

Metro South Economic Development Opportunities from Sewer Infrastructure

For the Metro South Chamber of Commerce

| Dan Hodge
October 2022



Today's Presentation

- Project context and purpose
- Overview of sewer infrastructure capacity, use, opportunities
- Potential development opportunities in Avon, Easton, East Bridgewater, West Bridgewater
- Regional economic impacts
- Summary findings and potential next steps

Project context and purpose

- Sewer infrastructure can be a critical factor in enabling economic development but many towns in Metro South region lack sewer
- Brockton Advanced Water Reclamation Facility (AWRF) provides potential opportunity for nearby towns but there are capacity limits
- This study focused on:
 - Understanding the realities of sewer capacity, opportunities, constraints
 - Evaluate the economic development opportunities at specific industrial parks and commercial districts in adjacent towns seeking sewer infrastructure
 - Estimate the regional economic impacts of expanded sewer infrastructure to quantify the economic development opportunity

AWRF wastewater flow and capacity

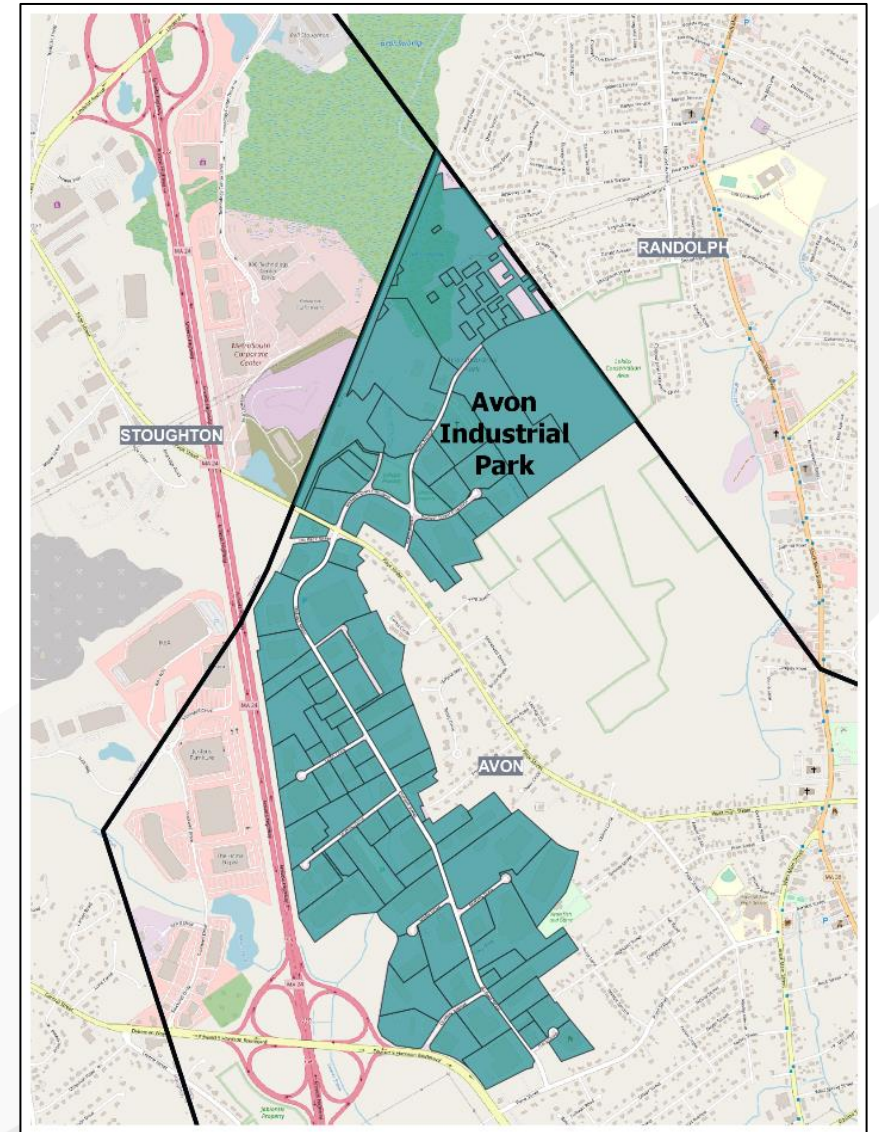
Date	12 Month Rolling Average Flow (MGD)	Difference from Permitted Flow (18 MGD)
12/08	17.8	0.2
11/09	17.3	0.7
11/10	16.2	1.8
10/11	14.3	3.7
11/11	14.9	3.1
11/12	13.4	4.6
11/13	15.1	2.9
11/14	15.1	2.9
11/15	16.5	1.5
11/16	13.8	4.2
11/17	16.4	1.6
11/18	19.1	-1.1
11/19	17	1
11/20	15.8	2.2
5/22*	16.8	1.2
Average	16.0	2.0

