Promise Zone Data and Evaluation Framework Desk Guide

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Developed by ICF in partnership with
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INTRODUCTION

The Promise Zones Program

In 2013, the U.S. Department of Housing and Urban Development (HUD) launched the Promise Zone (PZ) Initiative to support communities with high poverty rates and low economic opportunities. Twenty-two communities located in urban, rural, and tribal areas[1] were selected through three rounds of national competition, in which applicants demonstrated a comprehensive and consensus vision for their community and residents, the capacity to carry out that vision, and a shared commitment to specific, measurable results.[2]

HUD manages the 14 Urban Promise Zones and the U.S. Department of Agriculture (USDA) manages the 8 Rural and Tribal Promise Zones. Through this initiative, the Federal Government partners with local leaders to address multiple community revitalization challenges in a collaborative way, increase economic activity, improve educational opportunities, leverage private investment, reduce violent crime, enhance public health, and address other priorities identified by the community.

To further ensure success, Promise Zones receive:

- An opportunity to engage five AmeriCorps VISTA members in the PZ work.
- A federal liaison assigned to help designees navigate federal programs.
- Preferences for certain competitive federal grant programs and technical assistance from participating federal agencies.
- PZ tax incentives, if enacted by Congress.

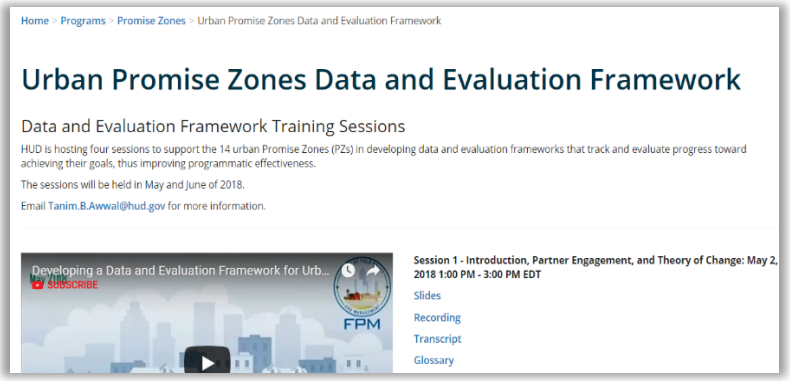
Altogether, this assistance is intended to accelerate local efforts over the 10-year period of the PZ designation. During this term, the specific benefits made available to PZs will vary from year to year, and sometimes more often than annually, due to changes in agency policies, changes in appropriations, and authorizations for relevant programs.

Developing a Data and Evaluation Framework for Urban Promise Zones

As part of receiving an urban PZ designation, HUD requires each community to collect data and information related to the progress of their efforts. Lead entity staff, stakeholders, and VISTA volunteers are all expected to collaborate to collect the information and use it to evaluate the program. To facilitate this data collection effort, each grantee must develop a **Data and Evaluation Framework** (Framework). Also known as an evaluation plan, a Data and Evaluation Framework links evaluation questions about a program to indicators, data sources, data collection methods, and the outcomes the program seeks to achieve. Guided by the program's Theory of Change and Logic Model, the Framework describes and justifies the data collection and evaluation approach selected and provides a guide for each step of the evaluation process. It also includes a timeline and identifies the resources that will be used in the evaluation.

[1] Urban PZs are administered by HUD, while rural and tribal PZs are administered by the U.S. Department of Agriculture.
[2] Promise Zones Overview. Retrieved from https://www.hudexchange.info/programs/promise-zones/promise-zones-overview/.

About This Desk Guide



This Guide is designed to walk users through the process of developing and using a PZ Data and Evaluation Framework. The Guide may be used as a stand-alone document, but may also be supplemented by reviewing materials from a series of four PZ training sessions hosted by HUD in May and June 2018. The four training sessions were recorded and are available, along with supporting materials, at hudexchange.info. The Guide offers examples, tools, and templates, as well as providing references to more in-depth resources that users may choose to investigate for a 'deeper dive' on key topics (e.g., logic models, theory of change, indicators, data collection, analysis, and visualization). While the Guide provides structure to help non-evaluators develop a Data and Evaluation Framework, many of the activities will require guidance from experienced evaluators. PZs should draw on the expertise of their data/evaluation partners throughout the process of developing the Data and Evaluation Framework to achieve the appropriate degree of rigor at each step along the way.

This Guide is designed to be completed sequentially. Each chapter builds on the prior chapter or section and includes *Apply Your Knowledge* activities. Completing each *Apply Your Knowledge* activity in the template provided in Appendix A will result in a complete draft Framework. *NOTE: The elements of the Framework Template are not completed sequentially, but they will all be addressed by the time you finish working through the Activities in this Guide.* Appendix B contains an example in the Framework Template that has been completed to illustrate how the sections of the Framework fit together. Appendix C provides information about Frameworks developed by three community change programs, each using its own format, to illustrate the range of ways in which a Data and Evaluation Framework can be developed. Regardless of the format or the process used to develop the Framework, the Framework should take into consideration the structure of the PZ, engagement of evaluation partners, and its community involvement. These considerations are addressed throughout the chapters of this Guide.

The draft Framework will need to be refined based on stakeholder input and revised over time as the program evolves and elements such as the evaluation questions and data sources are refined. It is also essential for the PZ to develop an implementation plan to ensure that the Framework is actually used as intended and is serving its purpose.

Upon reviewing the information and completing the activities outlined in the Guide, users will be able to:

- Explain the importance of collecting data and be able to identify common measures for community change initiatives.
- Define the elements of a data and evaluation framework for a community change initiative.
- Strategize how to leverage partner and other resources to gather both qualitative and quantitative data.
- Describe how data analysis and data visualization can be used to support data-driven policy.
- Develop a PZ Data and Evaluation Framework that tracks and evaluates the PZ's progress toward achieving its goals, thereby improving programmatic effectiveness.

Chapter 1

Preparing for the Framework

Chapter 1

Preparing for the Framework

Before diving into Framework development, it is important to understand the big picture. This chapter describes what a Data and Evaluation Framework is, and why and how to use it. It also discusses several concepts that can influence the way communities develop their Frameworks, including community change, collective impact, and partner engagement.

What is a Data and Evaluation Framework?

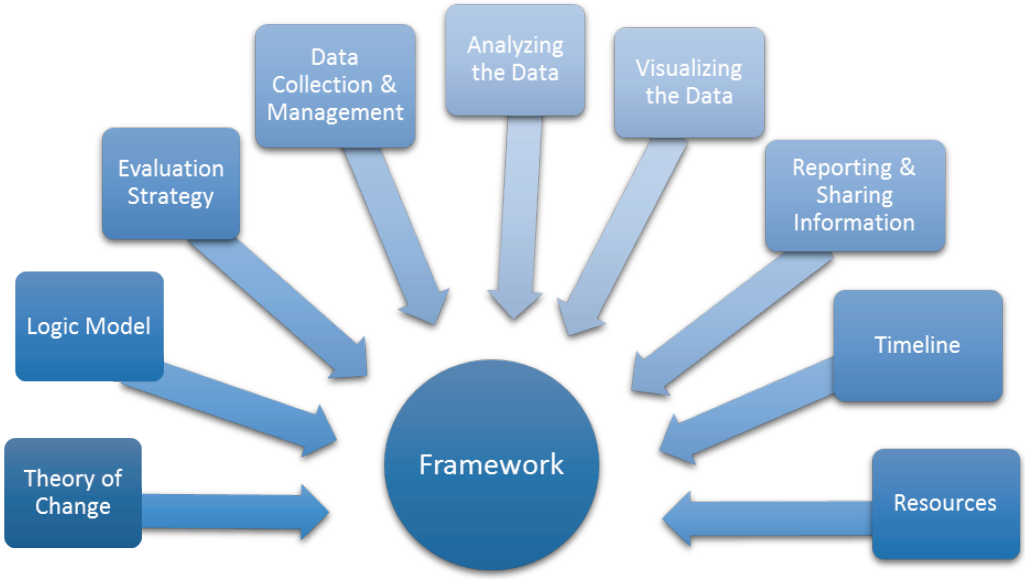
A Promise Zone (PZ) Data and Evaluation Framework (Framework) is a written document that describes the process the PZ will use for evaluating what is accomplished through implementation of the PZ program model. It describes and justifies the data collection and evaluation approach selected, and it provides a guide for completing each step of the evaluation process.

Developing and using a Framework can have many benefits for the community. For example, it can:

- Create a shared understanding among partners about intended outcomes
- Identify data needed
- Establish data collection methods
- Describe analyses to be used
- Plan for information dissemination
- Establish a realistic timeline
- Identify potential roadblocks and solutions

Figure 1 depicts the elements that make up a Data and Evaluation Framework.

Figure 1: The Elements of a Data and Evaluation Framework



Once the Data and Evaluation Framework is developed, the PZ's challenge will be to put it to good use. The Framework can be used for a variety of purposes over its lifetime, and each community has its own individualized needs. A few uses for the Framework that apply to most PZs include:

- It can be used as an effective tool for **bringing new partners up to speed** about the common visions, activities, and stakeholders involved in the PZ effort.
- **New VISTA volunteers** can use the Framework to fully understand the evaluation process as envisioned by the PZ and where they fit into the ongoing effort.
- Keeping the Framework front and center during strategy discussions can **help the partners stay focused** on the key things that will make a difference to the community.
- It can serve as a reminder for PZ partners who work regularly on individual programs and individual sectors of the overall objectives of the PZ and the **anticipated impact of the PZ as a whole**.
- Following the Framework provides the PZ with data and analysis needed to **continuously improve programs and realize better results** for the community.
- It can be used as a means for **ongoing communication** with HUD on the progress of PZ activities.
- Implementing the data collection aspects of the Framework helps **meet the community's data collection responsibilities** as a PZ designee.

Completing the activities in this Guide will result in a working draft of the Framework; however, the Framework must be updated regularly to reflect factors such as changes in the community, evolution in the PZ's understanding of the community's needs, new programs available within the PZ, and new information about promising practices in the field. Appendix D contains a glossary of terms that PZs may find helpful as they think about their evaluations. Some of the terms are used in this Guide; others may come in handy as PZs work with their data partners on more complex aspects of their evaluations.

There are multiple reasons why the Framework will need to be revised during the duration of the PZ designation.

- The PZ Initiative is a 10-year effort involving multiple stakeholders. As needs change and new priorities emerge, the Theory of Change and Logic Model that guide the PZ activities will change.
- The initial draft Data and Evaluation Framework may not include all of the details needed to implement an evaluation during the life of the PZ designation. When initially developing the Framework, PZs will flesh out the early years in greater detail than the later years. Over time, the community will need to determine and plan activities for those subsequent years based on evolving programs, resources, and timelines.
- PZ activities will need to be adjusted to reflect the implementation progress, unexpected events, and evaluation data that show what is working and what needs to be improved.
- Some data and evaluation activities will take more or less time than expected. The timeline and resources for data and evaluation may need to be adjusted to reflect feasibility.

Keeping a document current under changing circumstances is not easy. The following tips can help the PZ keep the Framework current over time, ensure that partners stay on the same page about priorities and take ownership of the Framework, and allow opportunities to update the Framework to reflect evolving thinking about the community's needs:

- **Designate a custodian of the Framework.** With many activities and stakeholders, it is easy for the framework to get lost in the shuffle without having a champion. The designated custodian could be an evaluator or a data partner.
- **Set aside a time and an agenda item** in meetings to revisit key aspects of the Framework, including the Theory of Change and the Logic Model, when PZ stakeholders gather.
- **Formally revisit the Framework** quarterly and distribute among stakeholders to ensure that it stays current and is used as a guiding document.

Example: Sacramento Promise Zone Uses its Logic Model and Framework

The Sacramento PZ is committed to using its logic model and Framework for action planning, project implementation, data analysis, evaluation, and reporting processes. Steps it takes to ensure active use of the Framework include:

- Sharing updated versions of the PZ logic model with all stakeholders regularly.
- Collecting logic models annually from Action Teams responsible for specific programs or sectors and sharing them among Action Teams, Implementation Partners, and Councils.
- Engaging stakeholders in ongoing discussions to reflect, share, and apply what is learned to ensure continuous improvement.
- Hosting regular meetings to discuss data collection, progress, successes, and lessons learned, and reporting on a quarterly basis how the PZ is moving the needle on each indicator.

Community Change

The Promise Zones Initiative is one of many community change programs in operation across the country. Community change programs and initiatives aim to focus federal, state, and local efforts and help participants take a more collaborative approach to their work, leverage local funds, and maximize the impact they can have on their communities. Prior to 2017, these kinds of programs were commonly referred to as place-based initiatives, and that term may still be used when referring to programs that pre-date this change.

The number of community change initiatives has increased over the last 10 years, but they can be challenging to evaluate. Some of the key challenges and solutions are reflected in **Figure 2**.

Want to know more?

For a look at how several community change and place-based initiatives are working, and how they are being evaluated, see *How to Evaluate Choice and Promise Neighborhoods*.

Find more information about specific community change and place-based initiatives at the following links:

- HUD/USDA: Promise Zones
- HUD: Strong Cities Strong Communities (SC2)
- HUD: Choice Neighborhoods
- ED: Promise Neighborhoods

Figure 2: Challenges and Solutions for Evaluating Community Change Programs

Challenges	Solutions
▪ **Neighborhood-level changes** – outcomes can be difficult to detect ▪ **Service saturation** – hard to tell which service had which effects and find comparison neighborhoods ▪ **No standard treatment** – residents will get different services, or potentially varying quality, at different times ▪ **Comprehensive objectives** – different stakeholders may be interested in different units of analysis ▪ **Locally driven goals** – building on local situations can make cross-site comparisons difficult	▪ **High-quality performance measurement** – when established at the outset, it helps ensure quality data are gathered consistently and are available for analysis ▪ **Locally focused process study** – implementation information helps consider results in light of varying goals and approaches ▪ **Rely on links in the Theory of Change** – relying on the Theory of Change can help make the case for causality ▪ **Rigorous evaluation of selected links** – when evaluation resources are scarce, targeted studies of key links in the chain can provide important insights

Source: Adapted from Smith, R. (2011). How to Evaluate Choice and Promise Neighborhoods.

Collective Impact

Some PZs rely on a collective impact model, which may be reflected in the Data and Evaluation Framework. Collective impact refers to the idea that large-scale social change requires cross-sector collaboration, including a shared agenda, common approaches to measuring outcomes, and tackling activities that reinforce and complement each other. It may involve collaboration across government, business, philanthropy, nonprofit

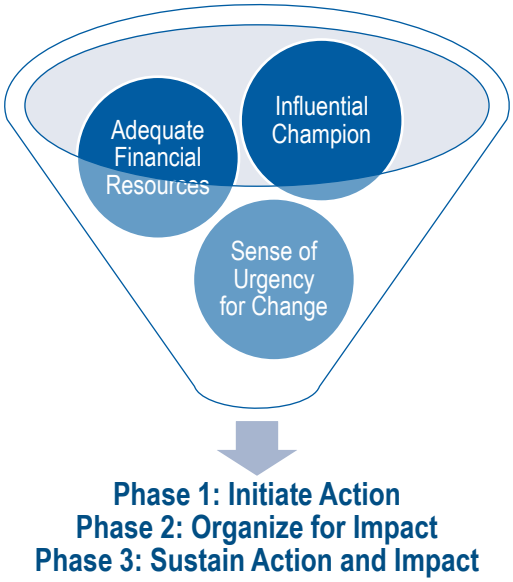
Want to know more?

For more information about collective impact, check out these resources:

- Hanleybrown, F., Kania, J. & Kramer, M. Channeling Change: Making Collective Impact Work
- ORS Impact and Spark Policy Institute: When Collective Impact has an Impact

organizations, and citizens. **Figure 3** depicts the elements required for effective collective impact and the phases that a collective impact effort goes through to effect change in a community.[3]

Figure 3: Three key elements lead into a three phase process for achieving collective impact.



Source: Channeling Change: Making Collective Impact Work

How is your PZ's Capacity to Undertake Collective Impact Efforts?

The Los Angeles Promise Zone, which was very interested in collective impact, found value in assessing its areas of strength and weakness. It used two instruments to assess its areas of strong capacity as well as areas for improvement.

Interested in assessing your PZ's capacity and readiness for collective impact efforts? Consider these diagnostic tools:

- Collective Impact: Self-Assessment and Planning Tool from the Tamarack Institute
- Evaluation Capacity Diagnostic Tool by Informing Change

Effectively Engaging Partner Organizations

A key to successfully developing and implementing a Data and Evaluation Framework is gaining support and buy-in from partners and stakeholders, but figuring out who the key stakeholders are and getting them to agree to participate is not enough. PZs need to establish ongoing relationships with the community partners, ensure the partners are invested in the process, promote real buy-in, and work together to ensure follow through. Some principles for engaging partners effectively include:

- **Thinking Broadly –** Some partner organizations will come readily to mind, but others may be less obvious. Brainstorm the various service providers, funders, community organizations, and government

[3] Hanleybrown, F., Kania, J. & Kramer, M. Channeling Change: Making Collective Impact Work, *Stanford Social Innovation Review*, January 2012.

agencies that work in the PZ community. Think carefully about ways to engage them by showing them how working together can amplify each one's impact beyond what they can do alone.

- **Early Engagement –** Engage partner organizations early on to help define overarching goals and inform the development of the Data and Evaluation Framework.
- **Information Sharing –** Help partners understand the PZ's goals and highlight their role in supporting those goals. Clearly outline which activities will lead to which outcomes and how they will be documented. Explain to partners how their engagement will also help them to better tell their own stories.
- **Defining Data Needs –** Clearly outline data collection expectations from the start. Explain how data can help partner organizations build their own capacity and achieve organizational goals. Provide resources and technical assistance to collect requested data. Engaging partners will help ensure that the chosen indicators make sense and are the best way to measure the outcomes.
- **Communication –** Establish regular meetings among partners to communicate needs, questions, and challenges, and create mechanisms for sharing important information with partners between meetings.
- **Sustained Engagement –** Keeping the Framework at the center of the work with a regular focus on the logic model and theory of change can help keep partners engaged over the long term and facilitate transitions (e.g., onboarding new VISTAs). Assigning concrete roles and goals helps build involvement and commitment among subcommittees and other partners.

Hear from the Speaker

Hear more about engaging partners and stakeholders from the San Diego Promise Zone. Discussion starts at about minute 23:00 of Session 1 - Introduction, Partner Engagement, and Theory of Change.

Chapter 2

Foundation of the Framework

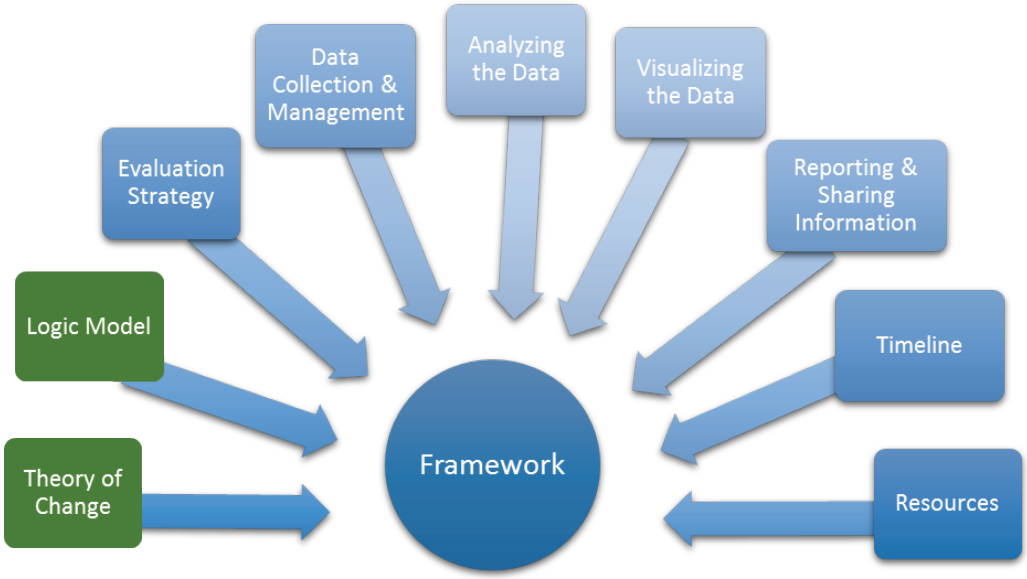
Chapter 2

Foundation of the Framework

Framework Elements Covered in This Chapter

Chapter 2 walks through the process of developing the foundational elements of the Data and Evaluation Framework, which include the Theory of Change and the Logic Model, as shown in **Figure 4**.

