



# BC Underground Infrastructure 2026 Roundtable Report

Advancing Coordination, Data, and Damage Prevention in British Columbia

## Acknowledgement

BC 1 Call extends sincere thanks to all Roundtable participants for their time, insight, and willingness to share perspectives with a diverse group of attendees. The strength of this report reflects the quality of the discussion and engagement in a thoughtful, respectful, and collaborative dialogue. We additionally thank the BCIT student volunteers for their excellent work in capturing the conversations on which this report is built.

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## EXECUTIVE SUMMARY

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On February 25, 2026, BC 1 Call convened a multi-stakeholder BC Underground Infrastructure Roundtable, bringing together representatives from municipalities, utilities, contractors, regulators, industry associations, and technology leaders.

The purpose of the Roundtable was to explore how British Columbia can strengthen damage prevention, improve coordination, and better support safe infrastructure development in an increasingly complex and high-demand environment.

The discussions revealed a clear and consistent message: the challenges facing underground infrastructure in British Columbia are systemic and interconnected.

Participants described a landscape where infrastructure complexity is increasing, but coordination, data systems, and accountability frameworks have not evolved at the same pace.

While awareness of safe digging practices has improved, gaps remain in how information is shared, how responsibilities are defined, and how risks are managed in practice.

These findings reflect consistent themes identified across a diverse group of senior leaders and practitioners from across the infrastructure ecosystem.

This report is intended to reflect the perspectives shared during the Roundtable, identify system-level themes, and support continued dialogue and decision-making across the underground infrastructure community in British Columbia.

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# 1 PARTICIPATION OVERVIEW

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The Roundtable brought together 54 participants representing a broad and influential cross-section of British Columbia's underground infrastructure ecosystem.

Participants came from organizations responsible for planning, building, operating, regulating, and protecting underground infrastructure across the province. This included municipal governments, utility owners and operators, contractors, regulators, industry associations, and technology and data service providers.

Attendees held a wide range of roles spanning both strategic leadership and operational delivery. This included Chief Executive Officers, Executive Directors, Vice Presidents, General Managers, Directors, Managers, Engineers, planners, utility locating professionals, and field operations specialists. The discussion benefited from the presence of both decision-makers shaping policy and investment, and practitioners responsible for execution, safety, and coordination on the ground.

In addition to their primary roles, many participants are actively engaged across the broader infrastructure ecosystem through board and committee service, advisory roles, and leadership within industry and non-profit organizations focused on construction, safety, utilities, and damage prevention. These additional affiliations brought deeper system awareness to the discussion, reflecting not only organizational perspectives, but also cross-sector collaboration, governance experience, and long-term industry insight.

Participants also represented a mix of geographic contexts, including large urban centres, rapidly growing municipalities, and smaller or more remote communities. This ensured that the discussion reflected both high-density infrastructure challenges and capacity constraints experienced in less-resourced regions.

The Roundtable was intentionally designed to include both:

- **Strategic perspectives:** policy, governance, planning, and regulatory viewpoints
- **Operational perspectives:** execution, safety, locating, damage prevention, and field coordination realities

This combination ensured that the conversation captured both system-level challenges and real-world implementation experience.

Collectively, participants represent organizations and networks that influence infrastructure planning, delivery, safety practices, public awareness, and policy development across British Columbia.

## 2 AREAS OF CONSENSUS

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Across all discussions, participants consistently aligned on several core realities:

- Infrastructure systems are more complex than ever, particularly in urban and redevelopment environments
- Risk is not always visible due to fragmented or incomplete information
- Coordination often happens too late, after issues have already emerged
- Data quality and accessibility must improve to support better decision-making
- Education, training, and workforce readiness remain critical to safe outcomes

As infrastructure demand continues to grow, the consequences of system gaps will also increase. These include safety risks, service disruptions, project delays, and rising costs.

Participants were clear that improving outcomes will require coordinated progress across data, systems, people, and governance.

At the same time, the Roundtable demonstrated that British Columbia has a strong foundation to build from, including engaged stakeholders, growing awareness, and a shared commitment to improvement.

*“We’re asking people to move faster in a system that hasn’t been built to support that speed.”*

*“We don’t have a lack of effort; we have a lack of alignment.”*

## 3 ABOUT THE ROUNDTABLE

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- **Date:** February 25, 2026
- **Location:** The Vancouver Club, Vancouver, BC
- **Host:** BC 1 Call

The Roundtable brought together a diverse cross-section of the underground infrastructure ecosystem, including municipalities, utilities, contractors, regulators, industry associations, and technology leaders.

