# What's the Impact?

Designing a framework for the impact assessment of temporary urban intervention projects.

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Molly Connor

**What's the Impact? Designing a framework for the impact assessment of temporary urban intervention projects.**

By Molly Connor

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> *Our public spaces—parks, plazas, and, strip malls—and their temporary urban interventions—pop-ups, parklets—have the potential to positively impact local communities and neighbourhoods.*
>
> *However, it is often challenging for projects to assess the impact of these projects.*

## ABSTRACT

Our public spaces—parks, plazas, and, strip malls—and their temporary urban interventions—pop-ups, parklets—have the potential to catalyze positive impact for local communities and neighbourhoods. However, it is often challenging for citymakers to assess the impact of these projects.

This research project presents a customized approach to impact assessment through the collaborative development of a temporary urban intervention impact assessment framework.

The framework is presented in partnership with a recent temporary urban intervention, plazaPOPS, an initiative to transform inner-suburban strip mall parking lots into a community gathering place. This framework presents an approach to the measurement of a temporary urban intervention that is impact-focused, agile and process-driven. This framework will be leveraged by plazaPOPS to support a streamlined approach to measurement for future projects and support the growth of the plazaPOPS brand.

The framework presents a four research stages to impact assessment: Explore, Define, Experiment, Evaluate. The four phases of impact assessment are supported by a process toolkit, key principles for measurement and supporting indicators. This research identifies opportunities to incorporate a process and outcome-driven approach, support the individual and community, integrate a foresight lens to impact measurement and explore the appropriate threshold of complexity in the impact assessment of temporary urban interventions.

The resulting framework contributes to the broader conversation on the impact assessment of public spaces, while providing a tangible, real-world application through the plazaPOPS project.

**Key words:**
Temporary Urban Interventions, Impact, Community, Neighbourhood, Measure, Public Spaces.

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**Dedication**

To mom and dad, who have had a great impact on me.

## Acknowledgement of land and knowledge

This project was researched on the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. Toronto is covered by Treaty 13 with the Mississaugas of the Credit.

This research supports the acknowledgement and belief that public spaces and parks should play a vital role in providing shared spaces for all people and are an important space for reconciliation and decolonization. This research project is presented in support of the stewardship of this land as Indigenous peoples have done since time immemorial, and to further understand the history of colonization and how truth and reconciliation can be a part of how we bring people together on common ground.[1]

[1] Inspired by the Park People Land Acknowledgement, 2020.

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# Introduction

If you had happened by the corner of Lawrence Avenue East and Warden Avenue in Toronto in the summer of 2019, you might have thought you were seeing a mirage in the Wexford Heights Plaza parking lot: an oasis featuring lush plants, umbrellas for shade, and lots of seating. Your eyes were not deceiving you; you were witness to the plazaPOPS Wexford Heights pilot —wexPOPS—a temporary urban intervention to activate an inner suburban, car-centric area and transform it from an asphalt parking lot into a green oasis.

## plazaPOPS

The plazaPOPS project, and their Wexford Heights pilot, WexPOPS, is an example of a community working together to transform parking lots into a temporary urban intervention. In this instance, communities work to create pedestrian-friendly social infrastructure in the privately-owned public spaces (POPS) of

strip mall parking lots with "pop-up" features such as seating, shade, and greenery in an otherwise concrete environment.

WexPOPS transformed 10 parking spots into a vibrant community gathering place in the Wexford Heights plaza at Lawrence Avenue E and Warden Avenue, an iconic strip mall home to a variety of shops, restaurants, clothing stores, and hair salons.

The installation—assembled in two days—was designed through a participatory community outreach process. Working with residents, community organizations, and city staff, the project was launched in July and remained open for six weeks. Over this time, WexPOPS hosted social events, concerts, and community initiatives featuring local artists and musicians.

plazaPOPS is an example of innovative community building through temporary urban interventions in underused public spaces.[2]

## Project Description

Temporary urban interventions leverage short-term action to catalyze long-term change. These projects encapsulate a broad range of approaches and methodologies, such as those found within Placemaking and Tactical Urbanism and may last from a weekend to a season. Temporary urban interventions can catalyze underused public spaces, transforming parking lots, alleyways, or inhospitable green spaces into great public spaces that strengthen community networks, increase resilience, and make people happier.[3]

Temporary urban interventions may increase social connection, attract economic activity, improve access to green spaces and enhance local ecology.

Due to the inherently short-term nature of these temporary urban interventions, these impacts are often hard to monitor and record, yet are often a key stipulation of funding bodies, local government and community organizations.

Impact is defined as cause of an effect, the effect of a case, or to have influence on something.

Although impact is often used in the built environment, it can be challenging to conceptualize, measure and definitively communicate.

This project examines the role of impact assessment of temporary urban interventions. The research will explore temporary urban interventions and impact assessment through the development of a framework prototype.

[2] plazaPOPS, 2018

[3] Garcia & Lydon, 2015

[4] IMPACT | Meaning in the Cambridge English Dictionary, n.d.

Figure 1: Block Party

**This research project is framed through the following research question:**

——

# How might we measure the impact of temporary urban interventions?

## Research Process

Working collaboratively with plazaPOPS, this project leveraged a design research process to develop an impact assessment framework.

The research process consisted of five phases: Discover, Define and Develop concept, Develop Prototype, Review and Refine, and Deliver.

Methods used in this process included a literature review, subject matter expert interviews, collaborative plazaPOPS working sessions, concept-development and prototype development.

## Research objectives

The objectives of this research are:

1. Collaboratively build a custom plazaPOPS impact assessment framework to assess the impact of temporary urban intervention projects.

    a. Review best practices of impact assessment, temporary urban intervention measurement methodologies, toolkits, and guides.

    b. Identify core structural components of framework.

    c. Develop framework and refine through review sessions. Test framework through applied scenarios.

    d. Identify next steps.

## The Framework

The research presents an approach to the measurement of impact of a temporary urban intervention through the development of a conceptual framework for impact assessment.

This framework will be leveraged by plazaPOPS to support a streamlined approach to measurement for future projects and support the growth of the plazaPOPS brand. The framework consists of four phases of impact assessment: Explore, Define, Experiment, Evaluate. The four phases of impact assessment are supported by key principles for measurement and supporting indicators.

The following chapters describe the research findings in more detail through the research process and supporting methodologies, highlighting key insights and presenting the impact assessment framework. Finally, the framework is applied and analyzed against two applied scenarios.

Next steps for further research include the continued testing and refinement of the prototype and developing the plazaPOPS brand through impact measurement and project the implementation toolkit.

Figure 2: Neighbours Chatting
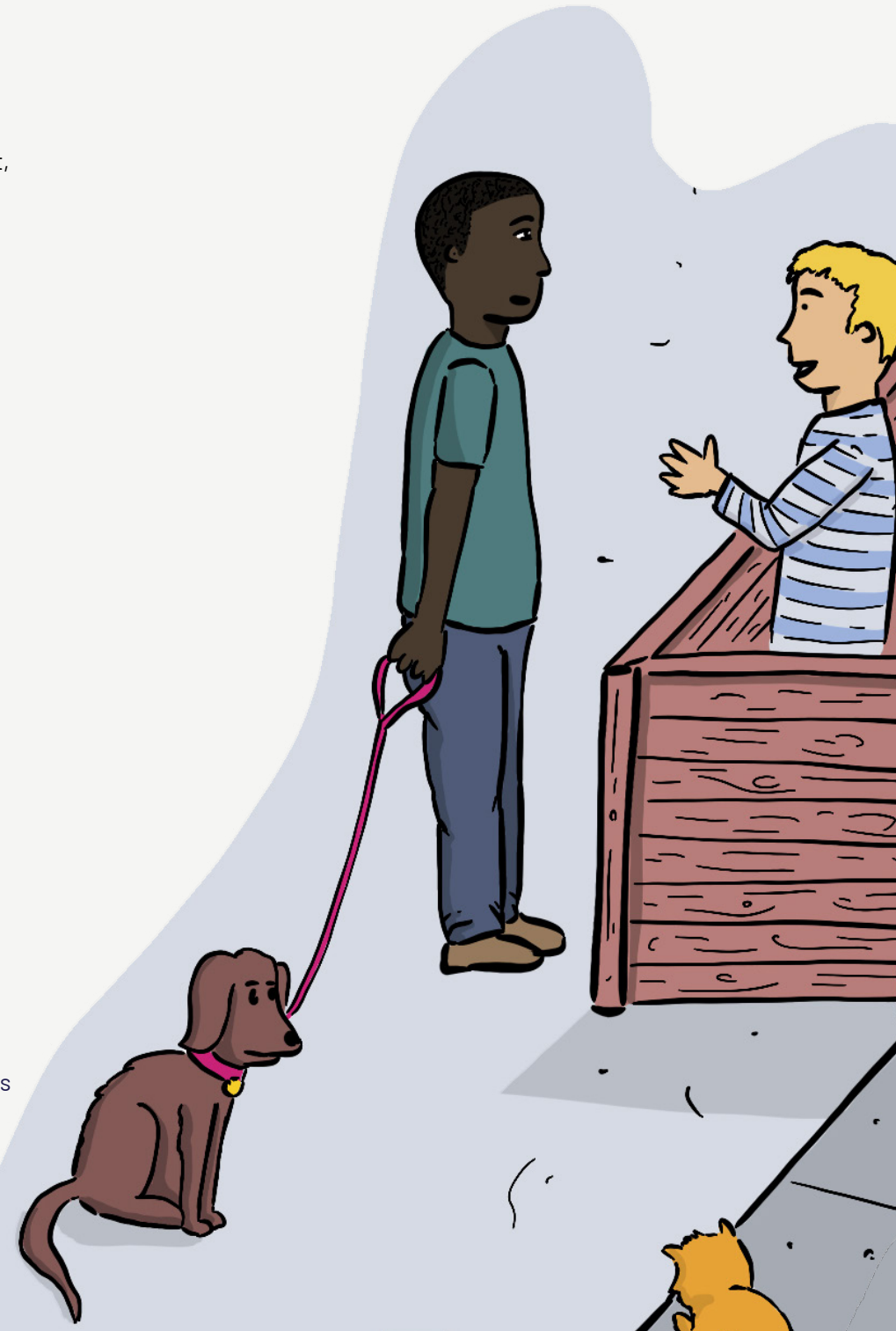
# Project Context

## "The city is a social and imaginative space which is shared by strangers."

— Georg Simmel

## CITIES, COMMUNITIES, AND NEIGHBOURHOODS

Every day, urban dwellers walk the same path, interact with the same people, and operate in individual circuits of experience. Occasionally, strangers come together. Neighbourhood gathering places—parks, public spaces—offer opportunities for chance encounters, social gathering and the opportunity to connect with strangers, neighbours, and future friends. These experiences play out against the hardware of the city—the built environment becomes the backdrop for everyday life.

The concept of "city" has been examined, discussed, and theorized from many angles.

Louis Wirth begins with the basics: "Cities are made of size, density and social heterogeneity." [6] At the heart

of this assessment lies the tension between spatial and social elements of the city. These spatial and social elements can be evaluated as separate entities and as interconnected concepts. According to Georg Simmel, the most exciting exploration comes from the interconnectedness and the examination of how the spatial and social shape one another.[7]

In this same vein, Eric Klinenberg, author of *Palaces for the People*, highlights that "the social life we experience doesn't exist in a vacuum; there's a context for it. It can be supported or undermined by the places where we spend time." [8]

In essence, the interconnectedness relationship between the physical environment (the spatial) and the social life of urban dwellers (the social) can enable or disable opportunities to connect socially. [9]

The concept and tensions of the community are representative of the social aspect of a city, but, curiously, this social aspect is grounded in the spatial elements and material forms of the city. One cannot exist without the other.

## COMMUNITY: THE SOCIAL FACTOR

Community is the thread that connects us, defined as the "formal and informal means through which social groups organize and reproduce themselves in particular spaces." Communities are determined by individual interests, experiences, and places.[10]

There are a number of ways to explore community categorizations. Robert Park (1967) presents three aspects of community:

- **Location-based communities:**
  » Community is centred on a geographically bound "place," such as a suburb, neighbourhood, housing estate or village, where there is a physical, location-based connection between the people and the place.

- **Organizationally-based communities:**
  » Ranging from informal family or network-based organizations and associations to formal, professional or members-based organizations.

- **Identity-based communities:**
  » Where community comes from shared identity and interests, such as sub-cultures, ethnic groups and religious communities. This model can represent spatially dispersed yet socially connected communities. The affective model also incorporates communities where "members" may not know each other, but are connected, through community or need or identity, such as diasporic, queer, or disabled communities.

Although Park's model is pre-internet, this concept of community is still valid. Park viewed his segments of community as distinct, whereas more modern models of community showcase the interconnectedness, overlapping and meshing of different forms and definitions.[11]

[6] Wirth, 1938
[7] Simmel, 2011
[8] Klinenberg, 2019
[9] ERA Architects, n.d.
[10] Perel, n.d.
[11] Park & Burgess, 2019

Figure 3: Parklet

[12] Perel, n.d.

[13] Summers, 2015
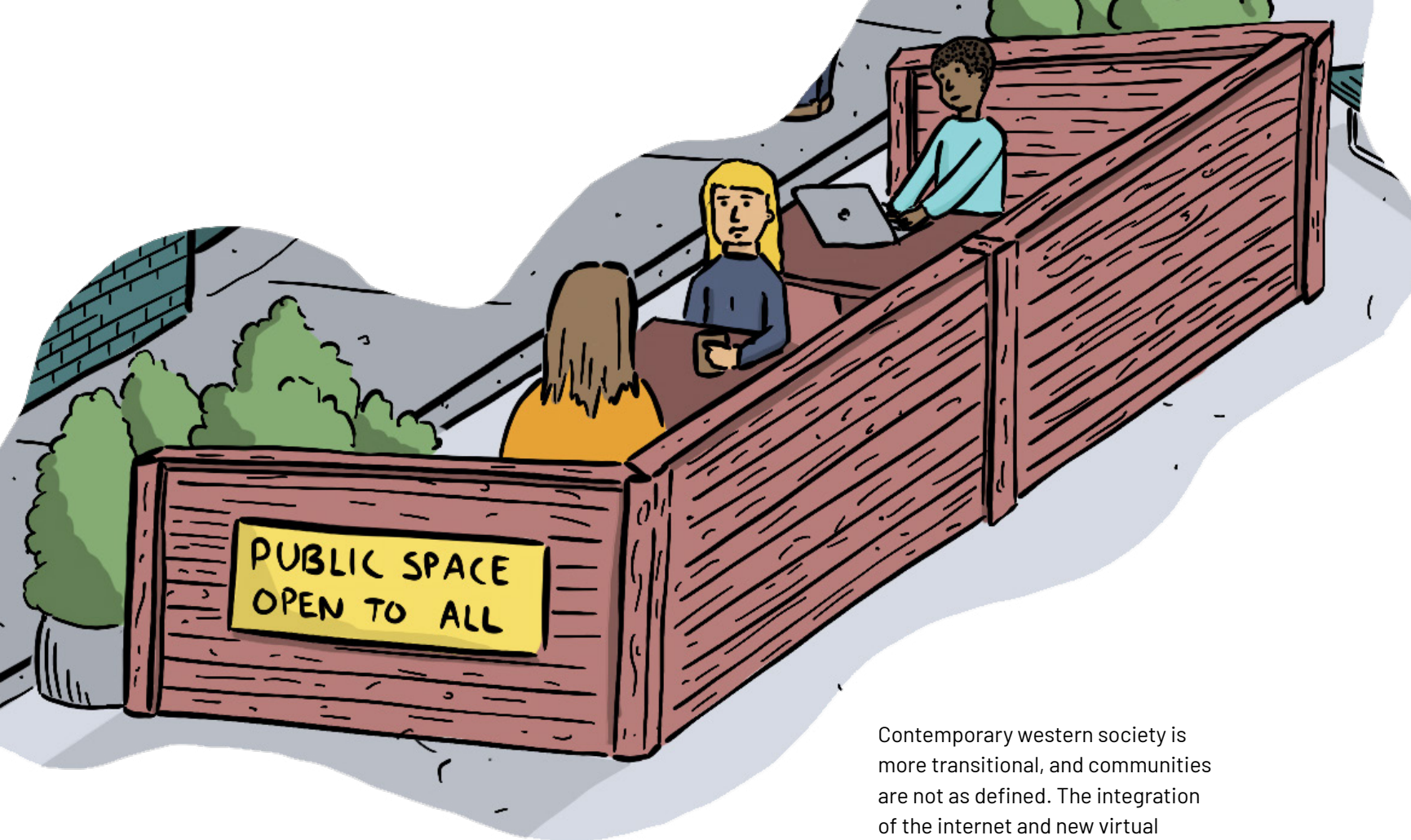
For example, communities of diaspora may be physically distant, but share common social networks, identities, and spaces across distances. Similarly, the city is made up of interconnected and overlapping communities and neighbourhoods.

