



Infrastructure Equity Research Survey Companion Guide

Introduction

The Institute for Sustainable Infrastructure (ISI) and the Université du Québec à Montréal (UQAM) are working together to explore how social equity outcomes can be more effectively measured in infrastructure planning, design, construction, and operations.

As part of this research, we have developed a preliminary set of Infrastructure Equity Key Performance Indicators (KPIs) that may help inform future guidance and content development for Envision v4. These KPIs are organized into:

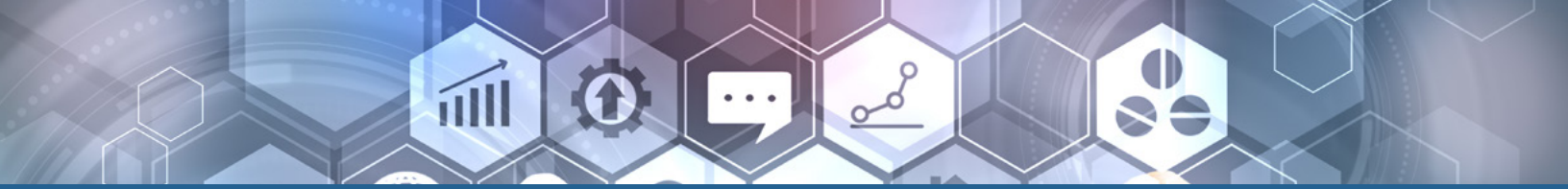
- **Three Core Equity Dimensions** based on the Fraser Tripartite Model of Justice:
 - Redistribution
 - Recognition
 - Representation
- **Six Cross-Cutting Themes** that emerged from research and industry practice.

The purpose of this survey is to gather feedback on the clarity, relevance, practicality, and usefulness of these proposed measures.

How to Use This Guide

This guide provides a high-level overview of the proposed equity framework and key performance indicators (KPIs) being evaluated through this research. You do not need to be familiar with every term or metric to participate.

As you review the themes and KPIs, we encourage you to consider whether they are relevant, practical, measurable, and useful for evaluating social equity outcomes in infrastructure projects.



The three core equity dimensions provide the foundational structure for the framework, while the six cross-cutting themes reflect priority topics identified through research and industry practice that may apply across multiple dimensions and phases of project delivery.

Core Equity Dimensions	Cross-Cutting Themes
• Redistribution • Recognition • Representation	• Indigenous Equity • Climate Vulnerability & Equity • Procurement-Embedded Equity • Quantifiable Equity Outcomes • Engagement Quality • Workforce Representation

KEY TERMS & CONCEPTS

Key Performance Indicator (KPI)

A measurable indicator used to evaluate whether a project is achieving a desired outcome. In this research, KPIs are proposed ways to assess social equity outcomes throughout the infrastructure lifecycle.

Equity

The fair distribution of opportunities, resources, benefits, and decision-making power, recognizing that different individuals and communities may face different barriers and needs. Equity focuses on achieving fair outcomes rather than treating everyone identically.

Fraser’s Tripartite Model of Justice

A framework developed by philosopher Nancy Fraser that views equity through three interconnected dimensions: Redistribution, Recognition, and Representation. Together, these dimensions help assess whether infrastructure projects create fair outcomes, respect communities, and support meaningful participation in decision-making.

Redistribution

The fair distribution of a project’s benefits, opportunities, costs, and burdens. Examples include access to services, affordability, economic investment, employment opportunities, and exposure to project impacts.

Recognition

The extent to which a project acknowledges, respects, and responds to the identities, cultures, histories, knowledge systems, and lived experiences of affected communities.

Representation

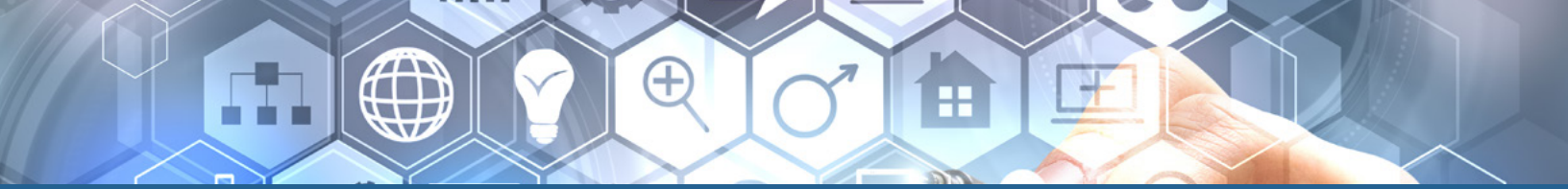
The ability of affected communities to participate in, influence, and help shape project decisions. Representation focuses on voice, participation, accountability, and decision-making power.

