## ASHBURNHAM - 010 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	59.493	6,934
	Average Age	46.6	47.5
	Average Service	10.8	10.1
	Valuation Salary	3,359,385	\$304,282,630
	Average Salary	\$55,990	\$43,883
	Retired Members and Beneficiaries	31.000	3,351
	Average Age	72.8	73.5
	Total Annual Pension	\$841,562	\$68,184,912
	Average Annual Pension	\$27,147	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	*O	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	70.6	61.2
	Total Annual Pension	\$54,720	\$720,176
	Average Annual Pension	\$27,360	\$16,748
	Inactive Members	10.000	1,978
	Annuity Savings Fund	\$500,123	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	. ,	" ,
a.	Total Normal Cost	\$625,366	\$43,715,955
b.	Administrative Expenses	14,628	1,100,000
c.	Expected Employee Contributions	364,699	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$275,295	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$8,517,802	\$708,337,933
b.	Retired Members and Beneficiaries	8,715,638	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	567,461	8,720,198
e.	Inactive Members	500,123	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$18,301,024	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$18,301,024	\$1,459,223,833
h.	Actuarial Value of Assets	8,222,907	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$10,078,117	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$311,073	\$21,725,204
b.	Payment on UAL	552,349	44,853,675
c.	Payment on 2002 ERI	33,535	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a + b + c + d + e$ .	\$896,957	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$880,527	\$67,190,465

#### ASHBURNHAM-WESTMINSTER REGIONAL - 020

Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	127.644	6,934
Average Age	47.1	47.5
Average Service	7.2	10.1
Valuation Salary	3,458,760	\$304,282,630
Average Salary	\$26,812	\$43,883
Retired Members and Beneficiaries	46.000	3,351
Average Age	74.0	73.5
Total Annual Pension	\$649,515	\$68,184,912
Average Annual Pension	\$14,120	\$20,348
Disabled Members - Accidental	2.000	227
Average Age	64.9	63.2
Total Annual Pension	\$64,618	\$8,011,164
Average Annual Pension	\$32,309	\$35,291
Disabled Members - Ordinary	" <i>-</i>	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	<b>\$</b> 0	\$16,748
Inactive Members	66.000	1,978
Annuity Savings Fund	\$362,575	\$18,530,021
Employer Normal Cost as of January 1, 2018	n <b>y</b> - · -	n - <b>y</b> y
a. Total Normal Cost	\$601,078	\$43,715,955
b. Administrative Expenses	14,060	1,100,000
c. Expected Employee Contributions	375,430	28,880,357
d. Employer Normal Cost = a. + b c.	\$239,708	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accrued Liability (AAL):	•	
a. Active Members	\$7,144,269	\$708,337,933
b. Retired Members and Beneficiaries	6,509,383	630,352,611
c. Disabled Members - Accidental	761,131	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	362,575	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$14,777,358	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	" ,	" , , ,
g. Actuarial Accrued Liability = f.	\$14,777,358	\$1,459,223,833
h. Actuarial Value of Assets	6,801,212	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$7,976,146	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$270,860	\$21,725,204
b. Payment on UAL	468,585	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$739,445	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$725,901	\$67,190,465

## ATHOL - 025 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	97.625	6,934
	Average Age	48.0	47.5
	Average Service	13.9	10.1
	Valuation Salary	5,093,915	\$304,282,630
	Average Salary	\$49,455	\$43,883
	Retired Members and Beneficiaries	64.000	3,351
	Average Age	73.8	73.5
	Total Annual Pension	\$1,603,788	\$68,184,912
	Average Annual Pension	\$25,059	\$20,348
	Disabled Members - Accidental	15.000	227
	Average Age	61.2	63.2
	Total Annual Pension	\$527,835	\$8,011,164
	Average Annual Pension	\$35,189	\$35,291
	Disabled Members - Ordinary	3.000	43
	Average Age	69.7	61.2
	Total Annual Pension	\$44,219	\$720,176
	Average Annual Pension	\$14,740	\$16,748
	Inactive Members	15.000	1,978
	Annuity Savings Fund	\$162,880	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	# - <b> ,</b>	# - 0,000 0,0 <u>—</u> -
a.	Total Normal Cost	\$863,335	\$43,715,955
b.	Administrative Expenses	20,195	1,100,000
c.	Expected Employee Contributions	514,372	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$369,158	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$16,665,014	\$708,337,933
b.	Retired Members and Beneficiaries	15,889,083	630,352,611
c.	Disabled Members - Accidental	6,368,567	93,283,070
d.	Disabled Members - Ordinary	429,736	8,720,198
e.	Inactive Members	162,880	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$39,515,280	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$39,515,280	\$1,459,223,833
h.	Actuarial Value of Assets	18,103,533	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$21,411,747	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$417,133	\$21,725,204
b.	Payment on UAL	1,247,285	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,664,418	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,633,931	\$67,190,465

## ATHOL HOUSING AUTHORITY - 026 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	5.773	6,934
	Average Age	48.5	47.5
	Average Service	7.5	10.1
	Valuation Salary	238,879	\$304,282,630
	Average Salary	\$39,813	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	83.6	73.5
	Total Annual Pension	\$17,276	\$68,184,912
	Average Annual Pension	\$8,638	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	π ~	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	# 0	π - 0,000 0,0 = -
a.	Total Normal Cost	\$34,688	\$43,715,955
b.	Administrative Expenses	Ψ5 1,000 811	1,100,000
c.	Expected Employee Contributions	23,458	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$12,041	\$15,935,598
	- ,		# 10,200,020
	unded Actuarial Accrued Liability (UAAL) as of Jan arial Accrued Liability (AAL):	uary 1, 2016	
	, , ,	\$402.00 <i>C</i>	\$700.227.022
a.	Active Members	\$483,986	\$708,337,933
b.	Retired Members and Beneficiaries	132,457	630,352,611
C.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$616,443	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$616,443	\$1,459,223,833
h.	Actuarial Value of Assets	372,012	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$244,431	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$13,606	\$21,725,204
b.	Payment on UAL	25,631	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$39,237	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$38,518	\$67,190,465

#### ATHOL-ROYALSTON REGIONAL SCHOOL DISTRICT - 027

Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	88.883	6,934
	Average Age	49.9	47.5
	Average Service	10.9	10.1
	Valuation Salary	2,365,633	\$304,282,630
	Average Salary	\$26,285	\$43,883
	Retired Members and Beneficiaries	57.000	3,351
	Average Age	72.5	73.5
	Total Annual Pension	\$710,579	\$68,184,912
	Average Annual Pension	\$12,466	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	67.4	63.2
	Total Annual Pension	\$75,251	\$8,011,164
	Average Annual Pension	\$18,813	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	** **O	\$16,748
	Inactive Members	22.000	1,978
	Annuity Savings Fund	\$173,971	\$18,530,021
Emn	,	" ,	" ,
a.	loyer Normal Cost as of January 1, 2018  Total Normal Cost	\$375,475	\$43,715,955
а. b.	Administrative Expenses	\$,783	1,100,000
	-		
C.	Expected Employee Contributions	233,945	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$150,313	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		*
a.	Active Members	\$6,709,136	\$708,337,933
b.	Retired Members and Beneficiaries	7,142,937	630,352,611
c.	Disabled Members - Accidental	837,535	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	173,971	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$14,863,579	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$14,863,579	\$1,459,223,833
h.	Actuarial Value of Assets	6,723,948	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$8,139,631	\$773,735,700
FY20	021 Appropriation		
a.	Employer Normal Cost	\$169,848	\$21,725,204
b.	Payment on UAL	463,262	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$633,110	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$621,513	\$67,190,465

#### <u>AUBURN - 030</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	327.697	6,934
	Average Age	46.4	47.5
	Average Service	10.7	10.1
	Valuation Salary	14,177,404	\$304,282,630
	Average Salary	\$42,447	\$43,883
	Retired Members and Beneficiaries	141.000	3,351
	Average Age	72.8	73.5
	Total Annual Pension	\$2,799,640	\$68,184,912
	Average Annual Pension	\$19,856	\$20,348
	Disabled Members - Accidental	13.000	227
	Average Age	61.5	63.2
	Total Annual Pension	\$492,262	\$8,011,164
	Average Annual Pension	\$37,866	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	53.6	61.2
	Total Annual Pension	\$29,992	\$720,176
	Average Annual Pension	\$14,996	\$16,748
	Inactive Members	76.000	1,978
	Annuity Savings Fund	\$622,981	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$2,458,554	\$43,715,955
b.	Administrative Expenses	57,509	1,100,000
c.	Expected Employee Contributions	1,485,109	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$1,030,954	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$39,706,461	\$708,337,933
b.	Retired Members and Beneficiaries	27,063,817	630,352,611
c.	Disabled Members - Accidental	5,887,979	93,283,070
d.	Disabled Members - Ordinary	443,653	8,720,198
e.	Inactive Members	622,981	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$73,724,891	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$73,724,891	\$1,459,223,833
h.	Actuarial Value of Assets	33,936,803	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$39,788,088	\$773,735,700
FY2	021 Appropriation	<b>.</b>	4-:
a.	Employer Normal Cost	\$1,164,937	\$21,725,204
b.	Payment on UAL	2,247,888	44,853,675
c.	Payment on 2002 ERI	184,718	1,554,689
d.	Payment on 2003 ERI	28,660	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$3,626,203	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$3,559,783	\$67,190,465

#### <u>AUBURN HOUSING AUTHORITY - 040</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data		Member Unit	Worcester Regional
Active Members		4.000	6,934
Average Age		57.6	47.5
Average Service		12.1	10.1
Valuation Salary		266,335	\$304,282,630
Average Salary		\$66,584	\$43,883
Retired Members and Beneficiaries		4.000	3,351
Average Age		73.8	73.5
Total Annual Pension		\$81,093	\$68,184,912
Average Annual Pension		\$20,273	\$20,348
Disabled Members - Accidental		-	227
Average Age		-	63.2
Total Annual Pension		\$0	\$8,011,164
Average Annual Pension		*O	\$35,291
Disabled Members - Ordinary		-	43
Average Age		_	61.2
Total Annual Pension		\$0	\$720,176
Average Annual Pension		\$0	\$16,748
Inactive Members		2.000	1,978
Annuity Savings Fund		\$21,071	\$18,530,021
Employer Normal Cost as of Januar	m; 1 2019	π = -, ο · · -	т - 0,000 0,0
a. Total Normal Cost	19 1, 2016	\$46,601	\$43,715,955
b. Administrative Expenses		1,090	1,100,000
c. Expected Employee Contribution	one	27,318	28,880,357
d. Employer Normal Cost = a. + b		\$20,373	\$15,935,598
Unfunded Actuarial Accrued Liabil			u - <b>) )</b>
Actuarial Accrued Liability (AAL):			
a. Active Members		\$766,248	\$708,337,933
b. Retired Members and Benefician	ries	721,776	630,352,611
c. Disabled Members - Accidental		0	93,283,070
d. Disabled Members - Ordinary		0	8,720,198
e. Inactive Members		21,071	18,530,021
f. Total AAL = $a + b + c + d + d$	· e.	\$1,509,095	\$1,459,223,833
Unfunded Actuarial Accrued Liability	(UAAL):		
g. Actuarial Accrued Liability = f.	,	\$1,509,095	\$1,459,223,833
h. Actuarial Value of Assets		694,458	685,488,133
i. Unfunded Actuarial Accrued Lia	ability = g h.	\$814,637	\$773,735,700
FY2021 Appropriation			
a. Employer Normal Cost		\$23,021	\$21,725,204
b. Payment on UAL		47,846	44,853,675
c. Payment on 2002 ERI		0	1,554,689
d. Payment on 2003 ERI		0	304,815
e. Payment on 2010 ERI		0	5,770
f. Total Appropriation = $a. + b. +$	c. + d. + e.	\$70,867	\$68,444,153
If Total Appropriation paid or	n July 1, 2020	\$69,569	\$67,190,465

#### <u>AUBURN WATER DISTRICT - 050</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	8.000	6,934
Average Age	55.8	47.5
Average Service	20.4	10.1
Valuation Salary	529,006	\$304,282,630
Average Salary	\$66,126	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	75.9	73.5
Total Annual Pension	\$17,456	\$68,184,912
Average Annual Pension	\$17,456	\$20,348
Disabled Members - Accidental	-	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$O \$O	\$35,291
Disabled Members - Ordinary	Ψ0	43
Average Age	-	61.2
Total Annual Pension	<b>\$</b> 0	\$720,176
Average Annual Pension	\$0 \$0	
Inactive Members	ΨV	\$16,748 1,978
	<b>\$</b> 0	*
Annuity Savings Fund	<b>\$</b> 0	\$18,530,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$77,511	\$43,715,955
b. Administrative Expenses	1,813	1,100,000
	53,815	28,880,357
<ul><li>c. Expected Employee Contributions</li><li>d. Employer Normal Cost = a. + b c.</li></ul>	\$25,509	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan		\(\pi\)
Actuarial Accrued Liability (AAL):	idary 1, 2010	
a. Active Members	\$2,078,545	\$708,337,933
b. Retired Members and Beneficiaries	156,509	630,352,611
	0	93,283,070
c. Disabled Members - Accidental d. Disabled Members - Ordinary	0	8,720,198
- · · · · · · · · · · · · · · · · · · ·		
	0 \$2.225.054	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$2,235,054	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	Ф2 22 F 0 F 4	Ф1 450 000 000
g. Actuarial Accrued Liability = f.	\$2,235,054	\$1,459,223,833
h. Actuarial Value of Assets	1,042,772	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$1,192,282	\$773,735,700
FY2021 Appropriation	***	**
a. Employer Normal Cost	\$28,824	\$21,725,204
b. Payment on UAL	69,519	44,853,675
c. Payment on 2002 ERI	5,497	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$103,840	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$101,938	\$67,190,465

## BARRE - 060 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	49.290	6,934
	Average Age	42.2	47.5
	Average Service	8.0	10.1
	Valuation Salary	1,884,693	\$304,282,630
	Average Salary	\$30,897	\$43,883
	Retired Members and Beneficiaries	15.000	3,351
	Average Age	74.0	73.5
	Total Annual Pension	\$338,989	\$68,184,912
	Average Annual Pension	\$22,599	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	75.0	63.2
	Total Annual Pension	\$24,995	\$8,011,164
	Average Annual Pension	\$24,995	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	56.8	61.2
	Total Annual Pension	\$7,459	\$720,176
	Average Annual Pension	\$7,459	\$16,748
	Inactive Members	11.000	1,978
	Annuity Savings Fund	\$247,817	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	п 3	n - <b>,</b> ,
a.	Total Normal Cost	\$317,954	\$43,715,955
b.	Administrative Expenses	7,437	1,100,000
c.	Expected Employee Contributions	200,244	28,880,357
d.	Employer Normal Cost = a. + b c.	\$125,147	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jar		п - <b></b>
	arial Accrued Liability (AAL):		
a.	Active Members	\$2,946,463	\$708,337,933
b.	Retired Members and Beneficiaries	3,499,952	630,352,611
c.	Disabled Members - Accidental	227,199	93,283,070
d.	Disabled Members - Ordinary	123,361	8,720,198
e.	Inactive Members	247,817	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$7,044,792	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	W1,011,72	Ψ1,137,223,033
g.	Actuarial Accrued Liability = f.	\$7,044,792	\$1,459,223,833
h.	Actuarial Value of Assets	3,167,533	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$3,877,259	\$773,735,700
	, ,	4030773207	Ψ113,133,100
	021 Appropriation	dh 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$24.70F.004
a.	Employer Normal Cost	\$141,411	\$21,725,204
b.	Payment on UAL	214,652	44,853,675
C.	Payment on 2002 ERI	6,048	1,554,689
d.	Payment on 2003 ERI	2,419	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$364,530	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$357,853	\$67,190,465

## BARRE HOUSING AUTHORITY - 070 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	1.562	6,934
	Average Age	57.3	47.5
	Average Service	21.8	10.1
	Valuation Salary	100,268	\$304,282,630
	Average Salary	\$50,134	\$43,883
	Retired Members and Beneficiaries	1.000	3,351
	Average Age	78.4	73.5
	Total Annual Pension	\$9,747	\$68,184,912
	Average Annual Pension	\$9,747	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	<del>-</del>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	\$0	\$16,748
	Inactive Members	- -	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018	"	" ,
a.	Total Normal Cost	\$13,347	\$43,715,955
b.	Administrative Expenses	312	1,100,000
c.	Expected Employee Contributions	9,956	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$3,703	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$447,646	\$708,337,933
b.	Retired Members and Beneficiaries	97,350	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$544,996	\$1,459,223,833
Unfu	ınded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$544,996	\$1,459,223,833
h.	Actuarial Value of Assets	243,124	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$301,872	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$4,184	\$21,725,204
b.	Payment on UAL	16,751	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$20,935	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$20,552	\$67,190,465

## BERLIN - 080 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	49.992	6,934
	Average Age	49.2	47.5
	Average Service	10.1	10.1
	Valuation Salary	2,048,452	\$304,282,630
	Average Salary	\$30,124	\$43,883
	Retired Members and Beneficiaries	21.000	3,351
	Average Age	76.0	73.5
	Total Annual Pension	\$558,843	\$68,184,912
	Average Annual Pension	\$26,612	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	58.8	63.2
	Total Annual Pension	\$27,667	\$8,011,164
	Average Annual Pension	\$27,667	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	55.8	61.2
	Total Annual Pension	\$15,527	\$720,176
	Average Annual Pension	\$15 <b>,</b> 527	\$16,748
	Inactive Members	10.000	1,978
	Annuity Savings Fund	\$125,098	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	"	" , ,
a.	Total Normal Cost	\$372,631	\$43,715,955
b.	Administrative Expenses	8,716	1,100,000
c.	Expected Employee Contributions	211,280	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$170,067	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$5,191,840	\$708,337,933
b.	Retired Members and Beneficiaries	5,316,553	630,352,611
c.	Disabled Members - Accidental	375,243	93,283,070
d.	Disabled Members - Ordinary	221,265	8,720,198
e.	Inactive Members	125,098	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$11,229,999	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$11,229,999	\$1,459,223,833
h.	Actuarial Value of Assets	5,095,544	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$6,134,455	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$192,169	\$21,725,204
b.	Payment on UAL	351,069	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$543,238	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$533,288	\$67,190,465

#### **BERLIN-BOYLSTON REGIONAL - 090**

Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	25.792	6,934
Average Age	50.5	47.5
Average Service	9.4	10.1
Valuation Salary	821,347	\$304,282,630
Average Salary	\$20,534	\$43,883
Retired Members and Beneficiaries	11.000	3,351
Average Age	74.0	73.5
Total Annual Pension	\$152,733	\$68,184,912
Average Annual Pension	\$13,885	\$20,348
Disabled Members - Accidental	-	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$O	\$35,291
Disabled Members - Ordinary	Ψ <sup>0</sup>	43
Average Age		61.2
Total Annual Pension	<b>\$</b> 0	\$720,176
Average Annual Pension	\$0 \$0	\$16,748
Inactive Members	9.000	1,978
Annuity Savings Fund	\$42,507	\$18,530,021
, ,	\$42,30 <i>1</i>	\$10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$140,627	\$43,715,955
b. Administrative Expenses	3,289	1,100,000
c. Expected Employee Contributions	82,893	28,880,357
d. Employer Normal Cost = a. + b c.	\$61,023	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan		π
Actuarial Accrued Liability (AAL):	idary 1, 2010	
a. Active Members	\$2,103,959	\$708,337,933
b. Retired Members and Beneficiaries	1,518,450	630,352,611
5	1,316,430	93,283,070
c. Disabled Members - Accidental d. Disabled Members - Ordinary	0	8,720,198
	42,507	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$3,664,916	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	#2 // A 04 /	#4 4F0 222 022
g. Actuarial Accrued Liability = f.	\$3,664,916	\$1,459,223,833
h. Actuarial Value of Assets	1,634,929	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$2,029,987	\$773,735,700
FY2021 Appropriation	A 40	**
a. Employer Normal Cost	\$68,953	\$21,725,204
b. Payment on UAL	112,642	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$181,595	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$178,269	\$67,190,465

