

Integrated Project Delivery:

A Better Way to Deliver Capital Projects



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partnership with



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What Is Integrated Project Delivery?

Integrated Project Delivery (IPD) is a contract based collaborative project delivery model designed to align the interests, objectives, and practices of all project participants — owners, designers, and contractors — toward shared project success. It is a multiparty agreement signed by all key project partners. Unlike traditional adversarial contracting, IPD creates

a high performing team environment built on transparency, trust, early involvement, and shared risk/reward. The result is enhanced collaboration, innovation, and driving value into the project. This contract model has seen significant growth throughout Canada and successfully utilized on several water and wastewater projects.

Baseline: Why change is needed

52%

Megaprojects
over budget

91.5%

Over budget
and late

99.5%

Over budget, late
and did not deliver
desired benefit

Reference: Flyvbjerg & Gardner, 2023

Core Principles of IPD

1. Early Involvement of Key Participants

IPD brings the owner, designers and construction partners into the process early—often at conceptual design—to collaboratively define scope, constructability, risks, opportunities, and a cost model.

Benefits include:

- Identification of major issues early
- Better design optimization
- Improved cost and schedule certainty
- Transparency amongst signatory parties to the contract

2. Shared Risk and Reward

Under IPD, all signatories place all their profit in a shared risk/reward pool that grows or shrinks based on collective performance. This eliminates adversarial behaviour and drives a project-first mentality. With a no-fault contract including a waiver of claims, failed work affects everyone.

Within this contract structure, the team is motivated to:

- Solve problems collaboratively
- Take tangible steps to eliminate rework
- Continue to delivery the project efficiently to enhance collective performance

3. Joint Project Management

IPD teams operate as a single virtual organization, often working from a co located “Big Room.” Decision making is more consensus-driven, relying on structured tools such as Choosing by Advantages or A3 as structured problem-solving and decision-making approaches.

What Is Integrated Project Delivery?

IPD is a contract-based approach that creates a high-performing environment to enhance collaboration, innovation, and overall project value.



Early Involvement

Identify and address critical issues as early as possible



Joint Project Management

Each party involved in the decision-making process and project management processes



Shared Risk & Reward

Project First Approach:
Put the project success above individual incentives



Transparency & Trust

All parties involved in decision-making process and adhere to open-book principles

4. Transparency and Trust

IPD uses an open book cost model, enabling real time visibility into cost trends, risks, opportunities, and contingency. Transparency reduces surprises and builds confidence between all partners.

How IPD Compares to Traditional Delivery

Traditional procurement structures distribute risk unevenly, driving defensive behaviours, withholding of information, and misaligned incentives. Research shows that language in traditional contracts centers on compliance, whereas IPD contracts emphasize collaboration and integration.

Why IPD Works Better

1. Better Alignment of Incentives

The shared profit pool ensures all partners are rewarded when the project succeeds—not when individual organizations maximize their own interests. This is one of IPD's most powerful differentiators.

2. Cost Certainty Through Validation

IPD includes a robust pre-detailed design Validation Phase, where the team confirms they can meet the Owner's Conditions of Satisfaction.

All partners collaboratively work together on developing the early stage of the project, resulting in:

- A shared understanding of scope
- A reliable Target Cost
- A jointly managed risk contingency
- Confidence in an all-encompassing project schedule
- A procurement strategy that mitigates long lead times and market impacts

We can build
this project,
with these
features, for
this cost,
within this
schedule

...

3. Lean-Enabled Design and Construction

Driving value and eliminating waste is a core Lean principle.

Lean principles—an approach that increases value by reducing waste and improving workflow—underpin many IPD practices. To support this, IPD teams use Lean Design and Construction methods defined by the Lean Construction Institute, including:

Last Planner System®:

- A method for reliable planning and delivery designed to keep work flowing predictably across all teams. It helps identify and resolve potential issues early, ensuring plans stay reliable and progress stays on track.

Target Value Delivery:

- A “design-to-cost” approach that uses structured, disciplined management throughout the project to ensure the final facility meets user needs, stays within budget, and encourages innovation that increases value and reduces waste—rather than estimating costs after the design is complete.