Participants represented both strategic leadership and field-level expertise, including CEOs, Vice Presidents, General Managers, Directors, Managers, and technical specialists responsible for planning, delivery, safety, and infrastructure management.

The Roundtable also included representation from provincial and federal regulators, as well as Ontario One Call, providing insight into alternative models and approaches.

This breadth of participation ensured that discussions reflected real-world challenges, system-level perspectives, and practical opportunities for improvement across British Columbia.

While the Roundtable included broad representation, future engagement will seek to further expand participation to ensure all perspectives are reflected.

## 4 HOW TO READ THIS REPORT

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This report reflects the themes and insights captured across all Roundtable discussions.

While not every perspective is represented in every section, the findings highlight consistent patterns and shared observations across diverse stakeholder groups. The intent is not to attribute comments to specific organizations *or individuals*, but to identify system-level themes that emerged collectively.

The report is designed to synthesize both broad areas of alignment and selected operational realities that help explain how these challenges are experienced in practice.

## 5 THEMES OVERVIEW

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The following sections summarize the four core themes explored during the Roundtable discussions. While each theme focuses on a distinct aspect of the system, participants consistently emphasized that these issues are interconnected.

Together, they describe a system that is under increasing pressure, where improvements in one area, such as data, coordination, education, or workforce capacity, are closely linked to progress in others.

### THEME 1: INFRASTRUCTURE GROWTH AND SYSTEM PRESSURE

**Key Insight:** Infrastructure complexity is increasing faster than coordination systems can adapt, raising risk across planning and execution.

Participants consistently described a system under increasing strain. Growth, densification, and aging infrastructure are creating environments where underground networks are more congested, more layered, and more difficult to manage than in the past. These conditions are especially pronounced in brownfield and redevelopment settings, where historical infrastructure is often poorly documented and multiple assets compete for limited space.

Several discussions highlighted the growing disconnect between the pace of development and the ability of coordination systems to keep up. Planning, permitting, and construction processes are not always aligned, resulting in repeated excavation, avoidable rework, and increased project costs. Even where activity levels have slowed temporarily in some areas, participants noted that the underlying pressures remain. Densification, utility relocation, and the challenge of working within increasingly constrained corridors continue to test the system.

Participants also described the tension between growth objectives and the condition or capacity of existing underground infrastructure. In some communities, new development is moving forward while questions remain about whether older systems can support it. In others, utilities are being required to fit into already crowded spaces, requiring compromises, redesign, or additional coordination that can delay projects and increase cost.

A recurring concern was the gap between recorded information and field reality. Legacy infrastructure, undocumented assets, abandoned services, and inconsistent record quality can create uncertainty that is only discovered once work is underway. This increases reliance on field judgment and verification, often after budgets and schedules have already been set. Participants noted that this is particularly challenging for contractors, who may bear significant risk without having access to the same level of visibility as infrastructure owners.

Workforce issues were also a major part of this discussion. Participants raised concerns about labour shortages, retirements, inconsistent experience levels, and the difficulty of transferring institutional knowledge. Language barriers and training limitations were also noted as growing challenges, especially as the workforce becomes more diverse and projects more complex. Several participants questioned whether the current pace of work is outstripping the system's ability to train, support, and retain people with the necessary expertise.

Participants also identified pressures unique to smaller municipalities and organizations. Limited staffing, partial digitization, and reduced GIS or technical capacity make it harder to keep pace with growth and changing project demands. In those contexts, critical knowledge may reside with only a few individuals, increasing vulnerability when staff retire or move on.

In addition, the Roundtable surfaced concerns about the broader construction environment. Competitive bidding pressures, cost escalation, and compressed timelines can incentivize shortcuts or create conditions where safe, careful planning is harder to sustain. Participants noted that some good actors are shouldering the cost of diligence while competing against others who may not follow the same standards.

Taken together, these observations suggest that the challenge is not simply one of volume. It is one of complexity, preparedness, and the ability of systems and people to manage that complexity safely and efficiently.

*“We’re building on top of systems we don’t fully understand anymore.”*

## **THEME 2: DATA, INSIGHT, AND RISK VISIBILITY**

**Key Insight:** Risk cannot be effectively managed when the information required to see it is fragmented, incomplete, or difficult to access.