## BLACKSTONE - 100 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	71.000	6,934
	Average Age	45.8	47.5
	Average Service	12.8	10.1
	Valuation Salary	3,862,150	\$304,282,630
	Average Salary	\$53,641	\$43,883
	Retired Members and Beneficiaries	23.000	3,351
	Average Age	70.1	73.5
	Total Annual Pension	\$553,839	\$68,184,912
	Average Annual Pension	\$24,080	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	58.3	63.2
	Total Annual Pension	\$144,810	\$8,011,164
	Average Annual Pension	\$36,203	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	79.4	61.2
	Total Annual Pension	\$22,196	\$720,176
	Average Annual Pension	\$22,196	\$16,748
	Inactive Members	12.000	1,978
	Annuity Savings Fund	\$143,311	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018	" /	. , ,
<u>a.</u>	Total Normal Cost	\$665,174	\$43,715,955
b.	Administrative Expenses	15,559	1,100,000
c.	Expected Employee Contributions	392,474	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$288,259	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$11,850,568	\$708,337,933
b.	Retired Members and Beneficiaries	5,793,313	630,352,611
c.	Disabled Members - Accidental	1,899,921	93,283,070
d.	Disabled Members - Ordinary	141,411	8,720,198
e.	Inactive Members	143,311	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$19,828,524	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$19,828,524	\$1,459,223,833
h.	Actuarial Value of Assets	8,997,374	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$10,831,150	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$325,720	\$21,725,204
b.	Payment on UAL	619,895	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$945,615	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$928,294	\$67,190,465

## BLACKSTONE HOUSING AUTHORITY - 105

Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	1.000	6,934
Average Age	58.1	47.5
Average Service	9.9	10.1
Valuation Salary	37,083	\$304,282,630
Average Salary	\$37,083	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	56.5	73.5
Total Annual Pension	\$10,216	\$68,184,912
Average Annual Pension	\$10,216	\$20,348
Disabled Members - Accidental	" <i>-</i>	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	<b>\$</b> 0	\$35,291
Disabled Members - Ordinary	₩°	43
Average Age	_	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$O \$O	\$16,748
Inactive Members	1.000	1,978
Annuity Savings Fund	\$14,530	\$18,530,021
, .	ψ1 <b>-1,</b> 330	Ψ10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$10,346	\$43,715,955
b. Administrative Expenses	242	1,100,000
c. Expected Employee Contributions	3,652	28,880,357
d. Employer Normal Cost = a. + b c.	\$6,936	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accrued Liability (AAL):	<i>,</i>	
a. Active Members	\$84,140	\$708,337,933
b. Retired Members and Beneficiaries	155,838	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	14,530	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$254,508	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	π = 0 ', 0 0 0	π - , , ,
g. Actuarial Accrued Liability = f.	\$254,508	\$1,459,223,833
h. Actuarial Value of Assets	166,458	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$88,050	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$7,837	\$21,725,204
b. Payment on UAL	11,469	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = a. + b. + c. + d. + e.	\$19,306	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$18,952	\$67,190,465

## $\underline{\textbf{BLACKSTONE-MILLVILLE REGIONAL-110}}$

Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	88.000	6,934
Average Age	50.6	47.5
Average Service	10.6	10.1
Valuation Salary	2,552,660	\$304,282,630
Average Salary	\$28,682	\$43,883
Retired Members and Beneficiaries	45.000	3,351
Average Age	75.2	73.5
Total Annual Pension	\$587,977	\$68,184,912
Average Annual Pension	\$13,066	\$20,348
Disabled Members - Accidental	1.000	227
Average Age	74.7	63.2
Total Annual Pension	\$35,687	\$8,011,164
Average Annual Pension	\$35,687	\$35,291
Disabled Members - Ordinary	1.000	43
Average Age	66.7	61.2
Total Annual Pension	\$20,708	\$720,176
Average Annual Pension	\$20,708	\$16,748
Inactive Members	25.000	1,978
Annuity Savings Fund	\$150,806	\$18,530,021
, ,	Ψ130,000	Ψ10,550,521
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$432,283	\$43,715,955
b. Administrative Expenses	10,112	1,100,000
c. Expected Employee Contributions	262,860	28,880,357
d. Employer Normal Cost = $a$ . + $b$ $c$ .	\$179,535	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accrued Liability (AAL):	•	
a. Active Members	\$6,369,709	\$708,337,933
b. Retired Members and Beneficiaries	5,271,393	630,352,611
c. Disabled Members - Accidental	317,242	93,283,070
d. Disabled Members - Ordinary	275,654	8,720,198
e. Inactive Members	150,806	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$12,384,804	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	. ,	" , , ,
g. Actuarial Accrued Liability = f.	\$12,384,804	\$1,459,223,833
h. Actuarial Value of Assets	5,658,963	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$6,725,841	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$202,867	\$21,725,204
b. Payment on UAL	389,887	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$592,754	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$581,897	\$67,190,465

## BOLTON - 120 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	43.337	6,934
Average Age	44.7	47.5
Average Service	10.7	10.1
Valuation Salary	2,141,290	\$304,282,630
Average Salary	\$48,666	\$43,883
Retired Members and Beneficiaries	16.000	3,351
Average Age	69.9	73.5
Total Annual Pension	\$473,892	\$68,184,912
Average Annual Pension	\$29,618	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	1.000	43
Average Age	54.7	61.2
Total Annual Pension	\$39,509	\$720,176
Average Annual Pension	\$39,509	\$16,748
Inactive Members	7.000	1,978
Annuity Savings Fund	\$270,009	\$18,530,021
	¥=10,000	Ψ10,550,0 <b>2</b> 1
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$368,922	\$43,715,955
b. Administrative Expenses	8,630	1,100,000
c. Expected Employee Contributions	222,639	28,880,357
d. Employer Normal Cost = $a + b - c$ .	\$154,913	\$15,935,598
Unfunded Actuarial Accrued Liability (UAA	L) as of January 1, 2018	
Actuarial Accrued Liability (AAL):	, , , , , , , , , , , , , , , , , , , ,	
a. Active Members	\$5,277,348	\$708,337,933
b. Retired Members and Beneficiaries	5,024,807	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	537,428	8,720,198
e. Inactive Members	270,009	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$11,109,592	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	ı ,,	" , , ,
g. Actuarial Accrued Liability = f.	\$11,109,592	\$1,459,223,833
h. Actuarial Value of Assets	5,005,267	685,488,133
i. Unfunded Actuarial Accrued Liability = g		\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$175,046	\$21,725,204
b. Payment on UAL	337,174	44,853,675
c. Payment on 2002 ERI	18,143	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = a. + b. + c. + d. +		\$68,444,153
If Total Appropriation paid on July 1, 2	<b>2020</b> \$520,648	\$67,190,465

## BOYLSTON - 130 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	59.807	6,934
	Average Age	49.5	47.5
	Average Service	9.8	10.1
	Valuation Salary	2,877,615	\$304,282,630
	Average Salary	\$37,372	\$43,883
	Retired Members and Beneficiaries	22.000	3,351
	Average Age	78.0	73.5
	Total Annual Pension	\$586,647	\$68,184,912
	Average Annual Pension	\$26,666	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	61.9	63.2
	Total Annual Pension	\$73,586	\$8,011,164
	Average Annual Pension	\$36,793	\$35,291
	Disabled Members - Ordinary	" <i>-</i>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	*O	\$16,748
	Inactive Members	7.000	1,978
	Annuity Savings Fund	\$67,076	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" ,	" ,
a.	Total Normal Cost	\$562,645	\$43,715,955
b.	Administrative Expenses	13,161	1,100,000
c.	Expected Employee Contributions	304,254	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$271,552	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$7,341,712	\$708,337,933
b.	Retired Members and Beneficiaries	5,103,871	630,352,611
c.	Disabled Members - Accidental	948,075	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	63,330	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$13,456,988	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$13,456,988	\$1,459,223,833
h.	Actuarial Value of Assets	6,122,550	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$7,334,438	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$306,843	\$21,725,204
b.	Payment on UAL	416,013	44,853,675
c.	Payment on 2002 ERI	13,745	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$736,601	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$723,109	\$67,190,465

#### <u>BOYLSTON WATER DISTRICT - 135</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	1.000	6,934
	Average Age	50.3	47.5
	Average Service	12.7	10.1
	Valuation Salary	60,809	\$304,282,630
	Average Salary	\$60,809	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	71.0	73.5
	Total Annual Pension	\$13,661	\$68,184,912
	Average Annual Pension	\$6,831	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	-	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$9,549	\$43,715,955
b.	Administrative Expenses	223	1,100,000
c.	Expected Employee Contributions	6,373	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$3,399	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Janu	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$147,030	\$708,337,933
b.	Retired Members and Beneficiaries	169,979	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$317,009	\$1,459,223,833
Unfu	nnded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$317,009	\$1,459,223,833
h.	Actuarial Value of Assets	141,419	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$175,590	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$3,840	\$21,725,204
b.	Payment on UAL	9,743	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$13,583	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$13,334	\$67,190,465

## BROOKFIELD - 140 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	31.170	6,934
	Average Age	48.8	47.5
	Average Service	11.9	10.1
	Valuation Salary	1,128,780	\$304,282,630
	Average Salary	\$35,274	\$43,883
	Retired Members and Beneficiaries	14.000	3,351
	Average Age	71.9	73.5
	Total Annual Pension	\$278,562	\$68,184,912
	Average Annual Pension	\$19,897	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	58.6	63.2
	Total Annual Pension	\$53,007	\$8,011,164
	Average Annual Pension	\$26,504	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	46.9	61.2
	Total Annual Pension	\$17,036	\$720,176
	Average Annual Pension	\$17,036	\$16,748
	Inactive Members	7.000	1,978
	Annuity Savings Fund	\$19,989	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" /	" ,
a.	Total Normal Cost	\$207,264	\$43,715,955
b.	Administrative Expenses	4,848	1,100,000
c.	Expected Employee Contributions	117,470	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$94,642	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$2,940,124	\$708,337,933
b.	Retired Members and Beneficiaries	2,807,066	630,352,611
c.	Disabled Members - Accidental	723,486	93,283,070
d.	Disabled Members - Ordinary	285,315	8,720,198
e.	Inactive Members	19,989	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$6,775,980	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$6,775,980	\$1,459,223,833
h.	Actuarial Value of Assets	3,022,782	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$3,753,198	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$106,941	\$21,725,204
b.	Payment on UAL	204,385	44,853,675
c.	Payment on 2002 ERI	9,162	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$320,488	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$314,618	\$67,190,465

#### <u>CHARLTON - 150</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	94.711	6,934
	Average Age	48.3	47.5
	Average Service	12.7	10.1
	Valuation Salary	5,325,818	\$304,282,630
	Average Salary	\$54,345	\$43,883
	Retired Members and Beneficiaries	35.000	3,351
	Average Age	70.6	73.5
	Total Annual Pension	\$906,274	\$68,184,912
	Average Annual Pension	\$25,894	\$20,348
	Disabled Members - Accidental	8.000	227
	Average Age	52.4	63.2
	Total Annual Pension	\$367,586	\$8,011,164
	Average Annual Pension	\$45,948	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	<del>-</del>	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	11.000	1,978
	Annuity Savings Fund	\$104,711	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	π - Ψ • • • •	# - 0,00 0,0 <u>-</u> -
<u>a.</u>	Total Normal Cost	\$997,088	\$43,715,955
b.	Administrative Expenses	23,323	1,100,000
c.	Expected Employee Contributions	548,366	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$472,045	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$15,837,096	\$708,337,933
b.	Retired Members and Beneficiaries	9,518,948	630,352,611
c.	Disabled Members - Accidental	4,780,781	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	104,711	18,530,021
f.	Total $AAL = a. + b. + c. + d. + e.$	\$30,241,536	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$30,241,536	\$1,459,223,833
h.	Actuarial Value of Assets	13,915,064	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$16,326,472	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$533,392	\$21,725,204
b.	Payment on UAL	938,864	44,853,675
c.	Payment on 2002 ERI	46,914	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,519,170	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,491,343	\$67,190,465

#### <u>CHERRY VALLEY-ROCHDALE WATER - 160</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	5.000	6,934
	Average Age	37.2	47.5
	Average Service	6.3	10.1
	Valuation Salary	274,647	\$304,282,630
	Average Salary	\$54,929	\$43,883
	Retired Members and Beneficiaries	3.000	3,351
	Average Age	66.9	73.5
	Total Annual Pension	\$128,921	\$68,184,912
	Average Annual Pension	\$42,974	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	<b>\$</b> 0	\$35,291
	Disabled Members - Ordinary	π ~	43
	Average Age	_	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	# · ·	1,978
	Annuity Savings Fund	\$0	\$18,530,021
<b></b>	, ,	ΨΟ	Ψ10,550,021
	bloyer Normal Cost as of January 1, 2018	\$27.72Q	\$42.74F.0FF
a.	Total Normal Cost	\$36,738	\$43,715,955
b.	Administrative Expenses	859	1,100,000
c.	Expected Employee Contributions	31,415	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$6,182	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$335,670	\$708,337,933
b.	Retired Members and Beneficiaries	1,458,141	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,793,811	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,793,811	\$1,459,223,833
h.	Actuarial Value of Assets	800,224	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$993,587	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$6,985	\$21,725,204
b.	Payment on UAL	55,133	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$62,118	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$60,980	\$67,190,465

#### <u>DOUGLAS - 170</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	176.921	6,934
	Average Age	44.3	47.5
	Average Service	7.2	10.1
	Valuation Salary	5,767,289	\$304,282,630
	Average Salary	\$32,040	\$43,883
	Retired Members and Beneficiaries	39.000	3,351
	Average Age	71.0	73.5
	Total Annual Pension	\$872,643	\$68,184,912
	Average Annual Pension	\$22,375	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	64.3	63.2
	Total Annual Pension	\$93,750	\$8,011,164
	Average Annual Pension	\$46,875	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	75.000	1,978
	Annuity Savings Fund	\$634,356	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" ,	" ,
a.	Total Normal Cost	\$1,044,095	\$43,715,955
b.	Administrative Expenses	24,423	1,100,000
c.	Expected Employee Contributions	632,308	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$436,210	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan		
Actu	arial Accrued Liability (AAL):	-	
a.	Active Members	\$11,632,538	\$708,337,933
b.	Retired Members and Beneficiaries	8,905,727	630,352,611
c.	Disabled Members - Accidental	1,093,017	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	634,356	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$22,265,638	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$22,265,638	\$1,459,223,833
h.	Actuarial Value of Assets	10,258,861	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$12,006,777	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$492,900	\$21,725,204
b.	Payment on UAL	695,874	44,853,675
c.	Payment on 2002 ERI	13,192	1,554,689
d.	Payment on 2003 ERI	12,654	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,214,620	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,192,372	\$67,190,465

### <u>DUDLEY - 180</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	58.244	6,934
	Average Age	46.9	47.5
	Average Service	13.4	10.1
	Valuation Salary	3,157,384	\$304,282,630
	Average Salary	\$53,515	\$43,883
	Retired Members and Beneficiaries	29.000	3,351
	Average Age	73.8	73.5
	Total Annual Pension	\$761,615	\$68,184,912
	Average Annual Pension	\$26,263	\$20,348
	Disabled Members - Accidental	5.000	227
	Average Age	66.1	63.2
	Total Annual Pension	\$173,588	\$8,011,164
	Average Annual Pension	\$34,718	\$35,291
	Disabled Members - Ordinary	" <del>-</del>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	17.000	1,978
	Annuity Savings Fund	\$342,336	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	# · · - <b>,</b> · · · ·	п - 0, - 0 0, 0 = 1
a.	Total Normal Cost	\$538,848	\$43,715,955
b.	Administrative Expenses	12,604	1,100,000
c.	Expected Employee Contributions	329,914	28,880,357
d.	Employer Normal Cost = a. + b c.	\$221,538	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jar		п - <b></b>
	arial Accrued Liability (AAL):		
a.	Active Members	\$10,077,529	\$708,337,933
b.	Retired Members and Beneficiaries	7,261,343	630,352,611
c.	Disabled Members - Accidental	1,943,397	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	342,336	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$19,624,605	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	Ψ12,021,003	Ψ1,137,223,033
g.	Actuarial Accrued Liability = f.	\$19,624,605	\$1,459,223,833
h.	Actuarial Value of Assets	9,244,379	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$10,380,226	\$773,735,700
	, ,	ψ1033003220	<i>₩113,133,100</i>
	O21 Appropriation	\$250,330	\$21.70E.204
a. 5	Employer Normal Cost		\$21,725,204
b.	Payment on UAL	574,065	44,853,675
С. ച	Payment on 2002 ERI	140,187	1,554,689
d.	Payment on 2003 ERI	8,375	304,815
e.	Payment on 2010 ERI	0 \$072.057	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$972,957	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$955,135	\$67,190,465

#### <u>DUDLEY HOUSING AUTHORITY - 190</u> Based on Valuation Results as of January 1, 2018

Summ	nary of Member Data	Member Unit	Worcester Regional
	Active Members	2.000	6,934
	Average Age	61.0	47.5
	Average Service	6.5	10.1
	Valuation Salary	51,225	\$304,282,630
	Average Salary	\$25,613	\$43,883
_	Retired Members and Beneficiaries	1.000	3,351
	Average Age	73.7	73.5
	Total Annual Pension	\$36,933	\$68,184,912
	Average Annual Pension	\$36,933	\$20,348
_	Disabled Members - Accidental	<u> </u>	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
_	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
-	Inactive Members	π ~ -	1,978
	Annuity Savings Fund	\$0	\$18,530,021
	,	<b>4</b> 0	ψ10,530,0 <b>2</b> 1
	oyer Normal Cost as of January 1, 2018  Total Normal Cost	¢2.400	\$42.71F.0FF
		\$3,409	\$43,715,955
	Administrative Expenses	80	1,100,000
	Expected Employee Contributions	1,038	28,880,357
d.	Employer Normal Cost = a. + b c.	\$2,451	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	rial Accrued Liability (AAL):		
	Active Members	\$118,664	\$708,337,933
	Retired Members and Beneficiaries	369,012	630,352,611
	Disabled Members - Accidental	0	93,283,070
	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
	Total AAL = a. + b. + c. + d. + e.	\$487,676	\$1,459,223,833
	ded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$487,676	\$1,459,223,833
h.	Actuarial Value of Assets	217,554	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$270,122	\$773,735,700
	21 Appropriation		
	Employer Normal Cost	\$2,769	\$21,725,204
	Payment on UAL	14,989	44,853,675
	Payment on 2002 ERI	0	1,554,689
	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$17,758	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$17,433	\$67,190,465

#### <u>DUDLEY-CHARLTON REGIONAL - 200</u> Based on Valuation Results as of January 1, 2018

Summary of M	lember Data	Member Unit	Worcester Regional
Active Me.	mbers	148.560	6,934
Average .	Age	50.1	47.5
Average S	Service	11.5	10.1
Valuation	Salary	4,968,719	\$304,282,630
Average S	Salary	\$32,905	\$43,883
	embers and Beneficiaries	64.000	3,351
Average .	Age	76.5	73.5
_	nual Pension	\$1,194,981	\$68,184,912
Average .	Annual Pension	\$18,672	\$20,348
	11 Aembers - Accidental	-	227
Average .	Age	_	63.2
_	nual Pension	\$0	\$8,011,164
	Annual Pension	\$0	\$35,291
	Aembers - Ordinary	1.000	43
Average .	9	64.9	61.2
_	nual Pension	\$4,722	\$720,176
	Annual Pension	\$4,722	\$16,748
Inactive M		33.000	1,978
	Savings Fund	\$350,429	\$18,530,021
•		Ψ330,π <b>2</b> 3	ψ10,330,021
	mal Cost as of January 1, 2018	\$792,726	\$43,715,955
b. Administ	rative Expenses	18,543	1,100,000
	Employee Contributions	500,338	28,880,357
-	r Normal Cost = $a$ . + $b$ $c$ .	\$310,931	\$15,935,598
Unfunded Act	uarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accru	ed Liability (AAL):		
a. Active M	• • •	\$13,720,885	\$708,337,933
b. Retired M	fembers and Beneficiaries	10,565,524	630,352,611
c. Disabled	Members - Accidental	0	93,283,070
	Members - Ordinary	61,305	8,720,198
e. Inactive l		350,429	18,530,021
	L = a. + b. + c. + d. + e.	\$24,698,143	\$1,459,223,833
	arial Accrued Liability (UAAL):	" ,	"
	Accrued Liability = f.	\$24,698,143	\$1,459,223,833
	Value of Assets	11,089,259	685,488,133
	d Actuarial Accrued Liability = g h.	\$13,608,884	\$773,735,700
FY2021 Approp	priation		
a. Employe	r Normal Cost	\$351,340	\$21,725,204
b. Payment		737,852	44,853,675
•	on 2002 ERI	43,062	1,554,689
	on 2003 ERI	18,796	304,815
•	on 2010 ERI	0	5,770
•	propriation = $a. + b. + c. + d. + e.$	\$1,151,050	\$68,444,153
If Total	Appropriation paid on July 1, 2020	\$1,129,966	\$67,190,465

