The Problem With Data

Why our current data habits keep reinforcing broken systems

Insights from Year Two of our Research & Knowledge Initiative project, funded by the Government of Canada.

Context and Funding

- This webinar shares highlights from the first half of the second year of our multi-year project funded by the Government of Canada through the Research and Knowledge Initiative

Our Goal

To understand why infill and missing middle housing remain so difficult to deliver—even when everyone agrees it's needed.

This project is funded by the Government of Canada.

Canada

Our Partners

We're working alongside:

- Municipal governments
    - City of Kelowna
    - City of Salmon Arm
    - City of Colwood
    - Regional District of the Central Okanagan
    - City of Calgary

- Community organizations

- Data and infrastructure experts

What We Did In This Phase, Year Two

In the first part of the second year, we took a deep dive into data itself, what it means, how its used, and what's invisible:

- Conducted a comprehensive inquiry into the role of data in housing and infrastructure systems in Canada

- Researched municipal data capacity across jurisdictions to understand how data is collected, structured, and used

- Investigated Indigenous data sovereignty principles, including OCAP®, CARE, and FAIR
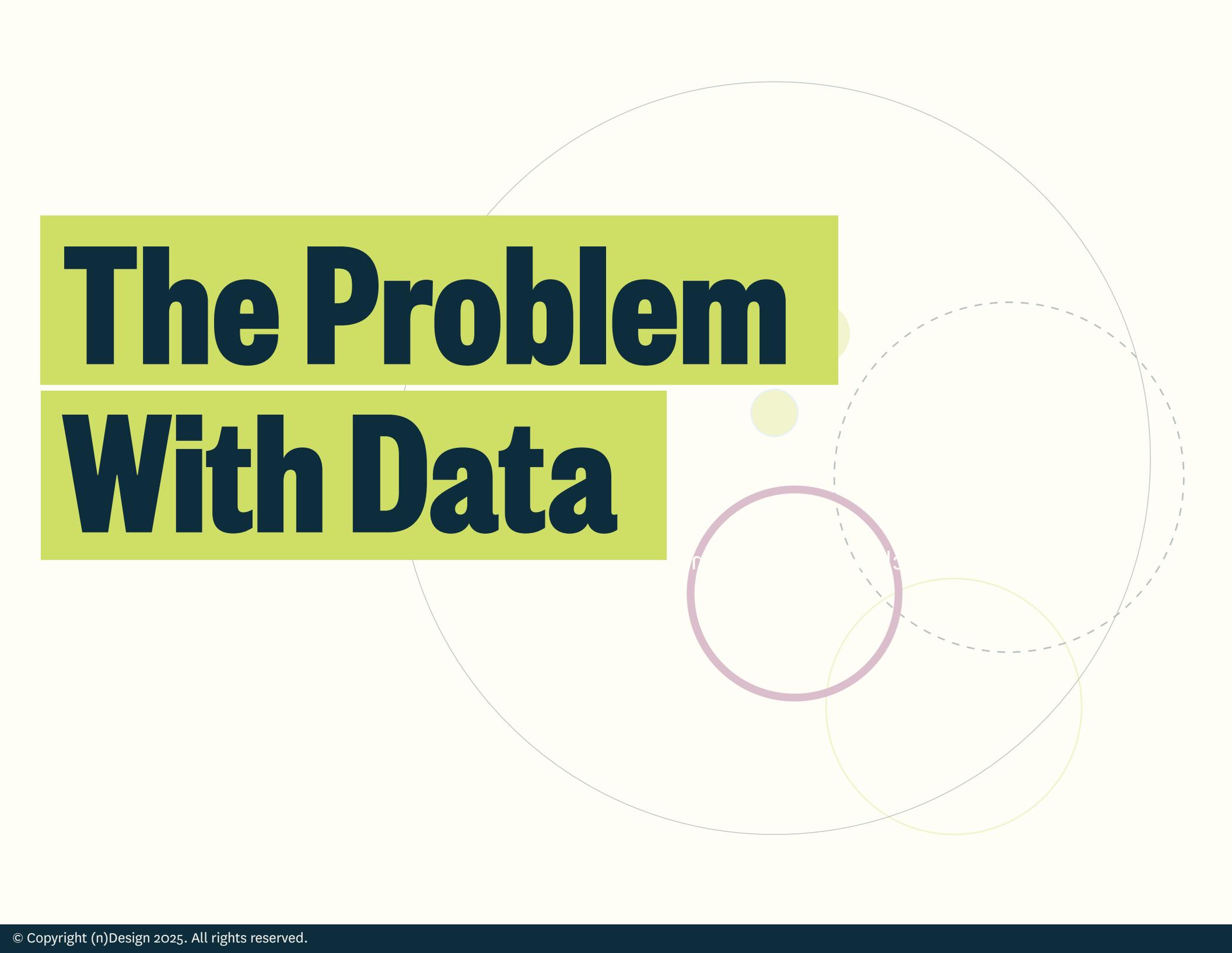
- Analyzed a wide range of equity and justice frameworks relevant to data, including GBA+, intersectionality, and racial equity tools

