



# **Water Company Acquisition Study Committee** ***Recommendation Vote Summary***

**January 2019**

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## **11 Dec 2018 Board of Selectmen Charge**

**WCASC charged to review available information related to potential purchase of the water system and report back to the Board of Selectmen with a recommendation**



# **WCASC Investigation Process Summary**

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**Article 19, Town Meeting 2012:** *“...determine whether the acquisition is feasible and advisable for further Town Meeting consideration”*

- **25 WCASC meetings:** 30 May 2012 – 23 Jan 2019
- **Periodic updates** of Town financial model at request of Town Administrator
- **Mar 2018:** Resumption of Governance & Engineering investigations at conclusion of litigation
- **Jan 2019:** Summary reviews
  - 3<sup>rd</sup>-party expert financial model reviews: Berry Dunn + Andersen Tax
  - Financial Analysis, Governance, and Engineering phase summaries



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# Financial Analysis



## Financial Analysis Summary

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- **2H2012:** Identified **~\$7M** in Aquarion costs that Town-owned water system would not have to pay
  - Revenue from eliminated costs could be ‘re-deployed’
- **Apr 2016:** Court-ordered 31 Dec 2013 price: **\$88.6M**
- **Purchase price estimate** as of Town Meeting 2019: **\$107.8M**
- **Apr 2017:** Aquarion files for **14.7%** rate increase
- **Dec 2017:** Aquarion purchased by Eversource for **\$1.68B**
- **Dec 2018:** DPU approves **11.9%** increase for SAA ratepayers
  - DPU also approves annual **2%** MRAM ratepayer surcharge



## Financial Analysis Summary (cont'd)

- **Nov 2018:** Town retained two **3<sup>rd</sup>-party experts** to review Town financial model
  - **Berry Dunn** → Town's assumption of 10% Aquarion rate increase every three years is "***conservative and reasonable***"
  - **Andersen Tax** → Town ownership would result in at least **\$50M** in ratepayer savings over 31 years
    - Ratepayer savings would increase by **\$7.4M** each year after acquisition debt paid off

