bluefield RESEARCH

About this Report

U.S. & Canada Water & Wastewater Pipe CAPEX Forecasts, 2025–2035

Released June 2025

- Section 1 – Pipe Market Overview and Drivers
- Section 2 – Forecast Methodology
- Section 3 – Forecast Breakdown
- Section 4 – Looking Ahead
- Related Data Dashboard

Summary

BACKGROUND

The U.S. municipal water and wastewater sector is entering a generational investment cycle—one marked by increasing urgency, complexity, and transformation. As utilities face aging infrastructure, shifting demographics, and tightening regulations, they must navigate a capital landscape shaped by rising costs, labor shortages, and delayed federal funding.

This 2025–2035 forecast focuses on the pipe equipment segment of utility infrastructure. Grounded in a decade of capital planning data, cost inputs, and regulatory tracking across all 50 states, the analysis reflects a market that is shifting away from reactive fixes toward strategic renewal. For utilities and stakeholders alike, the next decade represents a critical opportunity to optimize infrastructure investments and shape a more resilient water future.

This Insight Report presents a data data-driven perspective on how market trends, policy disruptions, and strategic pivots are reshaping the landscape for investments in pipe infrastructure.

This forecast highlights shifts across material types, looking specifically at mile of pipe installed for new pipe, pipe replacement, and pipe rehabilitation for water and wastewater infrastructure.

report SCOPE

Backed by a transparent research methodology, this Insight Report provides **qualitative** and **quantitative analysis** to help companies understand the water & wastewater pipe **market opportunities** in the U.S. & Canada over the next decade.

report HIGHLIGHTS

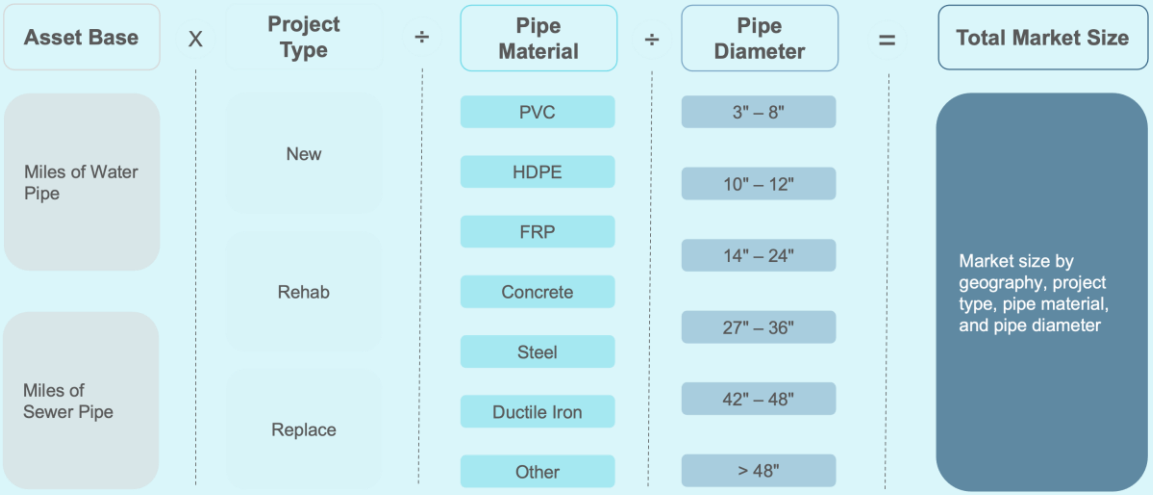
- Drivers and trends shaping pipe infrastructure investment
- 10-year CAPEX forecasts for U.S. and Canada municipal water and wastewater pipe infrastructure
    - By segment, by project type, by pipe material type, by pipe diameter
- Project type growth assumptions (Greenfield, replacement, rehabilitation rates)
- Drinking water pipe market share by diameter and material type
- Top opportunities by geography: projected pipe CAPEX by state/province
- Looing ahead: market variables

bluefield RESEARCH

About

MARKET MODEL

Bluefield's market model evaluates the market size and growth of each state across water and wastewater, broken down into three project types, seven pipe materials, and six diameter classes.



Note: Total U.S. market size for key project types and pipe materials is established by triangulating a range of sources, including utility capital budget data, construction and bid documents, industry needs surveys, and industry interviews
Source: Bluefield Research

CAPEX for water and wastewater distribution and collection pipes will grow at a CAGR of 6.04%, increasing from US$7.9 billion to US$14.1 billion by 2035.

