

Town of Lexington Memoranda

To: James Malloy, Town Manager

From: Carolyn Kosnoff, Assistant Town Manager for Finance

Date: September 30, 2022

Subject: Proposed FY2023 Water and Wastewater Rates

The attached packet contains information in support of the proposed FY2023 water and wastewater rates. The following reports are included for your reference:

- a. FY2022 Operating Results for the water and wastewater operations
- Water consumption history and chart for FY2016 to FY2022, and estimates of FY2023 usage used for calculating proposed FY2023 water and wastewater rates
- Water consumption graphs provided by MWRA- MWRA system wide CY2020 -CY2022; and Lexington CY2020 - CY2022
- d. Water and wastewater expenditure history including amendments to the FY2023 budgets proposed for the 2022 Fall Special Town Meeting-3 to serve as the basis for proposed FY2023 rates
- e. Proposed FY2023 water and wastewater rates
- f. A history of water purchased from the MWRA, by month, from 2000 through August, 2022
- g. A presentation of the combined impact of FY2023 water and wastewater rates at various levels of annual usage
- h. Community comparison of water and sewer charges and assessments from MWRA Advisory Board's 2021 Annual Water and Wastewater Retail Rate Survey

FY2022 Water and Wastewater Enterprise Operating Results

The Water Enterprise ended FY2022 with an operating loss of approximately \$(979,000). This loss was due to a shortfall in estimated water revenues of approximately \$(1,238,000), partly offset by a turn-back of \$259,000 in expenditures. The Water Enterprise Retained Earnings balance as of June 20, 2022 was sufficient to cover the FY2022 operating loss.

The shortfall in FY2022 Water revenue was largely due to user charges coming in under estimates, particularly a dramatic drop-off in usage at Hanscom Air Force Base (AFB) for the second year in a row. Usage at the Base was estimated to be 207,000 HCF in FY2022, but came in at 69,641 HCF - a shortfall of 137,359 HCF or approximately (\$975,000). FY2022 usage at Hanscom AFB was down 68% compared to the average of the preceding 5-years, including FY2021 which was the height of the pandemic. Staff are working to understand if this decrease in water consumption is related to long-term operational changes at the Base resulting from the pandemic, if our existing meters are not correctly registering usage, or a combination of these two issues. Town

Management has been in contact with the Base to discuss this change and better understand what should be expected going forward.

In addition, the total tiered usage came in \$(228,000) under estimates, and irrigation was \$(372,000) under estimates. These revenue shortfalls were partly offset by usage from the Town of Bedford which exceeded estimates by approximately \$299,000, and strong collections of non-rate revenue.

Water Enterprise expenses were under budget in several areas including compensation, contractual services, supplies and debt service. Detailed operating results for FY2022 can be found on page $\underline{8}$.

A review of FY2022 billed water use versus budgeted estimates (page 10) shows a shortfall in most categories, as well as overall lower usage compared to prior years. Domestic usage across tiers 1, 2 and 3 came in (34,726) HCF under projections, resulting in the deficit of approximately \$(228,000) noted above. Overall, FY2022 water consumption across the three primary tiers was Lexington's lowest recorded usage in the last 15 years. FY2022 results continue to reflect a downward trend in domestic consumption that began in FY2018 (with the exception of FY2021 which reflected a change in behaviors related to the pandemic.)

The Sewer Enterprise ended FY2022 with an operating income of \$482,440, which reflects a \$98,358 revenue surplus and turn-back of \$384,082 in expenditures. As with the Water Enterprise, Wastewater usage was down across all three tiers, but the shortfall in tiered rates was offset by collections of liens and other non-rate revenue. Expenses were favorable in compensation, debt service, contractual services and supplies.

FY2023 Water and Wastewater Enterprise Fund Budgets

On a combined basis, Lexington's water and wastewater budgets are increasing 2.6% from FY2022 to FY2023. Detailed budgets for the enterprise funds are on pages <u>13</u> and <u>14</u>.

	FY2023 Enterprise Budgets												
		FY2022 Budget	FY2023 Budget*	\$ Change	% Change								
Water Enterprise	\$	12,624,466 \$	12,707,237	\$ 82,771	0.7%								
Wastewater Enterprise	\$	11,203,270 \$	11,731,877	\$ 528,607	4.7%								
Combined Enterprise Budgets	\$	23,827,736 \$	24,439,114	\$ 611,378	2.6%								

^{*}Reflects proposed wastewater budget adjustments at 2022 Fall STM for final MWRA assessment.

The FY2023 Water Enterprise budget is \$12,707,237 inclusive of indirect costs, which represents a \$82,771 increase, or 0.7%, from the final FY2022 budget. The Town's FY2023 MWRA assessment is decreasing by \$(250,445) or (2.9)% compared to FY2022. This decrease is being offset by the addition of \$200,000 in cash capital into

the operating budget, an increase in indirect expenses, and a modest increase in debt service (page <u>13</u>).

The FY2023 Wastewater Enterprise budget is \$11,731,877 inclusive of indirect costs, which represents a \$528,607 increase, or 4.7%, over the final FY2022 budget. This increase is attributable to a \$255,579, or 3.1% increase in the MWRA assessment compared to the FY2022 budget, the addition of \$100,000 in cash capital, and a \$130,904 increase in debt service (page 14).

The largest expense in both the water and wastewater budgets is our annual assessment from the MWRA, which represents 66.8% and 71.9% of the total budgets, respectively. Several factors impact the Town's assessments from year-to-year, and they are largely driven by changes in the MWRA's annual budget. Our water assessment will also fluctuate based on Lexington's consumption of water during the previous calendar year, and our Town's percent share of consumption in relation to the total MWRA system. Our share of the overall MWRA system consistently increased from calendar years 2018-2020 which added to our assessment for the past three fiscal years. This trend reversed in calendar year 2021, which resulted in a lower FY2023 assessment. For wastewater, our assessment will fluctuate bases on our Town's average sewer flows from the past three calendar years and our Town's wastewater contamination levels.

Proposed FY2023 Water and Wastewater Rates

Preliminary water and wastewater rates are proposed to increase 6.5%, on a combined basis. This average increase reflects an 6.8% increase in water rates and a 6.4% increase in wastewater rates. The proposed rate calculations are based on budgeted expenses and estimated water and wastewater consumption for fiscal year 2023. Detailed rate calculations are on pages 15 and 16.

