

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

ASHBURNHAM - 010

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2,000 | 43 |
| Average Age | 70.6 | 61.2 |
| Total Annual Pension | \$54,720 | \$720,176 |
| Average Annual Pension | \$27,360 | \$16,748 |
| <i>Inactive Members</i> | 10,000 | 1,978 |
| Annuity Savings Fund | \$500,123 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$301,036 | \$21,024,235 |
| b. Payment on UAL | 481,782 | 39,440,820 |
| c. Payment on 2002 ERI | 32,091 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$814,909 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$799,982 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

ASHBURNHAM-WESTMINSTER REGIONAL - 020

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 64.9 | 63.2 |
| Total Annual Pension | \$64,618 | \$8,011,164 |
| Average Annual Pension | \$32,309 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 66,000 | 1,978 |
| Annuity Savings Fund | \$362,575 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 January 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$262,120 | \$21,024,235 |
| b. Payment on UAL | 408,651 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$670,771 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$658,485 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

ATHOL - 025

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 15.000 | 227 |
| Average Age | 61.2 | 63.2 |
| Total Annual Pension | \$527,835 | \$8,011,164 |
| Average Annual Pension | \$35,189 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 3.000 | 43 |
| Average Age | 69.7 | 61.2 |
| Total Annual Pension | \$44,219 | \$720,176 |
| Average Annual Pension | \$14,740 | \$16,748 |
| <i>Inactive Members</i> | 15.000 | 1,978 |
| Annuity Savings Fund | \$162,880 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| a. Active Members | \$16,665,014 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 27,815,025 | 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. | \$51,441,222 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$51,441,222 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 23,423,727 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$28,017,495 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$403,674 | \$21,024,235 |
| b. Payment on UAL | 1,407,416 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,811,090 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,777,916 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

ATHOL HOUSING AUTHORITY - 026

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$34,688 | \$43,715,955 |
| b. Administrative Expenses | 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-----------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$13,167 | \$21,024,235 |
| b. Payment on UAL | 22,352 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$35,519 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$34,868 | \$61,110,021 |

Worcester Regional Contributory Retirement System

Annual Appropriation for 2020 Fiscal Year

ATHOL-ROYALSTON REGIONAL SCHOOL DISTRICT - 027

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|-------------|-----------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4.000 | 227 |
| Average Age | 67.4 | 63.2 |
| Total Annual Pension | \$75,251 | \$8,011,164 |
| Average Annual Pension | \$18,813 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 22.000 | 1,978 |
| Annuity Savings Fund | \$173,971 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$375,475 | \$43,715,955 |
| b. Administrative Expenses | 8,783 | 1,100,000 |
| c. Expected Employee Contributions | 233,945 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$150,313 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$164,368 | \$21,024,235 |
| b. Payment on UAL | 404,009 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$568,377 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$557,966

\$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

AUBURN - 030

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 13.000 | 227 |
| Average Age | 61.5 | 63.2 |
| Total Annual Pension | \$492,262 | \$8,011,164 |
| Average Annual Pension | \$37,866 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2.000 | 43 |
| Average Age | 53.6 | 61.2 |
| Total Annual Pension | \$29,992 | \$720,176 |
| Average Annual Pension | \$14,996 | \$16,748 |
| <i>Inactive Members</i> | 76.000 | 1,978 |
| Annuity Savings Fund | \$622,981 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$1,127,350 | \$21,024,235 |
| b. Payment on UAL | 1,960,883 | 39,440,820 |
| c. Payment on 2002 ERI | 176,762 | 1,487,741 |
| d. Payment on 2003 ERI | 27,426 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$3,292,421 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$3,232,114 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

AUBURN HOUSING AUTHORITY - 040

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 2,000 | 1,978 |
| Annuity Savings Fund | \$21,071 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$46,601 | \$43,715,955 |
| b. Administrative Expenses | 1,090 | 1,100,000 |
| c. Expected Employee Contributions | 27,318 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$20,373 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$766,248 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 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. + 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 Liability = g. - h. | \$814,637 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$22,279 | \$21,024,235 |
| b. Payment on UAL | 41,726 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$64,005 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$62,833 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

AUBURN WATER DISTRICT - 050

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$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 |
| c. Expected Employee Contributions | 53,815 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$25,509 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$2,078,545 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 156,509 | 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. | \$2,235,054 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$27,894 | \$21,024,235 |
| b. Payment on UAL | 60,640 | 39,440,820 |
| c. Payment on 2002 ERI | 5,260 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$93,794 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$92,076 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BARRE - 060

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 75.0 | 63.2 |
| Total Annual Pension | \$24,995 | \$8,011,164 |
| Average Annual Pension | \$24,995 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 56.8 | 61.2 |
| Total Annual Pension | \$7,459 | \$720,176 |
| Average Annual Pension | \$7,459 | \$16,748 |
| <i>Inactive Members</i> | 11,000 | 1,978 |
| Annuity Savings Fund | \$247,817 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$136,848 | \$21,024,235 |
| b. Payment on UAL | 187,218 | 39,440,820 |
| c. Payment on 2002 ERI | 5,788 | 1,487,741 |
| d. Payment on 2003 ERI | 2,315 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$332,169 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$326,085

\$61,110,021

Worcester Regional Contributory Retirement System

Annual Appropriation for 2020 Fiscal Year

BARRE HOUSING AUTHORITY - 070

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|-------------|-----------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$4,049 | \$21,024,235 |
| b. Payment on UAL | 14,608 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$18,657 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$18,315

\$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BERLIN - 080

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 58.8 | 63.2 |
| Total Annual Pension | \$27,667 | \$8,011,164 |
| Average Annual Pension | \$27,667 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 55.8 | 61.2 |
| Total Annual Pension | \$15,527 | \$720,176 |
| Average Annual Pension | \$15,527 | \$16,748 |
| <i>Inactive Members</i> | 10,000 | 1,978 |
| Annuity Savings Fund | \$125,098 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$185,969 | \$21,024,235 |
| b. Payment on UAL | 306,166 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$492,135 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$483,121 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BERLIN-BOYLSTON REGIONAL - 090

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 9,000 | 1,978 |
| Annuity Savings Fund | \$42,507 | \$18,530,021 |

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 January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$2,103,959 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 1,518,450 | 630,352,611 |
| c. Disabled Members - Accidental | 0 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 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):

| | | |
|---|-------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$66,729 | \$21,024,235 |
| b. Payment on UAL | 98,235 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$164,964 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$161,942 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BLACKSTONE - 100

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4,000 | 227 |
| Average Age | 58.3 | 63.2 |
| Total Annual Pension | \$144,810 | \$8,011,164 |
| Average Annual Pension | \$36,203 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 79.4 | 61.2 |
| Total Annual Pension | \$22,196 | \$720,176 |
| Average Annual Pension | \$22,196 | \$16,748 |
| <i>Inactive Members</i> | 12,000 | 1,978 |
| Annuity Savings Fund | \$143,311 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$315,211 | \$21,024,235 |
| b. Payment on UAL | 540,608 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$855,819 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$840,143 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BLACKSTONE HOUSING AUTHORITY - 105

