 Years		Full at 10+ Years		None	
	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent	Number	Row Percent
State Administered Systems	310,560	3.10	0	.00	373,796	3.73	4,959,259	49.52	185,964	41.80	185,146	1.85	0	0.00
Large City Systems	16,289	2.50	7,920	1.22	0	.00	157,469	24.18	369,733	56.78	99,712	15.31	0	0.00
Other Local Systems with 500 or More Members	772	.35	0	.00	0	.00	38,879	17.48	149,653	67.30	33,067	14.87	0	0.00
Other Local Systems with Fewer than 500 Members	3,191	25.11	5	.04	0	.00	256	2.01	5,182	40.78	4,074	32.06	3,073	24.18

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.3.3
Mean Years until Full Vesting Under State and Local Pension Plans by Type of Administrator, 1978, Plan Weighted

	Number of Plans	Mean Years
State Administered Systems	143	7.56
Large City Systems	44	11.02
Other Local Systems with 500 or More Members	112	10.75
Other Local Systems with Fewer than 500 Members	196	14.06

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence", NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.3.4
Mean Years until Full Vesting Under State and Local Pension Plans by Type of Administrator, 1978, Participant Weighted

	Number of Participants	Mean Years
State Administered Systems	10,014,825	6.66
Large City Systems	651,123	9.68
Other Local Systems with 500 or More Members	222,371	10.29
Other Local Systems with Fewer than 500 Members	12,708	13.26

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence", NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

6.4 Benefit Formulae and Benefit Levels of State and Local Defined Benefit Pension Plans

Almost all state and local pension plans explicitly relate pension benefits to the level of earnings (tables 6.4.1 and 6.4.2). For state-administered and other large local systems, the most common formula is a unit formula based on earnings and service. Over 61 percent of state-administered plans, 67.86 percent of other large local plans, and 42.13 percent of small local plans specify such a formula. For large-city systems, the most common formula is the service step rate, which is a slight modification of the unit formula. The unit formula calculates benefits as a percentage of a designated earnings base multiplied by years of service. The service step rate formula applies different percentages depending on the particular years of service. For example, with a service step rate formula a plan may specify that participants receive 2 percent of earnings per year of service up to 30 years and 2.5 percent of earnings per year of service over 30 years.

State and local plans differ considerably from private plans in the extent of social security integration. While almost half of private plans report such integration, less than 6 percent of state-administered plans do. One partial explanation is that many (49 percent) state and local participants do not participate in social security.

Earnings bases for state and local plans also differ considerably from their private pension counterparts (tables 6.4.3 and 6.4.4). Most participants of state and local plans are covered by a final or highest 3 years earnings base; 53.52 percent of state-administered plan participants, 72.61 percent of large-city plan participants, and 60.40 percent of other large local plan participants have such provisions. The corresponding figure for private plans is only 5.65 percent (table 4.5.17). A sizable fraction (over 15 percent) of private plans with earnings related benefit formulae use terminal 5, terminal 10, or career average earnings bases. The effect of this shorter terminal earnings base is that the real benefits of state and local plan participants are better insured against inflation occurring during their working years.

The rate at which pension benefits replace wages in state and local plans appears to be considerably higher than in private plans (tables 6.4.5 and 6.4.6). While a hypothetical private covered worker retiring in 1977 with a final salary of \$20,000 and 35 years of service would, on average, receive a pension benefit of \$4,400, she (he) would, on average, receive \$11,000 from state-administered plans, \$12,000 from large-city plans, \$12,600 from other large local plans, and \$10,200 from small local plans. Across all levels of earnings, the replacement rates of state and local plans are more than twice those of private plans.