In the past, community could be defined by a deep rootedness and interconnected structure, such as a shared history or social, economic, religious, and cultural ties. These handwoven knots of community were structured and secure, built from what has come before.

Contemporary western society is more transitional, and communities are not as defined. The integration of the internet and new virtual communities adds another layer that allows individuals to be together, yet apart. These new definitions of community are built not with tight knots, but with loose threads.[12]

Community structures have been replaced with community networks and, in the face of increasing social isolation, pandemics and climate emergencies, there is momentum behind projects that strengthen community networks and resilience.

There is an undeniable relationship between place and people. The shift toward a human-centred approach to urban design has inspired the use of urban interventions to facilitate these social interactions and the building of community.

# "This is what the city is, bits and pieces."

**— Jane Jacobs,** *The Death and Life of Great American Cities*

## NEIGHBOURHOOD: THE SPATIAL FACTOR

Until the mid-twentieth century, western cities were walkable, interconnected, and built from a mix of residential and commercial structures.

The ending of World War II coincided with a North American shift in urban planning. Suburban development expanded in response to the growing middle class, bringing low-density, single-family detached homes, the separation of residential and commercial buildings, and an increased dependency on the car.

In the 1960s and 1970s, the New Urbanism movement moved to return urban planning to its roots—where human-scaled design encouraged neighbourhood walkability, the proximity of residential and commercial structures and accessible, integrated public spaces.[13] The Congress for New Urbanism (1993) lists two core concepts to define the movement: Urban Design should (1) be focused on the development of urban practices and (2) build a sense of community.[14]

The New Urbanism approach returns the city to the idea of a "neighbourhood," an area designed and built "for people, not cars and shopping centers." [15] The concept of neighbourhood rests on spatial and material forms that hold meaning for the individual. Neighbourhoods, in this sense, are lively, connected, and geographically or socially bounded, and consist of mixed-use elements and active public spaces.

The spatial aspects of a city can be designed to facilitate the social elements. William "Holly" Whyte's *The Social Life of Small Urban Spaces* (1980) identified patterns in public behaviour in urban spaces—and how the urban space influences public behaviour. Urban spaces designed as "pathways" with minimal seating act as a thoroughfare and speed up pedestrian traffic, whereas plazas with a diversity of objects encouraged congregation and conversation.[16]

In recent years, city budgets and investment in large-scale, permanent infrastructure have decreased, and new, community-led approaches to urban improvement are mobilizing to fill the void. Movements, such as Placemaking and Tactical Urbanism, use a community-centric approach to design physical environments for people.

### Temporary Urban Interventions

Placemaking is considered both a process and a philosophy. The process uses a collaborative, community-first approach to create and revitalize public spaces. The philosophy leverages a hands-on, community-centric approach to change. Projects could include the installation of floating docks for temporary urban swimming, pop-up block parties, or residential intersection activation for traffic calming.[17]

[14] The Congress for New Urbanism, 2015

[15] Projects for Public Spaces, n.d.

[16] Whyte, 1980

[17] Projects for Public Spaces, n.d.

Project for Public Spaces defines Placemaking:

**"Both an overarching idea and a hands-on approach for improving a neighbourhood, city, or region, Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of every community. Strengthening the connection between people and the places they share, placemaking refers to a collaborative process by which we can shape our public realm to maximize shared value."[18]**
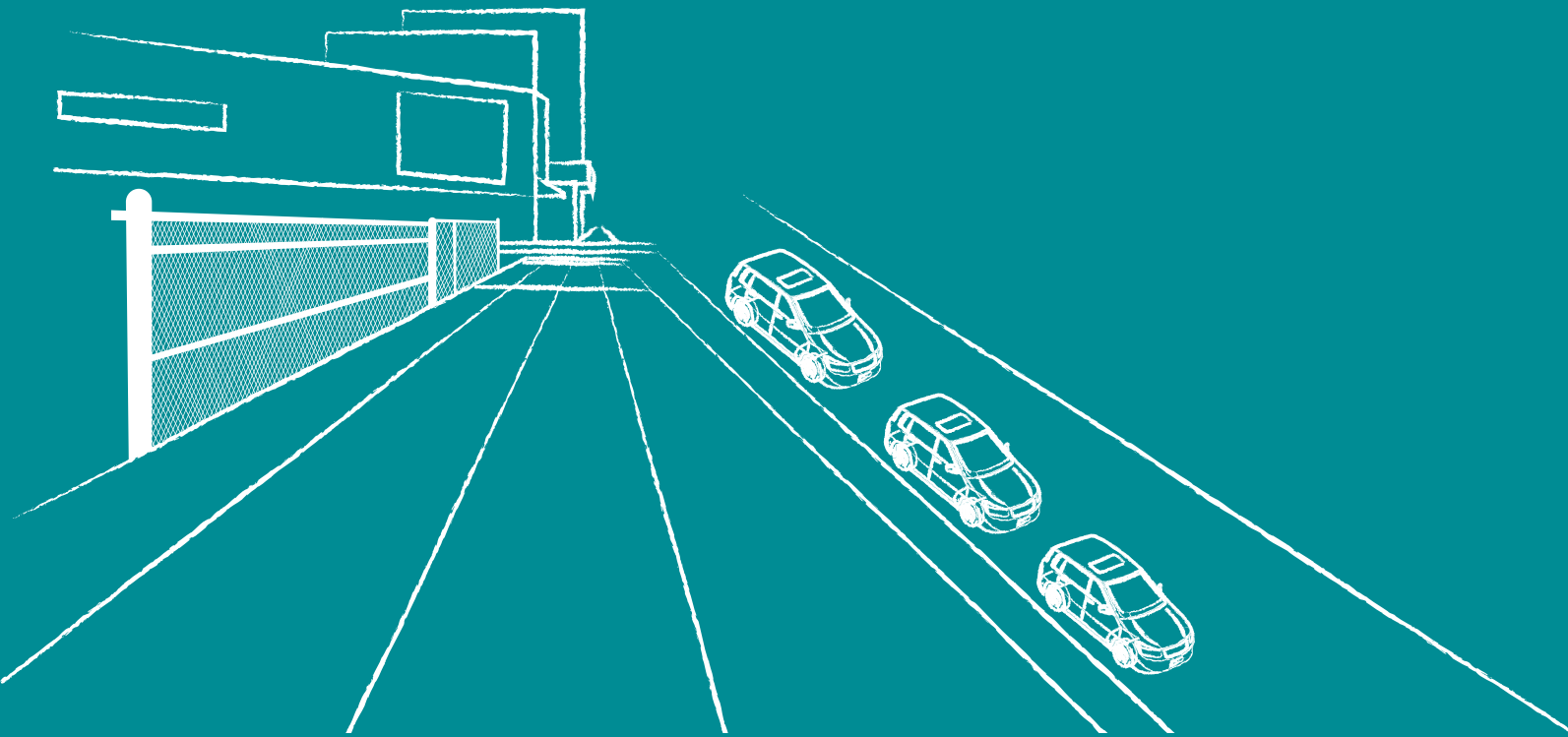


Figure 4: Before a Temporary Urban Intervention
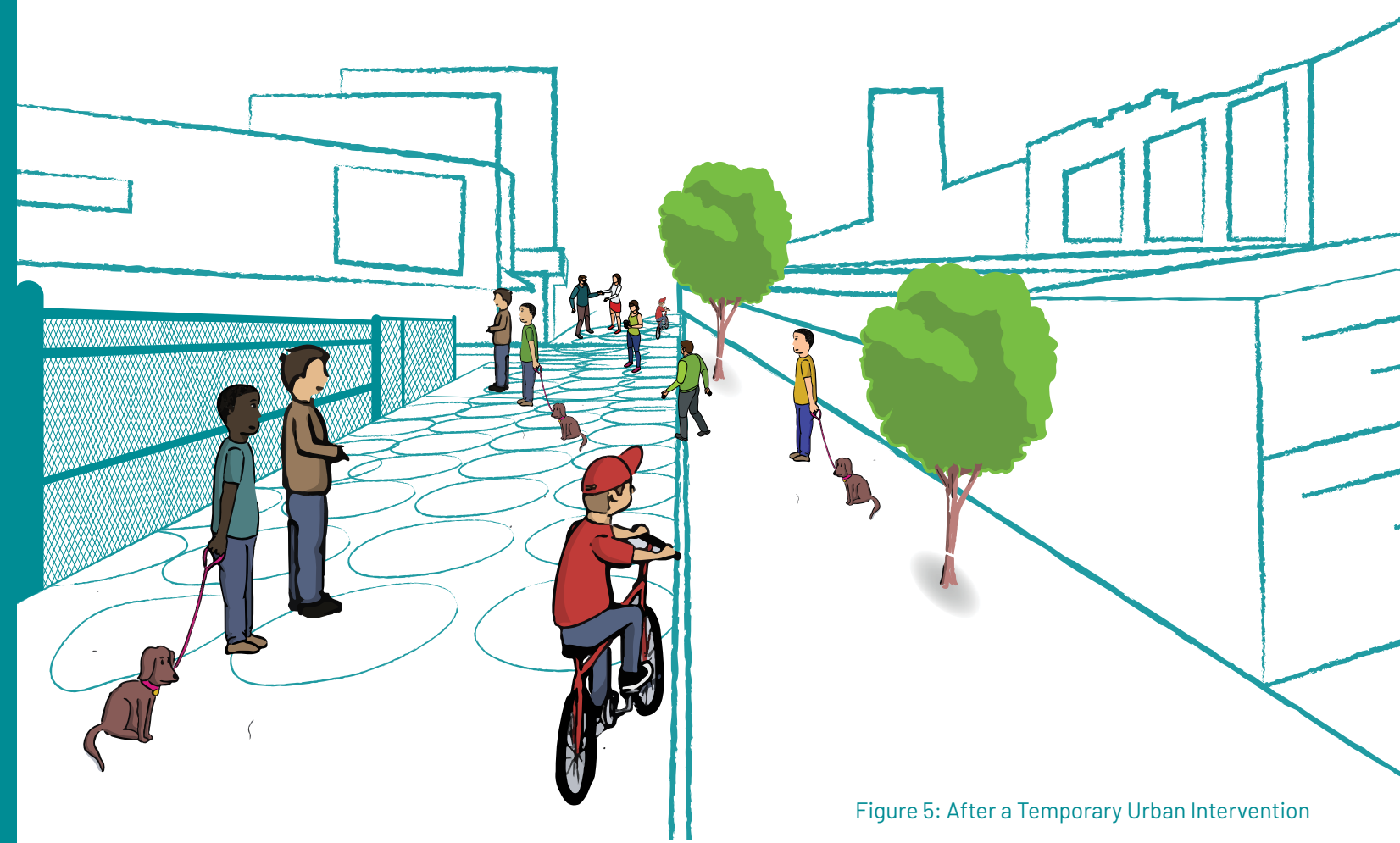


Figure 5: After a Temporary Urban Intervention

**Tactical urbanism is a "city, organizational, or citizen-led approach to neighbourhood building using short-term, low-cost and scalable interventions to catalyze long-term change." [19]**

[18] Projects for Public Spaces, n.d.

[19] Garcia & Lydon, 2015

[20] Steuteville, 2014

[21] Depave, n.d.

Tactical Urbanism is an approach and a process for neighbourhood-level change through low-risk, low-cost public space projects to test small-scale improvements before more significant investments. Projects may include parking space conversion, pop-ups, parklets, painted roads, and temporary structures.[20]

Both Placemaking and Tactical Urbanism are forms of temporary urban interventions. Tactical urbanism is considered a grassroots, community-led approach to urban improvement and projects may include pop-up crosswalks, cycling infrastructure or temporary public spaces. Portland's Depave project initiative initially brought together activists to transform underused concrete areas, such as parking lots and driveways, to community green spaces to reduce stormwater runoff. The organization, now an influential non-profit, has become a highly connected network of community members across North America.[21]

Figure 6: Parking Lot

## plazaPOPS

plazaPOPS is an example of a Temporary Urban Intervention. A temporary urban intervention is a cost-conscious, incremental, community-focused approach to reinventing the urban environment using short-term interventions for long-term change, a term that encapsulates both Placemaking and Tactical Urbanism.

plazaPOPS project is an experiment in leveraging temporary urban interventions for social, environmental and economic impact.

The pilot project was funded through the Public Space Incubator program, a Park People initiative funded by Ken and Eti Greenberg and the Balsam Foundation. In addition, the project received City of Toronto funding through the BIA Innovation Grant. The project is the result of a partnership between the Wexford Heights Business Improvement Association, Scarborough Arts and the University of Guelph's School of Environmental Design and Rural Development, and the owner of Wexford Plaza, where the intervention was located.

The project used a participatory and co-creative community engagement process to engage the local community and design an intervention that reflected local culture. This included the creation of a working group whose members spanned local residents, community organizations, local business owners and city staff.

In addition, the plazaPOPS team hosted several community workshops to gather design feedback. The design of the final installation was generated as a part of the University of Guelph's Community Design Studio class and representative of the five themes generated at one of the workshops: Modernism, Nature, Storytelling, Diversity and Entrepreneurialism.

Figure 7: Active Green Space



Placemaking projects may include city-led initiatives, such as New York City's Plaza Program and San Francisco's Pavement to Parks program.

New York's Plaza Program is a Department of Transportation initiative that works with organizations to transform underused areas into vibrant public spaces. Using temporary materials and structures such as planters, pavement paint, and seating, many projects become permanent—supporting the city's park provision goal that every New Yorker live within 10 minutes of a quality open space.[22]

Another Plaza Program initiative is the Green Light for Midtown project, which had the goal of creating new pedestrian plazas in Times Square. The impacts of this project over the six-year timeline included an 11% increase in pedestrian activity, and 74% of visitors said that the area had "improved dramatically."

San Francisco's Pavement to Parks program installed the first parklet in 2009, which has inspired similar projects in cities around the globe. A parklet is a short-term approach to creating public spaces through the installation of temporary open seating platforms, generally used to convert sidewalk-adjacent parking spaces into vibrant community spaces, using seating, greenery, bike racks and more.[24] From 2009 to 2015, over 160 converted parking spaces contributed to a 4% increase in pedestrian activity and an 11% increase in San Francisco cycling. [23]

[22] New York City Department of Transportation, 2020

[23] Global Designing Cities Initiative, n.d.

To encourage public participation and community engagement, the plazaPOPS team hosted open houses at key community organizations, such as the Arab Community Centre of Toronto, the Victoria Park Hub, a local senior's home and a community hub for newcomers.

The intervention was assembled on site in two days, and launched in summer of 2019. The project was active for six weeks and, throughout that time, regularly programmed with events and concerts.