Equity-Deserving Groups

Communities that have historically experienced barriers, exclusion, discrimination, or underrepresentation and may require focused attention to achieve equitable outcomes. Depending on context, this can include Indigenous Peoples, women, racialized communities, persons with disabilities, 2SLGBTQI+ individuals, low-income populations, and others. Several proposed KPIs seek to understand outcomes for these groups.

Cross-Cutting Themes

Priority areas identified through research and industry practice that influence multiple aspects of equity in infrastructure.



THREE CORE EQUITY DIMENSIONS

These dimensions form the foundation of the proposed framework and address different aspects of equitable infrastructure outcomes.

Redistribution

Are project benefits and burdens shared fairly?

Redistribution focuses on whether infrastructure investments create equitable outcomes by ensuring benefits, opportunities, and investments are not concentrated among already advantaged populations while burdens are disproportionately borne by vulnerable communities.

Proposed KPIs

KPI	What It Measures
KPI 1: Benefit Distribution Equity Index	Whether project benefits are distributed equitably across populations
KPI 2: Burden Distribution Ratio	Whether negative impacts disproportionately affect certain groups
KPI 3: Local / Underserved Economic Reinvestment Rate	Investment directed to underserved communities
KPI 4: Affordability Index	Whether resulting services remain affordable
KPI 5: Construction Employment Equity Rate	Access to project jobs and apprenticeships

Recognition

Are community identities, histories, and cultures respected?

Recognition examines whether projects acknowledge and incorporate cultural identity, lived experience, historical context, and Indigenous knowledge into decision-making.

Proposed KPIs

KPI	What It Measures
KPI 6: Cultural / Heritage Site Preservation Rate	Protection of culturally significant places
KPI 7: Historic Context Documentation Completeness	Consideration of historical inequities and context
KPI 8: Indigenous / Traditional Knowledge Integration Level	How traditional knowledge informs project decisions
KPI 9: Non-Discrimination & Pay Equity Policy Coverage	Organizational commitments to equitable practices
KPI 10: Community Identity Respect Score	Community perceptions of respect and inclusion



Representation

Do affected communities have a meaningful voice?

Representation focuses on participation, influence, accountability, and governance. It considers whether communities have real opportunities to shape project decisions and outcomes.

Proposed KPIs

KPI	What It Measures
KPI11: Stakeholder Participation Rate	Participation in engagement activities
KPI12: Underrepresented Group Engagement Parity	Inclusion of historically marginalized groups
KPI13: Decision Influence Rate	Whether feedback results in project changes
KPI14: Grievance Resolution Rate & Time	Responsiveness to stakeholder concerns
KPI15: Governance Seat Equity	Community representation in project governance

CROSS-CUTTING THEMES

Research identified six important themes that may warrant dedicated consideration within future infrastructure frameworks. These themes cut across multiple lifecycle phases and equity dimensions.

1. Indigenous Equity

How can infrastructure projects support meaningful Indigenous participation, reconciliation, and economic inclusion?

This theme explores how projects can recognize Indigenous rights, strengthen relationships, support economic participation, and create workforce opportunities. It also considers how Indigenous knowledge and consent processes can be reflected in project decision-making.

Proposed KPIs

KPI	What It Measures
KPI16: Indigenous Procurement Spend Share	Spending directed to Indigenous-owned businesses
KPI17: Indigenous Relations Certification Level of Project Partners	Organizational commitments to Indigenous relations and reconciliation
KPI18: Free, Prior, and Informed Consent (FPIC) / Consent Documentation Rate	How consent and consultation processes are documented and completed
KPI19: Indigenous Employment & Training Rate	Workforce and training opportunities for Indigenous Peoples



2. Climate Vulnerability & Equity Intersection

How can climate resilience investments better support vulnerable populations?

This theme examines the intersection of climate risk and social vulnerability. It focuses on whether resilience investments reach communities most affected by climate hazards and whether recovery outcomes are equitable.

Proposed KPIs

KPI	What It Measures
KPI20: Social Vulnerability-Hazard Overlap Index	Exposure of vulnerable populations to climate-related risks
KPI21: Resilience Investment Equity Ratio	Distribution of resilience investments to high-vulnerability areas
KPI22: Post-Event Service Restoration Equity Gap	Differences in recovery and service restoration after climate events

3. Procurement-Embedded Equity Mechanisms

How can procurement processes be used to create equitable outcomes?

Procurement is one of the most direct ways project owners can influence who benefits from infrastructure investment. This theme explores how procurement policies, bid requirements, supplier diversity, and community benefits can advance measurable equity outcomes.