BUYER PROFILE

Who should buy this report?

- Pipe vendors/manufacturers
- Engineering, procurement & construction (EPC) firms
- Water and wastewater utilities
- Financial and investment firms
- Hardware, equipment, and infrastructure providers
- Technology and solutions companies

bluefield RESEARCH

Insights

SAMPLE TAKEAWAYS

The outlook is robust for pipe network capital expenditure (CAPEX)

Bluefield Research forecasts US$117 billion in cumulative CAPEX between 2025 and 2035—increasing from US$7.9 billion in 2025 to US$14.1 billion in 2035, reflecting a compound annual growth rate (CAGR) of 6.04%.

- **Infrastructure renewal and resilience are driving spend.** With legacy networks nearing or exceeding their design life, investment is shifting from reactive maintenance to proactive renewal. Pipe rehabilitation is the fastest growing segment at 15.1% CAGR, reflecting utilities' increasing reliance on asset management and non-disruptive repair solutions.
- **Federal infrastructure funds are flowing—slowly.** Despite over US$44 billion in authorized funding from the IIJA and State Revolving Funds (SRF), actual disbursements have lagged, with only 13% (Drinking Water State Revolving Funds [DWSRF]) and 19% (Clean Water State Revolving Funds [CWSRF]) of subawards reaching utilities as of early 2025. Utilities face challenges in translating federal intention into shovel-ready execution.

- **Wastewater systems are the new frontier**. Wastewater pipe investments are forecast to grow at 7.15% CAGR, outpacing drinking water (5.18%). This growth will be driven by rising sewer connectivity rates and regulatory pressures on decentralized systems.
- **The South is the epicenter of investment.** The southern U.S. will attract 48% of all pipe infrastructure CAPEX, propelled by population growth, climate vulnerabilities, and increasing federal funding allotments. Texas alone is expected to invest US$17.6 billion—more than any other state.
- **Small pipes make up a large share of spend**. The bulk of investments will go toward 3"–8" diameter pipes, which serve as the backbone of residential and small commercial distribution. These account for the majority of new network connections and targeted replacement projects.

- **Population growth in Canada puts spotlight on water infrastructure**. From 2022 to 2023, Canada saw its population increase at the highest growth rate since 1957. In this context, more miles of drinking water, wastewater, and stormwater pipes were installed each year from 2020 to 2022 than in any other period on record, highlighting opportunities for continued investment.

Key Questions Addressed

What is the total forecasted CAPEX in water and wastewater pipe infrastructure across the U.S. & Canada?

Which pipe diameters are driving the largest share of utility pipe spend?

Which infrastructure categories—such as plants, pumps, and recycling—account for the highest planned capital investment through 2032?

How does capital spend on water distribution compare to wastewater collection systems?

Which states and regions are expected to lead in pipe-related capital investment over the next decade?

How do projected investments in drinking water pipes compare to wastewater pipes?