	1	PROPOSED	FY2023 RA1	TES		
Residential / Commercial / Industrial	FY22 Water Rates	Proposed FY23 Water Rates	% Change	FY22 Wastewater Rates	Proposed FY23 Wastewater Rates	% Change
Tier 1	\$4.75	\$5.07	6.7%	\$8.77	\$9.33	6.4%
Tier 2	\$7.12	\$7.60	6.7%	\$14.32	\$15.24	6.4%
Tier 3	\$9.40	\$10.04	6.8%	\$22.77	\$24.23	6.4%
Irrigation	\$9.40	\$10.04	6.8%	NA	NA	NA
Municipal	\$3.27	\$3.46	5.8%	\$3.68	\$3.68	0.0%
Hanscom/Lincoln Labs	\$7.00	\$7.48	6.9%	NA	NA	NA
VA Hospital	\$8.37	\$8.94	6.8%	NA	NA	NA
Bedford	\$3.30	\$3.49	5.8%	NA	NA	NA
Flat Sewer Rate (annual)	NA	NA	NA	\$401.38	\$427.01	6.4%

^{**} Rounding on % change may differ slightly compared to pages 15 & 16 due to rates being rounded to the whole penny.

The proposed 6.8% increase in water rates is attributable to the 0.7% increase in the FY2023 water budget and a decrease in projected usage across several categories including Hanscom AFB and the 3 tiered rates. Hanscom's assumed usage in this scenario is assumed to be approximately 50% of pre-pandemic levels, however this assumption many need to be modified depending on operations at the Base. Irrigation for FY2023 is level compared to the prior year's budget and is expected to meet or exceed projections due to the drought conditions experienced in the summer of 2022. The proposed 6.4% increase in wastewater rates is attributable to the 4.7% increase in the FY2022 wastewater budget and an overall (1.5)% decrease in projected wastewater production for the coming year.

The estimated consumption used to build the preliminary FY2023 rates is shown on page 10, which reflects a decrease increase in the overall projected usage for the both the water and wastewater funds when compared to the prior year estimated amounts.

Projected FY2	2023 Water and Sewer	r Consumption for F	Rate C	alculation	
	Estimates for FY2022 Rates	Estimates for FY2023 Rates	\$	Change	% Change
Total Water Consumption	2,215,000	2,121,000	\$	(94,000)	-4.2%
Total Sewer Consumption	938,000	924,000	\$	(14,000)	-1.5%

Staff estimated consumption from review and analysis of the data shown on pages 10 and 17, including 5 and 10 year averages of the Town's usage by category. These estimates were further adjusted for the actual trend experienced from FY2018 through FY2022 which may be reflective of future consumption levels. Behavior changes that were seen in FY2021, likely as a result of the pandemic, are included in averages, however in making adjustments this year was discounted as pre-pandemic trends seem to have continued in FY2022. Total water purchased from the MRWA increased significantly in July and August 2022 which may be attributed to excess lawn irrigation during the summer's drought conditions.

Water trends can vary depending on weather, and in an effort to show wet year versus dry year variations, the history of water purchased from the MWRA by month and fiscal year from 2000 to 2022 is presented on page <u>17</u>.

Wholesale Water and Sewer Rates

Bedford's contractual rate and the rate charged to municipal operations is based on Lexington's wholesale water rate. The wholesale rate for any given year is calculated by dividing the Town's current MWRA assessment by our total consumption from the previous calendar year (the FY2023 MWRA assessment is a function of the Town's calendar year 2021 purchases of water from the MWRA). Lexington's MRWA assessment decreased by (2.9)% year-over-year, and our water purchased from MWRA in calendar year 2021 decreased by 8.2%. The decrease in our usage was greater than

the decrease in our assessment, resulting in an increase of 5.8% in the wholesale cost of water (lower consumption results in a higher cost per unit of water).

Staff is recommending that our municipal wastewater rate remain flat for FY2023 as the calculated wholesale rate remains lower than the 2019 rate we have carried forward for the past two fiscal years. The wholesale sewer rate is calculated by dividing the Town's current MWRA sewer assessment by an average of the past three calendar years of sewer flows (the FY2023 assessment is a function of the Town's calendar years 2019-2021 sewer flows to the MWRA).

Historical Rate Increases: Cost Impact on Household of Average Consumption

For the period FY2009 to FY2023, the table below depicts the cost impact of annual changes in water and wastewater rates on a household consuming 120 hundred cubic feet (HCF) annually, which is the MWRA's determination of average household usage throughout its system. As noted above, the FY2023 proposed rates would increase the annual combined cost of water and sewer for an average household by 6.5% or approximately \$126.40 per year.

An	nual Water/S	ewer Charge	s for Househ	old Using 120 H	CF/Year
	Water	Sewer	Total	\$ Change from Prior Year	% Change from Prior Year
FY2023	\$709.60	\$1,356.00	\$2,065.60	\$126.40	6.5%
FY2022	\$664.80	\$1,274.40	\$1,939.20	\$112.00	6.1%
FY2021	\$615.60	\$1,211.60	\$1,827.20	\$69.60	4.0%
FY2020	\$573.60	\$1,184.00	\$1,757.60	\$120.00	7.3%
FY2019	\$554.00	\$1,083.60	\$1,637.60	\$96.40	6.3%
FY2018	\$544.40	\$996.80	\$1,541.20	\$20.80	1.4%
FY2017	\$526.40	\$994.00	\$1,520.40	\$40.77	2.8%
FY2016	\$501.96	\$977.67	\$1,479.63	\$(28.37)	-1.9%
FY2015	\$483.20	\$1,024.80	\$1,508.00	\$27.20	1.8%
FY2014	\$463.60	\$1,017.20	\$1,480.80	\$24.00	1.6%
FY2013	\$448.00	\$1,008.80	\$1,456.80	\$49.48	3.5%
FY2012	\$436.79	\$970.52	\$1,407.32	\$157.28	12.6%
FY2011	\$411.60	\$838.44	\$1,250.04	\$9.64	0.8%
FY2010	\$407.60	\$832.80	\$1,240.40	\$(48.80)	-3.8%
FY2009	\$415.60	\$873.60	\$1,289.20		

Average Annual Change: FY2009 to FY2022 3.2%

Recent staff analysis on actual meter data indicates that the average consumption for a single family household in Lexington is approximately 70 HCF/year, significantly lower than the 120 HCF/year as defined by the MWRA. Based on consumption of 70 HCF/year, proposed FY2023 rates would increase the annual combined cost of water and sewer by \$61.60 per year.

Annual Water/Sewer Charges for Household Using 70 HCF/Year

	Water	Sewer	Total	from Prior Year	from Prior Year
FY2023	\$ 354.90	\$ 653.10	\$ 1,008.00	\$61.60	6.5%
FY2022	\$ 332.50	\$ 613.90	\$ 946.40	\$54.60	6.1%
FY2021	\$ 308.00	\$ 583.80	\$ 891.80	\$34.30	4.0%
FY2020	\$ 287.00	\$ 570.50	\$ 857.50		

The impact of the proposed FY2023 rates on a low (50 HCF), average (120 HCF) and high user (240 HCF) is shown on page 18. Also shown is the impact on an average single family home in Lexington and a hypothetical commercial user of 1000 HCF per year.

