

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

ASHBURNHAM - 010

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	58,942	6,773
Average Age	47.8	48.0
Average Service	11.7	10.6
Valuation Salary	3,171,341	\$282,918,805
Average Salary	\$51,151	\$41,772
<i>Retired Members and Beneficiaries</i>	27,000	3,122
Average Age	72.3	73.8
Total Annual Pension	735,831	\$59,160,612
Average Annual Pension	\$27,253	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	2,000	38
Average Age	68.6	62.1
Total Annual Pension	52,800	\$637,948
Average Annual Pension	\$26,400	\$16,788
<i>Inactive Members</i>	5,000	1,925
Annuity Savings Fund	199,176	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$568,406	\$41,092,346
b. Administrative Expenses	14,233	1,100,000
c. Expected Employee Contributions	330,592	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$252,047	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	8,916,005	\$688,107,910
b. Retired Members and Beneficiaries	7,767,182	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	575,248	7,655,312
e. Inactive Members	199,176	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$17,457,611	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$17,457,611	\$1,369,390,456
h. Actuarial Value of Assets	7,445,837	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$10,011,774	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$282,571	\$20,057,051
b. Payment on UAL	439,192	29,782,198
c. Payment on 2002 ERI	30,709	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$752,472	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$738,689

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

ASHBURNHAM-WESTMINSTER REGIONAL - 020

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	122,883	6,773
Average Age	47.3	48.0
Average Service	7.6	10.6
Valuation Salary	3,151,001	\$282,918,805
Average Salary	\$25,618	\$41,772
<i>Retired Members and Beneficiaries</i>	50,000	3,122
Average Age	73.5	73.8
Total Annual Pension	691,416	\$59,160,612
Average Annual Pension	\$13,828	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	66.1	62.7
Total Annual Pension	23,973	\$7,387,664
Average Annual Pension	\$23,973	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	58,000	1,925
Annuity Savings Fund	375,318	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$545,813	\$41,092,346
b. Administrative Expenses	13,667	1,100,000
c. Expected Employee Contributions	333,765	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$225,715	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	6,367,608	\$688,107,910
b. Retired Members and Beneficiaries	6,907,522	570,882,886
c. Disabled Members - Accidental	297,481	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	375,318	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$13,947,929	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$13,947,929	\$1,369,390,456
h. Actuarial Value of Assets	5,948,924	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,999,005	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$253,051	\$20,057,051
b. Payment on UAL	360,666	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$613,717	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$602,476	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

ATHOL - 025

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	94,383	6,773
Average Age	46.9	48.0
Average Service	14.8	10.6
Valuation Salary	4,654,750	\$282,918,805
Average Salary	\$48,487	\$41,772
<i>Retired Members and Beneficiaries</i>	77,000	3,122
Average Age	74.9	73.8
Total Annual Pension	1,663,742	\$59,160,612
Average Annual Pension	\$21,607	\$18,950
<i>Disabled Members - Accidental</i>	15,000	222
Average Age	59.2	62.7
Total Annual Pension	515,666	\$7,387,664
Average Annual Pension	\$34,378	\$33,278
<i>Disabled Members - Ordinary</i>	2,000	38
Average Age	76.5	62.1
Total Annual Pension	25,770	\$637,948
Average Annual Pension	\$12,885	\$16,788
<i>Inactive Members</i>	14,000	1,925
Annuity Savings Fund	102,497	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$781,662	\$41,092,346
b. Administrative Expenses	19,573	1,100,000
c. Expected Employee Contributions	477,711	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$323,524	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	15,580,838	\$688,107,910
b. Retired Members and Beneficiaries	16,080,687	570,882,886
c. Disabled Members - Accidental	6,395,473	86,480,979
d. Disabled Members - Ordinary	180,580	7,655,312
e. Inactive Members	102,497	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$38,340,075	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$38,340,075	\$1,369,390,456
h. Actuarial Value of Assets	16,352,407	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$21,987,668	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$362,705	\$20,057,051
b. Payment on UAL	991,398	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,354,103	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,329,300	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**ATHOL HOUSING AUTHORITY - 026
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	5,000	6,773
Average Age	51.3	48.0
Average Service	12.3	10.6
Valuation Salary	204,915	\$282,918,805
Average Salary	\$40,983	\$41,772
<i>Retired Members and Beneficiaries</i>	5,000	3,122
Average Age	80.8	73.8
Total Annual Pension	49,149	\$59,160,612
Average Annual Pension	\$9,830	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$29,941	\$41,092,346
b. Administrative Expenses	750	1,100,000
c. Expected Employee Contributions	21,153	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$9,538	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	713,342	\$688,107,910
b. Retired Members and Beneficiaries	376,693	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,090,035	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,090,035	\$1,369,390,456
h. Actuarial Value of Assets	464,911	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$625,124	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$10,693	\$20,057,051
b. Payment on UAL	28,186	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$38,879	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$38,167	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

ATHOL-ROYALSTON REGIONAL SCHOOL DISTRICT - 027

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	88,000	6,773
Average Age	51.3	48.0
Average Service	12.5	10.6
Valuation Salary	2,301,246	\$282,918,805
Average Salary	\$25,857	\$41,772
<i>Retired Members and Beneficiaries</i>	56,000	3,122
Average Age	74.1	73.8
Total Annual Pension	570,354	\$59,160,612
Average Annual Pension	\$10,185	\$18,950
<i>Disabled Members - Accidental</i>	4,000	222
Average Age	65.4	62.7
Total Annual Pension	71,740	\$7,387,664
Average Annual Pension	\$17,935	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	27,000	1,925
Annuity Savings Fund	173,801	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$383,582	\$41,092,346
b. Administrative Expenses	9,605	1,100,000
c. Expected Employee Contributions	227,724	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$165,463	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,161,651	\$688,107,910
b. Retired Members and Beneficiaries	5,469,134	570,882,886
c. Disabled Members - Accidental	835,507	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	173,801	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$13,640,093	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$13,640,093	\$1,369,390,456
h. Actuarial Value of Assets	5,817,630	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,822,463	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$185,502	\$20,057,051
b. Payment on UAL	352,706	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$538,208	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$528,350	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

AUBURN - 030

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	313,985	6,773
Average Age	47.3	48.0
Average Service	11.2	10.6
Valuation Salary	12,772,426	\$282,918,805
Average Salary	\$40,292	\$41,772
<i>Retired Members and Beneficiaries</i>	143,000	3,122
Average Age	73.6	73.8
Total Annual Pension	2,630,990	\$59,160,612
Average Annual Pension	\$18,399	\$18,950
<i>Disabled Members - Accidental</i>	13,000	222
Average Age	63.6	62.7
Total Annual Pension	455,946	\$7,387,664
Average Annual Pension	\$35,073	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	62.8	62.1
Total Annual Pension	11,113	\$637,948
Average Annual Pension	\$11,113	\$16,788
<i>Inactive Members</i>	59,000	1,925
Annuity Savings Fund	502,491	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$2,219,606	\$41,092,346
b. Administrative Expenses	55,579	1,100,000
c. Expected Employee Contributions	1,308,271	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$966,914	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	35,966,198	\$688,107,910
b. Retired Members and Beneficiaries	25,309,673	570,882,886
c. Disabled Members - Accidental	5,241,008	86,480,979
d. Disabled Members - Ordinary	138,329	7,655,312
e. Inactive Members	502,491	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$67,157,699	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$67,157,699	\$1,369,390,456
h. Actuarial Value of Assets	28,643,399	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$38,514,300	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$1,084,014	\$20,057,051
b. Payment on UAL	1,658,767	29,782,198
c. Payment on 2002 ERI	169,151	1,362,369
d. Payment on 2003 ERI	26,244	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$2,938,176	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$2,884,358	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**AUBURN HOUSING AUTHORITY - 040
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	5,000	6,773
Average Age	55.8	48.0
Average Service	8.8	10.6
Valuation Salary	274,411	\$282,918,805
Average Salary	\$54,882	\$41,772
<i>Retired Members and Beneficiaries</i>	5,000	3,122
Average Age	73.3	73.8
Total Annual Pension	84,711	\$59,160,612
Average Annual Pension	\$16,942	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	1,000	1,925
Annuity Savings Fund	15,329	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$47,990	\$41,092,346
b. Administrative Expenses	1,202	1,100,000
c. Expected Employee Contributions	27,820	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$21,372	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	629,994	\$688,107,910
b. Retired Members and Beneficiaries	788,967	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	15,329	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,434,290	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,434,290	\$1,369,390,456
h. Actuarial Value of Assets	611,738	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$822,552	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$23,960	\$20,057,051
b. Payment on UAL	37,088	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$61,048	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$59,930	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**AUBURN WATER DISTRICT - 050
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	8,000	6,773
Average Age	53.8	48.0
Average Service	18.4	10.6
Valuation Salary	492,887	\$282,918,805
Average Salary	\$61,611	\$41,772
<i>Retired Members and Beneficiaries</i>	5,000	3,122
Average Age	83.7	73.8
Total Annual Pension	110,451	\$59,160,612
Average Annual Pension	\$22,090	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$71,023	\$41,092,346
b. Administrative Expenses	1,778	1,100,000
c. Expected Employee Contributions	49,712	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$23,089	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,741,115	\$688,107,910
b. Retired Members and Beneficiaries	890,984	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,632,099	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$2,632,099	\$1,369,390,456
h. Actuarial Value of Assets	1,122,616	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,509,483	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$25,885	\$20,057,051
b. Payment on UAL	66,057	29,782,198
c. Payment on 2002 ERI	5,034	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$96,976	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$95,200

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BARRE - 060

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	40,844	6,773
Average Age	45.7	48.0
Average Service	10.9	10.6
Valuation Salary	1,497,461	\$282,918,805
Average Salary	\$34,825	\$41,772
<i>Retired Members and Beneficiaries</i>	16,000	3,122
Average Age	73.7	73.8
Total Annual Pension	305,411	\$59,160,612
Average Annual Pension	\$19,088	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	73.0	62.7
Total Annual Pension	24,035	\$7,387,664
Average Annual Pension	\$24,035	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	54.8	62.1
Total Annual Pension	7,031	\$637,948
Average Annual Pension	\$7,031	\$16,788
<i>Inactive Members</i>	10,000	1,925
Annuity Savings Fund	122,514	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$245,666	\$41,092,346
b. Administrative Expenses	6,151	1,100,000
c. Expected Employee Contributions	149,078	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$102,739	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	3,350,004	\$688,107,910
b. Retired Members and Beneficiaries	3,089,885	570,882,886
c. Disabled Members - Accidental	232,093	86,480,979
d. Disabled Members - Ordinary	119,056	7,655,312
e. Inactive Members	121,770	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$6,912,808	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$6,912,808	\$1,369,390,456
h. Actuarial Value of Assets	2,948,378	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$3,964,430	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$115,181	\$20,057,051
b. Payment on UAL	175,664	29,782,198
c. Payment on 2002 ERI	5,539	1,362,369
d. Payment on 2003 ERI	2,215	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$298,599	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$293,130 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**BARRE HOUSING AUTHORITY - 070
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1,512	6,773
Average Age	55.3	48.0
Average Service	19.8	10.6
Valuation Salary	89,256	\$282,918,805
Average Salary	\$44,628	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	76.4	73.8
Total Annual Pension	9,188	\$59,160,612
Average Annual Pension	\$9,188	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$11,610	\$41,092,346
b. Administrative Expenses	291	1,100,000
c. Expected Employee Contributions	8,758	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$3,143	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	356,252	\$688,107,910
b. Retired Members and Beneficiaries	98,095	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$454,347	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$454,347	\$1,369,390,456
h. Actuarial Value of Assets	193,783	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$260,564	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$3,523	\$20,057,051
b. Payment on UAL	11,748	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$15,271	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$14,991	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BERLIN - 080

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	47.600	6,773
Average Age	51.1	48.0
Average Service	12.1	10.6
Valuation Salary	2,078,677	\$282,918,805
Average Salary	\$34,645	\$41,772
<i>Retired Members and Beneficiaries</i>	22.000	3,122
Average Age	77.1	73.8
Total Annual Pension	496,978	\$59,160,612
Average Annual Pension	\$22,590	\$18,950
<i>Disabled Members - Accidental</i>	1.000	222
Average Age	56.8	62.7
Total Annual Pension	26,707	\$7,387,664
Average Annual Pension	\$26,707	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	12.000	1,925
Annuity Savings Fund	116,894	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$361,207	\$41,092,346
b. Administrative Expenses	9,045	1,100,000
c. Expected Employee Contributions	205,103	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$165,149	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	5,893,723	\$688,107,910
b. Retired Members and Beneficiaries	4,629,103	570,882,886
c. Disabled Members - Accidental	371,812	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	116,894	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$11,011,532	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$11,011,532	\$1,369,390,456
h. Actuarial Value of Assets	4,696,523	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$6,315,009	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$185,150	\$20,057,051
b. Payment on UAL	284,736	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$469,886	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$461,279 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**BERLIN-BOYLSTON REGIONAL - 090
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	23,107	6,773
Average Age	50.1	48.0
Average Service	10.5	10.6
Valuation Salary	731,487	\$282,918,805
Average Salary	\$22,166	\$41,772
<i>Retired Members and Beneficiaries</i>	10,000	3,122
Average Age	76.2	73.8
Total Annual Pension	107,080	\$59,160,612
Average Annual Pension	\$10,708	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	8,000	1,925
Annuity Savings Fund	34,625	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$115,489	\$41,092,346
b. Administrative Expenses	2,892	1,100,000
c. Expected Employee Contributions	74,464	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$43,917	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	1,878,695	\$688,107,910
b. Retired Members and Beneficiaries	1,019,277	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	34,625	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,932,597	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$2,932,597	\$1,369,390,456
h. Actuarial Value of Assets	1,250,780	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,681,817	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$49,236	\$20,057,051
b. Payment on UAL	75,831	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$125,067	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$122,776	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BLACKSTONE - 100

