Creating a Place-Based Data Framework: Processes and First Phase Outcomes

Creating a Place-Based Data Framework

Data is often cited as the most significant barrier for Place-Based Initiatives (PBIs) to get to shared decision-making and measurement.

In 2023, Thriving Queensland Kids Partnership and Infoxchange brought together people and organisations who have deep understanding of PBIs, data, and change processes to co-design a Place-based Data Framework that would support PBIs to overcome the systemic data barriers experienced by many.

The purpose is to create a framework to guide practitioners in place on building a shared understanding of the 'how to' of accessing, collecting and using data for the purpose of shared measurement and shared decision-making. We recognise a need to develop an overarching framework to guide efforts in PBIs to access, collect and use data to inform and measure social change. The 'what' includes key components and practical resources that strengthens practices needed to use data for learning and action, help us to understand opportunities for shared learning and capacity building, along with providing the critical data and evidence to understand the impact of their work.

This report will:

- provide an overview of the proposed architecture - the key components and data types,
- describe what needs to be included in the framework to equip PBIs in their journey to shared decision making and measurement, and
- propose the next steps for building the place-based data framework, identifying the current gaps and opportunities.

The design team (below) collaborated over four workshops, co-facilitated by Infoxchange as part of the Data Catalyst Network. The proposed framework is a result of these workshops.

The design team

The design team is a collaboration between people from the following organisations who have collectively shared their wisdom and practice knowledge to develop a framework and included:

- Restacking the Odds- MCRI
- Logan Together
- YourTown
- Gladstone Region engaging in action Together (GRT)
- Misson Australia
- Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities, and the Arts
- Childrens Health Queensland
- Nexus -Foundation Partners (UQ)
- Griffith University
- QCOSS
- University of Sunshine Coast
- Infoxchange
- Hand Heart Pocket
- Department of Social Services – SPSP
- Department of Health
- Brisbane North PHN- SMBI
- SEER Data
- Thriving Queensland Kids Partnership

- Queensland University of Technology

Why is this important to build a Place-based data framework?

As place-based work is increasingly moving to the centre of policy and investment design, despite the interest and growth in PBIs, it has difficult to make firm conclusions about their effectiveness. However, the uncertainty around results is more an issue of 'absence of evidence' rather than the 'evidence of absence' (Inspiring Communities and Tamarack 2014; Moore et al 2014), This is leading to a sense of urgency to support and build practice around shared decision making and measurement, which is key to understanding impact.

Data is a key contributor in this, but for many practitioners' access to and the effective use of data is one of the most challenging parts of their work. A report by QCOSS also indicates that while there is enthusiasm across community organisations to utilise data, methods used are primarily informal and rarely integrated, proposing the following recommendations (i) build data capacity, (ii) standardise approaches to collecting data, (iii) invest in a dedicated shared resources.

We know that data is the heart of continuous learning: the regular gathering, analysis, and reporting of data allows PBIs to act and learn what's working and celebrate success along the way. Even if precise measurement and attribution isn't possible, analysis of qualitative and quantitative data can illustrate broad directions of travel.

There are lots of gaps in PBI data, this framework will make those gaps clear - providing an invitation for others to fill the gaps with new knowledge. Data is mentioned in most policy documents, working in place requires us to find new ways of accessing and using data to inform change. This requires joined up thinking and a clear strategy.

The boundaries and the scope of the framework

This framework does not address evaluation except were evaluation overlaps with shared decision making and measurement. An excellent discussion on this topic is found in the Place-based Evaluation Framework developed by Jess Dart (2018) see figure 1.
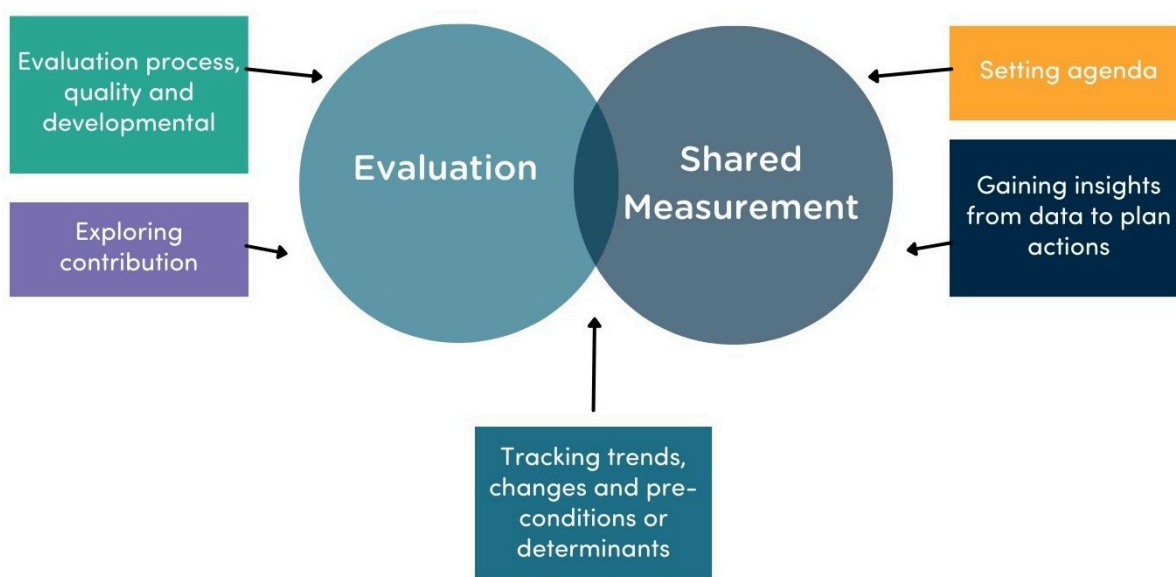