Enterprise Fund Retained Earnings History

The retained earnings history of both the Water and Wastewater Enterprise funds as of June 30th are in the table below. The retained earnings balance will fluctuate from year-to-year and will increase by surplus revenue collected and unexpended appropriations. It will decrease due to annual operating losses, appropriations for capital improvements or to mitigate rate increases.

		Retaine	ed .	Earnings His	toi	γ	
	C	ertified as of 6/30/2019	C	Certified as of 6/30/2020	C	Certified as of 6/30/2021	Projected etained Earnings as of 6/30/2022
Water Enterprise	\$	1,346,448	\$	1,737,914	\$	3,537,851	\$ 769,999
Wastewater Enterprise	\$	995,546	\$	1,297,665	\$	2,565,157	\$ 1,807,854

Water retained earnings as of June 30, 2021 was \$3,537,851 and is projected to be approximately \$770,000 as of June 30, 2022. The year-over year decrease reflects \$1,820,000 in cash capital appropriations in the FY2023 budget as well as the FY2022 operating loss noted in the Operating Results section above.

Wastewater retained earnings as of June 30, 2021 was \$2,565,157, and is projected to be approximately \$1,808,000 as of June 30, 2022. The decrease in wastewater retained earnings reflects \$1,365,000 in cash capital appropriations in the FY2023 budget, partly offset by the FY2022 operating surplus as noted in the Operating Results section above.

It has been the practice of the Town to maintain a balance in retained earnings for a variety of reasons including the funding of unanticipated emergency spending; to cover potential revenue shortfalls; and, to serve as a source of working capital so that General Fund cash does not have to be used for water and wastewater fund operations. It is

proposed that this practice continue and any amounts in excess retained earnings be applied to finance capital projects.

Community Comparisons

Finally, included is a comparison of Lexington's proposed rates with those of the other MWRA member communities based on the MWRA Advisory Board's Annual Water and Wastewater Retail Rate Survey for 2021 (pages 19 and 20) and a comparison of assessments for all member communities that purchase water and wastewater services from the MWRA (page 20).

Water Enterprise Operating Results - FY2022

Revenues	ļ	FY2022 Budget		FY2022 Actuals		Favorable/ (Unfavorable)
User Charges	\$	12,316,466	\$	10,892,419	\$	(1,424,047)
Non-Rate Revenue					\$	_
Penalties & Interest Late Charges	\$	35,000	\$	74,465	\$	39,465
Tax Liens/Titles Redeemed			\$	9,148		
2021 & Prior Water Liens			\$	59,608		
2022 Water Lien			\$	182,260		
Total Tax Titles/Water Liens	\$	165,000	\$	251,016	\$	86,016
New Meter Charge	\$	35,000	\$	84,872	\$	49,872
Misc. Dept Revenue	\$	15,000	\$	26,161	\$	11,161
Backflow Testing	\$	50,000	\$	46,553	\$	(3,447)
Interest Earned	\$	8,000	\$	11,196	\$	3,196
Sub-total Non-rate Revenue	\$	308,000	\$	494,264	\$	186,264
Retained Earnings	\$	_	\$	_	\$	_
Water Enterprise Total Revenues	\$	12,624,466	\$	11,386,683	\$	(1,237,783)
Expenses - Direct Costs						
Compensation	\$	865,454	\$	823,447	\$	42,007
Expenses:	·	,	·		,	,
Contractual Services	\$	269,800	\$	248,643	\$	21,157
Utilities	\$	17,000		21,545		(4,545)
Supplies	\$	202,500		109,252		93,248
Small Equipment	\$	25,000		· _	\$	25,000
Cash Capital	\$	400,000		400,000	\$	· <u> </u>
Debt	\$	1,179,794		1,097,696		82,098
MWRA	\$	8,743,912	\$	8,743,912		<u> </u>
OPEB	\$	2,761	\$	2,761	\$	_
Total Direct Costs	\$	11,706,221	\$	11,447,256	\$	258,965
Indirect Costs						
Equipment Maintenance and Depreciation	\$	36,369	Φ.	36,369	Φ.	
Auto Insurance	\$ \$	6,114		6,114		_
Indirect Departmental Expenses	э \$	296,339		296,339		_
Workers' Compensation	\$ \$	18,038		18,038		_
Employee Benefits	\$ \$	208,331		208,331		_
Retirement Costs	Ψ \$	174,971		174,971		
Indirect Town Expenses	Ψ \$	173,468		173,468		
General Insurance		4,615		4,615		
Total Indirect Costs	<u>\$</u> \$	918,245		918,245		
	=					
Water Enterprise Total Expenses	\$	12,624,466	\$	12,365,501	\$	258,965
FY2022 Surplus/(Deficit)	\$	_	\$	(978,818)	\$	(978,818)