Replacement rates among state and local plans differ considerably depending on the type of formula in effect (tables 6.4.7 and 6.4.8). Plans with formulae that are integrated with social security report the lowest replacement rates. However, it is interesting to note how the replacement rates for these plans vary with the level of earnings. In general, state and local plans integrated with social security have formulae that favor high income workers to a greater extent than do similar private plans. For example, among integrated state and local plans, a \$40,000 worker would receive a replacement rate that is almost twice that of a \$10,000 worker. Among integrated private plans, the ratio of the replacement rate of a \$40,000 worker to that of a \$10,000 worker is less than 1.5.

Table 6.4.1
Number of State and Local Defined Benefit Plans by Benefit Formulae and Type of Administrator, 1978

	Unit Formula Based on Earnings and Service		Social Security Step Rate		Social Security Offset		Service Step Rate		Flat Percentage Related to Earnings Only		Pension Plus Own Annuity		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State Administered Systems	88	61.54	6	4.20	2	1.40	40	27.97	2	1.40	5	3.50	0	.00
Large City Systems	16	36.36	0	.00	1	2.27	20	45.45	0	.00	5	11.36	2	4.55
Other Local Systems with 500 or More Members	76	67.86	5	4.46	4	3.57	18	16.07	0	.00	9	8.04	0	.00
Other Local Systems with Fewer than 500 Members	83	42.13	9	4.57	14	7.11	20	10.15	32	16.24	0	.00	39	19.80

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.4.2
Number of State and Local Defined Benefit Participants by Benefit Formulae and Type of Administrator, 1978

	Unit Formula Based on Earnings and Service		Social Security Step Rate		Social Security Offset		Service Step Rate		Flat Percentage Related to Earnings Only		Pension Plus Own Annuity		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State Administered Systems	6,641,584	66.32	1,268,223	12.66	294,114	2.94	1,475,268	14.73	1,078	.01	334,558	3.34	0	.00
Large City Systems	168,166	25.83	0	.00	179,974	27.64	146,228	22.46	0	.00	130,989	20.12	25,766	3.96
Other Local Systems with 500 or More Members	179,078	80.53	8,442	3.80	3,480	1.56	23,164	10.42	0	.00	8,207	3.69	0	.00
Other Local Systems with Fewer than 500 Members	6,154	48.38	674	5.30	318	2.50	1,624	12.77	1,438	11.31	0	.00	2,512	19.75

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.4.3
Number of State and Local Pension Plans by Earnings Base and Type of Administrator, 1978

	Final or Highest 1 Year		Final or Highest 3 Years		Final or Highest 5 Years		Final or Highest 10 Years		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<u>State Administered Systems</u>										
Number		12		57		53		0		24
Row Percent		8.22		39.04		36.30		.00		16.44
<u>Large City Systems</u>										
Number		5		23		7		2		7
Row Percent		11.36		52.27		15.91		4.55		15.91
<u>Other Local Systems with 500 or More Members</u>										
Number		5		68		25		3		11
Row Percent		4.46		60.71		22.32		2.68		9.82
<u>Other Local Systems with Fewer than 500 Members</u>										
Number		34		44		83		2		34
Row Percent		17.26		22.34		42.13		1.02		17.26

Sources: Frank Arnold STPS (1978). NBER CLLPS (1978). SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.4.4
Number of State and Local Pension Participants by Earnings Base and Type of Administrator, 1978

	Final or Highest 1 Year	Final or Highest 3 Years	Final or Highest 5 Years	Final or Highest 10 Years	Other
State Administered Systems					
Number	108,622	5,342,657	3,460,345	0	1,071,203
Row Percent	1.09	53.52	34.66	.00	10.73
Large City Systems					
Number	79,916	472,776	66,334	17,531	14,566
Row Percent	12.27	72.61	10.19	2.69	2.24
Other Local Systems with 500 or More Members					
Number	16,597	134,317	50,796	7,103	13,558
Row Percent	7.46	60.40	22.84	3.19	6.10
Other Local Systems with Fewer than 500 Members					
Number	2,772	2,747	5,217	118	1,919
Row Percent	21.70	21.51	40.84	.92	15.02