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	70.000	6,773
Average Age	45.9	48.0
Average Service	12.3	10.6
Valuation Salary	3,496,440	\$282,918,805
Average Salary	\$49,949	\$41,772
<i>Retired Members and Beneficiaries</i>	27.000	3,122
Average Age	71.5	73.8
Total Annual Pension	566,917	\$59,160,612
Average Annual Pension	\$20,997	\$18,950
<i>Disabled Members - Accidental</i>	4.000	222
Average Age	56.3	62.7
Total Annual Pension	140,868	\$7,387,664
Average Annual Pension	\$35,217	\$33,278
<i>Disabled Members - Ordinary</i>	1.000	38
Average Age	77.4	62.1
Total Annual Pension	21,236	\$637,948
Average Annual Pension	\$21,236	\$16,788
<i>Inactive Members</i>	11.000	1,925
Annuity Savings Fund	106,299	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$596,727	\$41,092,346
b. Administrative Expenses	14,942	1,100,000
c. Expected Employee Contributions	360,102	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$251,567	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	9,991,218	\$688,107,910
b. Retired Members and Beneficiaries	5,857,135	570,882,886
c. Disabled Members - Accidental	1,889,954	86,480,979
d. Disabled Members - Ordinary	147,396	7,655,312
e. Inactive Members	106,299	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$17,992,002	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$17,992,002	\$1,369,390,456
h. Actuarial Value of Assets	7,673,760	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$10,318,242	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$282,034	\$20,057,051
b. Payment on UAL	465,237	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$747,271	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$733,583	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**BLACKSTONE HOUSING AUTHORITY - 105
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,000	6,773
Average Age	55.3	48.0
Average Service	14.2	10.6
Valuation Salary	68,116	\$282,918,805
Average Salary	\$34,058	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	77.9	73.8
Total Annual Pension	14,432	\$59,160,612
Average Annual Pension	\$14,432	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	1,000	1,925
Annuity Savings Fund	14,501	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$15,079	\$41,092,346
b. Administrative Expenses	378	1,100,000
c. Expected Employee Contributions	6,634	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$8,823	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	197,275	\$688,107,910
b. Retired Members and Beneficiaries	121,342	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	14,501	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$333,118	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$333,118	\$1,369,390,456
h. Actuarial Value of Assets	142,078	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$191,040	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$9,892	\$20,057,051
b. Payment on UAL	8,614	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$18,506	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$18,167	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**BLACKSTONE-MILLVILLE REGIONAL - 110
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	84,399	6,773
Average Age	51.0	48.0
Average Service	11.2	10.6
Valuation Salary	2,388,230	\$282,918,805
Average Salary	\$28,097	\$41,772
<i>Retired Members and Beneficiaries</i>	40,000	3,122
Average Age	76.2	73.8
Total Annual Pension	515,075	\$59,160,612
Average Annual Pension	\$12,877	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	65.3	62.7
Total Annual Pension	57,074	\$7,387,664
Average Annual Pension	\$28,537	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	64.7	62.1
Total Annual Pension	19,748	\$637,948
Average Annual Pension	\$19,748	\$16,788
<i>Inactive Members</i>	20,000	1,925
Annuity Savings Fund	110,268	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$401,986	\$41,092,346
b. Administrative Expenses	10,066	1,100,000
c. Expected Employee Contributions	236,879	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$175,173	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	6,122,449	\$688,107,910
b. Retired Members and Beneficiaries	4,577,903	570,882,886
c. Disabled Members - Accidental	616,726	86,480,979
d. Disabled Members - Ordinary	272,547	7,655,312
e. Inactive Members	110,268	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$11,699,893	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$11,699,893	\$1,369,390,456
h. Actuarial Value of Assets	4,990,115	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$6,709,778	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$196,388	\$20,057,051
b. Payment on UAL	302,536	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$498,924	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$489,785 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BOLTON - 120

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	45,318	6,773
Average Age	44.9	48.0
Average Service	10.3	10.6
Valuation Salary	2,137,690	\$282,918,805
Average Salary	\$45,483	\$41,772
<i>Retired Members and Beneficiaries</i>	14,000	3,122
Average Age	69.7	73.8
Total Annual Pension	320,116	\$59,160,612
Average Annual Pension	\$22,865	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	52.7	62.1
Total Annual Pension	38,549	\$637,948
Average Annual Pension	\$38,549	\$16,788
<i>Inactive Members</i>	7,000	1,925
Annuity Savings Fund	205,152	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$352,749	\$41,092,346
b. Administrative Expenses	8,833	1,100,000
c. Expected Employee Contributions	218,251	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$143,331	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	5,339,457	\$688,107,910
b. Retired Members and Beneficiaries	3,511,338	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	533,194	7,655,312
e. Inactive Members	205,152	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$9,589,141	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$9,589,141	\$1,369,390,456
h. Actuarial Value of Assets	4,089,860	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$5,499,281	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$160,690	\$20,057,051
b. Payment on UAL	241,341	29,782,198
c. Payment on 2002 ERI	16,614	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$418,645	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$410,977	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BOYLSTON - 130

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	57,440	6,773
Average Age	49.6	48.0
Average Service	10.7	10.6
Valuation Salary	2,737,431	\$282,918,805
Average Salary	\$39,106	\$41,772
<i>Retired Members and Beneficiaries</i>	27,000	3,122
Average Age	79.4	73.8
Total Annual Pension	539,784	\$59,160,612
Average Annual Pension	\$19,992	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	59.9	62.7
Total Annual Pension	71,512	\$7,387,664
Average Annual Pension	\$35,756	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	13,000	1,925
Annuity Savings Fund	39,744	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$523,312	\$41,092,346
b. Administrative Expenses	13,104	1,100,000
c. Expected Employee Contributions	283,099	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$253,317	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,050,001	\$688,107,910
b. Retired Members and Beneficiaries	4,529,873	570,882,886
c. Disabled Members - Accidental	943,444	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	39,744	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$12,563,062	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$12,563,062	\$1,369,390,456
h. Actuarial Value of Assets	5,358,265	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,204,797	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$283,994	\$20,057,051
b. Payment on UAL	319,844	29,782,198
c. Payment on 2002 ERI	12,586	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$616,424	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$605,133	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**BOYLSTON WATER DISTRICT - 135
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,000	6,773
Average Age	37.9	48.0
Average Service	6.5	10.6
Valuation Salary	107,192	\$282,918,805
Average Salary	\$53,596	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	69.0	73.8
Total Annual Pension	12,877	\$59,160,612
Average Annual Pension	\$6,439	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$13,434	\$41,092,346
b. Administrative Expenses	336	1,100,000
c. Expected Employee Contributions	11,156	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$2,614	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	122,245	\$688,107,910
b. Retired Members and Beneficiaries	167,633	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$289,878	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$289,878	\$1,369,390,456
h. Actuarial Value of Assets	123,636	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$166,242	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$2,931	\$20,057,051
b. Payment on UAL	7,496	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$10,427	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$10,236	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

BROOKFIELD - 140

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	35,631	6,773
Average Age	49.7	48.0
Average Service	11.5	10.6
Valuation Salary	1,177,536	\$282,918,805
Average Salary	\$31,825	\$41,772
<i>Retired Members and Beneficiaries</i>	13,000	3,122
Average Age	74.8	73.8
Total Annual Pension	223,877	\$59,160,612
Average Annual Pension	\$17,221	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	56.6	62.7
Total Annual Pension	51,933	\$7,387,664
Average Annual Pension	\$25,967	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	44.9	62.1
Total Annual Pension	16,076	\$637,948
Average Annual Pension	\$16,076	\$16,788
<i>Inactive Members</i>	7,000	1,925
Annuity Savings Fund	17,892	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$214,346	\$41,092,346
b. Administrative Expenses	5,367	1,100,000
c. Expected Employee Contributions	118,774	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$100,939	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	3,139,009	\$688,107,910
b. Retired Members and Beneficiaries	1,915,443	570,882,886
c. Disabled Members - Accidental	725,341	86,480,979
d. Disabled Members - Ordinary	275,894	7,655,312
e. Inactive Members	17,892	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$6,073,579	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$6,073,579	\$1,369,390,456
h. Actuarial Value of Assets	2,590,440	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$3,483,139	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$113,163	\$20,057,051
b. Payment on UAL	153,710	29,782,198
c. Payment on 2002 ERI	8,390	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$275,263	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$270,221	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

CHARLTON - 150

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	86.114	6,773
Average Age	49.6	48.0
Average Service	13.4	10.6
Valuation Salary	4,643,858	\$282,918,805
Average Salary	\$51,031	\$41,772
<i>Retired Members and Beneficiaries</i>	36.000	3,122
Average Age	72.4	73.8
Total Annual Pension	741,118	\$59,160,612
Average Annual Pension	\$20,587	\$18,950
<i>Disabled Members - Accidental</i>	7.000	222
Average Age	51.9	62.7
Total Annual Pension	312,954	\$7,387,664
Average Annual Pension	\$44,708	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	20.000	1,925
Annuity Savings Fund	220,321	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$865,800	\$41,092,346
b. Administrative Expenses	21,680	1,100,000
c. Expected Employee Contributions	476,912	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$410,568	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	15,265,439	\$688,107,910
b. Retired Members and Beneficiaries	7,538,137	570,882,886
c. Disabled Members - Accidental	4,078,767	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	220,321	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$27,102,664	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$27,102,664	\$1,369,390,456
h. Actuarial Value of Assets	11,559,544	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$15,543,120	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$460,290	\$20,057,051
b. Payment on UAL	683,716	29,782,198
c. Payment on 2002 ERI	42,960	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,186,966	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,165,224	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**CHERRY VALLEY-ROCHDALE WATER - 160
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	4,404	6,773
Average Age	43.7	48.0
Average Service	14.9	10.6
Valuation Salary	300,755	\$282,918,805
Average Salary	\$60,151	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	65.9	73.8
Total Annual Pension	40,890	\$59,160,612
Average Annual Pension	\$20,445	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$31,991	\$41,092,346
b. Administrative Expenses	801	1,100,000
c. Expected Employee Contributions	27,631	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$5,161	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,079,130	\$688,107,910
b. Retired Members and Beneficiaries	479,741	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,558,871	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,558,871	\$1,369,390,456
h. Actuarial Value of Assets	664,873	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$893,998	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$5,785	\$20,057,051
b. Payment on UAL	40,309	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$46,094	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$45,250

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**CHERRY VALLEY SEWER DISTRICT - 165
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	0.596	6,773
Average Age	38.1	48.0
Average Service	13.6	10.6
Valuation Salary	39,635	\$282,918,805
Average Salary	\$39,635	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$3,370	\$41,092,346
b. Administrative Expenses	84	1,100,000
c. Expected Employee Contributions	4,187	26,597,269
d. Employer Normal Cost = a. + b. - c.	(\$733)	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	67,561	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$67,561	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$67,561	\$1,369,390,456
h. Actuarial Value of Assets	28,815	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$38,746	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$0	\$20,057,051
b. Payment on UAL	1,747	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,747	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,715	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

DOUGLAS - 170

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	166,297	6,773
Average Age	44.9	48.0
Average Service	8.1	10.6
Valuation Salary	5,480,171	\$282,918,805
Average Salary	\$32,236	\$41,772
<i>Retired Members and Beneficiaries</i>	37,000	3,122
Average Age	71.5	73.8
Total Annual Pension	731,561	\$59,160,612
Average Annual Pension	\$19,772	\$18,950
<i>Disabled Members - Accidental</i>	3,000	222
Average Age	63.5	62.7
Total Annual Pension	135,811	\$7,387,664
Average Annual Pension	\$45,270	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	61.3	62.1
Total Annual Pension	26,701	\$637,948
Average Annual Pension	\$26,701	\$16,788
<i>Inactive Members</i>	66,000	1,925
Annuity Savings Fund	351,776	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$952,274	\$41,092,346
b. Administrative Expenses	23,845	1,100,000
c. Expected Employee Contributions	579,923	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$396,196	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	11,868,286	\$688,107,910
b. Retired Members and Beneficiaries	7,440,533	570,882,886
c. Disabled Members - Accidental	1,616,989	86,480,979
d. Disabled Members - Ordinary	314,771	7,655,312
e. Inactive Members	351,776	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$21,592,355	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$21,592,355	\$1,369,390,456
h. Actuarial Value of Assets	9,209,345	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,383,010	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$444,177	\$20,057,051
b. Payment on UAL	548,912	29,782,198
c. Payment on 2002 ERI	12,081	1,362,369
d. Payment on 2003 ERI	11,588	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,016,758	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$998,134	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