Wastewater Enterprise Operating Results - FY2022

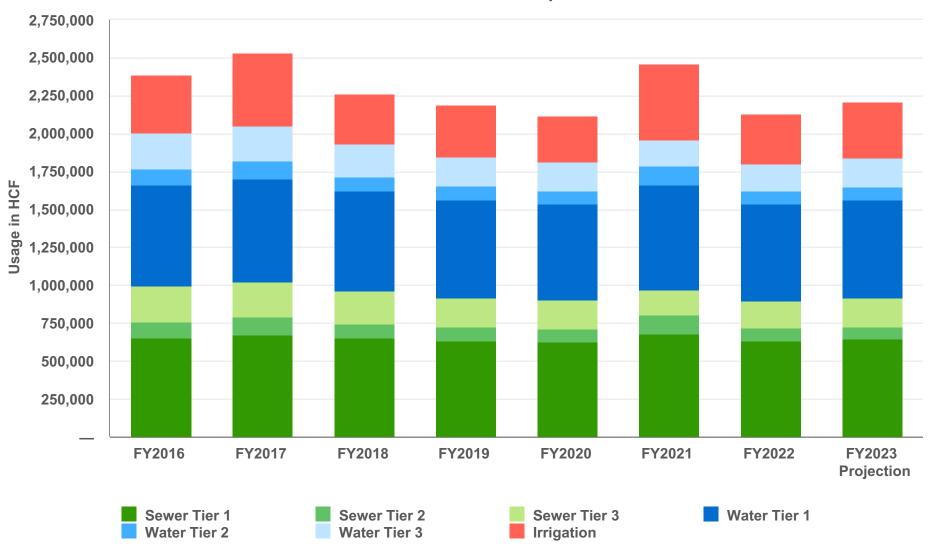
Revenues	Rev	FY2022 vised Budget	FY2022 Actuals	Favorable/ (Unfavorable)
User Charges	\$	10,841,270	\$ 10,831,707	\$ (9,563)
Non-Rate Revenue				
Penalties & Interest	\$	60,000	\$ 114,595	\$ 54,595
Tax Liens/Titles Redeemed			\$ 18,306	
2021 & Prior Sewer Liens			\$ 117,140	
2022 Sewer Lien			\$ 198,037	
Total Tax Titles/Sewer Liens	\$	282,000	\$ 333,483	\$ 51,483
Previous Connection Charges	\$	0	\$ 1,824	\$ 1,824
Misc. Dept Revenue	\$	12,000	\$ 14,193	\$ 2,193
Interest Earned	\$	8,000	\$ 5,827	\$ (2,173)
sub-total Non-Rate Revenue	\$	362,000	\$ 469,921	\$ 107,921
Retained Earnings	\$	0	\$ 0	\$ 0
Wastewater Enterprise Total Revenues	\$	11,203,270	\$ 11,301,628	\$ 98,358
Expenses - Direct Costs				
Compensation	\$	389,779	\$ 279,417	\$ 110,362
Expenses:				
Contractual Services	\$	207,400	\$ 119,436	\$ 87,964
Supplies	\$	103,250	\$ 28,811	\$ 74,439
Utilities	\$	130,000	\$ 145,003	\$ (15,003)
Small Equipment	\$	14,000	\$ 0	\$ 14,000
Cash Capital	\$	200,000	\$ 200,000	\$ 0
Debt	\$	1,464,513	\$ 1,352,192	\$ 112,321
MWRA	\$	8,177,213	\$ 8,177,213	\$ 0
OPEB	\$	3,004	\$ 3,004	\$ 0
Total Direct Costs	\$	10,689,159	\$ 10,305,077	\$ 384,082
Expenses - Indirect Costs				
Equipment Maintenance and Depreciation	\$	27,231	\$ 27,231	\$ 0
Auto Insurance	\$	4,058	\$ 4,058	\$ 0
Indirect Departmental Expenses	\$	243,416	\$ 243,416	\$ 0
Workers' Compensation	\$	6,388	\$ 6,388	\$ 0
Employee Benefits	\$	36,297	\$ 36,297	\$ 0
Retirement Costs	\$	51,756	\$ 51,756	\$ 0
Indirect Town Expenses	\$	134,714	\$ 134,714	\$ 0
General Insurance	\$	10,251	\$ 10,251	\$ 0
Total Indirect Costs	\$	514,111	\$ 514,111	\$ 0
Wastewater Enterprise Total Expenses	\$	11,203,270	\$ 10,819,188	\$ 384,082
FY2022 Surplus/(Deficit)	\$	_	\$ 482,440	\$ 482,440

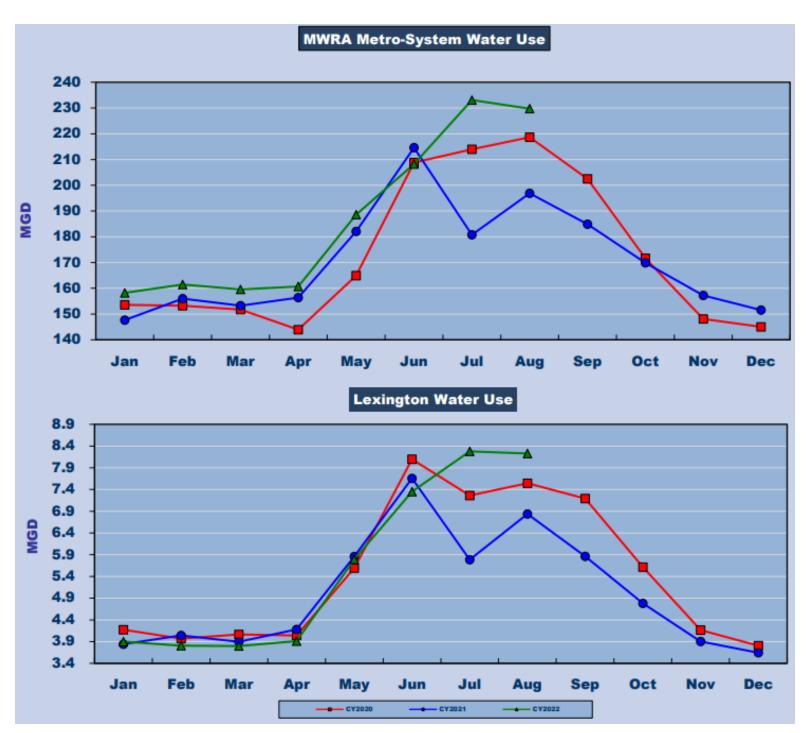
TOWN OF LEXINGTON WATER CONSUMPTION HISTORY FY2016 thru FY2022

(in hundred cubic feet(HCF))

											Α			В	(B-A)/A
(1)	DESCRIPTION	TIER	HCF RANG E	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	Estimates for FY22 Rates	10 Year Average	5 Year Average	Estimates for FY23 Preliminary Rates	% change FY23 vs FY22 Budget
(2)	WATER	TIER 1	0-40	664,407	678,913	660,903	644,456	635,458	688,356	642,648	660,000	664,763	654,364	650,000	(1.5)%
(3)		TIER 2	41-80	107,531	120,883	91,895	90,091	84,705	124,119	82,313	90,000	101,669	94,625	87,000	(3.3)%
(4)		TIER 3	80+	237,070	231,490	221,151	194,533	190,371	172,745	180,313	190,000	209,975	191,823	188,000	(1.1)%
(5)		TOTAL		1,009,008	1,031,286	973,949	929,080	910,534	985,220	905,274	940,000	976,407	940,811	925,000	(1.6)%
(6)	WATER - MUNICIPAL	FLAT RATE		38,600	63,263	29,825	31,826	23,641	35,908	23,634	30,000	31,380	28,967	29,000	(1.6)%
(7)	WATER- IRRIGATION	TIER 3		386,065	477,864	326,750	339,772	306,548	504,998	330,409	370,000	351,248	361,695	370,000	—%
(8)	WATER BEDFORD	FLAT RATE		687,019	696,163	616,099	657,483	756,890	772,132	750,662	660,000	700,342	710,653	680,000	3.0%
(9)	WATER - VA HOSPITAL	FLAT RATE		29,404	32,893	28,756	24,444	11,349	5,913	14,809	8,000	25,045	17,054	10,000	25.0%
(10)	HANSCOM/ LINCOLN LABS	110+111		227,665	248,605	238,436	234,333	227,734	167,408	69,641	207,000	213,995	187,510	107,000	(48.3)%
(11)	WATER- BURLINGTON	FLAT RATE			10,936	4,595	_	2,883		-	_	2,971	1,496	_	
(12)	TOTAL WATER			2,377,761	2,793,638	2,218,410	2,216,938	2,239,579	2,471,579	2,094,429	2,215,000	2,301,388	2,248,187	2,121,000	(4.2)%
(13)	SEWER	TIER 1	0-40	655.115	670.008	652.510	636.342	627.872	680.647	635.775	652.000	655.727	646.629	643.000	(1.4)%
(14)		TIER 2	41-80	105,028	118,482	90,185	88,283	83,318	121,881	80,865	88,000	99,442	92,906	85,000	(3.4)%
(15)		TIER 3	80+	234,697	232,394	217,533	192,973	189,217	170,119	178,642	188,000	207,697	189,697	186,000	(1.1)%
(16)		TOTAL		994,840	1,020,884	960,228	917,598	900,407	972,647	895,282	928,000	962,867	929,232	914,000	(1.5)%
(17)	SEWER- MUNICIPAL	FLAT RATE		14,724	14,168	11,558	10,511	11,349	8,683	11,808	10,000	12,099	10,782	10,000	— %
(18)	TOTAL SEWER			1,009,564	1,035,052	971,786	928,109	911,756	981,330	907,090	938,000	974,965	940,014	924,000	(1.5)%
(19)	GRAND TOTAL			3,387,325	3,828,690	3,190,196	3,145,047	3,151,335	3,452,909	3,001,519	3,153,000	3,276,353	3,188,201	3,045,000	(3.4)%