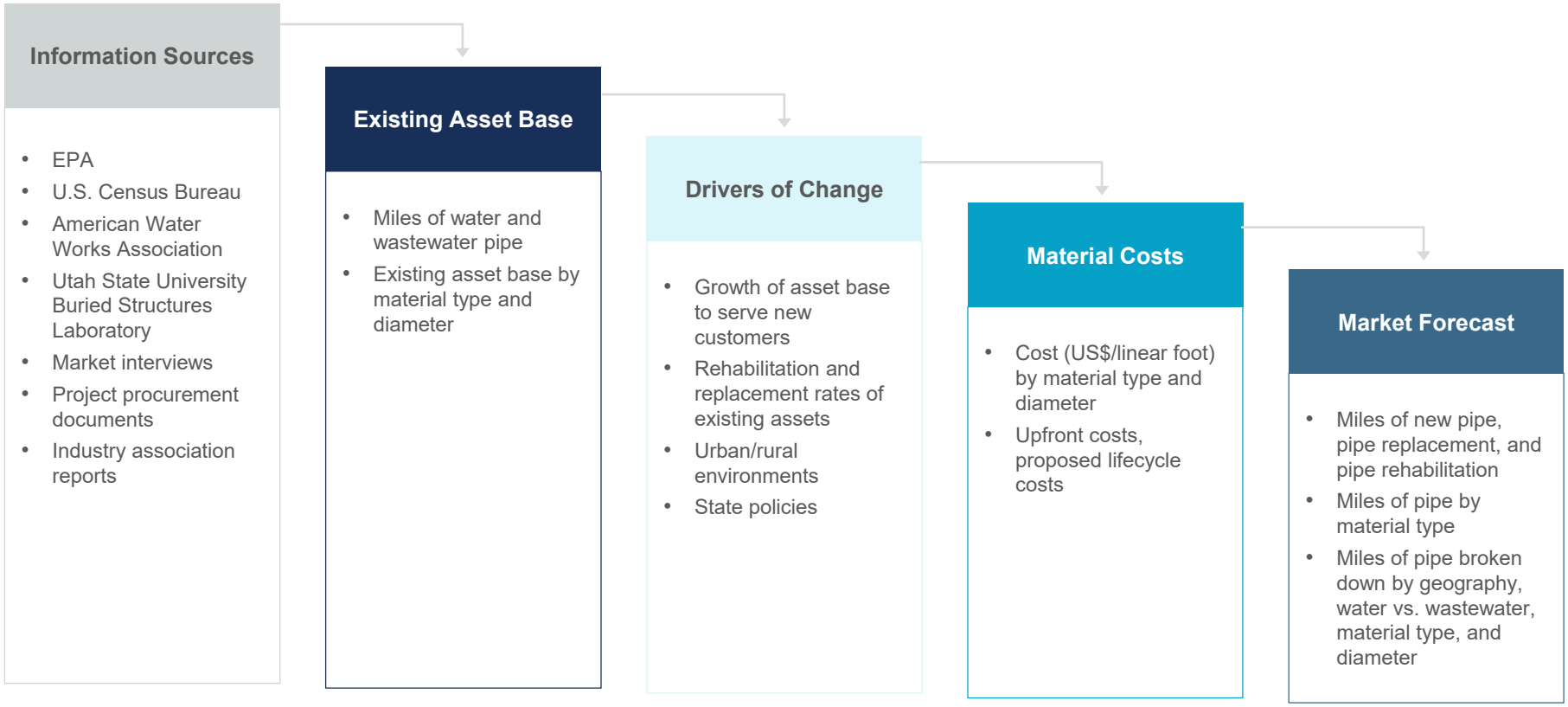
How do material costs and usage trends compare across PVC, ductile iron, concrete, steel, and other pipe types?

Table of Contents

Market Forecast Methodology Overview

This forecast highlights shifts across material types, looking specifically at mile of pipe installed for new pipe, pipe replacement, and pipe rehabilitation for water and wastewater infrastructure.

Bluefield Pipe Forecast Research Methodology



Pipe Market Drivers

Aging infrastructure, housing starts, population demographic shifts, and exposure to severe climate events all exert pressure on U.S. pipe resilience and longevity.

Key Market Drivers

Financial Pressures

Supply chain constraints coupled with record material prices borne by high inflation have driven increases in key input costs across the sector, constraining utility spend on greenfield and rehabilitation and replacement of underground network infrastructure.

Infrastructure Funding

Federal funding through the IIJA and the Inflation Reduction Act will be key in propelling utility capital investment. However, recent funding cuts threaten to undermine the volume and amounts of allocations.

Labor Availability and Rates

High retirement rates, recruitment and retention challenges, and workforce realignment are reshaping labor markets in water and escalating wages for utility operators and construction workers.

Digital Integration

The evolving technology landscape helps create data-driven solutions that effectively funnel investment dollars to key utility pain points.

Climate and Environmental Risks

Weather events are growing in frequency and severity (e.g., drought, flooding), driving reactive and proactive responses and endangering the integrity of infrastructure networks.

Housing Market Activity

Housing starts and population growth require the expansion of water and wastewater infrastructure capacity. Population decline leads to reduced per capita water use, undercutting utility revenues.

Aging Infrastructure

Aging utility assets are increasingly costly to operate and maintain, fueling increases in operating expenses (OPEX) and CAPEX.

Regulatory Compliance

Recently implemented regulations regarding harmful contaminants (e.g., PFAS) and lead service line (LSL) replacements introduce substantial long-term compliance costs for utilities.

Local Governance

Difficulties in identifying and securing funding resources, as well as prolonged infrastructure investment deferral, contribute to the use of assets beyond their intended lifespan, escalating capital costs in the long run.