DUDLEY - 180

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	56,879	6,773
Average Age	47.8	48.0
Average Service	13.3	10.6
Valuation Salary	2,873,267	\$282,918,805
Average Salary	\$49,539	\$41,772
<i>Retired Members and Beneficiaries</i>	37,000	3,122
Average Age	72.7	73.8
Total Annual Pension	876,478	\$59,160,612
Average Annual Pension	\$23,689	\$18,950
<i>Disabled Members - Accidental</i>	5,000	222
Average Age	64.1	62.7
Total Annual Pension	169,634	\$7,387,664
Average Annual Pension	\$33,927	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	21,000	1,925
Annuity Savings Fund	399,367	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$482,401	\$41,092,346
b. Administrative Expenses	12,079	1,100,000
c. Expected Employee Contributions	294,260	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$200,220	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	8,989,981	\$688,107,910
b. Retired Members and Beneficiaries	8,429,169	570,882,886
c. Disabled Members - Accidental	1,965,325	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	399,367	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$19,783,842	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$19,783,842	\$1,369,390,456
h. Actuarial Value of Assets	8,437,996	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$11,345,846	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$224,468	\$20,057,051
b. Payment on UAL	457,405	29,782,198
c. Payment on 2002 ERI	128,374	1,362,369
d. Payment on 2003 ERI	7,669	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$817,916	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$802,934	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**DUDLEY HOUSING AUTHORITY - 190
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,000	6,773
Average Age	71.7	48.0
Average Service	26.5	10.6
Valuation Salary	93,467	\$282,918,805
Average Salary	\$46,734	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	61.9	73.8
Total Annual Pension	6,066	\$59,160,612
Average Annual Pension	\$6,066	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$0	\$41,092,346
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$0	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	461,686	\$688,107,910
b. Retired Members and Beneficiaries	79,800	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$541,486	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$541,486	\$1,369,390,456
h. Actuarial Value of Assets	230,949	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$310,537	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$0	\$20,057,051
b. Payment on UAL	14,002	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$14,002	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$13,746	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**DUDLEY-CHARLTON REGIONAL - 200
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	146,050	6,773
Average Age	49.9	48.0
Average Service	11.4	10.6
Valuation Salary	4,660,043	\$282,918,805
Average Salary	\$31,487	\$41,772
<i>Retired Members and Beneficiaries</i>	66,000	3,122
Average Age	76.7	73.8
Total Annual Pension	1,054,679	\$59,160,612
Average Annual Pension	\$15,980	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	62.9	62.1
Total Annual Pension	4,450	\$637,948
Average Annual Pension	\$4,450	\$16,788
<i>Inactive Members</i>	30,000	1,925
Annuity Savings Fund	288,038	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$743,396	\$41,092,346
b. Administrative Expenses	18,615	1,100,000
c. Expected Employee Contributions	464,059	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$297,952	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	12,892,937	\$688,107,910
b. Retired Members and Beneficiaries	9,100,331	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	60,300	7,655,312
e. Inactive Members	288,038	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$22,341,606	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$22,341,606	\$1,369,390,456
h. Actuarial Value of Assets	9,528,908	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,812,698	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$334,036	\$20,057,051
b. Payment on UAL	555,156	29,782,198
c. Payment on 2002 ERI	39,433	1,362,369
d. Payment on 2003 ERI	17,212	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$945,837	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$928,512	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

EAST BROOKFIELD - 210

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	16,744	6,773
Average Age	55.5	48.0
Average Service	16.8	10.6
Valuation Salary	625,120	\$282,918,805
Average Salary	\$28,415	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	86.0	73.8
Total Annual Pension	19,661	\$59,160,612
Average Annual Pension	\$19,661	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	3,000	1,925
Annuity Savings Fund	15,007	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$123,346	\$41,092,346
b. Administrative Expenses	3,089	1,100,000
c. Expected Employee Contributions	62,153	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$64,282	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	2,519,710	\$688,107,910
b. Retired Members and Beneficiaries	106,150	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	15,007	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,640,867	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$2,640,867	\$1,369,390,456
h. Actuarial Value of Assets	1,126,355	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,514,512	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$72,067	\$20,057,051
b. Payment on UAL	68,287	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$140,354	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$137,783 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

GRAFTON - 220

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	287,889	6,773
Average Age	45.4	48.0
Average Service	8.1	10.6
Valuation Salary	8,806,656	\$282,918,805
Average Salary	\$30,263	\$41,772
<i>Retired Members and Beneficiaries</i>	96,000	3,122
Average Age	72.8	73.8
Total Annual Pension	1,806,640	\$59,160,612
Average Annual Pension	\$18,819	\$18,950
<i>Disabled Members - Accidental</i>	8,000	222
Average Age	68.6	62.7
Total Annual Pension	234,136	\$7,387,664
Average Annual Pension	\$29,267	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	131,000	1,925
Annuity Savings Fund	1,081,771	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$1,457,702	\$41,092,346
b. Administrative Expenses	36,501	1,100,000
c. Expected Employee Contributions	933,683	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$560,520	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	19,203,632	\$688,107,910
b. Retired Members and Beneficiaries	17,795,400	570,882,886
c. Disabled Members - Accidental	2,435,024	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	1,081,771	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$40,515,827	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$40,515,827	\$1,369,390,456
h. Actuarial Value of Assets	17,280,386	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$23,235,441	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$628,403	\$20,057,051
b. Payment on UAL	1,025,575	29,782,198
c. Payment on 2002 ERI	38,763	1,362,369
d. Payment on 2003 ERI	16,700	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,709,441	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,678,129	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**GRAFTON HOUSING AUTHORITY - 230
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	4,000	6,773
Average Age	59.2	48.0
Average Service	12.2	10.6
Valuation Salary	203,361	\$282,918,805
Average Salary	\$50,840	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	71.1	73.8
Total Annual Pension	42,665	\$59,160,612
Average Annual Pension	\$10,666	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	1,000	1,925
Annuity Savings Fund	24,100	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$40,705	\$41,092,346
b. Administrative Expenses	1,019	1,100,000
c. Expected Employee Contributions	19,750	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$21,974	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	540,086	\$688,107,910
b. Retired Members and Beneficiaries	430,270	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	24,100	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$994,456	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$994,456	\$1,369,390,456
h. Actuarial Value of Assets	424,145	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$570,311	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$24,635	\$20,057,051
b. Payment on UAL	25,715	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$50,350	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$49,428	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

HARDWICK - 240

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	14,031	6,773
Average Age	47.7	48.0
Average Service	11.6	10.6
Valuation Salary	621,249	\$282,918,805
Average Salary	\$38,828	\$41,772
<i>Retired Members and Beneficiaries</i>	10,000	3,122
Average Age	70.4	73.8
Total Annual Pension	254,174	\$59,160,612
Average Annual Pension	\$25,417	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	63.1	62.7
Total Annual Pension	32,031	\$7,387,664
Average Annual Pension	\$32,031	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	4,000	1,925
Annuity Savings Fund	11,446	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$118,051	\$41,092,346
b. Administrative Expenses	2,956	1,100,000
c. Expected Employee Contributions	67,455	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$53,552	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,768,024	\$688,107,910
b. Retired Members and Beneficiaries	2,642,877	570,882,886
c. Disabled Members - Accidental	374,270	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	11,446	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$4,796,617	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$4,796,617	\$1,369,390,456
h. Actuarial Value of Assets	2,045,803	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$2,750,814	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$60,038	\$20,057,051
b. Payment on UAL	118,953	29,782,198
c. Payment on 2002 ERI	12,755	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$191,746	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$188,234 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

HARVARD - 250

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	94,237	6,773
Average Age	48.2	48.0
Average Service	10.9	10.6
Valuation Salary	4,119,182	\$282,918,805
Average Salary	\$43,360	\$41,772
<i>Retired Members and Beneficiaries</i>	56,000	3,122
Average Age	73.3	73.8
Total Annual Pension	906,692	\$59,160,612
Average Annual Pension	\$16,191	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	74.7	62.7
Total Annual Pension	29,548	\$7,387,664
Average Annual Pension	\$29,548	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	31,000	1,925
Annuity Savings Fund	427,980	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$676,662	\$41,092,346
b. Administrative Expenses	16,944	1,100,000
c. Expected Employee Contributions	431,098	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$262,508	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	11,938,954	\$688,107,910
b. Retired Members and Beneficiaries	8,935,250	570,882,886
c. Disabled Members - Accidental	264,131	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	427,980	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$21,566,315	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$21,566,315	\$1,369,390,456
h. Actuarial Value of Assets	9,198,238	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,368,077	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$294,299	\$20,057,051
b. Payment on UAL	557,662	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$851,961	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$836,356	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**HILLCREST WATER DISTRICT - 260
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	0.254	6,773
Average Age	59.0	48.0
Average Service	23.7	10.6
Valuation Salary	16,727	\$282,918,805
Average Salary	\$16,727	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$2,257	\$41,092,346
b. Administrative Expenses	57	1,100,000
c. Expected Employee Contributions	1,766	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$548	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	87,965	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$87,965	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$87,965	\$1,369,390,456
h. Actuarial Value of Assets	37,518	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$50,447	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$615	\$20,057,051
b. Payment on UAL	2,275	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$2,890	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$2,837 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

HOLDEN - 270

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	156,635	6,773
Average Age	47.0	48.0
Average Service	12.8	10.6
Valuation Salary	8,597,142	\$282,918,805
Average Salary	\$53,398	\$41,772
<i>Retired Members and Beneficiaries</i>	93,000	3,122
Average Age	73.8	73.8
Total Annual Pension	2,822,548	\$59,160,612
Average Annual Pension	\$30,350	\$18,950
<i>Disabled Members - Accidental</i>	7,000	222
Average Age	62.6	62.7
Total Annual Pension	235,383	\$7,387,664
Average Annual Pension	\$33,626	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	18,000	1,925
Annuity Savings Fund	405,041	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$1,446,549	\$41,092,346
b. Administrative Expenses	36,222	1,100,000
c. Expected Employee Contributions	877,991	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$604,780	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	24,069,266	\$688,107,910
b. Retired Members and Beneficiaries	26,774,618	570,882,886
c. Disabled Members - Accidental	2,810,476	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	405,041	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$54,059,401	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$54,059,401	\$1,369,390,456
h. Actuarial Value of Assets	23,056,850	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$31,002,551	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$678,022	\$20,057,051
b. Payment on UAL	1,372,546	29,782,198
c. Payment on 2002 ERI	63,599	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$2,114,167	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$2,075,442	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**HOLDEN HOUSING AUTHORITY - 280
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	3,000	6,773
Average Age	64.2	48.0
Average Service	14.1	10.6
Valuation Salary	106,074	\$282,918,805
Average Salary	\$35,358	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	74.9	73.8
Total Annual Pension	20,657	\$59,160,612
Average Annual Pension	\$10,329	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$22,592	\$41,092,346
b. Administrative Expenses	566	1,100,000
c. Expected Employee Contributions	9,959	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$13,199	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	377,309	\$688,107,910
b. Retired Members and Beneficiaries	167,600	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$544,909	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$544,909	\$1,369,390,456
h. Actuarial Value of Assets	232,409	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$312,500	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$14,798	\$20,057,051
b. Payment on UAL	14,090	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$28,888	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$28,359	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

HOPEDALE - 290

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	129,000	6,773
Average Age	46.0	48.0
Average Service	8.9	10.6
Valuation Salary	4,574,633	\$282,918,805
Average Salary	\$35,462	\$41,772
<i>Retired Members and Beneficiaries</i>	42,000	3,122
Average Age	76.9	73.8
Total Annual Pension	806,958	\$59,160,612
Average Annual Pension	\$19,213	\$18,950
<i>Disabled Members - Accidental</i>	4,000	222
Average Age	54.6	62.7
Total Annual Pension	143,064	\$7,387,664
Average Annual Pension	\$35,766	\$33,278
<i>Disabled Members - Ordinary</i>	3,000	38
Average Age	63.2	62.1
Total Annual Pension	56,161	\$637,948
Average Annual Pension	\$18,720	\$16,788
<i>Inactive Members</i>	56,000	1,925
Annuity Savings Fund	370,655	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$817,066	\$41,092,346
b. Administrative Expenses	20,459	1,100,000
c. Expected Employee Contributions	476,900	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$360,625	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	10,016,760	\$688,107,910
b. Retired Members and Beneficiaries	7,518,857	570,882,886
c. Disabled Members - Accidental	1,802,405	86,480,979
d. Disabled Members - Ordinary	564,766	7,655,312
e. Inactive Members	370,655	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$20,273,443	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$20,273,443	\$1,369,390,456
h. Actuarial Value of Assets	8,646,817	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$11,626,626	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$404,298	\$20,057,051
b. Payment on UAL	524,231	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$928,529	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$911,521	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

HUBBARDSTON - 310

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	28,239	6,773
Average Age	47.1	48.0
Average Service	9.1	10.6
Valuation Salary	1,140,880	\$282,918,805
Average Salary	\$35,653	\$41,772
<i>Retired Members and Beneficiaries</i>	17,000	3,122
Average Age	74.9	73.8
Total Annual Pension	274,654	\$59,160,612
Average Annual Pension	\$16,156	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	59.8	62.7
Total Annual Pension	32,576	\$7,387,664
Average Annual Pension	\$32,576	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	16,000	1,925
Annuity Savings Fund	118,356	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$211,915	\$41,092,346
b. Administrative Expenses	5,306	1,100,000
c. Expected Employee Contributions	121,339	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$95,882	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	2,413,980	\$688,107,910
b. Retired Members and Beneficiaries	2,651,549	570,882,886
c. Disabled Members - Accidental	399,225	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	118,356	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$5,583,110	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$5,583,110	\$1,369,390,456
h. Actuarial Value of Assets	2,381,249	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$3,201,861	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$107,495	\$20,057,051
b. Payment on UAL	138,664	29,782,198
c. Payment on 2002 ERI	10,068	1,362,369
d. Payment on 2003 ERI	4,260	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$260,487	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$255,716	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