Participants emphasized that effective damage prevention depends on the ability to clearly understand underground conditions before work begins; however, the information required to do so is not always available in a consistent, complete, or reliable way.

Across discussions, participants described persistent challenges with missing or outdated as-built records, incomplete GIS systems, undocumented legacy infrastructure, uncertainty around depth, and gaps between what appears in drawings and what is found in the field. In some cases, developers do not submit drawings in a timely way, leaving municipalities or other stakeholders with prolonged data gaps. In others, organizations rely on paper records, archived files, or institutional memory to reconstruct what may exist underground.

A major theme was that data fragmentation reduces confidence and increases risk. Information is often distributed across municipalities, utilities, private owners, strata developments, regulators, and various internal systems. There is no single authoritative source that provides a complete picture. This means that planning teams, contractors, and field crews may each be working from different versions of reality.

Participants also noted that field-level access to information is inconsistent. In some organizations, sophisticated GIS systems and digital tools are available. In others, staff may still rely on PDFs, static maps, screenshots, or partial records. Field crews do not always receive the same quality or depth of information available at the planning level, creating disconnects that can affect decision-making during execution.

Another recurring point was that BC 1 Call is sometimes misunderstood as a source of complete infrastructure data, rather than as a notification service. This misunderstanding can create false assumptions about what information has been captured and what has not. Participants stressed that this highlights a need for greater clarity around roles, responsibilities, and system boundaries.

The discussion also surfaced an important tension around data ownership and liability. Some organizations are cautious about sharing information because they are concerned about how it may be interpreted, relied upon, or used if it proves inaccurate. Others pointed to the cost of maintaining and updating quality data, particularly in smaller or less-resourced organizations. At the same time, participants were clear that the current environment leaves too much room for uncertainty, duplication, and avoidable risk.

In several discussions, participants pointed to the promise of better standards, interoperability, digital mapping, 3D visualization, AI-assisted systems, and common data frameworks. These ideas were not framed as technology for its own sake, but as tools to improve clarity, confidence, and efficiency across the system.

The overarching message was that better visibility of risk is foundational to better planning, safer work, and more efficient project delivery. Without stronger data quality, accessibility, and governance, other parts of the system will continue to struggle.

*“A partial map can be more dangerous than no map at all.”*

*“The information exists, but not always where or when it’s needed.”*

### THEME 3: SHARED RESPONSIBILITY AND COORDINATION

**Key Insight:** Shared responsibility is widely accepted, but cannot function effectively without clear accountability, consistent participation, and strong communication.

Participants strongly endorsed the principle that damage prevention is a shared responsibility. At the same time, they were equally clear that shared responsibility is difficult to operationalize when roles are unclear, participation is inconsistent, and information does not move effectively across organizations.

Coordination challenges most often arise at points of intersection: between municipalities and utilities, between owners and contractors, between regulators and field operations, and between planning-stage decisions and construction-stage realities. These intersections are especially difficult in dense environments, where multiple organizations may be working in proximity with different timelines, systems, and priorities.

Several discussions highlighted that coordination is still too often reactive. Stakeholders are frequently brought together after a conflict has been identified, rather than early enough to prevent the conflict in the first place. Participants cited repeated paving, overlapping utility works, inconsistent permit coordination, and missed opportunities to align projects before work begins. While some municipalities and organizations have begun using internal conflict checks, integrated project delivery approaches, or multi-party coordination practices, these are not yet consistent across the system.

Another recurring theme was uneven participation. Some organizations are highly engaged in BC 1 Call and related coordination processes, while others are not. This creates blind spots and weakens the effectiveness of any shared system. Participants pointed out that even where coordination tools exist, inconsistent uptake reduces their value.

Education and communication were also central to this theme. Participants stressed that well-designed processes still depend on how effectively they are understood and applied by people in real situations. This includes communication between departments, between office and field, and between supervisors and crews. Language barriers, varied levels of experience, and inconsistent training approaches can all undermine coordination on the ground.

Questions of accountability surfaced repeatedly. Participants noted that responsibility for risk is not always matched by responsibility for data accuracy or coordination. In some cases, contractors bear substantial liability even where they are working with incomplete or imperfect information. In others, utility owners or municipalities may have information that is not easily accessible to those doing the work. This creates frustration and contributes to a sense that responsibility is shared unevenly in practice.