Source: Brockton Flow Information Updates, US EPA data provided by MassDEP

- The AWRF is permitted for 18 MGD in wastewater flow
- The facility has a 15-year average of 2 MGD in excess capacity (11%), though it exceeded permitted flow capacity in 2018
 - 1.2 MGD excess capacity in 2022; future growth in Brockton could squeeze available capacity further
- The facility has applied to EPA to expand allowable discharge, but it seems unlikely
- To expand flow, AWRF may be able to use effluent discharge beds (5 acres per 1 MGD)

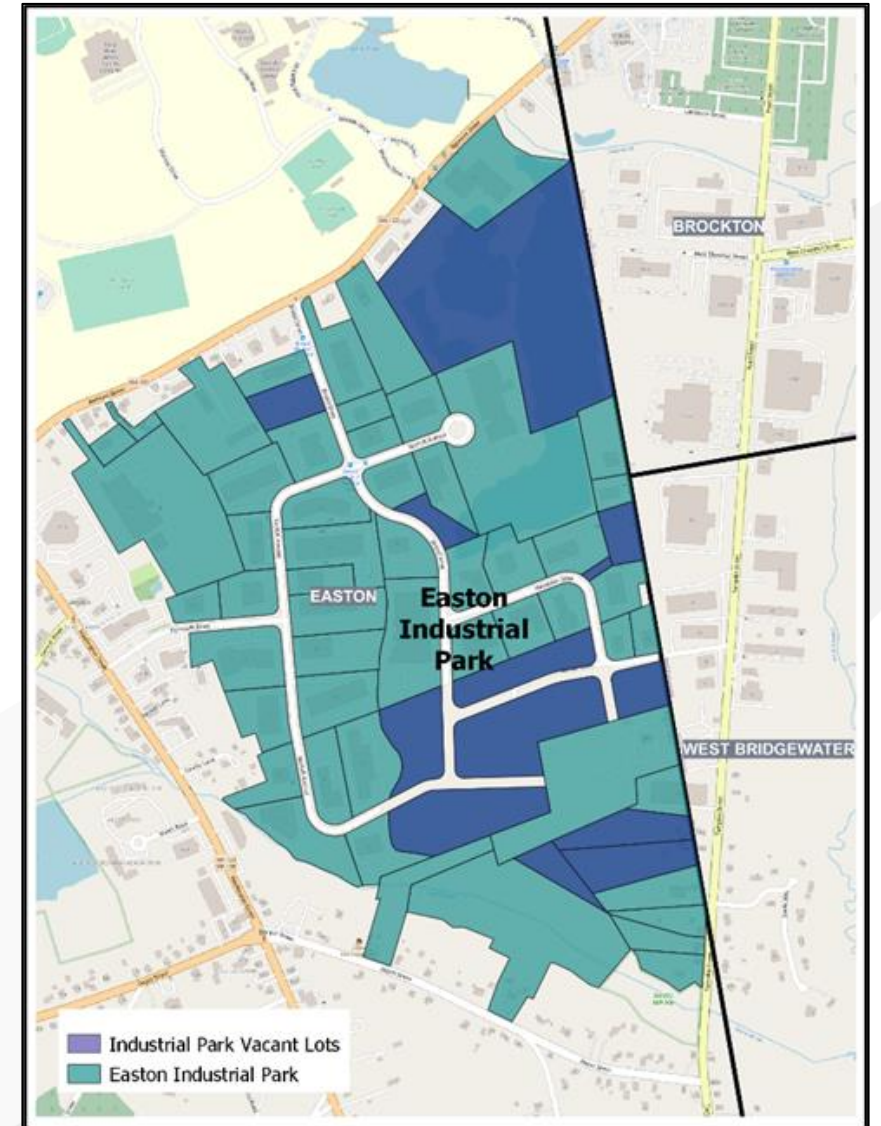
Economic opportunity: Avon Industrial Park

- Building development:
 - An estimated **450,000 SF** of additional development could be supported by sewer access
 - Most of this development would be vertical expansion of existing structures
- Jobs:
 - Potential to add about **900 jobs** to the park – mix of light industrial, misc business, office uses