## EAST BROOKFIELD - 210 Based on Valuation Results as of January 1, 2018

Summar	y of Member Data	Member Unit	Worcester Regional
	tive Members	15.403	6,934
Av	erage Age	54.2	47.5
	erage Service	14.6	10.1
	luation Salary	607,639	\$304,282,630
	erage Salary	\$31,981	\$43,883
	tired Members and Beneficiaries	3.000	3,351
	erage Age	71.4	73.5
	tal Annual Pension	\$91,058	\$68,184,912
Av	erage Annual Pension	\$30,353	\$20,348
	sabled Members - Accidental	-	227
Av	erage Age	-	63.2
	tal Annual Pension	\$0	\$8,011,164
	erage Annual Pension	**************************************	\$35,291
	sabled Members - Ordinary	" <del>-</del>	43
	erage Age	-	61.2
	tal Annual Pension	\$0	\$720,176
	erage Annual Pension	<b>\$</b> 0	\$16,748
	active Members	π · · · · · · · · · · · · · · · · · · ·	1,978
	nuity Savings Fund	\$0	\$18,530,021
		<b>4</b> 0	ψ10,000,021
	er Normal Cost as of January 1, 2018 tal Normal Cost	\$127,675	\$42.715.055
			\$43,715,955
	ministrative Expenses	2,986	1,100,000
	pected Employee Contributions	64,191	28,880,357
	nployer Normal Cost = a. + b c.	\$66,470	\$15,935,598
	ed Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	Accrued Liability (AAL):		
	tive Members	\$2,021,346	\$708,337,933
	tired Members and Beneficiaries	910,347	630,352,611
	sabled Members - Accidental	0	93,283,070
	sabled Members - Ordinary	0	8,720,198
e. Ina	active Members	0	18,530,021
	tal AAL = a. + b. + c. + d. + e.	\$2,931,693	\$1,459,223,833
	d Actuarial Accrued Liability (UAAL):		
g. Ac	tuarial Accrued Liability = f.	\$2,931,693	\$1,459,223,833
h. Ac	tuarial Value of Assets	1,410,301	685,488,133
i. Un	funded Actuarial Accrued Liability = g h.	\$1,521,392	\$773,735,700
	Appropriation		
	nployer Normal Cost	\$75,107	\$21,725,204
	yment on UAL	97,166	44,853,675
-	yment on 2002 ERI	0	1,554,689
	yment on 2003 ERI	0	304,815
	yment on 2010 ERI	0	5,770
f. To	tal Appropriation = $a. + b. + c. + d. + e.$	\$172,273	\$68,444,153
If'	Total Appropriation paid on July 1, 2020	\$169,117	\$67,190,465

#### <u>GRAFTON - 220</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	329.516	6,934
Average Age	44.0	47.5
Average Service	7.1	10.1
Valuation Salary	10,108,872	\$304,282,630
Average Salary	\$29,732	\$43,883
Retired Members and Beneficiaries	102.000	3,351
Average Age	72.8	73.5
Total Annual Pension	\$2,079,015	\$68,184,912
Average Annual Pension	\$20,383	\$20,348
Disabled Members - Accidental	10.000	227
Average Age	69.3	63.2
Total Annual Pension	\$300,556	\$8,011,164
Average Annual Pension	\$30,056	\$35,291
Disabled Members - Ordinary	1.000	43
Average Age	49.6	61.2
Total Annual Pension	\$7,552	\$720,176
Average Annual Pension	\$7,552	\$16,748
Inactive Members	122.000	1,978
Annuity Savings Fund	\$1,193,276	\$18,530,021
,	¥ -3,220 <del>,</del> 210	#10 <b>,</b> 000,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$1,662,929	\$43,715,955
b. Administrative Expenses	38,898	1,100,000
c. Expected Employee Contributions	1,092,755	28,880,357
d. Employer Normal Cost = a. + b c.	\$609,072	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of	Flanuary 1, 2018	
Actuarial Accrued Liability (AAL):	•	
a. Active Members	\$19,509,294	\$708,337,933
b. Retired Members and Beneficiaries	20,350,609	630,352,611
c. Disabled Members - Accidental	3,120,501	93,283,070
d. Disabled Members - Ordinary	127,716	8,720,198
e. Inactive Members	1,193,276	18,530,021
f. Total AAL = a. + b. + c. + d. + e.	\$44,301,396	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	H 11,500 2,500	\(\frac{1}{1}\),\(\frac{1}{10}\),\(\frac{1}{10}\)
g. Actuarial Accrued Liability = f.	\$44,301,396	\$1,459,223,833
h. Actuarial Value of Assets	20,174,356	685,488,133
<ul><li>i. Unfunded Actuarial Accrued Liability = g h.</li></ul>	\$24,127,040	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$688,228	\$21,725,204
b. Payment on UAL	1,364,336	44,853,675
c. Payment on 2002 ERI	42,330	1,554,689
d. Payment on 2003 ERI	18,237	304,815
n .	10,237	5,770
<ul><li>e. Payment on 2010 ERI</li><li>f. Total Appropriation = a. + b. + c. + d. + e.</li></ul>	\$2,113,131	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$2,074,425	\$67,190,465

## GRAFTON HOUSING AUTHORITY - 230 Paged on Valuation Pagelta as of January 1, 2015

Based on Valuation	Results as o	f January 1, 2018

Sumn	nary of Member Data	Member Unit	Worcester Regional
	Active Members	4.000	6,934
	Average Age	55.3	47.5
	Average Service	16.4	10.1
	Valuation Salary	213,338	\$304,282,630
	Average Salary	\$53,335	\$43,883
	Retired Members and Beneficiaries	4.000	3,351
	Average Age	70.1	73.5
	Total Annual Pension	\$63,100	\$68,184,912
	Average Annual Pension	\$15,775	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	π ~	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Empl	oyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$32,552	\$43,715,955
b.	Administrative Expenses	761	1,100,000
c.	Expected Employee Contributions	21,454	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$11,859	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	rial Accrued Liability (AAL):	<b>#</b> 504.464	<b>*</b> =00.00=000
	Active Members	\$704,464	\$708,337,933
b.	Retired Members and Beneficiaries	712,163	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,416,627	\$1,459,223,833
Unfur	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,416,627	\$1,459,223,833
h.	Actuarial Value of Assets	631,961	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$784,666	\$773,735,700
	21 Appropriation	<b>***</b>	<b>****</b>
a.	Employer Normal Cost	\$13,400	\$21,725,204
b.	Payment on UAL	43,540	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$56,940	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$55,897	\$67,190,465

## HARDWICK - 240 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	17.796	6,934
Average Age	45.6	47.5
Average Service	10.2	10.1
Valuation Salary	855,892	\$304,282,630
Average Salary	\$45,047	\$43,883
Retired Members and Beneficiaries	9.000	3,351
Average Age	72.1	73.5
Total Annual Pension	\$251,524	\$68,184,912
Average Annual Pension	\$27,947	\$20,348
Disabled Members - Accidental	1.000	227
Average Age	65.1	63.2
Total Annual Pension	\$32,991	\$8,011,164
Average Annual Pension	\$32,991	\$35,291
Disabled Members - Ordinary		43
Average Age	_	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	5.000	1,978
Annuity Savings Fund	\$12,031	\$18,530,021
, 0	Ψ12 <sub>3</sub> 0.51	Ψ10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$130,893	\$43,715,955
b. Administrative Expenses	3,062	1,100,000
c. Expected Employee Contributions	84,950	28,880,357
d. Employer Normal Cost = a. + b c.	\$49,005	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$1,939,351	\$708,337,933
b. Retired Members and Beneficiaries	2,492,192	630,352,611
c. Disabled Members - Accidental	372,547	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	12,031	18,530,021
f. Total AAL = a. + b. + c. + d. + e.	\$4,816,121	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	ψτ,010,121	ψ1,τ37,223,033
	\$4,816,121	\$1,459,223,833
•	2,198,026	685,488,133
<ul><li>h. Actuarial Value of Assets</li><li>i. Unfunded Actuarial Accrued Liability = g h.</li></ul>	\$2,618,095	\$773,735,700
, ,	π <del>-</del> 3~-~3,~-	<del>п , ,</del>
FY2021 Appropriation	ФГГ 27 <i>4</i>	#04 70F 004
a. Employer Normal Cost	\$55,374	\$21,725,204
b. Payment on UAL	145,546	44,853,675
c. Payment on 2002 ERI	13,928	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$214,848	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$210,913	\$67,190,465

#### <u>HARVARD - 250</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	93.181	6,934
	Average Age	48.3	47.5
	Average Service	10.3	10.1
	Valuation Salary	3,987,338	\$304,282,630
	Average Salary	\$41,535	\$43,883
	Retired Members and Beneficiaries	58.000	3,351
	Average Age	73.4	73.5
	Total Annual Pension	\$1,179,408	\$68,184,912
	Average Annual Pension	\$20,335	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	76.7	63.2
	Total Annual Pension	\$30,508	\$8,011,164
	Average Annual Pension	\$30,508	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	28.000	1,978
	Annuity Savings Fund	\$507,490	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	# <b>* * * * * *</b> * * * * * * * * * * * * *	# - 0,00 0,0 <u>-</u> -
<u>a.</u>	Total Normal Cost	\$659,595	\$43,715,955
b.	Administrative Expenses	15,429	1,100,000
c.	Expected Employee Contributions	416,584	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$258,440	\$15,935,598
Unft	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$11,024,504	\$708,337,933
b.	Retired Members and Beneficiaries	11,664,989	630,352,611
c.	Disabled Members - Accidental	255,784	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	507,490	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$23,452,767	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$23,452,767	\$1,459,223,833
h.	Actuarial Value of Assets	10,567,868	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$12,884,899	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$292,027	\$21,725,204
b.	Payment on UAL	728,098	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,020,125	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,001,439	\$67,190,465

#### <u>HILLCREST WATER DISTRICT - 260</u> Based on Valuation Results as of January 1, 2018

Summar	y of Member Data	Member Unit	Worcester Regional
	tive Members	0.488	6,934
Av	rerage Age	47.5	47.5
	rerage Service	17.8	10.1
	luation Salary	39,783	\$304,282,630
	rerage Salary	\$19,892	\$43,883
	tired Members and Beneficiaries	<u> </u>	3,351
	rerage Age	-	73.5
	otal Annual Pension	\$0	\$68,184,912
Av	rerage Annual Pension	*O	\$20,348
	sabled Members - Accidental	- -	227
Av	rerage Age	-	63.2
	otal Annual Pension	\$0	\$8,011,164
	rerage Annual Pension	**************************************	\$35,291
	sabled Members - Ordinary	" <del>-</del>	43
	rerage Age	-	61.2
	otal Annual Pension	\$0	\$720,176
	verage Annual Pension	<b>\$</b> 0	\$16,748
	active Members	π · · · · · · · · · · · · · · · · · · ·	1,978
	nuity Savings Fund	\$0	\$18,530,021
	,	₩ ~	\(\frac{1}{2}\)
	er Normal Cost as of January 1, 2018 otal Normal Cost	\$4.261	\$42.715.055
		\$4,361	\$43,715,955
	Iministrative Expenses	102	1,100,000
	spected Employee Contributions	4,270	28,880,357
d. Er	nployer Normal Cost = a. + b c.	\$193	\$15,935,598
	ed Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	Accrued Liability (AAL):		
a. Ac	tive Members	\$125,281	\$708,337,933
b. Re	tired Members and Beneficiaries	0	630,352,611
	sabled Members - Accidental	0	93,283,070
d. Di	sabled Members - Ordinary	0	8,720,198
e. Ina	active Members	0	18,530,021
f. To	AAL = a. + b. + c. + d. + e.	\$125,281	\$1,459,223,833
Unfunde	d Actuarial Accrued Liability (UAAL):		
g. Ac	tuarial Accrued Liability = f.	\$125,281	\$1,459,223,833
h. Ac	tuarial Value of Assets	55,888	685,488,133
i. Ur	nfunded Actuarial Accrued Liability = g h.	\$69,393	\$773,735,700
	Appropriation		
	nployer Normal Cost	\$218	\$21,725,204
	yment on UAL	3,851	44,853,675
	yment on 2002 ERI	0	1,554,689
	yment on 2003 ERI	0	304,815
	yment on 2010 ERI	0	5,770
f. To	otal Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$4,069	\$68,444,153
If	Total Appropriation paid on July 1, 2020	\$3,994	\$67,190,465

## HOLDEN - 270 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	159.539	6,934
	Average Age	45.4	47.5
	Average Service	11.4	10.1
	Valuation Salary	8,985,179	\$304,282,630
	Average Salary	\$55,124	\$43,883
	Retired Members and Beneficiaries	90.000	3,351
	Average Age	73.1	73.5
	Total Annual Pension	\$2,999,620	\$68,184,912
	Average Annual Pension	\$33,329	\$20,348
	Disabled Members - Accidental	6.000	227
	Average Age	61.9	63.2
	Total Annual Pension	\$215,558	\$8,011,164
	Average Annual Pension	\$35,926	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	23.000	1,978
	Annuity Savings Fund	\$610,297	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	# ~ - ~ <b>y_</b> - v .	# - 0,00 0,0 <u>-</u> -
<u>a.</u>	Total Normal Cost	\$1,434,785	\$43,715,955
b.	Administrative Expenses	33,562	1,100,000
c.	Expected Employee Contributions	918,922	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$549,425	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$22,977,303	\$708,337,933
b.	Retired Members and Beneficiaries	29,086,808	630,352,611
c.	Disabled Members - Accidental	2,623,687	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	610,297	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$55,298,095	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$55,298,095	\$1,459,223,833
h.	Actuarial Value of Assets	25,759,424	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$29,538,671	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$620,828	\$21,725,204
b.	Payment on UAL	1,745,374	44,853,675
c.	Payment on 2002 ERI	69,452	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$2,435,654	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,391,040	\$67,190,465

## HOLDEN HOUSING AUTHORITY - 280

Based on Valuation Results as of January 1, 2018

Sumn	nary of Member Data	Member Unit	Worcester Regional
	Active Members	3.000	6,934
	Average Age	66.2	47.5
	Average Service	16.1	10.1
	Valuation Salary	120,102	\$304,282,630
	Average Salary	\$40,034	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	76.9	73.5
	Total Annual Pension	\$21,900	\$68,184,912
	Average Annual Pension	\$10,950	\$20,348
	Disabled Members - Accidental	<u> </u>	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	π ~ -	1,978
	Annuity Savings Fund	\$0	\$18,530,021
		₩.	ψ10,530,0 <b>2</b> 1
	oyer Normal Cost as of January 1, 2018 Total Normal Cost	\$25.407	\$42.715.055
		\$25,487	\$43,715,955
	Administrative Expenses	596	1,100,000
C.	Expected Employee Contributions	11,523	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$14,560	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	rial Accrued Liability (AAL):		
	Active Members	\$484,384	\$708,337,933
	Retired Members and Beneficiaries	164,278	630,352,611
	Disabled Members - Accidental	0	93,283,070
	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
	Total AAL = a. + b. + c. + d. + e.	\$648,662	\$1,459,223,833
	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$648,662	\$1,459,223,833
h.	Actuarial Value of Assets	289,370	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$359,292	\$773,735,700
	21 Appropriation		
	Employer Normal Cost	\$16,453	\$21,725,204
b.	Payment on UAL	19,937	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$36,390	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$35,723	\$67,190,465

# **HOPEDALE - 290**Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	132.657	6,934
	Average Age	46.9	47.5
	Average Service	9.3	10.1
	Valuation Salary	4,854,987	\$304,282,630
	Average Salary	\$36,504	\$43,883
	Retired Members and Beneficiaries	44.000	3,351
	Average Age	75.0	73.5
	Total Annual Pension	\$875,991	\$68,184,912
	Average Annual Pension	\$19,909	\$20,348
	Disabled Members - Accidental	3.000	227
	Average Age	49.8	63.2
	Total Annual Pension	\$116,246	\$8,011,164
	Average Annual Pension	\$38,749	\$35,291
	Disabled Members - Ordinary	3.000	43
	Average Age	65.2	61.2
	Total Annual Pension	\$57,758	\$720,176
	Average Annual Pension	\$19,253	\$16,748
	Inactive Members	52.000	1,978
	Annuity Savings Fund	\$327,675	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	#321,013	\(\psi\).0,550,021
a.	Total Normal Cost	\$855,425	\$43,715,955
ъ. Ъ.	Administrative Expenses	20,010	1,100,000
c.	Expected Employee Contributions	511,595	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$363,840	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan		<sub>\(\pi\)</sub> 20,700,670
Actu	arial Accrued Liability (AAL):	-	
a.	Active Members	\$11,026,056	\$708,337,933
b.	Retired Members and Beneficiaries	8,425,797	630,352,611
c.	Disabled Members - Accidental	1,568,946	93,283,070
d.	Disabled Members - Ordinary	553,016	8,720,198
e.	Inactive Members	327,675	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$21,901,490	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	II - 9 - 9	" , , ,
g.	Actuarial Accrued Liability = f.	\$21,901,490	\$1,459,223,833
h.	Actuarial Value of Assets	9,817,049	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$12,084,441	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$411,124	\$21,725,204
b.	Payment on UAL	676,368	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,087,492	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,067,572	\$67,190,465

## HOPEDALE HOUSING AUTHORITY - 300

Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	-	6,934
Average Age	-	47.5
Average Service	-	10.1
Valuation Salary	-	\$304,282,630
Average Salary	\$0	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	85.1	73.5
Total Annual Pension	\$12,415	\$68,184,912
Average Annual Pension	\$12,415	\$20,348
Disabled Members - Accidental	1.000	227
Average Age	85.4	63.2
Total Annual Pension	\$18,973	\$8,011,164
Average Annual Pension	\$18,973	\$35,291
Disabled Members - Ordinary	-	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	*O	\$16,748
Inactive Members	-	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018	"	" , ,
a. Total Normal Cost	\$0	\$43,715,955
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	28,880,357
d. Employer Normal Cost = $a + b - c$ .	\$0	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$0	\$708,337,933
b. Retired Members and Beneficiaries	73,395	630,352,611
c. Disabled Members - Accidental	112,795	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a. + b. + c. + d. + e.$	\$186,190	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$186,190	\$1,459,223,833
h. Actuarial Value of Assets	83,060	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$103,130	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$0	\$21,725,204
b. Payment on UAL	5,723	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$5,723	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$5,618	\$67,190,465

#### <u>HUBBARDSTON - 310</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	25.849	6,934
	Average Age	42.0	47.5
	Average Service	6.9	10.1
	Valuation Salary	1,128,683	\$304,282,630
	Average Salary	\$35,271	\$43,883
	Retired Members and Beneficiaries	17.000	3,351
	Average Age	76.9	73.5
	Total Annual Pension	\$285,449	\$68,184,912
	Average Annual Pension	\$16,791	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	61.8	63.2
	Total Annual Pension	\$33,536	\$8,011,164
	Average Annual Pension	\$33,536	\$35,291
	Disabled Members - Ordinary	" <del>-</del>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	18.000	1,978
	Annuity Savings Fund	\$48,692	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" ,	" ,
a.	Total Normal Cost	\$222,806	\$43,715,955
b.	Administrative Expenses	5,212	1,100,000
c.	Expected Employee Contributions	123,237	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$104,781	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$1,745,020	\$708,337,933
b.	Retired Members and Beneficiaries	2,592,229	630,352,611
c.	Disabled Members - Accidental	398,813	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	48,526	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	<b>\$4,</b> 78 <b>4,</b> 588	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	<b>\$4,</b> 78 <b>4,</b> 588	\$1,459,223,833
h.	Actuarial Value of Assets	2,195,231	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$2,589,357	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$118,398	\$21,725,204
b.	Payment on UAL	144,627	44,853,675
c.	Payment on 2002 ERI	10,994	1,554,689
d.	Payment on 2003 ERI	4,652	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$278,671	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$273,567	\$67,190,465

