

How Inspection Helps Prevent Disaster

Sewer Inspections, Cross Bores, and Manholes: Protecting Infrastructure Before It Fails



Across the US, sewer systems built decades ago are reaching the end of their lifecycle. The results are impossible to ignore: overflowing manholes during heavy rains, emergency excavations that drain budgets, and costly environmental fines.

For municipalities, engineering firms, and contractors, these failures create more than headaches — they threaten public safety, compliance, and community trust. A reactive approach is no longer enough. The smarter path forward is [proactive inspection and assessment](#).

Common Failure Points in Sewer Infrastructure

The warning signs are predictable, but without inspection they go undetected until it's too late:

- **Material deterioration** in clay, cast iron, or concrete pipes leads to cracks, corrosion, or collapse.
- **Ground shifting** causes joints to separate or misalign.
- **Root intrusion** finds even the smallest openings, blocking flow and weakening structure.

- **Infiltration & Inflow (I&I)** allows stormwater and groundwater to overload treatment plants, causing combined sewer overflows (CSOs).

A recent study found that American utilities face an average of [11.1 failures per 100 miles of pipe](#), underscoring the urgent need for early detection.

Why Proactive Assessment Matters

Modern inspection methods provide a clear view of system health before problems escalate:

- **CCTV camera surveys** reveal cracks, blockages, and structural risks.
- **Robotic crawlers** identify damage in hard-to-reach areas.
- **Acoustic sensors** detect infiltration and leaks.

This data-driven approach allows municipalities to plan targeted repairs, avoid disruptive emergencies, and meet strict regulatory requirements.

Checklist Resource: [Explore our checklist](#) for proactive sewer system assessment and stay ahead of costly failures.

Cross Bore Inspection: Preventing Catastrophic Failures

Cross bores — when a new utility line is drilled through a sewer lateral — are rare but high-risk. Left undetected, they can lead to explosive hazards when gas lines intersect with sewer systems.

Pro-Pipe's **layered [cross bore inspection program](#)** ensures safety at every step:

- Inspecting laterals before, during, and after directional drilling
- Capturing high-resolution video and GPS data
- Delivering digital documentation for compliance and record-keeping

For contractors and engineering firms, this proactive measure protects crews, homeowners, and project timelines.

Manhole Inspection: The Gatekeeper of System Integrity

Often overlooked, manholes are critical access points — and frequent failure risks. Through regular inspections, Pro-Pipe identifies:

- Cracks or structural weaknesses
- Corroded or missing covers
Inflow from surface runoff
- Root intrusion and silt buildup

For public works directors, these inspections mean fewer system backups, reduced I&I, and improved reliability.

From Data to Action: Smarter, Faster Repairs

Inspection is only the beginning. Acting on inspection data with trenchless methods like:

- [CIPP lining](#) (cured-in-place pipe)
- **Joint sealing and point repair**
- **Root removal**

saves time, cuts costs, and minimizes disruption to communities. Compared to emergency excavation, these methods are:

- **Cost-effective** because they target specific problem areas and avoid large-scale digs
- **Less disruptive** for traffic and residents
- **Longer-lasting**, extending the system's lifespan

Technology Spotlight: Digital Tools for Modern Utilities

The days of relying on paper maps and best guesses are over. Pro-Pipe leverages:

- [GIS mapping](#) and **mobile portals** for real-time data
- **Digital video capture** for clear, documented evidence
- **Custom reporting platforms** for compliance and budgeting

For engineers and contractors, this translates into smarter project planning, better collaboration, and stronger compliance records.

What It Means for Municipalities, Engineers, and Contractors

- **For Municipalities & Public Works Leaders:** Protect budgets, reduce environmental penalties, and ensure reliable service delivery.
- **For Engineers:** Gain precise data for planning, compliance, and asset management.
- **For Contractors:** Streamline projects and avoid costly cross-bore risks.

Don't Wait for Legacy Lines to Fail

Aging sewer systems are more than an infrastructure issue — they're a public safety and compliance risk. Proactive inspection, timely repair, and modern rehabilitation methods are the best defense against disaster.

Next Steps for You:

- **Municipalities:** Schedule a system-wide inspection to assess risks.

- **Engineers & Contractors:** [Request a consultation](#) to learn how Pro-Pipe supports your next project.
- **Everyone:** [Explore our checklist](#) to help you select the right inspection partner.

With Pro-Pipe, you gain a partner committed to **accuracy, safety, and long-term infrastructure health.**