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.4.5
Mean Benefits and Replacement Rates for Hypothetical Workers in State and Local Pension Plans by Type of Administrator, 1978, Plan Weighted¹

	Level of Earnings at Age 65, 1977							
	\$10,000		\$20,000		\$30,000		\$40,000	
	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate
State Administered Systems	5,600	56.00	11,400	57.00	17,100	57.00	22,800	57.00
Large City Systems	6,400	64.00	12,800	64.00	19,200	64.00	25,600	64.00
Other Local Systems with 500 or More Members	6,200	62.00	12,600	63.00	19,200	64.00	25,600	64.00
Other Local Systems with Fewer than 500 Members	4,300	43.00	8,800	44.00	13,200	44.00	17,600	44.00

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

1. Excludes plans with "pension plus own annuity" benefit formulae. The hypothetical worker retiring in 1977 is assumed to have 35 years of service and to retire at the plan's normal retirement age.

Table 6.4.6
Mean Benefits and Replacement Rates for Hypothetical Workers in State and Local Pension Plans by Type of Administrator, 1978, Participant Weighted¹

	Level of Earnings at Age 65, 1977							
	\$10,000		\$20,000		\$30,000		\$40,000	
	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate	Mean Benefit Amount	Mean Percentage Replacement Rate
State Administered Systems	5,500	.55	11,000	.55	16,500	.55	22,400	.55
Large City Systems	5,900	.59	12,000	.60	18,600	.62	25,200	.63
Other Local Systems with 500 or More Members	6,200	.62	12,600	.63	18,900	.63	25,200	.63
Other Local Systems with Fewer than 500 Members	5,000	.50	10,200	.51	15,600	.52	20,800	.52

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

1. Excludes plans with "pension plus own annuity" benefit formulae. The hypothetical worker retiring in 1977 is assumed to have 35 years of service and to retire at the plan's normal retirement age.

Table 6.4.7
 Mean Benefits and Replacement Rates for Hypothetical Workers in State and Local Pension Plans by Benefit Formulae and Type of Administrator, 1978, Plan Weighted¹

	Unit Formula Based on Earnings and Service	Social Security Step Rate	Social Security Offset	Service Step Rate	Flat Percentage Related to Earnings Only	Other
State Administered Systems						
Number of Plans	.88	.6	.2	.40	.2	.C
\$10,000 Worker	.58	.35	.36	.58	.56	NA
\$20,000 Worker	.58	.43	.43	.58	.56	NA
\$30,000 Worker	.58	.50	.50	.58	.56	NA
\$40,000 Worker	.58	.54	.54	.58	.56	NA
Large City Systems						
Number of Plans	.16	.0	.1	.20	.0	.7
\$10,000 Worker	.63	NA	.44	.65	NA	NA
\$20,000 Worker	.63	NA	.49	.65	NA	NA
\$30,000 Worker	.63	NA	.54	.65	NA	NA
\$40,000 Worker	.63	NA	.57	.65	NA	NA
Other Local Systems with 500 or More Members						
Number of Plans	.76	.5	.4	.18	.0	.9
\$10,000 Worker	.67	.20	.23	.57	NA	NA
\$20,000 Worker	.67	.33	.27	.57	NA	NA
\$30,000 Worker	.67	.39	.31	.57	NA	NA
\$40,000 Worker	.67	.42	.34	.57	NA	NA
Other Local Systems with Fewer than 500 Members						
Number of Plans	.83	.9	.14	.20	.32	.39
\$10,000 Worker	.49	.18	.19	.66	.47	.29
\$20,000 Worker	.49	.32	.30	.66	.47	.24
\$30,000 Worker	.49	.36	.38	.66	.47	.22
\$40,000 Worker	.49	.38	.42	.66	.47	.21

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

1. The replacement rate reported here is the mean of the replacement rates for hypothetical workers earning \$10,000, \$20,000, \$30,000, and \$40,000 at retirement in 1977.