Figure 4: Framework Elements – Theory of Change and Logic Model



Developing the Foundation of the Framework

Evaluating a community change initiative like the PZ Initiative starts with developing hypotheses about why the changes the PZ implements will solve community problems or accomplish the PZ's goals. Examples of such goals might include boosting economic activity and job growth, improving educational opportunities, reducing crime, or improving quality of life in the community.

The Theory of Change provides a narrative description of why the initiative is expected to solve the problem or accomplish the goals. Articulating the PZ's Theory of Change involves developing hypotheses about how certain activities the PZ intends to undertake will accomplish these goals.

The Logic Model provides a visual representation of the Theory of Change, with a focus on how the proposed activities will solve the problems or accomplish the goals.

Together, the Theory of Change and Logic Model provide the foundation for the Data and Evaluation Framework and provide the basis for making key decisions related to building the Framework. This section walks through the development of these two key elements.

Theory of Change

The Theory of Change describes why the activities being undertaken are expected to solve the problems or accomplish the goals the PZ has established to make a positive difference in the community.

A Theory of Change addresses three core questions:

1. Who within the community is expected to be helped by the initiative (population)?
2. How will the changes be accomplished (strategies)?
3. What is expected to change within the community as a result (outcomes)?

Want to know more?

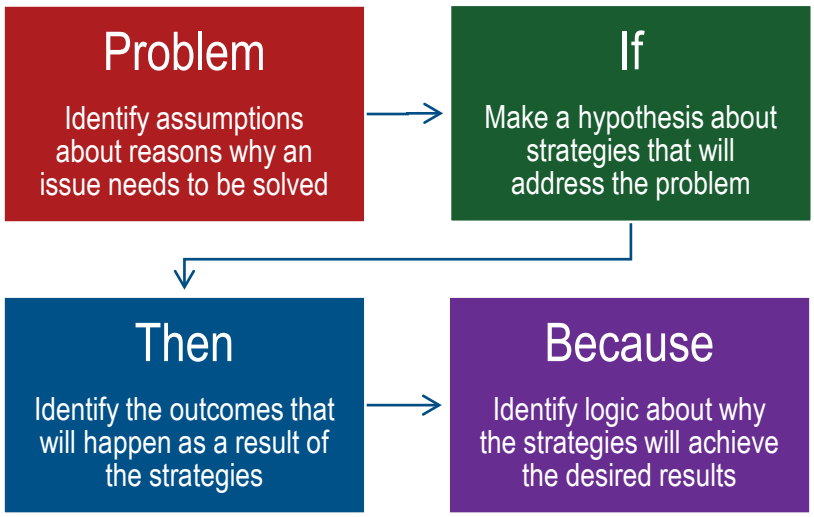
For more information about developing a Theory of Change, consider reviewing Theory of Change: A Practical Tool for Action, Results and Learning from the Annie E. Casey Foundation.

The Theory of Change is the narrative description of the relationship between these three elements in the context of the PZ community.

A Theory of Change allows the PZ to check the logic behind the strategies it intends to implement by clearly articulating why the proposed activities are expected to achieve the desired results. It also serves as a communication tool because it helps ensure that all partners have a common understanding of the anticipated PZ activities and priorities, and how they are expected to achieve shared goals.

One technique for developing a Theory of Change efficiently is the Problem-If-Then-Because (PIT-B) technique, as illustrated in **Figure 5**.

Figure 5: Completing a statement that covers the four boxes in this exhibit helps articulate why the proposed strategies will lead to the desired outcomes.



To build a Theory of Change using the PIT-B method, first, identify the problem to be solved as well as any assumptions about the problem. Second, identify a hypothesis about workable strategies that can be used to address the problem. Third, list all outcomes expected to occur as a result of the proposed strategies. Finally, identify why the strategies are expected to achieve the desired results or outcomes. Add reasons or assumptions to support the Theory of Change, if desired. **Figure 6** provides real-life examples of applying the PIT-B approach to develop a Theory of Change in three sectors frequently targeted by PZs. Read each example from top to bottom to follow the Problem, If, Then, and Because statements.

Figure 6: PIT-B Examples

Theory of Change Element	Example 1: Adolescent Health	Example 2: Student Reading Level	Example 3: Distressed Neighborhood
Problem	Adolescents in our city suffer from high levels of obesity and related ailments. We believe adolescents do not know how to make good food choices, and often do not understand the impact that those choices can have on their health.	The problem is students do not read at grade level. We believe that one of the reasons they do not read at grade level is because they don't get enough individual attention in the classroom.	The neighborhood is distressed. The poor state of the buildings decreases the availability of safe and affordable housing units. Along with a lack of basic amenities (e.g., public transit, school, and services) and safety, the physical distress of the neighborhood negatively affects the economic opportunities available to residents by discouraging commercial establishments from moving into the area.
If	Our theory is that if adolescents learn about healthy shopping and cooking…	If we provide 30 minutes of one-on-one tutoring to the students after school…	If we rehabilitate the buildings in the neighborhood, demolish the most run-down and distressed ones, and construct new buildings in their place; and if we improve the safety and amenities of the community…
Then	…then those students will become healthier…	…then their reading will improve.	…then we will be able to transform the neighborhood into one that provides the resources and environment that will attract mixed-income residents.
Because	…because they will learn about how to choose better food options and develop positive attitudes toward eating. Our program helps students learn about choosing and cooking healthy meals by delivering a fun and interactive after-school program. By providing adolescents with an age-appropriate nutrition curriculum, we will improve their knowledge and attitudes about healthy food.	By providing individualized, one-on-one tutoring to students, we can give them the one-on-one attention they are not receiving in the classroom. More individualized attention will help improve their reading because the tutors will be able to tailor their teaching to the individual students' needs. Ultimately, this will help students read at grade level.	...because revitalizing distressed properties will increase the number of high quality, energy efficient, and affordable units available both for housing and commercial use in the neighborhood. Efforts to improve community services will improve the quality of these services while increasing the trust and engagement of stakeholders, leading to a safe and healthy community with high performing schools and services. These improvements will ultimately transform the neighborhood.

Apply Your Knowledge: Develop a Theory of Change

Using the PIT-B method, draft a Theory of Change. Insert the Theory of Change in Part A of the *Data and Evaluation Framework Template* (see Appendix A) or another template already in use. Appendix B contains a sample Theory of Change to use as a guide.

Does the Theory of Change have these important attributes?

- ❑ **Honest:** Clear distinctions between facts, assumptions, and hypothesis
- ❑ **Plausible:** Achievable given your resources
- ❑ **Unambiguous:** Direct and clear; it is not the place for vague or passive language
- ❑ **Consensus-driven:** Reflects input and agreement from all your stakeholders
- ❑ **Local:** Specific to a particular program

Check Your Work: Does your Theory of Change have any of these pitfalls?

Example	Common Pitfall
"Our program seeks to reduce the drop-out rate by implementing the ACME drop-out prevention program. We believe that if we implement our drop-out program, then we will encourage more students to stay in school and graduate because we will successfully decrease the dropout rate."	**Circular Logic:** Repeating the same statement in different words. That is to say, repeating the if/then using slightly different language, but never explaining the underlying reason why the program will work.
"Our program model seeks to help unemployed residents find stable jobs in our community. We achieve this through a two-step process. First, new clients complete a survey about their job skills and interests. Second, our staff hold meetings with unemployed individuals to talk about possible options. After clients complete these meetings, we expect them to be able to find a job."	**Process Focused:** Going into the weeds on the "how" of the program but forgetting to address the "why."
"In 1983, a group of idealistic recent college graduates started an afterschool club at a middle school in a low-income neighborhood. Once a week, they would lead lively discussions about their favorite books with students. After doing this informally for 10 years, in 1993 we incorporated as a nonprofit, which we know today as Storytime. With a headquarters in Any City, Storytime now runs afterschool reading programs at 100 schools across the state."	**Program Histories:** Giving a detailed look at every way the program has evolved but forgetting to explain why it works the way it does.
"Several recent studies show that Americans are less active than they were in the past. Our program runs sports programming, such as youth and adult soccer and basketball clubs, at the local YMCA. Another organization in Big City operated a similar program and found that participants increased their activity levels substantially. A similar study, published in 2010, showed that participants in organized sports leagues were less likely to develop diabetes over time."	**Literature Reviews:** Describing the results of research into similar programs, but not addressing the underlying factor behind those programs.

Logic Model

The next element to consider after creating a Theory of Change is the Logic Model. A Logic Model is a visual representation of the way the PZ will accomplish the goals described in the Theory of Change.

Like the Theory of Change, the Logic Model clearly identifies the elements of the evaluation—in this case, visually. For a community change program like PZs, it also shows how various activities are inter-related. If parts of the program do not seem to fit neatly into the different sections of the Logic Model, it is a clear indication that they may not be relevant to the initiative's intended outcomes or need to be re-worked.

Want to know more?

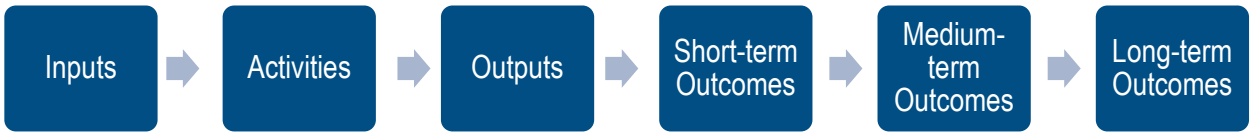
For more information about Logic Models:

- W.K. Kellogg Foundation (2004). *Logic Model Development Guide*
- Corporation for National and Community Service. *How to Develop a Program Logic Model*

Developing a Logic Model

The key components that must be identified and incorporated into a Logic Model are depicted in **Figure 7** and described below.[4]

Figure 7: A Logic model consists of key components—inputs (resources), activities (actions), outputs (products), and outcomes (expected changes).



- **Inputs** are the human, financial, organizational, and community resources available for carrying out a program's activities. These could include funding, program staff, volunteers, and research. It is especially important for PZ Initiatives to tabulate these resources because there are so many pieces of the program that need to be coordinated.
- **Activities** are the processes, tools, events, and actions that are hypothesized to bring about the intended changes. These are also referred to as strategies.
- **Outputs** are direct counts of a program's activities (i.e., what is being done). These could include types, levels, and targets of services to be delivered by the program. Outputs are not enough to show the effectiveness of an initiative, which is why they must be connected to outcomes.

[4] This section was adapted from W.K. Kellogg Foundation (2004). Logic Model Development Guide. Corporation for National & Community Service (n.d.). How to Develop a Program Logic Model.

- **Outcomes** are the expected changes in the population served that result from the program's activities. Outcomes fall along a continuum, ranging from short- to long-term results. They are broken up this way for a reason. The PZ Initiative is a 10-year initiative, but it is important not to wait for 10 years to see what happens. Short- and medium-term outcomes provide a way to check to see if outcomes are being achieved throughout the initiative; if they are not, the initiative can be corrected as needed. If outcomes are not materializing as expected, the Theory of Change may be flawed, or perhaps the program is not being implemented as intended. Any time the results are not emerging as expected, it is important to find out early and to adjust accordingly.
  - **Short-term outcomes** are outcomes that would be expected within 1–3 years, such as changes in knowledge, skills, and/or attitudes.
  - **Medium-term outcomes** are outcomes that would be expected in 4–6 years, such as changes in behavior or actions.
  - **Long-term outcomes** are outcomes that would be expected after 7–10 years, such as changes in condition or status in life.

Outputs vs. Outcomes

Both outputs and outcomes can be quantified, but while outputs refer to actions taken, outcomes refer to the results of those actions.

- **Outputs:** program activities/services (e.g., # attending workshops, # receiving services, # receiving referrals)
- **Outcomes:** changes resulting from a program's activities/services (e.g., increased knowledge of healthy choices, increased adoption of healthy practices, improved health)

Recall the example in Figure , where the PIT-B approach was applied to a program to address adolescent health through healthy eating workshops. The Logic Model would include the elements that can be used to track, measure, and understand how a program focused on healthy eating habits would impact adolescent health as shown in **Figure 8**.

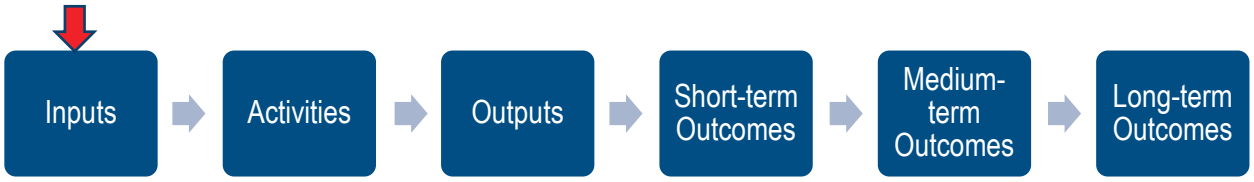
Figure 8: Logic Model Elements Example

Logic Model Element	Description	Example: Healthy Eating
Inputs	The resources that go into a program	▪ Classroom/kitchen space ▪ Funding to develop outreach materials ▪ Workshop facilitators and food preparation counselors
Activities	The activities the program undertakes	▪ Workshops on healthy food options ▪ Food preparation counseling ▪ Referrals to food programs and resources
Outputs	What is produced through those activities	▪ # workshops provided ▪ # individuals attending workshops ▪ # individuals receiving counseling ▪ # individuals receiving referrals
Short-Term Outcomes	Changes or benefits that result from the program in the near term (1–3 years)	▪ Increase in knowledge of healthy choices

Logic Model Element	Description	Example: Healthy Eating
Medium-Term Outcomes	Changes or benefits that occur in a longer timeframe (4–6 years)	▪ Increase in adoption of healthy food practices
Long-Term Outcomes	Long-term changes or benefits of the program, often at the social level (7–10 years)	▪ Development of healthy food habits ▪ Increase in overall health

It is possible to approach a Logic Model by moving from left to right in the Logic Model template —starting by identifying the inputs first, then moving on to activities, outputs, and short-/medium-/long-term outcomes as shown in **Figure 9**.

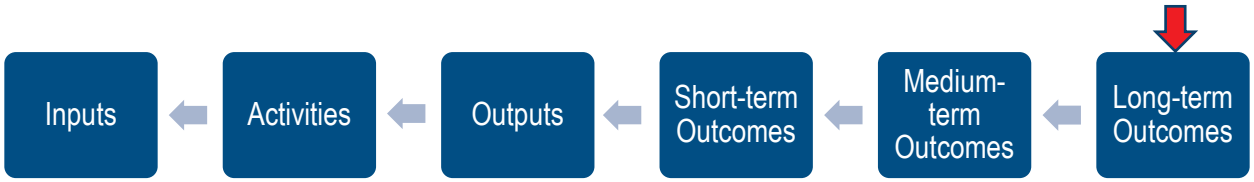
Figure 9: A Logic Model consists of key components—inputs (resources), activities (actions), outputs (products), and outcomes (expected changes).



However, this is not the only way to get to a completed Logic Model. Here are some other options:

- **Start with the desired long-term outcomes –** As illustrated in **Figure 10**, this approach starts by identifying what is hoped to be achieved (outcomes), and then thinking backward to identify what would lead to the outcomes (outputs), figuring out what the program would do to produce the outputs (activities), and then gathering the resources (inputs) needed to do the activities. This is a useful approach because it allows for thinking about the desired endpoint without being constrained by whether or not the resources to get there are available right now.

Figure 10: Reversing the order in which the Logic Model components are considered lets the desired long-term outcomes dictate how the other components should be established.



- **Start with a set of existing activities –** Starting with existing activities might be particularly relevant for PZ Initiatives, which involve a variety of project partners. These project partners may be engaged in a variety of activities already. As illustrated in **Figure 11**, this approach begins by identifying what is currently being done (**activities**) and then identifies what result those activities are likely to lead to (**outcomes**) and whether they coincide with the desired long-term changes. Any gaps can be filled in (**inputs and outputs**) based on the Theory of Change.

Figure 11: Beginning with a focus on Activities may be most practical for PZs in which many activities are ongoing; and identifying gaps may be particularly helpful.

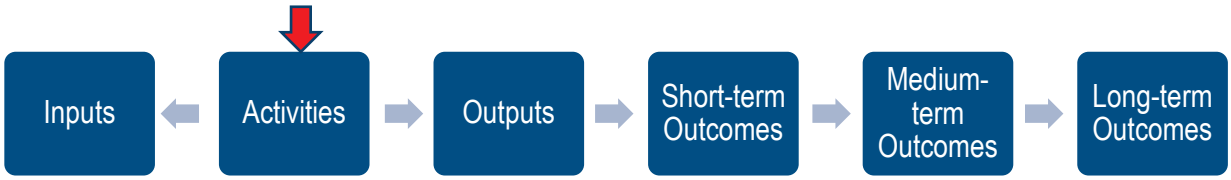
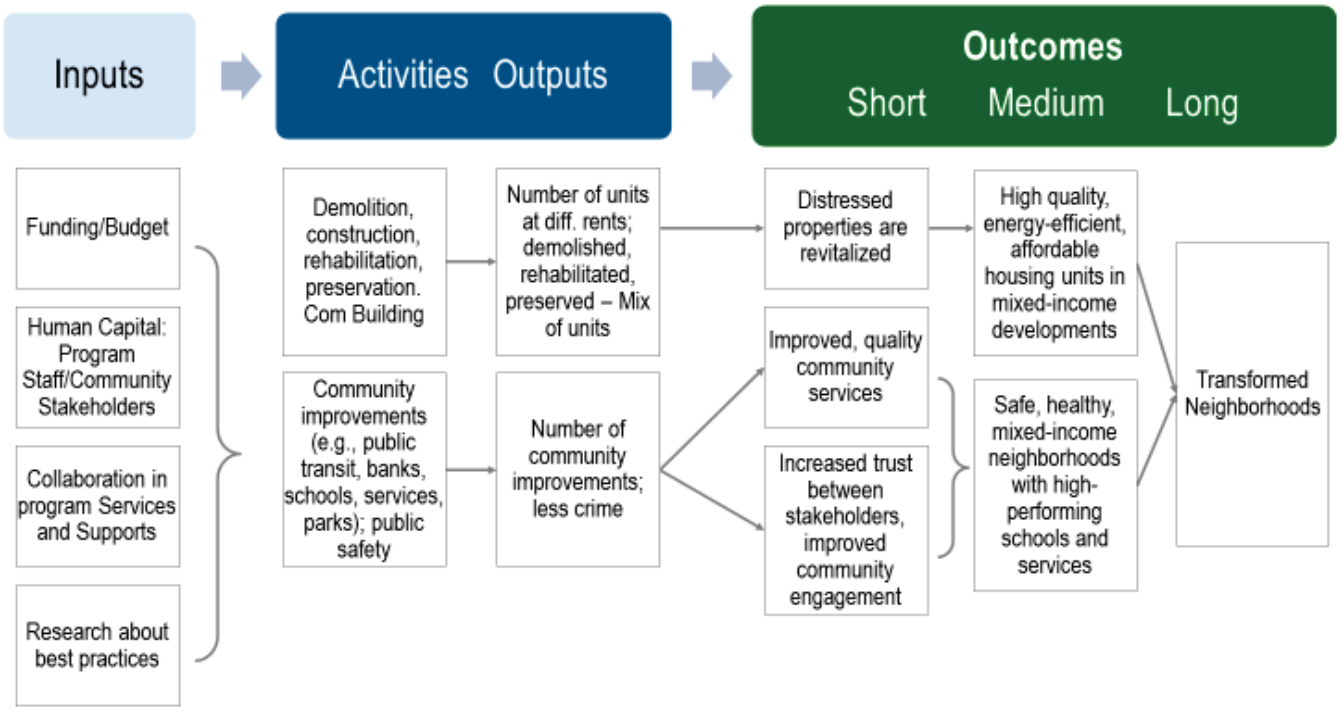


Figure 12 provides a real-life example of how all the elements of the Logic Model might come together to represent a Theory of Change visually.