Figure 1

The Scope

Within Scope	Outside Scope
• It addresses the various types of data needed; population, service, administrative, system and local/voice. • It outlines the key elements, preconditions, principles, and processes that enable PBIs build and use data for learning, acting and measuring. • It provides a high-level overview of tools, techniques and resources that are required to collect, analysis and share data.	• This Framework does not cover some of the more technical aspects such as data architecture, including storage platforms.

How the Framework was developed

The Double Diamond Design framework developed by the <u>Design Council</u> was used and adapted to support deeper inquiry, supporting a process of exploring an opportunity or issue more widely and deeply (divergent thinking) and then developing focused actions (convergent thinking).

The design team met over four workshops. The table below provides an overview of the process.

Discover Workshop 1	Frame the project problem, build the team and get ready for co-design	• How do we describe shared measurement in place-based work? • What are the data elements that inform this? • What can the project leverage, build on or inform? • Who are the end users and what are the users requirements?
		Draft framework developed
Define Workshop 2	Build understanding and learning from lived experience	• Draft framework shared • What works well? • What is important? • What is missing? • Where are their case examples of good practice?
		Interviews conducted-case examples gathered
Develop Workshop 3	Make sense of what has been learnt, identify key touchpoints and opportunities	• Case studies shared • Framework refinement and testing • Content developed
		Framework architecture and content developed and tested
Deliver Workshop 4	Create solutions, test, learn and adapt	• Refined Framework presented for testing • Content finalised • Actions identified
		Framework action plan developed and projects scoped

The Key Components of the framework

The framework sets out the key components, describes the resources and supports for each component and outlines leverage points and connections. The below diagram (fig 2) outlines the seven interconnected components and practices that support PBIs use data to share, learn, act to enable shared decision making and measurement. The following pages outline leverage points and connections.

Seven Components of the framework:

1. Principles;
2. Conditions;
3. Enablers;
4. Knowledge exchange;
5. Learning together;
6. Acting together; and
7. Data buckets.

Data Principles
The principles and ways of working that guide the way we access, collect or generate data

Conditions
The conditions we need place to protect, access, generate, receive, hold and absorb data

Acting Together
The way we come together to absorb the learnings from the data for shared decision making, action and measurement

Enablers
The data skills knowledge, mindsets and capabilities we need in place

Learning Together
The way we bring the data types together to learn and make sense about the local system(s) unearth systemic inequalities and opportunities for acting