Water & Wastewater Consumption Trends





Water Enterprise Fund - Town of Lexington

Budget and Spending History: FY2019 to FY2023

Direct Costs	FY2019 Actuals	FY2020 Actuals	FY2021 Actuals	F`	Y2022 Final Budget	FY2022 Actuals	F	Y2023 TM Budget	(FY2023 Revised Budget Proposed)*	\$	Change	% Change
Compensation	\$ 684,682	\$ 660,929	\$ 834,114	\$	865,454	\$ 823,447	\$	875,670	\$	875,670	\$	10,216	1.2 %
Expenses													
Contractual Services	\$ 174,029	\$ 183,763	\$ 171,836	\$	269,800	\$ 248,643	\$	279,800	\$	279,800	\$	10,000	3.7 %
Utilities	\$ 12,831	\$ 18,143	\$ 14,104	\$	17,000	\$ 21,545	\$	17,000	\$	17,000	\$	_	— %
Supplies	\$ 189,527	\$ 192,234	\$ 133,964	\$	202,500	\$ 109,252	\$	211,700	\$	211,700	\$	9,200	7.3 %
Small Equipment	\$ 3,443	\$ 26,296	\$ 77,198	\$	25,000	\$ _	\$	25,000	\$	25,000	\$	_	— %
Cash Capital	\$ _	\$ _	\$ 200,000	\$	400,000	\$ 400,000	\$	600,000	\$	600,000	\$	200,000	50.0 %
Debt	\$ 1,436,995	\$ 1,192,000	\$ 1,192,910	\$	1,179,794	\$ 1,097,696	\$	1,224,746	\$	1,224,746	\$	44,952	3.8 %
MWRA	\$ 7,128,006	\$ 7,413,364	\$ 8,006,399	\$	8,743,912	\$ 8,743,912	\$	8,493,467	\$	8,493,467	\$ ((250,445)	(2.9)%
OPEB	\$ 9,089	\$ 2,761	\$ 	\$	2,761	\$ 2,761	\$	2,761	\$	2,761	\$		
Total Direct Costs	\$ 9,638,601	\$ 9,689,490	\$ 10,630,525	\$	11,706,221	\$ 11,447,256	\$	11,730,144	\$	11,730,144	\$	23,923	0.2 %
Indirect Costs													
Equipment Maintenance and Depreciation	\$ 37,736	\$ 34,405	\$ 38,616	\$	36,369	\$ 36,369	\$	31,024	\$	31,024	\$	(5,345)	(14.7)%
Auto Insurance	\$ 7,184	\$ 7,646	\$ 8,673	\$	6,114	\$ 6,114	\$	6,644	\$	6,644	\$	530	8.7 %
Indirect Departmental Expenses	\$ 310,491	\$ 300,818	\$ 314,776	\$	296,339	\$ 296,339	\$	308,018	\$	308,018	\$	11,679	3.9 %
Workers' Compensation	\$ 17,420	\$ 15,717	\$ 15,914	\$	18,038	\$ 18,038	\$	16,406	\$	16,406	\$	(1,632)	(9.0)%
Employee Benefits	\$ 184,330	\$ 184,415	\$ 201,181	\$	208,331	\$ 208,331	\$	225,513	\$	225,513	\$	17,182	8.2 %
Retirement Costs	\$ 133,348	\$ 160,050	\$ 179,301	\$	174,971	\$ 174,971	\$	200,990	\$	200,990	\$	26,019	14.9 %
Indirect Town Expenses	\$ 174,375	\$ 186,536	\$ 167,154	\$	173,468	\$ 173,468	\$	183,671	\$	183,671	\$	10,203	5.9 %
General Insurance	\$ 4,949	\$ 4,986	\$ 4,386	\$	4,615	\$ 4,615	\$	4,827	\$	4,827	\$	212	4.6 %
Total Indirect Costs	\$ 869,833	\$ 894,573	\$ 930,001	\$	918,245	\$ 918,245	\$	977,093	\$	977,093	\$	58,848	6.4 %
Water Enterprise Total Expenses	\$ 10,508,434	\$ 10,584,063	\$ 11,560,526	\$	12,624,466	\$ 12,365,501	\$	12,707,237	\$	12,707,237	\$	82,771	0.7 %

Wastewater Enterprise Fund - Town of Lexington Budget and Spending History: FY2019 to FY2023