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 1.000 | 1,978 |
| Annuity Savings Fund | \$14,530 | \$18,530,021 |

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 January 1, 2018

| | | |
|---|-----------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| 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): | | |
| 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$7,584 | \$21,024,235 |
| b. Payment on UAL | 10,002 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$17,586 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$17,264 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BLACKSTONE-MILLVILLE REGIONAL - 110

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 74.7 | 63.2 |
| Total Annual Pension | \$35,687 | \$8,011,164 |
| Average Annual Pension | \$35,687 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 66.7 | 61.2 |
| Total Annual Pension | \$20,708 | \$720,176 |
| Average Annual Pension | \$20,708 | \$16,748 |
| <i>Inactive Members</i> | 25,000 | 1,978 |
| Annuity Savings Fund | \$150,806 | \$18,530,021 |

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 January 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 |

FY2020 Appropriation

| | | |
|--|------------------|---------------------|
| a. Employer Normal Cost | \$196,321 | \$21,024,235 |
| b. Payment on UAL | 340,019 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$536,340 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$526,516 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BOLTON - 120

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 54.7 | 61.2 |
| Total Annual Pension | \$39,509 | \$720,176 |
| Average Annual Pension | \$39,509 | \$16,748 |
| <i>Inactive Members</i> | 7,000 | 1,978 |
| Annuity Savings Fund | \$270,009 | \$18,530,021 |

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 (UAAL) 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):

| | | |
|---|--------------|-----------------|
| 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. - h. | \$6,104,325 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$169,398 | \$21,024,235 |
| b. Payment on UAL | 294,091 | 39,440,820 |
| c. Payment on 2002 ERI | 17,362 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$480,851 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$472,043 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BOYLSTON - 130

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 61.9 | 63.2 |
| Total Annual Pension | \$73,586 | \$8,011,164 |
| Average Annual Pension | \$36,793 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 7,000 | 1,978 |
| Annuity Savings Fund | \$67,076 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$296,942 | \$21,024,235 |
| b. Payment on UAL | 362,836 | 39,440,820 |
| c. Payment on 2002 ERI | 13,153 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$672,931 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$660,605 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BOYLSTON WATER DISTRICT - 135

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$3,717 | \$21,024,235 |
| b. Payment on UAL | 8,497 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$12,214 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$11,990 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

BROOKFIELD - 140

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 58.6 | 63.2 |
| Total Annual Pension | \$53,007 | \$8,011,164 |
| Average Annual Pension | \$26,504 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 46.9 | 61.2 |
| Total Annual Pension | \$17,036 | \$720,176 |
| Average Annual Pension | \$17,036 | \$16,748 |
| <i>Inactive Members</i> | 7,000 | 1,978 |
| Annuity Savings Fund | \$19,989 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$103,491 | \$21,024,235 |
| b. Payment on UAL | 178,266 | 39,440,820 |
| c. Payment on 2002 ERI | 8,768 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$290,525 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$285,203 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

CHARLTON - 150

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 8,000 | 227 |
| Average Age | 52.4 | 63.2 |
| Total Annual Pension | \$367,586 | \$8,011,164 |
| Average Annual Pension | \$45,948 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 11,000 | 1,978 |
| Annuity Savings Fund | \$104,711 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$516,181 | \$21,024,235 |
| b. Payment on UAL | 818,892 | 39,440,820 |
| c. Payment on 2002 ERI | 44,893 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,379,966 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$1,354,689 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

CHERRY VALLEY-ROCHDALE WATER - 160

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$6,759 | \$21,024,235 |
| b. Payment on UAL | 48,081 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$54,840 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$53,835

\$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

CHERRY VALLEY SEWER DISTRICT - 165

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | - | 6,934 |
| Average Age | - | 47.5 |
| Average Service | - | 10.1 |
| Valuation Salary | - | \$304,282,630 |
| Average Salary | \$0 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-----|-----------------|
| a. Active Members | \$0 | \$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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----|--------------|
| a. Employer Normal Cost | \$0 | \$21,024,235 |
| b. Payment on UAL | 0 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$0 | \$62,250,254 |

| | | |
|--|------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$0 | \$61,110,021 |
|--|------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

DOUGLAS - 170

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 64.3 | 63.2 |
| Total Annual Pension | \$93,750 | \$8,011,164 |
| Average Annual Pension | \$46,875 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 75,000 | 1,978 |
| Annuity Savings Fund | \$634,356 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$476,996 | \$21,024,235 |
| b. Payment on UAL | 606,930 | 39,440,820 |
| c. Payment on 2002 ERI | 12,624 | 1,487,741 |
| d. Payment on 2003 ERI | 12,109 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,108,659 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,088,352 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

DUDLEY - 180

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 5,000 | 227 |
| Average Age | 66.1 | 63.2 |
| Total Annual Pension | \$173,588 | \$8,011,164 |
| Average Annual Pension | \$34,718 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 17,000 | 1,978 |
| Annuity Savings Fund | \$342,336 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$242,253 | \$21,024,235 |
| b. Payment on UAL | 500,994 | 39,440,820 |
| c. Payment on 2002 ERI | 134,150 | 1,487,741 |
| d. Payment on 2003 ERI | 8,014 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$885,411 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$869,193 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

DUDLEY HOUSING AUTHORITY - 190

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|---------|--------------|
| a. Total Normal Cost | \$3,409 | \$43,715,955 |
| b. Administrative Expenses | 80 | 1,100,000 |
| c. Expected Employee Contributions | 1,038 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$2,451 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-----------|-----------------|
| a. Active Members | \$118,664 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 369,012 | 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. | \$487,676 | \$1,459,223,833 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$2,680 | \$21,024,235 |
| b. Payment on UAL | 13,072 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$15,752 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$15,463 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

DUDLEY-CHARLTON REGIONAL - 200
Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|-------------|-----------------------|
| <i>Active Members</i> | 148,560 | 6,934 |
| Average Age | 50.1 | 47.5 |
| Average Service | 11.5 | 10.1 |
| Valuation Salary | 4,968,719 | \$304,282,630 |
| Average Salary | \$32,905 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 64,000 | 3,351 |
| Average Age | 76.5 | 73.5 |
| Total Annual Pension | \$1,194,981 | \$68,184,912 |
| Average Annual Pension | \$18,672 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 64.9 | 61.2 |
| Total Annual Pension | \$4,722 | \$720,176 |
| Average Annual Pension | \$4,722 | \$16,748 |
| <i>Inactive Members</i> | 33,000 | 1,978 |
| Annuity Savings Fund | \$350,429 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$792,726 | \$43,715,955 |
| b. Administrative Expenses | 18,543 | 1,100,000 |
| c. Expected Employee Contributions | 500,338 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$310,931 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$13,720,885 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 10,565,524 | 630,352,611 |
| c. Disabled Members - Accidental | 0 | 93,283,070 |
| d. Disabled Members - Ordinary | 61,305 | 8,720,198 |
| e. Inactive Members | 350,429 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$24,698,143 | \$1,459,223,833 |
| Unfunded Actuarial Accrued Liability (UAAL): | | |
| g. Actuarial Accrued Liability = f. | \$24,698,143 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 11,089,259 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$13,608,884 | \$773,735,700 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$340,004 | \$21,024,235 |
| b. Payment on UAL | 643,625 | 39,440,820 |
| c. Payment on 2002 ERI | 41,208 | 1,487,741 |
| d. Payment on 2003 ERI | 17,987 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,042,824 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,023,723 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