LANCASTER - 320

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	51,525	6,773
Average Age	51.2	48.0
Average Service	14.0	10.6
Valuation Salary	2,404,227	\$282,918,805
Average Salary	\$46,235	\$41,772
<i>Retired Members and Beneficiaries</i>	28,000	3,122
Average Age	73.9	73.8
Total Annual Pension	616,326	\$59,160,612
Average Annual Pension	\$22,012	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	61.4	62.1
Total Annual Pension	9,635	\$637,948
Average Annual Pension	\$9,635	\$16,788
<i>Inactive Members</i>	2,000	1,925
Annuity Savings Fund	68,810	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$434,337	\$41,092,346
b. Administrative Expenses	10,876	1,100,000
c. Expected Employee Contributions	252,735	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$192,478	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,471,048	\$688,107,910
b. Retired Members and Beneficiaries	6,052,340	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	135,661	7,655,312
e. Inactive Members	68,810	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$13,727,859	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$13,727,859	\$1,369,390,456
h. Actuarial Value of Assets	5,855,063	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,872,796	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$215,788	\$20,057,051
b. Payment on UAL	354,975	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$570,763	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$560,308 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**LANCASTER HOUSING AUTHORITY - 325
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1.000	6,773
Average Age	52.4	48.0
Average Service	1.9	10.6
Valuation Salary	49,254	\$282,918,805
Average Salary	\$49,254	\$41,772
<i>Retired Members and Beneficiaries</i>	3.000	3,122
Average Age	71.6	73.8
Total Annual Pension	38,516	\$59,160,612
Average Annual Pension	\$12,839	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$9,735	\$41,092,346
b. Administrative Expenses	244	1,100,000
c. Expected Employee Contributions	5,116	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$4,863	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	8,312	\$688,107,910
b. Retired Members and Beneficiaries	351,873	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$360,185	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$360,185	\$1,369,390,456
h. Actuarial Value of Assets	153,622	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$206,563	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$5,452	\$20,057,051
b. Payment on UAL	9,314	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$14,766	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$14,496	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

LEICESTER - 330

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	167,160	6,773
Average Age	48.3	48.0
Average Service	10.9	10.6
Valuation Salary	4,995,112	\$282,918,805
Average Salary	\$28,543	\$41,772
<i>Retired Members and Beneficiaries</i>	66,000	3,122
Average Age	73.0	73.8
Total Annual Pension	1,205,441	\$59,160,612
Average Annual Pension	\$18,264	\$18,950
<i>Disabled Members - Accidental</i>	7,000	222
Average Age	67.5	62.7
Total Annual Pension	192,563	\$7,387,664
Average Annual Pension	\$27,509	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	54.4	62.1
Total Annual Pension	11,442	\$637,948
Average Annual Pension	\$11,442	\$16,788
<i>Inactive Members</i>	43,000	1,925
Annuity Savings Fund	241,084	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$851,144	\$41,092,346
b. Administrative Expenses	21,313	1,100,000
c. Expected Employee Contributions	512,145	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$360,312	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	14,474,496	\$688,107,910
b. Retired Members and Beneficiaries	11,998,632	570,882,886
c. Disabled Members - Accidental	2,024,059	86,480,979
d. Disabled Members - Ordinary	190,685	7,655,312
e. Inactive Members	241,084	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$28,928,956	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$28,928,956	\$1,369,390,456
h. Actuarial Value of Assets	12,338,475	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$16,590,481	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$403,948	\$20,057,051
b. Payment on UAL	727,120	29,782,198
c. Payment on 2002 ERI	50,509	1,362,369
d. Payment on 2003 ERI	2,046	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,183,623	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,161,943 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**LEICESTER HOUSING AUTHORITY - 340
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	4,000	6,773
Average Age	61.1	48.0
Average Service	22.0	10.6
Valuation Salary	183,252	\$282,918,805
Average Salary	\$45,813	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	84.4	73.8
Total Annual Pension	33,957	\$59,160,612
Average Annual Pension	\$16,979	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$21,502	\$41,092,346
b. Administrative Expenses	538	1,100,000
c. Expected Employee Contributions	12,618	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$9,422	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	918,764	\$688,107,910
b. Retired Members and Beneficiaries	151,333	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,070,097	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,070,097	\$1,369,390,456
h. Actuarial Value of Assets	456,407	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$613,690	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$10,563	\$20,057,051
b. Payment on UAL	27,671	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$38,234	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$37,534

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**LEICESTER WATER DISTRICT - 350
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	7,436	6,773
Average Age	41.5	48.0
Average Service	9.4	10.6
Valuation Salary	226,545	\$282,918,805
Average Salary	\$28,318	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	71.9	73.8
Total Annual Pension	103,748	\$59,160,612
Average Annual Pension	\$51,874	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	65.5	62.1
Total Annual Pension	13,680	\$637,948
Average Annual Pension	\$13,680	\$16,788
<i>Inactive Members</i>	1,000	1,925
Annuity Savings Fund	36,449	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$35,070	\$41,092,346
b. Administrative Expenses	878	1,100,000
c. Expected Employee Contributions	27,215	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$8,733	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	406,194	\$688,107,910
b. Retired Members and Beneficiaries	968,133	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	157,153	7,655,312
e. Inactive Members	36,449	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,567,929	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,567,929	\$1,369,390,456
h. Actuarial Value of Assets	668,737	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$899,192	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$9,791	\$20,057,051
b. Payment on UAL	40,544	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$50,335	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$49,413	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

LUNENBURG - 360

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	158,187	6,773
Average Age	48.5	48.0
Average Service	9.4	10.6
Valuation Salary	5,181,620	\$282,918,805
Average Salary	\$32,589	\$41,772
<i>Retired Members and Beneficiaries</i>	83,000	3,122
Average Age	73.7	73.8
Total Annual Pension	1,508,451	\$59,160,612
Average Annual Pension	\$18,174	\$18,950
<i>Disabled Members - Accidental</i>	4,000	222
Average Age	63.1	62.7
Total Annual Pension	120,014	\$7,387,664
Average Annual Pension	\$30,004	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	50.7	62.1
Total Annual Pension	6,067	\$637,948
Average Annual Pension	\$6,067	\$16,788
<i>Inactive Members</i>	47,000	1,925
Annuity Savings Fund	640,571	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$932,228	\$41,092,346
b. Administrative Expenses	23,343	1,100,000
c. Expected Employee Contributions	559,555	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$396,016	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	13,807,923	\$688,107,910
b. Retired Members and Beneficiaries	15,057,994	570,882,886
c. Disabled Members - Accidental	1,350,604	86,480,979
d. Disabled Members - Ordinary	105,652	7,655,312
e. Inactive Members	640,571	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$30,962,744	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$30,962,744	\$1,369,390,456
h. Actuarial Value of Assets	13,205,905	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$17,756,839	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$443,977	\$20,057,051
b. Payment on UAL	800,634	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,244,611	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,221,814	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**LUNENBURG HOUSING AUTHORITY - 370
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1,000	6,773
Average Age	40.3	48.0
Average Service	2.3	10.6
Valuation Salary	38,771	\$282,918,805
Average Salary	\$38,771	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$4,778	\$41,092,346
b. Administrative Expenses	120	1,100,000
c. Expected Employee Contributions	3,899	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$999	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	8,765	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$8,765	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$8,765	\$1,369,390,456
h. Actuarial Value of Assets	3,738	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$5,027	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$1,119	\$20,057,051
b. Payment on UAL	227	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,346	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,321	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**LUNENBURG WATER DISTRICT - 380
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	6,000	6,773
Average Age	43.9	48.0
Average Service	14.3	10.6
Valuation Salary	328,808	\$282,918,805
Average Salary	\$54,801	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	71.7	73.8
Total Annual Pension	40,956	\$59,160,612
Average Annual Pension	\$20,478	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	3,000	1,925
Annuity Savings Fund	3,050	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$37,023	\$41,092,346
b. Administrative Expenses	927	1,100,000
c. Expected Employee Contributions	33,135	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$4,815	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	1,290,596	\$688,107,910
b. Retired Members and Beneficiaries	429,691	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	3,050	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,723,337	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,723,337	\$1,369,390,456
h. Actuarial Value of Assets	735,020	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$988,317	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$5,398	\$20,057,051
b. Payment on UAL	44,562	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$49,960	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$49,045	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

MENDON - 390

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	45,005	6,773
Average Age	46.7	48.0
Average Service	12.3	10.6
Valuation Salary	2,440,676	\$282,918,805
Average Salary	\$51,929	\$41,772
<i>Retired Members and Beneficiaries</i>	16,000	3,122
Average Age	72.6	73.8
Total Annual Pension	319,225	\$59,160,612
Average Annual Pension	\$19,952	\$18,950
<i>Disabled Members - Accidental</i>	5,000	222
Average Age	55.6	62.7
Total Annual Pension	207,115	\$7,387,664
Average Annual Pension	\$41,423	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	11,000	1,925
Annuity Savings Fund	194,277	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$447,198	\$41,092,346
b. Administrative Expenses	11,198	1,100,000
c. Expected Employee Contributions	260,316	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$198,080	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,027,106	\$688,107,910
b. Retired Members and Beneficiaries	3,281,520	570,882,886
c. Disabled Members - Accidental	2,623,605	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	194,277	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$13,126,508	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$13,126,508	\$1,369,390,456
h. Actuarial Value of Assets	5,598,580	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,527,928	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$222,069	\$20,057,051
b. Payment on UAL	327,602	29,782,198
c. Payment on 2002 ERI	8,055	1,362,369
d. Payment on 2003 ERI	21,641	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$579,367	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$568,755 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**MENDON-UPTON REGIONAL - 400
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	132,771	6,773
Average Age	51.2	48.0
Average Service	11.0	10.6
Valuation Salary	4,180,136	\$282,918,805
Average Salary	\$30,964	\$41,772
<i>Retired Members and Beneficiaries</i>	34,000	3,122
Average Age	75.1	73.8
Total Annual Pension	423,196	\$59,160,612
Average Annual Pension	\$12,447	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	58.6	62.7
Total Annual Pension	32,505	\$7,387,664
Average Annual Pension	\$32,505	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	46,000	1,925
Annuity Savings Fund	288,568	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$664,982	\$41,092,346
b. Administrative Expenses	16,651	1,100,000
c. Expected Employee Contributions	403,729	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$277,904	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	11,054,094	\$688,107,910
b. Retired Members and Beneficiaries	3,822,426	570,882,886
c. Disabled Members - Accidental	406,807	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	288,568	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$15,571,895	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$15,571,895	\$1,369,390,456
h. Actuarial Value of Assets	6,641,561	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$8,930,334	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$311,560	\$20,057,051
b. Payment on UAL	397,001	29,782,198
c. Payment on 2002 ERI	6,713	1,362,369
d. Payment on 2003 ERI	7,496	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$722,770	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$709,531	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

MILLBURY - 410

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	189.102	6,773
Average Age	47.9	48.0
Average Service	10.2	10.6
Valuation Salary	6,841,958	\$282,918,805
Average Salary	\$35,635	\$41,772
<i>Retired Members and Beneficiaries</i>	120.000	3,122
Average Age	74.1	73.8
Total Annual Pension	2,233,089	\$59,160,612
Average Annual Pension	\$18,609	\$18,950
<i>Disabled Members - Accidental</i>	8.000	222
Average Age	68.0	62.7
Total Annual Pension	298,065	\$7,387,664
Average Annual Pension	\$37,258	\$33,278
<i>Disabled Members - Ordinary</i>	2.000	38
Average Age	68.2	62.1
Total Annual Pension	36,670	\$637,948
Average Annual Pension	\$18,335	\$16,788
<i>Inactive Members</i>	69.000	1,925
Annuity Savings Fund	465,214	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,206,877	\$41,092,346
b. Administrative Expenses	30,220	1,100,000
c. Expected Employee Contributions	720,115	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$516,982	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	17,373,500	\$688,107,910
b. Retired Members and Beneficiaries	21,901,645	570,882,886
c. Disabled Members - Accidental	3,230,562	86,480,979
d. Disabled Members - Ordinary	329,247	7,655,312
e. Inactive Members	465,214	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$43,300,168	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$43,300,168	\$1,369,390,456
h. Actuarial Value of Assets	18,467,935	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$24,832,233	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$579,592	\$20,057,051
b. Payment on UAL	1,065,070	29,782,198
c. Payment on 2002 ERI	137,098	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,781,760	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,749,124	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**MILLBURY HOUSING AUTHORITY - 420
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	7,000	6,773
Average Age	54.5	48.0
Average Service	9.8	10.6
Valuation Salary	350,470	\$282,918,805
Average Salary	\$50,067	\$41,772
<i>Retired Members and Beneficiaries</i>	5,000	3,122
Average Age	76.9	73.8
Total Annual Pension	143,174	\$59,160,612
Average Annual Pension	\$28,635	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	80.9	62.7
Total Annual Pension	25,062	\$7,387,664
Average Annual Pension	\$25,062	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$62,944	\$41,092,346
b. Administrative Expenses	1,576	1,100,000
c. Expected Employee Contributions	35,800	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$28,720	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	786,292	\$688,107,910
b. Retired Members and Beneficiaries	1,159,600	570,882,886
c. Disabled Members - Accidental	165,301	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,111,193	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$2,111,193	\$1,369,390,456
h. Actuarial Value of Assets	900,444	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,210,749	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$32,198	\$20,057,051
b. Payment on UAL	52,148	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	6,136	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$90,482	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$88,825	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

