



*Networks Business
Gas Engineering & Operations*

Berkshire Gas Company

*Gas System Enhancement Program
(GSEP) Overview*

04.24.2023

GSEP Overview

Gas System Enhancement Program

Pursuant to G.L. c. 164, § 145, each gas company must annually submit to the Department of Public Utilities a plan to replace leak-prone natural gas pipeline infrastructure. These plans are known as the Gas System Enhancement Plans or GSEPs.

Agenda

- Pipe inventory by material
- Miles of LPP replaced
- Leak rate on total pipe inventory
- Emissions reduction associated with LPP replacement

GSEP Overview

Pipe inventory by material

Berkshire Gas delivers natural gas services to over 40,000 customers in 20 Western Massachusetts cities and towns

Active Mains (YTD'23)



Services (YTD'23)

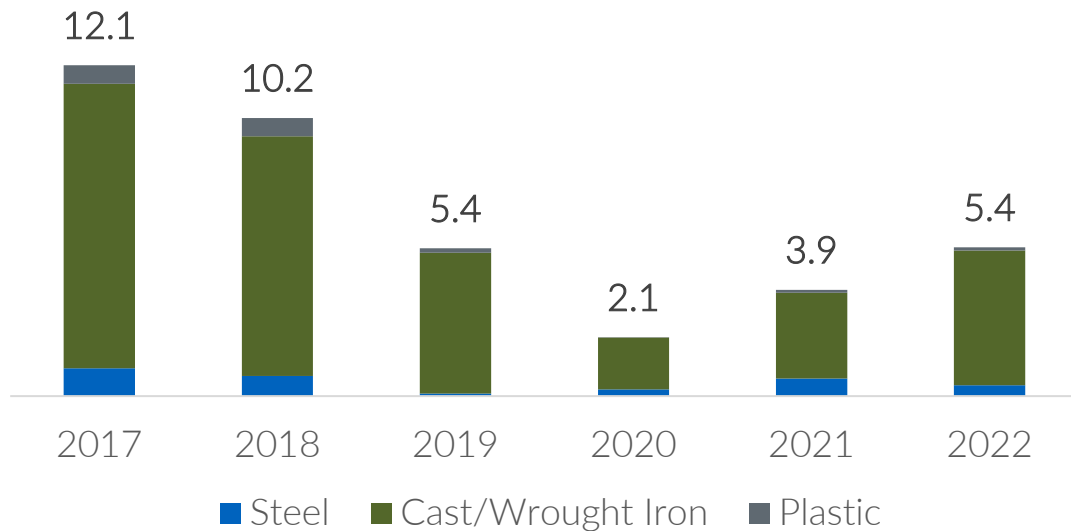


GSEP Overview

Pipe Retirement

40 miles of pipeline retired since 2017

Total Pipe Retirement (miles)



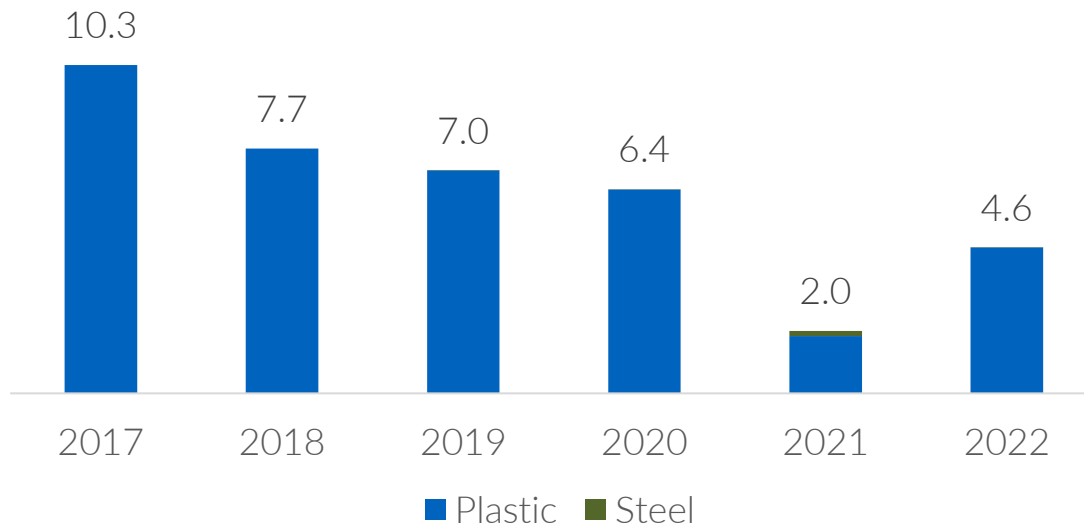
Pipe Retirement by material (miles)