EAST BROOKFIELD - 210

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 15,403 | 6,934 |
| Average Age | 54.2 | 47.5 |
| Average Service | 14.6 | 10.1 |
| Valuation Salary | 607,639 | \$304,282,630 |
| Average Salary | \$31,981 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 3,000 | 3,351 |
| Average Age | 71.4 | 73.5 |
| Total Annual Pension | \$91,058 | \$68,184,912 |
| Average Annual Pension | \$30,353 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$127,675 | \$43,715,955 |
| b. Administrative Expenses | 2,986 | 1,100,000 |
| c. Expected Employee Contributions | 64,191 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$66,470 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-------------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$2,021,346 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 910,347 | 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. | \$2,931,693 | \$1,459,223,833 |
| Unfunded Actuarial Accrued Liability (UAAL): | | |
| g. Actuarial Accrued Liability = f. | \$2,931,693 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 1,410,301 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$1,521,392 | \$773,735,700 |

FY2020 Appropriation

| | | |
|--|------------------|---------------------|
| a. Employer Normal Cost | \$72,684 | \$21,024,235 |
| b. Payment on UAL | 84,738 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$157,422 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$154,539 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

GRAFTON - 220

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 10,000 | 227 |
| Average Age | 69.3 | 63.2 |
| Total Annual Pension | \$300,556 | \$8,011,164 |
| Average Annual Pension | \$30,056 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 49.6 | 61.2 |
| Total Annual Pension | \$7,552 | \$720,176 |
| Average Annual Pension | \$7,552 | \$16,748 |
| <i>Inactive Members</i> | 122,000 | 1,978 |
| Annuity Savings Fund | \$1,193,276 | \$18,530,021 |

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 January 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): | | |
| g. Actuarial Accrued Liability = f. | \$44,301,396 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 20,174,356 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$24,127,040 | \$773,735,700 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$666,022 | \$21,024,235 |
| b. Payment on UAL | 1,189,977 | 39,440,820 |
| c. Payment on 2002 ERI | 40,507 | 1,487,741 |
| d. Payment on 2003 ERI | 17,452 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,913,958 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,878,900 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

GRAFTON HOUSING AUTHORITY - 230

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$12,967 | \$21,024,235 |
| b. Payment on UAL | 37,971 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$50,938 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$50,005 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HARDWICK - 240

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 65.1 | 63.2 |
| Total Annual Pension | \$32,991 | \$8,011,164 |
| Average Annual Pension | \$32,991 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 5,000 | 1,978 |
| Annuity Savings Fund | \$12,031 | \$18,530,021 |

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 January 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):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$4,816,121 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 2,198,026 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$2,618,095 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$53,587 | \$21,024,235 |
| b. Payment on UAL | 126,963 | 39,440,820 |
| c. Payment on 2002 ERI | 13,329 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$193,879 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$190,328

\$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HARVARD - 250

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 76.7 | 63.2 |
| Total Annual Pension | \$30,508 | \$8,011,164 |
| Average Annual Pension | \$30,508 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 28,000 | 1,978 |
| Annuity Savings Fund | \$507,490 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$282,604 | \$21,024,235 |
| b. Payment on UAL | 634,971 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$917,575 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$900,768 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HILLCREST WATER DISTRICT - 260

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 0.488 | 6,934 |
| Average Age | 47.5 | 47.5 |
| Average Service | 17.8 | 10.1 |
| Valuation Salary | 39,783 | \$304,282,630 |
| Average Salary | \$19,892 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|---------|--------------|
| a. Total Normal Cost | \$4,361 | \$43,715,955 |
| b. Administrative Expenses | 102 | 1,100,000 |
| c. Expected Employee Contributions | 4,270 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$193 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-----------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$125,281 | \$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. | \$125,281 | \$1,459,223,833 |
| Unfunded Actuarial Accrued Liability (UAAL): | | |
| g. Actuarial Accrued Liability = f. | \$125,281 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 55,888 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$69,393 | \$773,735,700 |

FY2020 Appropriation

| | | |
|--|----------------|---------------------|
| a. Employer Normal Cost | \$211 | \$21,024,235 |
| b. Payment on UAL | 3,358 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$3,569 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$3,504 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HOLDEN - 270

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 6,000 | 227 |
| Average Age | 61.9 | 63.2 |
| Total Annual Pension | \$215,558 | \$8,011,164 |
| Average Annual Pension | \$35,926 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 23,000 | 1,978 |
| Annuity Savings Fund | \$610,297 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$600,797 | \$21,024,235 |
| b. Payment on UAL | 1,522,299 | 39,440,820 |
| c. Payment on 2002 ERI | 66,461 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$2,189,557 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$2,149,451 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HOLDEN HOUSING AUTHORITY - 280
Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$25,487 | \$43,715,955 |
| b. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-----------|-----------------|
| a. Active Members | \$484,384 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 164,278 | 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. | \$648,662 | \$1,459,223,833 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$15,922 | \$21,024,235 |
| b. Payment on UAL | 17,387 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$33,309 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$32,699 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HOPEDALE - 290

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 3,000 | 227 |
| Average Age | 49.8 | 63.2 |
| Total Annual Pension | \$116,246 | \$8,011,164 |
| Average Annual Pension | \$38,749 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 3,000 | 43 |
| Average Age | 65.2 | 61.2 |
| Total Annual Pension | \$57,758 | \$720,176 |
| Average Annual Pension | \$19,253 | \$16,748 |
| <i>Inactive Members</i> | 52,000 | 1,978 |
| Annuity Savings Fund | \$327,675 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$855,425 | \$43,715,955 |
| b. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$397,859 | \$21,024,235 |
| b. Payment on UAL | 589,858 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$987,717 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$969,625 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HOPEDALE HOUSING AUTHORITY - 300

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | - | 6,934 |
| Average Age | - | 47.5 |
| Average Service | - | 10.1 |
| Valuation Salary | - | \$304,282,630 |
| Average Salary | \$0 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 85.4 | 63.2 |
| Total Annual Pension | \$18,973 | \$8,011,164 |
| Average Annual Pension | \$18,973 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 January 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 |

FY2020 Appropriation

| | | |
|--|----------------|---------------------|
| a. Employer Normal Cost | \$0 | \$21,024,235 |
| b. Payment on UAL | 4,991 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$4,991 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$4,900 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

HUBBARDSTON - 310

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 61.8 | 63.2 |
| Total Annual Pension | \$33,536 | \$8,011,164 |
| Average Annual Pension | \$33,536 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 18,000 | 1,978 |
| Annuity Savings Fund | \$48,692 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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. | \$4,784,588 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$4,784,588 | \$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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$114,578 | \$21,024,235 |
| b. Payment on UAL | 126,166 | 39,440,820 |
| c. Payment on 2002 ERI | 10,521 | 1,487,741 |
| d. Payment on 2003 ERI | 4,451 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$255,716 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$251,032 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LANCASTER - 320