Figure 12: Sample Logic Model



Source: Adapted from Philadelphia Division of Housing and Community Development, Neighborhood Plan.

Use the Theory of Change and the Logic Model

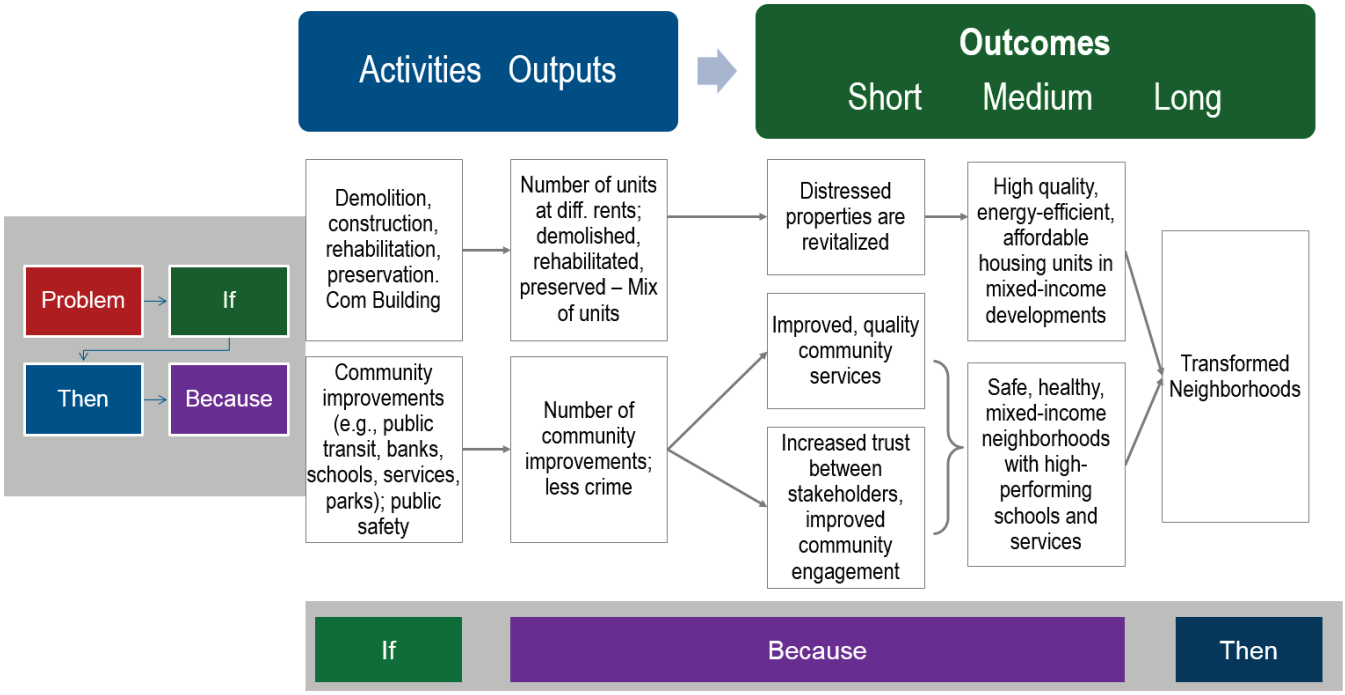
The Theory of Change and the Logic Model provide the foundation for the rest of the Data and Evaluation Framework. The process of developing the Theory of Change and the Logic Model helps communities build consensus about desired outcomes, determine what data will be collected, and decide how to track the outcomes and outputs needed to inform evidence-based decision making.

Hear from the Speaker

Hear more about addressing challenges with the Theory of Change and Logic Model from the San Diego Promise Zone. Discussion starts at about minute 1:14:00 of Session 1 - Introduction, Partner Engagement, and Theory of Change.

Stay alert to ensure alignment between the Theory of Change and the Logic Model! As illustrated in Figure , the Theory of Change's "If" will correspond with the Logic Model's activities; the Theory of Change's "Then" will correspond with the long-term outcomes; and the Theory of Change's "Because" will encompass the Outputs and Short-/Medium-term Outcomes.

Figure 13: Sample Logic Model Paired with PIT-B



Tips for Creating a Logic Model

- It is acceptable to borrow elements of a logic model from an organization with a similar mission. Just adapt to reflect the elements of your specific program.
- Remember the PIT-B. Think about how to take the problem, if, then, because statement (PIT-B) from your Theory of Change and translate it into a visual representation that includes inputs, activities, outputs, and outcomes.
- Larger or more complex place-based initiatives may develop separate Logic Models for each sector and then combine them into a single, high-level Logic Model that depicts all aspects of the Promise Zone Initiative.
- A logic model is a living product that should be adjusted as implementation progresses.

Apply Your Knowledge: Develop a Logic Model

Using the Logic Model Template in Part A of the *Data and Evaluation Framework Template* (see Appendix A), or another template already in use, develop a Logic Model for the PZ. Use what you have learned in the previous section to guide your thinking. You may also want to review the Logic Model examples, found in Appendix B, to help you envision what a completed Logic Model might look like.

Develop or revise the logic model to clearly define—

- Inputs
- Activities
- Outputs
- Outcomes (short-, medium-, and long-term)
- Identify connections among these elements
- Clearly state the Theory of Change (i.e., description and illustration of how and why a desired change is expected to happen) as the starting point for the Logic Model.

Excerpts of the Theory of Change and Logic Model from the sample framework in Appendix B are included below. Use this as a reference to complete the template in Appendix A.

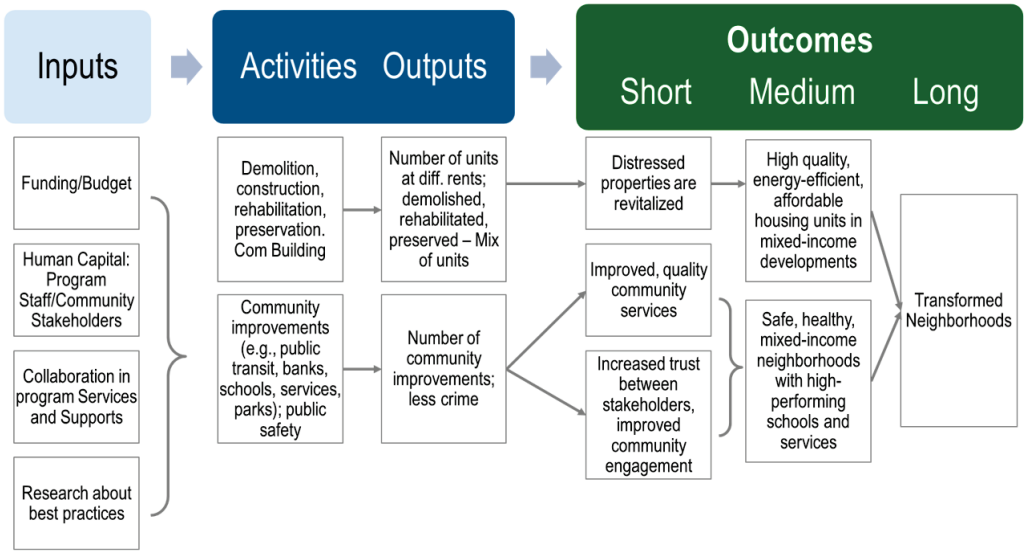
1. Theory of Change

The Theory of Change (TOC) is the foundation for your data and evaluation framework. It is a narrative description of why desired changes are expected to happen in a particular context. It does this by presenting a clearly expressed relationship between the populations (who?), outcomes (what?), and strategies (how?). Work with your team to describe your Theory of Change. Insert the PIT-B (problem/if/then/because) description you develop in the box below.

- Our **problem** is that the neighborhood is distressed. The poor state of the buildings decreases the availability of safe and affordable housing units. Along with a lack of basic amenities (e.g. public transit, school and services) and safety, the physical distress of the neighborhood negatively affects the economic opportunities available to residents by discouraging commercial establishments from moving into the area.
- **If** we rehabilitate the buildings in the neighborhood, demolish the most run-down, distressed ones and construct new buildings in their place; and if we improve the safety and amenities of the community
- **Then** we will be able to transform the neighborhood into one that provides the resources, and environment that will attract mixed-income residents.
- This is **because** revitalizing distressed properties will increase the number of high quality, energy efficient and affordable units available both for housing and commercial use in the neighborhood. Efforts to improve community services will improve the quality of these services while increasing the trust and engagement of stakeholders, leading to a safe and healthy community with high performing schools and services. These improvements will ultimately transform the neighborhood.

2. Logic Model

The Logic Model is a visual representation of the way your PZ will implement its programs in accordance with your Theory of Change. It translates the "why" you described in your The Theory of Change into a fleshed out "how." Work with your team to build or refine your logic model, including defining inputs, activities, outputs, and outcomes (short-, medium-, and long-term) and identifying connections among these elements. Insert the logic model you develop or refine below. If appropriate, your logic model may include multiple sections corresponding to different focus areas.



Chapter 3

Developing an Overall Evaluation Strategy

Chapter 3

Developing an Evaluation Strategy

Framework Elements Covered in This Chapter

Once the Framework foundation has been established through the development of the Theory of Change and Logic Model, the next step is to develop an overall strategy for carrying out the data collection and evaluation activities. To do so, consider what evaluation questions need to be answered, what evaluation design options are most appropriate and feasible, and what activities will be required to implement the evaluation design (see **Figure 14**: Framework Elements – Evaluation Questions, Design, and Activities).

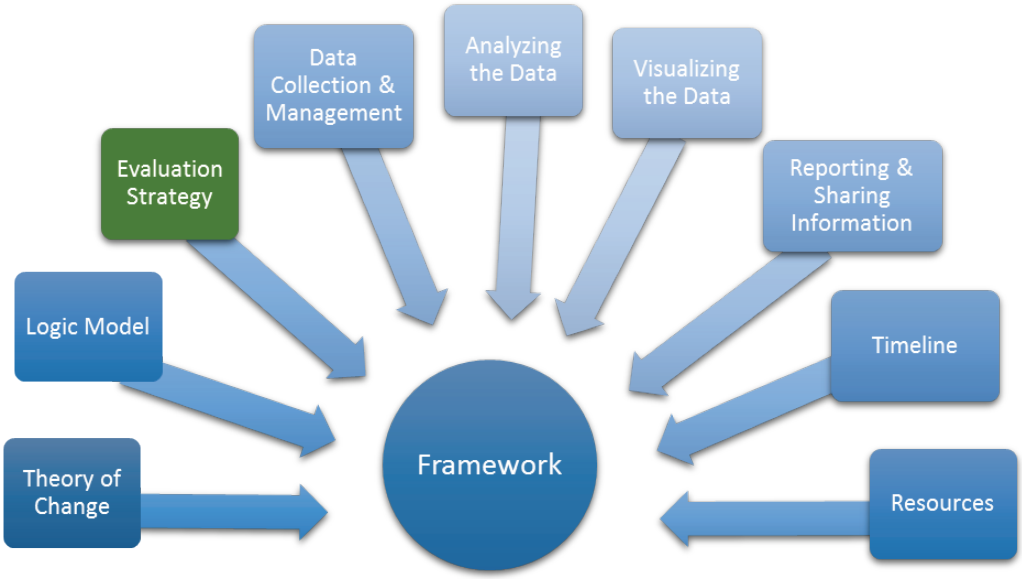
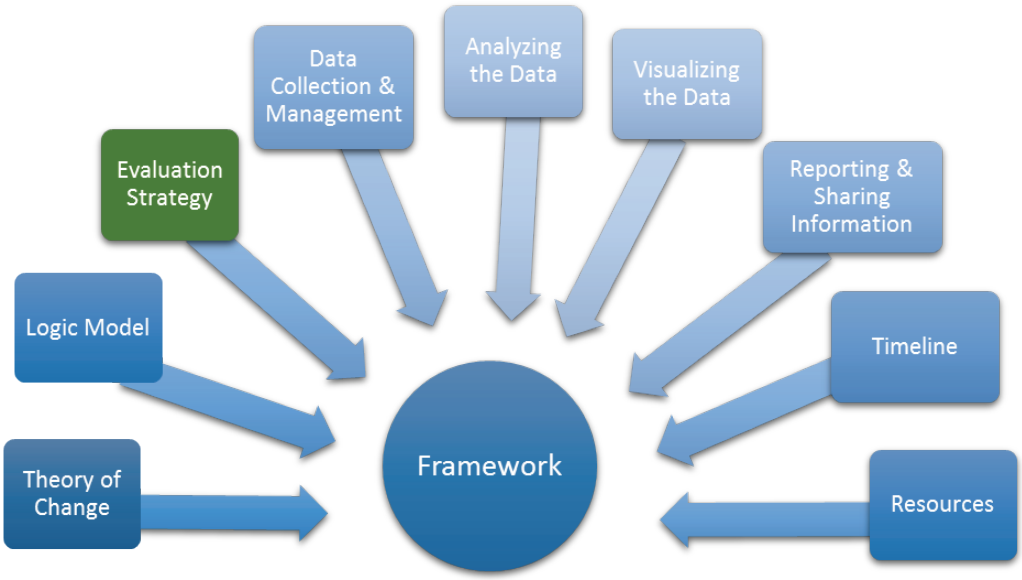


Figure 14: Framework Elements – Evaluation Questions, Design, and Activities



Developing Evaluation Questions

Having a clear Theory of Change and Logic Model is a key component of an evaluation plan; however, not every part of the Logic Model needs to be evaluated. Here are a few things to consider when determining what to evaluate:

- Long-term outcomes sometimes may not materialize during the PZ program cycle.
- The scope of evaluation must fit with the PZ's needs and resources.
- The Framework needs to be a living document and remain flexible—keep in mind that initial decisions about what to evaluate can evolve over time as resources become available or different elements of the PZ's strategy take on greater levels of significance.

Want to know more?

For more information about Evaluation Questions:

- Epstein, D. & DiTommaso, A. (2015). Laying the Groundwork Before Your First Evaluation from AmeriCorps State and National 2015 Symposium.
- How to Develop the Right Research Questions for Program Evaluation, from the Corporation for National & Community Service

Based on these considerations, and the priorities of the PZ partners, the next step is to prioritize the topics to be evaluated. The evaluation strategy should focus on the top priority elements, with the understanding that additional elements may be evaluated as resources allow or as priorities shift over time.

The specific approach an evaluation takes should be driven by the questions the PZ wants to answer based on the Theory of Change and Logic Model. Typically, the questions are tied to anticipated outcomes and will help determine whether the selected activities are producing the expected outcomes.

It is often helpful to draft evaluation questions in collaboration with the PZ partners involved. This encourages partners to describe what they believe the evaluation should address and could reveal

conflicting priorities or assumptions among the different sectors and groups working on the PZ Initiative. See Chapter 1 for strategies for engaging partners.

Connecting evaluation questions to the Logic Model is essential, but it can be tricky. Often, those involved in developing the questions have curiosity about topics that are not closely linked to the Logic Model. Sometimes the group may develop numerous questions that are connected to the Logic Model, but that would work better if combined into a more general question. Other times, the resources available for the evaluation may not be sufficient to answer all the questions identified, requiring the group to prioritize some questions over others.

Figure helps illustrate how targeted evaluation questions can be linked to the Logic Model by providing sample evaluation questions that might be posed for the Logic Model in **Figure 13: Sample Logic Model Paired with PIT-B.**

Figure 15: Possible Evaluation Questions for PZs

Logic Model Element	Possible Framing of Evaluation Questions
Less crime Number of community improvements	Has there been a decrease in the crime rate in the neighborhood? What is the number of community improvements in the neighborhood?
Improved community services	Has the number of residents receiving community services increased? Do resident assessments of the quality of the community services indicate the services are of high quality and meet their needs?
Safe, healthy, mixed-income neighborhoods with high performing schools and services	What is the income range of residents in the neighborhood? Has the average income of residents increased since the start of the initiative? Do residents in the neighborhood feel safer? Has there been an improvement in student performance on state assessments in the local schools within the PZ?
Transformed neighborhoods	Did the living conditions in the neighborhood improve? If so, how have they improved? What are the opinions of residents as to the quality of their neighborhood? Do residents assess their neighborhood as having been transformed?

Apply Your Knowledge: Develop Evaluation Questions

To start developing your evaluation methods, use Part B: Evaluation Methods in the *Data and Evaluation Framework Template* (see Appendix A) or another template already in use. Use Column 1, "Evaluation Question," to record the evaluation questions that need to be addressed. Keep in mind what you learned in this section to create targeted evaluation questions that are closely tied to your Theory of Change and Logic Model.

See Part B of Appendix B to review sample evaluation questions.

Selecting Evaluation Designs

Another key step in developing a Data and Evaluation Framework is deciding which evaluation design(s) will best answer the evaluation questions. The evaluation design lays out the approach the PZ will take to collect and analyze information about program activities, characteristics, and outcomes in a systematic way that is specifically structured to answer the evaluation questions. Together, the data collection and analysis activities need to allow the PZ to make judgments about the program's effectiveness, improve program quality, and/or inform decisions about future programming.

There are three common types of evaluation designs, as described in

Want to know more?

For more information about planning the evaluation design in a variety of contexts:

- Developing an Effective Evaluation Plan from the Centers for Disease Control and Prevention
- User Friendly Handbook for Project Evaluation from the National Science Foundation
- How to Evaluate Choice and Promise Neighborhoods from The Urban Institute
- Evaluation Design slides from the AmeriCorps State and National 2015 Symposium

Figure . Each has a different purpose and can be used to address different types of evaluation questions. Each also varies in its ease of implementation and whether it allows you to attribute the observed changes directly to the initiative. Selection of a design should be determined by which design will allow the PZ to answer its priority evaluation questions most effectively.