Participants also discussed the importance of earlier communication and longer-range planning. Publishing capital plans, sharing future works, coordinating projects in common corridors, and

making it easier to update records were all seen as ways to move from reactive coordination to proactive coordination.

Overall, the Roundtable reinforced that coordination is not only a process challenge. It is also a governance, culture, and communication challenge. Stronger shared responsibility will require clearer expectations, earlier collaboration, and more consistent participation across the underground infrastructure ecosystem.

*“By the time everyone is at the table, the problem is already there.”*

*“Everyone is responsible, but no one is clearly accountable.”*

#### **THEME 4: FUTURE STATE — WHAT WOULD BETTER LOOK LIKE**

**Key Insight:** A more effective system for BC would be integrated, proactive, and supported by reliable data, clear accountability, and consistent participation.

Participants described a future state in which underground infrastructure coordination in BC is simpler, more proactive, and more trusted. At the centre of that vision is a system that functions more like a true “one call” environment, where users can access what they need through a single, reliable process, rather than navigating multiple systems and fragmented sources of information.

A key aspiration was greater integration of data, systems, and workflows. Participants expressed strong interest in a future where infrastructure information is more accurate, more accessible, and more interoperable across organizations. This included discussion of centralized or linked mapping platforms, digital twins, 3D tools, common standards, and more efficient ways to update and validate records over time.

Participants emphasized the need to strengthen education and competency across the system. This included interest in more consistent training, stronger certification or qualification pathways, better education for homeowners and smaller operators, and approaches that reflect the realities of a changing workforce. There was also discussion of whether some forms of excavation work should require more formal training or competency requirements, similar to other regulated activities.

Several participants pointed to the importance of making good practice easier to follow. An optimized system would reduce unnecessary complexity, improve clarity, and give users confidence that the information they receive is timely, usable, and complete enough to support safe decisions. There was also a strong desire for a system that reduces the burden of navigating separate processes for municipalities, utilities, private owners, and other infrastructure stakeholders.

Policy and regulation were an important part of the future-state discussion. Participants referenced other jurisdictions, particularly Ontario, the UK, Australia, Japan, and parts of Europe, as examples worth watching or learning from. At the same time, there was clear recognition that

BC's geography, governance environment, and infrastructure landscape are distinct. Any future model would need to be shaped for BC, not simply copied from elsewhere.

The Roundtable also surfaced a nuanced view of regulation. Some participants saw strong value in broader participation requirements, more consistent standards, stronger damage reporting, and clearer accountability for repeat offenders. Others cautioned that poorly designed rules could create unintended consequences or increase bureaucracy without improving outcomes. There was broad agreement, however, that consistency, clarity, and enforceability matter.

Participants also described future progress in practical terms: fewer unknowns, fewer avoidable damages, better data confidence, more timely coordination, easier access to information, and a stronger culture of competence and preparedness across the system.

The future state envisioned through these discussions is not just more digital or more regulated. It is more coherent. It is a system where information is trusted, coordination begins early, responsibilities are clearer, and users at every level can understand what is expected of them.

**“The system should be as simple as the expectation: one call, clear answers.”**

**“Better should feel simpler, clearer, and safer for everyone involved.”**

## 6 CROSS-CUTTING INSIGHTS

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Across all themes, several consistent system-level observations emerged:

- **The system is fragmented.**

Information, responsibility, and coordination remain distributed across multiple organizations and platforms, limiting efficiency and clarity.

- **Data is foundational, but not yet reliable enough.**

Improving data quality, accessibility, and integration is essential to improving planning and reducing risk.

- **Coordination happens too late.**

Stakeholders are often brought together after problems emerge, rather than at early planning stages where issues could be prevented.

- **Accountability is uneven.**

Responsibilities are not always clearly defined or consistently applied, particularly at points of intersection between organizations.

- **People remain central to the system.**

Training, communication, and culture continue to play a critical role in how processes are implemented in practice.

- **There is strong alignment on direction.**

Despite diverse perspectives, participants consistently identified similar challenges and opportunities for improvement.