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 65.0 | 63.2 |
| Total Annual Pension | \$62,161 | \$8,011,164 |
| Average Annual Pension | \$62,161 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 63.4 | 61.2 |
| Total Annual Pension | \$10,222 | \$720,176 |
| Average Annual Pension | \$10,222 | \$16,748 |
| <i>Inactive Members</i> | 2,000 | 1,978 |
| Annuity Savings Fund | \$12,483 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$233,925 | \$21,024,235 |
| b. Payment on UAL | 435,943 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$669,868 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$657,598 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LANCASTER HOUSING AUTHORITY - 325

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$10,286 | \$43,715,955 |
| b. Administrative Expenses | 241 | 1,100,000 |
| c. Expected Employee Contributions | 5,367 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$5,160 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-----------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$28,215 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 348,270 | 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. | \$376,485 | \$1,459,223,833 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$5,642 | \$21,024,235 |
| b. Payment on UAL | 10,091 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$15,733 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$15,445 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LANCASTER SEWER - 327

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-----|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$0 | \$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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|----------------|---------------------|
| a. Employer Normal Cost | \$2,141 | \$21,024,235 |
| b. Payment on UAL | 0 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$2,141 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$2,102 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LEICESTER - 330

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 6,000 | 227 |
| Average Age | 68.9 | 63.2 |
| Total Annual Pension | \$175,869 | \$8,011,164 |
| Average Annual Pension | \$29,312 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 56.4 | 61.2 |
| Total Annual Pension | \$12,139 | \$720,176 |
| Average Annual Pension | \$12,139 | \$16,748 |
| <i>Inactive Members</i> | 48,000 | 1,978 |
| Annuity Savings Fund | \$297,289 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$411,279 | \$21,024,235 |
| b. Payment on UAL | 873,133 | 39,440,820 |
| c. Payment on 2002 ERI | 52,782 | 1,487,741 |
| d. Payment on 2003 ERI | 2,138 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,339,332 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,314,800 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LEICESTER HOUSING AUTHORITY - 340

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| 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 January 1, 2018

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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$17,444 | \$21,024,235 |
| b. Payment on UAL | 30,026 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$47,470 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$46,600 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LEICESTER WATER DISTRICT - 350

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 67.5 | 61.2 |
| Total Annual Pension | \$14,514 | \$720,176 |
| Average Annual Pension | \$14,514 | \$16,748 |
| <i>Inactive Members</i> | 2,000 | 1,978 |
| Annuity Savings Fund | \$157,811 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$32,829 | \$43,715,955 |
| b. Administrative Expenses | 768 | 1,100,000 |
| c. Expected Employee Contributions | 29,946 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$3,651 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$3,993 | \$21,024,235 |
| b. Payment on UAL | 43,588 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$47,581 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$46,709 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LUNENBURG - 360

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4,000 | 227 |
| Average Age | 65.1 | 63.2 |
| Total Annual Pension | \$123,854 | \$8,011,164 |
| Average Annual Pension | \$30,964 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 52.7 | 61.2 |
| Total Annual Pension | \$6,436 | \$720,176 |
| Average Annual Pension | \$6,436 | \$16,748 |
| <i>Inactive Members</i> | 51,000 | 1,978 |
| Annuity Savings Fund | \$502,636 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$457,035 | \$21,024,235 |
| b. Payment on UAL | 922,589 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,379,624 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,354,353 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LUNENBURG HOUSING AUTHORITY - 370

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|----------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|---|---------|--------------|
| a. Employer Normal Cost | \$1,159 | \$21,024,235 |
| b. Payment on UAL | 540 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,699 | \$62,250,254 |

| | | |
|--|----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,668 | \$61,110,021 |
|--|----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

LUNENBURG WATER DISTRICT - 380

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 2,000 | 1,978 |
| Annuity Savings Fund | \$1,848 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$32,219 | \$43,715,955 |
| b. Administrative Expenses | 754 | 1,100,000 |
| c. Expected Employee Contributions | 32,856 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$117 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$682,648 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 1,473,544 | 630,352,611 |
| c. Disabled Members - Accidental | 0 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 1,848 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$2,158,040 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$2,158,040 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 962,707 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$1,195,333 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$127 | \$21,024,235 |
| b. Payment on UAL | 57,844 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$57,971 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$56,909 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

MENDON - 390

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 5,000 | 227 |
| Average Age | 57.6 | 63.2 |
| Total Annual Pension | \$210,589 | \$8,011,164 |
| Average Annual Pension | \$42,118 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 12,000 | 1,978 |
| Annuity Savings Fund | \$236,313 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 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):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$244,370 | \$21,024,235 |
| b. Payment on UAL | 389,168 | 39,440,820 |
| c. Payment on 2002 ERI | 8,417 | 1,487,741 |
| d. Payment on 2003 ERI | 22,616 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$664,571 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$652,398 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

MENDON-UPTON REGIONAL - 400

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 60.6 | 63.2 |
| Total Annual Pension | \$33,465 | \$8,011,164 |
| Average Annual Pension | \$33,465 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 45,000 | 1,978 |
| Annuity Savings Fund | \$378,513 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$700,898 | \$43,715,955 |
| b. Administrative Expenses | 16,395 | 1,100,000 |
| c. Expected Employee Contributions | 425,093 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$292,200 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$319,522 | \$21,024,235 |
| b. Payment on UAL | 458,257 | 39,440,820 |
| c. Payment on 2002 ERI | 7,015 | 1,487,741 |
| d. Payment on 2003 ERI | 7,833 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$792,627 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$778,108 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

MILLBURY - 410

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 9,000 | 227 |
| Average Age | 69.0 | 63.2 |
| Total Annual Pension | \$342,372 | \$8,011,164 |
| Average Annual Pension | \$38,041 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2,000 | 43 |
| Average Age | 70.2 | 61.2 |
| Total Annual Pension | \$38,214 | \$720,176 |
| Average Annual Pension | \$19,107 | \$16,748 |
| <i>Inactive Members</i> | 70,000 | 1,978 |
| Annuity Savings Fund | \$471,869 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$482,865 | \$21,024,235 |
| b. Payment on UAL | 1,235,490 | 39,440,820 |
| c. Payment on 2002 ERI | 143,268 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,861,623 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,827,524 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

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

| Summary of Member Data | Member Unit | Worcester Regional |
|--|-------------|-----------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1.000 | 227 |
| Average Age | 82.9 | 63.2 |
| Total Annual Pension | \$26,022 | \$8,011,164 |
| Average Annual Pension | \$26,022 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-------------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$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): | | |
| 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$25,724 | \$21,024,235 |
| b. Payment on UAL | 64,564 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 6,412 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$96,700 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$94,929 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

MILLVILLE - 430

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 12,000 | 1,978 |
| Annuity Savings Fund | \$209,438 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$132,421 | \$21,024,235 |
| b. Payment on UAL | 49,216 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$181,637 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$178,310 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NARRAGANSETT REGIONAL - 440

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 39.1 | 61.2 |
| Total Annual Pension | \$13,216 | \$720,176 |
| Average Annual Pension | \$13,216 | \$16,748 |
| <i>Inactive Members</i> | 13,000 | 1,978 |
| Annuity Savings Fund | \$200,550 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 of January 1, 2018