Urban–Rural Shifts

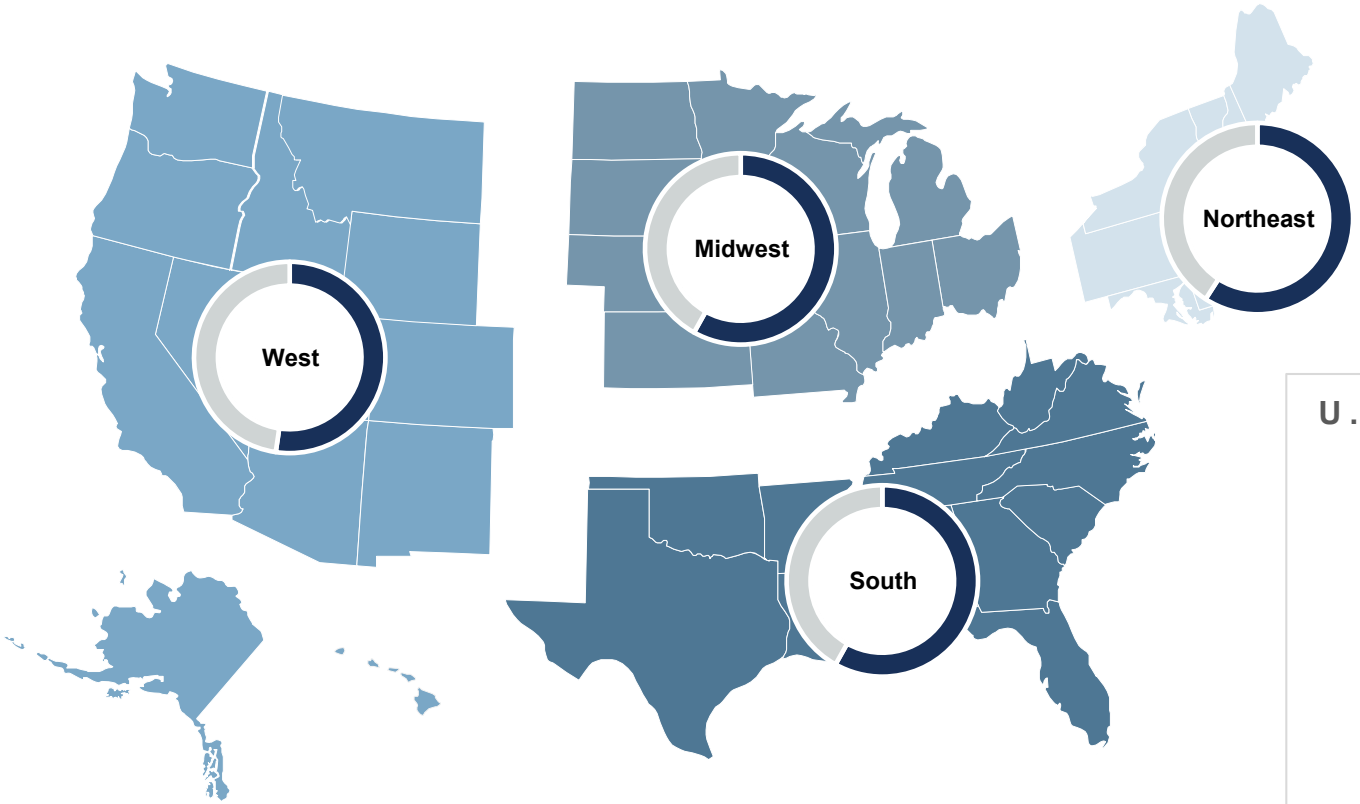
Urban areas often prefer legacy materials to complement existing pipe material networks, while rural areas tend to favor newer and less costly materials such as plastic.

Source: Bluefield Research

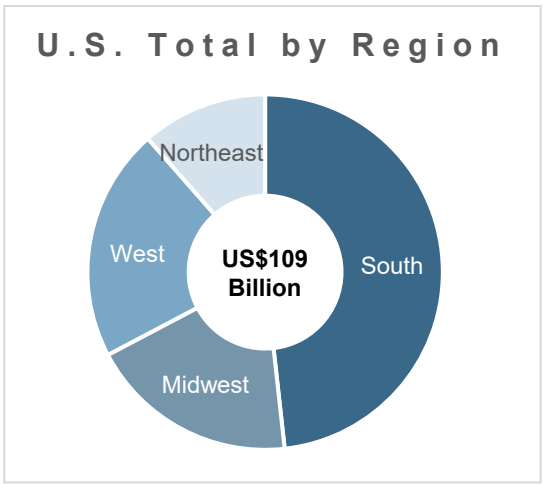
Regional Hot Spots: Pipe Infrastructure Forecast by Region

The South is expected to see the largest share of cumulative pipe infrastructure investment through 2035, accounting for 48% of the total.