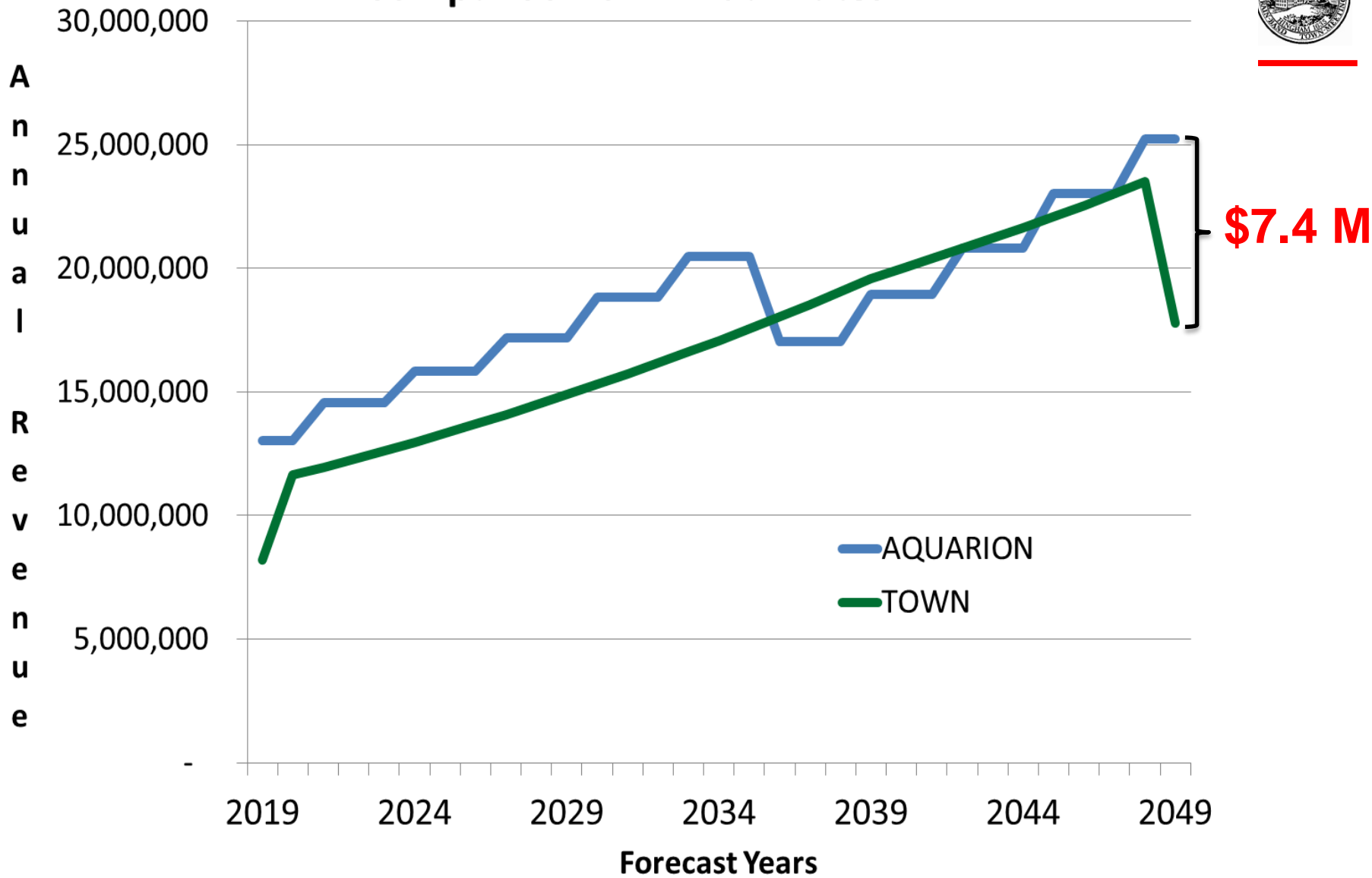


## Financial Analysis Summary (cont'd)

Model	Town	Aquarion	Andersen
Town	\$510,867,000	\$510,867,000	<b>\$526,855,000</b>
Aquarion	\$647,725,000	\$470,894,000	<b>\$576,623,000</b>
Difference Town Higher/(Town Lower)	(\$136,858,000)	\$39,973,000	<b>(\$49,768,000)</b>

**Forecast period includes acquisition debt repayment –  
Starting in 2049 (last year of forecast) total savings  
increase to \$7.4 million per year**

# Comparison of Annual Rates







## Financial Analysis Summary (cont'd)

- **Andersen Tax Model “Apples to Apples” Key Factors and Assumptions**
  - Acquisition Cost: \$107.8M
  - Fund Balance Repayment: \$ 1.49M
  - Borrowing: 1 year short-term + 29 years’ long-term, level payment
  - Annual capital expenditure (CAPEX): \$2.7M → \$3.7M
    - Used Aquarion’s 13 Aug 2018 *Infrastructure Investment Plan* amounts
  - Initial Town operating costs increase 3% annually
    - Outsourced system operations & maintenance
    - Water system Superintendent
    - Admin support
    - Other municipal costs



## Financial Analysis Final Points

- All water system costs are paid by ratepayers—not taxpayers
- 337 MA communities (96%) served by public water systems
- Aquarion's purchase price doubled in 10 years (\$860M → \$1.68B) for a compelling reason: 10.5% authorized profit