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):

| | | |
|---|-------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$133,785 | \$21,024,235 |
| b. Payment on UAL | 248,487 | 39,440,820 |
| c. Payment on 2002 ERI | 24,726 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$406,998 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$399,543 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NASHOBA REGIONAL - 450

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 54.7 | 63.2 |
| Total Annual Pension | \$35,287 | \$8,011,164 |
| Average Annual Pension | \$35,287 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2,000 | 43 |
| Average Age | 59.8 | 61.2 |
| Total Annual Pension | \$27,162 | \$720,176 |
| Average Annual Pension | \$13,581 | \$16,748 |
| <i>Inactive Members</i> | 57,000 | 1,978 |
| Annuity Savings Fund | \$810,457 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| a. Total Normal Cost | \$1,001,846 | \$43,715,955 |
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$416,230 | \$21,024,235 |
| b. Payment on UAL | 642,990 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,059,220 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,039,818 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NASHOBA VALLEY DISPATCH - 455

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$17,748 | \$21,024,235 |
| b. Payment on UAL | 21,240 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$38,988 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$38,274 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NEW BRAINTREE - 460

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 64.6 | 63.2 |
| Total Annual Pension | \$74,953 | \$8,011,164 |
| Average Annual Pension | \$37,477 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 3,000 | 1,978 |
| Annuity Savings Fund | \$4,643 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$36,615 | \$43,715,955 |
| b. Administrative Expenses | 856 | 1,100,000 |
| c. Expected Employee Contributions | 22,444 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$15,027 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$553,046 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 130,868 | 630,352,611 |
| c. Disabled Members - Accidental | 849,957 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 4,643 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$1,538,514 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$1,538,514 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 686,335 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$852,179 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$16,432 | \$21,024,235 |
| b. Payment on UAL | 41,239 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$57,671 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$56,615 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NORTHBORO - 470

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 7,000 | 227 |
| Average Age | 59.5 | 63.2 |
| Total Annual Pension | \$260,036 | \$8,011,164 |
| Average Annual Pension | \$37,148 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 58.5 | 61.2 |
| Total Annual Pension | \$15,498 | \$720,176 |
| Average Annual Pension | \$15,498 | \$16,748 |
| <i>Inactive Members</i> | 63,000 | 1,978 |
| Annuity Savings Fund | \$418,183 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$660,563 | \$21,024,235 |
| b. Payment on UAL | 1,497,870 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$2,158,433 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$2,118,897 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NORTHBORO HOUSING AUTHORITY - 480

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 1,000 | 1,978 |
| Annuity Savings Fund | \$10,479 | \$18,530,021 |

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 January 1, 2018

| | | |
|---|-------------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$1,252,210 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 325,944 | 630,352,611 |
| c. Disabled Members - Accidental | 0 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 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): | | |
| 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$22,607 | \$21,024,235 |
| b. Payment on UAL | 45,240 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$67,847 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$66,604 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NORTHBORO-SOUTHBORO REGIONAL - 490

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 63.0 | 63.2 |
| Total Annual Pension | \$34,204 | \$8,011,164 |
| Average Annual Pension | \$34,204 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 45,000 | 1,978 |
| Annuity Savings Fund | \$301,277 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$390,502 | \$43,715,955 |
| b. Administrative Expenses | 9,134 | 1,100,000 |
| c. Expected Employee Contributions | 243,672 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$155,964 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|------------------|---------------------|
| a. Employer Normal Cost | \$170,547 | \$21,024,235 |
| b. Payment on UAL | 232,474 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$403,021 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$395,639 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NORTH BROOKFIELD - 500

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 24,000 | 1,978 |
| Annuity Savings Fund | \$157,367 | \$18,530,021 |

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 January 1, 2018

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):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$200,697 | \$21,024,235 |
| b. Payment on UAL | 310,635 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 14,424 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$525,756 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$516,126 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

NORTH BROOKFIELD HOUSING AUTHORITY - 510

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

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 | 4,790 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$1,838 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

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):

| | | |
|---|-----------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$2,009 | \$21,024,235 |
| b. Payment on UAL | 14,504 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$16,513 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$16,211 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

OAKHAM - 530

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 2.000 | 1,978 |
| Annuity Savings Fund | \$18,316 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$24,766 | \$21,024,235 |
| b. Payment on UAL | 47,493 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$72,259 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$70,935 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

OXFORD - 540

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 14,000 | 227 |
| Average Age | 67.6 | 63.2 |
| Total Annual Pension | \$414,799 | \$8,011,164 |
| Average Annual Pension | \$29,629 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 41.3 | 61.2 |
| Total Annual Pension | \$10,060 | \$720,176 |
| Average Annual Pension | \$10,060 | \$16,748 |
| <i>Inactive Members</i> | 80,000 | 1,978 |
| Annuity Savings Fund | \$824,350 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$618,997 | \$21,024,235 |
| b. Payment on UAL | 1,247,607 | 39,440,820 |
| c. Payment on 2002 ERI | 136,956 | 1,487,741 |
| d. Payment on 2003 ERI | 15,492 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$2,019,052 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,982,069 | \$61,110,021 |

Worcester Regional Contributory Retirement System

Annual Appropriation for 2020 Fiscal Year

OXFORD HOUSING AUTHORITY - 550

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|-------------|-----------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$27,009 | \$21,024,235 |
| b. Payment on UAL | 48,739 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$75,748 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$74,361

\$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

OXFORD-ROCHDALE SEWER DISTRICT - 555

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$10,172 | \$21,024,235 |
| b. Payment on UAL | 24,439 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$34,611 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$33,977 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

PAXTON - 560

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 69.9 | 63.2 |
| Total Annual Pension | \$48,367 | \$8,011,164 |
| Average Annual Pension | \$48,367 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 5,000 | 1,978 |
| Annuity Savings Fund | \$35,103 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| a. Active Members | \$7,724,552 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 5,476,351 | 630,352,611 |
| c. 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$13,707,523 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 6,874,914 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$6,832,609 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$367,331 | \$21,024,235 |
| b. Payment on UAL | 413,080 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$780,411 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$766,116 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

PETERSHAM - 570

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 7,000 | 1,978 |
| Annuity Savings Fund | \$34,580 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$58,649 | \$21,024,235 |
| b. Payment on UAL | 97,496 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 2,315 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$158,460 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$155,557 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

PHILLIPSTON - 580

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 89.5 | 63.2 |
| Total Annual Pension | \$19,016 | \$8,011,164 |
| Average Annual Pension | \$19,016 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 8,000 | 1,978 |
| Annuity Savings Fund | \$25,545 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$64,136 | \$21,024,235 |
| b. Payment on UAL | 74,852 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$138,988 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$136,442 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

PRINCETON - 590

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 84.4 | 63.2 |
| Total Annual Pension | \$53,636 | \$8,011,164 |
| Average Annual Pension | \$26,818 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 67.1 | 61.2 |
| Total Annual Pension | \$52,364 | \$720,176 |
| Average Annual Pension | \$52,364 | \$16,748 |
| <i>Inactive Members</i> | 10,000 | 1,978 |
| Annuity Savings Fund | \$258,274 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$70,755 | \$21,024,235 |
| b. Payment on UAL | 291,768 | 39,440,820 |
| c. Payment on 2002 ERI | 8,417 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$370,940 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$364,146 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