U.S. Cumulative Water and Wastewater Pipe CAPEX Outlook by Region, 2025–2035



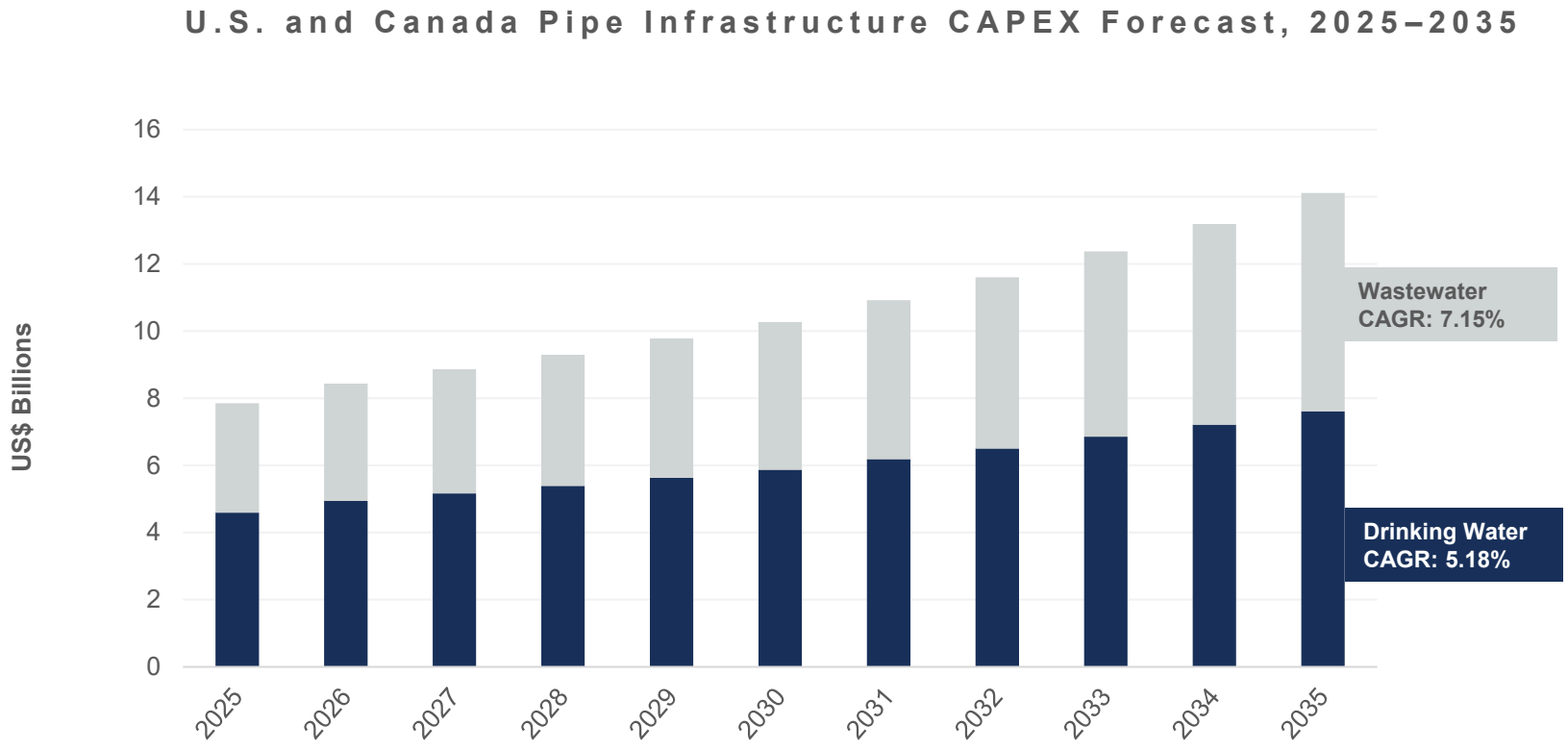
U.S. Total by Region



Source: Bluefield Research

Market Forecasts by Segment—Water and Wastewater

CAPEX for water and wastewater distribution and collection pipes will grow at a CAGR of 6.04%, increasing from US$7.9 billion to US$14.1 billion by 2035.