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# Governance



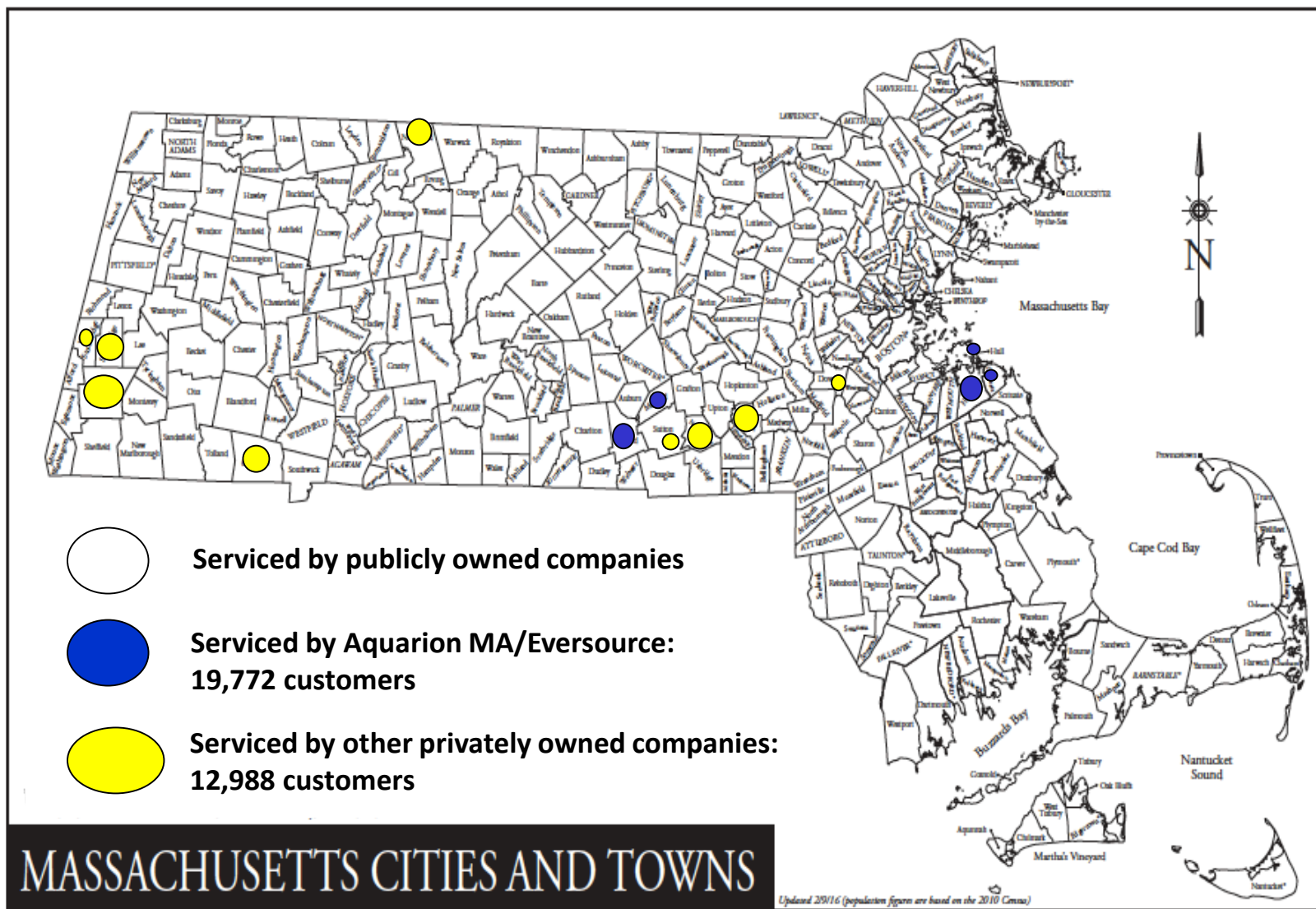
## **Governance: Diligence**

- **Researched state law governance and operational requirements**
- **Obtained legal advice from Town Counsel**
- **Reviewed MA Drinking Water Regulations**
- **Contacted professional water consultant**
- **Contacted bond counsel in the water-utility space**
- **Met with representatives from Hull and Cohasset**
- **Contacted other municipalities and talked with water superintendents in other towns**
- **Contacted officials at MassDEP**
- **Reviewed Tighe & Bond *2017 Massachusetts Water Rate Survey***

(Source: UNC School of Government Environmental Finance Center *MA Water and Wastewater Rates Dashboard*)