Table 6.4.8
 Mean Benefits and Replacement Rates for Hypothetical Workers in State and Local Pension Plans by Benefit Formulae and Type of Administration, 1978, Participant Weighted¹

	Unit Formula Based on Earnings and Service	Social Security Step Rate	Social Security Offset	Service Step Rate	Flat Percentage Related to Earnings Only	Other
State Administered Systems						
Number of Participants	6,641,584	1,268,223	294,114	1,475,268	1,078	334,558
\$10,000 Worker	.57	.39	.45	.54	.56	NA
\$20,000 Worker	.57	.46	.50	.54	.56	NA
\$30,000 Worker	.57	.53	.55	.54	.56	NA
\$40,000 Worker	.57	.55	.58	.54	.56	NA
Large City Systems						
Number of Participants	168,166	.0	179,974	146,228	.0	156,755
\$10,000 Worker	.39	NA	.44	.67	NA	NA
\$20,000 Worker	.39	NA	.49	.67	NA	NA
\$30,000 Worker	.39	NA	.54	.67	NA	NA
\$40,000 Worker	.39	NA	.57	.67	NA	NA
Other Local Systems with 500 or More Members						
Number of Participants	179,078	8,442	3,480	23,164	8,207	.0
\$10,000 Worker	.67	.17	.21	.57	NA	NA
\$20,000 Worker	.67	.28	.25	.57	NA	NA
\$30,000 Worker	.67	.34	.29	.57	NA	NA
\$40,000 Worker	.67	.36	.31	.57	NA	NA
Other Local Systems with Fewer than 500 Members						
Number of Participants	6,154	674	318	1,624	1,438	2,512
\$10,000 Worker	.56	.19	.20	.66	.51	.36
\$20,000 Worker	.56	.31	.35	.66	.51	.38
\$30,000 Worker	.56	.34	.42	.66	.51	.38
\$40,000 Worker	.56	.36	.46	.66	.51	.39

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

1. The replacement rate reported here is the mean of the replacement rates for hypothetical workers earning \$10,000, \$20,000, \$30,000, and \$40,000 at retirement in 1977.

6.5 Normal Retirement Provisions of State and Local Pension Plans

As noted in section 4.6, all private pension plans stipulate that a worker must meet certain requirements as a precondition for normal retirement benefits. The case of state and local public employee pension plans is no different—all require that the employee either reach a certain age, complete a specified amount of service, or do both (table 6.5.1). State-administered and large-city plans generally have both age and service requirements for normal retirement (72.03 and 72.73 percent of plans, respectively), while other large local plans are more likely to have only an age requirement (46.36 percent). These figures compare with 62.22 percent of private plans which have only an age requirement and 24.35 percent of private plans which specify both an age and a service requirement (table 4.6.1). Small local plans are the most likely to specify only a service requirement—14.21 percent versus zero percent of state-administered and other large local plans and 9.09 percent of large-city plans.

State and local plans with only an age requirement tend to specify ages which are 2 to 6 years lower than their private pension counterparts. For state-administered plans, the mean age specified is 60.11; for large-city plans, the mean age is 58.75; and for other large local and small local plans, the mean ages are 62.44 and 62.55, respectively. These figures compare with a mean age of 64.71 for private plans. These differences are even more pronounced among plans specifying both age and service requirements. Here the mean ages specified by state, large-city, other large local, and small plans are 59.68, 57.06, 58.09, and 58.41, respectively. The comparable figure for private plans is 64.67. On a participant-weighted basis, the mean normal retirement ages of state and local plans are somewhat higher, but they are still well below their private pension counterparts (table 6.5.2).