MILLVILLE - 430

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	18,383	6,773
Average Age	48.8	48.0
Average Service	6.1	10.6
Valuation Salary	466,201	\$282,918,805
Average Salary	\$23,310	\$41,772
<i>Retired Members and Beneficiaries</i>	5,000	3,122
Average Age	79.2	73.8
Total Annual Pension	67,221	\$59,160,612
Average Annual Pension	\$13,444	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	9,000	1,925
Annuity Savings Fund	189,486	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$156,320	\$41,092,346
b. Administrative Expenses	3,914	1,100,000
c. Expected Employee Contributions	57,455	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$102,779	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	796,727	\$688,107,910
b. Retired Members and Beneficiaries	629,218	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	189,486	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,615,431	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,615,431	\$1,369,390,456
h. Actuarial Value of Assets	688,996	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$926,435	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$115,226	\$20,057,051
b. Payment on UAL	41,772	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$156,998	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$154,122 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**NARRAGANSETT REGIONAL - 440
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	51,000	6,773
Average Age	49.7	48.0
Average Service	10.1	10.6
Valuation Salary	1,780,699	\$282,918,805
Average Salary	\$34,916	\$41,772
<i>Retired Members and Beneficiaries</i>	29,000	3,122
Average Age	74.1	73.8
Total Annual Pension	510,349	\$59,160,612
Average Annual Pension	\$17,598	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	18,000	1,925
Annuity Savings Fund	148,495	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$283,870	\$41,092,346
b. Administrative Expenses	7,108	1,100,000
c. Expected Employee Contributions	178,211	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$112,767	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	4,036,083	\$688,107,910
b. Retired Members and Beneficiaries	4,970,003	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	148,495	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$9,154,581	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$9,154,581	\$1,369,390,456
h. Actuarial Value of Assets	3,904,516	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$5,250,065	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$126,424	\$20,057,051
b. Payment on UAL	227,298	29,782,198
c. Payment on 2002 ERI	23,661	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$377,383	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$370,470	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

NASHOBA REGIONAL - 450

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	176,824	6,773
Average Age	49.1	48.0
Average Service	9.1	10.6
Valuation Salary	6,309,246	\$282,918,805
Average Salary	\$35,445	\$41,772
<i>Retired Members and Beneficiaries</i>	53,000	3,122
Average Age	70.8	73.8
Total Annual Pension	724,658	\$59,160,612
Average Annual Pension	\$13,673	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	2,000	38
Average Age	57.8	62.1
Total Annual Pension	25,988	\$637,948
Average Annual Pension	\$12,994	\$16,788
<i>Inactive Members</i>	54,000	1,925
Annuity Savings Fund	524,546	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,017,934	\$41,092,346
b. Administrative Expenses	25,489	1,100,000
c. Expected Employee Contributions	645,808	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$397,615	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	13,043,788	\$688,107,910
b. Retired Members and Beneficiaries	7,410,887	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	354,919	7,655,312
e. Inactive Members	524,546	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$21,334,140	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$21,334,140	\$1,369,390,456
h. Actuarial Value of Assets	9,099,214	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,234,926	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$445,770	\$20,057,051
b. Payment on UAL	551,658	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$997,428	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$979,158 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

NEW BRAINTREE - 460

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	5,162	6,773
Average Age	51.1	48.0
Average Service	12.0	10.6
Valuation Salary	154,555	\$282,918,805
Average Salary	\$22,079	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	71.6	73.8
Total Annual Pension	12,427	\$59,160,612
Average Annual Pension	\$12,427	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	62.6	62.7
Total Annual Pension	73,033	\$7,387,664
Average Annual Pension	\$36,517	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$28,379	\$41,092,346
b. Administrative Expenses	711	1,100,000
c. Expected Employee Contributions	16,911	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$12,179	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	434,658	\$688,107,910
b. Retired Members and Beneficiaries	131,355	570,882,886
c. Disabled Members - Accidental	857,018	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,423,031	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,423,031	\$1,369,390,456
h. Actuarial Value of Assets	606,936	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$816,095	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$13,654	\$20,057,051
b. Payment on UAL	36,797	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$50,451	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$49,527 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

NORTHBORO - 470

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	218,273	6,773
Average Age	45.0	48.0
Average Service	10.4	10.6
Valuation Salary	9,585,448	\$282,918,805
Average Salary	\$41,139	\$41,772
<i>Retired Members and Beneficiaries</i>	100,000	3,122
Average Age	73.8	73.8
Total Annual Pension	2,309,804	\$59,160,612
Average Annual Pension	\$23,098	\$18,950
<i>Disabled Members - Accidental</i>	7,000	222
Average Age	57.5	62.7
Total Annual Pension	253,316	\$7,387,664
Average Annual Pension	\$36,188	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	56.5	62.1
Total Annual Pension	14,608	\$637,948
Average Annual Pension	\$14,608	\$16,788
<i>Inactive Members</i>	71,000	1,925
Annuity Savings Fund	489,699	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,485,656	\$41,092,346
b. Administrative Expenses	37,201	1,100,000
c. Expected Employee Contributions	1,003,692	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$519,165	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	25,288,329	\$688,107,910
b. Retired Members and Beneficiaries	22,638,956	570,882,886
c. Disabled Members - Accidental	3,199,493	86,480,979
d. Disabled Members - Ordinary	204,240	7,655,312
e. Inactive Members	489,699	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$51,820,717	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$51,820,717	\$1,369,390,456
h. Actuarial Value of Assets	22,102,030	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$29,718,687	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$582,040	\$20,057,051
b. Payment on UAL	1,339,980	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,922,020	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,886,814 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**NORTHBORO HOUSING AUTHORITY - 480
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	7,000	6,773
Average Age	50.9	48.0
Average Service	10.5	10.6
Valuation Salary	357,106	\$282,918,805
Average Salary	\$51,015	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	66.9	73.8
Total Annual Pension	46,426	\$59,160,612
Average Annual Pension	\$23,213	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$57,532	\$41,092,346
b. Administrative Expenses	1,441	1,100,000
c. Expected Employee Contributions	37,088	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$21,885	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	1,025,546	\$688,107,910
b. Retired Members and Beneficiaries	435,579	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,461,125	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,461,125	\$1,369,390,456
h. Actuarial Value of Assets	623,184	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$837,941	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$24,536	\$20,057,051
b. Payment on UAL	37,782	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$62,318	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$61,177	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

NORTHBORO-SOUTHBORO REGIONAL - 490

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	76,412	6,773
Average Age	45.5	48.0
Average Service	6.4	10.6
Valuation Salary	2,123,497	\$282,918,805
Average Salary	\$22,833	\$41,772
<i>Retired Members and Beneficiaries</i>	35,000	3,122
Average Age	77.2	73.8
Total Annual Pension	399,458	\$59,160,612
Average Annual Pension	\$11,413	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	44,000	1,925
Annuity Savings Fund	249,490	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$379,202	\$41,092,346
b. Administrative Expenses	9,495	1,100,000
c. Expected Employee Contributions	238,148	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$150,549	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	3,436,354	\$688,107,910
b. Retired Members and Beneficiaries	3,718,891	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	249,490	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$7,404,735	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$7,404,735	\$1,369,390,456
h. Actuarial Value of Assets	3,158,191	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$4,246,544	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$168,782	\$20,057,051
b. Payment on UAL	191,472	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$360,254	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$353,655 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

NORTH BROOKFIELD - 500

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	74,620	6,773
Average Age	47.4	48.0
Average Service	11.6	10.6
Valuation Salary	1,895,611	\$282,918,805
Average Salary	\$23,117	\$41,772
<i>Retired Members and Beneficiaries</i>	26,000	3,122
Average Age	76.8	73.8
Total Annual Pension	463,878	\$59,160,612
Average Annual Pension	\$17,841	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	24,000	1,925
Annuity Savings Fund	104,335	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$311,020	\$41,092,346
b. Administrative Expenses	7,788	1,100,000
c. Expected Employee Contributions	188,712	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$130,096	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	6,113,372	\$688,107,910
b. Retired Members and Beneficiaries	4,531,511	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	104,335	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$10,749,218	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$10,749,218	\$1,369,390,456
h. Actuarial Value of Assets	4,584,644	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$6,164,574	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$145,851	\$20,057,051
b. Payment on UAL	272,458	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	13,803	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$432,112	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$424,197	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**NORWORCO HEALTH DISTRICT - 520
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	-	6,773
Average Age	-	48.0
Average Service	-	10.6
Valuation Salary	-	\$282,918,805
Average Salary	\$0	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	82.0	73.8
Total Annual Pension	36,076	\$59,160,612
Average Annual Pension	\$18,038	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$0	\$41,092,346
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$0	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	-	\$688,107,910
b. Retired Members and Beneficiaries	215,325	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$215,325	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$215,325	\$1,369,390,456
h. Actuarial Value of Assets	0	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$215,325	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$0	\$20,057,051
b. Payment on UAL	0	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$0	\$51,474,497

If Total Appropriation paid on July 1, 2018 \$0 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

OAKHAM - 530

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	6,852	6,773
Average Age	54.4	48.0
Average Service	14.2	10.6
Valuation Salary	267,647	\$282,918,805
Average Salary	\$29,739	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	73.8	73.8
Total Annual Pension	78,891	\$59,160,612
Average Annual Pension	\$19,723	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	3,000	1,925
Annuity Savings Fund	38,590	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$48,493	\$41,092,346
b. Administrative Expenses	1,214	1,100,000
c. Expected Employee Contributions	25,872	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$23,835	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	781,641	\$688,107,910
b. Retired Members and Beneficiaries	673,027	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	38,590	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,493,258	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,493,258	\$1,369,390,456
h. Actuarial Value of Assets	636,889	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$856,369	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$26,722	\$20,057,051
b. Payment on UAL	38,613	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$65,335	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$64,138 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

OXFORD - 540

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	213,667	6,773
Average Age	47.8	48.0
Average Service	10.8	10.6
Valuation Salary	8,012,325	\$282,918,805
Average Salary	\$36,754	\$41,772
<i>Retired Members and Beneficiaries</i>	102,000	3,122
Average Age	72.9	73.8
Total Annual Pension	1,890,746	\$59,160,612
Average Annual Pension	\$18,537	\$18,950
<i>Disabled Members - Accidental</i>	17,000	222
Average Age	68.0	62.7
Total Annual Pension	465,920	\$7,387,664
Average Annual Pension	\$27,407	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	71,000	1,925
Annuity Savings Fund	504,013	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,317,319	\$41,092,346
b. Administrative Expenses	32,986	1,100,000
c. Expected Employee Contributions	787,744	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$562,561	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	22,107,121	\$688,107,910
b. Retired Members and Beneficiaries	18,392,644	570,882,886
c. Disabled Members - Accidental	5,020,284	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	504,013	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$46,024,062	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$46,024,062	\$1,369,390,456
h. Actuarial Value of Assets	19,629,701	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$26,394,361	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$630,691	\$20,057,051
b. Payment on UAL	1,132,006	29,782,198
c. Payment on 2002 ERI	131,057	1,362,369
d. Payment on 2003 ERI	14,825	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,908,579	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,873,620

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**OXFORD HOUSING AUTHORITY - 550
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	6,000	6,773
Average Age	53.7	48.0
Average Service	15.6	10.6
Valuation Salary	295,320	\$282,918,805
Average Salary	\$49,220	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	70.5	73.8
Total Annual Pension	50,229	\$59,160,612
Average Annual Pension	\$12,557	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$45,309	\$41,092,346
b. Administrative Expenses	1,135	1,100,000
c. Expected Employee Contributions	29,163	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$17,281	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):		
a. Active Members	959,201	\$688,107,910
b. Retired Members and Beneficiaries	522,762	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,481,963	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,481,963	\$1,369,390,456
h. Actuarial Value of Assets	632,071	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$849,892	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$19,375	\$20,057,051
b. Payment on UAL	38,321	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$57,696	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$56,639	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

OXFORD-ROCHDALE SEWER DISTRICT - 555

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,106	6,773
Average Age	56.3	48.0
Average Service	28.3	10.6
Valuation Salary	143,510	\$282,918,805
Average Salary	\$47,837	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$19,740	\$41,092,346
b. Administrative Expenses	494	1,100,000
c. Expected Employee Contributions	12,301	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$7,933	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	816,881	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$816,881	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$816,881	\$1,369,390,456
h. Actuarial Value of Assets	348,407	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$468,474	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$8,894	\$20,057,051
b. Payment on UAL	21,123	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$30,017	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$29,467

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

PAXTON - 560

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	55,703	6,773
Average Age	44.9	48.0
Average Service	10.1	10.6
Valuation Salary	2,736,960	\$282,918,805
Average Salary	\$40,850	\$41,772
<i>Retired Members and Beneficiaries</i>	28,000	3,122
Average Age	76.0	73.8
Total Annual Pension	638,442	\$59,160,612
Average Annual Pension	\$22,802	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	63.6	62.7
Total Annual Pension	102,128	\$7,387,664
Average Annual Pension	\$51,064	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	3,000	1,925
Annuity Savings Fund	16,327	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$537,880	\$41,092,346
b. Administrative Expenses	13,469	1,100,000
c. Expected Employee Contributions	286,874	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$264,475	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,002,618	\$688,107,910
b. Retired Members and Beneficiaries	6,119,195	570,882,886
c. Disabled Members - Accidental	1,171,806	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	16,327	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$14,309,946	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$14,309,946	\$1,369,390,456
h. Actuarial Value of Assets	6,103,328	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$8,206,618	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$296,504	\$20,057,051
b. Payment on UAL	370,026	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$666,530	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$654,321 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