#### <u>LANCASTER - 320</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	50.530	6,934
	Average Age	52.0	47.5
	Average Service	14.5	10.1
	Valuation Salary	2,714,006	\$304,282,630
	Average Salary	\$52,192	\$43,883
	Retired Members and Beneficiaries	25.000	3,351
	Average Age	73.1	73.5
	Total Annual Pension	\$586,691	\$68,184,912
	Average Annual Pension	\$23,468	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	65.0	63.2
	Total Annual Pension	\$62,161	\$8,011,164
	Average Annual Pension	\$62,161	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	63.4	61.2
	Total Annual Pension	\$10,222	\$720,176
	Average Annual Pension	\$10,222	\$16,748
	Inactive Members	2.000	1,978
	Annuity Savings Fund	\$12,483	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	π - <b>- ,</b>	# - 0,000 0,0 <u>—</u> -
a.	Total Normal Cost	\$483,388	\$43,715,955
b.	Administrative Expenses	11,307	1,100,000
c.	Expected Employee Contributions	280,773	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$213,922	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$8,811,458	\$708,337,933
b.	Retired Members and Beneficiaries	5,913,087	630,352,611
c.	Disabled Members - Accidental	685,806	93,283,070
d.	Disabled Members - Ordinary	138,337	8,720,198
e.	Inactive Members	12,483	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$15,561,171	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$15,561,171	\$1,459,223,833
h.	Actuarial Value of Assets	7,255,424	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$8,305,747	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$241,724	\$21,725,204
b.	Payment on UAL	499,879	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$741,603	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$728,019	\$67,190,465

## <u>LANCASTER HOUSING AUTHORITY - 325</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	1.000	6,934
	Average Age	54.4	47.5
	Average Service	3.9	10.1
	Valuation Salary	51,542	\$304,282,630
	Average Salary	\$51,542	\$43,883
	Retired Members and Beneficiaries	3.000	3,351
	Average Age	73.6	73.5
	Total Annual Pension	\$40,481	\$68,184,912
	Average Annual Pension	\$13,494	\$20,348
	Disabled Members - Accidental		227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	π ~	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	# 0	π - 0,000 0,0 = -
a.	Total Normal Cost	\$10,286	\$43,715,955
ъ. b.	Administrative Expenses	241	1,100,000
с.	Expected Employee Contributions	5,367	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$5,160	\$15,935,598
			Ψ13,733,370
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	arial Accrued Liability (AAL):	\$20.24F	Ф700 <b>227 022</b>
a.	Active Members	\$28,215	\$708,337,933
b.	Retired Members and Beneficiaries	348,270	630,352,611
С.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$376,485	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$376,485	\$1,459,223,833
h.	Actuarial Value of Assets	167,951	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$208,534	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$5,830	\$21,725,204
b.	Payment on UAL	11,571	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$17,401	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$17,082	\$67,190,465

## <u>LANCASTER SEWER - 327</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	1.000	6,934
	Average Age	44.2	47.5
	Average Service	0.5	10.1
	Valuation Salary	14,560	\$304,282,630
	Average Salary	\$14,560	\$43,883
	Retired Members and Beneficiaries	-	3,351
	Average Age	-	73.5
	Total Annual Pension	\$0	\$68,184,912
	Average Annual Pension	\$0	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	** **O	\$16,748
	Inactive Members	-	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	" -	
a.	Total Normal Cost	\$4,627	\$43,715,955
b.	Administrative Expenses	108	1,100,000
c.	Expected Employee Contributions	2,777	28,880,357
d.	Employer Normal Cost = a. + b c.	\$1,958	\$15,935,598
Unft	unded Actuarial Accrued Liability (UAAL) as of Janu	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	<b>\$</b> O	\$708,337,933
b.	Retired Members and Beneficiaries	0	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$0	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$0	\$1,459,223,833
h.	Actuarial Value of Assets	0	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$0	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$2,213	\$21,725,204
b.	Payment on UAL	0	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$2,213	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,172	\$67,190,465

#### <u>LEICESTER - 330</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	163.255	6,934
	Average Age	47.6	47.5
	Average Service	10.5	10.1
	Valuation Salary	5,376,821	\$304,282,630
	Average Salary	\$31,443	\$43,883
	Retired Members and Beneficiaries	71.000	3,351
	Average Age	72.4	73.5
	Total Annual Pension	\$1,471,474	\$68,184,912
	Average Annual Pension	\$20,725	\$20,348
	Disabled Members - Accidental	6.000	227
	Average Age	68.9	63.2
	Total Annual Pension	\$175,869	\$8,011,164
	Average Annual Pension	\$29,312	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	56.4	61.2
	Total Annual Pension	\$12,139	\$720,176
	Average Annual Pension	\$12,139	\$16,748
	Inactive Members	48.000	1,978
	Annuity Savings Fund	\$297,289	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	п—э . <b>у</b> = 0 э	# - 0,000 0,0 <u>—</u> -
a.	Total Normal Cost	\$902,039	\$43,715,955
b.	Administrative Expenses	21,100	1,100,000
c.	Expected Employee Contributions	547,027	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$376,112	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$15,051,680	\$708,337,933
b.	Retired Members and Beneficiaries	14,582,968	630,352,611
c.	Disabled Members - Accidental	1,805,919	93,283,070
d.	Disabled Members - Ordinary	197,171	8,720,198
e.	Inactive Members	297,289	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$31,935,027	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$31,935,027	\$1,459,223,833
h.	Actuarial Value of Assets	14,881,727	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$17,053,300	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$424,992	\$21,725,204
b.	Payment on UAL	1,001,032	44,853,675
c.	Payment on 2002 ERI	55,157	1,554,689
d.	Payment on 2003 ERI	2,234	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,483,415	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,456,243	\$67,190,465

#### <u>LEICESTER HOUSING AUTHORITY - 340</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	4.000	6,934
Average Age	60.3	47.5
Average Service	15.1	10.1
Valuation Salary	183,792	\$304,282,630
Average Salary	\$45,948	\$43,883
Retired Members and Beneficiaries	2.000	3,351
Average Age	75.2	73.5
Total Annual Pension	\$46,575	\$68,184,912
Average Annual Pension	\$23,288	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	<b>\$</b> 0	\$16,748
Inactive Members	π ·	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018	ਜ਼ ∨	#10 <b>,</b> 000,021
a. Total Normal Cost	\$33,438	\$43,715,955
b. Administrative Expenses	782	1,100,000
c. Expected Employee Contributions	18,268	28,880,357
d. Employer Normal Cost = a. + b c.	\$15,952	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of		" ,
Actuarial Accrued Liability (AAL):		
a. Active Members	\$713,016	\$708,337,933
b. Retired Members and Beneficiaries	407,187	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total $AAL = a. + b. + c. + d. + e.$	\$1,120,203	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,120,203	\$1,459,223,833
h. Actuarial Value of Assets	499,726	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$620,477	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$18,025	\$21,725,204
b. Payment on UAL	34,430	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$52,455	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$51,494	\$67,190,465

#### <u>LEICESTER WATER DISTRICT - 350</u> Based on Valuation Results as of January 1, 2018

Sumi	mary of Member Data	Member Unit	Worcester Regional
	Active Members	6.204	6,934
	Average Age	39.7	47.5
	Average Service	8.8	10.1
	Valuation Salary	276,381	\$304,282,630
	Average Salary	\$39,483	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	73.9	73.5
	Total Annual Pension	\$105,668	\$68,184,912
	Average Annual Pension	\$52,834	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	67.5	61.2
	Total Annual Pension	\$14,514	\$720,176
	Average Annual Pension	\$14,514	\$16,748
	Inactive Members	2.000	1,978
	Annuity Savings Fund	\$157,811	\$18,530,021
Ema	,	π - • · • •	# - <b>&gt;,•</b> - <b>&gt;</b> ,•
	loyer Normal Cost as of January 1, 2018  Total Normal Cost	\$32,829	\$43,715,955
а. b.	Administrative Expenses	\$32,829 768	1,100,000
	*		
C.	Expected Employee Contributions	29,946 \$2,651	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$3,651	\$15,935,598
	anded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actua	arial Accrued Liability (AAL):		
a.	Active Members	\$376,041	\$708,337,933
b.	Retired Members and Beneficiaries	934,883	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	157,416	8,720,198
e.	Inactive Members	157,811	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$1,626,151	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,626,151	\$1,459,223,833
h.	Actuarial Value of Assets	725,430	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$900,721	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$4,126	\$21,725,204
b.	Payment on UAL	49,980	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$54,106	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$53,115	\$67,190,465

#### <u>LUNENBURG - 360</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	168.806	6,934
	Average Age	48.0	47.5
	Average Service	9.0	10.1
	Valuation Salary	5,981,089	\$304,282,630
	Average Salary	\$35,183	\$43,883
	Retired Members and Beneficiaries	81.000	3,351
	Average Age	73.2	73.5
	Total Annual Pension	\$1,618,231	\$68,184,912
	Average Annual Pension	\$19,978	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	65.1	63.2
	Total Annual Pension	\$123,854	\$8,011,164
	Average Annual Pension	\$30,964	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	52.7	61.2
	Total Annual Pension	\$6,436	\$720,176
	Average Annual Pension	\$6,436	\$16,748
	Inactive Members	51.000	1,978
	Annuity Savings Fund	\$502,636	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	## • <b>- ,</b> • • •	# - 0,00 0,0 <u></u>
<u>a.</u>	Total Normal Cost	\$1,031,807	\$43,715,955
b.	Administrative Expenses	24,135	1,100,000
c.	Expected Employee Contributions	637,987	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$417,955	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$15,216,472	\$708,337,933
b.	Retired Members and Beneficiaries	16,076,442	630,352,611
c.	Disabled Members - Accidental	1,347,822	93,283,070
d.	Disabled Members - Ordinary	109,840	8,720,198
e.	Inactive Members	502,636	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$33,253,212	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$33,253,212	\$1,459,223,833
h.	Actuarial Value of Assets	15,354,722	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$17,898,490	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$472,273	\$21,725,204
b.	Payment on UAL	1,057,899	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,530,172	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,502,144	\$67,190,465

#### <u>LUNENBURG HOUSING AUTHORITY - 370</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	1.000	6,934
	Average Age	42.3	47.5
	Average Service	4.3	10.1
	Valuation Salary	43,051	\$304,282,630
	Average Salary	\$43,051	\$43,883
	Retired Members and Beneficiaries	-	3,351
	Average Age	-	73.5
	Total Annual Pension	<b>\$</b> O	\$68,184,912
	Average Annual Pension	<b>\$</b> O	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	<b>\$</b> O	\$8,011,164
	Average Annual Pension	<b>\$</b> O	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	<b>\$</b> O	\$720,176
	Average Annual Pension	<b>\$</b> O	\$16,748
	Inactive Members	-	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Emp	loyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$5,320	\$43,715,955
b.	Administrative Expenses	124	1,100,000
c.	Expected Employee Contributions	4,384	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$1,060	\$15,935,598
	ınded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$20,142	\$708,337,933
b.	Retired Members and Beneficiaries	0	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$20,142	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$20,142	\$1,459,223,833
h.	Actuarial Value of Assets	8,985	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$11,157	\$773,735,700
	021 Appropriation	****	624 = 27 7 7
a.	Employer Normal Cost	\$1,197	\$21,725,204
b.	Payment on UAL	619	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,816	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,783	\$67,190,465

#### <u>LUNENBURG WATER DISTRICT - 380</u> Based on Valuation Results as of January 1, 2018

Summ	nary of Member Data	Member Unit	Worcester Regional
	Active Members	7.000	6,934
	Average Age	37.3	47.5
	Average Service	7.8	10.1
	Valuation Salary	280,959	\$304,282,630
	Average Salary	\$40,137	\$43,883
-	Retired Members and Beneficiaries	5.000	3,351
	Average Age	68.3	73.5
	Total Annual Pension	\$134,027	\$68,184,912
	Average Annual Pension	\$26,805	\$20,348
-	Disabled Members - Accidental		227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
-	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
-	Inactive Members	2.000	1,978
	Annuity Savings Fund	\$1,848	\$18,530,021
	,	Ψ1,010	ψ10,530,0 <b>2</b> 1
	oyer Normal Cost as of January 1, 2018	Ф22.240	Ф42 74 F ОББ
	Total Normal Cost	\$32,219	\$43,715,955
	Administrative Expenses	754	1,100,000
	Expected Employee Contributions	32,856	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$117	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
	rial Accrued Liability (AAL):	db < 0.2 < 4.0	Ф <b>Т</b> ОО <b>22Т</b> 0 <b>2</b> 2
	Active Members	\$682,648	\$708,337,933
	Retired Members and Beneficiaries	1,473,544	630,352,611
	Disabled Members - Accidental	0	93,283,070
	Disabled Members - Ordinary	0	8,720,198
	Inactive Members	1,848	18,530,021
	Total AAL = a. + b. + c. + d. + e.	\$2,158,040	\$1,459,223,833
	ded Actuarial Accrued Liability (UAAL):		
_	Actuarial Accrued Liability = f.	\$2,158,040	\$1,459,223,833
	Actuarial Value of Assets	962,707	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$1,195,333	\$773,735,700
	21 Appropriation		
	Employer Normal Cost	\$132	\$21,725,204
	Payment on UAL	66,328	44,853,675
	Payment on 2002 ERI	0	1,554,689
	Payment on 2003 ERI	0	304,815
	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$66,460	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$65,243	\$67,190,465

## MENDON - 390 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	43.065	6,934
Average Age	46.4	47.5
Average Service	12.3	10.1
Valuation Salary	2,683,682	\$304,282,630
Average Salary	\$60,993	\$43,883
Retired Members and Beneficiaries	14.000	3,351
Average Age	71.3	73.5
Total Annual Pension	\$396,078	\$68,184,912
Average Annual Pension	\$28,291	\$20,348
Disabled Members - Accidental	5.000	227
Average Age	57.6	63.2
Total Annual Pension	\$210,589	\$8,011,164
Average Annual Pension	\$42,118	\$35,291
Disabled Members - Ordinary		43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	12.000	1,978
Annuity Savings Fund	\$236,313	\$18,530,021
Employer Normal Cost as of January 1, 2018	#=00% 10	#10 <b>,</b> 000,0 <b>2</b> 1
a. Total Normal Cost	\$497,096	\$43,715,955
b. Administrative Expenses	11,628	1,100,000
c. Expected Employee Contributions	285,249	28,880,357
d. Employer Normal Cost = a. + b c.	\$223,475	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of	of January 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$7,488,984	\$708,337,933
b. Retired Members and Beneficiaries	4,216,662	630,352,611
c. Disabled Members - Accidental	2,610,703	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	236,313	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$14,552,662	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	ıı	" , , ,
g. Actuarial Accrued Liability = f.	\$14,552,662	\$1,459,223,833
h. Actuarial Value of Assets	6,674,786	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$7,877,876	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$252,518	\$21,725,204
b. Payment on UAL	446,156	44,853,675
c. Payment on 2002 ERI	8,796	1,554,689
d. Payment on 2003 ERI	23,633	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = a. + b. + c. + d. + e.	\$731,103	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$717,711	\$67,190,465

## MENDON-UPTON REGIONAL - 400 Based on Valuation Results as of January 1, 2018

Sumn	nary of Member Data	Member Unit	Worcester Regional
	Active Members	137.256	6,934
	Average Age	50.8	47.5
	Average Service	10.6	10.1
	Valuation Salary	4,351,855	\$304,282,630
	Average Salary	\$31,535	\$43,883
	Retired Members and Beneficiaries	40.000	3,351
	Average Age	74.8	73.5
	Total Annual Pension	\$538,989	\$68,184,912
	Average Annual Pension	\$13,475	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	60.6	63.2
	Total Annual Pension	\$33,465	\$8,011,164
	Average Annual Pension	\$33,465	\$35,291
	Disabled Members - Ordinary	- -	43
	Average Age	<del>-</del>	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	45.000	1,978
	Annuity Savings Fund	\$378,513	\$18,530,021
E1	,	по го <b>ј</b> е се	# - <b>&gt;,•</b> - <b>&gt;</b> ,•
	loyer Normal Cost as of January 1, 2018  Total Normal Cost	\$700,898	\$43,715,955
a. b.	Administrative Expenses	16,395	1,100,000
	*	425,093	
C.	Expected Employee Contributions		28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$292,200	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actua	rial Accrued Liability (AAL):		
a.	Active Members	\$11,553,651	\$708,337,933
b.	Retired Members and Beneficiaries	4,969,116	630,352,611
c.	Disabled Members - Accidental	407,411	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	378,513	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$17,308,691	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$17,308,691	\$1,459,223,833
h.	Actuarial Value of Assets	7,721,452	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$9,587,239	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$330,175	\$21,725,204
b.	Payment on UAL	525,423	44,853,675
c.	Payment on 2002 ERI	7,330	1,554,689
d.	Payment on 2003 ERI	8,186	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$871,114	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$855,158	\$67,190,465

# MILLBURY - 410 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	195.500	6,934
	Average Age	47.6	47.5
	Average Service	10.6	10.1
	Valuation Salary	7,145,124	\$304,282,630
	Average Salary	\$35,198	\$43,883
	Retired Members and Beneficiaries	109.000	3,351
	Average Age	73.0	73.5
	Total Annual Pension	\$2,317,293	\$68,184,912
	Average Annual Pension	\$21,260	\$20,348
	Disabled Members - Accidental	9.000	227
	Average Age	69.0	63.2
	Total Annual Pension	\$342,372	\$8,011,164
	Average Annual Pension	\$38,041	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	70.2	61.2
	Total Annual Pension	\$38,214	\$720,176
	Average Annual Pension	\$19,107	\$16,748
	Inactive Members	70.000	1,978
	Annuity Savings Fund	\$471,869	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	# · · · - <b>,</b> · · · ·	# - 0,000 0,0 <u>—</u> -
a.	Total Normal Cost	\$1,140,989	\$43,715,955
b.	Administrative Expenses	26,689	1,100,000
c.	Expected Employee Contributions	726,101	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$441,577	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$19,479,294	\$708,337,933
b.	Retired Members and Beneficiaries	22,886,167	630,352,611
c.	Disabled Members - Accidental	3,630,425	93,283,070
d.	Disabled Members - Ordinary	323,307	8,720,198
e.	Inactive Members	471,869	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$46,791,062	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$46,791,062	\$1,459,223,833
h.	Actuarial Value of Assets	21,475,675	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$25,315,387	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$498,964	\$21,725,204
b.	Payment on UAL	1,416,281	44,853,675
c.	Payment on 2002 ERI	149,715	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$2,064,960	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,027,136	\$67,190,465

## MILLBURY HOUSING AUTHORITY - 420 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	7.000	6,934
Average Age	56.5	47.5
Average Service	14.4	10.1
Valuation Salary	402,818	\$304,282,630
Average Salary	\$57,545	\$43,883
Retired Members and Beneficiaries	5.000	3,351
Average Age	78.9	73.5
Total Annual Pension	\$147,974	\$68,184,912
Average Annual Pension	\$29,595	\$20,348
Disabled Members - Accidental	1.000	227
Average Age	82.9	63.2
Total Annual Pension	\$26,022	\$8,011,164
Average Annual Pension	\$26,022	\$35,291
Disabled Members - Ordinary		43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	—————————————————————————————————————	1,978
Annuity Savings Fund	\$0	\$18,530,021
,	¥0	Ψ10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$63,550	\$43,715,955
b. Administrative Expenses	1,487	1,100,000
c. Expected Employee Contributions	41,512	28,880,357
d. Employer Normal Cost = a. + b c.	\$23,525	\$15,935,598
• •		Ψ13,733,370
Unfunded Actuarial Accrued Liability (UAAL) as of Actuarial Accrued Liability (AAL):	January 1, 2018	
	\$1 225 031	\$700 227 022
	\$1,225,031	\$708,337,933
b. Retired Members and Beneficiaries	1,117,697	630,352,611
c. Disabled Members - Accidental	157,655	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a. + b. + c. + d. + e.$	\$2,500,383	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	<b>#9.</b> 500. <b>902</b>	<b>*4.450.000.000</b>
g. Actuarial Accrued Liability = f.	\$2,500,383	\$1,459,223,833
h. Actuarial Value of Assets	1,115,427	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$1,384,956	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$26,582	\$21,725,204
b. Payment on UAL	74,015	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	6,701	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$107,298	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$105,333	\$67,190,465