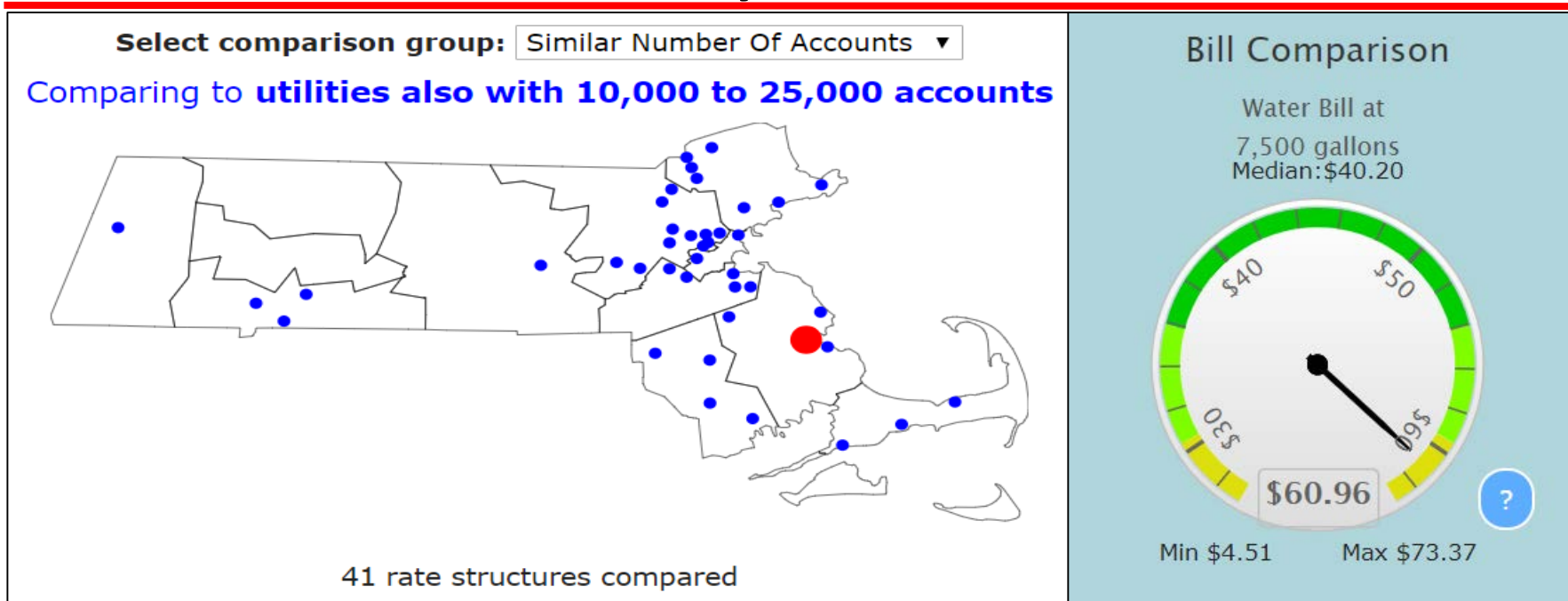


# Governance: Municipal vs. For-Profit Systems



Source: MA Department of Public Utilities

# Governance: Municipal Ownership of Medium-Sized Water Systems

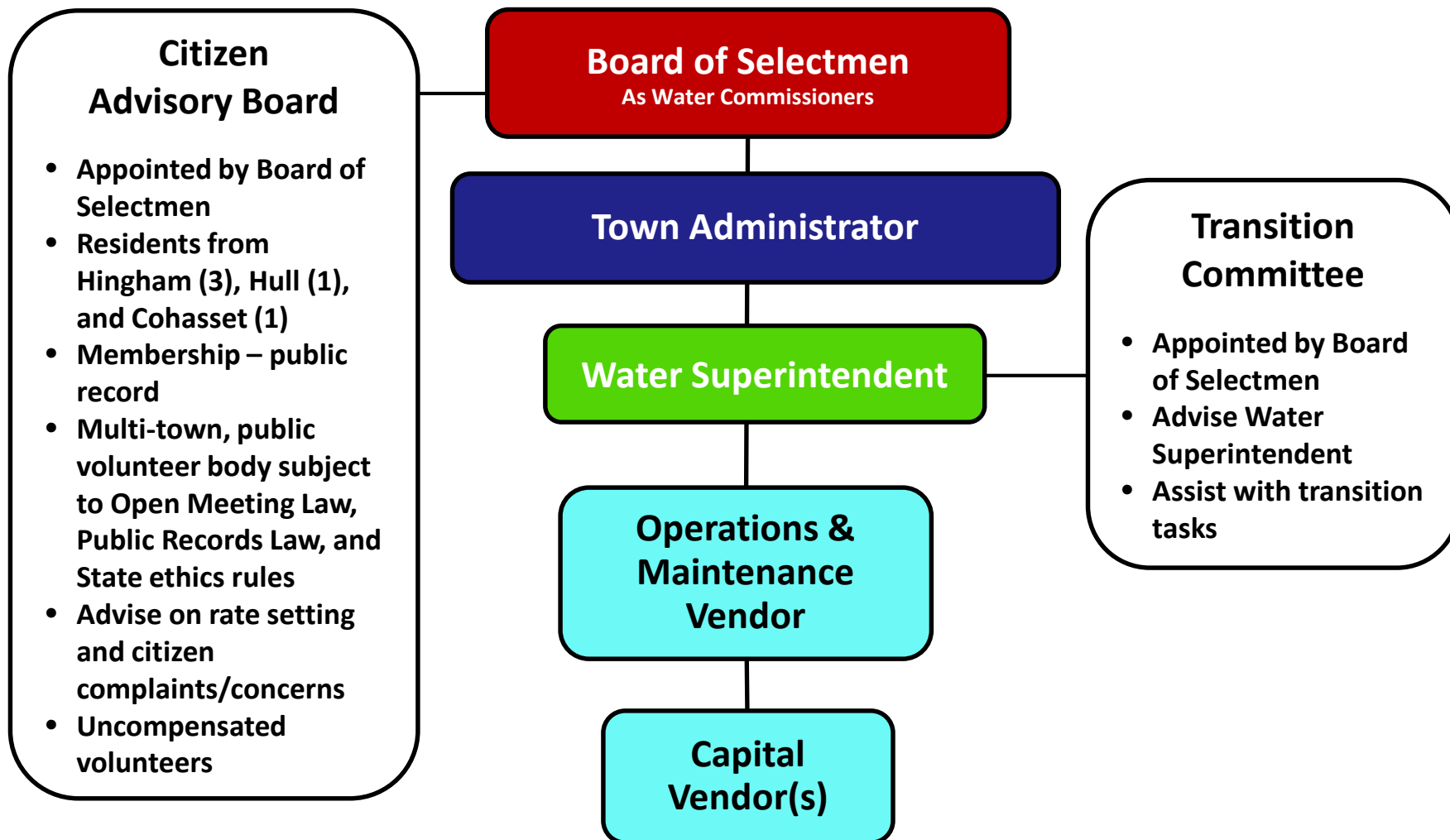


Source: UNC School of Government Environmental Finance Center and Tighe & Bond *MA Water and Wastewater Rates Dashboard*; rates as of July 1, 2017, dashboard updated August 28, 2018