The normal retirement ages of state and local plans are also more widely dispersed (table 6.5.3). While 89.65 percent of private plans specify a normal retirement age of 65 (table 4.6.2), only 32.87 percent of state plans specify this age. State plans are much more likely to specify an age of 60 (38.46 percent) than are private plans (4.82 percent). Large-city plans are more likely to specify age 55 (22.50 percent) than are state plans (14.69), although both are much more likely to specify this age than are private plans. Small local and large-city plans are the most likely to specify an age of 50 (11.83 and 15.00 percent, respectively) whereas only a tiny fraction of private plans (.08 percent) choose this age. On a participant-weighted basis, the findings are quite similar (table 6.5.4). While almost all private participants (90.50 percent) have a normal retirement age of 65, only about 35 percent of state and local participants do. For large cities, the discrepancy is even greater—only 12.25 percent of large-city participants have a normal retirement age of 65.

The service requirements for normal retirement are also more widely dispersed among state and local pension plans. While close to 75 percent of private plans specify a service requirement of 6–10 years, only 40.78 percent of state plans do (table 6.5.5). The figures for large-city plans, other large local plans, and small local plans are even lower—20.22 percent, 36.07 percent, and 25.81 percent, respectively. State plans are much more likely to specify service requirements of 1–5 years (40.78 percent), while large-city plans are more likely to require 16–20 years (52.78). On a participant-weighted basis, this feature of large-city plans is even more evident with 71.84 of participants in large-city plans covered by requirements of 16–20 years (table 6.5.6).

Table 6.5.1

Number of State and Local Pension Plans by Normal Retirement Requirements and Type of Administrator, 1978

	Age Requirement Only			Service Requirement Only			Age and Service Requirement			
	Number	Row Percent	Mean Age	Number	Row Percent	Mean Service	Number	Row Percent	Mean Age	Mean Service
State Administered Systems	40	27.97	60.11	0	.00	0	103	72.03	59.68	10.10
Large City Systems	8	18.18	58.75	4	9.09	20.00	32	72.73	57.06	11.25
Other Local Systems with 500 or More Members	51	46.36	62.44	0	.00	0	59	53.64	58.09	14.15
Other Local Systems with Fewer than 500 Members	73	37.06	62.55	28	14.21	20.25	96	48.73	58.41	15.09

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.5.2

Number of State and Local Participants by Normal Retirement Requirements and Type of Administrator, 1978

	Age Requirement Only			Service Requirement Only			Age and Service Requirement			
	Number	Percent	Mean Age	Number	Percent	Mean Service	Number	Percent	Mean Age	Mean Service
State Administered Systems	3,929,355	39.24	61.60	0	.00	NA	6,085,470	60.76	62.11	9.93
Large City Systems	230,242	35.36	60.31	12,808	1.97	20.42	408,073	62.67	60.28	16.42
Other Local Systems with 500 or More Members	101,238	45.53	62.24	1,891	.85	21.61	119,242	53.62	60.64	14.14
Other Local Systems with Fewer than 500 Members	5,720	44.97	62.57	1,674	13.16	20.45	5,326	41.87	55.25	14.95

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.5.3

Distribution of State and Local Pension Plans by Normal Retirement Ages and Type of Administrator, 1978

	Normal Retirement Age									
	45	47	50	52	55	58	60	62	65	
State Administered Systems										
Row Number	2	0	8	3	21	0	55	7	47	
Row Percent	1.40	.00	5.59	2.10	14.69	.00	38.46	4.90	32.87	
Large City Systems										
Row Number	0	0	6	0	9	0	13	5	7	
Row Percent	0.00	.00	15.00	0.00	22.50	.00	32.50	12.50	17.50	
Other Local with 500 or More Members										
Row Number	1	0	5	0	20	0	35	7	42	
Row Percent	.91	.00	4.55	.00	18.18	.00	31.82	6.36	38.18	
Other Local with Fewer than 500 Members										
Row Number	1	1	20	1	22	1	47	8	68	
Row Percent	.59	.59	11.83	.59	13.02	.59	27.81	4.73	40.24	