As a University of Guelph initiative, the initial plazaPOPS pilot-wexPOPS-was evaluated under University of Guelph standards. In the first stages of the project, the working group members set out a project charter, outlining goals for success.

Projects like plazaPOPS can provide social, environmental, and economic benefits to the local community and neighbourhood. The challenge lies in identifying these benefits.

In the pilot project, the project success was measured through goals identified by working group members. These goals ranged from "engage local youth" to "enhance local ecology" and "create a gethering place / neighbourhood hub." One of the goals was to "catalyze new plazaPOPS projects." As plazaPOPS expands in the coming years, the project will from transition from the University of Guelph measurement structure to a plazaPOPS-specific approach. In this transition lies the opportunity to build a customized approach to impact assessment for future plazaPOPS projects.

Figure 8: Neighbours Chatting

## Impact Assessment

The benefits of plazaPOPS' WexPOPS pilot may not have been immediately apparent to the everyday passerby. Nevertheless, through assessment and data collection, the evidence of impact was captured. Not long after the project launched, Monarch butterflies flocked to the potted plants—an unusual sight in a strip mall parking lot.

The project employed local youth from the local Arab Community Center to support the day-to-day maintenance of the pop-up, including the watering of the 29 species of native plants. The project employed 12 youth and inspired a new knowledge and a love for gardening. The local business owner dedicated 10 parking spots to the wexPOPS project and was concerned with the impact on public safety and parking. The data collected throughout the intervention actually cited an increase in the total number of cars present during the activation and only one minor graffiti incident was recorded, even though the project was left unfenced overnight. There were even more bicycles, thanks to the new cycling infrastructure installed by the plazaPOPS team.

For the plazaPOPS project, impact came in all shapes and sizes. It spanned social, environmental and economic impacts, individuals and community capacity building, and stemmed from both the process and the final intervention design and activation.

However, without a clear measurement approach, these impacts would have gone unrecorded.

Temporary urban intervention projects are complex. Practitioners must consider and incorporate a vast number of planning, design, and execution components. Alongside the logistical details, the measurement of impact can be overwhelming. Nevertheless, the intentional assessment of temporary urban interventions can provide practitioners with evidence of impact.

With this evidence, practitioners can report back to funders, reflect and identify learnings, and improve for next time.

There is no "perfect way" to improve the built environment and facilitate the the creation of community in local neighbourhoods-and there is no one way to measure a temporary urban intervention.

This research presents one approach for one project. plazaPOPS is a continuously evolving project and the framework presented here will mirror this approach.

# Project Framing

The plazaPOPS team define the wexPOPS pilot process as "the result of the hard work and collaboration of many local residents, community organizations, university students, design professionals and academic institutions."[24] Executed with underlying participatory and co-creative methodologies, the wexPOPS intervention was the result of 18 months of inclusive community engagement. Community engagement initiatives included the development of a local working group, online public engagements and a series of open houses. All of these initatives supported the inclusive engagement and, ultimately, led to the final design and activation of the project.

The research approach and methodologies leveraged in the plazaPOPS project align with the idealogy and best practices in temporary urban intervention projects.

Best practices in temporary urban intervention publications emphasize an approach that is hands-on, collaborative and iterative.

The research presented here supports the plazaPOPS approach and industry best practices via a hands-on and collaborative process and iterative research outcome to collaboratively develop a framework for impact assessment.

The framework was collaboratively built alongside the plazaPOPS team and actively included key stakeholders to review and provide input.

The plazaPOPS team was engaged through milestone collaboration sessions at each phase of the process. Key stakeholders were engaged as subject matter experts and prototype reviewers and included project funders, city liaisons, experts in the field and invested parties.

In this research project, the plazaPOPS team can be considered simultaneously as end user and client.

Additional end users may expand beyond the plazaPOPS team and include individuals or groups interested in leading temporary urban intervention projects, those interested in the topics of temporary urban interventions, and those interested in the impact assessment of public space projects.

Early on, the output of this research was narrowed to the development of a conceptual framework. A conceptual framework is a visual and theoretical representation of a complex phenomenon. Broadly defined, the conceptual framework is a set of concepts that assists in establishing coherence. The framework gives direction to the research or problem at hand, depicts individual concepts and their relationship to each other, and is used for problem and solution framing.

For this research, a framework is a network of interlinked concepts that provides a comprehensive view and understanding of a situation, showcasing the individual components and their relationship to each other. Concepts are the individual components of the framework, each playing an interconnected role within the framework. Frameworks provide structure, direction, and guidance while being flexible enough to adapt to specific situations.

[24] plazaPOPS, 2018

This research project is supported by a five-phased design research process, mirroring the plazaPOPS approach and best practices in temporary urban interventions.

**The research question:**

# How might we measure the impact of temporary urban interventions?
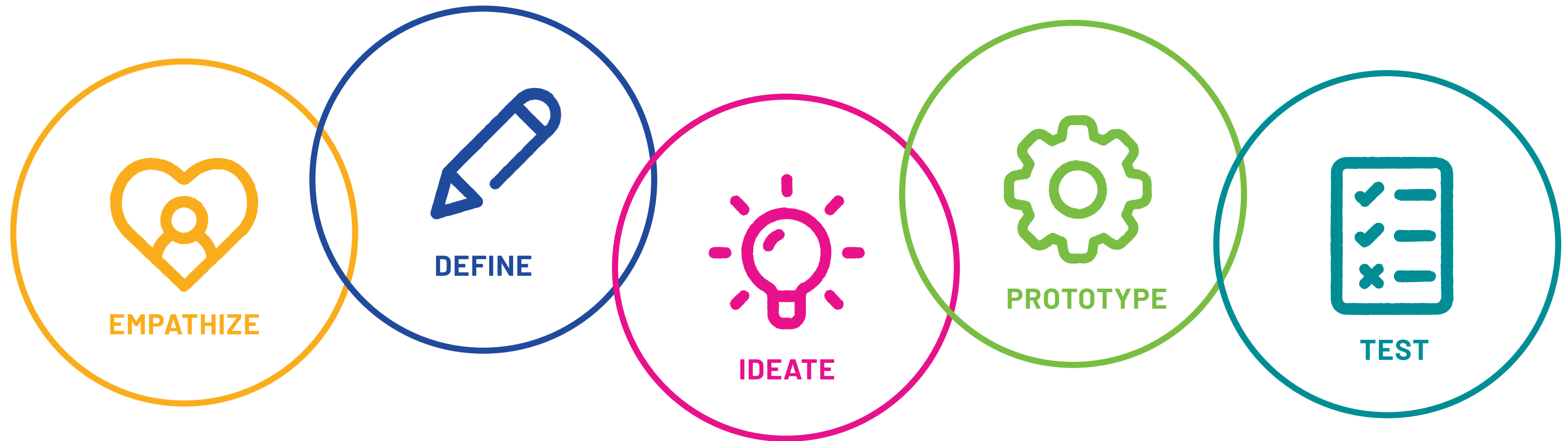
Figure 9: Design Thinking Process

## RESEARCH DESIGN

The research process was supported by a mix of design research methods, including:

- **Literature review** to explore the discussions, publications, and best practices within the areas of inquiry.

- **Framework precedent analysis** to review a select number of frameworks for best practices, opportunities, and analysis.

- **Subject matter expert interviews** to anchor the research through expert insights.

- **Collaboration sessions** with the plazaPOPS team.

- **Prototype Development and Review** through concept development, prototype development, review, and refinement.

In executing these design research methods, a five-phased approach was leveraged, mirroring the Design Thinking process methodology.[25] The Design Thinking process presents a non-linear, human-centred approach to problem solving. The five phases of Design Thinking include:

**Empathize:** Use exploratory methods to gain a deeper empathetic understanding of the problem from a human-centric lens.

**Define:** Define the problem using the insights gathered in the empathize stage and build a problem statement.

**Ideate:** Identify possible solutions to the problem statement.

**Prototype:** Produce physical representations of the solution for testing.

**Test:** Test the prototyped solutions with the users and use these insights to refine further to identify the most appropriate solution.

The research project used the literature review, plazaPOPS collaboration sessions and subject matter expert interviews to empathize and explore the research question. The synthesis of this exploration supported the definition of the research and the development of the concept and the precedent analysis and collaboration sessions were used to ideate and prototype the resulting framework. The prototype was refined through stakeholder meetings; however, further testing is required.

[25] Sanders & Stappers, 2012

[26] Stanford d.school, n.d.

## DIKW Framework

Ackoff's (1999) data-information-knowledge-wisdom (DIKW) pyramid is leveraged across research domains as a knowledge hierarchy, analysis tool, and sensemaking model. The goal of the DIKW model is to transition the researcher from considering individual data points to wisdom.[27]

Data refers to the individual point of observation or evidence, which can be interpreted in many forms and, individually, holds no meaning until it is processed into a usable format to become information. Information is the result of making sense of data through the asking of questions. The knowledge level takes this information, and, through patterns, theories, and processing, it becomes knowledge. From knowledge, wisdom can be explored.

The DIKW model was leveraged as a fundamental tool for the research output: the framework. The framework structure follows this same model and maps data-information-knowledge-wisdom to metrics-indicators-principles-impact research stages.

Figure 10: Data Information Knowledge Wisdom Model



WISDOM

KNOWLEDGE

INFORMATION

DATA



DISCOVER
To explore and uncover insights around the problem

DEFINE
To redefine the problem using these new insights

DEVELOP
To find new solutions, ideas or answers to address the problem

DELIVER
To test a variety of solutions and identify the best fit solution for the problem

Diverge  Converge  Diverge  Converge
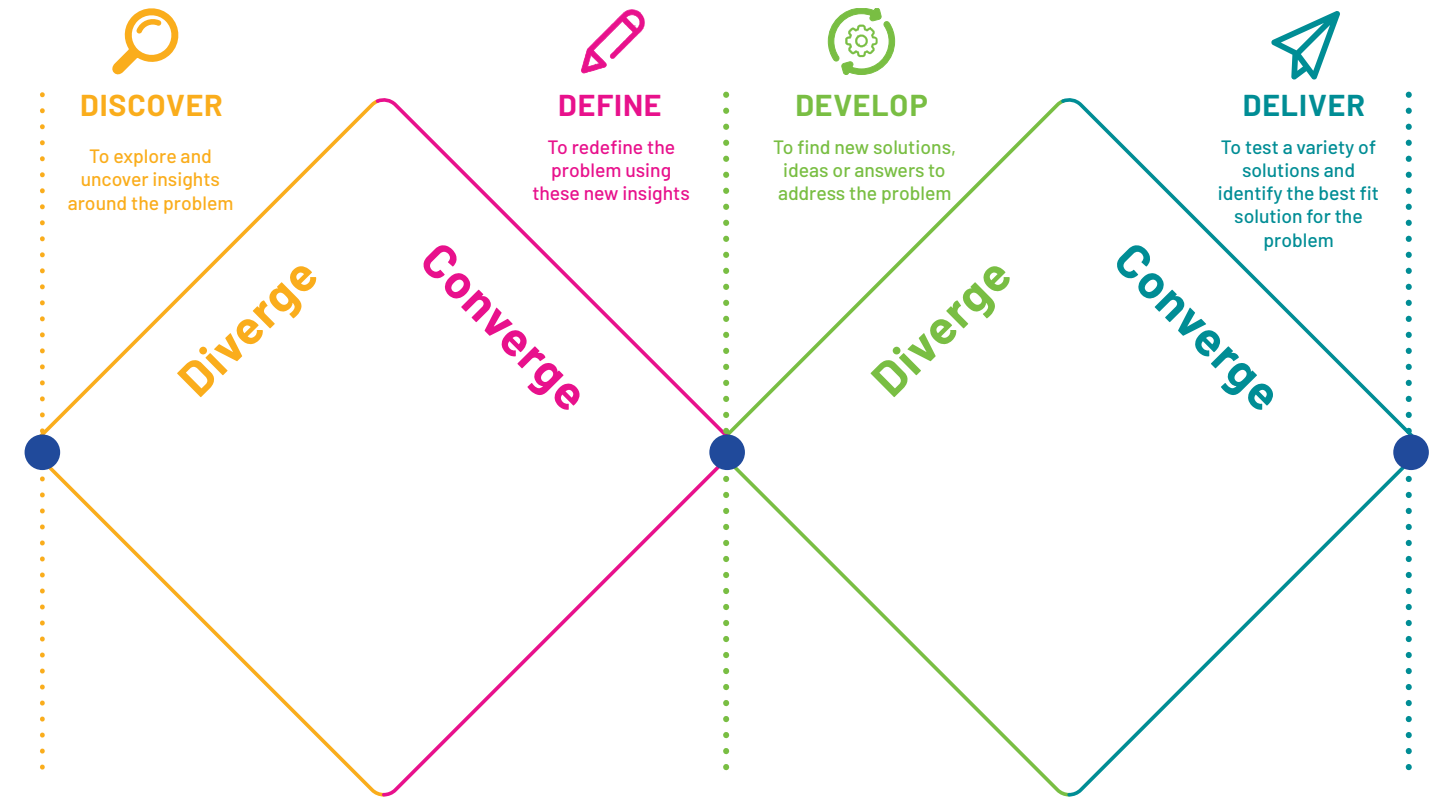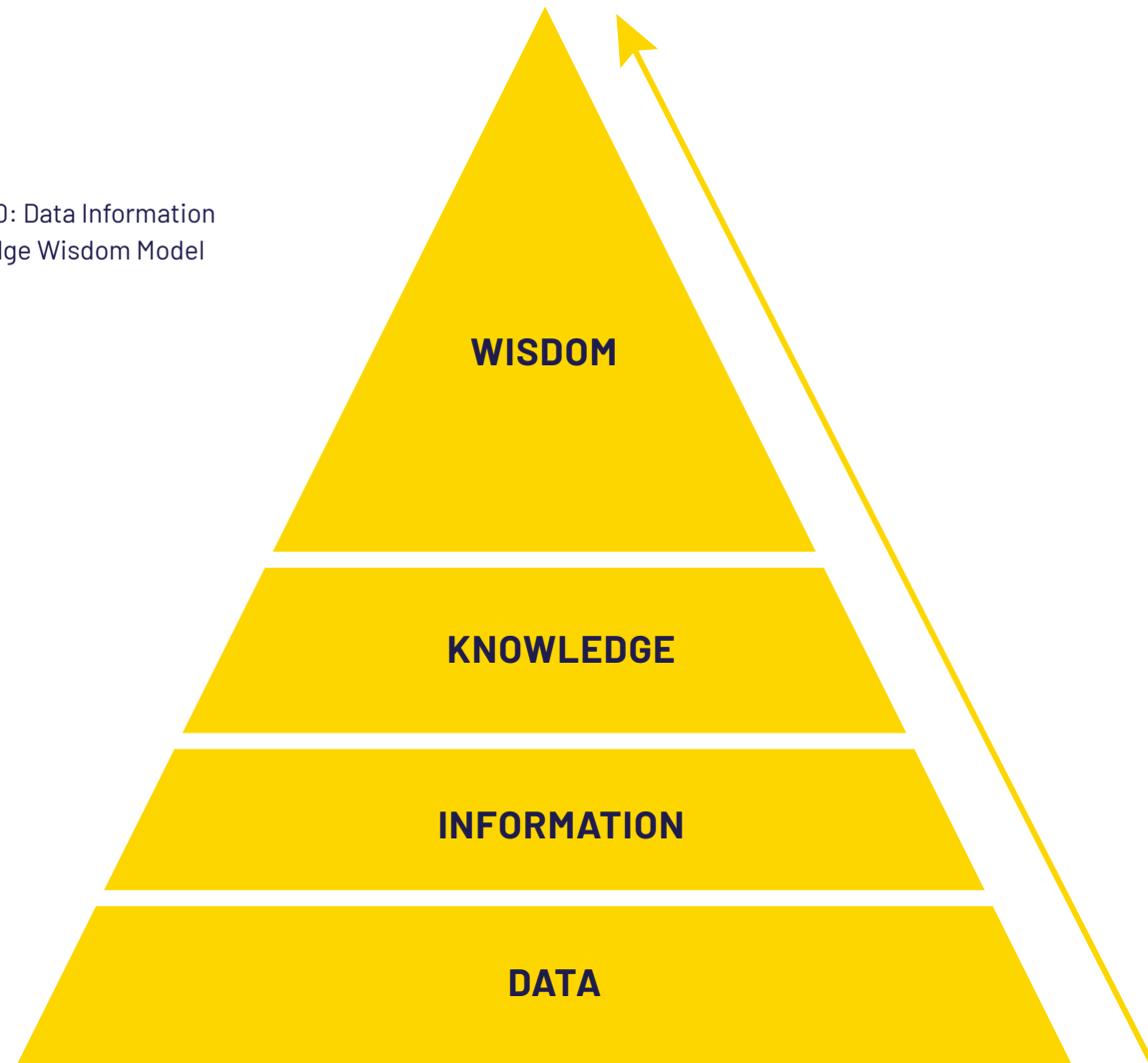
Figure 11: Double Diamond Model

## The Double Diamond Methodology

Launched in 2004 by the Design Council, the Double Diamond is a conceptual model that presents the design process moving from problem exploration to solution finding, using four stages: Discover, Define, Develop, and Deliver. [28]

• **Discover:** Explore and uncover insights into the problem.