Figure 16: Common Types of Evaluation Designs

Allows program managers to assemble and review selected performance indicators on a recurring and frequent basis (e.g., monthly, quarterly, yearly) and use these measures to adjust resource flows and make midcourse corrections in program operations. These measures can serve as an early warning system to managers and help ensure accountability to the public. Performance measurement usually involves measuring an outcome but does not allow for the change to be attributed to the project. For this reason it is sometimes viewed as something separate from evaluation, although it is treated as a form of evaluation in this Guide.
Process or Implementation Evaluation
Examines how well a program is being implemented on the ground and whether the implementation matches the theory behind its creation. This evaluation identifies why certain elements work or not and how the program can be improved. It can be used to inform program improvement, as well as to provide insights to explain the findings from outcome evaluations. Process/Implementation evaluations are used to address evaluation questions related to the *Inputs* and *Activities* sections of the Logic Model.
Outcome or Impact Evaluation
Addresses how changes are taking place among its participants or beneficiaries, and impact evaluation provides evidence about whether the initiative caused these observed changes. While it is often easy to observe change that happened during an initiative on certain outcomes, it is much more difficult to prove that the change was caused by the initiative. Outcome/Impact designs are used to answer evaluation questions related to the *Outcomes* parts of a logic model. Although the terms are sometimes used interchangeably, outcome evaluation often provides answers about outcomes without allowing for attribution; impact evaluation addresses causality. Designs that help assess the outcome or impact of an initiative, listed from least rigorous to most rigorous, include: ▪ **Non-experimental design:** Through mechanisms such as comparing the outcomes before and after the program, or administering a pre-/post-test, this design allows for measurement of the change that happened during the program. It does not, however, produce causal evidence about the program. This means that if a change occurred, it is impossible to say whether the program is what caused the change. ▪ **Quasi-experimental design:** This design compares outcomes for a treatment group (those exposed to the initiative) with outcomes for a comparison group (those not exposed to the initiative). The comparison group is selected to match the treatment group as closely as possible to allow for inferences about the impacts of the program but is not assigned randomly. ▪ **Experimental design (also known as a randomized controlled trial study):** This design randomly assigns participants into a treatment group or a control group so that they are statistically equivalent at the beginning of the implementation of the initiative, and any difference after the initiative can be attributed to the initiative itself.

Evaluation questions should always drive the evaluation design and data collection activities. At the same time, there is usually a tradeoff between rigor and time/resources spent on an evaluation—with randomized controlled studies being considered the most rigorous, but also the most costly in terms of time and resources. PZs will need to decide what types of evaluation to use by balancing the needs of the study against available resources.

Figure shows sample types of evaluation questions and how they relate to the logic model and specific evaluation designs.

Figure 17: Evaluation Questions Matched to Evaluation Designs

Evaluation Question	Relation to Logic Model	Evaluation Design
▪ Is the project reaching the intended number of participants? ▪ Is the project providing the planned services?	▪ Outputs	▪ Performance measurement
▪ Are the activities being performed as planned? ▪ Is the project reaching the intended target population? ▪ How satisfied are the participants with their involvement in this project?	▪ Activities ▪ Inputs	▪ Process/ implementation evaluation
▪ Did the participants experience any changes in their knowledge, attitude(s), and behavior(s)? ▪ What are the effects of the project on the organization (e.g., enhanced partnerships) or community?	▪ Outcomes	▪ Outcome/ impact evaluation

Apply Your Knowledge: Determine Priorities for the Evaluation Design

Continue developing your evaluation methods using Part B: Evaluation Methods in the *Data and Evaluation Framework Template* (see Appendix A) or another template already in use. Use Column 2, Evaluation Design, to record the type of evaluation design that will be used to address each Research Question. See Part B of Appendix B to see how evaluation designs can be matched with evaluation questions.

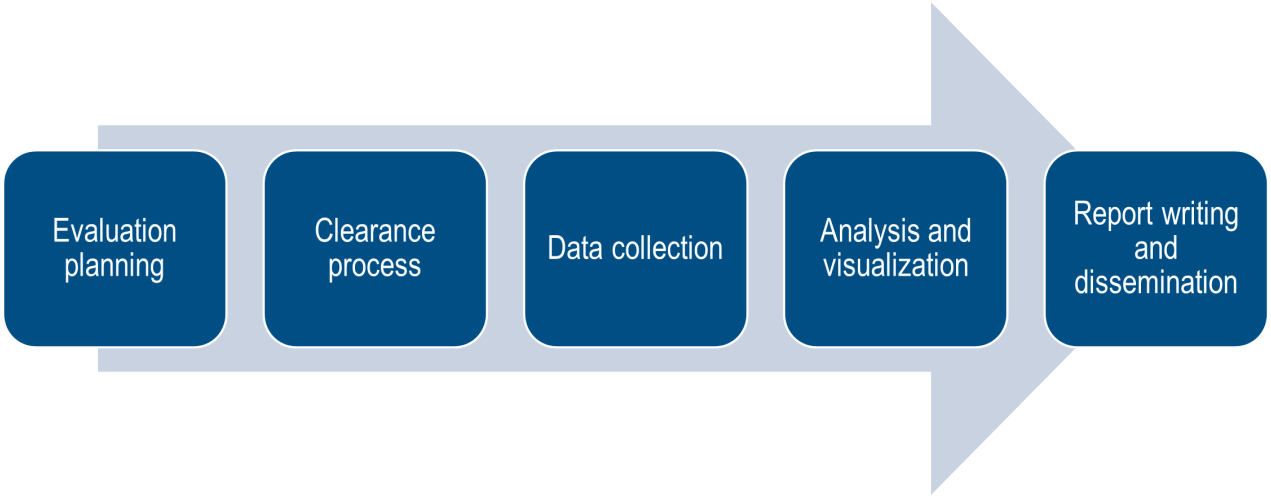
- Consider which topics are most important to understand and track in order to gauge the effectiveness of the PZ's activities.
- Assess which elements may be most practical to evaluate (e.g., is an evaluation required by a funding source contributing to one of the PZ's programs?)
- Determine whether certain PZ partners are well prepared to conduct an evaluation.
- Examine how your research questions align with your Logic Model to help you think of the most appropriate research design.

Planning for Evaluation Activities

Once the evaluation design for each research question has been identified, it is time to think the design through in somewhat more detail. For each part of the evaluation, it is important to consider each of the elements identified in Figure and get concrete about the specific activities that will be required to achieve each one.

The level of detail for listing activities should be much more fine-grained for those pieces of the evaluation that will happen in the near term, and may be more general and higher level for those that will take place in later years; however, having a clear sense of the activity 'chunks' that will need to take place at different points throughout the PZ designation will help the PZ stay on track to collect, analyze, and disseminate information at appropriate points. These activities will be further explored in the subsequent chapters.

Figure 18: Evaluation Framework Timeline



Apply Your Knowledge: Evaluation Activities

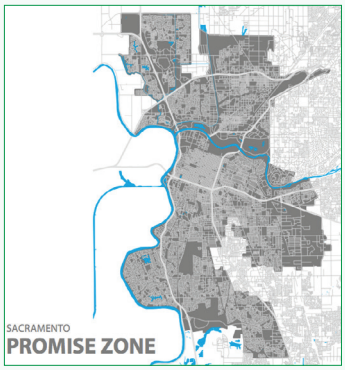
Now that you have evaluation questions and evaluation designs sketched out in *Part B* of the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use), you are ready to move to *Part D: Activities and Timeline.* Copy the Evaluation Questions to column 1 of *Part D: Activities and Timeline*. Then use column 2 to lay out the Activities that will be needed to implement the evaluation design associated with each research question. You will complete the timeline later.

See *Part D: Activities and Timeline* of Appendix B to see how research questions drive the activities needed to implement each evaluation design.

- Initially, consider listing the activities at a fairly high level (e.g., data collection, analysis, and reporting) for each component of the evaluation. Circle back to flesh out those components that need a more detailed plan as the time comes for implementation.
- Identify who will be responsible for each activity; they can continue to add more details.
- Look at all the activities listed, consider whether any of them will be occurring simultaneously, and plan accordingly. Sometimes, concurrent activities can piggyback on each other effectively; other times, they could interfere with each other.

Example: Moving from Theory of Change/Logic Model to Data and Evaluation Framework – Sacramento PZ

The Sacramento Promise Zone encountered several challenges and opportunities in moving from a Theory of Change/Logic Model to a full Data and Evaluation Framework, and emerged with some recommended approaches and resources.



Challenges

- Limited stakeholder understanding of the Promise Zone
- Range of stakeholder capacity and resources to evaluate
- Concerns about data collection and sharing
- Concerns about accountability and shared credit

Opportunities

- Slow down, step back
- Engage stakeholders
- Pursue creative avenues to conduct an evaluation with limited
- resources

Recommended Approach

- **Establish a shared understanding of what is a Promise Zone**. Emphasize the Promise Zone's purpose and intended impact.
- **Shift the mindset around evaluation**. Clarify why it is important to evaluate and the benefits of evaluation.
- **Produce an initial evaluation framework**. Then, acknowledge that it is a living document and use it as a "skeleton" for further development
- Create a clear **process and timeline for future collaboration.** Evaluating a PZ is an ongoing challenge and needs to be structured for long-term success.

Resources

- Sacramento Promise Zone Guidebook
- Sacramento Promise Zone Toolkit
- Sacramento Promise Zone Executive Summary

Hear from the Speaker

Hear more from the Sacramento PZ at about minute 58:30 of Session 2 - Developing a Data and Evaluation Framework for Urban Promise Zones.

An excerpt of the Evaluation Methods from the sample framework in Appendix B is included below. Use this as a reference to complete the template in Appendix A.

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy
Q1: How many houses have been rehabilitated, demolished and constructed? (output)	Process evaluation	# units rehabilitated # units demolished # units constructed	Secondary Data: Administrative records from partners	Quantitative Analysis: Descriptive statistics (count overall, by sector)	Trend line
Q2: What are the challenges with implementation?	Process evaluation	Type of challenges	Primary Data: Stakeholder interviews	Qualitative Analysis: Content analysis	Illustrative quotes
Q3: Has individual connectivity to neighborhood increased? (short-term outcome)	Outcome evaluation	Perceived connectivity to neighborhood (Group D)	Primary Data: Survey of residents	Quantitative Analysis: Descriptive statistics (mean overall, by sector), Comparative statistics	Trend line, GIS, infographics
Q4: Have the schools improved? (medium-term outcome)	Outcome evaluation	High school graduate rate (Group B)	Secondary Data: School district student records	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics
Q5: How many households are below the federal poverty line? (long-term outcome)	Outcome evaluation	Income (Group A)	Secondary Data: Census ACS	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics

Chapter 4

Data Collection & Management

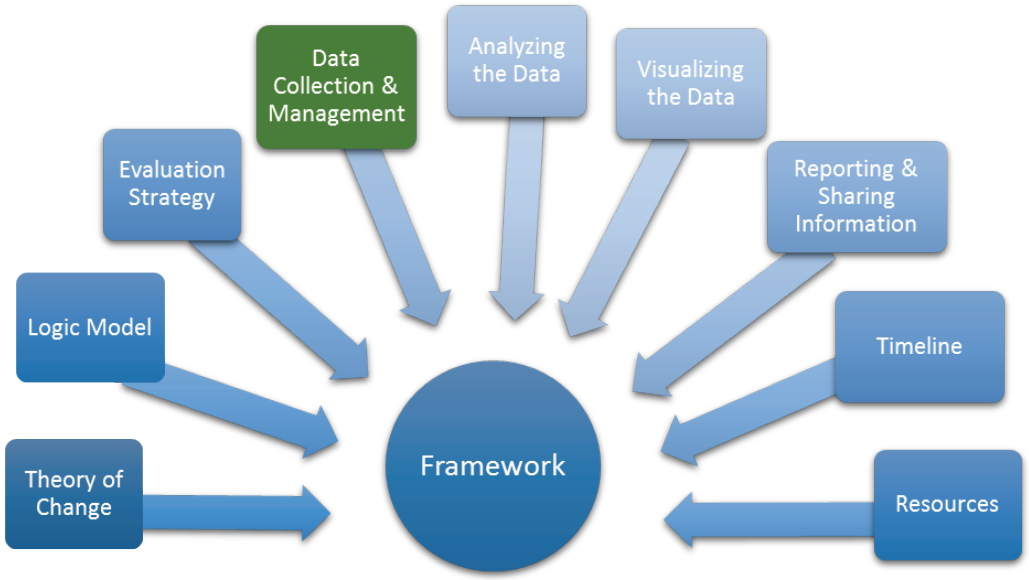
Chapter 4

Data Collection & Management

Framework Elements Covered in this Chapter

Once it is determined what questions need to be answered and what evaluation design will be used to answer those questions, the next step is to determine what data will be required and how to get the needed information. This chapter reviews the data types and sources available to continue to fill in the framework (see **Figure 19**).

Figure 19: Framework Elements – Data Types and Sources



Understanding Group Indicators

A key step in developing a data and evaluation framework for the PZ initiative is selecting the data indicators that will be measured to help gauge the results of the program. Each indicator will provide information needed to answer one or more of the evaluation questions.

What is an indicator?

A specific, observable, characteristic that can be measured to show the progress a program is making toward achieving a specified outcome.

What are Group A, B, C, and D indicators?

HUD categorizes indicators for PZ Initiatives into four groups—groups A, B, C, and D—based on how they are collected. These four groupings are specific to PZ Initiatives, and organizing and discussing indicators

in this way helps frame the PZ's thinking about what data to collect and how to get it as efficiently as possible (see Figure).

- **Group A Indicators –** These are national data tracked at the local level, which can be obtained from sources like HUD, USDA, and the U.S. Census Bureau.
- **Group B Indicators –** These are data that cannot be tracked from national sources but instead require local data.
- **Group C Indicators –** These are similar to group B indicators in that they also come from local data, but unlike group B indicators, group C indicators must be informed by local definitions and context.
- **Group D Indicators –** These data are only available through individual-level data collection methods, including, but not limited to, surveys.

HUD's Expectations About Group Indicators

HUD's expectations about PZ use of group indicators are laid out in *Section 8: Data and Evaluation* of the designation agreement for each Promise Zone. HUD agreed to provide PZs with group A data; support PZs in obtaining group B, C, and D data; help them conduct evaluations; and help them showcase their work to federal partners and other stakeholders.

To learn more, listen to Tanim Awwal of HUD discuss HUD's expectation in Session 3 of the Developing a Data and Evaluation Framework for Urban Promise Zones (minutes 17:06–19:33).

The example of the Los Angeles Promise Zone's use of Group indicators below illustrates how these indicator Groups play out in the context of a Data and Evaluation Framework.

Figure 20: Group Indicators—Definitions and Examples

Groups	Definitions	Examples
Group A	Indicators/measures that are possible to track from HUD and/or USDA; "National Data at Local Level"	▪ Jobs created ▪ Job sectors ▪ Income ▪ Employment by sector ▪ Poverty concentration ▪ Property values
Group B	Measures that require "Local Data"	▪ Building permits ▪ Crime rates ▪ High school graduation rates ▪ Chronic absenteeism
Group C	Indicators/measures that must be informed by "Local Definitions and Context"	▪ School quality ▪ Workforce development participation ▪ College entry ▪ Homeownership ▪ Access to pre-K or early childhood education ▪ Healthy food access
Group D	Information only available via survey, crowdsourcing, and other individual-level data collection methods	▪ Perceived neighborhood quality ▪ Community connectedness ▪ Perception of safety and community trust in law enforcement

Example: LA Promise Zone's Use of Group Indicators

According to the Los Angeles Promise Zone, different data within each group are being collected and used during different time periods—short-term, mid-term, and long-term—based on when they are available and when they might be expected to show change. Some indicators, such as labor market engagement (Group A), chronic absenteeism (Group B), and workforce development (Group C), will be collected across multiple time periods.

	Short-term (1–3 years)	Mid-term (4–6 years)	Long-term (7–10 years)
Group A (National Data)	▪ New neighborhood amenities ▪ New investment – money leveraged by source, etc. ▪ SNAP retailers (short- and mid-term)	▪ Jobs created ▪ New businesses ▪ Employment and unemployment rates ▪ Units affordable housing ▪ SNAP retailers (short- and mid-term) ▪ Labor market engagement (mid- and long-term)	▪ Income/wages ▪ % households below FPL ▪ Severely rent burdened HH ▪ Property value – median sales price ▪ Labor market engagement (mid- and long-term)
Group B (Local Data)	▪ New investment – building permits ▪ Community trust in law enforcement	▪ Crime rates ▪ Chronic absenteeism (mid- and long-term)	▪ HS graduation rate ▪ 3rd grade reading levels ▪ Chronic absenteeism (mid- and long-term)
Group C (Local Definition)	▪ Access to pre-K ▪ Healthy food access ▪ Workforce development (e.g., new certificates) (short- and mid-term)	▪ Homelessness ▪ Homeownership ▪ Workforce development (e.g., new certificates) (short- and mid-term)	▪ School quality ▪ College entry
Group D (Survey)	▪ Individuals connected to community	▪ Perception of neighborhood quality ▪ Perception of safety	

Using Indicators to Operationalize Outcomes

There are many decisions to make when choosing indicators to inform PZ data and evaluation efforts, but it is important to use practical considerations when choosing among possible indicators, such as whether they are readily available, easy to analyze, available in the right timeframe, and available for the right geographic region.

Using the SMART (Specific, Measurable, Attainable, Reliable, Timely) indicators approach[5] can help with selecting the right indicators and linking them to the

Want to know more?

To learn more about effective indicators, see:

- Six Steps to Success: Collecting and Using Performance Data in Place-Based Initiatives for a summary of keys to establishing effective indicators.
- BetterEvaluation.org for links to a wide range of sample indicators, from education, to poverty, to child welfare.

[5] Adapted from Centers for Disease Control and Prevention, Develop SMART Objectives.

identified evaluation questions, which will ultimately achieve the goals of the evaluation. Developing SMART indicators helps:

- Minimize data collection and analysis by choosing a few well-targeted indicators.
- Clearly operationalize indicators.
- Avoid indicators with an inherent bias.
- Avoid indicators that are collected too infrequently.

Recall the example describing the program designed to improve adolescent health through healthy eating workshops that encourage participants to make better food choices. In thinking about indicators that can be used to evaluate the program, those that are specific, measurable, attainable, reliable, and timely will best measure the program's outcomes. Below are some practical tips on how to operationalize the SMART approach.

"S"	▪ Indicators should be **specific** to the outputs or expected outcomes of the initiative, clearly tied to the evaluation questions, and simple. ▪ Choose an indicator that clearly and precisely relates to the outcomes of interest like "the number of people who reported making better food choices as a result of the training" over one like "the number of people in the training who use food stamps after the training." While data about which participants are on food stamps might be interesting and tangentially related to the project, it does not specifically address the expected outcome of the initiative the way the more specific one does.
"M"	▪ Indicators should be **measurable** and unambiguous. ▪ Choose an indicator that clearly articulates how a change is being measured, like "the number of people who scored higher on the Nutrition Knowledge quiz at the end of the training than on the pre-test" over one like " the number of people whose knowledge increased as a result of the training." While both indicators set out to show a change in knowledge, the second indicator is not clear about how an increase in knowledge is defined.
"A"	▪ Indicators should be **attainable**. ▪ Choose an indicator that is readily available and easy to analyze, like "the number of people who reported having fewer health problems as a result of the training" over one like "medical problems before and after the training that resulted from poor nutrition." While it would be valuable to know about medical problems that occurred, it would be difficult to obtain this information without access to participants' medical records.
"R"	▪ Indicators should be **reliable** so that different people can measure them and reach the same results, and they can be collected again with similar results. ▪ Choose "opinions about the training obtained from a follow up survey" over "opinions expressed in unsolicited emails that came in after the training." Opinions from a survey are standardized, whereas unsolicited opinions might contain inherent bias and might not reflect a representative sample of participants' opinions.
"T"	▪ Indicators should be **timely** for decision making and be able to show trends over time. ▪ If a program lasts for only 6 months, but the indicator is collected once every 4 years, the data cannot be collected in a way that will show change between the beginning and end of the program. ▪ Choose an indicator, such as "*participant blood pressure 3 months after the end of the training*" over one like "*participant blood pressure 10 years after the training*." While participant blood pressure 10 years later might show change, it is likely not possible to obtain this data so long after the training has ended, and the change may not be a direct result of the program.