QUABBIN REGIONAL - 600

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 74.2 | 63.2 |
| Total Annual Pension | \$21,254 | \$8,011,164 |
| Average Annual Pension | \$21,254 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 39.5 | 61.2 |
| Total Annual Pension | \$5,668 | \$720,176 |
| Average Annual Pension | \$5,668 | \$16,748 |
| <i>Inactive Members</i> | 33,000 | 1,978 |
| Annuity Savings Fund | \$299,357 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$298,747 | \$21,024,235 |
| b. Payment on UAL | 675,859 | 39,440,820 |
| c. Payment on 2002 ERI | 53,308 | 1,487,741 |
| d. Payment on 2003 ERI | 7,833 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,035,747 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,016,775 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

QUABOAG REGIONAL - 610

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 29.000 | 1,978 |
| Annuity Savings Fund | \$156,133 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$316,249 | \$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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$125,328 | \$21,024,235 |
| b. Payment on UAL | 215,333 | 39,440,820 |
| c. Payment on 2002 ERI | 30,862 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$371,523 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$364,718 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

ROYALSTON - 620

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 45.3 | 63.2 |
| Total Annual Pension | \$30,807 | \$8,011,164 |
| Average Annual Pension | \$30,807 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 1,000 | 1,978 |
| Annuity Savings Fund | \$8,288 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$15,512 | \$21,024,235 |
| b. Payment on UAL | 41,141 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$56,653 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$55,615 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

RUTLAND - 630

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4,000 | 227 |
| Average Age | 61.5 | 63.2 |
| Total Annual Pension | \$169,011 | \$8,011,164 |
| Average Annual Pension | \$42,253 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 8,000 | 1,978 |
| Annuity Savings Fund | \$61,322 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$232,759 | \$21,024,235 |
| b. Payment on UAL | 392,195 | 39,440,820 |
| c. Payment on 2002 ERI | 6,315 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$631,269 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$619,706 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SOUTHBORO - 640

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 9,000 | 227 |
| Average Age | 59.3 | 63.2 |
| Total Annual Pension | \$323,036 | \$8,011,164 |
| Average Annual Pension | \$35,893 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 64,000 | 1,978 |
| Annuity Savings Fund | \$608,183 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$678,627 | \$21,024,235 |
| b. Payment on UAL | 1,316,755 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,995,382 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$1,958,833 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SOUTHBORO HOUSING - 650

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 of 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$4,453 | \$21,024,235 |
| b. Payment on UAL | 336 | 39,440,820 |
| c. Payment on 2002 ERI | 11,047 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$15,836 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$15,546 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SPENCER - 660

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 3.000 | 227 |
| Average Age | 67.1 | 63.2 |
| Total Annual Pension | \$106,142 | \$8,011,164 |
| Average Annual Pension | \$35,381 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1.000 | 43 |
| Average Age | 79.5 | 61.2 |
| Total Annual Pension | \$18,235 | \$720,176 |
| Average Annual Pension | \$18,235 | \$16,748 |
| <i>Inactive Members</i> | 5.000 | 1,978 |
| Annuity Savings Fund | \$29,043 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$296,411 | \$21,024,235 |
| b. Payment on UAL | 601,852 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$898,263 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$881,810 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SPENCER-EAST BROOKFIELD REGIONAL - 670

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 3,000 | 43 |
| Average Age | 65.3 | 61.2 |
| Total Annual Pension | \$25,194 | \$720,176 |
| Average Annual Pension | \$8,398 | \$16,748 |
| <i>Inactive Members</i> | 33,000 | 1,978 |
| Annuity Savings Fund | \$181,193 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$469,259 | \$43,715,955 |
| b. Administrative Expenses | 10,977 | 1,100,000 |
| c. Expected Employee Contributions | 286,849 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$193,387 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$211,469 | \$21,024,235 |
| b. Payment on UAL | 366,283 | 39,440,820 |
| c. Payment on 2002 ERI | 23,848 | 1,487,741 |
| d. Payment on 2003 ERI | 4,094 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$605,694 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$594,600 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SPENCER HOUSING AUTHORITY - 680

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 | \$56,886 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 January 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$10,400 | \$21,024,235 |
| b. Payment on UAL | 35,711 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$46,111 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$45,266 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

STERLING - 690

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 60.1 | 63.2 |
| Total Annual Pension | \$64,851 | \$8,011,164 |
| Average Annual Pension | \$32,426 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 15,000 | 1,978 |
| Annuity Savings Fund | \$190,811 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$418,826 | \$21,024,235 |
| b. Payment on UAL | 673,047 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 14,067 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,105,940 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$1,085,683 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

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

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | - | 6,934 |
| Average Age | - | 47.5 |
| Average Service | - | 10.1 |
| Valuation Salary | - | \$304,282,630 |
| Average Salary | \$0 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-----|-----------------|
| a. Active Members | \$0 | \$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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$0 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 90,663 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | (\$90,663) | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|---------|--------------|
| a. Employer Normal Cost | \$0 | \$21,024,235 |
| b. Payment on UAL | 5,447 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$5,447 | \$62,250,254 |

| | | |
|--|----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$5,347 | \$61,110,021 |
|--|----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

STURBRIDGE - 710

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 8,000 | 227 |
| Average Age | 59.3 | 63.2 |
| Total Annual Pension | \$287,584 | \$8,011,164 |
| Average Annual Pension | \$35,948 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 28,000 | 1,978 |
| Annuity Savings Fund | \$290,739 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$574,196 | \$21,024,235 |
| b. Payment on UAL | 758,343 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 64,110 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,396,649 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,371,067 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

SUTTON - 720

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 8,000 | 227 |
| Average Age | 58.0 | 63.2 |
| Total Annual Pension | \$354,383 | \$8,011,164 |
| Average Annual Pension | \$44,298 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 56,000 | 1,978 |
| Annuity Savings Fund | \$439,638 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$980,739 | \$43,715,955 |
| b. Administrative Expenses | 22,941 | 1,100,000 |
| c. Expected Employee Contributions | 644,605 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$359,075 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$392,650 | \$21,024,235 |
| b. Payment on UAL | 813,975 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,206,625 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$1,184,523 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

TANTASQUA REGIONAL - 730

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 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 January 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$291,395 | \$21,024,235 |
| b. Payment on UAL | 430,059 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$721,454 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$708,239 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

TEMPLETON - 740

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4,000 | 227 |
| Average Age | 62.3 | 63.2 |
| Total Annual Pension | \$165,739 | \$8,011,164 |
| Average Annual Pension | \$41,435 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 58.0 | 61.2 |
| Total Annual Pension | \$11,870 | \$720,176 |
| Average Annual Pension | \$11,870 | \$16,748 |
| <i>Inactive Members</i> | 11,000 | 1,978 |
| Annuity Savings Fund | \$164,056 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$228,808 | \$21,024,235 |
| b. Payment on UAL | 562,380 | 39,440,820 |
| c. Payment on 2002 ERI | 21,569 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$812,757 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$797,870 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