Exchanging Knowledge
The way we share data for the purpose learning together

Data Buckets
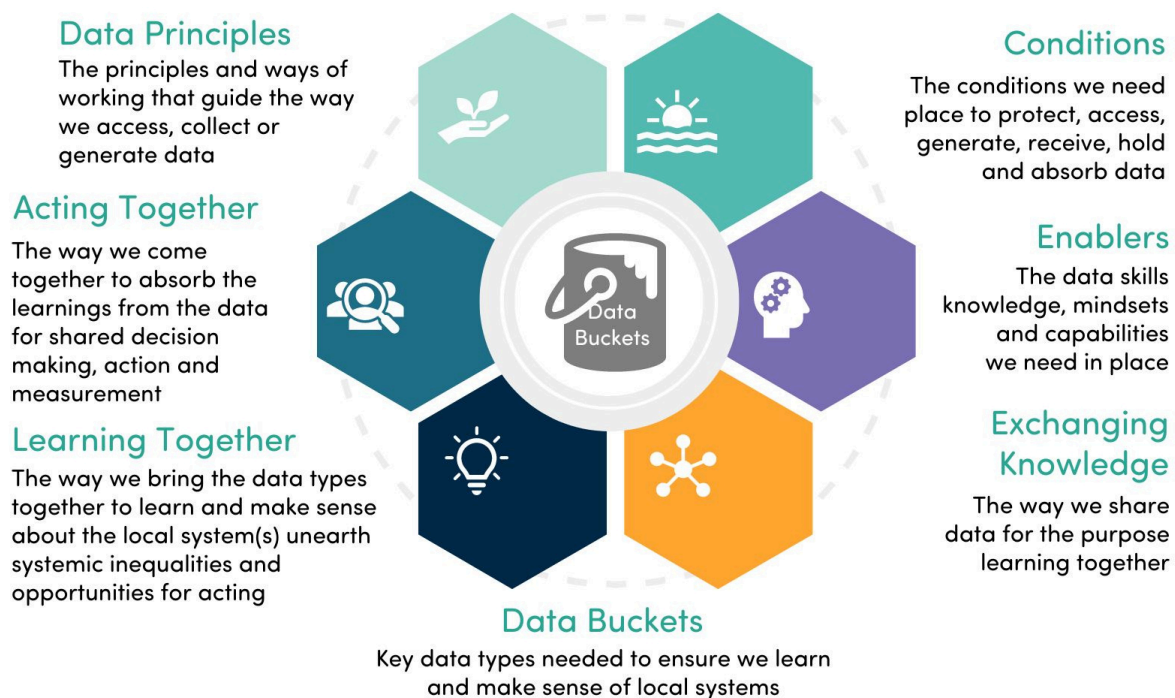Key data types needed to ensure we learn and make sense of local systems

Figure 2

Through the discovery phase the design team identified that there is significant investment and progress for PBIs in accessing population data, but not as much effort or investment in the other key components described.

The following key components were identified as opportunities for investment:

- Service Data Bucket: lack of available data;
- Community Data Bucket: resources to help with collecting and analysing community intelligence;
- Learning and Acting Together: how to connect data buckets for learning and acting;
- Exchanging Knowledge: data access agreements;
- Conditions: data governance and practical resources; and
- Enablers: skills and attributes needed now and into the future.

The Data Buckets

The report, Measuring What Matters (Bridges & Woolcock, 2022), remind us that, "Data is not an end in itself: data's primary purpose is not just monitoring processes, compliance, and outcomes, but contributing to problem-solving and organisational learning". More and better data will not fix a problem if the absence of such data is not itself the key problem or the binding constraint".

PBIs therefore need to embed their approach in a broader problem-solving framework. The key to working with data is first identifying the problem the PBI is addressing, then thinking about what data is needed to understand the problem and generate a solution. PBIs may be well placed to integrate complementary qualitative data and lived experience with broader population quantitative data apprehend and interpret local contexts and complex realities more accurately.

Four key data types or 'buckets' of data for PBIs (fig 3) were identified. The data types reflect the data ecology in which PBIs operate – from the 'macro' world of population data as a broader context for problems and measuring population change over time, through the mid-level of research data, to the 'micro' of service and community data where the problems are experienced at the local level. These are needed to ensure we learn and make sense of the local system(s) unearthing the inequalities and opportunities for shared decision making and action.

Population	**Service**	**Community**	**Research**
Sources include state and federal government, open and closed data assets. Di-identified and available at different geographical locations.	Collected by organisations or funders during the service delivery process. Could include inputs (resources and funding), outputs (quantity, quality), need (vacancies, participation) and performance.	Collected by conversations, surveys, social media, usually qualitative in nature. May include local wisdom, lived experience, ideas and innovations contributed by community members in place.	Collected, observed, generated or created to validate research findings, evidence-based practices or strategies. Usually held by universities, research institutes- including within policy and strategy.
1	2	3	4

Figure 3

The How: Building the framework

Under each of the interconnected components the design team identified supports and resources that would provide practical assistance for PBIs in the data journey.

The design team worked on building the frameworks while being guided by general principles that the framework's content needs to be grounded in practice, built collectively and provide:

1. Accessible and practical resources (tools, templates, checklists, links);
2. Practice support (case examples, guidelines, hints, tips); and
3. A structure that enables collective sharing, learning, mentoring and peer support.

The table below identifies the content needed for each component, including the data buckets.