- 41 medium-sized water systems (ranging from 10,000 to 25,000)
- 40 of 41 medium-sized systems in MA are owned and operated by municipalities
- We are the only system owned by a for-profit entity
- 39 out of 41 systems are governed by either a mayor or the Board of Selectmen acting as Water Commissioners
- Most medium-sized water systems provide water to one or more additional municipalities or to customers in other towns (Source: MassDEP Records)



# Governance: Day 1 Structure





## **Governance: Rate-Setting Process**

- **Local hearings vs. DPU process**
- **Significantly greater transparency**
- **Process for rates, capital, and budget-setting:**
  - **Recommendations from Water Superintendent**
  - **Recommendations from Transition Committee (in Year 1) with input from Citizen Advisory Board**
  - **Recommendations from Water Commissioners (Board of Selectmen) and Advisory Committee to Town Meeting**
  - **Non-binding Town Meeting vote on rates, capital, and budget**





## **Governance: Conclusions**

- **The vast majority of towns control their own water system**
- **Owning the water system enables a higher level of transparency and accountability for rates, capital, and budget-setting**
- **Public governance eliminates profit motive and any potential conflict between shareholders and rate payers**
- **There is a public interest in having control over your own water system**



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# Engineering



# **Capital Investment**

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## **Approach:**

- Reviewed Aquarion capital-improvement plans, DEP and DPU filings, rate-case exhibits, and Town information

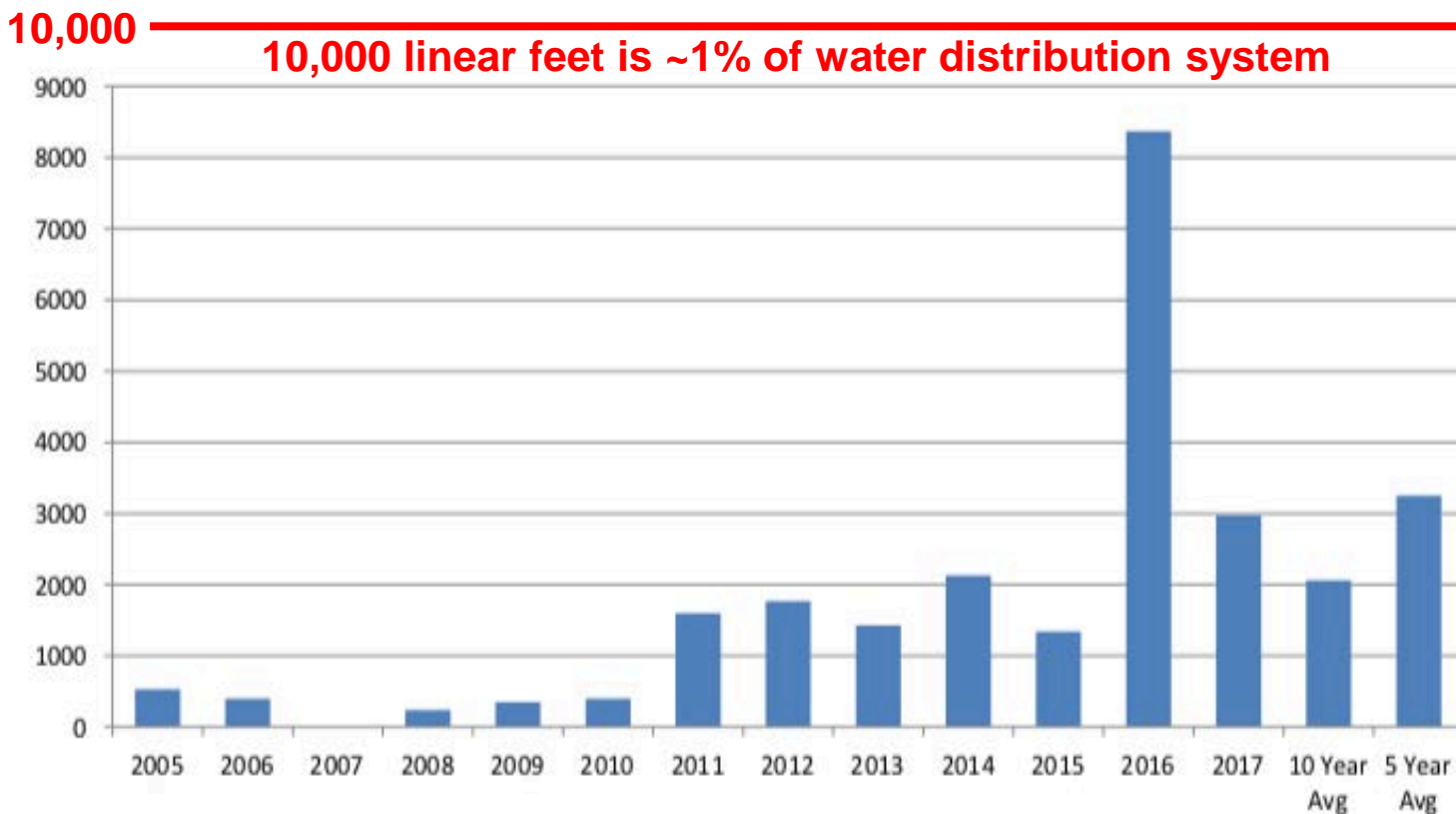
## **Conclusions:**

1. A significant and sustained increase in water main replacement and rehabilitation is required
2. Much closer coordination with Hingham and Hull road-building plans is required