## 7 SELECTED PARTICIPANT OBSERVATIONS

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While the core themes reflect strong alignment across discussions, participants also shared specific operational realities that add important context to these findings:

- Language and communication barriers are emerging across an increasingly diverse workforce, creating risks in field-level understanding and execution
- Homeowners are playing a growing role in excavation activity, often without the experience or tools needed to interpret locate information confidently
- Smaller municipalities and organizations face capacity constraints, particularly in GIS capability, data management, and post-project processes
- Inconsistent response times and practices across organizations create uncertainty in planning and execution
- Private and legacy infrastructure records are often incomplete or unreliable, increasing reliance on field verification
- Tension exists between regulatory requirements and project timelines, with some processes adding complexity without clear risk reduction
- Knowledge transfer between experienced and newer workers is inconsistent, creating gaps in institutional knowledge
- Field crews do not always have access to the same information available at the planning level, leading to disconnects during execution

These observations reinforce the importance of viewing underground infrastructure challenges not only through a policy or systems lens, but also through the day-to-day realities experienced by those planning, coordinating, and carrying out the work.

## 8 STRATEGIC IMPLICATIONS

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The Roundtable discussions indicate that improving damage prevention in British Columbia requires a coordinated, system-wide approach.

This is not solely a matter of individual behaviour or isolated process improvement. It is a broader systems challenge involving infrastructure complexity, information management, governance, workforce development, public awareness, and inter-organizational alignment.

Progress will depend on strengthening data systems, improving coordination practices, supporting workforce development, increasing consistency across organizations, and enhancing accountability. It will also depend on building trust in the systems and processes used to support safe excavation and infrastructure planning.

As infrastructure demand continues to grow, addressing these areas will be essential to improving safety, efficiency, and long-term sustainability. The cost of inaction is not limited to strikes or service disruptions. It also includes lost productivity, increased project risk, uncertainty in planning, and reduced confidence in how infrastructure systems are managed.

The Roundtable suggests that BC has both the expertise and the willingness to move forward. What is needed now is continued alignment, practical collaboration, and a focus on changes that improve both system performance and user experience.

Advancing these areas will require continued collaboration across industry, government, and stakeholders, with a shared commitment to strengthening how the system operates as a whole.

## 9 OPPORTUNITIES

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The Roundtable identified several priority areas where coordinated progress could significantly improve system performance:

**Data:** Participants consistently emphasized the need for stronger data standards, better accessibility, and more effective integration across organizations. Improving confidence in infrastructure records and creating more consistent information flows would support better decision-making across the system.

**Coordination:** Strengthening early-stage collaboration between municipalities, utilities, contractors, and other stakeholders could reduce downstream conflicts, delays, and inefficiencies. Participants repeatedly pointed to the value of bringing the right parties together sooner.

**Education and Competency Development:** This includes improving training for field crews and equipment operators, supporting stronger understanding of safe excavation practices, and ensuring that education keeps pace with workforce change and system complexity.

**Consistency:** Participants noted the value of more aligned practices and expectations across jurisdictions, organizations, and user groups. Greater consistency would improve clarity, reduce confusion, and strengthen trust in the system.

**Reporting and Accountability:** Better tracking of damages, near misses, and repeat issues could improve visibility into system performance, help identify patterns, and support more informed decisions over time.

**Policy and Legislation:** Finally, participants expressed interest in exploring policy and legislative approaches that could support alignment, accountability, and system performance, while ensuring that any future model remains practical and appropriate for British Columbia.

These areas reflect strong alignment across participants and provide a foundation for continued dialogue and action.

## 10 WHAT HAPPENS NEXT

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BC 1 Call will continue to share these insights with stakeholders and explore opportunities for ongoing collaboration, alignment, and improvement across the system.

The Roundtable has provided a strong foundation for continued engagement and future initiatives by identifying not only broad themes, but also practical areas where participants see value in continued discussion, coordination, and action.

The intent is for this report to serve not only as a summary of the event, but as a resource to inform future conversations and support continued progress across the underground infrastructure ecosystem in British Columbia.

## 11 CLOSING

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The Roundtable demonstrated that BC has a strong foundation for progress. Participants brought forward practical insights, shared challenges, and a clear interest in improving outcomes.

The opportunity in front of us, is to build on this alignment. Progress will not depend on any one organization, but on how effectively the system evolves together.

The Roundtable is not the conclusion of this conversation. It is the starting point for continued collaboration across British Columbia, and BC 1 Call is committed to keeping this important conversation going.

We sincerely thank all who participated in this unique and revealing event. We look forward to our ongoing collaborations.