Example: Are your indicators SMART?

The examples below show ways to revise indicators that are not SMART to make them more effective.

Not SMART	SMART
Not Specific # of people in the training who use food stamps after the training	**Specific** # of people who reported making better food choices as a result of the training
Not Measurable # of people whose knowledge increased as a result of the training	**Measurable** # of people who scored higher on the Nutrition Knowledge quiz at the end of the training than on the pre-test
Not Attainable Medical problems before and after the training that resulted from poor nutrition obtained from participant medical records	**Attainable** # of people who reported having fewer health problems as a result of the training
Not Reliable Opinions expressed in unsolicited emails that came in after the training	**Reliable** Opinions about the training obtained in a follow-up survey
Not Timely Incidence of high blood pressure 10 years after the training	**Timely** Incidence of high blood pressure 3 months after the training

Data Types

Group A, B, C, and D indicators can be further categorized by their data type—quantitative or qualitative. Each type of data can help answer a different type of question. For example, quantitative, or numerical data, can help answer "what" questions, while qualitative data can help answer "why" questions, further explaining what is going on with the quantitative measures. Quantitative and qualitative techniques provide a tradeoff between breadth and depth, and between generalizability and targeting to specific (sometimes very limited) populations, so it is important to make use of both types of data for a more complete evaluation. See Figure for a comparison of quantitative and qualitative data.

What is the difference between Quantitative and Qualitative Data?

Quantitative and qualitative data both have a place in an evaluation, but they are analyzed very differently.

- **Quantitative data:** Information that can be expressed in numerical terms, counted, or compared on a scale.
- **Qualitative data:** Information that is difficult to express in numerical terms (e.g., knowledge, attitudes, perceptions, and intentions).

Quantitative Data

Quantitative data take a numeric form, and can be counted, compared on a scale, or assessed using statistical analysis (e.g., frequencies, means, crosstabs, regressions). Often, quantitative data are collected for a sample of people and generalized across a larger population. Sometimes quantitative data come from program records or other direct observation of conditions or behaviors (e.g., number of people served). Other times, they are collected through questionnaires with pre-defined response options (e.g., multiple

choice, rating scales) that allow people to self-report their behaviors or opinions. These measures provide the "hard data" to show whether changes are occurring in the domains targeted by the PZ programs.

Qualitative Data

Qualitative data are non-numeric, and often take a narrative form. A transcript from an interview, quotes from comments provided on a survey, information from program plans or reports, or photographs can all provide important information that cannot be analyzed with statistics. Analysis of qualitative data does not produce statistical evidence of a program's impact, but can provide insights to help explain the results of a quantitative analysis. Qualitative data are often more labor intensive to collect and analyze, so typically involve fewer study subjects, but they can add considerably to a clear understanding of the reasons for a program's outcomes. These measures provide the insights and context needed to interpret the quantitative data and make appropriate programmatic adjustments.

Coding

Qualitative data must often be "coded," meaning it must be organized and translated in a way that makes it possible to identify trends, themes, or patterns. Chapter 5 (*Analyzing the Data*) discusses the concept of coding qualitative data.

Figure 21: Comparison of the Features of Quantitative and Qualitative Data

	Quantitative Data	Qualitative Data
Data format	Numeric	Narrative
Scope	Less in-depth data across a larger number of study subjects	More in-depth data on fewer study subjects
Data collection	Standardized data collection with mainly closed-ended questions (i.e., questions with pre-defined response options) such as surveys, multiple-choice assessments/tests, program data	Data collection can be standardized or semi-structured, mainly with open-ended questions (i.e., questions with no pre-defined response options) and can be used for interview, focus group, and observation protocols
Data analysis	Statistical approaches used to summarize the data (frequencies, means, crosstabs, regression)	Content analysis often used to identify, categorize, code, and summarize themes/patterns in the data
Results	Results can be compared, summarized, and generalized to a larger population; may provide statistical evidence of program impact	Results provide meaning, illustrative explanation, and views of study subject(s); NOT able to provide statistical evidence of program impact
Group	Group A, B, C, or D	Collected as Group D only, but can help explain what is happening in any group

Data Sources

Another key distinction between the group indicators is the source from which the data is obtained.

Group A, B, and C indicators involve **secondary data sources** and are drawn from data that already exist. Sources could be internal program data, such as participant records, program logs, or performance measurement data. Sources could also be from external sources that provide student test scores, medical records, census data, or unemployment insurance claims.

Group D indicators require **primary data** that must be collected from primary sources, such as new data from surveys, assessments, interviews, and observations.

Both data sources have advantages, but there are also challenges associated with each. See **Figure 22** for a list of pros and cons of primary and secondary data. For an excellent starting point for considering possible indicators and related data sources, see Appendix E: Matrix of Common Measures for Key Quality of Life Indicators.

Figure 22: Pros and Cons of Primary and Secondary Data

	Pros	Cons
Primary Data	▪ Collecting primary data is the only option when secondary data are not available ▪ Data can be closely aligned with the evaluation purposes and needs	▪ Collecting primary data can result in low response rates ▪ Primary data are more burdensome to collect than secondary data ▪ Primary data are more costly to collect than secondary data
Secondary Data	▪ Less expensive than collecting new data ▪ Often more complete	▪ Not tailored to the specific evaluation ▪ May be out of date ▪ May not be in a format that is easy to use, understand, or analyze ▪ Gaining access can be challenging

Data Collection

Smart and systematic data collection is vital to the evaluation. Poorly thought through data collection methods can waste resources, fail to answer the evaluation questions, or even lead to inaccurate or invalid evaluation results. In the most serious cases, improper data collection can harm the evaluation subjects (for example if sensitive or confidential information is disclosed). To avoid these pitfalls, the Data and Evaluation Framework includes a section for planning the data collection methods to be used for each indicator.

Approaches to Collecting Secondary Data

A successful evaluation relies on data that are available, useful, and aligned with the evaluation's objectives, but collecting these data can be challenging.

For some indicators, secondary data can be obtained from existing data sets. In these instances, the data collection methods portion of the Framework should specify the specific source, and the PZ will need to think through who will be responsible for obtaining the information. When collecting data for these indicators, PZs should carefully document the protocol for obtaining the information so that each time the data are collected (potentially by different people) the data selection parameters are the same so the data from different time periods can be compared.

Hear from the Speaker

Learn more about DUAs and listen to a discussion with HUD at about minute 48:30 of Session 3 - Data Collection and Management.

For other indicators, there may be challenges associated with identifying the appropriate data provider (who has the needed data?), communicating the data needs (what exactly is needed?), and ensuring data is

ongoing and timely (how do we make sure we get the data we need throughout the evaluation?). Prior to identifying and approaching data providers with data requests, it is critical to develop a clear understanding of what information is needed, in what format it is needed, how frequently it is needed, and how the data will be used to inform the evaluation. Once outlined, these considerations need to be communicated clearly to the data provider in order to get their agreement to provide the needed data up front and keep them engaged throughout the evaluation. This is often done through a **data usage agreement (DUA)**.[6]

A DUA is a contractual document used to stipulate the terms for transferring data that are nonpublic or otherwise subject to some restrictions on their use. DUAs outline the responsibilities of the data provider—the nonprofit, government, or private entity that collected the data and is responsible for its use—and the data receiver. They can take the form of formal contracts or more informal memos.

Key items to include in a DUA are:

- What are the data provider responsibilities?
- What data will be provided?
- In what format will the data be provided?
- How will the data be transmitted?
- How frequently will the data be shared?
- What are the data receiver responsibilities?
- How will the data be used?
- How will the data be kept confidential?
- Are there any restrictions on reporting?
- How will the data be disposed of?

Data Usage Agreement (DUA)

The DUA is one of the most important tools for PZs. With a range of stakeholders and partners involved in collecting the information needed to evaluate progress, PZs must have an effective mechanism for establishing and maintaining data-sharing relationships

DUAs must be customized to the organizations involved and the field of study (e.g., education, health, justice) because each may have its own requirements. Note that organizations with complicated DUA requirements typically have existing DUA forms and procedures in place. If the organization with which you want to develop a DUA does not have its own format, you can readily find examples of DUAs in a related field on the Internet.

Keep in mind the following considerations when collecting secondary data:

- **Consider the cost of data –** Publicly available data may be free or may have a fee associated with its use. Consider whether the fee can be covered within the resources available for the evaluation. If not, determine whether there are free data available that can be used to answer the same research questions instead; however, paying a fee for secondary data access is likely less expensive than collecting primary data.
- **Plan ahead –** If collaborating with other organizations, ask them what data they collect while administering their programs and whether they are willing to share it.
- **Leverage data from partners –** Partners may have access to additional nonpublic datasets, such as credit or health data, that can be used for the evaluation.

Where to find Secondary Data Sources for PZ Evaluations

See Appendix E, *Common Measures*, for ideas about data sources for different types of indicators.

[6] For more information about DUAs, see Data Use Agreement Guidance from the University of North Carolina.

- **Think about sector-specific considerations –** Certain types of data will have specific considerations, such as HIPAA requirements for health-related data, FERPA requirements for education-related data, and criminal justice considerations for data about crime and safety.

Approaches to Collecting Primary Data

For primary data collection, more detailed planning is needed. For program data, it will be important to ensure that the data are being collected systematically and recorded in a format that will allow the evaluation team to manipulate the information for statistical analysis. For indicators that cannot rely on data collected as part of program operations, the PZ may decide to adopt or adapt existing data collection instruments or may need to construct their own (e.g., survey instruments, observation templates, interview guides, focus group protocols). When adapting or constructing data collection instruments, be sure to craft questions in a way that will not influence the answers (i.e., they should be unbiased).

Collecting data well can be harder than it sounds! The PZ data partner can be a great resource for developing solid and reliable data collection protocols.

Collecting Quantitative Data

There are two main approaches to primary data collection for quantitative data—surveys (e.g., the Census, a client satisfaction survey) and assessments/tests (e.g., a standardized reading test, a test of participant knowledge before and after a class). PZs can obtain existing data from national or local sources (groups A, B, or C), or collect new quantitative data, typically through surveys or tests (group D).

- **Surveys –** Surveys are standardized instruments for collecting quantitative data from a targeted group. They are generally comprised of well-specified, closed-ended questions (e.g., multiple choice, rating scale). Be aware, however, that surveys may include open-ended questions—which collect qualitative data.
- **Assessments/Tests –** Whereas surveys collect information about opinions or experiences, assessments and tests collect information about respondents' knowledge, skills, or performance. Commercially available tests can be used or new tests can be developed and tailored to a specific program model.

Both surveys and assessments/tests can be administered by asking the respondent to provide answers in writing (email/online or on paper) or verbally by reading questions aloud (in person or by telephone) and recording the respondents' answers.

Keep in mind that surveys and assessments/tests can be administered to all participants of a given program or to a sample of participants. Using sampling can save time and money but needs to be done carefully to ensure that the sample is representative of the participant population.

Collecting Qualitative Data

Common methods used to collect qualitative data are interviews, focus groups, participant observation, and document review. These approaches let the evaluator explore nuances in depth, but they can be time-consuming to plan and implement, and they take some special skills to do well. One temptation to avoid is coming to conclusions based on the information being gathered before conducting a careful analysis. When

collecting qualitative date, keep in mind that it must eventually be analyzed as rigorously as quantitative data. Analysis techniques are discussed in Chapter 5 (*Analyzing the Data*).

- **Interviews –** Interviews collect information by talking with and listening to people, such as gathering stakeholder perspectives about their experience with PZ programs. They can be administered either in person or via telephone. Interviews often use open-ended questions which produce richer information because participants can elaborate more fully on their responses than in survey responses. Some interviewers may be very structured (i.e., the interviewer asks each interviewee a very specific set of questions), whereas others allow interviewers a significant amount of flexibility to adapt the flow of the interview to the specific participant.
- **Focus Groups –** Focus groups are similar to interviews, but they collect information through a guided small-group discussion, such as bringing different types of stakeholders together to discuss their experience with PZ programs. Focus groups can be beneficial because they allow participants to build on each other's ideas.
- **Participant Observation –** The key to participant observation is that the activity takes place in a natural setting where the observer is a "fly on the wall." For example, classroom observation involves the observer sitting in the back to observe while trying to be as unobtrusive as possible. Participant observation lets the observer see how something is working in a natural setting, but it requires the researcher to take lengthy and descriptive notes about the behaviors being observed, and the behaviors must be interpreted.
- **Document Review –** A document review involves analyzing and summarizing existing written information (e.g., meeting minutes, program logs, training materials/manuals, or annual performance reports). Reviewing documents can help the researcher understand the context, content, and implementation of a program. This method is particularly useful for describing institutional characteristics, policies and practices. Sometimes, information obtained from reviewing documents informs the development of survey instruments or interview protocols. The burden for providing the data for document review is usually low because the documents already exist, but it can be tricky to analyze them because the documents were not created for the purpose of an evaluation and therefore may not be complete or contain all of the information needed.

When collecting primary data, consider the following tips.

- **Use sampling to reduce cost**
  - Random sampling – collect data from a sample (or a part) of the population that is randomly selected to ensure it is representative of the whole population. It can be as accurate as collecting data from the entire population, but at a lower cost.
  - Purposeful sampling – select certain members of the population to collect data from because they can provide rich information, such as data about the best or worst cases. This technique is especially useful for qualitative studies; however, because the response rate is lower than with collecting data from the entire population or random sampling, it could introduce bias because only people who feel strongly (negative or positive) are likely to respond.

- **Minimize participant burden**
  - Keep surveys as short as possible.
  - Avoid administering surveys during conflicting events (e.g., holiday periods or school testing periods). This ensures the highest possible response rate.
- **Focus on improving response rates**
  - Collect data in person – This encourages participants to respond and can work especially well when gathering data about something that will be fresh in the participant's mind.
  - Send reminders – Use multiple modes of contact to remind people to complete the surveys.
  - Provide incentives – Offering incentives like gift cards or food encourages participants to respond.
  - Explain how results will be used – This reminds participants how their responses can help improve the program.

See Figure for a list of pros and cons of each data collection method.

Figure 23: Pros and Cons of Quantitative and Qualitative Data Collection Methods

	Pros	Cons
Quantitative Data		
Survey	▪ Quick and efficient ▪ Can cover a wide range of topics ▪ Obtain responses from large number of people ▪ Can be completed anonymously ▪ Easy to compare and analyze	▪ High response rates to avoid response bias are important, but may be difficult to achieve ▪ May lack in-depth information on a topic/subject ▪ Respondents may misunderstand questions
Assessment/ Test	▪ Provides objective information on knowledge and skills of participants ▪ Easy to compare and analyze	▪ May be biased against some groups of test takers
Qualitative Data		
Interview/ Focus Group	Interviews: ▪ Explore a range and depth of topics ▪ Yield rich data ▪ Opportunity for interviewer to explain or clarify questions Focus Groups: ▪ Efficiently obtain varying opinions and perspectives in a short time ▪ Respondents build off of each other's ideas	▪ May be difficult to analyze and compare data ▪ Requires trained interviewers/facilitators ▪ Potential desire of respondents to respond favorably ▪ Time-consuming to transcribe and analyze responses ▪ May be difficult to schedule meetings
Participant Observation	▪ Opportunity to view program operations in action ▪ Provide direct information about behavior of individuals and groups ▪ Data occur in a natural setting	▪ Requires experienced and well-trained observers ▪ Observer's selective perception may influence data ▪ May be difficult to interpret behaviors
Document Review	▪ Information is easily accessible ▪ Provide program history and development ▪ Opportunity to study historical trends	▪ Record may be incomplete or difficult to locate/access ▪ Analysis is limited to data previously collected

Developing Instruments

When setting up a data collection strategy, PZs should consider questions such as:

- What instruments do I need to collect this information effectively?
- Can I find an existing instrument that does what I need?
- Can I find a similar instrument to adapt for this program?

The tools needed will depend on the type of data to be collected. Examples might include:

- **Survey Instrument –** with well-designed questions for gathering primary data about opinions, behaviors, or characteristics of respondents.
- **Observation Template –** for ensuring that observers gather and record information systematically.
- **Outcome Extraction Template –** for gathering complete and consistent information about measures of progress (e.g., number of students who attend a course; pre- and post-test scores).
- **Program Monitoring Tool –** for collecting key indicators of service delivery from collaborating partners (e.g., a spreadsheet with specific fields for each metric, and a structure that allows data to be collected at multiple points in time and saved for later examination of trends over time).

As PZs set up their data collection systems, factors to keep in mind include:

- Setting up data collection tools that are explicitly targeted to getting the data you need to answer your question (not gathering extraneous data).
- Ensuring reliability and validity of the instruments. Data collection instruments are reliable when they measure the same thing in the same way consistently. Instruments are valid when they accurately measure the underlying concept.
- Getting the data at a granular enough level for the kind of analysis you want to do, but without so much detail that it is difficult or impossible to collect or analyze it.

Want to know more?

To learn more about tips and sample tools to improve your data collection efforts, see:

- 10 tips for Building Effective Surveys
- Creating an Observation Guide
- Tip Sheet on Question Wording

Considerations in Data Collection

Additional considerations when selecting data collection methods for a community-engagement initiative include methodological considerations, operational considerations, and ethical considerations.

Methodological Considerations

When selecting a data collection approach, PZs should consider a range of ways to ensure that the evaluation results can be relied on for policymaking and program improvement. Within the constraints of available resources, be sure to consider:

- **Triangulating Methods –** Triangulation involves gathering data using more than one method (e.g., using a broad-based survey supplemented by in-depth interviews) or from different types of respondents (e.g., program implementers, service recipients) in order to compare findings and provide a thorough assessment of the program.

- **Ensuring Reliability and Validity of the Instruments**
- **Seeking Generalizability –** Data collection instruments are generalizable when the results allow the researcher to make inferences about an entire population based on the data.

Example: Reliability and Validity

To understand the difference between reliability and validity, consider a simple bathroom scale:

Reliability: A scale is reliable if it consistently displays a similar weight for the same individual. If the scale first registers 120 pounds, but shows 130 pounds for the same individual 5 minutes later, it is not reliable.

Validity: A scale is designed to measure weight, so it is a valid way to assess weight gain or loss. It would not be a valid way to measure a person's temperature.

Operational Considerations

Wen planning an evaluation, it is easy to develop great ideas about indicators that will let the PZ assess progress, but not always easy to actually gather the needed data. When developing a data collection plan, it is important to make sure that the data identified for an evaluation can realistically be obtained and can be gathered and analyzed with the resources available.

DUAs, or contractual documents used for the transfer and use of nonpublic-use data, can be used as a tool for working with partners to get needed data.

Ethical Considerations

Ethical considerations involve the rights of human subjects, including privacy, confidentiality, and respect. Privacy and confidentiality issues come up regularly, and there are established standards for treating data appropriately in different fields (e.g., Health Insurance Probability and Accountability Act (HIPAA) for health, Family Educational Rights and Privacy Act (FERPA)). Working with academic data partners and other organizations may require an even greater emphasis on ethical issues, including obtaining Institutional Review Board (IRB) approval from a committee that approves, monitors, and reviews research involving human subjects.

Many secondary data sources provide information in a way that ensures confidentiality and protects the human subjects involved. Whenever the primary or secondary data could be traced to a particular individual, the evaluation team will need to give careful attention to ethical considerations.

