



WATER MAIN REPLACEMENT PROGRAM & WATER RATE RECOMMENDATION

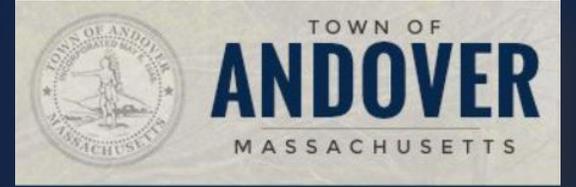
April 22, 2019

OBJECTIVES



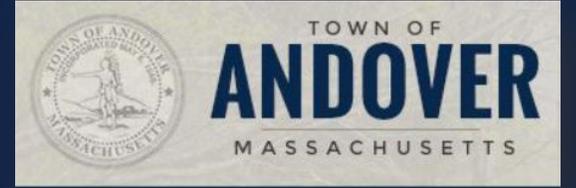
- Accelerate the Water Main Replacement Program – Currently 30 Years (Approx. 27 Years remaining)
- Align Paving Restoration from gas disaster with Water Main Replacement Program
 - 11.9 Miles of cast iron, unlined water mains under impacted roads
- Alleviate brown water condition through increased investment
- Take full advantage of state financing programs

CURRENT RATE PLAN



- 2.5% Annual Increase through FY 2021
- \$3M Annual Investment in Water Main Replacement – 30 Year Program
- Assumes North Reading increases capped at 2.5% through FY 2028 (adjustment to reflect Andover's rate in FY 2029)

RECOMMENDATION



- Fully fund 11.9 miles of water main under impacted (gas disaster) roads beginning in FY 2020 through FY 2023
- Accelerate program over 10 years beginning in FY 2020
- Target full replacement in 15 Years (FY 2034)
- Take advantage of State Revolving Fund Loan Program (SRF) to fund emergency work associated with gas disaster
 - One time opportunity
 - 0% Loan
 - Principal Forgiveness

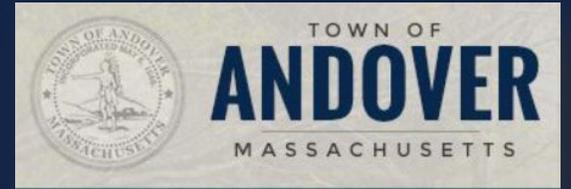
RATE RECOMMENDATION



Level Increase Rates - Water (\$/unit)										
Tier	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rate increase		5.0%	5.0%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
1	\$3.05	\$3.20	\$3.36	\$3.53	\$3.71	\$3.84	\$3.97	\$4.11	\$4.25	\$4.40
2	\$3.36	\$3.52	\$3.70	\$3.88	\$4.08	\$4.22	\$4.37	\$4.52	\$4.68	\$4.84
3	\$3.66	\$3.84	\$4.04	\$4.24	\$4.45	\$4.60	\$4.77	\$4.93	\$5.11	\$5.28
Annual Bill	\$373.32	\$391.99	\$411.59	\$432.16	\$453.77	\$469.65	\$486.09	\$503.11	\$520.71	\$538.94
Monthly	\$31.11	\$32.67	\$34.30	\$36.01	\$37.81	\$39.14	\$40.51	\$41.93	\$43.39	\$44.91

- Average annual bill will increase \$18.67 in FY2020; rather than \$9.34 under 2.5% rate increase

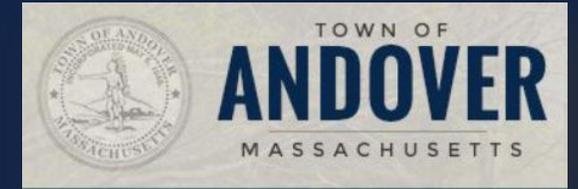
AVERAGE ANNUAL BILLS



Average Annual Bills Comparison

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rate Plan at 2.5%	\$373.32	\$382.65	\$392.22	\$402.03	\$412.08	\$422.34	\$432.89	\$443.71	\$454.80	\$466.17
Adoption of new rates	\$373.32	\$391.99	\$411.59	\$432.16	\$453.77	\$469.65	\$486.09	\$503.11	\$520.71	\$538.94

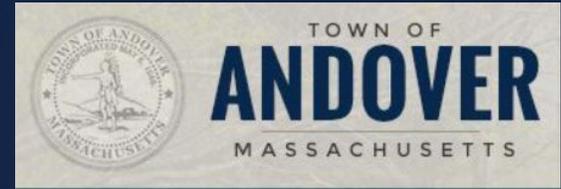
AVERAGE ANNUAL INCREASE COMPARISON



Average Annual Bills Comparison

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Annual Bill Increase at 2.5% Rate Plan	-	\$9.33	\$9.57	\$9.81	\$10.05	\$10.26	\$10.55	\$10.82	\$11.09	\$11.37
Annual Bill Increase under new Rate Plan	-	\$18.67	\$19.60	\$20.57	\$21.61	\$15.88	\$16.44	\$17.02	\$17.60	\$18.23
<i>Difference between 2.5% rate plan and new plan</i>	-	\$9.34	\$10.03	\$10.76	\$11.56	\$5.62	\$5.89	\$6.20	\$6.51	\$6.86

RATE RECOMMENDATION



Level Increase Rates - Water (\$/unit)										
Tier	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rate increase		5.0%	5.0%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
1	\$3.05	\$3.20	\$3.36	\$3.53	\$3.71	\$3.84	\$3.97	\$4.11	\$4.25	\$4.40
2	\$3.36	\$3.52	\$3.70	\$3.88	\$4.08	\$4.22	\$4.37	\$4.52	\$4.68	\$4.84
3	\$3.66	\$3.84	\$4.04	\$4.24	\$4.45	\$4.60	\$4.77	\$4.93	\$5.11	\$5.28
Annual Bill	\$373.32	\$391.99	\$411.59	\$432.16	\$453.77	\$469.65	\$486.09	\$503.11	\$520.71	\$538.94
Monthly	\$31.11	\$32.67	\$34.30	\$36.01	\$37.81	\$39.14	\$40.51	\$41.93	\$43.39	\$44.91