Direct Costs		FY2017 Actuals		FY2019 Actuals		FY2021 Actuals	Fi	FY2022 nal Budget		FY2022 Actuals	F	Y2023 TM Budget		FY2023 Revised Budget Proposed)*	\$	Change	% Change
Compensation	\$	631,564	\$	684,682	\$	239,392	\$	389,779	\$	279,417	\$	399,848	\$	399,848	\$	10,069	2.6 %
Expenses																	
Contractual Services	\$	174,211	\$	174,029	\$	24,020	\$	207,400	\$	119,436	\$	207,400	\$	207,400	\$	_	— %
Utilities	\$	13,159	\$	12,831	\$	15,980	\$	130,000	\$	145,003	\$	131,000	\$	131,000	\$	9,300	7.9 %
Supplies	\$	179,027	\$	189,527	\$	8,190,356	\$	103,250	\$	28,811	\$	105,900	\$	105,900	\$	2,650	2.6 %
Small Equipment	\$	36,174	\$	3,443	\$	_	\$	14,000	\$	_	\$	14,100	\$	14,100	\$	100	0.7 %
Cash Capital							\$	200,000	\$	200,000	\$	300,000	\$	300,000	\$	100,000	50.0 %
Debt	\$	1,374,696	\$	1,436,995	\$	_	\$	1,464,513	\$	1,352,192	\$	1,595,417	\$	1,595,417	\$	130,904	8.9 %
MWRA	\$	7,376,976	\$	7,128,006	\$	663	\$	8,177,213	\$	8,177,213	\$	8,499,573	\$	8,432,792	\$	255,579	3.1 %
OPEB	\$	_	\$	9,089	\$	_	\$	3,004	\$	3,004	\$	3,004	\$	3,004	\$		
Total Direct Costs	\$	9,785,807	\$	9,638,601	\$	8,699,406	\$1	0,689,159	\$1	10,305,077	\$	11,256,242	\$1	11,189,461	\$	500,302	4.7 %
Indirect Costs Equipment Maintenance and Depreciation	\$	40,917	\$	37.736	\$	26,939	\$	27,231	\$	27,231	\$	24,459	\$	24,459	\$	(2,772)	(10.2)%
Auto Insurance	\$	7,106	\$	7,184	\$	6,633	-	4,058		4,058	\$	3,853		3,853		(205)	(5.1)%
Indirect Departmental Expenses	\$	305,894		310,491		246,480		243,416	1	243,416		245,603		245,603		2,187	0.9 %
Workers' Compensation	\$	16,556		17,420		5,717	-	6,388		6,388		6,028		6,028		(360)	(5.6)%
Employee Benefits	\$	187,445		184,330	•	60,133		36,297	1	36,297		50,323		50,323		14,026	38.6 %
Retirement Costs	\$	124,525		133,348		57,307	-	51,756		51,756	•	60,219		60,219	· ·	8,463	16.4 %
Indirect Town Expenses	\$	191,260		174,375	•	128,871		134,714	1	134,714		141,053		141,053		6,339	4.7 %
General Insurance	\$	3,707	÷	4,949	_	9,583		10,251	_	10,251	_	10,878		10,878	_	627	6.1 %
Total Indirect Costs	\$	877,410	\$	869,833	\$	541,663	\$	514,111	\$	514,111	\$	542,416	\$	542,416	\$	28,305	5.5 %
	_																
Wastewater Enterprise Total Expenses	<u>\$</u>	10,663,217	\$	10,508,434	\$	9,241,069	\$1	1,203,270	\$^	10,819,188	\$	11,798,658	\$1	1,731,877	\$	528,607	4.7 %

	PRELIMINARY FY2022 WATER RATES										
	FY23 Budget	FY22 Budget	FY21 Budget	FY20 Budget	FY19 Budget	FY18 Budget	FY17 Budget	FY16 Budget			
Water Budget	\$12,107,237	\$12,224,466	\$11,522,329	\$10,881,995	\$10,749,241	\$10,722,659	\$10,766,291	\$10,022,950			
Capital/ Infrastructure	\$600,000	\$400,000	\$200,000								
Less: Estimated Non-Rate Revenue	\$(310,000)	\$(308,000)	\$(308,000)	\$(292,500)	\$(272,920)	\$(314,675)	\$(308,773)	\$(299,000)			
Less: Use of Retained Earnings	\$—	\$—	\$—	\$ —	\$(61,000)	\$(168,100)	\$(248,900)	\$(275,000)			
Net Revenue to be Raised from Water Charges	\$12,397,237	\$12,316,466	\$11,414,329	\$10,589,495	\$10,415,321	\$10,239,884	\$10,208,618	\$9,448,950			

a	D	C	u	е	<u> </u>
Final FY2021 RATES	Tier	Tier Range (HCF)	Tier as % of Subtotal	Estimated Consumption (HCF)	Rate/ HCF
Residential/ Commercial/ Industrial	Tier 1	0-40	70.2%	660,000	\$ 4.75
Residential/ Commercial/ Industrial	Tier 2	41-80	9.6%	90,000	\$ 7.12
Residential/ Commercial/ Industrial	Tier 3	80+	20.2%	190,000	\$ 9.40
Subtotal				940,000	
Irrigation	All @ Tier 3 R	ate		370,000	\$ 9.40
Municipal	Flat Rate			30,000	\$ 3.27
Hanscom/ Lincoln Labs	Flat Rate			207,000	\$ 7.00
VA Hospital	Flat Rate			8,000	\$ 8.37
Bedford Water Agreement	Flat Rate			660,000	\$ 3.30
Subtotal				1,275,000	
Total				2,215,000	

PROPOSED FY2022 RATES			Tier as % of Subtotal	Estimated Consumption (HCF)	Rate/ HCF	Revenue	% Rate Increase
Residential/ Commercial/ Industrial	Tier 1	0-40	70.3%	650,000	\$5.07	\$3,295,500	6.8%
Residential/ Commercial/ Industrial	Tier 2	41-80	9.4%	87,000	\$7.60	\$ 661,200	6.8%
Residential/ Commercial/ Industrial	Tier 3	80+	20.3%	188,000	\$10.04	\$1,887,520	6.8%
Subtotal				925,000		\$5,844,220	
Irrigation	All @ Tier 3 F	Rate		370,000	\$10.04	\$3,714,800	6.8%
Municipal	Flat Rate			29,000	\$3.46	\$ 100,340	5.8%
Hanscom/ Lincoln Labs	Flat Rate			107,000	\$7.48	\$ 800,360	6.8%
VA Hospital	Flat Rate			10,000	\$8.94	\$ 89,400	6.8%
Bedford Water Agreement	Flat Rate			680,000	\$3.49	\$2,373,200	5.8%
Subtotal				1,196,000		\$7,078,100	
Total				2,121,000		\$12,922,320	
Estimated Gross Water Charges						\$12,922,320	
Collection Rate						96%	
Estimated Net Revenue						\$12,405,427	
Revenue Target						\$12,397,237	
Surplus/ (Deficit)						\$ 8,190	