TEMPLETON HOUSING AUTHORITY - 750

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 1,000 | 1,978 |
| Annuity Savings Fund | \$13,655 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$14,935 | \$43,715,955 |
| b. Administrative Expenses | 349 | 1,100,000 |
| c. Expected Employee Contributions | 9,566 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$5,718 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|-----------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$351,175 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 514,433 | 630,352,611 |
| c. Disabled Members - Accidental | 0 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 13,655 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$879,263 | \$1,459,223,833 |
| Unfunded Actuarial Accrued Liability (UAAL): | | |
| g. Actuarial Accrued Liability = f. | \$879,263 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 392,241 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$487,022 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$6,252 | \$21,024,235 |
| b. Payment on UAL | 15,374 | 39,440,820 |
| c. Payment on 2002 ERI | 21,392 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$43,018 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$42,230 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

UPTON - 760

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1.000 | 227 |
| Average Age | 56.2 | 63.2 |
| Total Annual Pension | \$41,198 | \$8,011,164 |
| Average Annual Pension | \$41,198 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 11.000 | 1,978 |
| Annuity Savings Fund | \$156,978 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$216,932 | \$21,024,235 |
| b. Payment on UAL | 423,437 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$640,369 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$628,639 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

UXBRIDGE - 770

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 4.000 | 227 |
| Average Age | 59.1 | 63.2 |
| Total Annual Pension | \$141,533 | \$8,011,164 |
| Average Annual Pension | \$35,383 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 48.000 | 1,978 |
| Annuity Savings Fund | \$493,364 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| a. Total Normal Cost | \$1,270,773 | \$43,715,955 |
| b. Administrative Expenses | 29,725 | 1,100,000 |
| c. Expected Employee Contributions | 806,213 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$494,285 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| a. Active Members | \$21,589,512 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 22,431,402 | 630,352,611 |
| c. Disabled Members - Accidental | 1,733,536 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 493,364 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$46,247,814 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$540,501 | \$21,024,235 |
| b. Payment on UAL | 1,267,413 | 39,440,820 |
| c. Payment on 2002 ERI | 74,351 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,882,265 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$1,847,788 \$61,110,021

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

UXBRIDGE HOUSING AUTHORITY - 780
Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 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 January 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 |

FY2020 Appropriation

| | | |
|--|-----------------|---------------------|
| a. Employer Normal Cost | \$13,017 | \$21,024,235 |
| b. Payment on UAL | 40,468 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$53,485 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$52,505 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WACHUSETT REGIONAL - 790

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 2,000 | 227 |
| Average Age | 67.0 | 63.2 |
| Total Annual Pension | \$52,521 | \$8,011,164 |
| Average Annual Pension | \$26,261 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 196,000 | 1,978 |
| Annuity Savings Fund | \$985,723 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|--------------|-----------------|
| 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$785,182 | \$21,024,235 |
| b. Payment on UAL | 1,089,686 | 39,440,820 |
| c. Payment on 2002 ERI | 56,992 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,931,860 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,896,474 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WARREN - 800

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 44.1 | 63.2 |
| Total Annual Pension | \$44,883 | \$8,011,164 |
| Average Annual Pension | \$44,883 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 59.5 | 61.2 |
| Total Annual Pension | \$7,616 | \$720,176 |
| Average Annual Pension | \$7,616 | \$16,748 |
| <i>Inactive Members</i> | 6,000 | 1,978 |
| Annuity Savings Fund | \$57,472 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$110,651 | \$21,024,235 |
| b. Payment on UAL | 204,833 | 39,440,820 |
| c. Payment on 2002 ERI | 52,958 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 5,769 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$374,211 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$367,357 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WARREN WATER DISTRICT - 810

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | - | 3,351 |
| Average Age | - | 73.5 |
| Total Annual Pension | \$0 | \$68,184,912 |
| Average Annual Pension | \$0 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$7,850 | \$21,024,235 |
| b. Payment on UAL | 10,256 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$18,106 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$17,774 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WESTBORO - 820

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 15,000 | 227 |
| Average Age | 61.0 | 63.2 |
| Total Annual Pension | \$596,963 | \$8,011,164 |
| Average Annual Pension | \$39,798 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2,000 | 43 |
| Average Age | 64.3 | 61.2 |
| Total Annual Pension | \$62,268 | \$720,176 |
| Average Annual Pension | \$31,134 | \$16,748 |
| <i>Inactive Members</i> | 64,000 | 1,978 |
| Annuity Savings Fund | \$721,156 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-------------|--------------|
| 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|---------------|-----------------|
| Actuarial Accrued Liability (AAL): | | |
| a. Active Members | \$55,222,698 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 39,130,468 | 630,352,611 |
| c. 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 |
| Unfunded Actuarial Accrued Liability (UAAL): | | |
| g. Actuarial Accrued Liability = f. | \$102,759,875 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 47,123,722 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$55,636,153 | \$773,735,700 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$1,273,403 | \$21,024,235 |
| b. Payment on UAL | 2,817,790 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 35,615 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$4,126,808 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$4,051,220 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WESTBORO HOUSING AUTHORITY - 825

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 64.2 | 61.2 |
| Total Annual Pension | \$13,957 | \$720,176 |
| Average Annual Pension | \$13,957 | \$16,748 |
| <i>Inactive Members</i> | 1,000 | 1,978 |
| Annuity Savings Fund | \$4,776 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$15,063 | \$21,024,235 |
| b. Payment on UAL | 26,544 | 39,440,820 |
| c. Payment on 2002 ERI | 5,083 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$46,690 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$45,835 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WEST BOYLSTON - 830

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 6,000 | 227 |
| Average Age | 67.2 | 63.2 |
| Total Annual Pension | \$161,859 | \$8,011,164 |
| Average Annual Pension | \$26,977 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 33,000 | 1,978 |
| Annuity Savings Fund | \$353,148 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded 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 |

FY2020 Appropriation

| | | |
|---|-------------|--------------|
| a. Employer Normal Cost | \$523,121 | \$21,024,235 |
| b. Payment on UAL | 746,207 | 39,440,820 |
| c. Payment on 2002 ERI | 60,325 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,329,653 | \$62,250,254 |

| | | |
|--|--------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$1,305,298 | \$61,110,021 |
|--|--------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WEST BOYLSTON HOUSING AUTHORITY - 835

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | - | 6,934 |
| Average Age | - | 47.5 |
| Average Service | - | 10.1 |
| Valuation Salary | - | \$304,282,630 |
| Average Salary | \$0 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 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 January 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 |

FY2020 Appropriation

| | | |
|---|---------|--------------|
| a. Employer Normal Cost | \$0 | \$21,024,235 |
| b. Payment on UAL | 5,445 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$5,445 | \$62,250,254 |

| | | |
|--|----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$5,345 | \$61,110,021 |
|--|----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WEST BOYLSTON WATER DISTRICT - 840

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 1.000 | 1,978 |
| Annuity Savings Fund | \$18,502 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| 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 January 1, 2018