• **Define:** Redefine the problem using these new insights.

• **Develop:** Find new solutions, ideas, or answers to address the problem.

• **Deliver:** Test a variety of solutions and identify the best solution for the problem.

Each stage will use either divergent or convergent thinking. By diverging, the designer can explore the concept at hand in an open and exploratory manner; whereas, by converging, the designer makes decisions and takes action.

[27] Ackoff, 1999; Bernstein, 2011; Sanders & Stappers, 2012

[28] Design Council, 2015

## Research Phases

The research process outlines the individual design research phases and explores the methods used in each phase.

**DOUBLE DIAMOND**

DISCOVER

DEFINE

DEVELOP

DELIVER

**RESEARCH PROCESS**

PHASE 1
**Discover**

PHASE 2
**Define & Develop Concept**

PHASE 3
**Develop Prototype**

PHASE 4
**Review**

PHASE 5
**Deliver**

NEXT STEPS

**DESIGN THINKING**

EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

TEST

| PHASE 1 | PHASE 2 | PHASE 3 | PHASE 4 | PHASE 5 |
|---|---|---|---|---|
| **Explore & Discover** | **Define & Develop Concept** | **Prototype Development** | **Review** | **Deliver** |
| METHODS | METHODS | METHODS | METHODS | METHODS |
| Literature Review | Precedent Analysis | Framework Prototype Development | Collaboration Session | Framework Prototype |
| Interviews | Collaboration Session | | Prototype Review | Conclusion |
| Collaboration Session | Analysis & Synthesis | | Cases Study Application | Reflections |
| | Concept Development | | | Presentations & Next Steps |

Figure 12: Research Process

# PHASE 1

The first phase consisted of leveraging divergent thinking and exploratory methods to investigate the research areas of inquiry. Methods included a literature review, subject matter expert interviews, and a collaborative plazaPOPS session to explore the project objectives and identify critical tensions.

The areas of inquiry explored in the literature review and in choosing subject matter experts include:

- The modern city and the social and spatial aspects of community building in urban settings.

- Public space, parks, and temporary urban intervention best practices.

- Public space measurement tools, relevant frameworks, and best practices.

## Literature Review

A literature review is a method to explore and evaluate critical discussions, publications, and best practices of the areas of inquiry.[42] This method supported a foundational knowledge of the areas of inquiry, shaping the research and supporting the final deliverable.
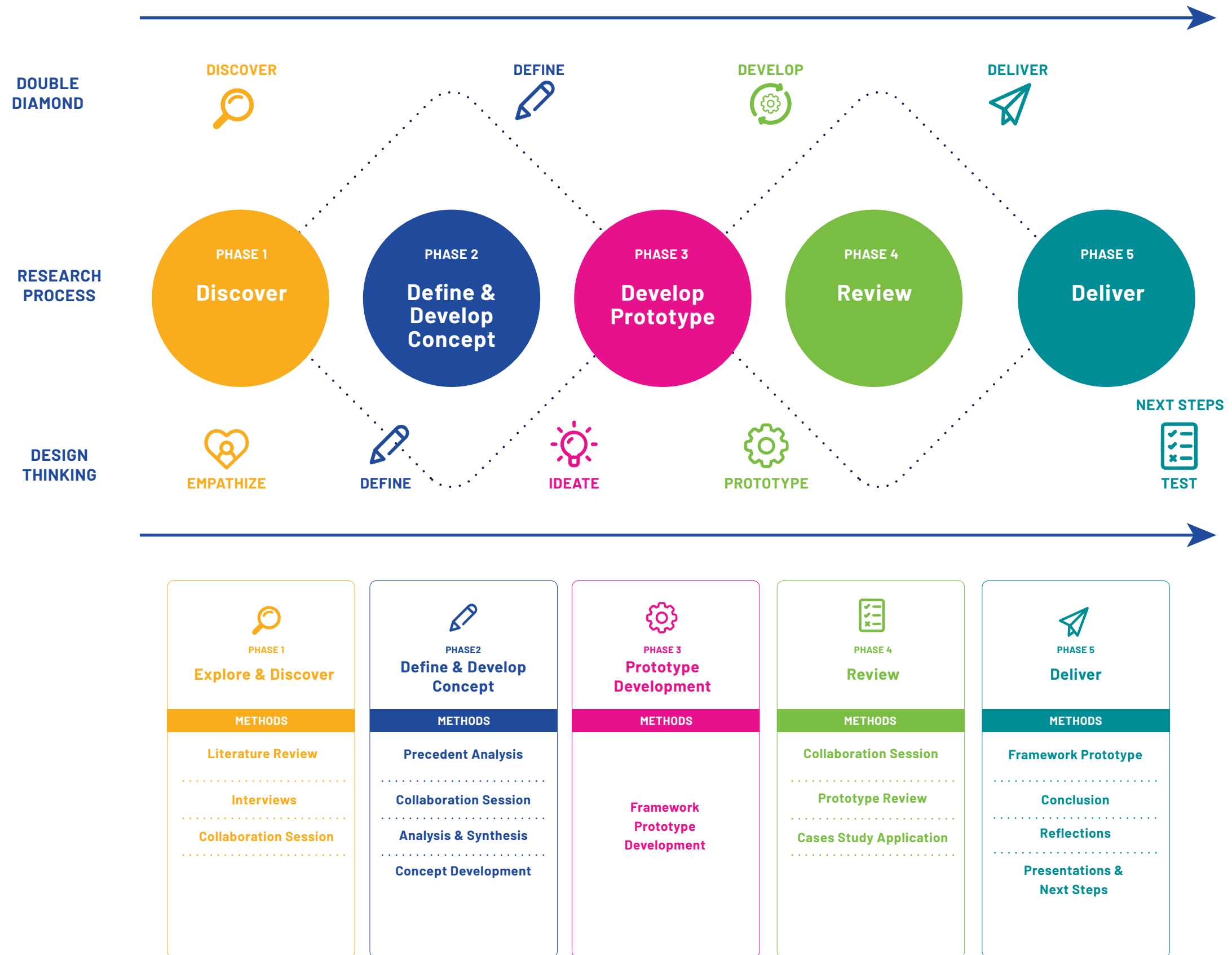
## Subject Matter Expert Interviews

The research included semi-structured 30-minute interviews with four experts in the areas of inquiry.

Interviewees were chosen based on their alignment with the area of inquiry. This method uncovered insights and identified best practices, case studies, opportunities, and challenges.

The subject matter experts interviewed included:

- CEO, urban analytics start-up

- Director, Strategy and Creative, place management and placemaking company

- Research and Policy Project Lead, parks and public spaces non-profit

- Project Coordinator, community engagement and impact non-profit

## plazaPOPS Collaboration Sessions

plazaPOPS collaboration sessions were held at milestone points throughout the research process. In Phase 1, the workshop session was exploratory and enabled both the plazaPOPS and OCAD U teams to identify objectives and goals for the project. The primary takeaway from this workshop session was a set of critical insights.

# PHASE 2

This phase synthesized the insights from Phase 1 and used convergent thinking and a defining approach to concept development. Methods used in this phase included precedent analysis, a comparison tool, and a plazaPOPS collaboration session.

## Precedent Analysis

A precedent analysis was used to compare a set of relevant frameworks for best practices.

The frameworks were chosen based on specific criteria, including alignment with the research question and area of inquiry, a focus on impact and/or measurement within the public realm, the contribution of a new perspective, and the source validity.

From these criteria, the following frameworks were chosen:

- Inclusive Healthy Places Framework, Gehl Institute, 2018.

- Conceptual Framework for Maximizing the Public Space Dividend, United Cities and Local Governments, 2016.

- City of Santa Monica Main Street Pilot Program Evaluation, UCLA Lewis Center for Regional Policy Studies, 2019.

- Great Places Framework, Project for Public Spaces, n.d.

Each case study was evaluated using a modified SWOT analysis, analyzing the Strengths, Weaknesses, and Opportunities of each framework.

## plazaPOPS Collaboration Session

The collaboration session was used to review the precedent analysis frameworks and insights. This session concluded that the structure of Gehl Institute's Inclusive Healthy Places Framework was the most appropriate for this research and was used as the model for Phase 3.

# PHASE 3

This phase incorporated divergent thinking to transition from concept development to prototype development.

Prototype Development

A low-fidelity framework prototype was developed for review and refinement.

# PHASE 4

The prototype was reviewed and refined through review sessions with stakeholders, a plazaPOPS collaboration session and the applied testing of the framework against applied plazaPOPS scenarios.

## Prototype Review

The framework was prototyped, reviewed and refined over four sessions. The review subjects were stakeholders in the plazaPOPS project and included:

- Research and Policy Team, parks and public spaces non-profit

- Public Realm Project Lead, City of Toronto

- Head of Analytics, urban analytics start-up

## plazaPOPS Collaboration Session

The prototype was presented for review and refinement with the plazaPOPS team and, after testing, the prototype was further refined through a visualization process.

## Prototype Application

The prototype was applied to two simulated project scenarios and analyzed.

# PHASE 5

The final phase in the design process is the conclusion and delivery of the project. This phase includes project delivery, reflection, and the identification of the next steps.

## Next Steps

Possible recommendations and next steps will be outlined in conclusion.

## Project Delivery

Final project delivery will include the written report and presentation of the final deliverable to the plazaPOPS team, Park People and OCAD U.

## Reflection

In closing, a personal reflection method will be used by the researcher to reflect on the process and outcomes of this project.

# A Framework for the Impact Assessment of Temporary Urban Interventions

Figure 13: Open Street

**The following section outlines the outcome of this project: a temporary urban intervention impact assessment framework prototype.**

The section is divided into two parts: Solution Framing and Solution Finding.

**Part A** explores solution framing and the process of arriving at the framework. The section includes the precedent analysis and core insights that informed the structure and content of the framework.

**Part B** explores solution finding and presents the framework prototype. The structure and content of the framework are explored. Finally, two examples of temporary urban interventions are presented, showcasing the applicability of the framework at different scales.

# PART A: SOLUTION FRAMING

This section provides a review of the solution framing and the process of arriving at the framework. Solution framing explores the precedent analysis and research insights.

## Precedent Analysis

A precedent analysis was used to compare a set of frameworks for best practices. Insights from this analysis were used as inspiration for the structure and content of the temporary urban intervention framework.

Frameworks were researched and identified through the areas of inquiry. plazaPOPS did not leverage a framework in the assessment of their wexPOPS pilot and the research and data collection for this project was built from the University of Guelph guidelines.

Four frameworks were compared for best practices, strengths, weaknesses and opportunities for applicability in this research process. Gehl's Inclusive Healthy Places Framework was the most closely aligned and served as inspiration.

**The four chosen frameworks were:**

- City of Santa Monica Main Street Pilot Program Evaluation, UCLA Lewis Center for Regional Policy Studies, 2019.
- Conceptual Framework for Maximizing the Public Space Dividend, United Cities and Local Governments, 2016.
- Great Places Framework, Project for Public Spaces, n.d.
- Inclusive Healthy Places Framework, Gehl Institute, 2018.

Each framework was evaluated using the modified SWOT analysis outlined below.

**City of Santa Monica Main Street Pilot Program Evaluation, UCLA Lewis Center for Regional Policy Studies, 2019.**

The City of Santa Monica Main Street Pilot Program Evaluation Framework evaluated three temporary parklets installed through Santa Monica's Main Street Parklet pilot program in June of 2017, published in 2019. This evaluation framework was chosen as it was directly representative of a temporary urban intervention evaluation framework and because it provided a simple approach to evaluation and measurement.[29]

| PROGRAM GOAL | DATA COLLECTION APPROACH | TASK PURPOSE |
| --- | --- | --- |
| | Count number of people in parklets | Determine level of parklet use |
| Create active public space and aesthetic streetscape | Observe activities in the parklet and on the corridor | Understand how the street is currently used and evaluate changes from parklets |
| Provide more pedestrian amenities and pedestrian friendly routes | Survey people in parklets and along street | Understand if parklets are a pedestrian amenity and see if parklets change perceptions of the street |
| Encourage more walking and cycling | Conduct bicycle and pedestrian counts along corridor | Analyze differences in walking and cycling volumes |
| Test the concept of parklets and determine whether a parklet program is appropriate | Combine original data collection methods and collect secondary data (SMPD) | Identitfy whether nuisance or other unwanted behaviours occur in the parklets and understand parklet user's feelings of safety |

[29] UCLA Lewis Center for Regional Policy Studies, 2019.

[30] United Cities and Local Governments, 2016.

Table 1: City of Santa Monica Main Street Pilot Program Evaluations
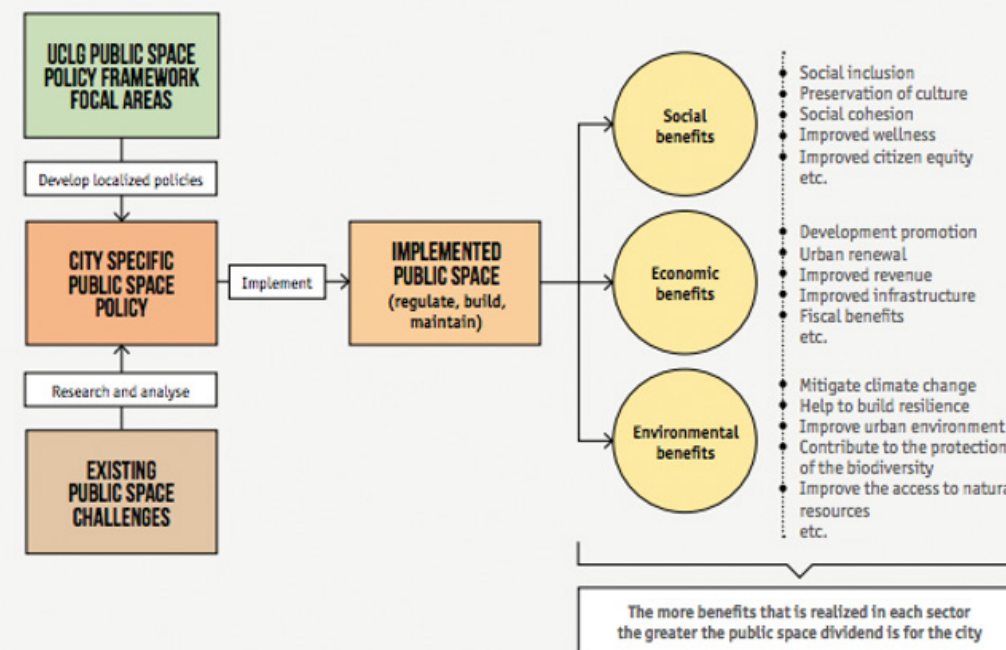


Figure 14: Conceptual Framework for Maximizing the Public Space Dividend

**Conceptual Framework for Maximizing the Public Space Dividend, United Cities and Local Governments, 2016.**

The Conceptual Framework for Maximizing the Public Space Dividend is intended to "influence cities to recognize the importance of localized citywide public space policy, to deepen the understanding of local governments' role and responsibilities on public space development, and to maximize public space dividends at a city level."[30] This approach presents the "dividend" opportunity of public space which emphasizes an investment approach to public spaces. This approach presents risks as it incorporates an investment approach that may conflict with the plazaPOPS project objectives.