	PRELIMINARY FY2022 WASTEWATER RATES											
	FY23 Budget	FY22 Budget	FY20 Budget	FY19 Budget	FY18 Budget	FY17 Budget	FY16 Budget	FY15 Budget				
Wastewater Budget	\$11,431,877	\$11,003,270	\$10,453,931	\$10,057,978	\$9,682,514	\$9,396,747	\$9,151,553	\$9,511,297				
Investment in Capital/ Infrastructure	\$300,000	\$200,000	\$100,000									
Estimated Non-Rate Revenue	\$(370,000)	\$(362,000)	\$(362,000)	\$(365,000)	\$(363,000)	\$(363,000)	\$(320,000)	\$(322,000)				
Use of Retained Earnings	\$—	\$ —	\$ —	\$ —	\$ —	\$—	\$ —	\$(50,000)				
Net Revenue to be Raised from Wastewater Charges	\$11,361,877	\$10,841,270	\$10,091,931	\$9,692,978	\$9,769,360	\$9,033,747	\$8,831,553	\$9,139,297				

a	D	C	a	е	Ţ
FINAL FY2021 RATES	Tier	Tier Range (HCF)	Tier as % of Subtotal	Estimated Consumption (HCF)	Rate/ HCF
Residential/ Commercial/ Industrial	Tier 1	0-40	67.3%	652,000	\$ 8.77
Residential/ Commercial/ Industrial	Tier 2	41-80	10.3%	88,000	\$ 14.32
Residential/ Commercial/ Industrial	Tier 3	80+	22.4%	188,000	\$ 22.77
Municipal	Flat Rate			10,000	\$ 3.50

Total 938,000

PROPOSED FY2022 RATES			Tier as % of Subtotal	Estimated Consumption (HCF)	Rate/ HCF	Revenue	% Rate Increase
Residential/ Commercial/ Industrial	Tier 1	0-40	70.4%	643,000	\$9.33	\$5,999,190	6.4%
Residential/ Commercial/ Industrial	Tier 2	41-80	9.3%	85,000	\$15.24	\$1,295,400	6.4%
Residential/ Commercial/ Industrial	Tier 3	80+	20.4%	186,000	\$24.23	\$4,506,780	6.4%
Municipal	Flat Rate			10,000	\$3.68	\$ 36,800	5.1%
Total				924,000		\$11,838,170	

Estimated Gross Wastewater Charges	\$11,838,170
Collection Rate	96%
Estimated Net Revenue	\$11,364,643
Revenue Target	\$11,361,877
Surplus/ (Deficit)	\$ 2,766

		Water I	Purchas	ed from	the MWF	RA by M	onth and	d Fiscal	Year: 20	03 to 20	22		
MG	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
FY2003	229.6	255.8	195.0	159.4	130.1	147.2	153.4	141.0	137.7	139.4	156.1	161.0	2,005.7
FY2004	222.5	179.0	164.8	140.1	117.4	126.9	126.6	120.4	118.7	123.1	152.0	185.7	1,777.2
FY2005	191.9	181.2	168.9	138.7	116.0	117.8	116.5	107.3	118.0	121.2	136.2	196.2	1,709.9
FY2006	219.9	224.4	196.1	143.3	119.1	121.0	122.1	109.3	123.2	129.4	148.6	157.3	1,813.7
FY2007	201.3	203.9	159.5	135.3	109.7	109.0	117.0	107.8	115.5	111.7	158.9	208.7	1,738.3
FY2008	216.9	225.2	202.7	141.5	102.1	107.9	111.5	103.8	121.3	122.2	149.6	185.2	1,789.9
FY2009	190.0	167.6	162.5	131.0	115.3	125.0	135.4	118.3	129.4	130.3	160.6	163.6	1,729.0
FY2010	160.5	189.3	171.5	122.0	106.7	115.4	120.9	106.1	116.9	113.3	157.3	181.4	1,661.3
FY2011	241.7	231.1	192.6	139.2	112.5	115.8	117.6	108.3	125.6	117.8	142.2	180.1	1,824.5
FY2012	231.1	186.1	154.0	129.2	99.9	104.8	106.7	104.3	107.7	123.4	147.9	165.1	1,660.2
FY2013	236.3	239.1	176.8	135.6	118.0	113.6	120.9	109.7	124.1	112.8	148.6	179.0	1,814.5
FY2014	227.4	235.8	203.6	163.2	121.9	115.9	123.5	104.1	107.5	119.8	151.1	207.9	1,881.7
FY2015	229.1	231.6	215.6	177.7	125.1	126.5	131.5	122.8	129.3	154.4	245.5	239.6	2,128.7
FY2016	237.0	246.7	226.1	156.1	115.8	112.1	115.3	108.8	116.1	118.5	173.5	243.1	1,969.1
FY2017	283.0	270.8	212.1	153.8	118.9	117.0	118.1	103.4	116.2	116.2	146.9	184.6	1,941.0
FY2018	194.8	223.8	190.1	164.8	123.0	116.9	136.5	103.8	116.1	111.8	158.5	205.2	1,845.3
FY2019	246.1	217.9	192.1	149.5	114.9	116.9	116.8	105.2	128.0	123.7	148.7	181.1	1,840.9
FY2020	223.2	222.8	196.9	156.3	129.2	136.5	129.4	115.1	126.0	121.3	173.4	242.9	1,973.0
FY2021	225.1	233.9	215.7	174.1	124.9	118.0	119.1	113.2	120.7	125.5	181.6	229.7	1,981.5
FY2022	179.3	211.9	175.9	148.2	117.1	113.0	120.9	106.6	117.7	117.4	179.6	220.6	1,808.2
FY2023	256.6	255.1	TBD										
Average FY00-FY21	218.1	216.7	187.5	147.9	118.7	120.6	125.1	113.2	122.6	123.9	160.5	192.7	1,847.4
10 Year Average FY12-FY21	228.4	229.1	196.3	155.3	119.0	117.4	121.7	108.8	119.0	122.3	168.7	209.0	1,894.9
5 Year Average FY17-FY21	225.3	230.2	197.1	157.8	121.3	119.7	123.5	107.9	120.8	119.3	164.8	210.7	1,898.3
	Summer 2020	875.3		Summer 2021	802.5		Summe	er 2022	911.9				

Combined Water/Wastewater Bill for Low, Average & High Users: Impact of Proposed Rate Changes

50 HCF (low user)							
FY2022 FY2023 Proposed							
Water	\$	237.50	\$	253.50			
Wastewater	\$	438.50	\$	466.50			
Combined	\$	676.00	\$	720.00			
\$ Change from FY21			\$	44.00			
% Change from FY21				6.5%			

70 HCF (Average Lexington Single Family Home)							
		FY2022	FY2023 Proposed				
Water	\$	332.50	\$	354.90			
Wastewater	\$	613.90	\$	653.10			
Combined	\$	946.40	\$	1,008.00			
\$ Change from FY21			\$	61.60			
% Change from FY21				6.5%			

120 HCF (average user)								
	FY2022 FY2023 Proposed							
Water	\$	664.80	\$	709.6	60			
Wastewater	\$	1,274.40	\$	1,356.0	0			
Combined	\$	1,939.20	\$	2,065.6	0			
\$ Change from FY21			\$	126.4	10			
% Change from FY21				6	.5%			