Proposed KPIs

KPI	What It Measures
KPI23: Equity, Diversity, and Inclusion (EDI)-Weighted Qualifications-Based Selection (QBS) Adoption Rate	Use of equity-related criteria during consultant and contractor selection
KPI24: Community Benefit Agreement Coverage	Implementation of measurable community benefit commitments
KPI25: Mandatory EDI Bid-Disclosure Compliance	Transparency of bidder diversity and inclusion practices
KPI26: Equity-Certified Supplier Share	Participation of certified diverse suppliers in the project supply chain

4. Quantifiable Equity Outcome Metrics

Are equity commitments resulting in measurable benefits?

This theme focuses on outcomes rather than intentions. It examines whether projects can demonstrate tangible benefits for equity-deserving groups and report those results in a transparent and consistent manner.

Proposed KPIs

KPI	What It Measures
KPI27: Equity-Deserving Contract Value Share	Contract dollars awarded to equity-deserving businesses
KPI28: Equity-Deserving Training Hours Delivered	Workforce development and skills training opportunities
KPI29: Net New Jobs for Underrepresented Groups	Employment outcomes for underrepresented populations
KPI30: Equity Outcomes Public Reporting Completeness	Public disclosure of equity performance and results



5. Engagement Quality Standards

How meaningful, inclusive, and effective is community engagement?

This theme moves beyond participation counts to examine the quality of engagement activities. It explores accessibility, timing, relationship-building, and whether engagement processes create genuine opportunities for communities to influence project outcomes.

Proposed KPIs

KPI	What It Measures
KPI31: Non-Traditional Engagement Channel Ratio	Use of diverse and accessible engagement approaches
KPI32: Relational Weighting in Procurement Evaluation	Importance placed on relationships and collaboration during procurement
KPI33: Strengths-Based Engagement Framing Score	Whether engagement focuses on community assets and opportunities
KPI34: Early-Engagement Lead Time	How early communities are engaged in project development

6. Workforce Representation Targets

Does the project workforce reflect the communities it serves?

This theme evaluates workforce diversity, leadership opportunities, retention, and progress toward representation goals. It focuses on creating and sustaining opportunities for equity-deserving groups throughout project delivery.

Proposed KPIs

KPI	What It Measures
KPI35: Workforce Representation Parity Ratio	Representation of equity-deserving groups in the workforce
KPI36: Target Attainment Rate	Progress toward stated workforce diversity goals
KPI37: Leadership & Supervisory Role Representation	Diversity within project leadership and supervisory positions
KPI38: 12-Month Retention Rate of Equity-Deserving Hires	Retention and long-term workforce inclusion

WHY MEASURE EQUITY?

Infrastructure projects can influence who benefits from investments, who bears risks and costs, whose perspectives inform decisions, and how opportunities are distributed. Measuring equity helps project teams understand, evaluate, and improve these outcomes in a transparent and consistent way.

SURVEY SPECIFICS

Completing the survey is expected to take **15-60 minutes**, depending on the number of core equity dimensions and cross-cutting themes selected for review.

What We Want to Learn From You

As you review these themes and KPIs, please consider:

- Are these the right areas to measure?
- Are the proposed KPIs clear and understandable?
- Are they practical for project teams to implement?
- Are any important measures missing?
- Which KPIs would provide the greatest value in driving equitable infrastructure outcomes?
- Which KPIs would be most difficult to measure or verify?

Your feedback will help refine these concepts and contribute to ongoing research exploring how social equity can be more effectively integrated into infrastructure planning, delivery, and evaluation, including future development of Envision v4.

How Will Feedback Be Used?

Survey responses and interviews will help the research team evaluate the relevance, practicality, and measurability of the proposed KPIs. Findings will be used to refine the research framework and inform recommendations related to future social equity content and guidance for Envision v4.

Follow-Up Interviews

At the end of the survey, participants will have the option to volunteer for a follow-up interview. While the survey will help identify broad trends and priorities, interviews provide an opportunity to explore selected themes in greater depth and better understand the experiences, insights, and perspectives behind survey responses.

These one-hour virtual interviews will focus on:

- Recommendations for strengthening the proposed indicators and KPIs
- Challenges and barriers to advancing equitable outcomes
- Real-world implementation examples
- Opportunities and successful practices
- Experiences applying equity-related approaches and metrics

Interviews will be scheduled at the participant's convenience. To ensure a broad range of perspectives, interview participants may be selected to reflect different geographic regions, infrastructure sectors, organization types, project types, and levels of experience with equity-related initiatives and sustainability frameworks.

All interview participation will remain strictly confidential. Individual participants and their organizations will not be identified in research findings, publications, or project materials without explicit permission.