- Explored leading critiques of "objectivity" in data and its consequences in policy and planning decisions

- Mapped the structural and systemic challenges in housing and infrastructure data, such as fragmentation, gaps, and governance blind spots

- Identified key guiding frameworks—Two-Eyed Seeing, Data Feminism, and Warm Data—to help us imagine a new path forward

What You'll Learn In This Overview

- How dominant data practices contribute to fragmentation, bias, and short-termism in decision-making

- What key frameworks — like Warm Data, Data Feminism, and Two-Eyed Seeing — offer as alternatives

- How municipal capacity, governance structures, and gets left out

Why transforming our relationship with data is essential to solving the housing crisis

The Problem With Data

The Problem With Data

"Data is not a neutral representation of reality;

it is produced through political, economic, & social power relations

that shape what can be known and by whom."

— Kesar, Data Politics

"What is counted reflects the priorities of those

with authority to classify the world."

— Kesar, Data Politics

The Problem With Data

- It's not about blaming bad actors — it's about uncovering **what we value**, and how that **shapes the stories our data tells**

- It's also about illuminating **WHO and WHAT is missing** in our data as a result

- It's also about what values we say we care about **but are NOT being represented** in our current data system

We've Been Making Progress

- We should celebrate public sector advancements:

    - **Open data portals**

    - **Provincial and federal equity frameworks**

    - **New roles like Chi ef Data Officers**

- Acknowledge municipal momentum:

    - **Climate plans**

    - **Inclusionary zoning policies**

    - **Indigenous Housing Needs Datasets**

But There Is Much To Do

- **Uneven capacity:** Data skills and infrastructure vary drastically across communities

- **Surface-level dashboards:** Many tools prioritize what's countable, not what's meaningful

- **Equity gaps:** Frameworks like GBA+ or OCAP® are rarely built into day-to-day workflows

- **Weak governance:** Unclear rules around ownership, sharing, and integration of diverse data

- **Limited access:** Residents and staff lack tools and training to interpret or use data meaningfully

The Problem With Data

"Municipalities increasingly recognize the value of data governance, yet most still lack the structures, roles, and practices needed to operationalize it effectively."

— *Open North Data Governance Report, 2022*

"Cities aspire to become data-informed, but uneven capacity, resource constraints, and fragmented systems limit their ability to fully realize this vision."

— *De Jong et al., The Data-Informed City, 2025*

So, What is The Problem With Data?

The Problem With Data is ASSUMPTIONS

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- Three intertwined challenges:

  1. Misaligned definitions of success/value/impact

  2. Illusion of objectivity

  3. Lack of Community Voice & Agency

"Every dataset reflects choices — what to measure, how to measure it, and whose experiences matter. These choices embed assumptions that shape how problems are understood."