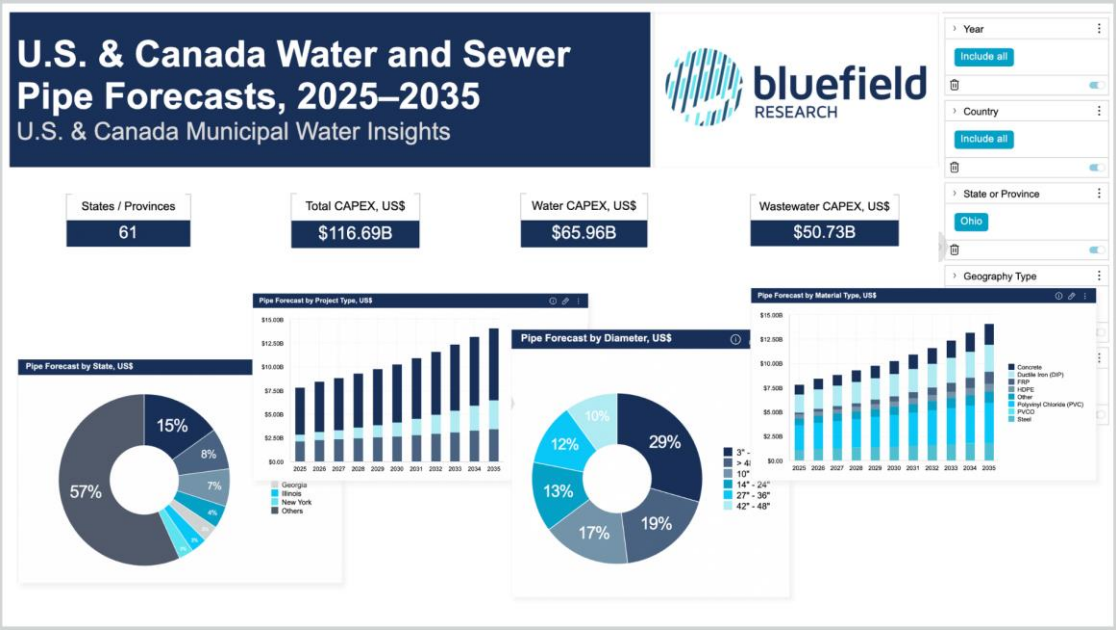


Source: Bluefield Research

Related Data Dashboard

Data underpins Bluefield's breadth of insight reports and analysis. This report is accompanied by a data dashboard that is available in Bluefield's flexible and interactive Data Navigator platform.

SAMPLE DATA DASHBOARD



Dashboard Widgets US$:

- Map of Total Expenditure by State
- State and Regional Breakouts
- Expenditure Forecast by Project Type
- Expenditure Forecast by Pipe Material Type
- Expenditure Forecast by Pipe Diameter

More on this dashboard

Talk to us about our data or book a demo.

Book 30-min demo

See the power of Data Navigator

bluefield RESEARCH

Global companies across the value chain are developing strategies to capitalize on greenfield opportunities in water—new build, new business models, and private investment. Bluefield Research supports a growing roster of companies across key technology segments and industry verticals addressing risks and opportunities in the new water landscape.

Companies are turning to Bluefield for in-depth, actionable intelligence into the water sector and the sector's impacts on key industries. The insights draw on primary research from the water, energy, power, mining, agriculture, financial sectors and their respective supply chains.

Bluefield works with key decision makers at utilities, project development companies, independent water and power providers, EPC companies, technology suppliers, manufacturers, and investment firms, giving them tools to define and execute strategies.

Boston | Barcelona | Chicago | Paris | San Francisco

NORTH AMERICA: +1 (617) 910 2540
EUROPE: +34 932 716 546

waterexperts@bluefieldresearch.com | www.bluefieldresearch.com

Two purchase options

- Report
- Report + Data

Learn about purchase options or for any questions please

Contact Us

Built on years of data and analysis, Bluefield Research's U.S. & Canada Municipal Water Market Corporate Subscription has become a key resource for companies across the value chain to identify key verticals, trends, and growth opportunities that stand out in an already crowded and more competitive field.