240 HCF (high user)							
	FY2022 FY2023 Proposed						
Water	\$	1,701.60	\$	1,816.80			
Wastewater	\$	3,668.80	\$	3,904.00			
Combined	\$	5,370.40	\$	5,720.80			
\$ Change from FY21			\$	350.40			
% Change from FY21				6.5%			

	1000 HCF	
	FY2022	FY2023 Proposed
Water	\$ 8,845.60	\$ 9,447.20
Wastewater	\$ 20,974.00	\$ 22,318.80
Combined	\$ 29,819.60	\$ 31,766.00
\$ Change from FY21		\$ 1,946.40
% Change from FY21		6.5%

Rates for Communities Receiving Water and Sewer Services from MWRA*

Community	Water	Sewer	Combined
Everett	\$ 291.60	\$ 793.20	\$ 1,084.80
Waltham	\$ 407.28	\$ 715.32	\$ 1,122.60
Malden	\$ 682.08	\$ 797.76	\$ 1,479.84
Boston	\$ 735.58	\$ 1,010.01	\$ 1,745.59
Chelsea	\$ 656.40	\$ 1,136.40	\$ 1,792.80
Brookline	\$ 667.04	\$ 1,135.76	\$ 1,802.80
Norwood	\$ 765.24	\$ 1,041.12	\$ 1,806.36
Watertown	\$ 618.00	\$ 1,213.20	\$ 1,831.20
Medford	\$ 860.40	\$ 1,073.28	\$ 1,933.68
Lexington	\$ 664.80	\$ 1,274.40	\$ 1,939.20
Revere	\$ 487.20	\$ 1,470.00	\$ 1,957.20
Arlington	\$ 939.92	\$ 1,094.12	\$ 2,034.04
Framingham	\$ 900.36	\$ 1,134.72	\$ 2,035.08
Quincy	\$ 866.40	\$ 1,232.28	\$ 2,098.68
Stoneham	\$ 834.00	\$ 1,320.00	\$ 2,154.00
Somerville	\$ 733.52	\$ 1,500.12	\$ 2,233.64
Melrose	\$ 931.60	\$ 1,439.12	\$ 2,370.72
Milton	\$ 894.48	\$ 1,481.04	\$ 2,375.52
Newton	\$ 967.80	\$ 1,486.20	\$ 2,454.00
Belmont	\$ 877.88	\$ 1,622.20	\$ 2,500.08
Reading	\$ 1,308.00	\$ 1,308.00	\$ 2,616.00
Winthrop	\$ 1,419.00	\$ 1,419.00	\$ 2,838.00

^{*}Data from MWRA Advisory Board's 2021 Annual Rate Survey, based on average annual household use of 120 HCF (FY2022 or most recently published).

Massachusetts Water Resources Authority Final FY23 Water and Sewer Assessments

5-Jun-22

MWRA Fully Served Water and Sewer Customers	Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
ARLINGTON	\$5,958,052	\$5,648,095	-5.2%	\$9,124,432	\$9,392,510	2.9%	\$15,082,484	\$15,040,605	(\$41,879)	-0.3%
BELMONT	3,321,668	3,134,847	-5.6%	5,482,714	5,677,766	3.6%	8,804,382	8,812,613	8,231	0.1%
BOSTON (BWSC)	93,962,296	99,390,501	5.8%	148,872,321	149,691,861	0.6%	242,834,617	249,082,362	6,247,745	2.6%
BROOKLINE	8,011,141	8,018,472	0.1%	13,660,245	14,277,389	4.5%	21,671,386	22,295,861	624,475	2.9%
CHELSEA	5,460,223	5,460,876	0.0%	8,986,504	9,362,783	4.2%	14,446,727	14,823,659	376,932	2.6%
EVERETT	6,272,641	6,422,774	2.4%	9,618,364	10,050,685	4.5%	15,891,005	16,473,459	582,454	3.7%
FRAMINGHAM	9,287,668	9,531,024	2.6%	13,764,605	13,631,736	-1.0%	23,052,273	23,162,760	110,487	0.5%
LEXINGTON	8,743,912	8,493,467	-2.9%	8,177,213	8,432,792	3.1%	16,921,125	16,926,259	5,134	0.0%
MALDEN	8,378,155	8,758,033	4.5%	13,820,322	14,707,650	6.4%	22,198,477	23,465,683	1,267,206	5.7%
MEDFORD	7,360,071	7,666,268	4.2%	12,538,844	13,036,794	4.0%	19,898,915	20,703,062	804,147	4.0%
MELROSE	3,511,330	3,499,715	-0.3%	6,842,727	7,179,811	4.9%	10,354,057	10,679,526	325,469	3.1%
MILTON	3,884,900	4,022,582	3.5%	5,910,238	6,075,106	2.8%	9,795,138	10,097,688	302,550	3.1%
NEWTON	13,717,608	14,157,661	3.2%	22,344,621	22,803,628	2.1%	36,062,229	36,961,289	899,060	2.5%
NORWOOD	4,409,127	7 4,502,690	2.1%	8,482,434	8,789,282	3.6%	12,891,561	13,291,972	400,411	3.1%
QUINCY	13,440,835	13,856,502	3.1%	21,473,437	22,536,755	5.0%	34,914,272	36,393,257	1,478,985	4.2%
READING	2,831,288	3 2,807,828	-0.8%	5,376,119	5,378,338	0.0%	8,207,407	8,186,166	(21,241)	-0.3%
REVERE	5,756,009	6,348,919	10.3%	11,066,469	12,301,594	11.2%	16,822,478	18,650,513	1,828,035	10.9%
SOMERVILLE	8,973,256	9,471,778	5.6%	17,020,189	17,021,558	0.0%	25,993,445	26,493,336	499,891	1.9%
STONEHAM	3,561,396	3,289,382	-7.6%	5,585,497	5,652,293	1.2%	9,146,893	8,941,675	(205,218)	-2.2%
WALTHAM	10,338,346	11,044,210	6.8%	14,299,920	14,787,237	3.4%	24,638,266	25,831,447	1,193,181	4.8%
WATERTOWN	4,166,126	4,147,401	-0.4%	6,806,903	6,800,246	-0.1%	10,973,029	10,947,647	(25,382)	-0.2%
WINTHROP	2,074,166	1,918,276	-7.5%	3,831,735	3,970,822	3.6%	5,905,901	5,889,098	(16,803)	-0.3%
Т	OTAL \$233,420,214	\$241,591,301	3.5%	\$373,085,853	\$381,558,636	2.3%	\$606,506,067	\$623,149,937	\$16,643,870	2.7%