PETERSHAM - 570

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	18,905	6,773
Average Age	51.2	48.0
Average Service	11.4	10.6
Valuation Salary	610,083	\$282,918,805
Average Salary	\$29,052	\$41,772
<i>Retired Members and Beneficiaries</i>	10,000	3,122
Average Age	75.5	73.8
Total Annual Pension	148,177	\$59,160,612
Average Annual Pension	\$14,818	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	5,000	1,925
Annuity Savings Fund	52,180	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$115,220	\$41,092,346
b. Administrative Expenses	2,885	1,100,000
c. Expected Employee Contributions	60,174	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$57,931	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,738,997	\$688,107,910
b. Retired Members and Beneficiaries	1,499,441	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	52,180	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$3,290,618	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$3,290,618	\$1,369,390,456
h. Actuarial Value of Assets	1,403,480	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,887,138	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$64,946	\$20,057,051
b. Payment on UAL	84,207	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	2,215	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$151,368	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$148,595 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

PHILLIPSTON - 580

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	12,814	6,773
Average Age	49.3	48.0
Average Service	9.3	10.6
Valuation Salary	485,742	\$282,918,805
Average Salary	\$28,573	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	68.3	73.8
Total Annual Pension	121,265	\$59,160,612
Average Annual Pension	\$30,316	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	87.5	62.7
Total Annual Pension	18,056	\$7,387,664
Average Annual Pension	\$18,056	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	5,000	1,925
Annuity Savings Fund	15,447	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$93,881	\$41,092,346
b. Administrative Expenses	2,351	1,100,000
c. Expected Employee Contributions	46,053	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$50,179	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,052,999	\$688,107,910
b. Retired Members and Beneficiaries	1,434,826	570,882,886
c. Disabled Members - Accidental	79,199	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	15,447	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,582,471	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$2,582,471	\$1,369,390,456
h. Actuarial Value of Assets	1,101,448	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,481,023	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$56,255	\$20,057,051
b. Payment on UAL	66,778	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$123,033	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$120,779	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

PRINCETON - 590

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	36,937	6,773
Average Age	50.7	48.0
Average Service	12.8	10.6
Valuation Salary	1,822,114	\$282,918,805
Average Salary	\$47,950	\$41,772
<i>Retired Members and Beneficiaries</i>	20,000	3,122
Average Age	76.4	73.8
Total Annual Pension	447,635	\$59,160,612
Average Annual Pension	\$22,382	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	82.4	62.7
Total Annual Pension	51,716	\$7,387,664
Average Annual Pension	\$25,858	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	65.1	62.1
Total Annual Pension	51,404	\$637,948
Average Annual Pension	\$51,404	\$16,788
<i>Inactive Members</i>	9,000	1,925
Annuity Savings Fund	179,532	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$258,452	\$41,092,346
b. Administrative Expenses	6,472	1,100,000
c. Expected Employee Contributions	187,053	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$77,871	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	5,174,270	\$688,107,910
b. Retired Members and Beneficiaries	4,105,463	570,882,886
c. Disabled Members - Accidental	308,710	86,480,979
d. Disabled Members - Ordinary	613,450	7,655,312
e. Inactive Members	179,532	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$10,381,425	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$10,381,425	\$1,369,390,456
h. Actuarial Value of Assets	4,427,777	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$5,953,648	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$87,302	\$20,057,051
b. Payment on UAL	265,236	29,782,198
c. Payment on 2002 ERI	8,055	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$360,593	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$353,988 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**QUABBIN REGIONAL - 600
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	146,807	6,773
Average Age	50.4	48.0
Average Service	11.8	10.6
Valuation Salary	4,465,990	\$282,918,805
Average Salary	\$30,176	\$41,772
<i>Retired Members and Beneficiaries</i>	79,000	3,122
Average Age	74.3	73.8
Total Annual Pension	1,122,010	\$59,160,612
Average Annual Pension	\$14,203	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	72.2	62.7
Total Annual Pension	20,294	\$7,387,664
Average Annual Pension	\$20,294	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	42,000	1,925
Annuity Savings Fund	317,761	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$733,569	\$41,092,346
b. Administrative Expenses	18,369	1,100,000
c. Expected Employee Contributions	456,694	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$295,244	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	12,311,610	\$688,107,910
b. Retired Members and Beneficiaries	10,201,686	570,882,886
c. Disabled Members - Accidental	207,328	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	317,761	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$23,038,385	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$23,038,385	\$1,369,390,456
h. Actuarial Value of Assets	9,826,091	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$13,212,294	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$331,000	\$20,057,051
b. Payment on UAL	572,431	29,782,198
c. Payment on 2002 ERI	51,013	1,362,369
d. Payment on 2003 ERI	7,496	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$961,940	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$944,320	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

QUABOAG REGIONAL - 610

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	70,837	6,773
Average Age	45.3	48.0
Average Service	9.3	10.6
Valuation Salary	1,762,240	\$282,918,805
Average Salary	\$24,140	\$41,772
<i>Retired Members and Beneficiaries</i>	30,000	3,122
Average Age	76.2	73.8
Total Annual Pension	383,984	\$59,160,612
Average Annual Pension	\$12,799	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	24,000	1,925
Annuity Savings Fund	98,676	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$285,400	\$41,092,346
b. Administrative Expenses	7,146	1,100,000
c. Expected Employee Contributions	189,733	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$102,813	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	4,311,555	\$688,107,910
b. Retired Members and Beneficiaries	3,462,511	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	98,676	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$7,872,742	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$7,872,742	\$1,369,390,456
h. Actuarial Value of Assets	3,357,799	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$4,514,943	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$115,264	\$20,057,051
b. Payment on UAL	191,815	29,782,198
c. Payment on 2002 ERI	29,533	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$336,612	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$330,446 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

ROYALSTON - 620

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	6,000	6,773
Average Age	51.5	48.0
Average Service	9.4	10.6
Valuation Salary	206,609	\$282,918,805
Average Salary	\$34,435	\$41,772
<i>Retired Members and Beneficiaries</i>	3,000	3,122
Average Age	67.9	73.8
Total Annual Pension	17,286	\$59,160,612
Average Annual Pension	\$5,762	\$18,950
<i>Disabled Members - Accidental</i>	1,000	222
Average Age	43.3	62.7
Total Annual Pension	29,642	\$7,387,664
Average Annual Pension	\$29,642	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$34,102	\$41,092,346
b. Administrative Expenses	854	1,100,000
c. Expected Employee Contributions	20,499	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$14,457	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	720,229	\$688,107,910
b. Retired Members and Beneficiaries	227,200	570,882,886
c. Disabled Members - Accidental	454,141	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,401,570	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,401,570	\$1,369,390,456
h. Actuarial Value of Assets	597,783	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$803,787	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$16,207	\$20,057,051
b. Payment on UAL	36,242	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$52,449	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$51,488	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

RUTLAND - 630

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	59,888	6,773
Average Age	44.0	48.0
Average Service	9.7	10.6
Valuation Salary	2,699,611	\$282,918,805
Average Salary	\$44,256	\$41,772
<i>Retired Members and Beneficiaries</i>	22,000	3,122
Average Age	72.7	73.8
Total Annual Pension	527,999	\$59,160,612
Average Annual Pension	\$24,000	\$18,950
<i>Disabled Members - Accidental</i>	3,000	222
Average Age	62.0	62.7
Total Annual Pension	121,140	\$7,387,664
Average Annual Pension	\$40,380	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	14,000	1,925
Annuity Savings Fund	179,284	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$482,282	\$41,092,346
b. Administrative Expenses	12,076	1,100,000
c. Expected Employee Contributions	275,935	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$218,423	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	5,790,023	\$688,107,910
b. Retired Members and Beneficiaries	5,051,302	570,882,886
c. Disabled Members - Accidental	1,407,444	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	179,284	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$12,428,053	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$12,428,053	\$1,369,390,456
h. Actuarial Value of Assets	5,300,683	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$7,127,370	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$244,876	\$20,057,051
b. Payment on UAL	318,958	29,782,198
c. Payment on 2002 ERI	6,043	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$569,877	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$559,439 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

SOUTHBORO - 640

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	200,285	6,773
Average Age	45.1	48.0
Average Service	9.7	10.6
Valuation Salary	8,649,893	\$282,918,805
Average Salary	\$40,232	\$41,772
<i>Retired Members and Beneficiaries</i>	76,000	3,122
Average Age	71.5	73.8
Total Annual Pension	1,941,743	\$59,160,612
Average Annual Pension	\$25,549	\$18,950
<i>Disabled Members - Accidental</i>	9,000	222
Average Age	57.3	62.7
Total Annual Pension	314,294	\$7,387,664
Average Annual Pension	\$34,922	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	59,000	1,925
Annuity Savings Fund	493,851	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,470,157	\$41,092,346
b. Administrative Expenses	36,813	1,100,000
c. Expected Employee Contributions	916,378	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$590,592	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	21,125,325	\$688,107,910
b. Retired Members and Beneficiaries	18,954,187	570,882,886
c. Disabled Members - Accidental	3,828,209	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	493,851	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$44,401,572	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$44,401,572	\$1,369,390,456
h. Actuarial Value of Assets	18,937,693	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$25,463,879	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$662,116	\$20,057,051
b. Payment on UAL	1,148,135	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,810,251	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,777,093	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**SOUTHBORO HOUSING - 650
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1,000	6,773
Average Age	52.1	48.0
Average Service	2.0	10.6
Valuation Salary	50,993	\$282,918,805
Average Salary	\$50,993	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	80.1	73.8
Total Annual Pension	22,335	\$59,160,612
Average Annual Pension	\$22,335	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$8,905	\$41,092,346
b. Administrative Expenses	223	1,100,000
c. Expected Employee Contributions	5,318	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$3,810	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	16,912	\$688,107,910
b. Retired Members and Beneficiaries	140,297	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$157,209	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$157,209	\$1,369,390,456
h. Actuarial Value of Assets	67,051	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$90,158	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$4,271	\$20,057,051
b. Payment on UAL	(144)	29,782,198
c. Payment on 2002 ERI	10,571	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$14,698	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$14,429	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

SPENCER - 660

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	64,690	6,773
Average Age	50.9	48.0
Average Service	14.0	10.6
Valuation Salary	3,401,161	\$282,918,805
Average Salary	\$51,533	\$41,772
<i>Retired Members and Beneficiaries</i>	46,000	3,122
Average Age	75.4	73.8
Total Annual Pension	791,783	\$59,160,612
Average Annual Pension	\$17,213	\$18,950
<i>Disabled Members - Accidental</i>	3,000	222
Average Age	65.1	62.7
Total Annual Pension	103,262	\$7,387,664
Average Annual Pension	\$34,421	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	77.5	62.1
Total Annual Pension	17,275	\$637,948
Average Annual Pension	\$17,275	\$16,788
<i>Inactive Members</i>	5,000	1,925
Annuity Savings Fund	65,838	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$609,358	\$41,092,346
b. Administrative Expenses	15,258	1,100,000
c. Expected Employee Contributions	345,606	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$279,010	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	11,463,869	\$688,107,910
b. Retired Members and Beneficiaries	8,173,592	570,882,886
c. Disabled Members - Accidental	1,151,417	86,480,979
d. Disabled Members - Ordinary	165,280	7,655,312
e. Inactive Members	65,838	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$21,019,996	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$21,019,996	\$1,369,390,456
h. Actuarial Value of Assets	8,965,229	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,054,767	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$312,799	\$20,057,051
b. Payment on UAL	543,535	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$856,334	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$840,649 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

SPENCER-EAST BROOKFIELD REGIONAL - 670

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	104,123	6,773
Average Age	48.9	48.0
Average Service	8.9	10.6
Valuation Salary	2,180,133	\$282,918,805
Average Salary	\$20,001	\$41,772
<i>Retired Members and Beneficiaries</i>	62,000	3,122
Average Age	72.1	73.8
Total Annual Pension	858,098	\$59,160,612
Average Annual Pension	\$13,840	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	3,000	38
Average Age	63.3	62.1
Total Annual Pension	23,748	\$637,948
Average Annual Pension	\$7,916	\$16,788
<i>Inactive Members</i>	21,000	1,925
Annuity Savings Fund	93,422	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$389,882	\$41,092,346
b. Administrative Expenses	9,763	1,100,000
c. Expected Employee Contributions	227,586	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$172,059	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	5,034,996	\$688,107,910
b. Retired Members and Beneficiaries	8,776,642	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	307,392	7,655,312
e. Inactive Members	93,422	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$14,212,452	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$14,212,452	\$1,369,390,456
h. Actuarial Value of Assets	6,061,747	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$8,150,705	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$192,896	\$20,057,051
b. Payment on UAL	356,859	29,782,198
c. Payment on 2002 ERI	22,821	1,362,369
d. Payment on 2003 ERI	3,917	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$576,493	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$565,933	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**SPENCER HOUSING AUTHORITY - 680
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	5,000	6,773
Average Age	48.6	48.0
Average Service	15.4	10.6
Valuation Salary	259,686	\$282,918,805
Average Salary	\$51,937	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	87.2	73.8
Total Annual Pension	40,048	\$59,160,612
Average Annual Pension	\$10,012	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$34,471	\$41,092,346
b. Administrative Expenses	863	1,100,000
c. Expected Employee Contributions	26,308	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$9,026	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	892,522	\$688,107,910
b. Retired Members and Beneficiaries	248,903	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,141,425	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,141,425	\$1,369,390,456
h. Actuarial Value of Assets	486,829	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$654,596	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$10,119	\$20,057,051
b. Payment on UAL	29,515	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$39,634	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$38,908	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