— Do No Harm Guide: Crafting Equitable Data Narratives

The Problem With Data

1. Misaligned definitions of success/value/impact

- We measure what's easiest: cost per unit; time to permit; dollars spent

- We ignore what matters most:
    - community wellbeing;
    - capacity for resilience and future adaptability;
    - physical, social, cultural and spiritual connections to lands and waters;
    - cumulative impacts on the potential of future generations to survive and thrive

The Problem With Data

2. Illusion of objectivity

- Data requires e**valu**ation which inherently involves value judgments (literally embedded in the word)

- Shaped by **who decides**: Who defines the problem? Who sets the thresholds? Who gets to say what matters? (and implicitly, whose values matter most)

"Indicators arise from values (we measure what we care about) and they create values (we care about what we measure)"

— Donealla Meadows, Limits to Growth

The Problem With Data

3. Lack of Community Voice & Agency

- Indigenous Rightsholders, local residents, equity-deserving groups are often **seen as anacdotal, not analytical** and often framed through **biased arratives** of deficit

- **Counter-data is often dismissed** unless it fits predefined categories

- **Different ways of knowing, being, doing and valuing** are devalued, dismissed or altogether silenced

The Problem With Data

"The Indigenous worldview has been marginalized for generations because it was seen as antiquated and unscientific and its ethics of respect for Mother Earth are in conflict with the Industrial worldview, [...]

But...we understand that the Indigenous worldview is neither unscientific nor antiquated, but is, in fact, a source of wisdom that we [all] urgently need."

- Potawatami Botanist, Robin Wall Kimmerer (Centering First Nations Concepts of Wellbeing: Towards a GDP-Alternitive Index in BC, 2020)

The Problem With Data is STRUCTURE

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- There are four key system patterns:

  1. **Limited Data Capacity**

  2. **Uneven Capabilities**

  3. **Inadequate Governance Structures**

  4. **Resource Constraints**

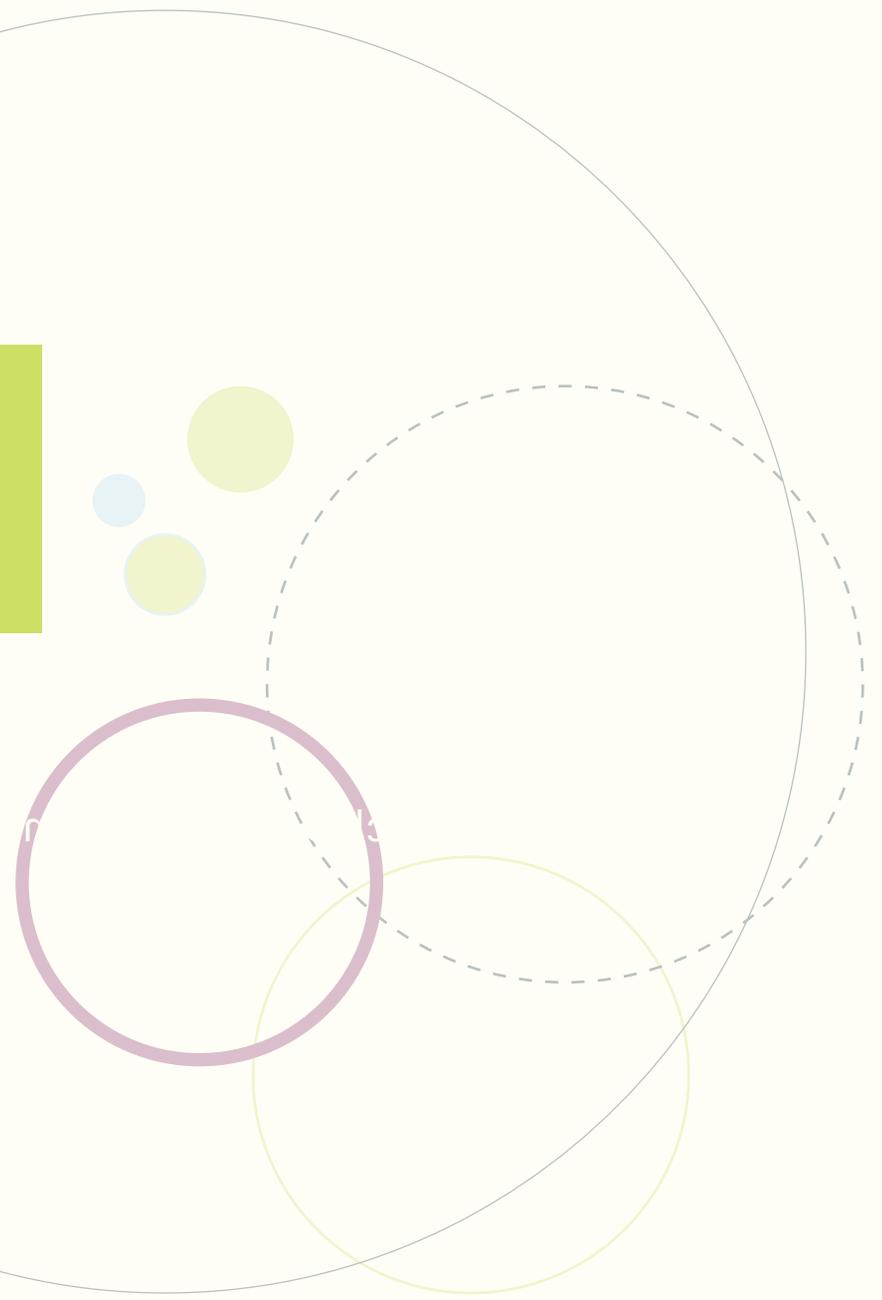"The issue is not merely a lack of technical ability but a more systemic absence of organizational conditions that enable data to be used meaningfully. This includes leadership, coordination, and the space to learn and adapt."