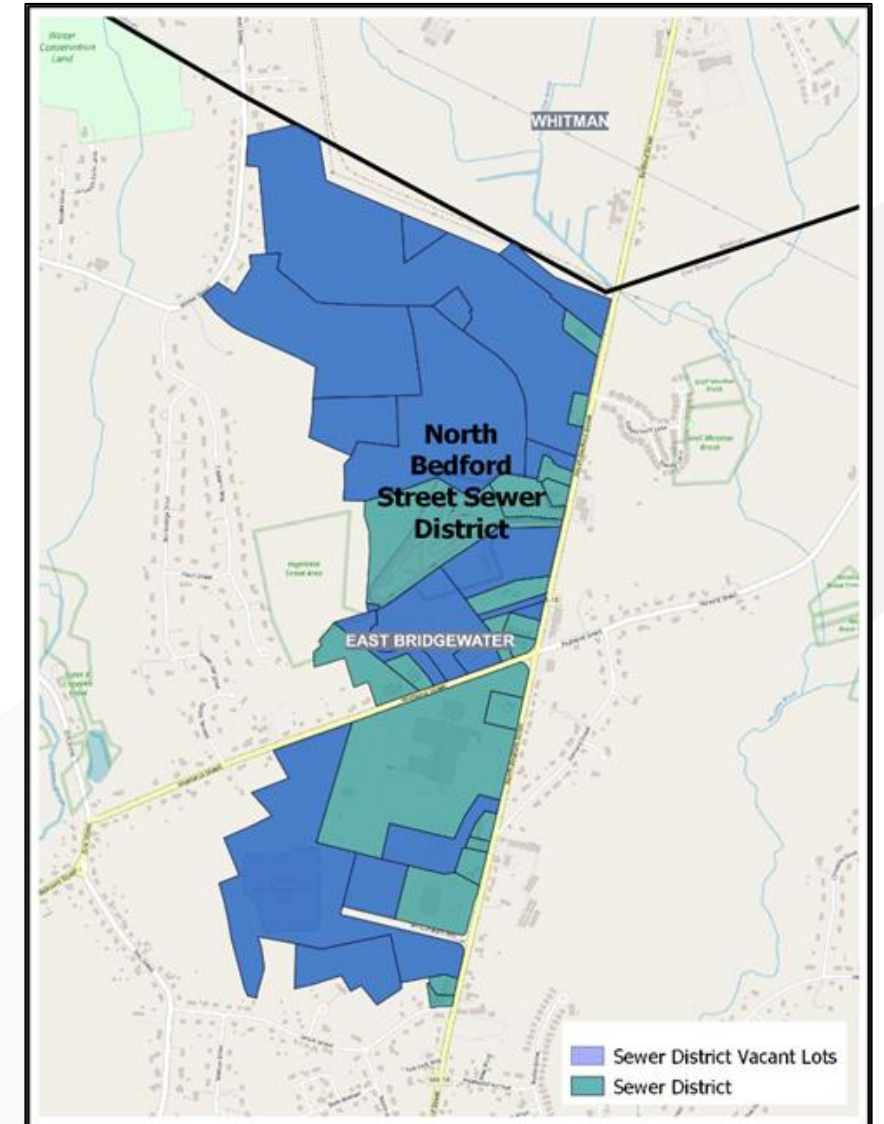
Economic opportunity: Easton Industrial Park

- Building development:
 - Some vacant and underutilized parcels in the park that could be developed and attract new business
 - Access to sewer infrastructure could support an additional **220,000 SF**
- Jobs:
 - The additional SF of development could support **240 new jobs** in the park