Big Rooms:

- Also known as Obeya, this is a collaborative project method that brings key team members together to improve communication, support rapid decision-making, enable real-time problem solving, and break down silos. It refers to a way of working, not just a shared physical space; simply meeting in the same room doesn’t qualify as a true Big Room approach.

Choosing by Advantages and A3 Problem Solving:

- A comprehensive decision making methodologies used to make transparent, objective decisions based on advantages, not subjective scoring. It is grounded in value-based decision making, with “value” defined by the end user and is balanced against cost. Helps team make well informed choices from everyday decisions to complex project planning.

Continuous Improvement:

- A mindset and value to continuously learn and drive out “waste”, in line with Kaizen principles. It is based on a continuous cycle of plan-do-check-adjust.

4. Focus on People, Culture, and Team Health

Cultural expectations are foundational and require maintenance. IPD team behaviours include attributes such as:

- Psychological safety
- Open and transparent communication
- Accountability
- Trust
- Respect for others
- Commitment

In IPD, culture
isn't an
afterthought-
it's a
contractual
expectation

...

Is IPD Right for Every Project?

Not all organizations or projects are a natural fit. IPD works best when:

- All organizations can embrace trust, transparency, and collaboration
- The project benefits from early engagement of both designer(s), constructor(s), and specialized technology providers
- Innovation would benefit the project
- Schedule compression is valuable
- Scope is not overly rigid
- The owner is willing and has resource capacity to participate in the project details and governance

Conclusion

IPD demonstrates superior performance in cost certainty, schedule reliability, quality, safety, and team satisfaction. As owners demand more predictable outcomes and higher value, this model is rapidly gaining traction across Canada among a variety of sectors and on large, complicated projects that demand a higher level of risk management to meet the owner's financial and schedule goals. Among these are a growing number of water and wastewater infrastructure projects. Its success lies in aligning incentives, fostering transparency, and bringing the right partners together early—transforming project delivery from adversarial to truly collaborative.

Reported performance: IPD vs non-IPD projects

85%

Schedule predictability
(better/significantly better)

90%

Overall value
(better/significantly better)

85%

Cost and budget control
(better/significantly better)

92%

Likelihood of using IPD again
(likely/significantly likely)

Reference: Allison & Cheng, 2015

Suggested format: APA:

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Bird Construction

Redefining Canadian Construction
From Coast to Coast to Coast

For over 100 years, Bird has built deep Canadian roots, growing organically and through strategic acquisitions that expand our reach and strengthen our diverse service offering.

With offices nationwide and more than 6,000 employees, we deliver commercial, institutional, residential, industrial, and infrastructure projects across the country. Our services include new construction, renovations, tenant improvements, and maintenance.

Our success is grounded in respect, transparency, and collaboration. By working closely with clients, consultants, trades, and communities, we foster innovation, drive performance, and deliver exceptional results.

The logo for Bird Construction features the word "bird" in a bold, lowercase, sans-serif font. A white horizontal bar is positioned above the letters "i" and "r", extending from the top of the "i" to the top of the "r".

bird.ca

Canadian Water Network

A Catalyst for Cross-Sector
Collaboration on Water

Canadian Water Network (CWN) is a national nonprofit advancing solutions to Canada's most urgent water challenges.

As a trusted convenor, we bring together government, Indigenous and non-Indigenous communities, private sector, NGOs, and academia to drive smarter decisions and more resilient systems.

With 5,000+ participants, 12 Communities of Practice, and 50+ knowledge products, CWN turns dialogue into action—helping leaders navigate complexity and co-create equitable, sustainable, future-ready solutions rooted in inclusion, empowerment, and reconciliation.



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Igniting interest.
Inspiring action.

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Bird Construction, an Innovation Partner Sponsor with the Canadian Water Network (CWN), is helping advance practical solutions to Canada's most pressing water challenges through cross-sector collaboration. This partnership demonstrates how industry and the water community can work together to accelerate meaningful, real-world impact.