— De Jong et al., 2025, "The Data-Informed City"

The Way
Forward to
Good Data

The Way Forward to Good Data

1. Reveal What's Missing

2. Shift Power & Ways of Knowing

3. Break Siloed Thinking

4. Improve Data Literacy

The Way Forward to Good Data

- A few frameworks:

    - **Warm Data**

    - **Two-Eyed-Seeing**

    - **Data Feminism**

The Way Forward to Good Data

Warm Data

- Goes beyond cold, isolated facts to **include relationships, context, and interdependencies**

- Emphasizes that **meaning is co-constructed** within living systems, not extracted as objective "truths"

- **Invites deeper reflection** on how fragmented data misses the complexity of real lives

The Way Forward to Good Data

Warm Data

"Warm Data is transcontextual information.

It's the information about the interrelationships

that integrate a complex system."

— *Nora Bateson, Small Arcs of Larger Circles*

The Way Forward to Good Data

"Etuaptmumk"/"Two-Eyed Seeing"*

- Learn to see from one eye with the strengths of Indigenous knowledges and from the other with Western ways for the benefit of all

- Encourages coexistence of multiple truths and knowledge systems to navigate complexity

- A framework for **ethical, reciprocal, & relational** knowledge sharing

*Concept shared by Mi'kmaq Elder Albert Marshall

The Way Forward to Good Data

"Etuaptmumk"/"Two-Eyed Seeing"*

"Two-Eyed Seeing is to see from one eye with the strengths of Indigenous ways of knowing, and from the other eye with the strengths of Western ways of knowing… and to use both eyes together."

— Elder Albert Marshall (Mi'kmaq Nation)

*Concept shared by Mi'kmaq Elder Albert Marshall

The Way Forward to Good Data

Data Feminism

- **Challenges the myth of data neutrality** by revealing how power and privilege shape what counts as data and how it is used

- Emphasizes the importance of multiple ways of knowing: lived experience, embodiment, emotion, and Indigenous worldview

- Aims to redesign data practices to **advance equity**, **challenge oppression**, and **build more inclusive systems**

The Way Forward to Good Data

Data Feminism

"Data feminism teaches us to ask: Whose voices are missing?