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978), SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.5.4
Distribution of State and Local Participants by Normal Retirement Ages
and Type of Administrator, 1978

	Normal Retirement Age								
	45	47	50	52	55	58	60	62	65
State Administered Systems									
Row Number	2,844	0	11,508	27,128	188,177	0	4,559,590	1,484,792	3,740,786
Row Percent	.03	.00	.11	.27	1.88	.00	45.53	14.83	37.35
Large City Systems									
Row Number	0	0	17,244	0	114,610	0	154,205	274,039	78,217
Row Percent	.00	.00	2.70	.00	17.96	.00	24.16	42.93	12.25
Other Local with 500 or More Members									
Row Number	696	0	4,417	0	28,380	0	96,141	11,471	79,375
Row Percent	.32	.00	2.00	.00	12.87	.00	43.58	5.20	35.98
Other Local with Fewer than 500 Members									
Row Number	190	381	1,167	188	1,234	24	2,803	823	4,236
Row Percent	1.72	3.45	10.56	1.70	11.17	.22	25.38	7.45	38.35

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.5.5
Distribution of State and Local Pension Plans by Service Requirements for Normal Retirement
and Type of Administrator, 1978

	years of Service							
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40
State Administered Systems								
Number	42	42	2	12	3	2	0	0
Row Percent	40.78	40.78	1.94	11.65	2.91	1.94	.00	.00
Large City Systems								
Number	5	8	1	19	2	1	0	0
Row Percent	13.89	22.22	2.78	52.78	5.56	2.78	.00	.00
Other Local with 500 or More Members								
Number	6	22	5	12	9	7	0	0
Row Percent	9.84	36.07	8.20	19.67	14.75	11.48	.00	.00
Other Local with Fewer than 500 Members								
Number	11	32	7	53	3	18	0	0
Row Percent	8.87	25.81	5.65	42.74	2.42	14.52	.00	.00

Sources: Frank Arnold, "The Financial Status of State and Local Public Employee Pension Systems: Theory and Evidence," NBER CLLPS (1978). SRI International - Milliman and Robertson Survey of Small Local Pension Plans (1979)

Table 6.5.6
Distribution of State and Local Participants by Service Requirements for Normal Retirement
and Type of Administrator, 1978

	Years of Service							
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40
State Administered Systems								
Number	1,705,368	2,808,024	27,556	914,156	264,602	365,764	0	0
Row Percent	28.02	46.14	.45	15.02	4.35	6.01	.00	.00
Large City Systems								
Number	23,438	56,305	5,249	302,381	8,608	24,900	0	0
Row Percent	5.57	13.38	1.25	71.84	2.05	5.92	.00	.00
Other Local with 500 or More Members								
Number	23,979	28,379	19,342	9,441	13,522	26,470	0	0
Row Percent	19.80	23.43	15.97	7.79	11.16	21.85	.00	.00
Other Local with Fewer than 500 Members								
Number	396	1,870	660	3,019	78	1,057	0	0
Row Percent	5.58	26.41	9.32	42.64	1.10	14.93	.00	.00

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

6.6 Early Retirement Provisions of State and Local Pension Plans

With the exception of small local plans, most state and local pension plans have provisions for early retirement; 90.21 percent of state plans, 68.81 percent of large-city plans, and 83.04 percent of other large local plans report such provisions (table 6.6.1); the corresponding figure for private pension plans is 64.10 percent (table 4.7.1). Only 38.07 percent of small local plans permit early retirement. On a participant-weighted basis, the figure for these small local plans is higher (51.54 percent), but it is still well below the corresponding figures for state, large-city, other large local, and private plans (96.54, 66.16, 85.82, and 82.20 percent, respectively).