# Aquarion Water Main Replacement History

## Service Area A – Historical Water Main Feet Replaced



Recommended in Aquarion's 2014 study:



1% of system's main-feet replaced each year

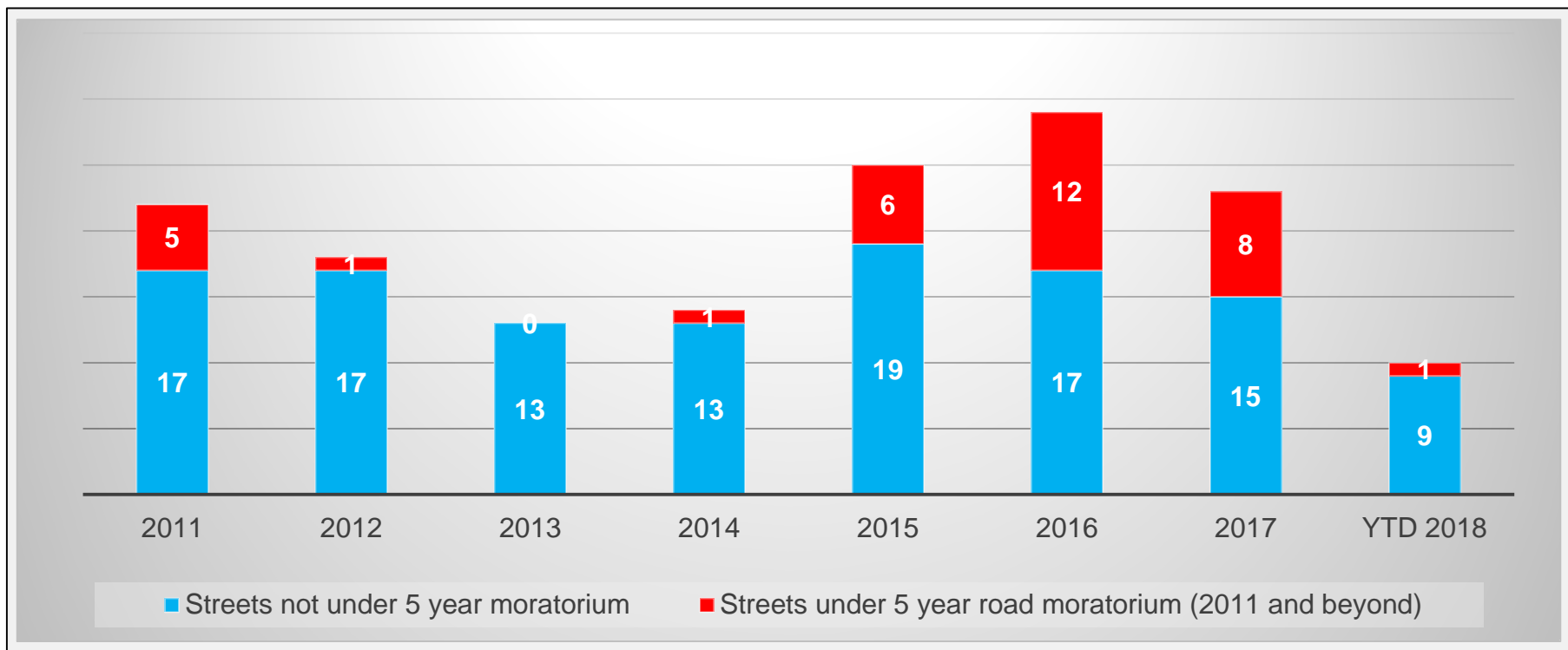


Aquarion track record: less than 1/3 of 1% replaced



# Hingham Emergency Water-Repair History

Number of Street-Opening Permits for Emergency Water Repairs: 2011 – May 2018



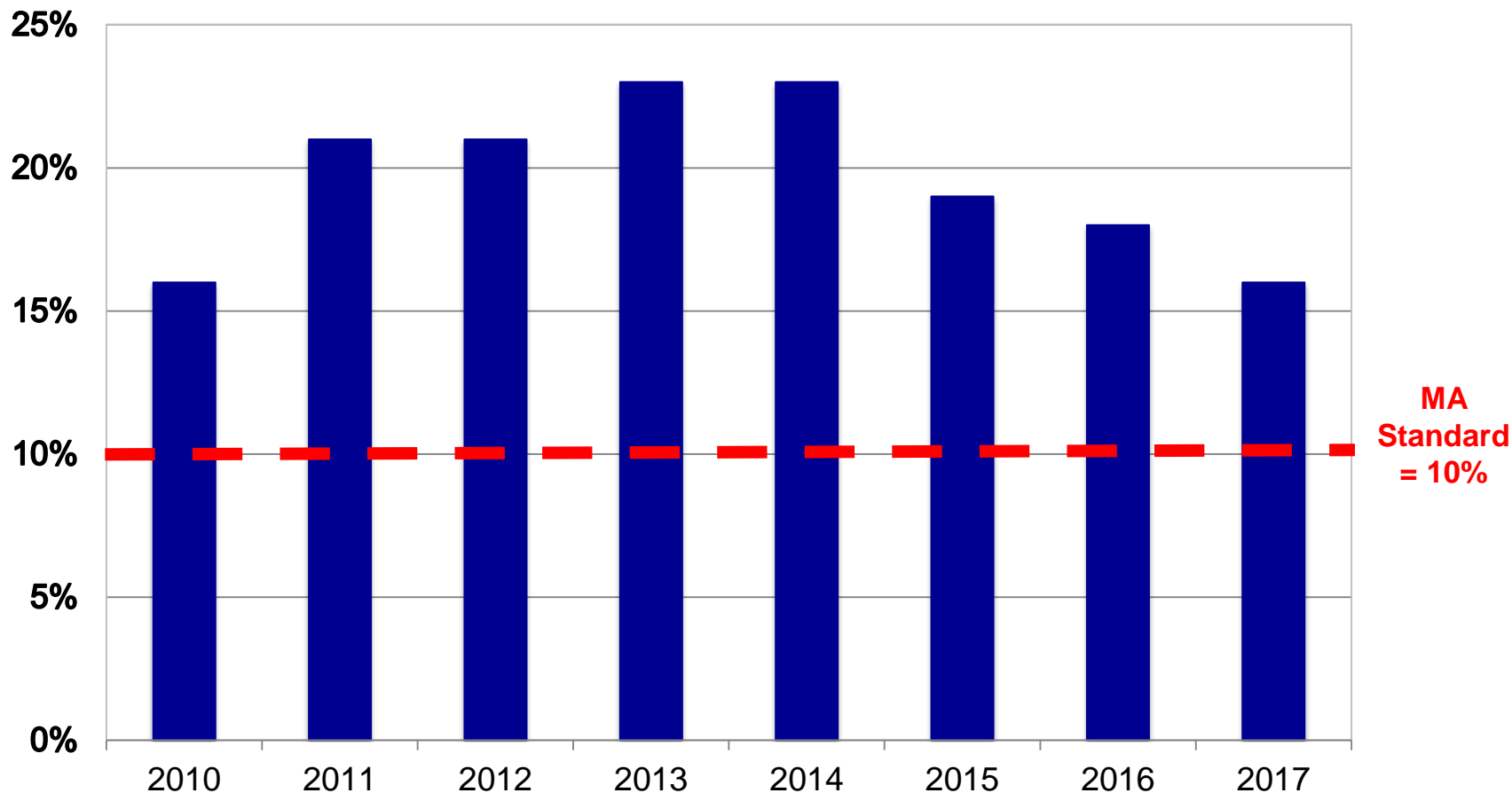
**22%** of emergency street openings occurred on roads under the 5-year moratorium. Several roads had multiple repairs.

Source: Hingham Town Engineer



# Result of Water Main Underinvestment → Leaks

## Service Area A Unaccounted for Water (UAW)



Source: *DEP-Approved Performance Standards for MA Public Water Suppliers*



# Inconsistent Operations & Maintenance → Discolored Water

## Summer 2018

### Hull

#### 'Just Gross': Hull, Mass. Residents Disgusted to See Dark Brown Tap Water

The issue, which began on Monday, affected nearly 4,000 homes across Hull and prompted hundreds of residents to lash out at Aquarion Water Company

By Mike Manzoni

Published Aug 9, 2018 at 7:43 PM | Updated at 7:49 PM EDT on Aug 9, 2018



Hundreds of Hull, Mass. residents have lashed out at the Aquarion Water Company after sediment blasted through the water supply and turned tap water dark brown in nearly 4,000 homes. (Published Thursday, Aug. 9, 2018)

### Hingham





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# **Water Company Acquisition Study Committee Summary**





## **WCASC Recommendation**

***“The Water Company Acquisition Study Committee recommends that the Town exercise its statutory rights to purchase the water system serving Hingham, Hull, and North Cohasset”***

**➔ Unanimous (5-0) affirmative vote, 23 Jan 2019**



**Water Company Acquisition Study Committee**  
***Recommendation Vote Summary***  
***Appendix***

January 2019

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# Study Pre-Litigation Timeline