**Great Places Framework, Project for Public Spaces, n.d.**

Created by Project for Public Spaces, the Great Places Framework provides a tool for the measurement and evaluation of "great public spaces" based on principles of sociability, use and activity, comfort and image, and access and linkages.[31]
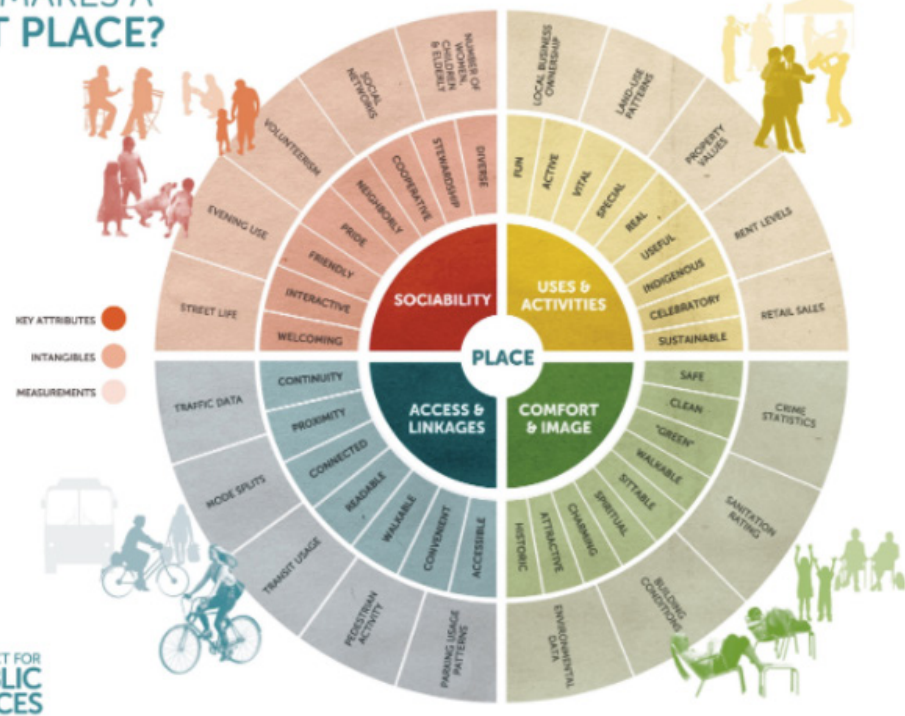


Figure 15: Great Places Framework



Figure 16: Inclusive Healthy Places Framework

**Inclusive Healthy Places Framework, Gehl Institute, 2018.**

The Inclusive Healthy Places framework is "a tool for evaluating and creating healthy, inclusive public places that support health equity." This framework explores the social determinants of health and public space through the combined perspective of public health and urban planning and design.[32]

[31] Project for Public Spaces, n.d.

[32] Gehl Institute, 2018

41   **What's the Impact?**  |  Designing a framework for the impact assessment of temporary urban intervention projects

**What's the Impact?**  |  Designing a framework for the impact assessment of temporary urban intervention projects   **42**

## Framework Precedent Analysis

Each framework was evaluated using a modified SWOT structure and analyzed the strengths, weaknesses and opportunities of application and alignment.[33]

- **Strengths:** Outlines the strengths of the framework.

- **Weaknesses:** Outlines possible improvements or elements that do not apply to this research.

- **Opportunities:** Outlines opportunities for application to this research and core insights.

Table 2: Precedent Framework SWOT Analysis

_____

[33] Kumar, 2012

| FRAMEWORK | STRENGTHS | WEAKNESSES | OPPORTUNITIES |
|---|---|---|---|
| **City of Santa Monica Main Street Pilot Program Evaluation, UCLA Lewis Center for Regional Policy Studies, 2019.** | • Leveraged a structured and straightforward approach to evaluation.<br>• Had a clear knowledge hierarchy.<br>• Connected program goals to data collection approaches from the beginning of the project.<br>• Collected data before and after the intervention.<br>• Combined data collection approaches and used open-source data. | • Straightforward approach to evaluation; possibly too simple.<br>• Program goals focused primarily on design and aesthetics, support for and encouragement of alternative transportation options, and safety and security, leaving out significant social and community measurement opportunities.<br>• Assessed safety and security of program using police data. | • A clear and concise approach can provide flexibility and adaptability to practitioners, but a level of depth is required in order to support impact assessment.<br>• Opportunity to expand the definition of "impact" beyond the physical space, transportation and safety measures, and measure social, environmental, and economic impact.<br>• Integrated, hierarchical approach to framework structure, with a combination of data sources. |
| **Conceptual Framework for Maximizing the Public Space Dividend, United Cities and Local Governments, 2016.** | • Focused evaluation on social, economic and environmental benefits.<br>• Focused on the "dividend" of public spaces.<br>• Combined a policy, public space, and evaluation approach. | • Policy approach is not as applicable for this research.<br>• Simplifies the "implement" section to the point of overlooking it. | • Provides a unique perspective in investments in public spaces as "dividends" paid out to residents; this reflects the mindset of local government or property developers but may be exclusionary to some.<br>• Focus on the combination of social, economic and environmental benefits. |
| **Great Places Framework, Project for Public Spaces, n.d.** | • Leverages a hierarchy of critical attributes, intangibles, and measurements to judge great places.<br>• Focuses on a broad range of assessment attributes, thinking beyond the physical to the social, uses and activities, comfort, image, and access.<br>• Identifies specific measurement areas and links these to specific vital attributes. | • The framework is built on a subjective "judgement" of great places and lacks clarity.<br>• There is a disconnect in the hierarchy. The list of "intangibles" between the measurements and key attributes confuses the framework structure.<br>• Focuses on the place *as is* and not applicable to the process of getting to a great place. | • Assess great places based on attributes that span social, use, comfort and access.<br>• Provide an assessment of great places that incorporates accessibility and inclusion and a broad range of activities.<br>• Aim for "great places." |
| **Inclusive Healthy Places Framework, Gehl Institute, 2018.** | • Focused on the process. Structure includes a logical hierarchy of "principles, indicators, metrics."<br>• Context Principle assesses the surrounding neighbourhood for a variety of indicators.<br>• Process Principle incorporates the impact of process, participation and engagement.<br>• Incorporates a long-term lens with the Sustain Principle.<br>• Focuses on the intersection of public health and public spaces.<br>• Easy to use and understand. | • Principle 3: Design and Program combines both the design and programming of an Inclusive Health Place, which may miss the distinct opportunities in each phase of the project.<br>• Missing distinct environmental and economic indicators.<br>• Focuses on safety and security, which can be a red flag for some communities. | • Build an impact measurement tool that outlines the fundamental principles for impact evaluation, identifying indicators, metrics and methods, while also providing a phased approach.<br>• Incorporate context, process, and sustain principles.<br>• Intentionally incorporate economic and environmental factors. |

## Key Insights

The insights outlined below are findings gathered during the research process and used to inform the structure and content of the impact assessment framework.

### A Discussion About Safety

Many frameworks list indicators or metrics concerning safety and security, vandalism, crime statistics, and/or are sourced using open police data. The delivery of temporary urban interventions will undoubtedly require safety and security considerations, especially when considering the long list of permits, safety requirements and insurance required.

Initially, the prototype featured an indicator labelled "safety and security." In the testing phase of the research project, multiple contributors indicated that the focus on "safety and security" and metrics such as vandalism and graffiti be changed to "health and safety" to represent a more neutral approach.

### The Economics of Temporary Urban Interventions

A core element of the plazaPOPS approach is the placement of the temporary urban intervention in privately-owned public spaces (POPS). In the WexPOPS pilot, the intervention was placed in the Wexford Plaza parking lot, which is privately owned and managed. This approach to urban interventions created a unique consideration for the plazaPOPS framework: the engagement and concern of local business owners became a top priority. Local business owners were concerned about public safety and the increase in pedestrian traffic, the impact on parking availability, and how this intervention would affect their business. In this instance, the framework reflects special consideration for local businesses as key stakeholders.

### Evaluating Process AND Outcomes

Highlighted early on in this research is the desire for a framework to shape the process of delivering a temporary urban intervention *and* to measure its impact. In a review of best practices and the precedent analysis, it became clear that there are frameworks to support the process *or* measure the impact, but not both. This insight presents the opportunity to build a framework that incorporates both process and outcome approaches to impact assessment.

### Balancing Individual AND Community

The most common approach used to evaluate impact is at a community level. In all frameworks evaluated, the community impact was the top priority. In this research, there is an opportunity to assess the individual benefits of participating in a plazaPOPS project, such as capacity building and strengthening community networks and the community benefits, such as increased community resiliency, knowledge sharing and access to communal green spaces. Incorporating both an individual and community lens in the solution framing will support a balanced approach to the prototype.

### Evaluation Timeframes

Many measurement frameworks use a "before" and "during" measurement approach, measuring the baseline (what was there before), and the experiment (the intervention). The baseline and experiment measurements are the most common, with a smaller portion of frameworks and projects measuring the longer-term impacts. The other exciting opportunity here lies in evaluating the "past, present and future." In reframing "pre-during-post" as "past-present-future," practitioners can consider the past societal, economic, and environmental impacts on the community, evaluate their intervention based on its impact in the now, and measure into the future.

### The Future is Often Overlooked

In permanent infrastructure projects (roads, public transportation, public spaces), the concept of "future"—the impact on future projects, people and places—is considered. Due to the ephemeral nature of temporary urban interventions, the practice of integrating a long-term lens is seldom used and, some may argue, out of place in temporary urban interventions.

### Appropriately Complex

The frameworks presented in the precedent analysis reflected a variety of different perspectives and complexities. In collaboratively evaluating and reviewing the frameworks with the plazaPOPS team, a particular level of complexity was identified as a key component of the framework structure. Although the team appreciated the simplicity of the Santa Monica evaluation framework, it appeared to be too simple.

### Scalable and Agile

Frameworks are, by their nature, meant to be used as guiding structures. A key objective of this framework reflects a final output that is scalable and agile. A scalable framework is one that can be applied to a range of project sizes, from the small community garden to a citywide installation of parklets. An agile framework is one that can be adapted and moulded to the project and practitioners. Integrating these two perspectives into the structure of the framework will ensure that it stays true to the definition of a framework, and that the final output is a framework that can be used as a flexible guide for practitioners and adapted based on project needs.

### Defining Impact

Every temporary urban intervention may leverage a different definition of impact. Some projects may incorporate a broad approach that includes social, environmental and economic benefits, while others focus on specific goals, such as bringing people together or increasing local spending. This research found that impact definition is unique to each project and cannot be prescribed—to a point.

Building a unified definition of impact is challenging. Each project operates in a unique context (neighbourhoods, communities), with different sources and amounts of funding and different goals. This framework supports this by offering an approach to impact that is conditional on the context and structure of the project.

### From Solution Framing to Solution Finding

These insights have formed the basis of the framework structure and content, which is presented in the following pages.

## PART B: SOLUTION FINDING (THE FRAMEWORK)

The conceptual framework prototype presented incorporates elements from Stanford's Double Diamond framework, Ackoff's DIKW model and Gehl's Inclusive Healthy Places Framework to measure the impact of temporary urban interventions.

The Double Diamond presents an approach to research consisting of divergent and convergent thinking. The impact research stages mirror the Double Diamond model for divergent and convergent thinking; however, they have been adapted to reflect the impact research process. The four stages of the Double Diamond: Discover, Define, Develop and Deliver are mirrored in the four stages of impact research assessment:

1. Explore the Opportunity for Change
2. Define Impact
3. Experiment
4. Evaluate Impact

The four stages of impact assessment are explored in more detail below.

The impact research stages are supported by key principles for measurement. The structure of this approach mirrors the DIKW model. In this DIKW model, the hierarchy of data to wisdom is data, information, knowledge, wisdom. Similarly, in the impact assessment framework, the hierarchy is metrics, indicators, key principle, impact research stage. Due to project timeline and scope limitations, the detailed outline of supporting metrics are not included and have been identified for further research.

The five key principles for measurement include:

1. Building the Neighbourhood Context
2. Designing Project Architecture
3. Designing the Experience
4. Activating and Programming
5. Project Evolution

Each principle is supported by suggested indicators and metrics and are explored in more detail below.

Gehl's Inclusive Healthy Places framework was used in the identification of key principles for measurement and indicators, where applicable. The resulting framework is intended to be used as a guided approach to impact assessment. The impact research stages and key principles for measurement provided a guided approach to the impact assessment and the process of developing a temporary urban intervention. Practitioners should leverage the indicators and metrics that are most applicable to a project. The framework is designed to be a guide, not a checklist.

The resulting framework is presented in detail below. The framework presents an approach to impact assessment that supports the research objectives for this project and the growth of the plazaPOPS project.

The following pages explore the impact research stages, the key principles for measurement and outlines suggestions for indicators. Finally, the framework is applied to assess and analyze the application of the framework.