Whose interests are served? Who is harmed?

It insists that data is never neutral—it is always a reflection of power."

— Catherine D'Ignazio & Lauren F. Klein, Data Feminism (2020)

The Way Forward to Good Data

"Marginalized communities often hold knowledge that is absent from official data but essential for understanding impact."

— *Do No Harm Guide: Crafting Equitable Data Narratives*

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"Marginalized communities often hold knowledge that is absent from official data but essential for understanding impact."

— Do No Harm Guide: Crafting Equitable Data Narratives

"Standard metrics overlook social and environmental dimensions, producing an incomplete picture of housing conditions."

— OECD Housing Report

A New Era of

Tools & Storytelling

A New Era of Tools and Storytelling

- Data literacy is nascent in Canada — both at the municipal level and among the general public

- Municipal staff are overloaded, often operating with limited data support, fragmented policies, and siloed systems

- Community members and grassroots actors are ready to engage, but lack accessible entry points, guidance, and legitimacy in formal decision-making

We're not just dealing with a data gap —

we're dealing with capacity, equity, and governance challenges.

A New Era of Tools and Storytelling

- These tools are grounded in the realities of Canadian municipal and community data environments

- What we're building:

  - **Educational by Design**
    Each tool integrates basic-to-advanced literacy-building — supporting user growth over time

  - **Multiple Ways In**
    We offer both quick entry points and deep exploration pathways, so users aren't overwhelmed at the start

A New Era of Tools and Storytelling

- We're building:

  - **Low-Onboarding Burden**

    Minimal setup. Minimal training. Designed for instant usability with meaningful payoff (in minutes, not weeks)

  - **Collaborative by Default**

    Built to be shared across departments, roles, and communities to reduce siloed thinking and reveal blind spots together

A New Era of Tools and Storytelling

- These tools are:

  - **Response to Complexity**
    Tools that embrace nuance rather than flatten it

  - **Public Learning Infrastructure**
    Not just dashboards, but spaces for reflection, critique, and collective insight

  - **Bridge Between Narrative & Numbers**
    Supporting system transformation by legitimizing diverse forms of knowing

A New Era of Tools and Storytelling

The **UnDashboard**

Make sense of **complex policies** and **data ecosystems**

Reveal alignment, conflicts, and blind spots across plans, dashboards, and strategies to help you understand your policy and data ecosystem as a whole.

📄 Policy Artifacts
Plans, strategies, frameworks, bylaws

🔍 **Quick Scan**	✨ **Deep Dive**	👥 **Collaborate**
Surface initial patterns	Comprehensive analysis	Workshop with others

The **Data Grove**

🌿 Justice-centered data storytelling

Build Narrative Power, Not Just Data Skills

Data Grove helps communities capture counter-data, examine assumptions, and create equity-centered narratives about housing, policy, and systemic change.

Start Building →   📖 Explore Learning Paths

A New Era of Tools and Storytelling

The **UnDashboard**

- Designed for municipal policy makers & data teams

- **Upload** policies, plans, processes, and/or data artifacts

    - query for: contradictions, ambiguities, omissions, best practices
    - compare to other policy documents for inspiration, direction

- **Reveal misalignments** between frameworks, language, metrics (e.g., equity goals vs zoning outcomes)

- **Audit** using embedded equity governance principles like OCAP®, CARE, GBA+, and other equity-based frameworks

A New Era of Tools and Storytelling

The Data Grove

- Designed for community members, advocates, and underrepresented groups

- Helps **gather and analyze counter-data** (lived experience, cultural knowledge, grassroots surveys)

- Uses AI to **help hone compelling narratives**

- Outputs ready for council presentations, funding reports, or media

What's Next?

A deep dive into these tools; how they work and the design decisions that guide them.