Most state and local plans with early retirement provisions require that employees meet both an age and a service requirement as a precondition for early retirement benefits. A substantial number of large-city plans specify only a service requirement (table 6.6.3). The mean age specified by plans with both age and service requirements is roughly 54 for all four survey groups. The mean service requirement of these plans ranges from a low of 9.74 years for other large local plans to a high of 15.36 years for large-city plans. The mean service requirement of plans specifying only a service requirement ranged from 18.57 years for large-city plans to 24.15 years for state-administered plans. These figures contrast sharply with the 7.53 year mean service requirement of private plans with service-only early retirement requirements (table 4.7.12). On a participant-weighted basis, the results are roughly the same (table 6.6.4).

The distribution of early retirement ages for state-administered plans closely resembles the distribution for private plans: 55.32 percent of state-administered plans report an early retirement age of 55, and 24.47 percent report an age of 60 (table 6.6.5); the corresponding figures for private plans are 57.94 and 32.72 percent, respectively (table 4.7.13). Large-city and other large local plans are much more likely to specify age 55 (72.22 and 78.69 percent of plans, respectively). This difference is even more pronounced when the data are tabulated on a participant-weighted basis: 78.12 percent of large-city plan participants and 86.34 percent of other large local plan participants have an early retirement age of 55 (table 6.6.6).

The service requirements of state and local plans are much more dispersed than those of private pensions with such requirements (tables 6.6.7 and 6.6.8). While about 50 percent of the relevant subset of private plans specify a service requirement of exactly 10 years, less than 25 percent of state and large local plans do so. Instead, many of these state and local plans specify service requirements of 15 years, 20 years, or 25 years.

Table 6.6.1
Number of State and Local Pension Plans with Early Retirement Provisions by Type of Administrator, 1978

	With Early Retirement Provisions		Without Early Retirement Provisions	
	Number	Row Percent	Number	Row Percent
State Administered Systems	129	90.21	14	9.79
Large City Systems	30	68.18	14	31.82
Other Local Systems with 500 or More Members	93	83.04	19	16.96
Other Local Systems with Fewer than 500 Members	75	38.07	122	61.93

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.2
Number of State and Local Participants with Early Retirement Provisions by Type of Administrator, 1978

	With Early Retirement Provisions		Without Early Retirement Provisions	
	Number	Row Percent	Number	Row Percent
State Administered Systems	9,723,802	96.69	332,416	3.31
Large City Systems	430,799	66.17	220,224	33.83
Other Local Systems with 500 or More Members	190,831	24.81	578,410	75.19
Other Local Systems with Fewer than 500 Members	6,556	51.54	6,164	48.46

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.3
Number of State and Local Pension Plans by Early Retirement Requirements and Type of Administrator, 1978

	Age Requirement Only			Service Requirement Only			Age and Service Requirement			
	Number	Row Percent	Mean Age	Number	Row Percent	Mean Service	Number	Row Percent	Mean Age	Mean Service
State Administered Systems	26	20.16	56.47	26	20.16	24.15	77	59.69	55.69	11.88
Large City Systems	4	13.33	53.75	12	40.00	18.57	14	46.67	54.29	15.36
Other Local Systems with 500 or More Members	7	7.53	52.14	32	34.41	19.13	54	58.06	54.33	9.74
Other Local Systems with Fewer than 500 Members	10	13.33	56.70	19	25.33	19.74	46	61.33	54.72	14.24

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.4
Number of State and Local Participants by Early Retirement Requirements and Type of Administrator, 1978

	Age Requirement Only			Service Requirement Only			Age and Service Requirement			
	Number	Row Percent	Mean Age	Number	Row Percent	Mean Service	Number	Row Percent	Mean Age	Mean Service
State Administered Systems	2,425,320	24.61	57.00	1,924,432	19.53	20.84	5,506,324	55.87	55.96	10.97
Large City Systems	204,629	47.61	54.89	45,490	10.58	25.25	179,690	41.81	53.99	13.43
Other Local Systems with 500 or More Members	10,090	5.29	52.23	67,359	35.30	19.51	113,382	59.41	54.61	10.42
Other Local Systems with Fewer than 500 Members	768	12.30	56.24	1,472	23.57	20.38	4,004	64.13	54.41	16.95