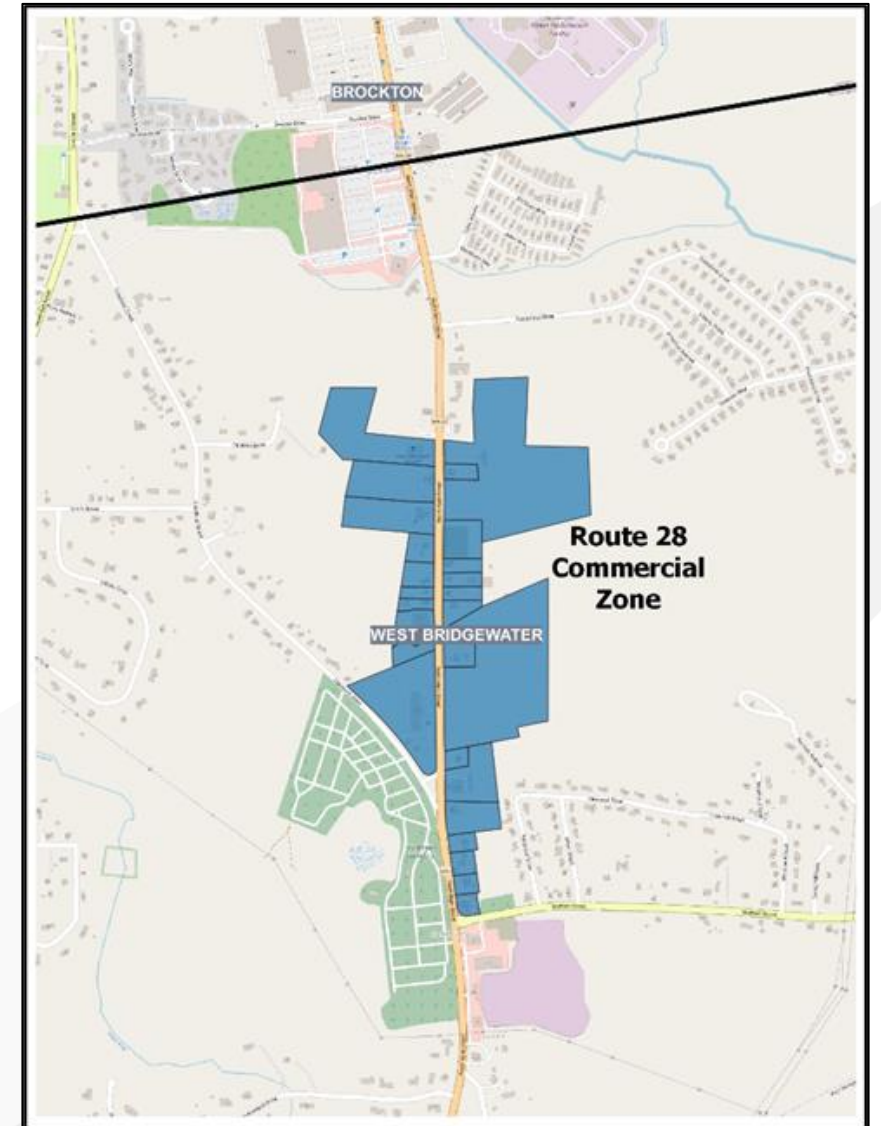
Economic opportunity: North Bedford Street Sewer District in East Bridgewater

- An agreement with Brockton was completed in 2022 for 0.075 MGD in flow capacity
- Building development:
 - Planned development includes industrial, medical, and residential uses
 - Sewer access is anticipated to add **770,000 SF** to the district (not including residential)
- Jobs:
 - Sewer capacity could add 240 jobs in industrial and warehousing and 970 jobs in medical fields, totaling approx. **1,200 new jobs**



Economic opportunity: West Bridgewater Route 28 Commercial Zone

- Building development:
 - Potential extension of existing sewer connection further south along Rt. 28
 - Estimated **234,000 SF** could be added to the commercial area with access to sewer
- Jobs:
 - The new development could generate and support an additional **400 jobs** in mixed commercial uses