Example: Useful Data Sources from Promise Neighborhoods Research Consortium

The Promise Neighborhood Research Consortium (PNRC) has compiled a variety of external data sources that may be useful for PZ evaluations. PNRC is funded by the National Institute on Drug Abuse to promote well-being in high poverty neighborhoods. Some of the measures included in the PNRC are:

Secondary Measures:

- Catalog of Administrative Data Sources for Neighborhood Indicators (CADSNI): environmental exposure, healthcare, health and safety data
- American Community Survey (ACS): demographic, economic, housing, social characteristics
- Topologically Integrated Geographic Encoding and Referencing (TIGER) system: indicator of neighborhood connectivity
- Economic Census: indicators of density

Primary Measures:

- Community Member and Parent Survey
- Child and Adolescent Surveys
- Teacher Assessment of Student

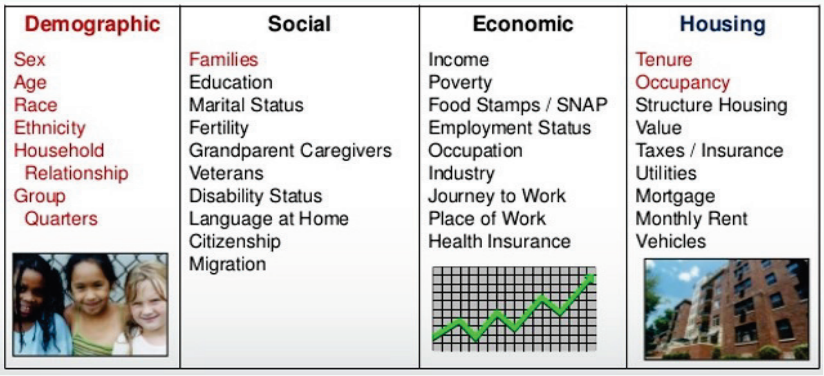
Learn more at http://promiseneighborhoods.org/index.html & http://promiseneighborhoods.org/measures.html

Example: Data Collection Challenges and Solutions – Philadelphia Promise Zone

Using existing data sources is a good start toward efficient data collection, but existing sources have their challenges, including making sure that the data are collected and analyzed consistently—even for group A, B, and C data collected by others. To ensure consistency for their group A indicators, the Philadelphia PZ developed a systematic process for gathering and collating census data using R, a statistical analysis program.

- Census Application Programming Interface (API) gives the public access to raw statistical data. Users can pull data from the API using R code. API is a part of a server that receives requests and sends responses.
- These data are raw and reproducible. The method can be applied quickly for the same exact variables in the same exact way across years and PZs.
- R is FREE and open source. It is integrated into a user-friendly interface, Rstudio.
- American Community Survey (ACS) is a good source for group A data.

To learn more about Philadelphia PZ's approach to group A data collection, access the webinar:



Hear from the Speaker

This discussion starts at about minute 59:13 of Session 3 - Data Collection and Management

Managing the Data

Once indicators and data collection strategies are identified, it is important to think through how the data will be organized and maintained. Data management is an important consideration, regardless of whether the PZ will collect primary data or gather secondary data from other sources.

Important questions to answer when thinking about data management include:

- Who will collect the data?
- When will data be collected?
- How will data be cleaned and checked for consistency and accuracy?
- How will data be stored and protected?

Identifying Who Will Collect Data

To ensure that data will be collected according to plan, it is wise to identify specific individuals or groups on the team to be responsible for collecting the data identified in the Framework.

For secondary data, this may involve gathering existing data from public sources or working with partners to obtain data agreed on through a DUA. In addition to actually collaborating with the partners to obtain

agreed-upon data under a DUA, the individual or group identified would need to ensure that all DUA requirements are met.

For primary data collection, more extensive planning and training may be needed. For example, data collectors may need time to practice using the data collection instruments, instructions for submitting the data, and training on how to protect personally identifiable information (PII) such as names, addresses, and information about race or ethnicity. It is also important to consider whether the individuals collecting the data may inadvertently introduce bias (or perception of bias) and to mitigate this risk (e.g., through thorough training).

Determining When Data Will Be Collected

The Framework should specify the timing for data collection. Generally, data can be collected at four points in time during the evaluation:

- **Before intervention –** Baseline data are collected before the intervention as a comparison point.
- **During intervention –** Some data are easier to collect during an intervention, such as sign-in sheets or observations.
- **Immediately after intervention –** Collecting data immediately after an intervention can help measure short-term or mid-term effects of an intervention, e.g., changes in knowledge.
- **After a period of time has elapsed subsequent to the intervention –** Long-term outcomes may not manifest immediately after intervention, so it may be useful to wait a period of time before collecting data about outcomes. Waiting may, for example, provide information about whether short-term or mid-term outcomes persist over time (e.g., not only was there a change in knowledge, but training participants retained that knowledge over time).

Cleaning and Checking Data

A systematic process must be in place for ensuring that data are high quality, and that involves cleaning and checking the data. This applies mainly to primary data, but secondary data could also require cleaning and checking. Plan to build in sufficient time and resources for data cleaning and checking to ensure data integrity. Data will contain errors. A specific person or persons should be assigned to review all data to identify missing information or anomalies and to follow up with data sources to confirm and fix errors. Ensure that data are:

- **Complete –** Surveys are completely filled out, sites have provided all their data, etc.
- **Consistent –** Sites and/or data collectors are using the same instruments and methods to collect data.
- **Accurate –** The data are free from typos and illogical answers.
- **Verifiable –** Original copies of surveys are maintained, ensuring that data can be confirmed if needed.

Storing and Protecting Data

A data collection effort must include descriptions of how data will be stored and for how long, how PII will be protected (e.g., storing it in files that are password protected), and how data will be disposed of safely at the end of the study. The plan should also specify how data that are being collected in hard copy (e.g., paper surveys) will be transferred to electronic format for analysis and, if data will be collected from multiple sources, how the information will be merged for analysis.

A data collection plan should also address backup plans to prevent loss of data, whether due to a disaster such as flooding or fire, or to a failure of the storage medium. Whether it is cloud storage or backup hard drives, PZs should protect the information they have worked so hard to collect.

Apply Your Knowledge: Identify the Data Indicators and Data Sources

With a good sense of your Evaluation Design and Activities in place, you are ready to dig into the evaluation details in more depth.

Return to *Part B: Evaluation Methods* in the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use). Use column 3 to identify the indicators you will use to answer your research questions and column 4 to identify the data sources that can be used to develop those indicators. Keep in mind that the data may come from secondary sources (e.g., publicly available data sources, data obtained through a Data Usage Agreement) or be primary data collected by the PZ (interview or survey data, program data).

See *Part B: Evaluation Methods* in Appendix B to see how indicators and data sources can align with specific evaluation questions.

Although the *Data and Evaluation Framework Template* does not require that the following topics related to managing the data be recorded, it is a best practice to think about them carefully as you develop your indicators and identify your data sources:

- Consider how each indicator applies to the evaluation question and fits with the logic model.
- Think about whether the data needed to answer the evaluation question will be qualitative or quantitative, and if the sources are primary or secondary.
- Decide who will manage the data collection effort, and how the data will be stored, checked, and maintained.

An excerpt of the Evaluation Methods from the sample Framework in Appendix B is included below. Use this as a reference to complete the template in Appendix A.

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy
Q1: How many houses have been rehabilitated, demolished and constructed? (output)	Process evaluation	# units rehabilitated # units demolished # units constructed	Secondary Data: Administrative records from partners	Quantitative Analysis: Descriptive statistics (count overall, by sector)	Trend line
Q2: What are the challenges with implementation?	Process evaluation	Type of challenges	Primary Data: Stakeholder interviews	Qualitative Analysis: Content analysis	Illustrative quotes
Q3: Has individual connectivity to neighborhood increased? (short-term outcome)	Outcome evaluation	Perceived connectivity to neighborhood (Group D)	Primary Data: Survey of residents	Quantitative Analysis: Descriptive statistics (mean overall, by sector), Comparative statistics	Trend line, GIS, infographics
Q4: Have the schools improved? (medium-term outcome)	Outcome evaluation	High school graduate rate (Group B)	Secondary Data: School district student records	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics
Q5: How many households are below the federal poverty line? (long-term outcome)	Outcome evaluation	Income (Group A)	Secondary Data: Census ACS	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics

Chapter 5

Analyzing the Data

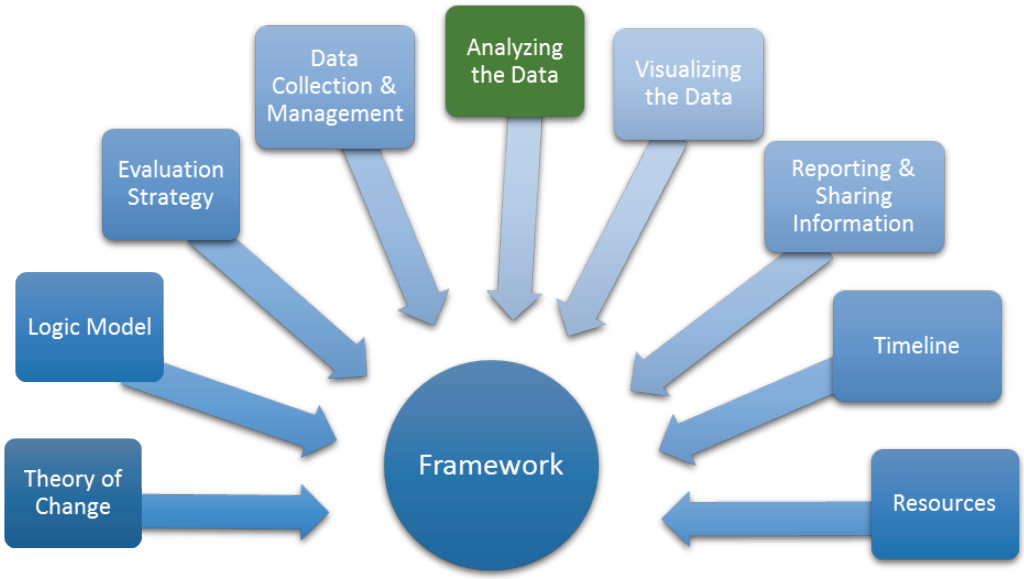
Chapter 5

Analyzing the Data

Framework Elements Covered in this Chapter

Chapter 5 discusses multiple ways to use the data collected for an evaluation and provides information about factors to consider when planning for data analysis (see Figure **4**).

Figure 24: Framework Elements – Data Analysis Strategies



Chapter 4 discussed the differences between quantitative and qualitative data and how those differences can affect data collection approaches. Approaches for analyzing the data also differ depending on whether the data are quantitative or qualitative, but one factor remains the same regardless of the type of data: the analysis must always be driven by the evaluation questions that need to be answered.

It is important to envision at the outset what kinds of analysis will be possible with the data to be gathered in order to ensure that data collection is tailored to allow for the desired type of analysis. When developing the Data and Evaluation Framework, PZs will want to work with their data partners to determine what types of analysis will be possible with data the PZ intends to collect. Once the data are gathered, PZs will want to engage qualitative or quantitative data experts in the analysis to make sure it is done effectively and efficiently.

As PZs decide on ways to analyze their data, a key consideration is ensuring that the resulting analysis will support the PZ in making policy decisions about future allocation of resources. Given that resources are likely to limit the extent of the evaluation the PZ can do, it is important to focus on gathering and analyzing data that will answer crucial policy questions, and allow decision makers to allocate resources to the most promising activities. For example, rather than doing a full, in-depth evaluation of all aspects of one education activity, the PZ might choose to evaluate a limited number of metrics for multiple activities in order to choose the more effective activity moving forward. This approach has risks—the indicators must be selected carefully, and the researchers must carefully consider whether the program may have important impacts that are not captured by the selected metrics. In the face of constrained resources, focusing the Data and Evaluation plan in ways that support good policy decisions can help ensure the best use of resources for the community. It is also important for the data analyst to think about and emphasize the policy implications of the findings rather than simply presenting the results.

Want to know more?

To learn more about when to use various quantitative and qualitative analysis techniques, consider these resources:

- **Textbooks.** A good statistics textbook from your library will allow you to look up the specific technique you are interested in for your analysis.
- **Online Resources.** The internet has lots of descriptions and tutorials to help explain particular techniques. Options range from YouTube videos, to sites such as Free Statistics Help, Center for Innovation in in Research and Teaching or Urban Institute.
- **Data Partners or Nearby Universities.** Data partners and supportive university faculty can easily explain various analytic techniques, their pros and cons, and what one can and cannot conclude from the analyses.

Quantitative Data Analysis

Recall from Chapter 4 that quantitative data are numeric, so statistical analysis techniques are used for analysis. The most appropriate statistical test will depend on the questions the evaluation team wants to answer and the nature of the data available. Choosing the right analysis to answer the key questions is an area where working closely with a data partner can be especially helpful. **Figure 25** describes some key statistical techniques, explains when they can be useful, offers some caveats to keep in mind when interpreting the results, and gives examples of the kinds of analysis they make possible.

Figure 25: Descriptions and Examples of Statistical Analysis Techniques

Descriptive Statistics	
Purpose:	Paint a picture.
Statistical Analysis Technique:	Descriptive statistics describe the characteristics of the data. This technique involves calculating key summary statistics that help examine some characteristics of the sample or population examined in the evaluation, such as the mean (average), range, or frequency. Other common summary statistics include the median, mode, and standard deviation.
Utility:	Descriptive statistics paint a picture of the population and provide context. When reviewing the results of other types of analysis, descriptive statistics inform interpretations and conclusions. PZs will want to generate descriptive statistics as a first step in almost any analysis.
Important Considerations:	It is easy to start drawing conclusions based on descriptive statistics. It is important not to jump to conclusions based on the face value of the numbers, but to dig in further to determine whether any differences seen are statistically significant, and whether they can be attributed to the PZ's activities.
Example:	After a healthy eating workshop, participants rate their eating habits on a scale of 1 (poor) to 5 (excellent). Descriptive statistics might be used show that the average rating after the program is 4 (very good); the range is 2 to 5; and the frequency shows that 40 out of 50 participants selected either 4 or 5. This information paints a picture of the eating habits of participants of the program and helps the audience get a sense of the context.
Group Comparison Using Statistical Significance Test	
Purpose:	Determine if observed differences between groups are likely to occur purely by chance.
Statistical Analysis Technique:	Tests of statistical significance are used to determine whether there is a meaningful difference between groups. Statistical significance tests include t-tests, ANOVA, or chi-squared tests.
Utility:	Tests of statistical significance help ensure that differences in raw data do not lead PZs to erroneous conclusions about what difference the PZ's programs do or don't make. A difference may be due purely to chance, or may indicate that the program had an effect. Only a significance test lets you know for sure.
Important Considerations:	It is important to consider not only whether the results are statistically significant, but also whether any differences are big enough to be practically important (i.e., effect size). Conversely, even when the results do not reach statistical significance, they can still provide useful information by showing the direction of any differences.
Example:	After a healthy eating workshop, self-ratings of healthy eating habits among participants are compared with ratings from a similar group that did not participate. The test shows a significant difference, with average program participant ratings of 4, and nonparticipant ratings of 3. This may provide the evidence needed to decide to continue the program; however, if the average rating for participants was 4 and the average for nonparticipants was 3.9, the difference may be statistically significant, yet so small it has little practical meaning.

Correlation	
Purpose:	Determine if characteristics of interest are related to each other.
Statistical Analysis Technique:	Correlation analysis provides a single number to describe how closely two characteristics are related (e.g., t-tests).
Utility:	PZs will want to assess whether changes in the community and its residents are related to the activities the PZ has undertaken. Correlation analyses provides a clear picture of whether certain characteristics (like participation in a program) are related to other characteristics (like changes the program is expected to produce).
Important Considerations:	Keep in mind that correlation does not imply causation!
Example:	A correlation shows a relationship between good nutrition habits and 1) higher income and 2) improved health outcomes. Although the correlation does not allow an assessment of causality, a logic model might help us infer that higher income likely causes people to make better nutrition choices because they can afford them, while better nutrition likely causes better health.
Regression Analysis	
Purpose:	Determine the net association between a PZ's activities and the observed outcomes.
Statistical Analysis Technique:	Regression analysis is a set of techniques that measure the relationship between key characteristics while statistically "controlling" for the effect of others.
Utility:	The complex social issues PZs tackle can be affected by a range of factors simultaneously. Regression analysis helps to separate out factors that are not within the control of the PZ and to focus on the effects of the specific interventions offered by the PZ's activities.
Important Considerations:	No regression analysis can account for every factor that might affect an outcome of interest. Regression analysis comes closer than any other technique to answering the question of whether a particular intervention is having the desired effect, but the analysis in and of itself does not imply causality.
Example:	If a regression analysis controls for income, it will be easier to see whether there is a link between nutrition education and health outcomes, because the results will not be confounded by some individuals' ability to afford healthier food.

A variety of software applications can be used to analyze quantitative data. Spreadsheet software, such as Microsoft Excel, is often used for descriptive statistics, since in many cases the data are already stored in a spreadsheet and it provides basic charts and graphs to display simple data. More advanced analyses, such as statistical significance, correlation, and regression, require programs such as SAS, SPSS, Stata, or R. Statistical analysis software simplifies data analysis, but in order to produce meaningful results, the evaluator must be trained in their use and must accurately tell the software how to analyze the data in order to provide meaningful answers to the research questions.

Qualitative Data Analysis

Qualitative data are nonnumeric and can be more difficult to analyze than quantitative data because they are less uniform, there can be a lot of data, and the results can be challenging to interpret.

Qualitative data analysis begins with "coding," or transforming narrative information into bite-sized chunks that can be compared and understood more easily. Coding helps the researcher focus in on themes, trends, and outliers, and look at patterns and relationships between codes categories.

To understand what coding does, think of using a highlighter to identify key pieces of information in narrative text. For example, an analyst reviewing an interview with a participant in a nutrition education seminar might manually highlight references to food choices in yellow, and references to challenges purchasing food in green. Topics highlighted in yellow can then be considered together, while those in green can be analyzed separately. Qualitative analysis software, like Nvivo, Atlas.ti, or Qualtrics, allow the user to code text electronically and highlight specific phrases of interest when analyzing complex data sets.

Tips for Qualitative Data Analysis

- While trends are important, **outliers** can be informative. For example, if all but one of the people interviewed about a program are satisfied with it, it would be easy to disregard that person's opinion; however, asking "What in this participant's experience made him or her different or unique from the rest?" can help identify potential gaps or problems.
- Don't just focus on each category of coded data. When possible, look at **patterns** between different categories of codes. Focusing on the codes in a vacuum, without accounting for other categories of codes, might overlook an important trend (e.g., the program seems to work well for women, but not for men).

Using software can be helpful for identifying patterns that are difficult to see, but it can be expensive. In addition, it takes time to learn how to use it, because like with quantitative data analysis software, the researcher must accurately tell the software how to analyze the data in order to provide meaningful answers to the research questions.

Additional Considerations for Data Analysis

With a variety of qualitative and quantitative indicators from various sources measuring different aspects of a community change initiative, it can become challenging to think about the indicators all at once. One strategy for organizing them is developing a scoring model or outcome index to support the analysis. By selecting a range of metrics, placing the results on a unified scale, and weighting the factors, PZs can establish a single number to use in assessing progress in a complex area. Such indexes can be especially helpful to assess overall progress if several related metrics are moving in different directions (e.g., employment among program participants may drop, but if enrollment in

Want to know more about scoring indexes?

The Opportunity360 Index Methodology document developed in support of Opportunity Zones describes one approach to creating an index to combine multiple measures into a single indicator. It describes indexes in the areas of:

- Housing Stability
- Education
- Health and Well-being
- Economic Security
- Mobility (transit)

education programs for higher-paying employment rises, the program may be on the way to achieving the improvements in economic security posited by the logic model).