# MILLVILLE - 430 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	17.806	6,934
	Average Age	49.8	47.5
	Average Service	6.5	10.1
	Valuation Salary	684,293	\$304,282,630
	Average Salary	\$34,215	\$43,883
	Retired Members and Beneficiaries	1.000	3,351
	Average Age	75.9	73.5
	Total Annual Pension	\$17,270	\$68,184,912
	Average Annual Pension	\$17,270	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	12.000	1,978
	Annuity Savings Fund	\$209,438	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	,	
a.	Total Normal Cost	\$191,325	\$43,715,955
b.	Administrative Expenses	4,475	1,100,000
c.	Expected Employee Contributions	74,702	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$121,098	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Januarian	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$1,080,470	\$708,337,933
b.	Retired Members and Beneficiaries	155,773	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	193,109	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$1,429,352	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,429,352	\$1,459,223,833
h.	Actuarial Value of Assets	819,112	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$610,240	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$136,836	\$21,725,204
b.	Payment on UAL	56,435	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$193,271	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$189,731	\$67,190,465

## NARRAGANSETT REGIONAL - 440 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	53.116	6,934
Average Age	50.4	47.5
Average Service	9.3	10.1
Valuation Salary	1,913,839	\$304,282,630
Average Salary	\$35,441	\$43,883
Retired Members and Beneficiaries	28.000	3,351
Average Age	72.8	73.5
Total Annual Pension	\$540,965	\$68,184,912
Average Annual Pension	\$19,320	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	*O	\$35,291
Disabled Members - Ordinary	1.000	43
Average Age	39.1	61.2
Total Annual Pension	\$13,216	\$720,176
Average Annual Pension	\$13,216	\$16,748
Inactive Members	13.000	1,978
Annuity Savings Fund	\$200,550	\$18,530,021
Employer Normal Cost as of January 1, 2018	π = 0 0 ,00 0 0	п - 0,000 0,0 — -
a. Total Normal Cost	\$307,637	\$43,715,955
b. Administrative Expenses	7,196	1,100,000
c. Expected Employee Contributions	192,488	28,880,357
d. Employer Normal Cost = a. + b c.	\$122,345	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as o		<sub>п</sub> - <b>су</b> , - с - у -
Actuarial Accrued Liability (AAL):		
a. Active Members	\$3,953,914	\$708,337,933
b. Retired Members and Beneficiaries	5,169,167	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	230,002	8,720,198
e. Inactive Members	200,550	18,530,021
f. Total AAL = $a. + b. + c. + d. + e.$	\$9,553,633	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	#7,000,000	\(\frac{1}{1}\),\(\frac{1}{1}\),\(\frac{1}{2}\),\(\frac{1}\),\(\frac{1}{2}\),\(\frac{1}{2}\),\(\frac{1}\),\(\frac{1}\),\(\frac{1}\),\(\frac{1}
g. Actuarial Accrued Liability = f.	\$9,553,633	\$1,459,223,833
h. Actuarial Value of Assets	4,293,216	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$5,260,417	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$138,246	\$21,725,204
b. Payment on UAL	284,860	44,853,675
c. Payment on 2002 ERI	25,839	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$448,945	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$440,722	\$67,190,465

#### NASHOBA REGIONAL - 450

Sumr	mary of Member Data	Member Unit	Worcester Regional
	Active Members	175.745	6,934
	Average Age	49.3	47.5
	Average Service	9.6	10.1
	Valuation Salary	6,425,544	\$304,282,630
	Average Salary	\$36,303	\$43,883
	Retired Members and Beneficiaries	51.000	3,351
	Average Age	71.8	73.5
	Total Annual Pension	\$733,879	\$68,184,912
	Average Annual Pension	\$14,390	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	54.7	63.2
	Total Annual Pension	\$35,287	\$8,011,164
	Average Annual Pension	\$35,287	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	59.8	61.2
	Total Annual Pension	\$27,162	\$720,176
	Average Annual Pension	\$13,581	\$16,748
	Inactive Members	57.000	1,978
	Annuity Savings Fund	\$810,457	\$18,530,021
Empl	,	π ~ - ~ <b>, 1</b> ·	# - <b>&gt;,•</b> - <b>&gt;</b> ,•
	loyer Normal Cost as of January 1, 2018  Total Normal Cost	\$1,001,846	\$43,715,955
a. b.	Administrative Expenses	23,435	1,100,000
	•		
c.	Expected Employee Contributions	644,642	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$380,639	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actua	rial Accrued Liability (AAL):		*
a.	Active Members	\$14,174,038	\$708,337,933
b.	Retired Members and Beneficiaries	7,287,478	630,352,611
c.	Disabled Members - Accidental	476,200	93,283,070
d.	Disabled Members - Ordinary	358,433	8,720,198
e.	Inactive Members	810,457	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$23,106,606	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$23,106,606	\$1,459,223,833
h.	Actuarial Value of Assets	10,701,332	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$12,405,274	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$430,107	\$21,725,204
b.	Payment on UAL	737,293	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,167,400	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,146,017	\$67,190,465

# NASHOBA VALLEY DISPATCH - 455 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	15.875	6,934
Average Age	38.5	47.5
Average Service	6.5	10.1
Valuation Salary	692,480	\$304,282,630
Average Salary	\$43,280	\$43,883
Retired Members and Beneficiaries	-	3,351
Average Age	-	73.5
Total Annual Pension	\$0	\$68,184,912
Average Annual Pension	\$0	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	<del>-</del>	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	π ~	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018		
a. Total Normal Cost	\$99,005	\$43,715,955
b. Administrative Expenses	2,316	1,100,000
c. Expected Employee Contributions	85,091	28,880,357
d. Employer Normal Cost = $a. + b c.$	\$16,230	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of	January 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$792,421	\$708,337,933
b. Retired Members and Beneficiaries	0	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a. + b. + c. + d. + e.$	\$792,421	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$792,421	\$1,459,223,833
h. Actuarial Value of Assets	353,501	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$438,920	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$18,340	\$21,725,204
b. Payment on UAL	24,355	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	<b>5,77</b> 0
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$42,695	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$41,913	\$67,190,465

## NEW BRAINTREE - 460 Based on Valuation Results as of January 1, 2018

Summ	nary of Member Data	Member Unit	Worcester Regional
	Active Members	6.150	6,934
	Average Age	51.3	47.5
	Average Service	11.2	10.1
	Valuation Salary	195,869	\$304,282,630
	Average Salary	\$27,981	\$43,883
	Retired Members and Beneficiaries	1.000	3,351
-	Average Age	73.6	73.5
	Total Annual Pension	\$13,184	\$68,184,912
	Average Annual Pension	\$13,184	\$20,348
_	Disabled Members - Accidental	2.000	227
	Average Age	64.6	63.2
	Total Annual Pension	\$74,953	\$8,011,164
	Average Annual Pension	\$37,477	\$35,291
_	Disabled Members - Ordinary	" <i>-</i>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
_	Inactive Members	3.000	1,978
	Annuity Savings Fund	\$4,643	\$18,530,021
	, 0	¥ 130 10	ψ10,030,0 <b>2</b> 1
	oyer Normal Cost as of January 1, 2018	ФОС (4.5	Ф42 74 F ОББ
	Total Normal Cost	\$36,615	\$43,715,955
	Administrative Expenses	856	1,100,000
	Expected Employee Contributions	22,444	28,880,357
d	Employer Normal Cost = $a. + b c.$	\$15,027	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
	rial Accrued Liability (AAL):	Ø550046	Ф <b>Т</b> ОО <b>22Т</b> 0 <b>2</b> 2
	Active Members	\$553,046	\$708,337,933
	Retired Members and Beneficiaries	130,868	630,352,611
	Disabled Members - Accidental	849,957	93,283,070
	Disabled Members - Ordinary	0	8,720,198
	Inactive Members	4,643	18,530,021
	Total AAL = a. + b. + c. + d. + e.	\$1,538,514	\$1,459,223,833
	ded Actuarial Accrued Liability (UAAL):		
_	Actuarial Accrued Liability = f.	\$1,538,514	\$1,459,223,833
	Actuarial Value of Assets	686,335	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$852,179	\$773,735,700
	21 Appropriation		
	Employer Normal Cost	\$16,980	\$21,725,204
	Payment on UAL	47,287	44,853,675
	Payment on 2002 ERI	0	1,554,689
	Payment on 2003 ERI	0	304,815
	Payment on 2010 ERI	0	5,770
f. '	Total Appropriation = $a. + b. + c. + d. + e.$	\$64,267	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$63,090	\$67,190,465

## NORTHBORO - 470 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	226.539	6,934
	Average Age	45.0	47.5
	Average Service	9.3	10.1
	Valuation Salary	10,725,123	\$304,282,630
	Average Salary	\$42,392	\$43,883
	Retired Members and Beneficiaries	100.000	3,351
	Average Age	73.5	73.5
	Total Annual Pension	\$2,563,530	\$68,184,912
	Average Annual Pension	\$25,635	\$20,348
	Disabled Members - Accidental	7.000	227
	Average Age	59.5	63.2
	Total Annual Pension	\$260,036	\$8,011,164
	Average Annual Pension	\$37,148	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	58.5	61.2
	Total Annual Pension	\$15,498	\$720,176
	Average Annual Pension	\$15,498	\$16,748
	Inactive Members	63.000	1,978
	Annuity Savings Fund	\$418,183	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	"	" , ,
a.	Total Normal Cost	\$1,687,024	\$43,715,955
b.	Administrative Expenses	39,462	1,100,000
c.	Expected Employee Contributions	1,122,406	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$604,080	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$26,097,108	\$708,337,933
b.	Retired Members and Beneficiaries	25,086,559	630,352,611
c.	Disabled Members - Accidental	3,203,628	93,283,070
d.	Disabled Members - Ordinary	207,945	8,720,198
e.	Inactive Members	418,183	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$55,013,423	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$55,013,423	\$1,459,223,833
h.	Actuarial Value of Assets	24,929,162	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$30,084,261	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$682,586	\$21,725,204
b.	Payment on UAL	1,717,552	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$2,400,138	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,356,175	\$67,190,465

#### NORTHBORO HOUSING AUTHORITY - 480

Summary of Member Data	Member Unit	Worcester Regional
Active Members	6.000	6,934
Average Age	52.4	47.5
Average Service	13.6	10.1
Valuation Salary	392,781	\$304,282,630
Average Salary	\$65,464	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	77.1	73.5
Total Annual Pension	\$40,851	\$68,184,912
Average Annual Pension	\$40,851	\$20,348
Disabled Members - Accidental	-	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	₩°	43
Average Age	_ _	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	<b>\$</b> 0	\$16,748
Inactive Members	1.000	1,978
Annuity Savings Fund	\$10,479	\$18,530,021
, ,	φ10,47 <i>9</i>	\$10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$57,583	\$43,715,955
b. Administrative Expenses	1,347	1,100,000
c. Expected Employee Contributions	38,256	28,880,357
d. Employer Normal Cost = a. + b c.	\$20,674	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan		# 10,7 00,000
Actuarial Accrued Liability (AAL):	uary 1, 2010	
a. Active Members	\$1,252,210	\$708,337,933
b. Retired Members and Beneficiaries	325,944	630,352,611
	0	93,283,070
d. Disabled Members - Ordinary	10.470	8,720,198
e. Inactive Members	10,479	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$1,588,633	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	<b>#4.5</b> 00.422	<b>*4.450.000.000</b>
g. Actuarial Accrued Liability = f.	\$1,588,633	\$1,459,223,833
h. Actuarial Value of Assets	752,930	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$835,703	\$773,735,700
FY2021 Appropriation	<b>#</b>	<b></b>
a. Employer Normal Cost	\$23,361	\$21,725,204
b. Payment on UAL	51,875	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	<b>5,</b> 770
f. Total Appropriation = $a + b + c + d + e$ .	\$75,236	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$73,858	\$67,190,465

#### NORTHBORO-SOUTHBORO REGIONAL - 490

Sumn	nary of Member Data	Member Unit	Worcester Regional
	Active Members	71.376	6,934
	Average Age	46.0	47.5
	Average Service	6.8	10.1
	Valuation Salary	2,283,018	\$304,282,630
	Average Salary	\$23,296	\$43,883
	Retired Members and Beneficiaries	36.000	3,351
	Average Age	79.0	73.5
	Total Annual Pension	\$434,308	\$68,184,912
	Average Annual Pension	\$12,064	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	63.0	63.2
	Total Annual Pension	\$34,204	\$8,011,164
	Average Annual Pension	\$34,204	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	45.000	1,978
	Annuity Savings Fund	\$301,277	\$18,530,021
Empl	loyer Normal Cost as of January 1, 2018	" /	" ,
a.	Total Normal Cost	\$390,502	\$43,715,955
а. b.	Administrative Expenses	9,134	1,100,000
	-		
C.	Expected Employee Contributions	243,672 \$155,964	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .		\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actua	rial Accrued Liability (AAL):		
a.	Active Members	\$3,894,226	\$708,337,933
b.	Retired Members and Beneficiaries	3,853,457	630,352,611
c.	Disabled Members - Accidental	399,111	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	301,277	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$8,448,071	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$8,448,071	\$1,459,223,833
h.	Actuarial Value of Assets	3,869,081	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$4,578,990	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$176,233	\$21,725,204
b.	Payment on UAL	266,569	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$442,802	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$434,691	\$67,190,465

#### NORTH BROOKFIELD - 500

Summary of Member Data	Member Unit	Worcester Regional
Active Members	77.911	6,934
Average Age	47.7	47.5
Average Service	9.6	10.1
Valuation Salary	2,191,737	\$304,282,630
Average Salary	\$26,092	\$43,883
Retired Members and Beneficiaries	28.000	3,351
Average Age	75.6	73.5
Total Annual Pension	\$581,120	\$68,184,912
Average Annual Pension	\$20,754	\$20,348
Disabled Members - Accidental	-	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$O	\$35,291
Disabled Members - Ordinary	Ψ <sup>0</sup>	43
Average Age	_	61.2
Total Annual Pension	<b>\$</b> 0	\$720,176
Average Annual Pension	\$0 \$0	\$16,748
Inactive Members	24.000	1,978
Annuity Savings Fund	\$157,367	\$18,530,021
, ,	φ137 <sub>5</sub> 307	\$10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$403,081	\$43,715,955
b. Administrative Expenses	9,429	1,100,000
c. Expected Employee Contributions	228,974	28,880,357
d. Employer Normal Cost = a. + b c.	\$183,536	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan		. ,
Actuarial Accrued Liability (AAL):		
a. Active Members	\$5,659,864	\$708,337,933
b. Retired Members and Beneficiaries	5,744,760	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	157,367	18,530,021
f. Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$11,561,991	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	# <b>, ,</b>	π - , , ,
g. Actuarial Accrued Liability = f.	\$11,561,991	\$1,459,223,833
h. Actuarial Value of Assets	5,261,863	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$6,300,128	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$207,388	\$21,725,204
b. Payment on UAL	356,152	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	15,073	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$578,613	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$568,015	\$67,190,465

#### NORTH BROOKFIELD HOUSING AUTHORITY - 510

Summary of Member Data	Member Unit	Worcester Regional
Active Members	0.878	6,934
Average Age	59.1	47.5
Average Service	28.6	10.1
Valuation Salary	56,674	\$304,282,630
Average Salary	\$56,674	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	77.2	73.5
Total Annual Pension	\$23,243	\$68,184,912
Average Annual Pension	\$23,243	\$20,348
Disabled Members - Accidental	π-υ <b>,</b> -	227
Average Age	_	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$O	\$35,291
Disabled Members - Ordinary	Ψ <sup>0</sup>	43
Average Age		61.2
Total Annual Pension	<b>\$</b> 0	\$720,176
Average Annual Pension	\$O \$O	\$16,748
Inactive Members	ΨV	1,978
Annuity Savings Fund	<b>\$</b> 0	\$18,530,021
	фU	\$10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$6,477	\$43,715,955
b. Administrative Expenses	151	1,100,000
c. Expected Employee Contributions	<b>4,</b> 790	28,880,357
d. Employer Normal Cost = a. + b c.	\$1,838	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan		п 9, 9
Actuarial Accrued Liability (AAL):		
a. Active Members	\$347,051	\$708,337,933
b. Retired Members and Beneficiaries	194,075	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$541,126	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	W2 11,120	Ψ1,102,220,000
g. Actuarial Accrued Liability = f.	\$541,126	\$1,459,223,833
h. Actuarial Value of Assets	241,398	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$299,728	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$2,076	\$21,725,204
b. Payment on UAL	16,632	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$18,708	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$18,365	\$67,190,465

# OAKHAM - 530 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	6.124	6,934
	Average Age	54.4	47.5
	Average Service	14.1	10.1
	Valuation Salary	261,483	\$304,282,630
	Average Salary	\$32,685	\$43,883
	Retired Members and Beneficiaries	5.000	3,351
	Average Age	74.4	73.5
	Total Annual Pension	\$99,649	\$68,184,912
	Average Annual Pension	\$19,930	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	2.000	1,978
	Annuity Savings Fund	\$18,316	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	" /	" ,
a.	Total Normal Cost	\$47,272	\$43,715,955
b.	Administrative Expenses	1,106	1,100,000
c.	Expected Employee Contributions	25,730	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$22,648	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Janu	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$900,488	\$708,337,933
b.	Retired Members and Beneficiaries	853,045	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	18,316	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$1,771,849	\$1,459,223,833
Unfu	ınded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,771,849	\$1,459,223,833
h.	Actuarial Value of Assets	790,427	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$981,422	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$25,592	\$21,725,204
b.	Payment on UAL	54,458	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$80,050	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$78,584	\$67,190,465

# OXFORD - 540 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	183.687	6,934
	Average Age	48.1	47.5
	Average Service	11.2	10.1
	Valuation Salary	7,552,436	\$304,282,630
	Average Salary	\$39,542	\$43,883
	Retired Members and Beneficiaries	91.000	3,351
	Average Age	72.1	73.5
	Total Annual Pension	\$2,096,857	\$68,184,912
	Average Annual Pension	\$23,042	\$20,348
	Disabled Members - Accidental	14.000	227
	Average Age	67.6	63.2
	Total Annual Pension	\$414,799	\$8,011,164
	Average Annual Pension	\$29,629	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	41.3	61.2
	Total Annual Pension	\$10,060	\$720,176
	Average Annual Pension	\$10,060	\$16,748
	Inactive Members	80.000	1,978
	Annuity Savings Fund	\$824,350	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	т ° <b>— 1,</b> 000°	# - 0,000 0,0 <u>—</u> -
<u>a.</u>	Total Normal Cost	\$1,314,343	\$43,715,955
b.	Administrative Expenses	30,744	1,100,000
c.	Expected Employee Contributions	779,019	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$566,068	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$21,389,280	\$708,337,933
b.	Retired Members and Beneficiaries	20,641,640	630,352,611
c.	Disabled Members - Accidental	4,510,438	93,283,070
d.	Disabled Members - Ordinary	188,624	8,720,198
e.	Inactive Members	687,269	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$47,417,251	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$47,417,251	\$1,459,223,833
h.	Actuarial Value of Assets	21,735,851	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$25,681,400	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$639,634	\$21,725,204
b.	Payment on UAL	1,430,148	44,853,675
c.	Payment on 2002 ERI	143,119	1,554,689
d.	Payment on 2003 ERI	16,189	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$2,229,090	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,188,260	\$67,190,465

# OXFORD HOUSING AUTHORITY - 550 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	6.000	6,934
Average Age	55.2	47.5
Average Service	11.4	10.1
Valuation Salary	329,350	\$304,282,630
Average Salary	\$54,892	\$43,883
Retired Members and Beneficiaries	3.000	3,351
Average Age	68.1	73.5
Total Annual Pension	\$59,214	\$68,184,912
Average Annual Pension	\$19,738	\$20,348
Disabled Members - Accidental	<del>-</del>	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	*O	\$35,291
Disabled Members - Ordinary	-	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	₩V -	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018	"	" - <b>, ,</b> -
a. Total Normal Cost	\$57,633	\$43,715,955
b. Administrative Expenses	1,348	1,100,000
c. Expected Employee Contributions	34,282	28,880,357
d. Employer Normal Cost = $a. + b c.$	\$24,699	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of	January 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$880,794	\$708,337,933
b. Retired Members and Beneficiaries	674,885	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$1,555,679	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,555,679	\$1,459,223,833
h. Actuarial Value of Assets	811,175	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$744,504	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$27,909	\$21,725,204
b. Payment on UAL	55,888	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$83,797	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$82,262	\$67,190,465