	Steel	Cast/Wrought Iron	Plastic
2017	1.0	10.4	0.7
2018	0.7	8.8	0.7
2019	0.1	5.1	0.2
2020	0.2	1.9	0.0
2021	0.6	3.1	0.1
2022	0.4	4.9	0.1
Total	3.1	34.2	1.7

Pipe Installation

38 miles of new pipes installed since 2017

Total Pipe Installation (miles)



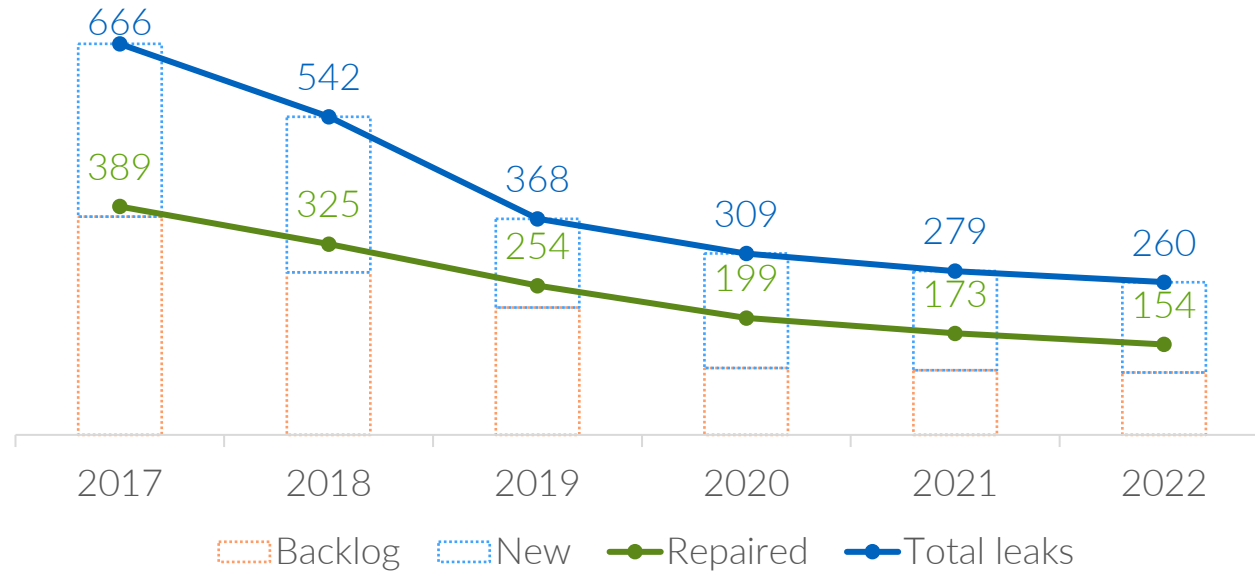
Pipe Installation by material (miles)

	Plastic	Steel
2017	10.3	0.0
2018	7.7	0.0
2019	7.0	0.0
2020	6.4	0.0
2021	1.8	0.2
2022	4.6	0.0
Total	37.6	0.2

Leak Management

Keeping assets' reliability through a comprehensive pipeline maintenance and inspection program and an effective leak management program to comply with safety regulations.

Total Leaks & Leaks Repaired (by year)



Leaks' Historical Data

Year	Backlog	Leaks Found	Repaired
2017	372	294	389
2018	277	265	325
2019	217	151	254
2020	114	195	199
2021	110	169	173
2022	106	154	154

Avg. New Leaks per
Total Mileage*

0.12

leak/mile

Emission Reduction

Emission Reduction Targets for Mains					
GSEP Timeline	Cast Iron	Bare Steel	Unprotected Coated Steel	Total Program Mileage to be Replaced	Reduction in CO ² e
Years	Miles	Miles	Miles	Miles	Metric Tones
2023	8.83	0.75	0.82	10.40	285
2024	6.26	2.62	0.61	9.49	244
2025	6.41	0.90	0.44	7.75	211

Emission Reduction Targets for Services				
GSEP Timeline	Bare Steel	Copper	Total Program Quantity to be Replaced	Reduction in CO ² e
Years	Each	Each	Quantity	Metric Tones
2023	297	66	363	46
2024	280	26	306	39
2025	214	15	229	30

Total Emission Reduction Targets			
GSEP Timeline	Total Main Reduction in CO ² e	Total Service Reduction in CO ² e	Total Yearly Reduction in CO ² e
Years	Metric Tones	Metric Tones	Metric Tones
2023	285	46	331
2024	244	39	283
2025	211	30	241

	Total Yearly Reduction in CO ² e
2022	275
2023	178
2024	201
2025	190
2026	190



Thank you