Another important consideration is how the PZ should interpret its metrics in a larger context. Looking at changes in metrics over time within the PZ community is important, but the effectiveness of the program can be gauged more effectively in comparison with other areas, such as the city, county, state, or country. In order to contextualize the numbers seen in the PZ, comparisons with non-PZ communities can help the PZ understand the significance of its metrics in the face of outside factors, such as an economic upturn or downturn, or significant changes in a particular industry. This will support insightful interpretation of the metrics collected under the Data and Evaluation Plan.

For example, consider a metric such as employment among high school graduates one year after graduation. A helpful comparison might include examining the employment rate among high school graduates within the community in relation to the employment rate of high school graduates city- or countywide, and in similar communities in other cities. If the rate of employment within the PZ community remained static, this might easily be seen as a failure in the program, but now suppose that the country was experiencing an economic downturn and employment statistics in those other geographic areas fell dramatically. In this case, achieving a steady employment rate among high school graduates, compared with a steep drop in other communities, could signal a big success for the PZ program.

Data Interpretation

Data interpretation refers to the processes of reviewing data to arrive at an informed conclusion. Data interpretation assigns a meaning to the information analyzed and determines its signification and implications. When interpreting data, an analyst must try to discern the differences between correlation, causation, and coincidences, and must strive to avoid allowing personal bias to influence the conclusions. **Figure 26** presents three of the most common interpretation pitfalls, and suggested remedies.

Figure 26: Data Interpretation Pitfalls and Remedies

Pitfalls	Remedies
Mistaking correlation for causation is the tendency to mix the cause of a phenomenon with correlation. It is the assumption that because two actions occurred together, one caused the other.	Be transparent about whether the results involve correlation or causation.
Succumbing to confirmation bias occurs when the analyst has a theory or hypothesis in mind, and only perceives data patterns that provide support, while overlooking those that do not.	Analyze data with a team of objective individuals. Resist the urge to draw a conclusion before data exploration has been completed.
Being distracted by irrelevant data involves the tendency to focus on data that may be intriguing, but is irrelevant to the evaluation question at hand.	Keep the evaluation question squarely in mind, and revisit it regularly to ensure that the analysis focuses on data that will answer the question

Data interpretation is both an art and science. Tips for interpreting data effectively include the following:

- Collect the data systematically and make it as clean as possible.
- Choose the type of analysis to perform: qualitative or quantitative, and apply the methods respectively to each.
- Take a step back and think about the data from various perspectives and what interpretation various stakeholders might bring to the results of the analysis.
- Reflect the thinking and reasoning that led to all conclusions, and remain aware of the pitfalls listed above.

Apply Your Knowledge: Identify the Data Analysis Strategy

For each indictor and data source identified in *Part B: Evaluation Methods* in the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use), use column 5 to indicate the data analysis strategy that will be used to understand the data.

See *Part B: Evaluation Methods* in Appendix B to see an example of how data analysis strategies can be identified for each indicator and data source.

- Make sure that each analysis strategy you list has a direct connection to one or more of your evaluation questions.
- Think about whether your data will be qualitative or quantitative and choose a data analysis strategy accordingly.

An excerpt of the Evaluation Methods from the sample Framework in Appendix B is included below. Use this as a reference to complete the template in Appendix A.

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy
Q1: How many houses have been rehabilitated, demolished and constructed? (output)	Process evaluation	# units rehabilitated # units demolished # units constructed	Secondary Data: Administrative records from partners	Quantitative Analysis: Descriptive statistics (count overall, by sector)	Trend line
Q2: What are the challenges with implementation?	Process evaluation	Type of challenges	Primary Data: Stakeholder interviews	Qualitative Analysis: Content analysis	Illustrative quotes
Q3: Has individual connectivity to neighborhood increased? (short-term outcome)	Outcome evaluation	Perceived connectivity to neighborhood (Group D)	Primary Data: Survey of residents	Quantitative Analysis: Descriptive statistics (mean overall, by sector), Comparative statistics	Trend line, GIS, infographics
Q4: Have the schools improved? (medium-term outcome)	Outcome evaluation	High school graduate rate (Group B)	Secondary Data: School district student records	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics
Q5: How many households are below the federal poverty line? (long-term outcome)	Outcome evaluation	Income (Group A)	Secondary Data: Census ACS	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics

Chapter 6

Visualizing the Data

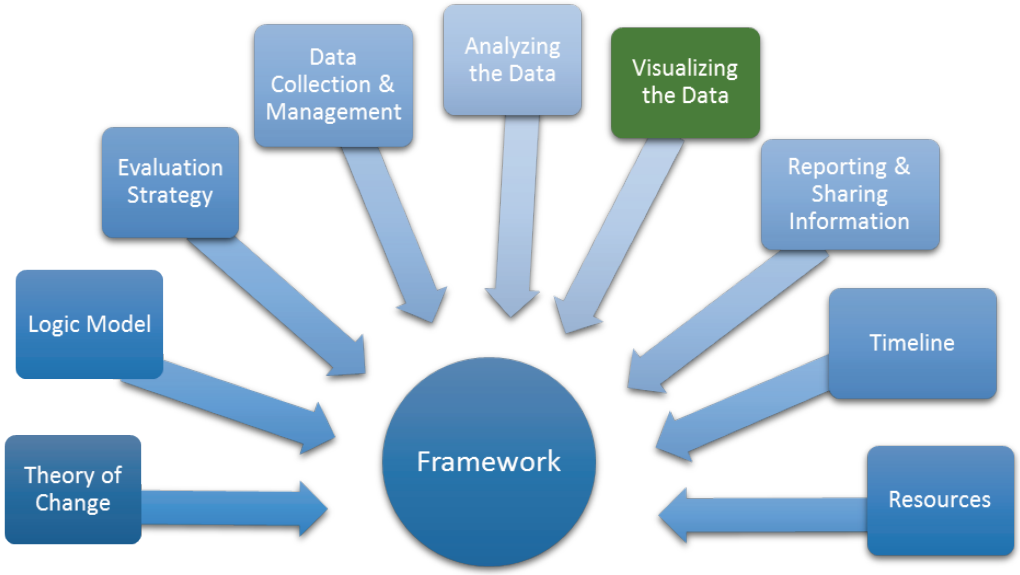
Chapter 6

Visualizing the Data

Framework Elements Covered in this Chapter

Chapter 6 discusses ways to use data visualization to analyze and interpret your data (see **Figure 27**).

Figure 27: Framework Elements – Data Visualization Strategies



Data visualization is a technique for presenting data in a graphic way and using it to glean insights or tell a story.

The principles behind data visualization go beyond just improving the appearance of data outputs. Rather, data visualization can be used to help researchers and stakeholders understand the significance of the data by placing it in a visual context.

- For evaluators, data visualization promotes critical thinking about the findings.
- For stakeholders, data visualization engages the audience and helps them better understand the results.

When developing the Data and Evaluation Plan, the PZ should give careful thought to the ways in which data visualization may be used to support analysis or to communicate results with stakeholders. Examples of ways PZs might use data visualization include:

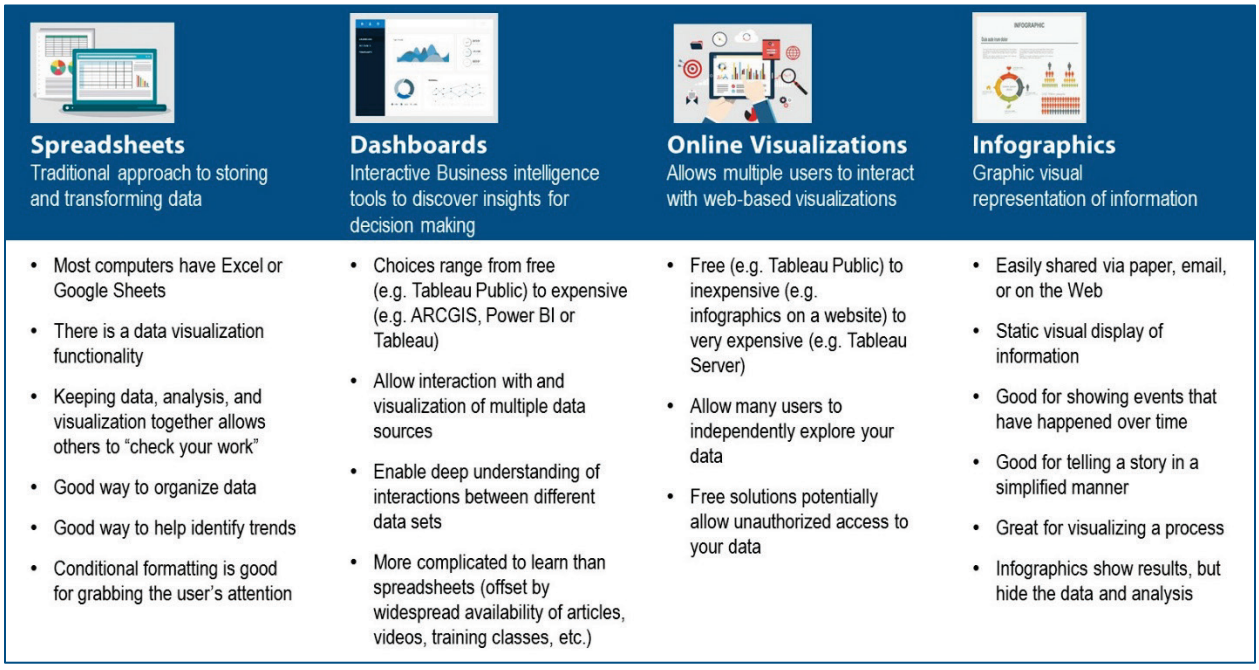
Hear from the Speaker

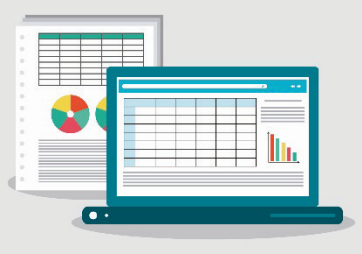
Listen to the full presentation on Data Visualization starting at 17:17 of Session 4 - Data Analysis, Visualization, and Data-Driven Policy.

- **Analytical Uses**
  - Looking at preliminary data visually to identify possible outliers.
  - Examining trends by looking at key indicators within the PZ over time.
  - Comparing PZ data on key indicators with data from similar cities or counties.
- **Data Sharing Uses**
  - Providing detailed data on key indicators, allowing users to examine their own areas of interest in detail (e.g., filtering economic indicators by demographic characteristics such as gender, race, and age).
  - Providing geographic markers, allowing users to make comparisons between geographic areas for topics of interest.
- **"Story Telling" Uses**
  - Making the PZ's Theory of Change and Logic Model accessible to the community by developing a process infographic that lays out key steps simply and logically.
  - Presenting key indicators visually to share messages about the effectiveness of a particular program to encourage support from community members, community leaders, and funders.

A variety of tools are available to support all of these uses for data visualization. **Figure** summarizes the differences between four types of data visualization tools: spreadsheets, dashboards, online visualization, and infographics. The sections that follow provide descriptions of the four types, along with pros and cons of each, and examples of the visual outputs each type of tool can create.

Figure 28: Summary of Data Visualization Tools





Spreadsheets

Spreadsheets are *primarily* tools for organizing and analyzing data, but many spreadsheet programs include functions that allow the user to easily show the data graphically, with bar charts, pie charts, and scatter charts.

The raw data in the rows and columns of a spreadsheet can be very hard to digest. Converting the data into a chart format allows the human eye to identify patterns and differences, allowing an analyst to quickly see trends, or helping readers grasp implications rapidly, without the need for complex analysis. If a PZ does not have current capacity for the more complex dashboards and online interactive visualizations described below, the visualization tools built into a spreadsheet program can be used to good effect. In addition, maintaining the data carefully in a well-designed spreadsheet that can grow over time will provide the foundation needed to tap into other more complex visualization programs later, should the opportunity arise.

Although they help both analysts and readers, spreadsheet graphics are static, and do not allow for "what-if" analysis or drill down. If the spreadsheet information is edited, the graphic will change accordingly, but this can be a cumbersome process, and is not well-suited to experimenting with different scenarios or allowing individual readers to focus in on the specific combination of characteristics that interest them (e.g., a reader cannot focus in on a particular geographic area in more detail). **Figure 29** lists some of the pros and cons of using spreadsheet graphics.

Figure 29: Spreadsheet Graphic Pros and Cons

Pros	Cons
▪ **Free.** Available to PZs at no additional cost through existing spreadsheet programs ▪ **Easy to use.** Quick, online tutorials are usually enough to allow users to create basic charts. ▪ **Effective Static Images.** Graphic functionality built into most spreadsheet programs will produce clear charts that provide visual insights and illustrate key points.	▪ **Not Interactive.** While they are great for showing a snapshot of a specific range of data, they do not lend themselves to quick adjustments to look at various scenarios or to drill down on a particular topic. ▪ **Limited Versatility.** The graphics are pre-set by the program, so the user is limited in the kinds of adjustments that can be made.

Figure 30 illustrates three ways to present data contained in a spreadsheet. The tabular presentation is harder to interpret quickly; the graphics are easier to grasp, but each gives a different message, depending on the emphasis selected by the creator.

Figure 31 illustrates the importance of thoughtful design when choosing how to represent spreadsheet data graphically.

Common Spreadsheet Tools

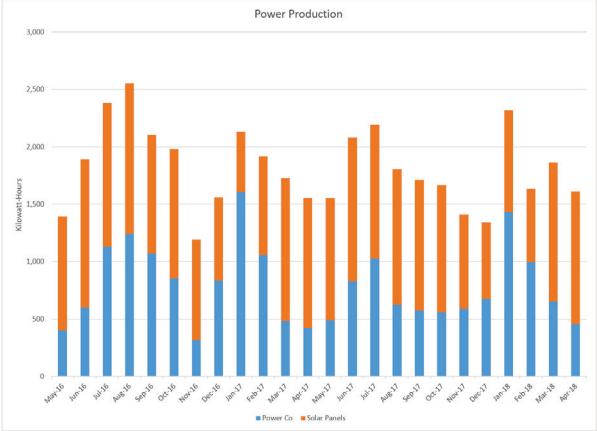
- **Excel –** Many workplace computers have Microsoft Office, including Excel, preinstalled. Latest versions have good wizards and templates.
- **Apache OpenOffice –** Open source (free)
- **LibreOffice –** Open source (free)
- **Google Sheets –** Free; web-based, which makes collaborating (with non-sensitive data) very easy.

Figure 30: Three Ways to Convey Information Using Spreadsheets

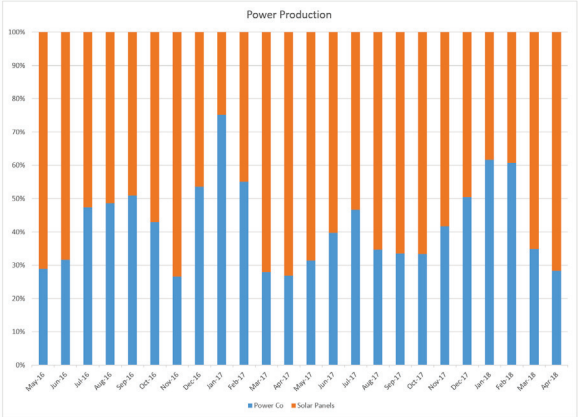
Below are three different ways to convey information about home solar panels and energy use using spreadsheet software like Excel. Each one may be used to provide a different type of information or answer a particular question.

	A	B	C	D	E	F
1	Date	Meter (KWh)	Solar (KWh)	Total (KWh)	Solar % of monthly power	Solar % of 12 month power
13	May-16	403	990	1,393	71%	7%
14	Jun-16	599	1,292	1,891	68%	13%
15	Jul-16	1,129	1,255	2,384	53%	19%
16	Aug-16	1,241	1,314	2,555	51%	24%
17	Sep-16	1,072	1,032	2,104	49%	29%
18	Oct-16	852	1,130	1,982	57%	34%
19	Nov-16	317	875	1,192	73%	38%
20	Dec-16	835	725	1,560	46%	41%
21	Jan-17	1,603	529	2,132	25%	42%
22	Feb-17	1,057	860	1,917	45%	47%
23	Mar-17	481	1,243	1,724	72%	52%
24	Apr-17	418	1,135	1,553	73%	55%
25	May-17	488	1,065	1,553	69%	55%
26	Jun-17	827	1,256	2,083	60%	55%

Conveys the most information; easy to add new data and perform calculations, but not easy to interpret.



Shows total power consumption over time; shows fairly consistent monthly and seasonal variations.



Shows that for most months, solar produces more than half of the power.

Source: © Andrew F. Wright, Creative Commons Attribution-ShareAlike 4.0 International Public License

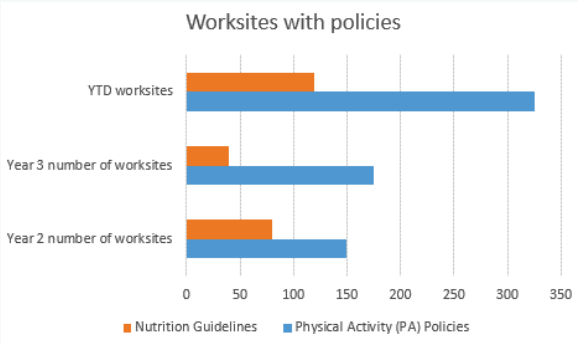
Figure 31: Choose the Graphic that Best Tells the Story

A spreadsheet can do much of the work to generate a helpful graphic, but the researcher must tell the tool how to analyze the data in order to ensure that it tells the right story. Consider data in a spreadsheet like the one below depicting the number of work sites with policies about physical activity or nutrition guidelines, by year.

	A	B	C	D	E	F	G	H
		Year 2 number of worksites	Year 3 number of worksites	YTD worksites	Year 5 Target	Year 2 Number of employees	Year 3 number of employees	YTD employees
Physical Activity (PA) Policies		150	175	325	700	650	780	1,430
Nutrition Guidelines		80	40	120	115	245	300	545

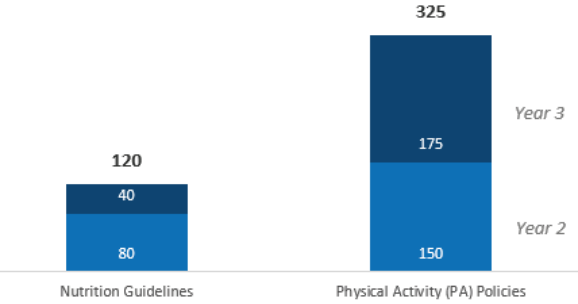
A spreadsheet tool might generate the graph on the left. Careful thought from the researcher about how best to tell the story might result in the more useful graphic on the right.

Default Graphic – Very Confusing!



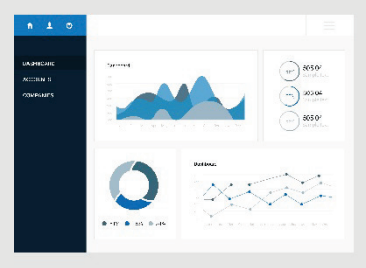
Thoughtful Graphic – Easy to Interpret

Worksites with physical activity policies outnumbered those with nutrition guidelines by almost 3:1.



Why does the graphic on the right tell the story better?

- Stacked column format presents the data by type of policy, year over year.
- The image displays the number of worksites within each bar and provides totals.
- The bar colors are labeled with the corresponding year.
- The caption at the top is descriptive of the data.