### Framework Structure

Adapted from the DIKW and Double Diamond Frameworks
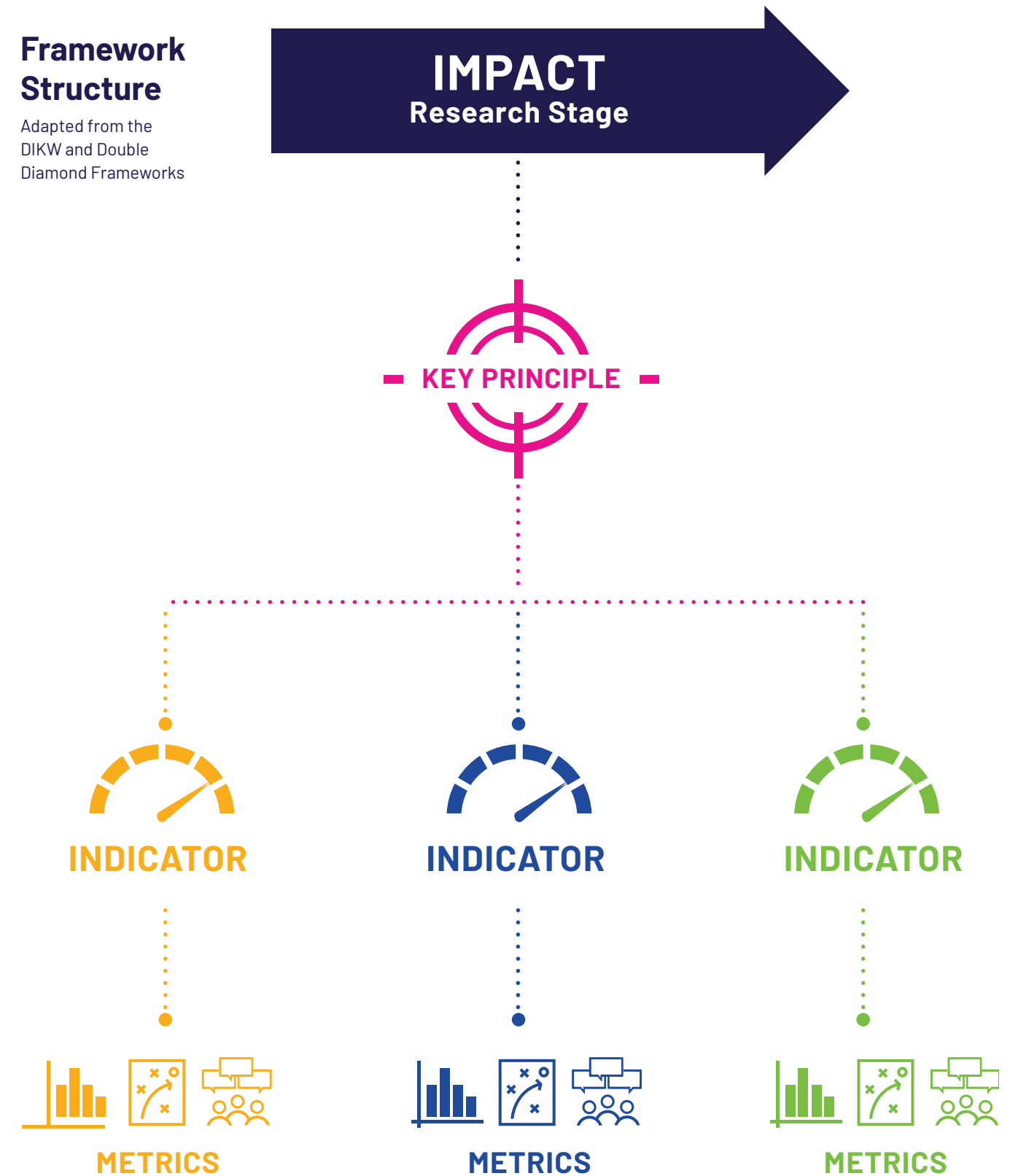


Figure 17: Impact Assessment Framework Structure

# The Impact Assessment Framework

**Impact Assessment**

### Explore the Opportunity

Explore the opportunity for change. Principle 1 is used to frame the context of the project within the community and local neighbourhood and explore the opportunity for change.

### Define Impact

Principle 2 defines "impact" within the context of the intervention and architects the project process.

### Experiment

Principles 3 & 4 provide a range of opportunities to experiment with impact within the context of the intervention. Design the experiment with intention of impact, situated within context and need of the local community.

### Evaluate

Use Principle 5 to process and communicate the impact story and deliver the conclusion of the project.

**Principle 1**

Building the Neighbourhood Context

**Principle 2**

Designing the Project Architecture

**Principle 3**

Designing the Experience

**Principle 4**

Activation and Programming

**Principle 5**

Project Evolution

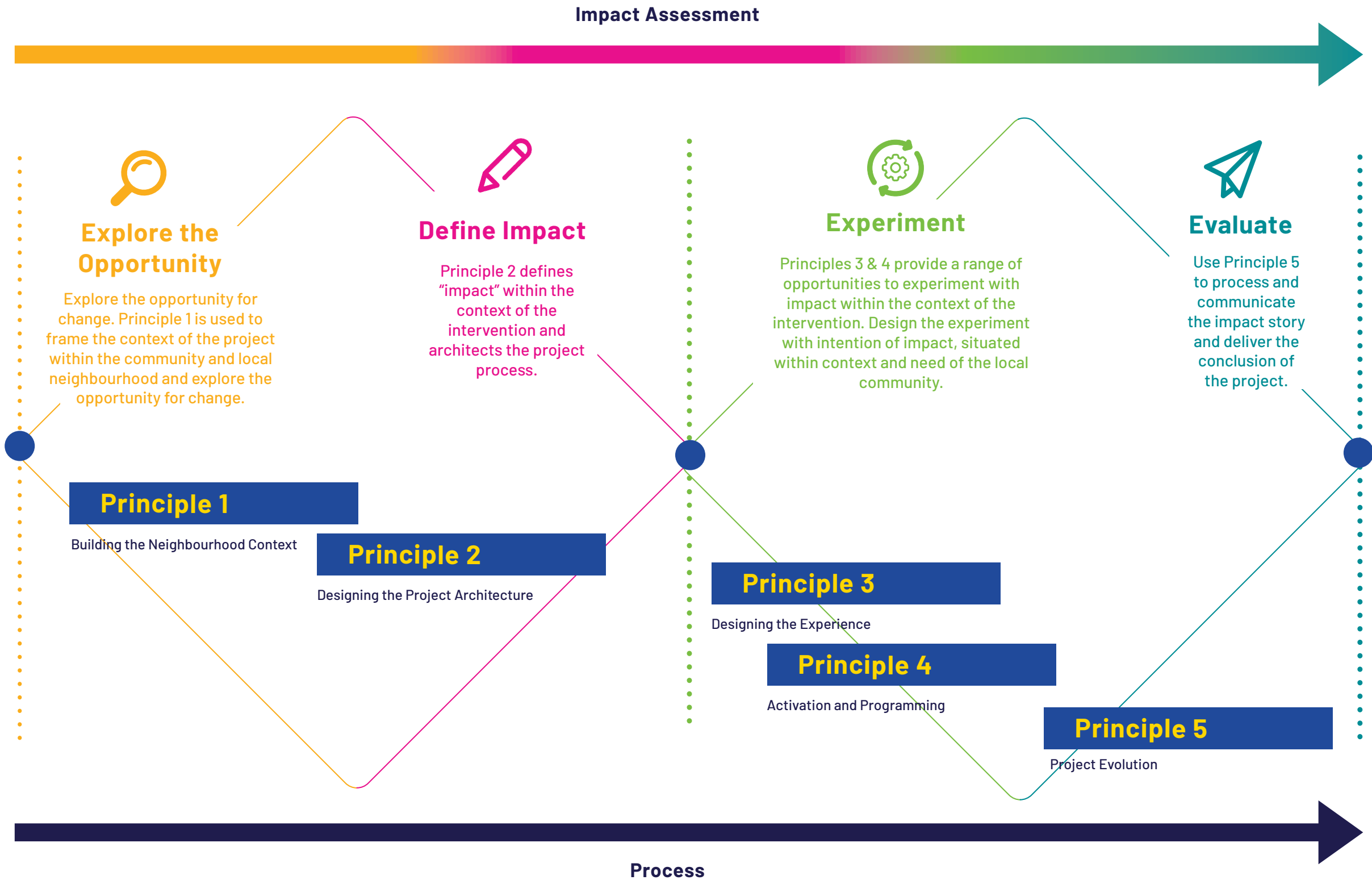**Process**

Figure 18: Impact Assessment Framework

## Impact Research Stages

The impact research stages support a divergent and convergent approach to impact assessment through a four-stage research approach: Explore, Define, Experiment, and Evaluate.

1.  Explore enables practitioners to discover the needs, context, and opportunity for change within a community.

2.  Define supports the definition of impact within the context of the project and opportunity for change.

3.  The experiment presents the intervention.

4.  Deliver processes and communicates the impact story.

Each component of the framework holds weight in its own capacity while providing the most value when combined with the others.

### Explore the Opportunity

Explore the opportunity for change. Principle 1 is used to frame the context of the project within the community and local neighbourhood and explore the opportunity for change.

### Define Impact

Principle 2 defines "impact" within the context of the intervention and architects the project process.

### Experiment

Principles 3 & 4 provide a range of opportunities to experiment with impact within the context of the intervention. Design the experiment with intention of impact, situated within context and need of the local community.

### Evaluate

Use Principle 5 to process and communicate the impact story and deliver the conclusion of the project.
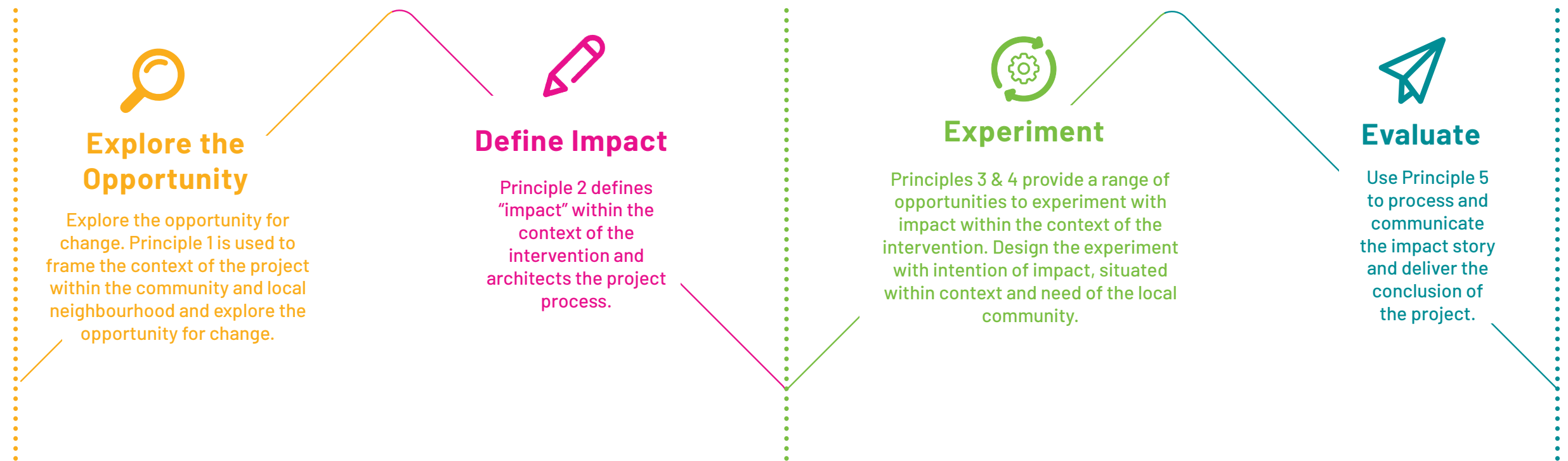
Figure 19: Impact Research Stages

## Key Principles For Measurement

The impact research stages are supported by key principles for measurement. The five key principles for measurement outlined here reflect a linear approach to the process of delivering a temporary urban intervention. The five principles are:

1. Building the Neighbourhood Context
2. Designing Project Architecture
3. Designing the Experience
4. Activating and Programming
5. Project Evolution

Each principle is outlined in more detail below. Each principle is described, outlined via key components and supported by prompting questions. The content of this section is supported by the research, plazaPOPS collaboration and review sessions, however, it has not yet been tested.

### 1. Building Neighbourhood Context

Building a neighbourhood context focuses on developing a deep understanding of the context of the place, people, and opportunity for change. Context is the assessment of the conditions, circumstances and setting of the project. In this framework, context is an assessment of the local neighbourhood identity, people, and local experiences. Needs can be community (people) focused, neighbourhood (place) focused, and can be highlighted by stakeholder planning, strategic documents, data, or community desires.

#### 1.1 Key Components

- Build an understanding of the context and needs, and identify the opportunity for change.
- Identify key community assets—physical, social, political, economic—to support the project.
- Identify the stakeholder landscape, including project champions, key partners, and invested parties.

- Assess and identify a site based on desirability, feasibility, and viability.
- Establish baseline data for benchmarking purposes.

#### 1.2 Prompting Questions

- What defines this community/neighbourhood?
- What are the immediate and long-term community/neighbourhood needs and conditions?
- What are the key community assets (physical/infrastructure, social, political, economic)?
- What are the opportunities for this project? Challenges?
- Who should be involved?
- What are possible funding sources, partners and locations?

### 2. Designing Project Architecture

Citizens are considered actively engaged when they "play a meaningful role in the deliberations, discussions, decision making and/or implementation of projects or programs affecting them."

Principle 2 focuses on designing the project architecture and project process, such as identifying partners, securing funding, and designing the process for delivery.

#### 2.1. Key Components

- Establish the tone for the project and focus on an inclusive and participatory approach.
- Engage the local community and activate local networks—actively searching out and incorporating feedback from a variety of communities and invested parties.
- Secure funding and partnership, engage key stakeholders.
- Establish a project landscape, a community charter, and a unified language, while highlighting project opportunities and challenges.

#### 2.2. Prompting Questions

- What does a participatory process look like in this community?
- Who should be engaged?
- Who is generally excluded from these projects, and how can we engage with everyone?
- What is the structure of this project?
- What is the timeline for delivery?
- Who are our project partners? Key stakeholders?
- What is the funding model? Have we secured funding?
- What is the governance structure?
- What roles are needed, and who will fill them?

### 3. Designing the Experience

The design and aesthetics of a temporary intervention can significantly influence the experience, use, and perception of the space. Principle 3 is concerned with the design and physicality of the temporary public space, building the experience, and incorporating wayfinding and aesthetic elements in the space and the surrounding areas. This phase is also highly tied to the accessibility and inclusivity of the physical space and the public safety in the surrounding area.

#### 3.1. Key Components

- Establish the physical design and aesthetic of the project through a collaborative and participatory approach to design.
- Establish the connections between design and aesthetics of intervention, and focus on project fit within the context of the neighbourhood and community.

- Engage the local community and networks by actively seeking and incorporating feedback.
- Establish the needs of the design and governance structure during the installation (e.g., incorporating plants and planning for their care).
- Establish the design-focused indicators and conduct the evaluation.

#### 3.2. Prompting Questions

- How will people use the space?
- How will people find the space?
- What are the physical and material dimensions of the space?
- What is the aesthetic of the space?
- How can we build an impactful experience and enhance the space?

### 4. The Activation and Programming

A recent park and public space study found that programmed activity within a park led to a 48% increase in use. Programming can attract people, create a popular destination, and enhance the appeal of the space. The proximity of public spaces, parks, and temporary public space installations do not guarantee use; but activation, proper signage, and access to amenities can promote use, create a lively space, and encourage stewardship.[35]

The purpose of Principle 4 is to program and activate the space in a way that represents the community context and enhances the intervention experience.

[34] Bassler et al., 2008

[35] City Parks Alliance, 2018

### 4.1. Phase Components

- Provide appropriate intervention activation to encourage the use of the space.

- Engage the local community and activate local networks, encouraging the integration of key community assets such as community groups, business owners, artists, food and beverage vendors, and musicians.

- Establish the space as lively, engaged, and reflective of the local neighbourhood.

- Program space as a point of access for community champions, local non-profits, the business community, vendors and more.

### 4.2. Prompting Questions

- What activities (programmed or impromptu) can happen in the space?
  - » What static elements can enhance the space and encourage programmed or impromptu activation?
  - » What dynamic events and programming can be hosted in the space to enhance the experience and encourage visitors?

- How can we leverage the knowledge and community assets to program the space? What local businesses and vendors can be involved (art, food, music, performance)?

- How can we use programming to enhance the inclusivity and accessibility of the space?

- How can we nurture a sense of ownership of the space to encourage communities for impromptu programming?

### 5. Project Evolution

The final principle evaluates the evolution of the temporary urban intervention—which will be different for each project. This principle evaluates the individual and community-level impacts of the intervention and, for the practitioner, any reflections, learnings, and final action items.

### 5.1. Phase Components

- Establish a future-facing component, if applicable.

- Reflect on and highlight project learnings.

- Evaluate next steps: scaling, repeating, evolving.

### 5.2. Prompting Questions

- Did we accomplish what we set out to do?

- What is the impact of this project?

- What did we learn? What would we do differently next time?

- What is next?

Figure 20: Boy Riding Bicycle

## Supporting Indicators

The indicators outlined here support the key principles for measurement. These have been refined through review sessions with the plazaPOPS team and stakeholders, but have not been tested.