Area	What needs to be included in the framework
Population Data Bucket	- List of evidence-based populations measures across the life course and domains of wellbeing - Catalogue of populations data assets (open/closed) and list of who the data custodians and how to access the data - Data access request (shell template) - Data dictionary - Links to data platforms (ACWDA, QFCC, QCOSS, etc.) - Log to collectively identify data gaps- scope and test instruments for new data assets (social inclusion) - Tips and templates to support developing questions to ask - Data storage and governance requirements
Service Data Bucket	- List of the types and granularity of service level data to explore (demand, quantity, quality, demographics, engagement, outputs, funding, participation, unmet, workflow etc.), including practice support in interpreting the data - Links to policy, strategic and practice guidelines, data manuals - Data collection guide, including definitions, tools, templates (Gladstone) - Data collection templates - Data sharing agreement templates
Community Data Bucket	- Supports in generating and accessing community voice and wisdom - List of methodologies and platforms (including examples) for collecting - Consent form template - Tips and uses of social media in gathering community intelligence - Survey tools and templates (with a list of key questions and validated questions) - Tools and supports for analysing qualitative data - Ethical considerations tips and checklists - Techniques to support feedback - Storage, privacy and sharing of community intelligence
Research Data Bucket	- List and links to research, research institutes, peak bodies for different content area expertise - Tools and tips for searching and collecting research (google scholar etc), including the different types of research - Tools on how to combine data sets for analysis and insight generation - Explanation on the role of research including tools and tips for using research to build collective understanding - Research partnership MOU templates
Exchanging Knowledge	- Data sharing agreement templates-How to put in place appropriate government structures - Data maturity model that articulates the different data needs at different stages of initiative maturity. - Tools, methods and platforms (such as AI) for analysis and storage of data - Consideration checklist (eg who has access) - Sharing what matters for different audiences - tips on how to visualise data for different audiences- Graphical reporting templates and examples - Tips on addressing bias and assumptions - Content register log of PBIs data projects (ie homelessness, first 1000 days) to allow for peer connection and learning

Learning and Acting Together	• Tips, practical examples, and practice support in how to connect and use data to empower communities led decision making (art and heart)- quality continuous improvement • Context and maturity of models • System mapping tools and examples for connecting data • Problem solving canvases
Principles	• Describe the key principles and explain what this looks like in practice • Key areas for principles to cover include - relational no transactional (trust), courageous, strength-based, collaborative, shared ownership and management, no data without narratives, focus on learning, simple and flexible, data at the right time, data sovereignty, protecting the space for deliberation, embracing an active role for qualitative data, focusing on data close to the problem
Conditions	• Description of the capabilities needed in place • Data governance- to support how PBIs in generating, receiving, holding, storing, and absorbing data
Enablers	• A list of mindsets and skills needed to support PBIs across the different stages of PBI data maturity • Skills list that can support PBI recruitment of data positions • Links to organisations and their data skills, including examples of how PBIs have utilised external supports

Leverage points

The framework will be continually tested, ensuring we build and leverage what we know and what already exists and to make it available for PBIs to use and adapt to their communities need. This is because most PBIs are accessing and using data they are also creating or sourcing techniques, tools, practices and resources to support them.

Ideally the Framework should be hosted online and be regularly updated. Participants agreed that it is important to start with a 'Beta' version that makes resources available sooner (with the caveat that the Framework is a work in progress) rather than wait lengthy periods for finalised materials. This is particularly important at a time when AI developments are leading to rapid ongoing changes.

Below is a list that can be drawn upon in the development of the framework content.

Practice Support – case examples, hints and tips

Logan Together	- Identifying robust methodologies to measure and monitor social cohesion - Shared Decision-making practice guide, case study, model - Linked Data project (PLIDA, Life Course data)
QCOSS	- Place-based approaches guide and toolkit - Research and Evaluation Network - Resource Hub recordings - Using Consumer data for continuous improvement
SEER	Indicator bank
Gladstone	- Data Sharing Agreements - Service Data Support and Reports - Data reports
SMBI	- Data Sharing Agreements - Learning Canvas
Restacking the Odds	- Early Childhood Development System Mapping - A framework of evidence-based indicators to measure the quality, quantity and participation of early childhood services
Burnie Works	- How we use data – Impact report 2022-23 - Community Knowledge Collectors
Nexus	Currently developing a data blueprint to scope data needs, gaps and actions across SPSP sites
ARACY	- NEST Framework - Wellbeing of Aust Children - Currently supporting several PBI in developing suitable indicators and sourcing data assets available to measure
Infoxchange	- Data Sharing Agreements - Digital Transformation Hub Guides and Resources