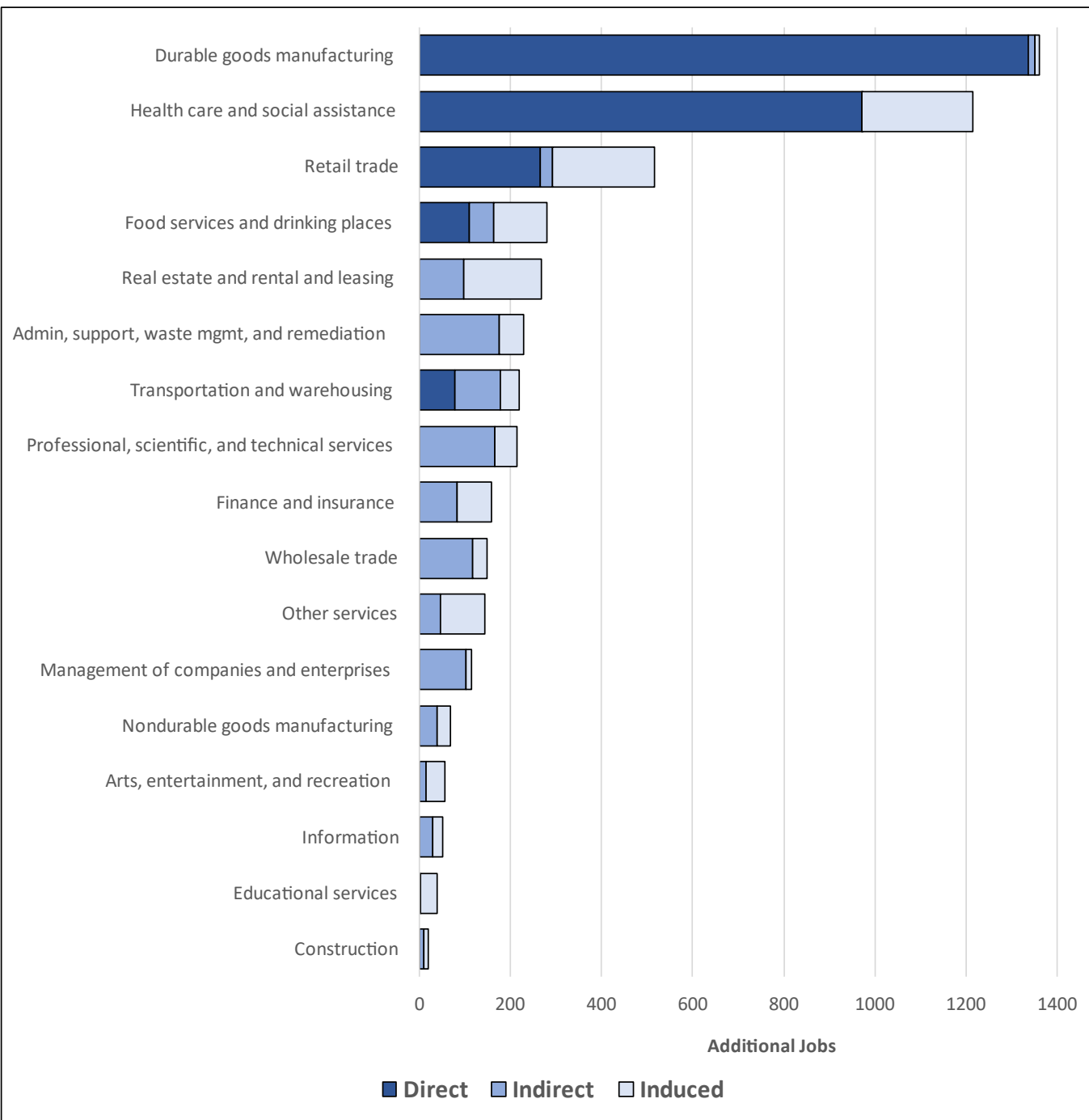
Regional economic impacts of sewer expansion

- The addition of jobs in these commercial and industrial areas impacts the broader regional economy
- The model provides estimates for three impact types:
 - **Direct** impacts reflect the increase in jobs and associated business activity as a direct result of potential sewer connections
 - **Indirect** impacts stem from the increased demand for supply chain components and inputs
 - **Induced** impacts arise as workers spend their additional earning on goods and services in the economy

	Jobs	Output (millions)	Earnings (millions)
Direct	2,760	\$1,007	\$194
Indirect	1,090	\$324	\$76
Induced	1,296	\$252	\$57
Total	5,146	\$1,583.4	\$327.3

Source: Cambridge Econometrics analysis using BEA's RIMS II input-output model and multipliers

Regional economic impacts of sewer expansion – jobs by industry



- Job impacts by industry sector include manufacturing, health care and social assistance, retail trade, restaurants, and misc business services

Regional sewer demand

- Estimated future need:
 - Avon Industrial Park: **0.250 MGD**
 - Easton Industrial Park: **0.100 MGD**
 - North Bedford Street Sewer District in East Bridgewater: **0.075 MGD**
 - West Bridgewater Route 28: **0.030MGD**
- In total, the four areas would require **up to 0.455 MGD** to support current business activity as well as future expansion.
- In 13 of the last 15 years, Brockton's AWRF had enough excess capacity to support this amount of wastewater flow.
- On average, the facility has an excess capacity over four times this amount of flow (2 MGD).
- While the sewer demand in surrounding areas is relatively small, Brockton has little excess capacity to realize planned and future development opportunities

Summary findings and potential next steps

- Significant regional economic development opportunity for Metro South if sewer infrastructure can be expanded with targeted connections in key industrial parks and commercial districts
- Based on the 4 areas studied, the region could see approximately 5,100 jobs spread across a mix of light industrial, mixed commercial
- Wage earnings in the region would increase by about \$327 million and business output by \$1.6 billion
- Brockton's AWRF has some capacity but also legitimate concerns about flow limits in context of potential future growth
- Region should further explore other options such as effluent discharge beds or local sewer districts and state/fed funding opportunities such as MassWorks grants

Contact us



dh@camecon.com



www.camecon.us



[cambridge-econometrics](https://www.linkedin.com/company/cambridge-econometrics)



[CambridgeEcon](https://twitter.com/CambridgeEcon)