Impact Stages
Key Principles

| EXPLORE 🔍 | |
|---|---|
| **Building Neighbourhood Context** | |
| **Indicators** | **Sources** |
| Community Profile (people) | Demographics |
| | Vital Statistics |
| | Project + Community Fit Assessment |
| Neighbourhood Profile (place) | Community Asset Mapping |
| | Environmental Assessment |
| | Project + Neighbourhood Fit Assessment |
| | Place Identity Assessment |
| Opportunity for Change / Impact | Neighbourhood Needs & Conditions |
| | Funding Opportunities |
| | Partner Priorities |
| | Local Stewardship Identification |
| Project Context | Project Fit Assessment |
| | Stakeholder / Partnership Mapping |
| | Community Assets Mapping |
| | Location Assessment |

| DEFINE ✏️ | |
|---|---|
| **Designing Project Architecture** | |
| **Indicators** | **Sources** |
| Engagement | Engagement Levels |
| | Community Partnerships |
| | Feedback Sessions |
| | Inclusive Engagement and Design Practices |
| Participation | Attendance / Activity |
| | Participation |
| | Network Spread |
| | Civic Participation |
| Governance | Local Stewardship |
| | Governance Structure |
| | Volunteers |

| EXPERIMENT ⚙️ | |
|---|---|
| **Designing the Experience Activating and Programming** | |
| **Indicators** | **Sources** |
| Design & Aesthetic | Reflective of Neighbourhood Identity / Project Fit |
| | Inclusive Design, Co-Creation and Transparency |
| | Quality of Experience |
| | Welcoming Elements |
| | Respite Elements |
| Experience | Connection to Natural Elements |
| | Opportunities for Social Mixing |
| | Opportunities for Learning and Education |
| | Local Stewardship |
| Access & Accessibility | Universal Design |
| | Inclusive & Welcoming |
| | Walkability |
| | Alternative Transit Access |
| | Integration with Local Business Community |
| Health & Safety | Public Health & Safety |
| | Co-Creation & Transparency |
| Activity | Level of Everyday Activity |
| | Level of Programmed Activity |
| | Diversity of Activates & Project Fit |
| Use and Behaviour | User Diversity |
| | Use of Space |
| | Behaviour Inside and Outside Space |
| | Integration with Immediate Surroundings |
| Experience | Diversity of Activates / Project Fit |
| | Evidence of Social Mixing |
| | Perception of Space |
| | Quality of Experience |

| EVALUATE ✈️ | |
|---|---|
| **Project Evolution** | |
| **Indicators** | **Sources** |
| Capacity Building | Individual Capacity Building |
| | Community / Neighbourhood Capacity Building |
| | Community Champions |
| | Increase in Knowledge |
| Community Resiliency | Civic Participation |
| | Social Connection |
| | Network Creation |
| | Localized Knowledge |
| Future Facing | Ongoing Stewardship |
| | Next Steps |
| | Ongoing Measurement and Evaluation of Impact |

Table 3: Supporting Indicators Table

## plazaPOPS
### An Impact Assessment Case Study #1

### PROJECT DESCRIPTION

A local BIA was inspired by the work completed in Wexford Heights last summer and have approached plazaPOPS to learn how they could create a similar project to support their members, local business owners and the local community through a seasonal temporary urban intervention. To launch the program, the BIA hosts community information sessions, a workshop and presents at local town hall. Communication channels are through BIA newsletter, social media (Facebook group) and information sessions, hosted at local businesses. The BIA works closely with the City of Toronto in securing funding and permits for this program and the program helps build the profile and brand of the BIA and the neighbourhood. The project spans the summer months and features bi-weekly events, concerts and becomes a hub of the local neighbourhood.

### PROJECT DETAILS

| Project Lead | BIA + plazaPOPS team |
|---|---|
| Project Scale | 1 project |
| Working Group | BIA, extensive community working group, supported by partners and business community |
| Partners | 10-15 community, business and political partners |
| Project Delivery Timeline | June - September |
| Z Project Total Timeline | 1 year |
| Funding | $$$ |
| Funding Source | Grants, Foundations, Non-Profits, etc. |

### Process / Experience Journey

| | Explore Neighbourhood Context | Designing Project Architecture | Designing the Experience | Activating and Programming | Project Evolution |
|---|---|---|---|---|---|

**Explore** community needs, assets, conditions, funding opportunities, partnerships, local stewards.
**Feeling** excited by the possibilities.

**Map** project, identify location possibilities, identify key partners and local stewards, apply for funding and grants, outline governance structure.
**Feel** overwhelmed by the amount of work ahead.

**Receive** funding, secure partnerships and location, design feedback and engagement sessions, collaborate with community
**Host** community engagement session for design
**Design** intervention
**Feel** supported and inspired

**Coordinate** project logistics (specifically, permits, insurance and volunteers)
**Feeling** stressed

**Install** intervention
**Feeling** excited, but overwhelmed by the details!

**Launch** intervention
**Program** intervention and events, coordinate local artists and businesses, promote
**Feeling** proud of what we've accomplished, stressed by day-to-day requirements
**Day-to-day** management of installation, volunteer coordination, intervention evaluation

**Project** wrap up, evolution — what's next?
**Feeling** sad its over - happy it happened!

### Key Steps

| Explore Neighbourhood Context | Designing Project Architecture | Designing the Experience | Activating and Programming | Project Evolution |
|---|---|---|---|---|
| • Explore community needs, assets, conditions<br>• Explore funding opportunities and partnerships<br>• Explore possible locations<br>• Host exploratory (formal and informal) conversations | • Design and define project process / key steps<br>• Identify key stakeholders<br>• Define project governance, working group committee<br>• Host community engagement session<br>• Apply / activate funding<br>• Secure partnerships<br>• Secure location | • Design physical + material structure<br>• Identify and source key materials / objects<br>• Host engagement / feedback sessions<br>• Sort out logistics / permits / insurance requirements<br>• Assemble Intervention<br>• Install Intervention<br>• Launch intervention | • Manage events and programming<br>• Coordinate day-to-day<br>• Promote through conversation, traditional and social media<br>• Measure and evaluate | • Wrap up, including closing and sorting project logistics (invoices, final report writing)<br>• Data analysis and reporting<br>• Debrief and reflection |

### Process Measurement

| Explore Neighbourhood Context | Designing Project Architecture | Designing the Experience | Activating and Programming | Project Evolution |
|---|---|---|---|---|
| • Demographic and vital statistic assessment<br>• Scan of available funding / grant opportunities<br>• Community Asset Mapping<br>• Community needs and conditions assessment<br>• Location Identification | • Engagement levels (informal and formal, communication channels, engagement sessions)<br>• Participation and activity<br>• Diverse and inclusive engagement<br>• Partnerships, governance, working group, local stewards<br>• Network mapping | • Design feedback and engagement<br>• Variety (#) of channels used to present and review design<br>• Concerns voiced, heard and incorporated | • Level of activity (everyday and programmed)<br>• Feedback on activity<br>• Use and behaviour within space<br>• Experience of space<br>• Perception of space | • Ongoing capacity<br>• Ongoing network strengthening<br>• Community resilience<br>• Ongoing stewardship of place<br>• Next steps |

### Impact Assessment

| EXPLORE | DEFINE | Experiment | Evaluate |
|---|---|---|---|
| • Project vision<br>• Community needs<br>• Opportunity for change<br>• Funding opportunities<br>• Community priorities<br>• Partner/ stakeholder priorities | • Define impact in the context of this project. The project team uses the plazaPOPS pillars for change: Social, Environmental, Economic<br>• Individual projects use co-create engagement sessions to identify specific goals within each pillar and structure measurement plan | • Project team, working group and volunteers use the "experiment stages to monitor, measure and evaluate the experiment against the impact goals identified in phase 2 | • Evaluate the experiment<br>• Analyze data collected against impact goals<br>• Reflect<br>• Learn<br>• Capture<br>• Communicate |

## plazaPOPS
### An Impact Assessment Case Study #2

| Process | Explore Neighbourhood Context | Designing Project Architecture | Designing the Experience | Activating and Programming | Project Evolution |
|---|---|---|---|---|---|

**Experience (+ / −)**

- **Project launch** after three friends discuss need for seating at local bus stop
- **Hold informal discussions,** explore options and discover the plazaPOPS approach
- **Explore** funding options, permits required and explore possible partners
- **Receive** funding through small local government grant and BIA. Present project at town hall, receive support and volunteer pledges.
- **Design intervention** with local company, source umbrellas and greenery through donations.
- **Coordinate** project logistics (specifically, permits, insurance and volunteers)
- **Install** intervention
- **Launch** intervention
- **Day-to-day** management of installation, volunteer coordination, intervention evaluation
- **Project** wrap-up; city explores permanent bus shelter

### PROJECT DESCRIPTION

A small group of community members come together to build a temporary intervention at a popular bus stop in their neighbourhood that has no seating or shade. Inspired by the plazaPOPS project in Wexford Heights, three community members decided to work together over the summer months. Funded through a small City of Toronto grant, the project team uses a facebook group to communicate with the community and present at their neighbourhood town hall. They provide opportunities for feedback through this facebook group and the design is built around providing seating, shade and a touch of greenery. The project is community run and supported by volunteers who heard about the project through their personal networks. The project might be run again next year.

**Key Steps**

| Explore Neighbourhood Context | Designing Project Architecture | Designing the Experience | Activating and Programming | Project Evolution |
|---|---|---|---|---|
| • Explore community needs, assets, conditions<br>• Explore funding opportunities and partnerships<br>• Explore possible locations<br>• Host exploratory (formal and informal) conversations | • Design and define project process / key steps<br>• Identify key stakeholders<br>• Define project governance, working group committee<br>• Host community engagement session<br>• Apply / activate funding<br>• Secure partnerships<br>• Secure location | • Design physical + material structure<br>• Identify and source key materials / objects<br>• Host engagement / feedback sessions<br>• Sort out logistics / permits / insurance requirements<br>• Assemble Intervention<br>• Install Intervention<br>• Launch intervention | • Manage events and programming<br>• Coordinate day-to-day<br>• Promote through conversation, traditional and social media<br>• Measure and evaluate | • Wrap up, including closing and sorting project logistics (invoices, final report writing)<br>• Data analysis and reporting<br>• Debrief and reflection |

### PROJECT DETAILS

| | |
|---|---|
| **Project Lead** | Community Group (with support from plazaPOPS) |
| **Project Scale** | 1 project |
| **Working Group** | 1-3 community members, supported by partners |
| **Partners** | 3-5 community partners |
| **Project Delivery Timeline** | 6 weeks over summer |
| **Project Total Timeline** | 1 year |
| **Funding** | $ |
| **Funding Source** | Community Fundraising, small City of Toronto Grant |

**Impact Assessment Process**

| EXPLORE | DEFINE | Experiment | Evaluate |
|---|---|---|---|
| • Project vision<br>• Community needs<br>• Opportunity for change | • Define impact in the context of this project. The project team uses the plazaPOPS pillars for change: Social, Environmental, Economic<br>• Individual projects use co-create engagement sessions to identify specific goals within each pillar and structure measurement plan | • Project team, working group and volunteers use the "experiment stages to monitor, measure and evaluate the experiment against the impact goals identified in phase 2 | • Evaluate the experiment<br>• Analyze data collected against impact goals<br>• Reflect<br>• Learn<br>• Capture<br>• Communicate |

## Applying Scenarios: Alternative Applications of the Framework —Analysis

**Case Study 1: plazaPOPS**

In the first case study, the impact assessment framework was leveraged as a complete temporary urban intervention package. The impact assessment supported the exploration of impact within the context of the project, defined impact with the goals of the project, partners and funding priorities and the plazaPOPS Pillars for Change: Social, Environmental and Economic. The project team used engagement sessions and the creation of a project charter to further define goals within each pillar for change. The experiment stage enabled the data collection and the project team used the evaluate stage to analyze the data against the goals and pillars for change and communicated the impact back to the community and key stakeholders. The framework supported the process and execution of the project by providing a step-by-step approach to the project and highlighting key measurements to support the phase-to-phase

process. The team leveraged the framework indicators and sources of information to support the project.

Overall, the application of the framework scenario #1 was complex. This complexity may be difficult for project leaders to understand and apply the framework components. The differences between process measurements and impact measurement needs to be very clearly defined—that process measurements help move the process forward and "feed" from one process phase into the next. In contrast to this, impact assessment research stages happen almost separately, and yet are intertwined with the process. In addition, within the process, there are supporting indicators and metrics. Further research may establish the data collection hierarchy (principles, indicators, metrics) and identify sources and methods for data collection.
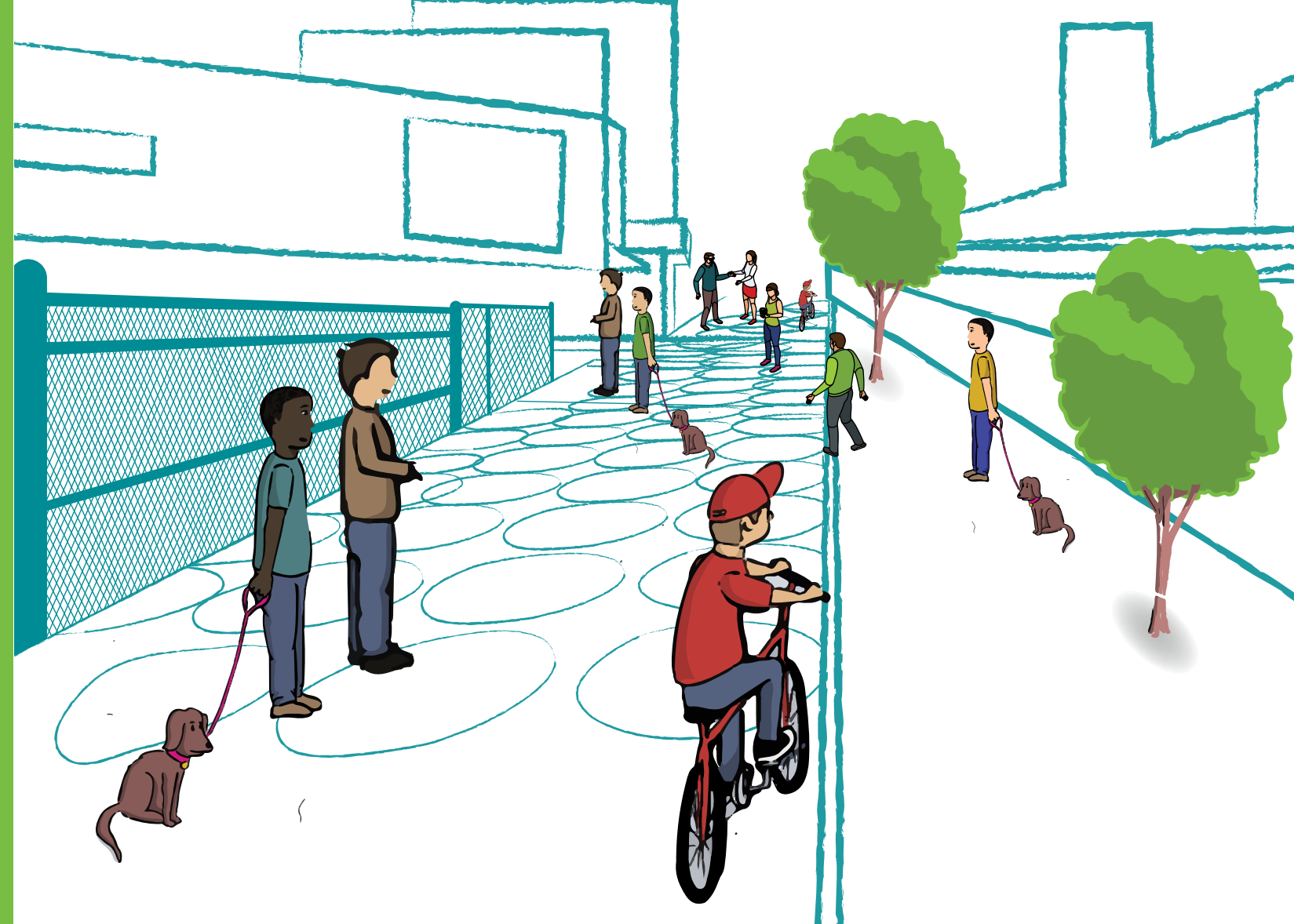
Figure 21: Active Green Space



Figure 22: After a Temporary Urban Intervention

**Case Study #2**

The second case study shows the framework solely as an impact measurement tool. In this scenario, the project was straightforward and concise. The project team used the impact assessment framework to support final report writing and build the case for permanent seating and shade at the bus stop. The impact assessment framework enabled the project team to explore the priorities of the city, partners and key stakeholders, including the local community. The impact of the project was defined as "a comfortable place to wait for the bus" and had supporting layers to

identify what comfortable meant to the community. The team used the experiment stage to capture data and the final stage was leveraged to evaluate and analyze the project and present the case for permanent seating to local government.