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 |

FY2020 Appropriation

| | | |
|---|----------|--------------|
| a. Employer Normal Cost | \$13,774 | \$21,024,235 |
| b. Payment on UAL | 52,873 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$66,647 | \$62,250,254 |

| | | |
|--|-----------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$65,426 | \$61,110,021 |
|--|-----------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WEST BROOKFIELD - 850

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 27,029 | 6,934 |
| Average Age | 49.2 | 47.5 |
| Average Service | 9.1 | 10.1 |
| Valuation Salary | 1,104,305 | \$304,282,630 |
| Average Salary | \$33,464 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 12,000 | 3,351 |
| Average Age | 71.0 | 73.5 |
| Total Annual Pension | \$262,578 | \$68,184,912 |
| Average Annual Pension | \$21,882 | \$20,348 |
| <i>Disabled Members - Accidental</i> | 1,000 | 227 |
| Average Age | 48.8 | 63.2 |
| Total Annual Pension | \$49,101 | \$8,011,164 |
| Average Annual Pension | \$49,101 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | 4,000 | 1,978 |
| Annuity Savings Fund | \$56,097 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$226,268 | \$43,715,955 |
| b. Administrative Expenses | 5,293 | 1,100,000 |
| c. Expected Employee Contributions | 120,800 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$110,761 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$2,670,445 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 2,868,716 | 630,352,611 |
| c. Disabled Members - Accidental | 687,652 | 93,283,070 |
| d. Disabled Members - Ordinary | 0 | 8,720,198 |
| e. Inactive Members | 56,097 | 18,530,021 |
| f. Total AAL = a. + b. + c. + d. + e. | \$6,282,910 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$6,282,910 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 2,861,983 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$3,420,927 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$121,118 | \$21,024,235 |
| b. Payment on UAL | 171,962 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$293,080 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$287,712 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WESTMINSTER - 860

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 3,000 | 227 |
| Average Age | 58.0 | 63.2 |
| Total Annual Pension | \$122,759 | \$8,011,164 |
| Average Annual Pension | \$40,920 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 2,000 | 43 |
| Average Age | 52.0 | 61.2 |
| Total Annual Pension | \$38,753 | \$720,176 |
| Average Annual Pension | \$19,377 | \$16,748 |
| <i>Inactive Members</i> | 5,000 | 1,978 |
| Annuity Savings Fund | \$28,318 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|-----------|--------------|
| a. Total Normal Cost | \$614,558 | \$43,715,955 |
| b. 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial 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 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|--------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$22,094,538 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 10,197,685 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$11,896,853 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$267,306 | \$21,024,235 |
| b. Payment on UAL | 610,819 | 39,440,820 |
| c. Payment on 2002 ERI | 0 | 1,487,741 |
| d. Payment on 2003 ERI | 4,986 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$883,111 | \$62,250,254 |

| | | |
|--|------------------|---------------------|
| If Total Appropriation paid on July 1, 2019 | \$866,935 | \$61,110,021 |
|--|------------------|---------------------|

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WINCHENDON - 870

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 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 |
| <i>Retired Members and Beneficiaries</i> | 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 |
| <i>Disabled Members - Accidental</i> | 9,000 | 227 |
| Average Age | 63.3 | 63.2 |
| Total Annual Pension | \$315,971 | \$8,011,164 |
| Average Annual Pension | \$35,108 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | 1,000 | 43 |
| Average Age | 70.2 | 61.2 |
| Total Annual Pension | \$15,392 | \$720,176 |
| Average Annual Pension | \$15,392 | \$16,748 |
| <i>Inactive Members</i> | 56,000 | 1,978 |
| Annuity Savings Fund | \$577,130 | \$18,530,021 |

Employer 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 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

| | | |
|---|--------------|-----------------|
| Actuarial 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 |
| Unfunded 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 |

FY2020 Appropriation

| | | |
|--|--------------------|---------------------|
| a. Employer Normal Cost | \$481,808 | \$21,024,235 |
| b. Payment on UAL | 1,026,988 | 39,440,820 |
| c. Payment on 2002 ERI | 60,499 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$1,569,295 | \$62,250,254 |
| If Total Appropriation paid on July 1, 2019 | \$1,540,550 | \$61,110,021 |

Worcester Regional Contributory Retirement System
Annual Appropriation for 2020 Fiscal Year

WINCHENDON HOUSING AUTHORITY - 880

Based on Valuation Results as of January 1, 2018

| Summary of Member Data | Member Unit | Worcester Regional |
|--|--------------------|-------------------------------|
| <i>Active Members</i> | 10,000 | 6,934 |
| Average Age | 58.3 | 47.5 |
| Average Service | 18.7 | 10.1 |
| Valuation Salary | 606,964 | \$304,282,630 |
| Average Salary | \$60,696 | \$43,883 |
| <i>Retired Members and Beneficiaries</i> | 3,000 | 3,351 |
| Average Age | 79.7 | 73.5 |
| Total Annual Pension | \$51,080 | \$68,184,912 |
| Average Annual Pension | \$17,027 | \$20,348 |
| <i>Disabled Members - Accidental</i> | - | 227 |
| Average Age | - | 63.2 |
| Total Annual Pension | \$0 | \$8,011,164 |
| Average Annual Pension | \$0 | \$35,291 |
| <i>Disabled Members - Ordinary</i> | - | 43 |
| Average Age | - | 61.2 |
| Total Annual Pension | \$0 | \$720,176 |
| Average Annual Pension | \$0 | \$16,748 |
| <i>Inactive Members</i> | - | 1,978 |
| Annuity Savings Fund | \$0 | \$18,530,021 |

Employer Normal Cost as of January 1, 2018

| | | |
|--|----------|--------------|
| a. Total Normal Cost | \$94,292 | \$43,715,955 |
| b. Administrative Expenses | 2,205 | 1,100,000 |
| c. Expected Employee Contributions | 61,431 | 28,880,357 |
| d. Employer Normal Cost = a. + b. - c. | \$35,066 | \$15,935,598 |

Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2018

Actuarial Accrued Liability (AAL):

| | | |
|---------------------------------------|-------------|-----------------|
| a. Active Members | \$2,456,235 | \$708,337,933 |
| b. Retired Members and Beneficiaries | 339,709 | 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. | \$2,795,944 | \$1,459,223,833 |

Unfunded Actuarial Accrued Liability (UAAL):

| | | |
|---|-------------|-----------------|
| g. Actuarial Accrued Liability = f. | \$2,795,944 | \$1,459,223,833 |
| h. Actuarial Value of Assets | 1,247,277 | 685,488,133 |
| i. Unfunded Actuarial Accrued Liability = g. - h. | \$1,548,667 | \$773,735,700 |

FY2020 Appropriation

| | | |
|---|-----------|--------------|
| a. Employer Normal Cost | \$38,345 | \$21,024,235 |
| b. Payment on UAL | 73,129 | 39,440,820 |
| c. Payment on 2002 ERI | 4,734 | 1,487,741 |
| d. Payment on 2003 ERI | 0 | 291,689 |
| e. Payment on 2010 ERI | 0 | 5,769 |
| f. Total Appropriation = a. + b. + c. + d. + e. | \$116,208 | \$62,250,254 |

If Total Appropriation paid on July 1, 2019

\$114,079 \$61,110,021