STERLING - 690

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	79,731	6,773
Average Age	47.7	48.0
Average Service	12.0	10.6
Valuation Salary	4,137,940	\$282,918,805
Average Salary	\$48,682	\$41,772
<i>Retired Members and Beneficiaries</i>	53,000	3,122
Average Age	72.5	73.8
Total Annual Pension	963,228	\$59,160,612
Average Annual Pension	\$18,174	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	58.1	62.7
Total Annual Pension	63,778	\$7,387,664
Average Annual Pension	\$31,889	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	22,000	1,925
Annuity Savings Fund	231,847	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$736,833	\$41,092,346
b. Administrative Expenses	18,450	1,100,000
c. Expected Employee Contributions	418,624	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$336,659	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	11,394,839	\$688,107,910
b. Retired Members and Beneficiaries	9,318,855	570,882,886
c. Disabled Members - Accidental	768,811	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	231,847	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$21,714,352	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$21,714,352	\$1,369,390,456
h. Actuarial Value of Assets	9,261,378	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$12,452,974	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$377,430	\$20,057,051
b. Payment on UAL	556,130	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	13,463	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$947,023	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$929,676	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**STERLING HOUSING AUTHORITY - 700
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1,000	6,773
Average Age	62.6	48.0
Average Service	16.3	10.6
Valuation Salary	39,342	\$282,918,805
Average Salary	\$39,342	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$7,848	\$41,092,346
b. Administrative Expenses	197	1,100,000
c. Expected Employee Contributions	3,912	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$4,133	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	162,999	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$162,999	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$162,999	\$1,369,390,456
h. Actuarial Value of Assets	69,520	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$93,479	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$4,634	\$20,057,051
b. Payment on UAL	4,215	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$8,849	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$8,687 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

STURBRIDGE - 710

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	147,513	6,773
Average Age	48.8	48.0
Average Service	10.0	10.6
Valuation Salary	5,826,912	\$282,918,805
Average Salary	\$38,335	\$41,772
<i>Retired Members and Beneficiaries</i>	59,000	3,122
Average Age	74.5	73.8
Total Annual Pension	995,550	\$59,160,612
Average Annual Pension	\$16,874	\$18,950
<i>Disabled Members - Accidental</i>	7,000	222
Average Age	56.9	62.7
Total Annual Pension	229,943	\$7,387,664
Average Annual Pension	\$32,849	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	40,000	1,925
Annuity Savings Fund	476,072	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,083,681	\$41,092,346
b. Administrative Expenses	27,135	1,100,000
c. Expected Employee Contributions	606,260	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$504,556	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	13,929,705	\$688,107,910
b. Retired Members and Beneficiaries	9,650,197	570,882,886
c. Disabled Members - Accidental	2,894,839	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	476,072	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$26,950,813	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$26,950,813	\$1,369,390,456
h. Actuarial Value of Assets	11,494,778	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$15,456,035	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$565,662	\$20,057,051
b. Payment on UAL	672,467	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	61,349	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,299,478	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,275,676	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

SUTTON - 720

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	170.107	6,773
Average Age	47.4	48.0
Average Service	9.2	10.6
Valuation Salary	5,761,284	\$282,918,805
Average Salary	\$33,496	\$41,772
<i>Retired Members and Beneficiaries</i>	55.000	3,122
Average Age	72.1	73.8
Total Annual Pension	990,998	\$59,160,612
Average Annual Pension	\$18,018	\$18,950
<i>Disabled Members - Accidental</i>	6.000	222
Average Age	58.6	62.7
Total Annual Pension	257,014	\$7,387,664
Average Annual Pension	\$42,836	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	60.000	1,925
Annuity Savings Fund	460,220	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$909,551	\$41,092,346
b. Administrative Expenses	22,775	1,100,000
c. Expected Employee Contributions	585,035	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$347,291	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	13,576,175	\$688,107,910
b. Retired Members and Beneficiaries	9,749,208	570,882,886
c. Disabled Members - Accidental	3,181,951	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	460,220	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$26,967,554	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$26,967,554	\$1,369,390,456
h. Actuarial Value of Assets	11,501,918	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$15,465,636	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$389,351	\$20,057,051
b. Payment on UAL	697,327	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,086,678	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,066,773 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

TANTASQUA REGIONAL - 730

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	103,378	6,773
Average Age	50.1	48.0
Average Service	8.9	10.6
Valuation Salary	3,451,329	\$282,918,805
Average Salary	\$32,870	\$41,772
<i>Retired Members and Beneficiaries</i>	34,000	3,122
Average Age	71.2	73.8
Total Annual Pension	580,497	\$59,160,612
Average Annual Pension	\$17,073	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	37,000	1,925
Annuity Savings Fund	209,955	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$590,353	\$41,092,346
b. Administrative Expenses	14,783	1,100,000
c. Expected Employee Contributions	356,931	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$248,205	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	7,554,316	\$688,107,910
b. Retired Members and Beneficiaries	6,214,905	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	209,955	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$13,979,176	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$13,979,176	\$1,369,390,456
h. Actuarial Value of Assets	5,962,252	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$8,016,924	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$278,265	\$20,057,051
b. Payment on UAL	361,473	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$639,738	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$628,020 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

TEMPLETON - 740

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	64,392	6,773
Average Age	48.4	48.0
Average Service	12.2	10.6
Valuation Salary	3,195,524	\$282,918,805
Average Salary	\$49,162	\$41,772
<i>Retired Members and Beneficiaries</i>	32,000	3,122
Average Age	72.9	73.8
Total Annual Pension	898,400	\$59,160,612
Average Annual Pension	\$28,075	\$18,950
<i>Disabled Members - Accidental</i>	3,000	222
Average Age	60.3	62.7
Total Annual Pension	103,092	\$7,387,664
Average Annual Pension	\$34,364	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	56.0	62.1
Total Annual Pension	11,189	\$637,948
Average Annual Pension	\$11,189	\$16,788
<i>Inactive Members</i>	20,000	1,925
Annuity Savings Fund	315,868	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$532,016	\$41,092,346
b. Administrative Expenses	13,322	1,100,000
c. Expected Employee Contributions	327,827	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$217,511	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	8,719,852	\$688,107,910
b. Retired Members and Beneficiaries	8,614,368	570,882,886
c. Disabled Members - Accidental	1,322,943	86,480,979
d. Disabled Members - Ordinary	171,055	7,655,312
e. Inactive Members	315,868	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$19,144,086	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$19,144,086	\$1,369,390,456
h. Actuarial Value of Assets	8,165,135	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$10,978,951	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$243,852	\$20,057,051
b. Payment on UAL	486,810	29,782,198
c. Payment on 2002 ERI	20,640	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$751,302	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$737,540	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

TEMPLETON HOUSING AUTHORITY - 750

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	1,488	6,773
Average Age	57.4	48.0
Average Service	15.9	10.6
Valuation Salary	85,810	\$282,918,805
Average Salary	\$42,905	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	73.4	73.8
Total Annual Pension	61,227	\$59,160,612
Average Annual Pension	\$30,614	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	1,000	1,925
Annuity Savings Fund	13,628	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$14,102	\$41,092,346
b. Administrative Expenses	353	1,100,000
c. Expected Employee Contributions	8,948	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$5,507	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	292,653	\$688,107,910
b. Retired Members and Beneficiaries	532,760	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	13,628	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$839,041	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$839,041	\$1,369,390,456
h. Actuarial Value of Assets	357,859	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$481,182	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$6,174	\$20,057,051
b. Payment on UAL	13,545	29,782,198
c. Payment on 2002 ERI	20,471	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$40,190	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$39,454 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

UPTON - 760

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	65,000	6,773
Average Age	49.3	48.0
Average Service	13.5	10.6
Valuation Salary	3,335,809	\$282,918,805
Average Salary	\$51,320	\$41,772
<i>Retired Members and Beneficiaries</i>	15,000	3,122
Average Age	71.8	73.8
Total Annual Pension	425,551	\$59,160,612
Average Annual Pension	\$28,370	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	11,000	1,925
Annuity Savings Fund	127,004	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$503,753	\$41,092,346
b. Administrative Expenses	12,614	1,100,000
c. Expected Employee Contributions	331,276	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$185,091	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	9,847,321	\$688,107,910
b. Retired Members and Beneficiaries	4,224,814	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	127,004	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$14,199,139	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$14,199,139	\$1,369,390,456
h. Actuarial Value of Assets	6,056,068	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$8,143,071	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$207,507	\$20,057,051
b. Payment on UAL	367,161	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$574,668	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$564,142 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**UPTON HOUSING AUTHORITY - 765
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	-	6,773
Average Age	-	48.0
Average Service	-	10.6
Valuation Salary	-	\$282,918,805
Average Salary	\$0	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$0	\$41,092,346
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$0	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	-	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$0	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$0	\$1,369,390,456
h. Actuarial Value of Assets	0	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$0	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$0	\$20,057,051
b. Payment on UAL	0	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$0	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$0 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

UXBRIDGE - 770

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	190,682	6,773
Average Age	47.5	48.0
Average Service	11.2	10.6
Valuation Salary	7,693,710	\$282,918,805
Average Salary	\$39,658	\$41,772
<i>Retired Members and Beneficiaries</i>	98,000	3,122
Average Age	71.7	73.8
Total Annual Pension	2,165,168	\$59,160,612
Average Annual Pension	\$22,094	\$18,950
<i>Disabled Members - Accidental</i>	6,000	222
Average Age	66.1	62.7
Total Annual Pension	200,091	\$7,387,664
Average Annual Pension	\$33,349	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	39,000	1,925
Annuity Savings Fund	461,633	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,261,574	\$41,092,346
b. Administrative Expenses	31,590	1,100,000
c. Expected Employee Contributions	794,347	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$498,817	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	20,361,289	\$688,107,910
b. Retired Members and Beneficiaries	21,927,124	570,882,886
c. Disabled Members - Accidental	2,109,078	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	461,633	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$44,859,124	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$44,859,124	\$1,369,390,456
h. Actuarial Value of Assets	19,132,844	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$25,726,280	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$559,227	\$20,057,051
b. Payment on UAL	1,131,638	29,782,198
c. Payment on 2002 ERI	71,149	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,762,014	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,729,739	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**UXBRIDGE HOUSING AUTHORITY - 780
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	4,000	6,773
Average Age	48.8	48.0
Average Service	12.3	10.6
Valuation Salary	169,851	\$282,918,805
Average Salary	\$42,463	\$41,772
<i>Retired Members and Beneficiaries</i>	6,000	3,122
Average Age	70.3	73.8
Total Annual Pension	84,161	\$59,160,612
Average Annual Pension	\$14,027	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$27,210	\$41,092,346
b. Administrative Expenses	681	1,100,000
c. Expected Employee Contributions	17,701	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$10,190	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	466,654	\$688,107,910
b. Retired Members and Beneficiaries	933,293	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,399,947	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,399,947	\$1,369,390,456
h. Actuarial Value of Assets	597,091	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$802,856	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$11,424	\$20,057,051
b. Payment on UAL	36,200	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$47,624	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$46,752	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WACHUSETT REGIONAL - 790

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	448,286	6,773
Average Age	47.7	48.0
Average Service	7.9	10.6
Valuation Salary	10,935,065	\$282,918,805
Average Salary	\$24,139	\$41,772
<i>Retired Members and Beneficiaries</i>	107,000	3,122
Average Age	73.8	73.8
Total Annual Pension	1,347,361	\$59,160,612
Average Annual Pension	\$12,592	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	65.0	62.7
Total Annual Pension	50,601	\$7,387,664
Average Annual Pension	\$25,301	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	182,000	1,925
Annuity Savings Fund	905,368	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$1,848,086	\$41,092,346
b. Administrative Expenses	46,276	1,100,000
c. Expected Employee Contributions	1,129,992	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$764,370	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	22,779,779	\$688,107,910
b. Retired Members and Beneficiaries	13,255,118	570,882,886
c. Disabled Members - Accidental	582,512	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	905,368	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$37,522,777	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$37,522,777	\$1,369,390,456
h. Actuarial Value of Assets	16,003,822	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$21,518,955	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$856,939	\$20,057,051
b. Payment on UAL	948,550	29,782,198
c. Payment on 2002 ERI	54,537	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,860,026	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,825,956 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WARREN - 800

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	39,536	6,773
Average Age	48.2	48.0
Average Service	12.2	10.6
Valuation Salary	1,444,251	\$282,918,805
Average Salary	\$35,226	\$41,772
<i>Retired Members and Beneficiaries</i>	15,000	3,122
Average Age	71.1	73.8
Total Annual Pension	298,722	\$59,160,612
Average Annual Pension	\$19,915	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	57.5	62.1
Total Annual Pension	7,179	\$637,948
Average Annual Pension	\$7,179	\$16,788
<i>Inactive Members</i>	5,000	1,925
Annuity Savings Fund	24,359	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$257,093	\$41,092,346
b. Administrative Expenses	6,438	1,100,000
c. Expected Employee Contributions	141,937	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$121,594	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	4,404,159	\$688,107,910
b. Retired Members and Beneficiaries	2,966,432	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	115,713	7,655,312
e. Inactive Members	24,359	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$7,510,663	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$7,510,663	\$1,369,390,456
h. Actuarial Value of Assets	3,203,369	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$4,307,294	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$136,319	\$20,057,051
b. Payment on UAL	172,798	29,782,198
c. Payment on 2002 ERI	50,678	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	5,769	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$365,564	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$358,868

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**WARREN WATER DISTRICT - 810
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,000	6,773
Average Age	58.2	48.0
Average Service	16.5	10.6
Valuation Salary	79,471	\$282,918,805
Average Salary	\$39,736	\$41,772
<i>Retired Members and Beneficiaries</i>	-	3,122
Average Age	-	73.8
Total Annual Pension	-	\$59,160,612
Average Annual Pension	\$0	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$14,278	\$41,092,346
b. Administrative Expenses	358	1,100,000
c. Expected Employee Contributions	7,913	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$6,723	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	312,893	\$688,107,910
b. Retired Members and Beneficiaries	0	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$312,893	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$312,893	\$1,369,390,456
h. Actuarial Value of Assets	133,452	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$179,441	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$7,537	\$20,057,051
b. Payment on UAL	8,091	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$15,628	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$15,342 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WESTBORO - 820