**Apr - May 2012**

**WCASC Appointed by Board of Selectmen**



**May 2012 - Jun 2013**

**WCASC Feasibility Study - Financial Analysis with Look-Aheads**



**Annual Town Meeting 2012  
Approval of Article 19**

**WCASC Recommendation  
to Board of Selectmen**

**April 2012**



**June 2013**





# Litigation Timeline

**Sep 2013 – Mar 2015**

**Superior Court Discovery, Motions, and Trial**



**Jul 2016 – May 2017**

**Appeal Court Filings**



**Town Litigation  
to Determine  
Water System  
Purchase Price**

**Superior Court Final  
Judgment**

**Appeal Court  
Affirmation**

**SJC Denial  
of FAR**

**July 2013**

**April 2016**

**Nov 2017**

**Mar 2018**





# Post-Litigation Timeline

**Feb – Oct 2018**

**DPU Amended Rate Case**



**Nov 2018 – Jan 2019**

**3<sup>rd</sup>-Party Review  
of Town Financial  
Model**



**Aquarion  
Rate Case  
Amendment**

**DPU Rate Case  
Order \***

**February  
2018**

**October  
2018**



\* 16 Nov 2018: DPU directs Aquarion to make 14 corrections to its tariffs



# 10 Jan 2019 Expert Review Conclusions

## Financial Feasibility Criteria:

- Rate-transparent acquisition  
(acquisition alone would not necessitate a rate increase)
- Establish significant capital reserve upon acquisition
- Replenish capital reserve annually
- Repay all feasibility study costs (including litigation)



**All  
Criteria  
Met or  
Exceeded\***

\* Additionally, every 3 years, starting in 2021:

→ Capital replenishment amount increased by 5%

→ Capital replenishment borrowing rate increased by 25 basis points



## Continued Aquarion Ownership Impacts

- **Taxpayer Impact**

- Hingham Fund Balance not repaid \$1.49M

- **Ratepayer Impact**

- Tighe & Bond 2017 Survey: **\$730/year** was **~23%** > MA average
- Ratepayer increase per DPU Order effective 1 Nov 2018:
  - Residential: **11.9%** → **\$817/year**
  - MRAM 2% annual surcharge → Additional **~\$13/year** → **Cumulative**
    - Sep 2019: \$10+14 → **~\$841**
    - Sep 2020: \$39 → **~\$856**
    - Sep 2021: \$50 → **~\$867**
    - Sep 2022: \$63 → **~\$880**
  - By 2022 → **~21%** increase in 4 years
    - With no assumption of a base rate increase in 2021



# Town Ownership Impacts

- **Taxpayer Impact**

- No property tax impact
- Hingham Fund Balance repaid \$1.49M

- **Ratepayer Impact**

- At least \$50M of savings over 30 years from 2019
  - >\$7M of additional savings/year starting in 2049
    - ➔ over \$100M total savings by 2055
- Increased capital infrastructure investment
  - No 2% annual ratepayer surcharge starting Sep 2019





## Apples to Apples – Aligning Assumptions

Assumptions	Town	Aquarion	Andersen
<b>Operating Cost Inflation –</b> Not applied to fixed costs for WTP, financing or depreciation costs	3.0%	2.2%	3.0%
<b>Capital Expenditure Cost &amp; Increases</b>	\$2.0 million (\$5.0 million in 2019)	\$2.0 million (\$5.0 million in 2019)	Aquarion plan of 8/13/18 through 2022 then 5% inc every 3 years
<b>Interest Rates - Town (30 Year)</b>  <b>Town (20 Year)</b>  <b>Aquarion</b>	3.75% 3.50% + inc 25 BPS/3 yrs	5.87% (19-21) 4.99% (22) 3.50% (23 – 49)	3.75% 3.50% + inc 25 BPS/3 yrs  5.87% (19-22) 5.32% + Inc every 5 yrs.



## Apples to Apples – 2020-2048 Perspective

	Town 2020	Aquarion 2020	Town 2048	Aquarion 2048
Operating Costs	\$5,489,000	\$11,669,000	\$12,516,000	\$20,001,000
Debt Service (Aq. Int. Only)	\$6,325,000	\$816,000	\$11,344,000	\$2,550,000
Equity Profit	N/A	\$1,297,000	N/A	\$2,691,000
CAPEX	\$2,700,000	\$2,700,000	\$3,694,000	\$3,694,000
Depreciation	N/A	\$1,470,000	N/A	\$2,734,000
Revenue Requirement	\$11,632,000	\$12,939,000	\$23,497,000	\$25,223,000

**2048 is the last year of Town payments related to acquisition. Projected revenue requirement subject to a decline of approximately \$6,200,000**



## Conclusions

**In order to compare ownership options an apples to apples comparison is essential. Common assumptions must align.**

**Due to differences in interest rates, the need for equity returns, debt leverage and cost structure the Town ownership option generates just under \$50,000,000 in savings over 30 years.**

**Once acquisition cost is paid off, annual savings increase to \$7,400,000 per year.**