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.5
Distribution of State and Local Pension Plans by Early Retirement Ages and Type of Administrator, 1978

	45	48	50	52	55	60	62
<u>State Administered Systems</u>							
Number	0	2	11	1	52	23	5
Row Percent	.00	2.13	11.70	1.06	55.32	24.47	5.32
<u>Large City Systems</u>							
Number	0	0	4	0	13	1	0
Row Percent	.00	.00	22.22	.00	72.22	5.56	.00
<u>Other Local Systems with 500 or More Members</u>							
Number	1	0	8	1	48	2	1
Row Percent	1.64	.00	13.11	1.64	78.69	3.28	1.64
<u>Other Local Systems with Fewer than 500 Members</u>							
Number	2	0	7	0	36	60	2
Row Percent	1.87	.00	6.54	.00	33.64	56.07	1.87

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.6
Distribution of State and Local Participants by Early Retirement Ages and Type of Administrator, 1978

	45	48	50	52	55	60	62
<u>State Administered Systems</u>							
Number	0	24,141	831,479	2,987	3,756,139	2,567,944	205,407
Row Percent	.00	.33	11.25	.04	50.84	34.76	2.78
<u>Large City Systems</u>							
Number	0	0	86,959	0	331,731	5,940	0
Row Percent	.00	.00	20.48	.00	78.12	1.40	.00
<u>Other Local Systems with 500 or More Members</u>							
Number	850	0	12,104	733	106,606	2,625	554
Row Percent	.69	.00	9.80	.59	86.34	2.13	.45
<u>Other Local Systems with Fewer than 500 Members</u>							
Number	125	0	715	0	3,298	504	130
Row Percent	2.62	.00	14.98	.00	69.11	10.56	2.72

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.7

Distribution of State and Local Pension Plans by Service Requirements for Early Retirement and Type of Administrator, 1978

	1-5	6-10	11-15	16-20	21-25	26-30	31-35
<u>State Administered Systems</u>							
Number	22	30	13	8	22	8	0
Row Percent	21.36	29.13	12.62	7.77	21.36	7.77	.00
<u>Large City Systems</u>							
Number	2	6	2	10	1	5	0
Row Percent	7.69	23.08	7.69	38.46	3.85	19.23	.00
<u>Other Local Systems with 500 or More Members</u>							
Number	31	13	10	19	8	4	0
Row Percent	36.47	15.29	11.76	22.35	9.41	4.71	.00
<u>Other Local Systems with Fewer than 500 Members</u>							
Number	2	24	13	23	2	1	0
Row Percent	3.08	36.92	20.00	35.38	3.08	1.54	.00

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)

Table 6.6.8

Distribution of State and Local Participants by Service Requirements for Early Retirement and by Type of Administrator, 1978

	1-5	6-10	11-15	16-20	21-25	26-30	31-35
<u>State Administered Systems</u>							
Number	2,725,907	1,608,489	682,555	189,202	1,838,795	385,814	0
Row Percent	36.68	21.65	9.19	2.55	24.75	5.19	.00
<u>Large City Systems</u>							
Number	35,152	60,924	32,978	57,411	5,400	33,315	0
Row Percent	15.61	27.06	14.65	25.50	2.40	14.79	.00
<u>Other Local Systems with 500 or More Members</u>							
Number	59,805	22,613	33,347	31,446	27,180	5,229	0
Row Percent	33.30	12.59	18.57	17.51	15.13	2.91	.00
<u>Other Local Systems with Fewer than 500 Members</u>							
Number	188	1,582	858	2,437	216	195	0
Row Percent	3.43	28.89	15.67	44.50	3.94	3.56	.00

Sources: Frank Arnold STPS (1978), NBER CLLPS (1978), SRI International - Milliman and Roberts Survey of Small Local Pension Plans (1979)