#### OXFORD-ROCHDALE SEWER DISTRICT - 555

Sumn	nary of Member Data	Member Unit	Worcester Regional
	Active Members	2.100	6,934
	Average Age	58.3	47.5
	Average Service	29.8	10.1
	Valuation Salary	153,262	\$304,282,630
	Average Salary	\$51,087	\$43,883
	Retired Members and Beneficiaries		3,351
	Average Age	-	73.5
	Total Annual Pension	\$0	\$68,184,912
	Average Annual Pension	\$0	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	- -	1,978
	Annuity Savings Fund	\$0	\$18,530,021
Empl	loyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$21,946	\$43,715,955
b.	Administrative Expenses	513	1,100,000
c.	Expected Employee Contributions	13,157	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$9,302	\$15,935,598
Unfu	nded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actua	rial Accrued Liability (AAL):	-	
a.	Active Members	\$911,756	\$708,337,933
b.	Retired Members and Beneficiaries	0	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	0	18,530,021
f.	Total $AAL = a. + b. + c. + d. + e.$	\$911,756	\$1,459,223,833
Unfur	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$911,756	\$1,459,223,833
h.	Actuarial Value of Assets	406,737	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$505,019	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$10,511	\$21,725,204
b.	Payment on UAL	28,023	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$38,534	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$37,828	\$67,190,465

### <u>PAXTON - 560</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	61.301	6,934
	Average Age	45.0	47.5
	Average Service	9.7	10.1
	Valuation Salary	3,115,362	\$304,282,630
	Average Salary	\$44,505	\$43,883
	Retired Members and Beneficiaries	24.000	3,351
	Average Age	74.1	73.5
	Total Annual Pension	\$563,024	\$68,184,912
	Average Annual Pension	\$23,459	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	69.9	63.2
	Total Annual Pension	\$48,367	\$8,011,164
	Average Annual Pension	\$48,367	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	5.000	1,978
	Annuity Savings Fund	\$35,103	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	",	n - <b>,</b> ,
a.	Total Normal Cost	\$664,388	\$43,715,955
b.	Administrative Expenses	15,541	1,100,000
c.	Expected Employee Contributions	344,007	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$335,922	\$15,935,598
	anded Actuarial Accrued Liability (UAAL) as of Jar		H
	arial Accrued Liability (AAL):	1441, 1, 2010	
a.	Active Members	\$7,724,552	\$708,337,933
ъ. b.	Retired Members and Beneficiaries	5,476,351	630,352,611
с.	Disabled Members - Accidental	471,517	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	35,103	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$13,707,523	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	Ψ13,707,323	Ψ1, τ37, 223,033
	Actuarial Accrued Liability (6777L).	\$13,707,523	\$1,459,223,833
g. h.	Actuarial Value of Assets	6,874,914	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$6,832,609	\$773,735,700
	, ,	\$0,032,009	\$//3 <b>,</b> /35,/00
	021 Appropriation	#== · == ·	****
a.	Employer Normal Cost	\$379,578	\$21,725,204
b.	Payment on UAL	473,663	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$853,241	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$837,612	\$67,190,465

#### <u>PETERSHAM - 570</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	17.238	6,934
	Average Age	51.9	47.5
	Average Service	12.8	10.1
	Valuation Salary	614,496	\$304,282,630
	Average Salary	\$32,342	\$43,883
	Retired Members and Beneficiaries	11.000	3,351
	Average Age	74.9	73.5
	Total Annual Pension	\$174,617	\$68,184,912
	Average Annual Pension	\$15,874	\$20,348
	Disabled Members - Accidental	<del>-</del>	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	7.000	1,978
	Annuity Savings Fund	<b>\$34,5</b> 80	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018	" /	. , ,
a.	Total Normal Cost	\$112,092	\$43,715,955
b.	Administrative Expenses	2,622	1,100,000
c.	Expected Employee Contributions	61,080	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$53,634	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$1,896,037	\$708,337,933
b.	Retired Members and Beneficiaries	1,735,376	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	34,580	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$3,665,993	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$3,665,993	\$1,459,223,833
h.	Actuarial Value of Assets	1,637,386	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$2,028,607	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$60,604	\$21,725,204
b.	Payment on UAL	111,788	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	2,419	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$174,811	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$171,609	\$67,190,465

#### <u>PHILLIPSTON - 580</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	12.971	6,934
	Average Age	51.0	47.5
	Average Service	9.5	10.1
	Valuation Salary	551,628	\$304,282,630
	Average Salary	\$26,268	\$43,883
	Retired Members and Beneficiaries	3.000	3,351
	Average Age	65.8	73.5
	Total Annual Pension	\$109,463	\$68,184,912
	Average Annual Pension	\$36,488	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	89.5	63.2
	Total Annual Pension	\$19,016	\$8,011,164
	Average Annual Pension	\$19,016	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	** \$0	\$16,748
	Inactive Members	8.000	1,978
	Annuity Savings Fund	\$25,545	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" ,	" ,
a.	Total Normal Cost	\$108,822	\$43,715,955
b.	Administrative Expenses	2,545	1,100,000
c.	Expected Employee Contributions	52,715	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$58,652	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$1,308,202	\$708,337,933
b.	Retired Members and Beneficiaries	1,317,242	630,352,611
c.	Disabled Members - Accidental	75,641	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	25,545	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$2,726,630	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$2,726,630	\$1,459,223,833
h.	Actuarial Value of Assets	1,245,768	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$1,480,862	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$66,274	\$21,725,204
b.	Payment on UAL	85,830	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$152,104	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$149,318	\$67,190,465

## PRINCETON - 590 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	33.463	6,934
	Average Age	48.6	47.5
	Average Service	13.0	10.1
	Valuation Salary	1,874,594	\$304,282,630
	Average Salary	\$53,560	\$43,883
	Retired Members and Beneficiaries	18.000	3,351
	Average Age	76.2	73.5
	Total Annual Pension	\$411,880	\$68,184,912
	Average Annual Pension	\$22,882	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	84.4	63.2
	Total Annual Pension	\$53,636	\$8,011,164
	Average Annual Pension	\$26,818	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	67.1	61.2
	Total Annual Pension	\$52,364	\$720,176
	Average Annual Pension	\$52,364	\$16,748
	Inactive Members	10.000	1,978
	Annuity Savings Fund	\$258,274	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	. ,	" ,
a.	Total Normal Cost	\$253,814	\$43,715,955
b.	Administrative Expenses	5,937	1,100,000
c.	Expected Employee Contributions	195,047	28,880,357
d.	Employer Normal Cost = a. + b c.	\$64,704	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$5,387,277	\$708,337,933
b.	Retired Members and Beneficiaries	3,811,855	630,352,611
c.	Disabled Members - Accidental	293,049	93,283,070
d.	Disabled Members - Ordinary	606,918	8,720,198
e.	Inactive Members	258,274	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$10,357,373	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$10,357,373	\$1,459,223,833
h.	Actuarial Value of Assets	4,909,569	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$5,447,804	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$73,114	\$21,725,204
b.	Payment on UAL	334,535	44,853,675
c.	Payment on 2002 ERI	8,796	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$416,445	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$408,817	\$67,190,465

#### **QUABBIN REGIONAL - 600**

Sumr	mary of Member Data	Member Unit	Worcester Regional
	Active Members	144.183	6,934
	Average Age	48.4	47.5
	Average Service	10.8	10.1
	Valuation Salary	4,667,539	\$304,282,630
	Average Salary	\$31,969	\$43,883
	Retired Members and Beneficiaries	89.000	3,351
	Average Age	74.0	73.5
	Total Annual Pension	\$1,375,527	\$68,184,912
	Average Annual Pension	\$15,455	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	74.2	63.2
	Total Annual Pension	\$21,254	\$8,011,164
	Average Annual Pension	\$21,254	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	39.5	61.2
	Total Annual Pension	\$5,668	\$720,176
	Average Annual Pension	\$5,668	\$16,748
	Inactive Members	33.000	1,978
	Annuity Savings Fund	\$299,357	\$18,530,021
		W257,557	ψ10,330,021
	loyer Normal Cost as of January 1, 2018	Ф72 Г 4 O 4	Ф42 74 F ОББ
a.	Total Normal Cost	\$735,184	\$43,715,955
b.	Administrative Expenses	17,197	1,100,000
c.	Expected Employee Contributions	479,179	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$273,202	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
	arial Accrued Liability (AAL):	\$40,000,40F	Ф <b>Т</b> ОО <b>22Т</b> 022
a.	Active Members	\$12,382,195	\$708,337,933
b.	Retired Members and Beneficiaries	12,842,168	630,352,611
c.	Disabled Members - Accidental	204,324	93,283,070
d.	Disabled Members - Ordinary	106,042	8,720,198
e.	Inactive Members	299,357	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$25,834,086	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$25,834,086	\$1,459,223,833
h.	Actuarial Value of Assets	11,638,149	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$14,195,937	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$308,707	\$21,725,204
b.	Payment on UAL	774,808	44,853,675
c.	Payment on 2002 ERI	55,707	1,554,689
d.	Payment on 2003 ERI	8,186	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,147,408	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,126,391	\$67,190,465

#### **QUABOAG REGIONAL - 610**

Sumn	mary of Member Data	Member Unit	Worcester Regional
	Active Members	76.675	6,934
	Average Age	45.9	47.5
	Average Service	9.2	10.1
	Valuation Salary	2,051,343	\$304,282,630
	Average Salary	\$26,641	\$43,883
	Retired Members and Beneficiaries	27.000	3,351
	Average Age	76.9	73.5
	Total Annual Pension	\$401,623	\$68,184,912
	Average Annual Pension	\$14,875	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	\$0	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	*O	\$16,748
	Inactive Members	29.000	1,978
	Annuity Savings Fund	\$156,133	\$18,530,021
E1	,	т - 2 3 <b>9</b> - 2 3	# - <b>&gt;,•</b> - <b>&gt;</b> ,•
	loyer Normal Cost as of January 1, 2018  Total Normal Cost	\$316,249	\$42.715.055
a. L			\$43,715,955
b.	Administrative Expenses	7,398	1,100,000
C.	Expected Employee Contributions	209,035	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$114,612	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actua	rial Accrued Liability (AAL):		
a.	Active Members	\$4,482,603	\$708,337,933
b.	Retired Members and Beneficiaries	3,590,934	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	156,133	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$8,229,670	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$8,229,670	\$1,459,223,833
h.	Actuarial Value of Assets	3,780,549	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$4,449,121	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$129,507	\$21,725,204
b.	Payment on UAL	246,826	44,853,675
c.	Payment on 2002 ERI	32,250	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$408,583	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$401,099	\$67,190,465

## ROYALSTON - 620 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	6.000	6,934
	Average Age	47.3	47.5
	Average Service	10.5	10.1
	Valuation Salary	238,569	\$304,282,630
	Average Salary	\$39,762	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	69.4	73.5
	Total Annual Pension	\$10,906	\$68,184,912
	Average Annual Pension	\$5,453	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	45.3	63.2
	Total Annual Pension	\$30,807	\$8,011,164
	Average Annual Pension	\$30,807	\$35,291
	Disabled Members - Ordinary	<u> </u>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**O	\$16,748
	Inactive Members	1.000	1,978
	Annuity Savings Fund	\$8,288	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" /	" ,
a.	Total Normal Cost	\$37,593	\$43,715,955
b.	Administrative Expenses	879	1,100,000
c.	Expected Employee Contributions	24,286	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$14,186	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$829,870	\$708,337,933
b.	Retired Members and Beneficiaries	148,734	630,352,611
c.	Disabled Members - Accidental	465,666	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	8,288	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$1,452,558	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,452,558	\$1,459,223,833
h.	Actuarial Value of Assets	684,706	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$767,852	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$16,029	\$21,725,204
b.	Payment on UAL	47,174	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$63,203	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$62,045	\$67,190,465

## RUTLAND - 630 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	61.863	6,934
	Average Age	44.3	47.5
	Average Service	9.6	10.1
	Valuation Salary	2,960,901	\$304,282,630
	Average Salary	\$44,862	\$43,883
	Retired Members and Beneficiaries	22.000	3,351
	Average Age	71.6	73.5
	Total Annual Pension	\$629,408	\$68,184,912
	Average Annual Pension	\$28,609	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	61.5	63.2
	Total Annual Pension	\$169,011	\$8,011,164
	Average Annual Pension	\$42,253	\$35,291
	Disabled Members - Ordinary	=	43
	Average Age	=	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	\$0	\$16,748
	Inactive Members	8.000	1,978
	Annuity Savings Fund	\$61,322	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	π	# - 0,000 o,000
<u>a.</u>	Total Normal Cost	\$514,019	\$43,715,955
b.	Administrative Expenses	12,024	1,100,000
c.	Expected Employee Contributions	313,186	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$212,857	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$6,277,469	\$708,337,933
b.	Retired Members and Beneficiaries	6,303,583	630,352,611
c.	Disabled Members - Accidental	1,968,646	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	61,322	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$14,611,020	\$1,459,223,833
Unfu	ınded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$14,611,020	\$1,459,223,833
h.	Actuarial Value of Assets	6,567,594	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$8,043,426	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$240,520	\$21,725,204
b.	Payment on UAL	449,698	44,853,675
c.	Payment on 2002 ERI	6,599	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$696,817	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$684,053	\$67,190,465

#### <u>SOUTHBORO - 640</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	195.233	6,934
	Average Age	45.8	47.5
	Average Service	9.6	10.1
	Valuation Salary	9,562,193	\$304,282,630
	Average Salary	\$44,683	\$43,883
	Retired Members and Beneficiaries	76.000	3,351
	Average Age	71.7	73.5
	Total Annual Pension	\$2,046,627	\$68,184,912
	Average Annual Pension	\$26,929	\$20,348
	Disabled Members - Accidental	9.000	227
	Average Age	59.3	63.2
	Total Annual Pension	\$323,036	\$8,011,164
	Average Annual Pension	\$35,893	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	64.000	1,978
	Annuity Savings Fund	\$608,183	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	" ,	" ,
a.	Total Normal Cost	\$1,585,565	\$43,715,955
b.	Administrative Expenses	37,089	1,100,000
c.	Expected Employee Contributions	1,002,054	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$620,600	\$15,935,598
Unfu	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$22,606,901	\$708,337,933
b.	Retired Members and Beneficiaries	19,858,775	630,352,611
c.	Disabled Members - Accidental	3,823,981	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	606,496	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$46,896,153	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$46,896,153	\$1,459,223,833
h.	Actuarial Value of Assets	21,914,839	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$24,981,314	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$701,253	\$21,725,204
b.	Payment on UAL	1,509,873	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$2,211,126	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,170,625	\$67,190,465

#### **SOUTHBORO HOUSING - 650**

Summary of Member Data	Member Unit	Worcester Regional
Active Members	1.000	6,934
Average Age	54.1	47.5
Average Service	4.0	10.1
Valuation Salary	53,417	\$304,282,630
Average Salary	\$53,417	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	82.1	73.5
Total Annual Pension	\$23,295	\$68,184,912
Average Annual Pension	\$23,295	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	*O	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	<del>-</del>	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	**************************************	\$16,748
Inactive Members	n ·	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018		. , ,
a. Total Normal Cost	\$9,436	\$43,715,955
b. Administrative Expenses	221	1,100,000
c. Expected Employee Contributions	5,584	28,880,357
d. Employer Normal Cost = $a + b - c$ .	\$4,073	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as o	f January 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$37,487	\$708,337,933
b. Retired Members and Beneficiaries	132,926	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$170,413	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$170,413	\$1,459,223,833
h. Actuarial Value of Assets	76,022	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$94,391	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$4,602	\$21,725,204
b. Payment on UAL	354	44,853,675
c. Payment on 2002 ERI	11,544	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$16,500	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$16,198	\$67,190,465

# SPENCER - 660 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	60.189	6,934
	Average Age	50.9	47.5
	Average Service	14.4	10.1
	Valuation Salary	3,486,829	\$304,282,630
	Average Salary	\$55,346	\$43,883
	Retired Members and Beneficiaries	36.000	3,351
	Average Age	73.8	73.5
	Total Annual Pension	\$778,158	\$68,184,912
	Average Annual Pension	\$21,616	\$20,348
	Disabled Members - Accidental	3.000	227
	Average Age	67.1	63.2
	Total Annual Pension	\$106,142	\$8,011,164
	Average Annual Pension	\$35,381	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	79.5	61.2
	Total Annual Pension	\$18,235	\$720,176
	Average Annual Pension	\$18,235	\$16,748
	Inactive Members	5.000	1,978
	Annuity Savings Fund	\$29,043	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$601,406	\$43,715,955
b.	Administrative Expenses	14,068	1,100,000
c.	Expected Employee Contributions	344,408	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$271,066	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):	•	
a.	Active Members	\$11,632,188	\$708,337,933
b.	Retired Members and Beneficiaries	8,247,681	630,352,611
c.	Disabled Members - Accidental	1,142,182	93,283,070
d.	Disabled Members - Ordinary	161,622	8,720,198
e.	Inactive Members	29,043	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$21,212,716	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$21,212,716	\$1,459,223,833
h.	Actuarial Value of Assets	10,016,665	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$11,196,051	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$306,293	\$21,725,204
b.	Payment on UAL	690,121	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$996,414	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$978,163	\$67,190,465

#### SPENCER-EAST BROOKFIELD REGIONAL - 670

Sumi	mary of Member Data	Member Unit	Worcester Regional
	Active Members	118.205	6,934
	Average Age	46.4	47.5
	Average Service	6.5	10.1
	Valuation Salary	2,709,811	\$304,282,630
	Average Salary	\$21,337	\$43,883
	Retired Members and Beneficiaries	66.000	3,351
	Average Age	71.7	73.5
	Total Annual Pension	\$859,690	\$68,184,912
	Average Annual Pension	\$13,026	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	** **O	\$35,291
	Disabled Members - Ordinary	3.000	43
	Average Age	65.3	61.2
	Total Annual Pension	\$25,194	\$720,176
	Average Annual Pension	\$8,398	\$16,748
	Inactive Members	33.000	1,978
	Annuity Savings Fund	\$181,193	\$18,530,021
	, 0	Ψ101,173	ψ10,330,021
	loyer Normal Cost as of January 1, 2018	<b>\$440.250</b>	Ф42 74 F ОББ
a.	Total Normal Cost	\$469,259	\$43,715,955
b.	Administrative Expenses	10,977	1,100,000
С.	Expected Employee Contributions	286,849	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$193,387	\$15,935,598
	anded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
	arial Accrued Liability (AAL):	<b>#4.200.042</b>	<b>\$</b> 700.227.022
a.	Active Members	\$4,399,842	\$708,337,933
b.	Retired Members and Beneficiaries	8,850,498	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	311,428	8,720,198
e.	Inactive Members	181,193	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$13,742,961	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$13,742,961	\$1,459,223,833
h.	Actuarial Value of Assets	6,274,203	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$7,468,758	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$218,519	\$21,725,204
b.	Payment on UAL	419,923	44,853,675
c.	Payment on 2002 ERI	24,921	1,554,689
d.	Payment on 2003 ERI	4,278	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$667,641	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$655,412	\$67,190,465

### SPENCER HOUSING AUTHORITY - 680 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	5.000	6,934
Average Age	50.6	47.5
Average Service	17.4	10.1
Valuation Salary	284,432	\$304,282,630
Average Salary	<b>\$56,886</b>	\$43,883
Retired Members and Beneficiaries	3.000	3,351
Average Age	86.3	73.5
Total Annual Pension	\$37,035	\$68,184,912
Average Annual Pension	\$12,345	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	<b>\$</b> O	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	-	43
Average Age	-	61.2
Total Annual Pension	<b>\$</b> O	\$720,176
Average Annual Pension	<b>\$</b> O	\$16,748
Inactive Members	-	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018		
a. Total Normal Cost	\$36,988	\$43,715,955
b. Administrative Expenses	865	1,100,000
c. Expected Employee Contributions	28,342	28,880,357
d. Employer Normal Cost = $a. + b c.$	\$9,511	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Janu	ary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$1,092,212	\$708,337,933
b. Retired Members and Beneficiaries	223,894	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$1,316,106	\$1,459,223,833
Infunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,316,106	\$1,459,223,833
h. Actuarial Value of Assets	594,338	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$721,768	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$10,747	\$21,725,204
b. Payment on UAL	40,948	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$51,695	\$68,444,153