Resources – tools, techniques and resources that exist in the ecosystem can support the implementation of the framework	
Population Data Bucket: **Data Access and Platforms**	- QFCC- Growing up in Qld Data Explorer - QCOSS Data Hub - Aust Child and Youth Wellbeing Atlas - ABS Table Builder Advanced – note access only available to universities - Ask Izzy - AIHW – National Child Wellbeing Data Asset – under development - SEER - Dataplace- National Data Commissioner - Data Snapshot – Tasmanian Gov - Breaking Down Barriers Community Profiles - Youth View Data Dashboard - Regional Data Hub- interactive map - Regional Data Hub home page - Qld open data portal
Population Data Bucket: **Indicators**	- Australian Research Data Commons - ARACY NEST – frameworks, research and reports - Measuring What Matters - AIHW - AIHW scoping child wellbeing measurements - Measuring Disadvantage in Early Childhood – Centre for Community Child Health - RSTO indicator Guide
Service Data Buckets	- Practice guidelines- National Health and Medical Research Council - Data sharing agreements- A guide to data sharing – Stive Together
Community Data Bucket	- Ethical Guidelines – Aust Evaluation Society - Data Ethics Canvas - Open Data Institute - Digital Child Ethics Toolkit
Research Data Bucket	- AIFS survey resources - QCOSS resource hub - Inequalities and Social Action Research Cluster
Exchanging Knowledge	- Data Maturity Plan- Data Orchard NFP Data Maturity Framework - Data Maturity Assessment- Data Maturity Assessment - Transforming raw data into value and actionable insight- Data for Social Good - Change Cycle - Collaboration for Impact
Learning and Acting Together	- Transforming raw data into value and actionable insight- Data for Social Good - QCOSS resource hub - Social Impact Measurement Network Australia
Principles	Measuring what matters- principles for a balanced data suite
Conditions	- Data Governance- what you need to know and how to get started - Data Storage - Change Cycle- Collaboration for Impact
Enablers	- Competency Framework- Aust Evaluation Society - Good Data Institute

| AI | • <u>Australian Framework for Generative AI in Schools</u>
• <u>Automated Decision Making and Society ARC Centre of Excellence</u> |

Next Steps

The framework sets out the key components, describes the resources and supports for each component and outlines leverage points and connections. Through the discovery phase the design team identified that there is significant investment and progress for PBIs in accessing population data, but not as much effort or investment in the other key components described. It identified that some of the content:

- is available - but not easily accessible or not in the format needed;
- has been developed (by one PBI or for a particular area) – but not shared due to them needing further development or adaptation to make them sharable; and
- is not available- in need of investment to develop.

Therefore, part of the next phase of building the framework is not only about creating new relationships, but connecting the existing supports and resources to make them easily accessible to all PBIs.

The following key components were identified as opportunities for investment:

- Service Data Bucket – lack of available data;
- Community Data Bucket - resources to help with collecting and analysing community intelligence;
- Learning and Acting Together - how to connect data buckets for learning and acting;
- Exchanging Knowledge - data access agreements;
- Conditions - data governance and practical resources; and
- Enablers - skills and attributes needed now and into the future.

The co-development phase identified the following areas for collective action

- The approach to the implementation of the Framework is viewed as an opportunity in and of itself to apply, test and learn together, in addition to each action and activity;
- To support the action plan implementation the team will codesign a collective approach and ways of working (using the Data Framework of exchanging knowledge, learning together, acting together) to guide the individual actions, activities and ways of understanding the impact; and
- The proposed data lab (for testing and learning) will provide the social infrastructure for collective learning and measuring impact.

Framework Component	PROJECT SUMMARY		Phased Approach	
			2024	2025
● Framework	1	Web Portal to house framework resources		
● Learning Together ● Acting Together	2.1	Practices, methods and tools for connecting data to understand the local system and inequalities		
		Applied learning package to support practitioners in connecting data		
● Community Data Bucket	2.2	Practices, methods and tools for collecting and analysing community data buckets		
● Service Data Bucket	2.3	Practices, methods and tools for collecting and analysing service data buckets		
● Population Data Bucket ● Exchanging Knowledge	3	Streamline access to population data, along with developing the resources and a network of critical data friend to support practice		
		Explore opportunities to align, share and/or leverage data and evaluation expertise efficiently, across multiple communities		
● Principles	4	Develop the key PBIs data principles and describe what they look like in practice		
● Framework	5	Develop case studies/examples on each of the framework components		
		Describe, codify and document the skills and capabilities needed for		

• Enablers • Conditions	6	accessing and using data for learning, acting and measuring together		
		Develop learning modules for existing undergraduate courses		
• Framework	7	Data Lab- shared testing, learning and problem solving infrastructure		
		Learning Canvas platform to test and build capability and legitimacy by delivering results		
• Conditions	8	Collate practical resources that will support PBIs in generating, receiving, holding and storing data		