In scenario 2, the focus was solely on the impact research stages and the application of the framework was straightforward. In this application, it became clear that the definition of impact will vary for each project and is difficult to prescribe. Further research may explore the definition of impact and its application to temporary urban interventions.

## Framework Analysis, Recommendations, and Next Steps

In the application of the framework to two scenarios, certain strengths and weaknesses of the framework emerged. The application of the framework to the first case study was complex; for community groups with limited resources or new to the delivery of temporary urban interventions, this complexity may be overwhelming.

The framework may benefit from a focus on simplicity. To simplify, the framework could be divided into two individual components: the impact assessment and a project delivery toolkit. The impact research stages could be developed into a separate impact research framework. The separation of impact and process may seemingly contradict the plazaPOPS requirement to create an impact framework that is both process-and outcome-driven. However, the research findings revealed the combination approach of assessing both impact and process produces a framework that may be inaccessible to the everyday user. To support this discovery, the impact assessment framework should continue to mirror the linear process of the delivery of temporary urban interventions and may be integrated with the process toolkit in future, through testing and framework evolution.

Further work is needed to define impact within the impact research stages. As plazaPOPS expands and develops a toolkit of plazaPOPS resources, it may be beneficial to further research a centralized definition of *impact*, a unique-to-project definition, or a combination of the two. A combination of centralized and unique-to-project definition of *impact* could support key plazaPOPS messagingwhile providing a flexibility for individual projects to adapt the definition or make it unique to a project.

Both approaches will require further research to explore the definition of *impact* and provide resources for impact assessment. These resources could take many forms and may include written resources, data collection and measurement tools, participatory workshop facilitation guides or further research on funding priorities.
The four stages of impact (explore, define, experiment and evaluate) work well when applied to the scenarios. *Explore* supports the unique requirements, conditions and needs of a community and project, while providing space to explore funding and partnership priorities. This first step supports a divergent and open approach to temporary urban interventions. The third stage, *Experiment*, supports two process phases (design and activation). The impact assessment stage name (experiment) may benefit from testing with community, as it reflect an experimental approach to impact assessment and may confuse practitioners.

Separating the impact assessment and process components of the framework may require the development of a process toolkit. A toolkit could be developed and tested with community and stakeholders, support the growth of the plazaPOPS project and contribute to establishing the plazaPOPS name as an information source and a resource for future temporary urban interventions.

The process toolkit could consist of key phases in the delivery of temporary urban interventions, supported by key steps and planning recommendations, process measurement indicators that support each process phase, and resources for project planning and data collection.

Finally, the case study application was beneficial in highlighting the correlation between the experience of the project team and the internal and external facing components of the project delivery. In both case studies, it became clear that the internal components of the project process can be negative, while the external components can lead to positive experiences.

Next steps may include further research and development of the components developed in this research project, namely the impact assessment framework and process toolkit. These outcomes may benefit from testing in future plazaPOPS projects. Further research may include the comparison of a centralized or unique-to-project definition of *impact*. Next steps for plazaPOPS may include the development of a definition of impact and the exploration of impact through the community and stakeholder lens, alongside building a deeper understanding of the collective experience of the group through an exploration of process components and their influence on collective experience.

Additional research may explore how groups deploy, adapt and apply the framework and the relationship between the application of the framework, capacity building and experience.

Further depth in an impact assessment framework may include developing an impact evaluation hierarchy, supporting indicators, metrics and data collection methods. To support the plazaPOPS method and best practices within the temporary urban intervention approach, the community and stakeholders may be integrated.

# Conclusion

Impact is a tricky thing. As previously stated, impact can be positive or negative, little or big, present or future. All definitions of impact suggest one similar outcomes: that the thing, situation or person will be changed.

Impact is an everyday reality when working in the urban sphere. Decisions about a new condo development, the upgrade to a park or a new garden will always have impact on people and place. In these situations, impact can be positive or negative, big or small, hard to ignore or invisible for years to come.

Cities are mirrors of the social, technological, environmental, economic, political and value-based systems of the times, places and cultures reflected within. Change is happening all around us. The world is urbanizing at an alarming rate: cities are growing and the urban environment is increasing in density. Global climate emergencies are increasing in frequency, pandemics are keeping people indoors and apart and social isolation rates are increasing. These drivers of change are evident across the globe.

This paints modern city life in the negative: isolating, lonely, uncertain, lacking in communal ties, and hostile to the individual.

However, **it is not all bad.**

Temporary urban intervention projects, like plazaPOPS and others, are aiming for positive, localized impact. These projects are hoping to have a powerful positive effect on local communities and neighbourhoods. plazaPOPS is an innovative example of how a project can take a grey parking lot and transform it into a place with meaning. The process of bringing the community together to launch the project strengthens community networks and increases individual and community capacity. The project design and activation provides a place of respite, shade and access to greenery. This is a project for positive change. Change may look different for every neighbourhood; for some, it may mean a change of perception of place, a new friend, a boost in localized spending or a shift towards stronger neighbourhood resilience. There is no one outcome for these projects and, similarly, there is no one way to measure.

There are numerous frameworks for measuring public spaces:, temporary interventions, impact, social connection, well-being, economic activity and more.

This research aims to develop a framework for the impact assessment of temporary urban interventions — the plazaPOPS way.

In addressing the research question and objectives, critical insights were developed regarding the measurement of impact of public spaces and temporary urban interventions. These insights span both general and plazaPOPS-specific opportunities. Generally, temporary urban interventions and public space measurement frameworks lack a focus on the future; frameworks focus either on process **or** outcome.

This research highlighted framework requirements that are unique to plazaPOPS and may not be applicable to all projects. Because plazaPOPS projects are "POPS" (privately owned public spaces), a major stakeholder is the private landowner. The local business community is actively involved in this project and, thus, the economic impact was heavily intertwined in the final output. The scenario application of the framework identified challenges with the level of complexity presented in a framework and the need for balance between prescribing a definition of impact and supporting a unique-to-project impact assessment approach, while also highlighting the ability of impact assessment as a reflection of project process and measurement opportunities. In the first case study, the definition of impact spanned social, environmental and economic impact and was supported by five indicators for impact, while, in the second case study, the definition of impact was "a comfortable and welcoming place the sit." In both cases, the definitions of impact share similar characteristics that help define impact within a temporary urban intervention; Impact is measurable, focused on value creation for the community, and society, and specific to the project context.

The benefit, and challenge, surrounding impact assessment lie in thinking beyond goals and outputs and, instead, focusing on impacts and outcomes. In this research, the DIKW model was vital in providing a clear, hierarchical approach to thinking beyond the immediate cause and effect and, instead, to think in terms of longer-term, nuanced and human-centric impacts. Impact assessment is complex, however, when aiming for happier, connected and resilient communities, the easy way just doesn't cut it.

# References

- Ackoff, R. (1999). *Ackoff's Best*. John Wiley & Sons.

- Bassler, A., Fogle, N., & Taverno, R. (2008). *Developing Effective Citizen Engagement: A How-To Guide for Community Leaders* (p. 28). Pennsylvania State University.

- Bernstein, J. H. (2011). The Data-Information-Knowledge-Wisdom Hierarchy and its Antithesis. NASKO, 2(1), 68–75. https://doi.org/10.7152/nasko.v2i1.12806

- Cambridge English Dictionary. (n.d.-a). Impact. Retrieved April 23, 2020, from https://dictionary.cambridge.org/dictionary/english/impact

- City Parks Alliance. (2018). Active Parks Healthy Cities. https://cityparksalliance.org/wp-content/uploads/2019/06/active-parks-healthy-cities.pdf?pdf=report

- From Parking Lots to Paradise. (n.d.). Depave. Retrieved April 13, 2020, from https://depave.org/

- Design Council. (2015, March 17). What is the framework for innovation? Design Council's evolved Double Diamond. Design Council. https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond

- ERA Architects. (n.d.). WexPOPS: Pop-up Plaza. Retrieved April 22, 2020, from http://www.eraarch.ca/2019/wexpops-pop-up-plaza/

- Garcia, A., & Lydon, M. (2015). *Tactical Urbanism— Short-term Action for Long-term Change.* Island Press_Center for Resource Economics.

- Gehl Institute. (2018). Inclusive Healthy Places. https://gehlinstitute.org/wp-content/uploads/2018/07/Inclusive-Healthy-Places_Gehl-Institute.pdf

- Global Designing Cities Initiative. (n.d.). Case Study: Pavement to Parks; San Francisco, USA. Global Designing Cities Initiative. Retrieved April 5, 2020, from https://globaldesigningcities.org/publication/global-street-design-guide/streets/pedestrian-priority-spaces/parklets/case-study-pavement-to-parks-san-francisco-usa/

- Jacobs, J. (1961). *The Death and Life of Great American Cities.* Random House.

- Kumar, V. (2012). *101 Design Methods: A Structured Approach for Driving Innovation in Your Organization.* John Wiley & Sons.

- New York City Department of Transportation. (2020). NYC DOT - NYC Plaza Program. https://www1.nyc.gov/html/dot/html/pedestrians/nyc-plaza-program.shtml

- Park, R. E., & Burgess, E. W. (2019). *The City.* University of Chicago Press.

- Perel, E. (n.d.). Prologue (No. 0). Retrieved April 28, 2020, from https://open.spotify.com/show/0P13JasQfVZ1RiDCMZMYNU

- Project For Public Spaces. (n.d.). What Makes a Successful Place? Retrieved April 8, 2020, from https://www.pps.org/article/grplacefeat

- Sanders, E. B.-N., & Stappers, P. J. (2012). *Convivial Toolbox: Generative Research for the Front End of Design.* BIS.

- Simmel, G. (2011). *Georg Simmel on Individuality and Social Forms.* University of Chicago Press.

- Stanford d.school. (n.d.). Get Started with Design Thinking. Stanford d.School. Retrieved April 7, 2020, from https://dschool.stanford.edu/resources/getting-started-with-design-thinking

- Steuteville, R. (2014, October 10). Four types of placemaking [ Text ]. Congress for New Urbanism. https://www.cnu.org/publicsquare/four-types-placemaking

- Stewart, B., Rotsztain, D., & Landman, K. (2018). PlazaPOPS. https://plazapops.ca/

- Summers, B. (2015, May 18). What is New Urbanism? Congress for New Urbanism. https://www.cnu.org/resources/what-new-urbanism

- The Congress for the New Urbanism. (2015, April 20). The Charter of the New Urbanism. Congress for New Urbanism. https://www.cnu.org/who-we-are/charter-new-urbanism

- Tonkiss, F. (2005). *Space, the City and Social Theory: Social Relations and Urban Forms.* Polity.

- UCLA Lewis Center for Regional Policy Studies. (2019). Santa Monica Parklet Evaluation.

- United Cities and Local Governments. (2016). Public Space Policy Framework.pdf. https://www.uclg.org/sites/default/files/public_space_policy_framework.pdf

- U.S. Department of Health and Human Services. (n.d.). Community Resilience. Retrieved April 23, 2020, from https://www.phe.gov/Preparedness/planning/abc/Pages/community-resilience.aspx

- What is Placemaking? (n.d.). Retrieved March 31, 2020, from https://www.pps.org/article/what-is-placemaking

- Whyte, W. H. (2001). The Social Life of Small Urban Spaces. Project for Public Spaces.

- Wirth, L. (1938). Urbanism as a Way of Life. *The American Journal of Sociology*, 44(1), 1–24.

# Appendix

# Contents

# APPENDIX A - CASE STUDY #1 PROJECT IMPACT DEFINED (WORK IN PROGRESS)

| PILLAR 1 | SOCIAL | | PILLAR 2 | ENVIRONMENTAL | | PILLAR 3 | ECONOMIC | |
|---|---|---|---|---|---|---|---|---|
| **GOAL** | **HOW?** | **METRIC** | **GOAL** | **HOW?** | **METRIC** | **GOAL** | **HOW?** | **METRIC** |
| **Create an active and welcoming social gathering place** | • Community engagement sessions<br>• Communication channels<br>• Design and activation | • Community assessment survey<br>• Intercepts survey<br>• Perception of place | **Increase access to natural and green spaces** | • Integrate green / natural aspect<br>• Increase shade<br>• Design elements | • Biodiversity recorded<br>• Green space provision comparison<br>• Perception of place | **Create jobs / volunteer opportunities** | • Create youth employment initiative<br>• Volunteers for day-to-day, events and project evaluation | • # of jobs created<br>• # of volunteers<br>• Volunteer engagement / participation |
| **Create opportunities for social connection** | • Community engagement and process (working group, variety of feedback channels)<br>• Design, activate for social connection | • Process engagement / participation<br>• Space assessment<br>• Intercept interviews Q: have you met someone new? | **Support more walking and cycling** | • Integrate cycling infrastructure<br>• Walkability<br>• Feelings of safety<br>• Traffic calming<br>• Signage | • Intercept surveys Q: transportation, feelings of safety<br>• Bike counts<br>• Perception of place | **Increase local spending** | • Connect intervention with local businesses<br>• Feature local businesses through events or signage | • Intercept surveys Q: how much did you / do you plan on spending?<br>• Local business interview / survey |
| **Reflect local culture** | • Co-creative engagement process<br>• Design, activation and events | • Process and design assessment<br>• Intercept interviews<br>• Working group interviews | **Enhance local ecology** | • Shade<br>• Access to natural elements<br>• Education and knowledge building | • Shade cover<br>• Survey / Intercept interviews<br>• Knowledge assessment<br>• Project evolution | **Support local businesses** | • Engage local businesses through: events, sponsorships and fundraising, signage.<br>• Parking impact | • Local business interview / survey<br>• Parking counts |
| **Strengthen individual and community social networks** | • Build collaborative and engaging community engagement process<br>• Events and programming | • Capacity and network assessment<br>• # of events and attendance<br>• Community assessment survey | **Build Community Resilience** | • Enhance community networks<br>• Strengthen social ties<br>• Increase knowledge | • Community survey (# of new connections made, strength of relationship)<br>• Working group interviews | **Enhance community and neighbourhood profile** | • Create destination<br>• Raise profile of community/ neighbourhood "brand"<br>• Feature local businesses | • Area recognition / association survey<br>• Exposure to new area<br>• Destination assessment |
| **Engage a diversity of people** | • Process engagement and participation<br>• Use a variety of engagement channels<br>• Diversity of use of space | • # of communication channels<br>• Active engagement strategy<br>• Use of space assessment | **Minimize waste** | • Circular economy approaches to waste<br>• Access to waste sorting<br>• Waste education | • Circular assessment<br>• Waste analysis<br>• Knowledge assessment | **Creates a "return on investment"** | • Financial ROI<br>• Social ROI | • Evaluate connection / priorities of funding partners<br>• Working group survey / interview |