### STERLING - 690 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	81.017	6,934
	Average Age	47.8	47.5
	Average Service	12.8	10.1
	Valuation Salary	4,762,092	\$304,282,630
	Average Salary	\$55,373	\$43,883
	Retired Members and Beneficiaries	44.000	3,351
	Average Age	72.1	73.5
	Total Annual Pension	\$1,018,581	\$68,184,912
	Average Annual Pension	\$23,150	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	60.1	63.2
	Total Annual Pension	\$64,851	\$8,011,164
	Average Annual Pension	\$32,426	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	15.000	1,978
	Annuity Savings Fund	\$190,811	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	π - ν <b>- γ</b>	# - 0,00 0,0 <u></u>
<u>a.</u>	Total Normal Cost	\$864,068	\$43,715,955
b.	Administrative Expenses	20,212	1,100,000
c.	Expected Employee Contributions	501,266	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$383,014	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$13,481,577	\$708,337,933
b.	Retired Members and Beneficiaries	9,959,261	630,352,611
c.	Disabled Members - Accidental	758,661	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	190,811	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$24,390,310	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$24,390,310	\$1,459,223,833
h.	Actuarial Value of Assets	11,291,242	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$13,099,068	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$432,790	\$21,725,204
b.	Payment on UAL	771,717	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	14,700	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,219,207	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,196,875	\$67,190,465

### STERLING HOUSING AUTHORITY - 700 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	-	6,934
Average Age	-	47.5
Average Service	-	10.1
Valuation Salary	-	\$304,282,630
Average Salary	\$0	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	63.0	73.5
Total Annual Pension	\$15,468	\$68,184,912
Average Annual Pension	\$15,468	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	-	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	-	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018		
a. Total Normal Cost	\$0	\$43,715,955
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	28,880,357
d. Employer Normal Cost = a. + b c.	\$0	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Ja	nuary 1, 2018	
Actuarial Accrued Liability (AAL):	**	****
a. Active Members	<b>\$</b> O	\$708,337,933
b. Retired Members and Beneficiaries	203,233	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$203,233	\$1,459,223,833
Infunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$203,233	\$1,459,223,833
h. Actuarial Value of Assets	90,663	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$112,570	\$773,735,700
FY2021 Appropriation		*
a. Employer Normal Cost	<b>\$</b> O	\$21,725,204
± •	6,246	44,853,675
b. Payment on UAL	0	1,554,689
<ul><li>b. Payment on UAL</li><li>c. Payment on 2002 ERI</li></ul>	0	
<ul><li>b. Payment on UAL</li><li>c. Payment on 2002 ERI</li><li>d. Payment on 2003 ERI</li></ul>	0	304,815
<ul><li>b. Payment on UAL</li><li>c. Payment on 2002 ERI</li><li>d. Payment on 2003 ERI</li><li>e. Payment on 2010 ERI</li></ul>	0	304,815 5,770
<ul><li>b. Payment on UAL</li><li>c. Payment on 2002 ERI</li><li>d. Payment on 2003 ERI</li></ul>	0	304,815 5,770 \$68,444,153

#### <u>STURBRIDGE - 710</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	158.515	6,934
	Average Age	47.4	47.5
	Average Service	9.6	10.1
	Valuation Salary	6,492,367	\$304,282,630
	Average Salary	\$39,588	\$43,883
	Retired Members and Beneficiaries	57.000	3,351
	Average Age	74.8	73.5
	Total Annual Pension	\$1,032,940	\$68,184,912
	Average Annual Pension	\$18,122	\$20,348
	Disabled Members - Accidental	8.000	227
	Average Age	59.3	63.2
	Total Annual Pension	\$287,584	\$8,011,164
	Average Annual Pension	\$35,948	\$35,291
	Disabled Members - Ordinary	" <del>-</del>	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	*O	\$16,748
	Inactive Members	28.000	1,978
	Annuity Savings Fund	\$290,739	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	,	" ,
a.	Total Normal Cost	\$1,183,037	\$43,715,955
b.	Administrative Expenses	27,673	1,100,000
c.	Expected Employee Contributions	685,612	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$525,098	\$15,935,598
Unfu	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$15,204,912	\$708,337,933
b.	Retired Members and Beneficiaries	9,730,626	630,352,611
c.	Disabled Members - Accidental	3,479,569	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	290,739	18,530,021
f.	Total AAL = $a. + b. + c. + d. + e.$	\$28,705,846	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$28,705,846	\$1,459,223,833
h.	Actuarial Value of Assets	13,029,859	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$15,675,987	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$593,340	\$21,725,204
b.	Payment on UAL	869,380	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	66,994	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,529,714	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,501,694	\$67,190,465

# SUTTON - 720 Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	180.545	6,934
	Average Age	45.9	47.5
	Average Service	8.4	10.1
	Valuation Salary	6,094,111	\$304,282,630
	Average Salary	\$33,484	\$43,883
	Retired Members and Beneficiaries	58.000	3,351
	Average Age	72.4	73.5
	Total Annual Pension	\$1,095,486	\$68,184,912
	Average Annual Pension	\$18,888	\$20,348
	Disabled Members - Accidental	8.000	227
	Average Age	58.0	63.2
	Total Annual Pension	\$354,383	\$8,011,164
	Average Annual Pension	\$44,298	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	_	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	\$0	\$16,748
	Inactive Members	56.000	1,978
	Annuity Savings Fund	\$439,638	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	¥ 137,030	\(\psi\).0,550,021
a.	Total Normal Cost	\$980,739	\$43,715,955
ъ. Ъ.	Administrative Expenses	22,941	1,100,000
с.	Expected Employee Contributions	644,605	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$359,075	\$15,935,598
	anded Actuarial Accrued Liability (UAAL) as of Jan		<sub>\(\pi\)</sub> 20,700,070
	arial Accrued Liability (AAL):	•	
a.	Active Members	\$14,392,539	\$708,337,933
b.	Retired Members and Beneficiaries	10,626,307	630,352,611
c.	Disabled Members - Accidental	4,416,682	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	439,638	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$29,875,166	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	W=23,0103100	W1,102,225,000
g.	Actuarial Accrued Liability = f.	\$29,875,166	\$1,459,223,833
h.	Actuarial Value of Assets	13,547,044	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$16,328,122	\$773,735,700
		ψ10,520,122	Ψ110,100,100
	021 Appropriation	\$40E 741	\$21.725.204
a. L	Employer Normal Cost	\$405,741	\$21,725,204
b.	Payment on UAL	933,355	44,853,675
С.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$1,339,096	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,314,568	\$67,190,465

#### <u>TANTASQUA REGIONAL - 730</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	109.121	6,934
Average Age	50.1	47.5
Average Service	8.7	10.1
Valuation Salary	3,746,283	\$304,282,630
Average Salary	\$33,449	\$43,883
Retired Members and Beneficiaries	33.000	3,351
Average Age	72.7	73.5
Total Annual Pension	\$612,101	\$68,184,912
Average Annual Pension	\$18,549	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	**O	\$35,291
Disabled Members - Ordinary	_	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	**************************************	\$16,748
Inactive Members	44.000	1,978
Annuity Savings Fund	\$337,804	\$18,530,021
Employer Normal Cost as of January 1, 2018	" ,	" ,
a. Total Normal Cost	\$644,210	\$43,715,955
b. Administrative Expenses	15,069	1,100,000
c. Expected Employee Contributions	392,801	28,880,357
d. Employer Normal Cost = $a$ . + $b$ $c$ .	\$266,478	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$8,846,191	\$708,337,933
b. Retired Members and Beneficiaries	6,304,440	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	337,804	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$15,488,435	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$15,488,435	\$1,459,223,833
h. Actuarial Value of Assets	7,157,501	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$8,330,934	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$301,110	\$21,725,204
b. Payment on UAL	493,132	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$794,242	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$779,694	\$67,190,465

# <u>TEMPLETON - 740</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	66.247	6,934
	Average Age	47.1	47.5
	Average Service	11.3	10.1
	Valuation Salary	3,391,145	\$304,282,630
	Average Salary	\$49,870	\$43,883
	Retired Members and Beneficiaries	30.000	3,351
	Average Age	73.1	73.5
	Total Annual Pension	\$955,437	\$68,184,912
	Average Annual Pension	\$31,848	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	62.3	63.2
	Total Annual Pension	\$165,739	\$8,011,164
	Average Annual Pension	\$41,435	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	58.0	61.2
	Total Annual Pension	\$11,870	\$720,176
	Average Annual Pension	\$11,870	\$16,748
	Inactive Members	11.000	1,978
	Annuity Savings Fund	\$164,056	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	# - 0 · <b>,</b> 0 0 0	# - 0, <del>0 - 0</del> 0,0 <u></u> -
<u>a.</u>	Total Normal Cost	\$560,090	\$43,715,955
b.	Administrative Expenses	13,101	1,100,000
c.	Expected Employee Contributions	363,948	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$209,243	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$8,834,860	\$708,337,933
b.	Retired Members and Beneficiaries	9,035,954	630,352,611
c.	Disabled Members - Accidental	2,002,097	93,283,070
d.	Disabled Members - Ordinary	175,455	8,720,198
e.	Inactive Members	164,056	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$20,212,422	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$20,212,422	\$1,459,223,833
h.	Actuarial Value of Assets	9,497,226	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$10,715,196	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$236,437	\$21,725,204
b.	Payment on UAL	644,798	44,853,675
c.	Payment on 2002 ERI	22,540	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$903,775	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$887,221	\$67,190,465

#### <u>TEMPLETON HOUSING AUTHORITY - 750</u> Based on Valuation Results as of January 1, 2018

Summ	nary of Member Data	Member Unit	Worcester Regional
	Active Members	1.438	6,934
	Average Age	59.4	47.5
	Average Service	17.9	10.1
	Valuation Salary	90,946	\$304,282,630
	Average Salary	\$45,473	\$43,883
_	Retired Members and Beneficiaries	2.000	3,351
	Average Age	75.4	73.5
	Total Annual Pension	\$63,147	\$68,184,912
	Average Annual Pension	\$31,574	\$20,348
_	Disabled Members - Accidental		227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
_	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
_	Inactive Members	1.000	1,978
	Annuity Savings Fund	\$13,655	\$18,530,021
	,	W123022	ψ10,330,021
	oyer Normal Cost as of January 1, 2018	Ф4.4.02. <u>Г</u>	Ф42 74 F ОББ
	Total Normal Cost	\$14,935	\$43,715,955
	Administrative Expenses	349	1,100,000
	Expected Employee Contributions	9,566	28,880,357
d. 1	Employer Normal Cost = $a$ . + $b$ $c$ .	\$5,718	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	rial Accrued Liability (AAL):	#254.4FF	<b>\$</b> 700.227.022
	Active Members	\$351,175	\$708,337,933
	Retired Members and Beneficiaries	514,433	630,352,611
	Disabled Members - Accidental	0	93,283,070
	Disabled Members - Ordinary	0	8,720,198
	Inactive Members	13,655	18,530,021
	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$879,263	\$1,459,223,833
	ded Actuarial Accrued Liability (UAAL):		
_	Actuarial Accrued Liability = f.	\$879,263	\$1,459,223,833
	Actuarial Value of Assets	392,241	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$487,022	\$773,735,700
	21 Appropriation		
	Employer Normal Cost	\$6,461	\$21,725,204
	Payment on UAL	17,567	44,853,675
	Payment on 2002 ERI	22,355	1,554,689
	Payment on 2003 ERI	0	304,815
	Payment on 2010 ERI	0	5,770
f. '	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$46,383	\$68,444,153
]	If Total Appropriation paid on July 1, 2020	\$45,533	\$67,190,465

#### <u>UPTON - 760</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	66.021	6,934
	Average Age	48.1	47.5
	Average Service	12.9	10.1
	Valuation Salary	3,365,186	\$304,282,630
	Average Salary	\$49,488	\$43,883
	Retired Members and Beneficiaries	17.000	3,351
	Average Age	72.1	73.5
	Total Annual Pension	\$453,195	\$68,184,912
	Average Annual Pension	\$26,659	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	56.2	63.2
	Total Annual Pension	\$41,198	\$8,011,164
	Average Annual Pension	\$41,198	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	**************************************	\$16,748
	Inactive Members	11.000	1,978
	Annuity Savings Fund	\$156,978	\$18,530,021
Emp	ployer Normal Cost as of January 1, 2018	" /	" , ,
a.	Total Normal Cost	\$550,264	\$43,715,955
b.	Administrative Expenses	12,871	1,100,000
c.	Expected Employee Contributions	364,751	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$198,384	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$10,734,381	\$708,337,933
b.	Retired Members and Beneficiaries	4,347,950	630,352,611
c.	Disabled Members - Accidental	558,153	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	156,978	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$15,797,462	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$15,797,462	\$1,459,223,833
h.	Actuarial Value of Assets	7,047,289	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$8,750,173	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$224,165	\$21,725,204
b.	Payment on UAL	485,539	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$709,704	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$696,704	\$67,190,465

#### <u>UXBRIDGE - 770</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	175.152	6,934
	Average Age	47.3	47.5
	Average Service	11.6	10.1
	Valuation Salary	7,791,572	\$304,282,630
	Average Salary	\$43,528	\$43,883
	Retired Members and Beneficiaries	99.000	3,351
	Average Age	72.2	73.5
	Total Annual Pension	\$2,210,977	\$68,184,912
	Average Annual Pension	\$22,333	\$20,348
	Disabled Members - Accidental	4.000	227
	Average Age	59.1	63.2
	Total Annual Pension	\$141,533	\$8,011,164
	Average Annual Pension	\$35,383	\$35,291
	Disabled Members - Ordinary		43
	Average Age	_	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	\$0	\$16,748
	Inactive Members	48.000	1,978
	Annuity Savings Fund	\$493,364	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	¥ 123,30 1	ψ10,550,0 <b>2</b> 1
a.	Total Normal Cost	\$1,270,773	\$43,715,955
ъ. b.	Administrative Expenses	29,725	1,100,000
с.	Expected Employee Contributions	806,213	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$494,285	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan		W10,700,000
	arial Accrued Liability (AAL):	uary 1, 2010	
a.	Active Members	\$21,589,512	\$708,337,933
а. b.	Retired Members and Beneficiaries	22,431,402	630,352,611
	Disabled Members - Accidental	1,733,536	
c.	Disabled Members - Accidental  Disabled Members - Ordinary		93,283,070 8,720,198
d.	·	0	
e.	Inactive Members	493,364	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$46,247,814	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	ΦAC <b>2</b> A <b>7</b> 04 4	\$4 450 000 000
g.	Actuarial Accrued Liability = f.	\$46,247,814	\$1,459,223,833
h.	Actuarial Value of Assets	21,567,626	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$24,680,188	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$558,522	\$21,725,204
b.	Payment on UAL	1,453,083	44,853,675
c.	Payment on 2002 ERI	77,697	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$2,089,302	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,051,032	\$67,190,465

#### <u>UXBRIDGE HOUSING AUTHORITY - 780</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	3.989	6,934
Average Age	50.8	47.5
Average Service	13.5	10.1
Valuation Salary	209,477	\$304,282,630
Average Salary	\$52,369	\$43,883
Retired Members and Beneficiaries	6.000	3,351
Average Age	72.3	73.5
Total Annual Pension	\$88,213	\$68,184,912
Average Annual Pension	\$14,702	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	*O	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	1.000	1,978
Annuity Savings Fund	\$12,206	\$18,530,021
Employer Normal Cost as of January 1, 2018	" /	" ,
a. Total Normal Cost	\$31,430	\$43,715,955
b. Administrative Expenses	735	1,100,000
c. Expected Employee Contributions	20,261	28,880,357
d. Employer Normal Cost = a. + b c.	\$11,904	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Janu	aary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$572,888	\$708,337,933
b. Retired Members and Beneficiaries	924,683	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	12,206	18,530,021
f. Total AAL = $a. + b. + c. + d. + e.$	\$1,509,777	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,509,777	\$1,459,223,833
h. Actuarial Value of Assets	673,515	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$836,262	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$13,451	\$21,725,204
b. Payment on UAL	46,403	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a + b + c + d + e$ .	\$59,854	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$58,758	\$67,190,465

### WACHUSETT REGIONAL - 790

Sumr	mary of Member Data	Member Unit	Worcester Regional
	Active Members	430.399	6,934
	Average Age	48.2	47.5
	Average Service	8.3	10.1
	Valuation Salary	11,177,326	\$304,282,630
	Average Salary	\$25,636	\$43,883
	Retired Members and Beneficiaries	114.000	3,351
	Average Age	73.5	73.5
	Total Annual Pension	\$1,528,262	\$68,184,912
	Average Annual Pension	\$13,406	\$20,348
	Disabled Members - Accidental	2.000	227
	Average Age	67.0	63.2
	Total Annual Pension	\$52,521	\$8,011,164
	Average Annual Pension	\$26,261	\$35,291
	Disabled Members - Ordinary	-	43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	196.000	1,978
	Annuity Savings Fund	\$985,723	\$18,530,021
т.		ψ200 <b>3</b> ; 20	ψ10,530,0 <b>2</b> 1
	loyer Normal Cost as of January 1, 2018	Ø4 707 044	\$42.71F.0FF
a.	Total Normal Cost	\$1,787,811	\$43,715,955
b.	Administrative Expenses	41,819	1,100,000
c.	Expected Employee Contributions	1,111,587	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$718,043	\$15,935,598
	nded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
	arial Accrued Liability (AAL):	000 540 050	<b>#5</b> 00 <b>225</b> 022
a.	Active Members	\$23,710,250	\$708,337,933
b.	Retired Members and Beneficiaries	15,022,914	630,352,611
c.	Disabled Members - Accidental	583,872	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	985,723	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$40,302,759	\$1,459,223,833
Unfu	nded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$40,302,759	\$1,459,223,833
h.	Actuarial Value of Assets	18,499,039	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$21,803,720	\$773,735,700
FY20	21 Appropriation		
a.	Employer Normal Cost	\$811,361	\$21,725,204
b.	Payment on UAL	1,249,339	44,853,675
c.	Payment on 2002 ERI	59,556	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$2,120,256	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$2,081,419	\$67,190,465

#### <u>WARREN - 800</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	38.783	6,934
	Average Age	48.7	47.5
	Average Service	12.6	10.1
	Valuation Salary	1,459,740	\$304,282,630
	Average Salary	\$34,756	\$43,883
	Retired Members and Beneficiaries	16.000	3,351
	Average Age	71.1	73.5
	Total Annual Pension	\$315,859	\$68,184,912
	Average Annual Pension	\$19,741	\$20,348
	Disabled Members - Accidental	1.000	227
	Average Age	44.1	63.2
	Total Annual Pension	\$44,883	\$8,011,164
	Average Annual Pension	\$44,883	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	59.5	61.2
	Total Annual Pension	\$7,616	\$720,176
	Average Annual Pension	\$7,616	\$16,748
	Inactive Members	6.000	1,978
	Annuity Savings Fund	\$57,472	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$236,877	\$43,715,955
b.	Administrative Expenses	5,541	1,100,000
c.	Expected Employee Contributions	141,228	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$101,190	\$15,935,598
Unfu	unded Actuarial Accrued Liability (UAAL) as of Jan	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$4,538,665	\$708,337,933
b.	Retired Members and Beneficiaries	3,096,121	630,352,611
c.	Disabled Members - Accidental	622,553	93,283,070
d.	Disabled Members - Ordinary	119,184	8,720,198
e.	Inactive Members	57,472	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$8,433,995	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$8,433,995	\$1,459,223,833
h.	Actuarial Value of Assets	3,762,427	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$4,671,568	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$114,340	\$21,725,204
b.	Payment on UAL	234,716	44,853,675
c.	Payment on 2002 ERI	55,341	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	5,770	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$410,167	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$402,654	\$67,190,465

# <u>WARREN WATER DISTRICT - 810</u> Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	2.000	6,934
Average Age	60.2	47.5
Average Service	18.5	10.1
Valuation Salary	84,934	\$304,282,630
Average Salary	\$42,467	\$43,883
Retired Members and Beneficiaries	-	3,351
Average Age	-	73.5
Total Annual Pension	\$0	\$68,184,912
Average Annual Pension	\$0	\$20,348
Disabled Members - Accidental	-	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	\$0	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	<del>-</del>	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$0	\$16,748
Inactive Members	π °	1,978
Annuity Savings Fund	\$0	\$18,530,021
Employer Normal Cost as of January 1, 2018		. , ,
a. Total Normal Cost	\$15,359	\$43,715,955
b. Administrative Expenses	359	1,100,000
c. Expected Employee Contributions	8,540	28,880,357
d. Employer Normal Cost = $a$ . + $b$ $c$ .	\$7,178	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of J	January 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$382,647	\$708,337,933
b. Retired Members and Beneficiaries	0	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$382,647	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$382,647	\$1,459,223,833
h. Actuarial Value of Assets	170,700	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$211,947	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$8,112	\$21,725,204
b. Payment on UAL	11,761	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	<b>5,77</b> 0
f. Total Appropriation = $a. + b. + c. + d. + e.$	\$19,873	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$19,509	\$67,190,465