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	368,502	6,773
Average Age	49.0	48.0
Average Service	11.7	10.6
Valuation Salary	17,349,646	\$282,918,805
Average Salary	\$46,891	\$41,772
<i>Retired Members and Beneficiaries</i>	163,000	3,122
Average Age	72.2	73.8
Total Annual Pension	3,676,428	\$59,160,612
Average Annual Pension	\$22,555	\$18,950
<i>Disabled Members - Accidental</i>	16,000	222
Average Age	59.9	62.7
Total Annual Pension	583,434	\$7,387,664
Average Annual Pension	\$36,465	\$33,278
<i>Disabled Members - Ordinary</i>	2,000	38
Average Age	62.3	62.1
Total Annual Pension	60,348	\$637,948
Average Annual Pension	\$30,174	\$16,788
<i>Inactive Members</i>	58,000	1,925
Annuity Savings Fund	597,194	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$2,865,387	\$41,092,346
b. Administrative Expenses	71,749	1,100,000
c. Expected Employee Contributions	1,781,488	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$1,155,648	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	52,452,462	\$688,107,910
b. Retired Members and Beneficiaries	36,210,160	570,882,886
c. Disabled Members - Accidental	6,904,523	86,480,979
d. Disabled Members - Ordinary	679,505	7,655,312
e. Inactive Members	597,194	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$96,843,844	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$96,843,844	\$1,369,390,456
h. Actuarial Value of Assets	41,304,821	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$55,539,023	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$1,295,604	\$20,057,051
b. Payment on UAL	2,490,617	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	34,082	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$3,820,303	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$3,750,330	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**WESTBORO HOUSING AUTHORITY - 825
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	3,000	6,773
Average Age	59.3	48.0
Average Service	9.7	10.6
Valuation Salary	123,037	\$282,918,805
Average Salary	\$41,012	\$41,772
<i>Retired Members and Beneficiaries</i>	2,000	3,122
Average Age	70.7	73.8
Total Annual Pension	29,596	\$59,160,612
Average Annual Pension	\$14,798	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	62.2	62.1
Total Annual Pension	13,155	\$637,948
Average Annual Pension	\$13,155	\$16,788
<i>Inactive Members</i>	2,000	1,925
Annuity Savings Fund	9,903	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$24,747	\$41,092,346
b. Administrative Expenses	620	1,100,000
c. Expected Employee Contributions	14,279	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$11,088	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	360,413	\$688,107,910
b. Retired Members and Beneficiaries	294,114	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	168,297	7,655,312
e. Inactive Members	9,903	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$832,727	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$832,727	\$1,369,390,456
h. Actuarial Value of Assets	355,166	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$477,561	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$12,431	\$20,057,051
b. Payment on UAL	19,596	29,782,198
c. Payment on 2002 ERI	4,864	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$36,891	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$36,215	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WEST BOYLSTON - 830

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	114,294	6,773
Average Age	47.9	48.0
Average Service	10.5	10.6
Valuation Salary	5,229,237	\$282,918,805
Average Salary	\$43,943	\$41,772
<i>Retired Members and Beneficiaries</i>	73,000	3,122
Average Age	76.3	73.8
Total Annual Pension	1,282,923	\$59,160,612
Average Annual Pension	\$17,574	\$18,950
<i>Disabled Members - Accidental</i>	5,000	222
Average Age	66.0	62.7
Total Annual Pension	150,953	\$7,387,664
Average Annual Pension	\$30,191	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	56.3	62.1
Total Annual Pension	3,623	\$637,948
Average Annual Pension	\$3,623	\$16,788
<i>Inactive Members</i>	32,000	1,925
Annuity Savings Fund	257,920	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$922,227	\$41,092,346
b. Administrative Expenses	23,093	1,100,000
c. Expected Employee Contributions	536,570	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$408,750	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	13,099,735	\$688,107,910
b. Retired Members and Beneficiaries	11,418,899	570,882,886
c. Disabled Members - Accidental	1,727,425	86,480,979
d. Disabled Members - Ordinary	56,280	7,655,312
e. Inactive Members	257,920	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$26,560,259	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$26,560,259	\$1,369,390,456
h. Actuarial Value of Assets	11,328,203	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$15,232,056	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$458,252	\$20,057,051
b. Payment on UAL	663,811	29,782,198
c. Payment on 2002 ERI	57,728	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,179,791	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$1,158,181	\$50,531,642
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**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WEST BOYLSTON HOUSING AUTHORITY - 835

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	2,000	6,773
Average Age	64.3	48.0
Average Service	18.5	10.6
Valuation Salary	78,987	\$282,918,805
Average Salary	\$39,494	\$41,772
<i>Retired Members and Beneficiaries</i>	1,000	3,122
Average Age	80.9	73.8
Total Annual Pension	5,462	\$59,160,612
Average Annual Pension	\$5,462	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$4,113	\$41,092,346
b. Administrative Expenses	103	1,100,000
c. Expected Employee Contributions	2,665	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$1,551	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	293,890	\$688,107,910
b. Retired Members and Beneficiaries	40,495	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$334,385	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$334,385	\$1,369,390,456
h. Actuarial Value of Assets	142,619	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$191,766	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$1,738	\$20,057,051
b. Payment on UAL	8,647	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$10,385	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$10,195 \$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

**WEST BOYLSTON WATER DISTRICT - 840
Based on Valuation Results as of January 1, 2016**

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	8,000	6,773
Average Age	55.0	48.0
Average Service	12.6	10.6
Valuation Salary	306,007	\$282,918,805
Average Salary	\$34,001	\$41,772
<i>Retired Members and Beneficiaries</i>	4,000	3,122
Average Age	75.2	73.8
Total Annual Pension	89,653	\$59,160,612
Average Annual Pension	\$22,413	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$40,379	\$41,092,346
b. Administrative Expenses	1,011	1,100,000
c. Expected Employee Contributions	29,092	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$12,298	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	747,630	\$688,107,910
b. Retired Members and Beneficiaries	724,333	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$1,471,963	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$1,471,963	\$1,369,390,456
h. Actuarial Value of Assets	627,806	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$844,157	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$13,788	\$20,057,051
b. Payment on UAL	38,062	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$51,850	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$50,900

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WEST BROOKFIELD - 850

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	26,355	6,773
Average Age	49.7	48.0
Average Service	10.9	10.6
Valuation Salary	1,131,317	\$282,918,805
Average Salary	\$39,011	\$41,772
<i>Retired Members and Beneficiaries</i>	14,000	3,122
Average Age	70.9	73.8
Total Annual Pension	215,098	\$59,160,612
Average Annual Pension	\$15,364	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	6,000	1,925
Annuity Savings Fund	128,621	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$222,854	\$41,092,346
b. Administrative Expenses	5,580	1,100,000
c. Expected Employee Contributions	120,247	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$108,187	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	2,916,671	\$688,107,910
b. Retired Members and Beneficiaries	2,272,624	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	128,621	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$5,317,916	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$5,317,916	\$1,369,390,456
h. Actuarial Value of Assets	2,268,142	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$3,049,774	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$121,289	\$20,057,051
b. Payment on UAL	137,511	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$258,800	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$254,060

\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WESTMINSTER - 860

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	66,175	6,773
Average Age	47.7	48.0
Average Service	13.7	10.6
Valuation Salary	3,431,110	\$282,918,805
Average Salary	\$48,325	\$41,772
<i>Retired Members and Beneficiaries</i>	34,000	3,122
Average Age	68.8	73.8
Total Annual Pension	801,897	\$59,160,612
Average Annual Pension	\$23,585	\$18,950
<i>Disabled Members - Accidental</i>	2,000	222
Average Age	62.5	62.7
Total Annual Pension	85,401	\$7,387,664
Average Annual Pension	\$42,701	\$33,278
<i>Disabled Members - Ordinary</i>	2,000	38
Average Age	50.0	62.1
Total Annual Pension	37,793	\$637,948
Average Annual Pension	\$18,897	\$16,788
<i>Inactive Members</i>	3,000	1,925
Annuity Savings Fund	18,468	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$590,813	\$41,092,346
b. Administrative Expenses	14,794	1,100,000
c. Expected Employee Contributions	350,901	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$254,706	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	11,055,475	\$688,107,910
b. Retired Members and Beneficiaries	8,130,139	570,882,886
c. Disabled Members - Accidental	1,068,281	86,480,979
d. Disabled Members - Ordinary	562,663	7,655,312
e. Inactive Members	18,468	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$20,835,026	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$20,835,026	\$1,369,390,456
h. Actuarial Value of Assets	8,886,338	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$11,948,688	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$285,552	\$20,057,051
b. Payment on UAL	536,852	29,782,198
c. Payment on 2002 ERI	0	1,362,369
d. Payment on 2003 ERI	4,771	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$827,175	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$812,024	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WINCHENDON - 870

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	135,408	6,773
Average Age	50.0	48.0
Average Service	12.4	10.6
Valuation Salary	5,271,834	\$282,918,805
Average Salary	\$38,481	\$41,772
<i>Retired Members and Beneficiaries</i>	91,000	3,122
Average Age	71.8	73.8
Total Annual Pension	1,765,492	\$59,160,612
Average Annual Pension	\$19,401	\$18,950
<i>Disabled Members - Accidental</i>	10,000	222
Average Age	61.3	62.7
Total Annual Pension	314,461	\$7,387,664
Average Annual Pension	\$31,446	\$33,278
<i>Disabled Members - Ordinary</i>	1,000	38
Average Age	68.2	62.1
Total Annual Pension	14,508	\$637,948
Average Annual Pension	\$14,508	\$16,788
<i>Inactive Members</i>	54,000	1,925
Annuity Savings Fund	461,464	\$15,987,062
Employer Normal Cost as of January 1, 2016		
a. Total Normal Cost	\$906,088	\$41,092,346
b. Administrative Expenses	22,688	1,100,000
c. Expected Employee Contributions	527,308	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$401,468	\$15,595,077
Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016		
Actuarial Accrued Liability (AAL):		
a. Active Members	14,485,310	\$688,107,910
b. Retired Members and Beneficiaries	17,881,739	570,882,886
c. Disabled Members - Accidental	3,714,394	86,480,979
d. Disabled Members - Ordinary	156,038	7,655,312
e. Inactive Members	461,464	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$36,698,945	\$1,369,390,456
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$36,698,945	\$1,369,390,456
h. Actuarial Value of Assets	15,652,449	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$21,046,496	\$774,600,338
FY2019 Appropriation		
a. Employer Normal Cost	\$450,088	\$20,057,051
b. Payment on UAL	925,910	29,782,198
c. Payment on 2002 ERI	57,894	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$1,433,892	\$51,474,497
If Total Appropriation paid on July 1, 2018	\$1,407,627	\$50,531,642

**Worcester Regional Contributory Retirement System
Annual Appropriation for 2019 Fiscal Year**

WINCHENDON HOUSING AUTHORITY - 880

Based on Valuation Results as of January 1, 2016

Summary of Member Data	Member Unit	Worcester Regional
<i>Active Members</i>	9,000	6,773
Average Age	55.7	48.0
Average Service	18.6	10.6
Valuation Salary	508,660	\$282,918,805
Average Salary	\$56,518	\$41,772
<i>Retired Members and Beneficiaries</i>	3,000	3,122
Average Age	77.7	73.8
Total Annual Pension	48,455	\$59,160,612
Average Annual Pension	\$16,152	\$18,950
<i>Disabled Members - Accidental</i>	-	222
Average Age	-	62.7
Total Annual Pension	-	\$7,387,664
Average Annual Pension	\$0	\$33,278
<i>Disabled Members - Ordinary</i>	-	38
Average Age	-	62.1
Total Annual Pension	-	\$637,948
Average Annual Pension	\$0	\$16,788
<i>Inactive Members</i>	-	1,925
Annuity Savings Fund	-	\$15,987,062

Employer Normal Cost as of January 1, 2016

a. Total Normal Cost	\$75,642	\$41,092,346
b. Administrative Expenses	1,894	1,100,000
c. Expected Employee Contributions	50,900	26,597,269
d. Employer Normal Cost = a. + b. - c.	\$26,636	\$15,595,077

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2016

Actuarial Accrued Liability (AAL):

a. Active Members	1,975,670	\$688,107,910
b. Retired Members and Beneficiaries	348,951	570,882,886
c. Disabled Members - Accidental	0	86,480,979
d. Disabled Members - Ordinary	0	7,655,312
e. Inactive Members	0	16,263,369
f. Total AAL = a. + b. + c. + d. + e.	\$2,324,621	\$1,369,390,456

Unfunded Actuarial Accrued Liability (UAAL):

g. Actuarial Accrued Liability = f.	\$2,324,621	\$1,369,390,456
h. Actuarial Value of Assets	991,473	594,790,118
i. Unfunded Actuarial Accrued Liability = g. - h.	\$1,333,148	\$774,600,338

FY2019 Appropriation

a. Employer Normal Cost	\$29,862	\$20,057,051
b. Payment on UAL	58,306	29,782,198
c. Payment on 2002 ERI	4,530	1,362,369
d. Payment on 2003 ERI	0	267,110
e. Payment on 2010 ERI	0	5,769
f. Total Appropriation = a. + b. + c. + d. + e.	\$92,698	\$51,474,497

If Total Appropriation paid on July 1, 2018

\$91,000 \$50,531,642