#### <u>WESTBORO - 820</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	399.700	6,934
	Average Age	48.0	47.5
	Average Service	10.8	10.1
	Valuation Salary	18,802,010	\$304,282,630
	Average Salary	\$46,197	\$43,883
	Retired Members and Beneficiaries	161.000	3,351
	Average Age	72.2	73.5
	Total Annual Pension	\$3,981,621	\$68,184,912
	Average Annual Pension	\$24,731	\$20,348
	Disabled Members - Accidental	15.000	227
	Average Age	61.0	63.2
	Total Annual Pension	\$596,963	\$8,011,164
	Average Annual Pension	\$39,798	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	64.3	61.2
	Total Annual Pension	\$62,268	\$720,176
	Average Annual Pension	\$31,134	\$16,748
	Inactive Members	64.000	1,978
	Annuity Savings Fund	\$721,156	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	n · - <b>,</b>	n - <b>,</b> ,
a.	Total Normal Cost	\$3,027,938	\$43,715,955
b.	Administrative Expenses	70,828	1,100,000
c.	Expected Employee Contributions	1,934,248	28,880,357
d.	Employer Normal Cost = a. + b c.	\$1,164,518	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jar		H
	arial Accrued Liability (AAL):	14419 1, 2010	
a.	Active Members	\$55,222,698	\$708,337,933
b.	Retired Members and Beneficiaries	39,130,468	630,352,611
с.	Disabled Members - Accidental	7,013,472	93,283,070
d.	Disabled Members - Ordinary	672,081	8,720,198
e.	Inactive Members	721,156	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$102,759,875	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	ψ102,737,073	Ψ1, τ37, 223,033
	Actuarial Accrued Liability = f.	\$102,759,875	\$1,459,223,833
g. h.	Actuarial Value of Assets	47,123,722	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$55,636,153	\$773,735,700
	, ,	#55,050,155	Ψ113,133,100
	021 Appropriation	\$4.24F.050	<b>*****</b>
a.	Employer Normal Cost	\$1,315,859	\$21,725,204
b.	Payment on UAL	3,230,953	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	37,218	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$4,584,030	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$4,500,066	\$67,190,465

#### <u>WESTBORO HOUSING AUTHORITY - 825</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	3.000	6,934
	Average Age	61.3	47.5
	Average Service	11.7	10.1
	Valuation Salary	197,365	\$304,282,630
	Average Salary	\$65,788	\$43,883
	Retired Members and Beneficiaries	2.000	3,351
	Average Age	72.7	73.5
	Total Annual Pension	\$31,245	\$68,184,912
	Average Annual Pension	\$15,623	\$20,348
	Disabled Members - Accidental	-	227
	Average Age	-	63.2
	Total Annual Pension	\$0	\$8,011,164
	Average Annual Pension	**************************************	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	64.2	61.2
	Total Annual Pension	\$13,957	\$720,176
	Average Annual Pension	\$13,957	\$16,748
	Inactive Members	1.000	1,978
	Annuity Savings Fund	\$4,776	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$33,870	\$43,715,955
b.	Administrative Expenses	792	1,100,000
c.	Expected Employee Contributions	20,887	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$13,775	\$15,935,598
	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$597,572	\$708,337,933
b.	Retired Members and Beneficiaries	290,451	630,352,611
c.	Disabled Members - Accidental	0	93,283,070
d.	Disabled Members - Ordinary	170,149	8,720,198
e.	Inactive Members	4,776	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$1,062,948	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$1,062,948	\$1,459,223,833
h.	Actuarial Value of Assets	474,184	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$588,764	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$15,565	\$21,725,204
b.	Payment on UAL	30,423	44,853,675
c.	Payment on 2002 ERI	5,312	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$51,300	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$50,360	\$67,190,465

#### <u>WEST BOYLSTON - 830</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	114.647	6,934
	Average Age	48.5	47.5
	Average Service	10.2	10.1
	Valuation Salary	5,289,953	\$304,282,630
	Average Salary	\$42,661	\$43,883
	Retired Members and Beneficiaries	65.000	3,351
	Average Age	75.1	73.5
	Total Annual Pension	\$1,344,254	\$68,184,912
	Average Annual Pension	\$20,681	\$20,348
	Disabled Members - Accidental	6.000	227
	Average Age	67.2	63.2
	Total Annual Pension	\$161,859	\$8,011,164
	Average Annual Pension	\$26,977	\$35,291
	Disabled Members - Ordinary		43
	Average Age	-	61.2
	Total Annual Pension	\$0	\$720,176
	Average Annual Pension	<b>\$</b> 0	\$16,748
	Inactive Members	33.000	1,978
	Annuity Savings Fund	\$353,148	\$18,530,021
Emp	oloyer Normal Cost as of January 1, 2018		
a.	Total Normal Cost	\$1,005,064	\$43,715,955
b.	Administrative Expenses	23,510	1,100,000
c.	Expected Employee Contributions	550,183	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$478,391	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$13,873,781	\$708,337,933
b.	Retired Members and Beneficiaries	12,390,137	630,352,611
c.	Disabled Members - Accidental	1,812,869	93,283,070
d.	Disabled Members - Ordinary	0	8,720,198
e.	Inactive Members	350,122	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$28,426,909	\$1,459,223,833
Unfu	unded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$28,426,909	\$1,459,223,833
h.	Actuarial Value of Assets	12,803,749	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$15,623,160	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$540,563	\$21,725,204
b.	Payment on UAL	855,475	44,853,675
c.	Payment on 2002 ERI	63,040	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,459,078	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,432,352	\$67,190,465

#### WEST BOYLSTON HOUSING AUTHORITY - 835

Summary of Member Data	Member Unit	Worcester Regional
Active Members	-	6,934
Average Age	-	47.5
Average Service	-	10.1
Valuation Salary	-	\$304,282,630
Average Salary	\$0	\$43,883
Retired Members and Beneficiaries	1.000	3,351
Average Age	55.2	73.5
Total Annual Pension	\$10,366	\$68,184,912
Average Annual Pension	\$10,366	\$20,348
Disabled Members - Accidental		227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	<b>\$</b> 0	\$35,291
Disabled Members - Ordinary	π ∨ -	43
Average Age	_	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	\$O	\$16,748
Inactive Members	ΨΟ	1,978
Annuity Savings Fund	\$0	\$18,530,021
, ,	şU	\$10,550,021
Employer Normal Cost as of January 1, 2018  a. Total Normal Cost	\$0	\$43,715,955
b. Administrative Expenses	0	1,100,000
c. Expected Employee Contributions	0	28,880,357
d. Employer Normal Cost = a. + b c.	\$0	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
Actuarial Accrued Liability (AAL):		
a. Active Members	\$0	\$708,337,933
b. Retired Members and Beneficiaries	163,860	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	0	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$163,860	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):	. ,	" , , ,
g. Actuarial Accrued Liability = f.	\$163,860	\$1,459,223,833
h. Actuarial Value of Assets	90,628	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$73,232	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$0	\$21,725,204
b. Payment on UAL	6,244	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$6,244	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$6,130	\$67,190,465

### WEST BOYLSTON WATER DISTRICT - 840 Based on Valuation Results as of January 1, 2018

Summary of Member Data	Member Unit	Worcester Regional
Active Members	6.000	6,934
Average Age	52.1	47.5
Average Service	12.9	10.1
Valuation Salary	298,365	\$304,282,630
Average Salary	\$49,728	\$43,883
Retired Members and Beneficiaries	6.000	3,351
Average Age	74.6	73.5
Total Annual Pension	\$112,032	\$68,184,912
Average Annual Pension	\$18,672	\$20,348
Disabled Members - Accidental	<del>-</del>	227
Average Age	-	63.2
Total Annual Pension	\$0	\$8,011,164
Average Annual Pension	<b>\$</b> 0	\$35,291
Disabled Members - Ordinary	- -	43
Average Age	-	61.2
Total Annual Pension	\$0	\$720,176
Average Annual Pension	<b>\$</b> O	\$16,748
Inactive Members	1.000	1,978
Annuity Savings Fund	\$18,502	\$18,530,021
Employer Normal Cost as of January 1, 2018	# 10,00 <u>0</u>	#10,000,0 <b>2</b> 1
a. Total Normal Cost	\$42,128	\$43,715,955
b. Administrative Expenses	985	1,100,000
c. Expected Employee Contributions	30,516	28,880,357
d. Employer Normal Cost = a. + b c.	\$12,597	\$15,935,598
Unfunded Actuarial Accrued Liability (UAAL) as of		" ,
Actuarial Accrued Liability (AAL):		
a. Active Members	\$846,257	\$708,337,933
b. Retired Members and Beneficiaries	942,959	630,352,611
c. Disabled Members - Accidental	0	93,283,070
d. Disabled Members - Ordinary	0	8,720,198
e. Inactive Members	18,502	18,530,021
f. Total AAL = $a + b + c + d + e$ .	\$1,807,718	\$1,459,223,833
Unfunded Actuarial Accrued Liability (UAAL):		
g. Actuarial Accrued Liability = f.	\$1,807,718	\$1,459,223,833
h. Actuarial Value of Assets	879,962	685,488,133
i. Unfunded Actuarial Accrued Liability = g h.	\$927,756	\$773,735,700
FY2021 Appropriation		
a. Employer Normal Cost	\$14,234	\$21,725,204
b. Payment on UAL	60,627	44,853,675
c. Payment on 2002 ERI	0	1,554,689
d. Payment on 2003 ERI	0	304,815
e. Payment on 2010 ERI	0	5,770
f. Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$74,861	\$68,444,153
If Total Appropriation paid on July 1, 2020	\$73,490	\$67,190,465

#### WEST BROOKFIELD - 850

Summa	ary of Member Data	Member Unit	Worcester Regional
	1ctive Members	27.029	6,934
А	verage Age	49.2	47.5
	verage Service	9.1	10.1
	aluation Salary	1,104,305	\$304,282,630
	verage Salary	\$33,464	\$43,883
	Letired Members and Beneficiaries	12.000	3,351
	verage Age	71.0	73.5
	otal Annual Pension	\$262,578	\$68,184,912
А	verage Annual Pension	\$21,882	\$20,348
	Disabled Members - Accidental	1.000	227
А	verage Age	48.8	63.2
	otal Annual Pension	\$49,101	\$8,011,164
	verage Annual Pension	\$49,101	\$35,291
	Disabled Members - Ordinary	" <i>-</i>	43
	verage Age	-	61.2
	otal Annual Pension	\$0	\$720,176
	verage Annual Pension	<b>\$</b> 0	\$16,748
	nactive Members	4.000	1,978
	annuity Savings Fund	\$56,097	\$18,530,021
		ψο <b>υ,</b> υν	ψ10,330,021
	yer Normal Cost as of January 1, 2018	#224.24B	Ф42 74 F ОББ
	otal Normal Cost	\$226,268	\$43,715,955
	dministrative Expenses	5,293	1,100,000
	expected Employee Contributions	120,800	28,880,357
d. E	Employer Normal Cost = $a$ . + $b$ $c$ .	\$110,761	\$15,935,598
	led Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	al Accrued Liability (AAL):	<b>**2</b> ( <b>*</b> 70 <b>**4 *</b>	Ф <b>Т</b> ОО <b>22Т</b> 0 <b>2</b> 2
	active Members	\$2,670,445	\$708,337,933
	etired Members and Beneficiaries	2,868,716	630,352,611
	Disabled Members - Accidental	687,652	93,283,070
	Disabled Members - Ordinary	0	8,720,198
	nactive Members	56,097	18,530,021
	fotal AAL = a. + b. + c. + d. + e.	\$6,282,910	\$1,459,223,833
	ed Actuarial Accrued Liability (UAAL):		
_	ctuarial Accrued Liability = f.	\$6,282,910	\$1,459,223,833
	ectuarial Value of Assets	2,861,983	685,488,133
i. U	Infunded Actuarial Accrued Liability = g h.	\$3,420,927	\$773,735,700
	Appropriation		
	Employer Normal Cost	\$125,156	\$21,725,204
	ayment on UAL	197,183	44,853,675
	ayment on 2002 ERI	0	1,554,689
	ayment on 2003 ERI	0	304,815
	ayment on 2010 ERI	0	5,770
f. T	otal Appropriation = a. + b. + c. + d. + e.	\$322,339	\$68,444,153
I	f Total Appropriation paid on July 1, 2020	\$316,435	\$67,190,465

### <u>WESTMINSTER - 860</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	71.709	6,934
	Average Age	46.4	47.5
	Average Service	12.2	10.1
	Valuation Salary	3,800,804	\$304,282,630
	Average Salary	\$48,111	\$43,883
	Retired Members and Beneficiaries	31.000	3,351
	Average Age	69.8	73.5
	Total Annual Pension	\$805,431	\$68,184,912
	Average Annual Pension	\$25,982	\$20,348
	Disabled Members - Accidental	3.000	227
	Average Age	58.0	63.2
	Total Annual Pension	\$122,759	\$8,011,164
	Average Annual Pension	\$40,920	\$35,291
	Disabled Members - Ordinary	2.000	43
	Average Age	52.0	61.2
	Total Annual Pension	\$38,753	\$720,176
	Average Annual Pension	\$19,377	\$16,748
	Inactive Members	5.000	1,978
	Annuity Savings Fund	\$28,318	\$18,530,021
Emr	ployer Normal Cost as of January 1, 2018	W20,010	\(\psi\).0,550,021
a.	Total Normal Cost	\$614,558	\$43,715,955
ъ. Ъ.	Administrative Expenses	14,376	1,100,000
c.	Expected Employee Contributions	384,485	28,880,357
d.	Employer Normal Cost = $a$ . + $b$ $c$ .	\$244,449	\$15,935,598
	anded Actuarial Accrued Liability (UAAL) as of Jan	· •	<sub>\(\pi\)</sub> 20,700,070
	arial Accrued Liability (AAL):	,	
a.	Active Members	\$11,756,789	\$708,337,933
b.	Retired Members and Beneficiaries	8,164,759	630,352,611
c.	Disabled Members - Accidental	1,583,093	93,283,070
d.	Disabled Members - Ordinary	563,600	8,720,198
e.	Inactive Members	26,297	18,530,021
f.	Total AAL = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$22,094,538	\$1,459,223,833
	anded Actuarial Accrued Liability (UAAL):	W22,00 1,000	Ψ1,107,223,033
	Actuarial Accrued Liability = f.	\$22,094,538	\$1,459,223,833
g. h.	Actuarial Value of Assets	10,197,685	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$11,896,853	\$773,735,700
		Ψ11,020,033	ψ113,133,100
	021 Appropriation	\$277.249	Ф21 72F 204
a.	Employer Normal Cost	\$276,218	\$21,725,204
b.	Payment on UAL	700,389	44,853,675
c.	Payment on 2002 ERI	0	1,554,689
d.	Payment on 2003 ERI	5,211	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a$ . + $b$ . + $c$ . + $d$ . + $e$ .	\$981,818	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$963,834	\$67,190,465

#### <u>WINCHENDON - 870</u> Based on Valuation Results as of January 1, 2018

Sum	mary of Member Data	Member Unit	Worcester Regional
	Active Members	143.828	6,934
	Average Age	49.1	47.5
	Average Service	11.0	10.1
	Valuation Salary	5,673,513	\$304,282,630
	Average Salary	\$38,860	\$43,883
	Retired Members and Beneficiaries	92.000	3,351
	Average Age	72.2	73.5
	Total Annual Pension	\$1,859,285	\$68,184,912
	Average Annual Pension	\$20,210	\$20,348
	Disabled Members - Accidental	9.000	227
	Average Age	63.3	63.2
	Total Annual Pension	\$315,971	\$8,011,164
	Average Annual Pension	\$35,108	\$35,291
	Disabled Members - Ordinary	1.000	43
	Average Age	70.2	61.2
	Total Annual Pension	\$15,392	\$720,176
	Average Annual Pension	\$15,392	\$16,748
	Inactive Members	56.000	1,978
	Annuity Savings Fund	\$577,130	\$18,530,021
Emr	oloyer Normal Cost as of January 1, 2018	,	" ,
a.	Total Normal Cost	\$1,012,233	\$43,715,955
b.	Administrative Expenses	23,678	1,100,000
c.	Expected Employee Contributions	595,301	28,880,357
d.	Employer Normal Cost = $a. + b c.$	\$440,610	\$15,935,598
Unfi	unded Actuarial Accrued Liability (UAAL) as of Jar	nuary 1, 2018	
Actu	arial Accrued Liability (AAL):		
a.	Active Members	\$15,242,828	\$708,337,933
b.	Retired Members and Beneficiaries	18,536,382	630,352,611
c.	Disabled Members - Accidental	3,592,931	93,283,070
d.	Disabled Members - Ordinary	155,324	8,720,198
e.	Inactive Members	577,130	18,530,021
f.	Total AAL = a. + b. + c. + d. + e.	\$38,104,595	\$1,459,223,833
Unfu	anded Actuarial Accrued Liability (UAAL):		
g.	Actuarial Accrued Liability = f.	\$38,104,595	\$1,459,223,833
h.	Actuarial Value of Assets	17,477,899	685,488,133
i.	Unfunded Actuarial Accrued Liability = g h.	\$20,626,696	\$773,735,700
FY2	021 Appropriation		
a.	Employer Normal Cost	\$497,872	\$21,725,204
b.	Payment on UAL	1,177,435	44,853,675
c.	Payment on 2002 ERI	63,221	1,554,689
d.	Payment on 2003 ERI	0	304,815
e.	Payment on 2010 ERI	0	5,770
f.	Total Appropriation = $a. + b. + c. + d. + e.$	\$1,738,528	\$68,444,153
	If Total Appropriation paid on July 1, 2020	\$1,706,683	\$67,190,465

#### WINCHENDON HOUSING AUTHORITY - 880

Summary	of Member Data	Member Unit	Worcester Regional
	ne Members	10.000	6,934
Aver	rage Age	58.3	47.5
	rage Service	18.7	10.1
	ation Salary	606,964	\$304,282,630
	age Salary	\$60,696	\$43,883
	ed Members and Beneficiaries	3.000	3,351
	rage Age	79.7	73.5
	l Annual Pension	\$51,080	\$68,184,912
Aver	rage Annual Pension	\$17,027	\$20,348
	bled Members - Accidental	<u> </u>	227
Aver	rage Age	-	63.2
	l Annual Pension	\$0	\$8,011,164
	rage Annual Pension	**************************************	\$35,291
	bled Members - Ordinary	" <del>-</del>	43
	rage Age	-	61.2
	l Annual Pension	\$0	\$720,176
	rage Annual Pension	<b>\$</b> 0	\$16,748
	ive Members	π ~ -	1,978
	uity Savings Fund	\$0	\$18,530,021
	,	<b>4</b> 0	ψ10,000,021
	Normal Cost as of January 1, 2018	<b>\$0.4.202</b>	Ф42 71 Г ОГ Г
	l Normal Cost	\$94,292	\$43,715,955
	inistrative Expenses	2,205	1,100,000
-	ected Employee Contributions	61,431	28,880,357
d. Emp	loyer Normal Cost = a. + b c.	\$35,066	\$15,935,598
	Actuarial Accrued Liability (UAAL) as of Jan	uary 1, 2018	
	ccrued Liability (AAL):	<b>\$2.45</b> ( 225	Ф <b>Т</b> ОО <b>22Т</b> 0 <b>2</b> 2
	ve Members	\$2,456,235	\$708,337,933
	red Members and Beneficiaries	339,709	630,352,611
	bled Members - Accidental	0	93,283,070
	bled Members - Ordinary	0	8,720,198
	rive Members	0	18,530,021
	1  AAL = a. + b. + c. + d. + e.	\$2,795,944	\$1,459,223,833
	Actuarial Accrued Liability (UAAL):		
_	arial Accrued Liability = f.	\$2,795,944	\$1,459,223,833
	arial Value of Assets	1,247,277	685,488,133
i. Unfu	ınded Actuarial Accrued Liability = g h.	\$1,548,667	\$773,735,700
	ppropriation		
	loyer Normal Cost	\$39,624	\$21,725,204
•	nent on UAL	83,841	44,853,675
	nent on 2002 ERI	4,947	1,554,689
•	nent on 2003 ERI	0	304,815
•	nent on 2010 ERI	0	5,770
f. Tota	1  Appropriation = a. + b. + c. + d. + e.	\$128,412	\$68,444,153
If To	otal Appropriation paid on July 1, 2020	\$126,060	\$67,190,465