Dashboards

Dashboards often combine multiple images into a single display. Some dashboards may involve static images, while others may allow the user to manipulate the data to look at key indicators of interest. The role of a dashboard is to capture information in a way that gives users an at-a-glance overview of the program.

Interactive features can make a dashboard far more useful and user-friendly than static images, but developing and maintaining interactive dashboards can be expensive. If resources are limited, PZs make information available to stakeholders at relatively low cost by using static dashboards—updated at appropriate intervals. **Figure 32** lists some of the pros and cons of using dashboards.

Figure 32: Dashboard Pros and Cons

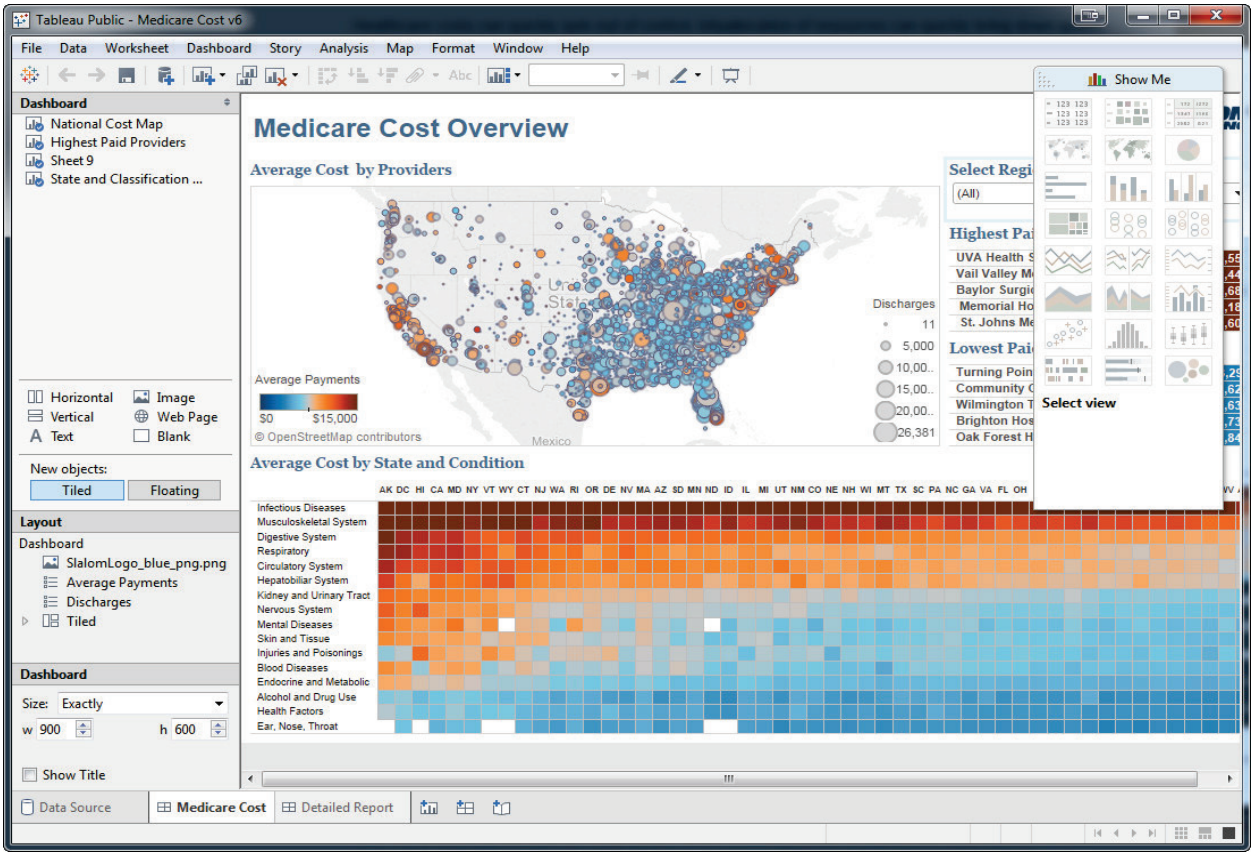
Pros	Cons
▪ **Snapshot View.** Users get at-a-glance information allowing them to see key indicators about a program easily. ▪ **Easy Data Sharing.** By posting a dashboard, PZs can make the information readily available at any time, to any stakeholder who chooses to access it.	▪ **Requires Maintenance.** Data can go out of date and must be refreshed regularly to keep the dashboard current and accurate. ▪ **Summary Data Only.** Part of the value of a dashboard is that it extracts and presents only key information. By definition it does not include details that may be of interest to some stakeholders.

Dashboards like those shown in Figure **33** and Figure put a great deal of information at the fingertips of the user. This allows users to explore the questions that matter to them, but limits the PZ's ability to focus attention on the particular results that they find to be of greatest interest.

Common Dashboard Tools

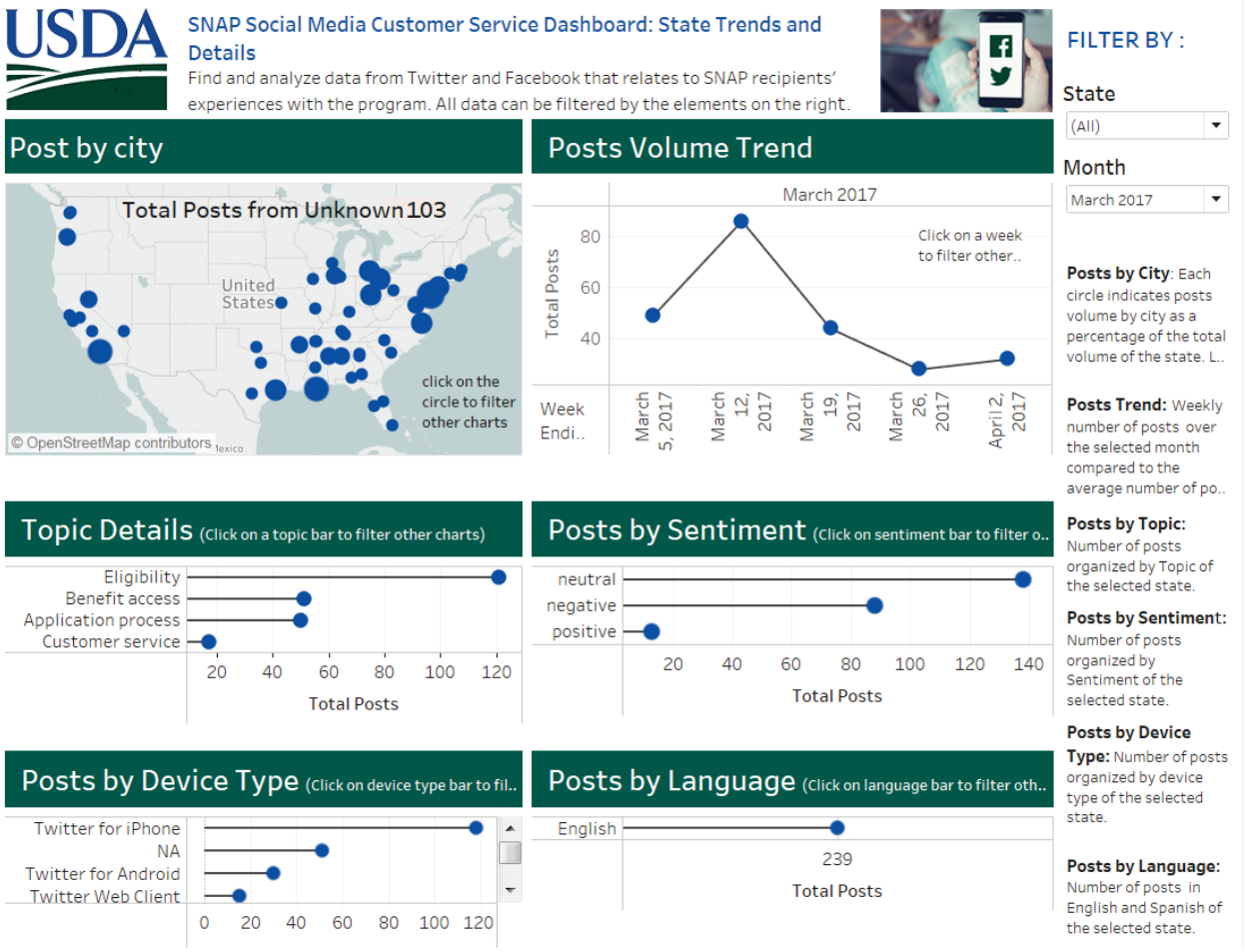
- Commercial Products
  - Tableau
  - Microsoft Power BI
  - ArcGIS
- Open Source (free)
  - R or Python + various open source visualization layers (e.g., Ggplot, Bokeh, Plotly, geoplotlib).
  - Java + various open source visualization layers (e.g. Graphviz, Visualization Toolkit, D3.js, Highcharts)

Figure 33: Dashboards allow researchers to build static and interactive displays quickly that allow for data exploration and drilling down into the data, perform geospatial analyses, and combine multiple displays into a single visual dashboard display.



Source: https://public.tableau.com/profile/srikanti.kakaraparthi#!/vizhome/MedicareCostv6_9/MedicareCost

Figure 34: In this dashboard, all six displays are linked to the same database, all can be filtered (and the filters selected will also be applied to the other displays automatically), and all of the displays will be updated automatically as new data come into the database.



Source: Created by ICF for USDA SNAP

Online Interactive Visualization

Online interactive visualization tools involve interactive displays that allow multiple users to explore the data, drill down into topics of interest, or look at the data from a geospatial perspective. By making a data set available to users, and providing filters and graphic presentation capacity, PZs can help stakeholders engage with the data in the ways that are most meaningful to them. For example, a user might want to examine how a key metric has changed for people with particular demographic characteristics, or compare metrics in one geographic area with another. Rather than an analyst trying to foresee all of the combinations of analysis a stakeholder may be interested in, online interactive visualization allows stakeholders to look at the specific items that interest them. **Figure 35** lists some of the pros and cons of using online interactive visualization tools.

Online interactive visualization also can be a powerful tool to support decision making. Part of the challenge for policymakers is to make sense out of the data available about a program. Online interactive visualization tools make it possible to discern patterns rapidly or identify the variables that have the biggest impact, either of which can point to next steps for supporting a program. **Figure 36** illustrates one example of using data visualization to support effective decision making.

Figure 35: Online Interactive Visualization Tool Pros and Cons

Pros	Cons
▪ **Tailored.** Each user can set the parameters of the interactive portion of the dashboard to learn more about the specific topic or geographic area that is of greatest interest. ▪ **Real Time.** Users do not need to wait for an analyst to create the desired analysis, and can look for specific answers to queries on an as-needed basis.	▪ **Can be Costly.** Maintaining a site that allows for interactive visualization, maintaining security, and keeping data current can all be expensive. ▪ **Requires Expertise to Develop.** Unlike spreadsheet graphics, which most users can produce with limited self-study, online visualizations require trained staff to set up and maintain the site.

When thinking about displaying visualizations online, consider the range of costs for both developing and maintaining the information:

- Cost of tools
- Costs of creating and maintaining visualizations
- Costs of keeping data fresh
- Costs of website
  - Outsourced
  - Insourced: acquisition, O&M, staff

Online options for data visualization

- Tableau Public (free, but should not be used for sensitive data due to privacy concerns)
- Tableau Server (much more expensive and requires a complex, back-end IT solution)
- Microsoft Power BI
- Microstrategy

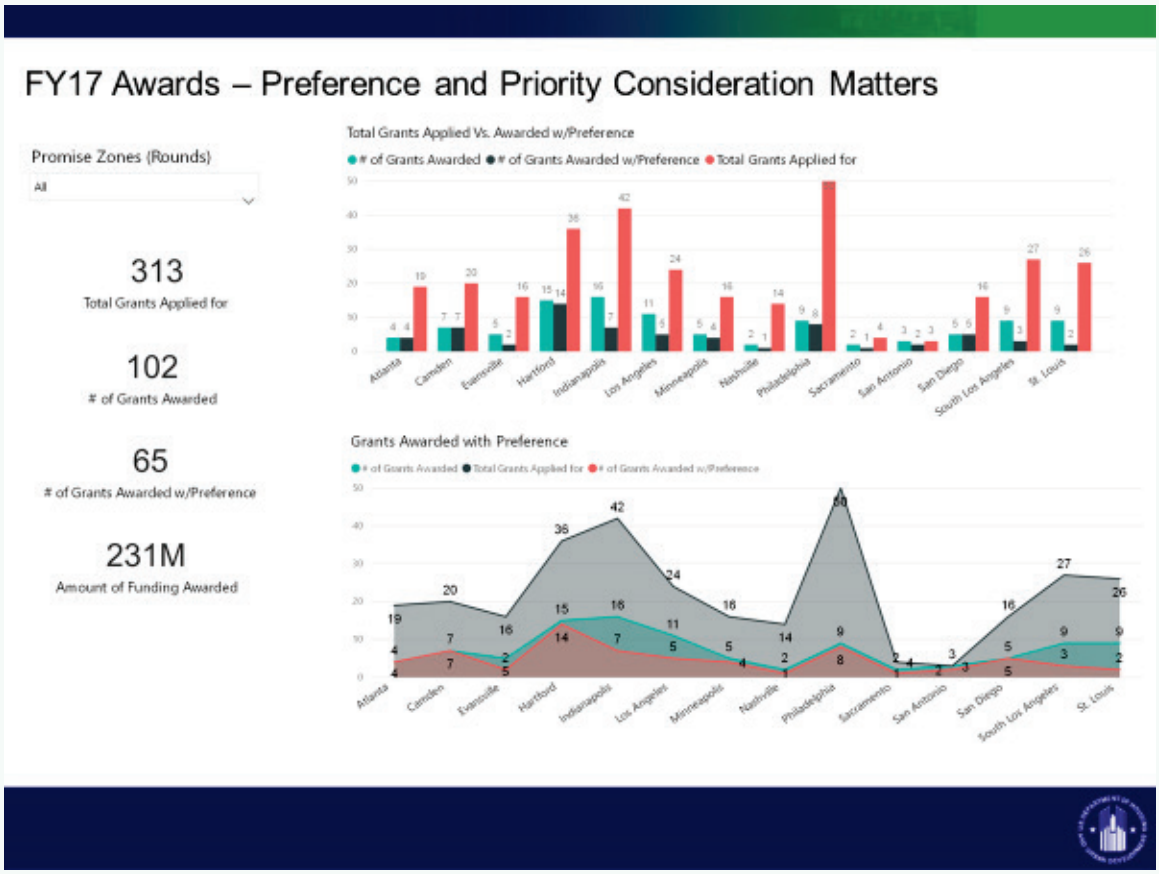
Figure 36: Using Data to Support Decision Making

HUD receives Federal Investment forms from the PZs, which are then aggregated. To help interpret the information, assess progress, provide technical assistance, and tell a story about the program's development they use Microsoft Power BI (similar programs include Tableau and Microstrategy). This tool can turn information from spreadsheets (e.g., Excel), or more advanced data sources (e.g., ArcGIS), into formats that are easy to understand and can help inform decision making. The example below illustrates grant awards with and without preference points.

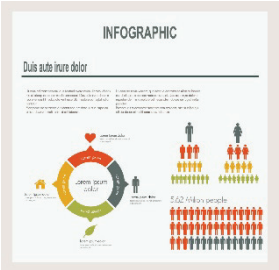
Hear from the Speaker

This presentation on how HUD uses Data Visualization starts at about minute 54:00 of Session 4 - Data Analysis, Visualization, and Data-Driven Policy

Interactive visualization can reveal insights that may not be apparent when looking at the raw data; however, there are some challenges in using this kind of technology. It is not always easy to share with non-HUD staff, and adoption of new technology can be slow, and difficult to accommodate within existing processes. HUD's bottom line: the benefits can be worth it.



Source: Presentation by Tanim Awwal at Promise Zones Webinar 4



Infographics

Whereas spreadsheets and dashboards can be used to support analysis, infographics are primarily used for displaying data after analysis is complete. Infographics boil down the information to tell a story about the analyst's conclusions in a visual way that is quick and easy for the audience to absorb.

Images for infographics can come from the spreadsheets and interactive dashboards discussed above, as well as from images created especially to tell the program's story. The quality of the graphics and visualizations can vary widely depending on the infographic tools used and the skill of the designer, so PZs will need to consider the tradeoffs in terms of time and cost versus quality when planning infographics. **Figure 37** lists some of the pros and cons for using Infographics.

Figure 37: Infographic Pros and Cons

Pros	Cons
▪ **Effective Communication Device.** A well-designed infographic can convey messages to a range of audiences quickly and effectively. ▪ **Cost Effective.** While a high-quality infographic requires design tools as well as analytic and graphic artist time, the relative cost for creating an infographic is small compared with an interactive online tool.	▪ **Static.** Once developed, the infographic is static. It will remain useful for as long as the data remain current, but it will become stale over time as new data are obtained and new insights emerge. ▪ **Lacking in Detail.** To be effective, infographics must focus on a clear message and remain simple. They cannot contain the level of detail that some audience members would like to see.

Infographics can serve a wide variety of purposes, such as explaining a process, comparing and contrasting, showing change over time, or telling a story over time. **Figure 38** provides examples of infographics designed for each purpose.

Creating infographics often needs teamwork because it requires several very different skill sets:

- **Analytic –** You need to understand your data, and you need to know what messages you want your audience to take away.
- **Artistic –** You don't need to be a graphic designer, but you will probably want a graphic designer for the final product.

Common Infographic Tools

- Commercial Packages
  - Adobe Photoshop
  - Adobe Illustrator
  - Microsoft PowerPoint
- Open Source (free)
  - GIMP
  - Inkscape
  - Apache OpenOffice
  - LibreOffice

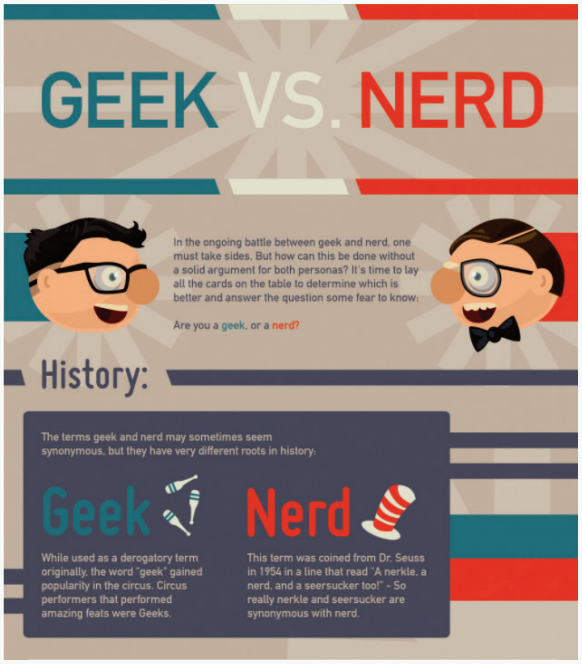
Figure 9 shows an effective blend of analytic and artistic skills. **Figure 40** illustrates the value of providing an infographic instead of raw data.

Figure 38: Infographics Can be Used to Illustrate a Variety of Types of Information

Explain a process:

Source: https://visual.ly/community/infographic/business/4-steps-build-your-personal-brand-online

Compare/contrast:



Source: https://memeburn.com/2012/01/geek-or-nerd/

Show change over time:

Source: Created by ICF for the Federal Highway Administration (FHWA)

Tell a story over time:

Source: https://www.icecream.com/icecreaminfo

Figure 39: To develop a strong infographic, bring together team members who can tell a clear story about the data (analytic skills) with those who can create a clear and graphic presentation (artistic skills).

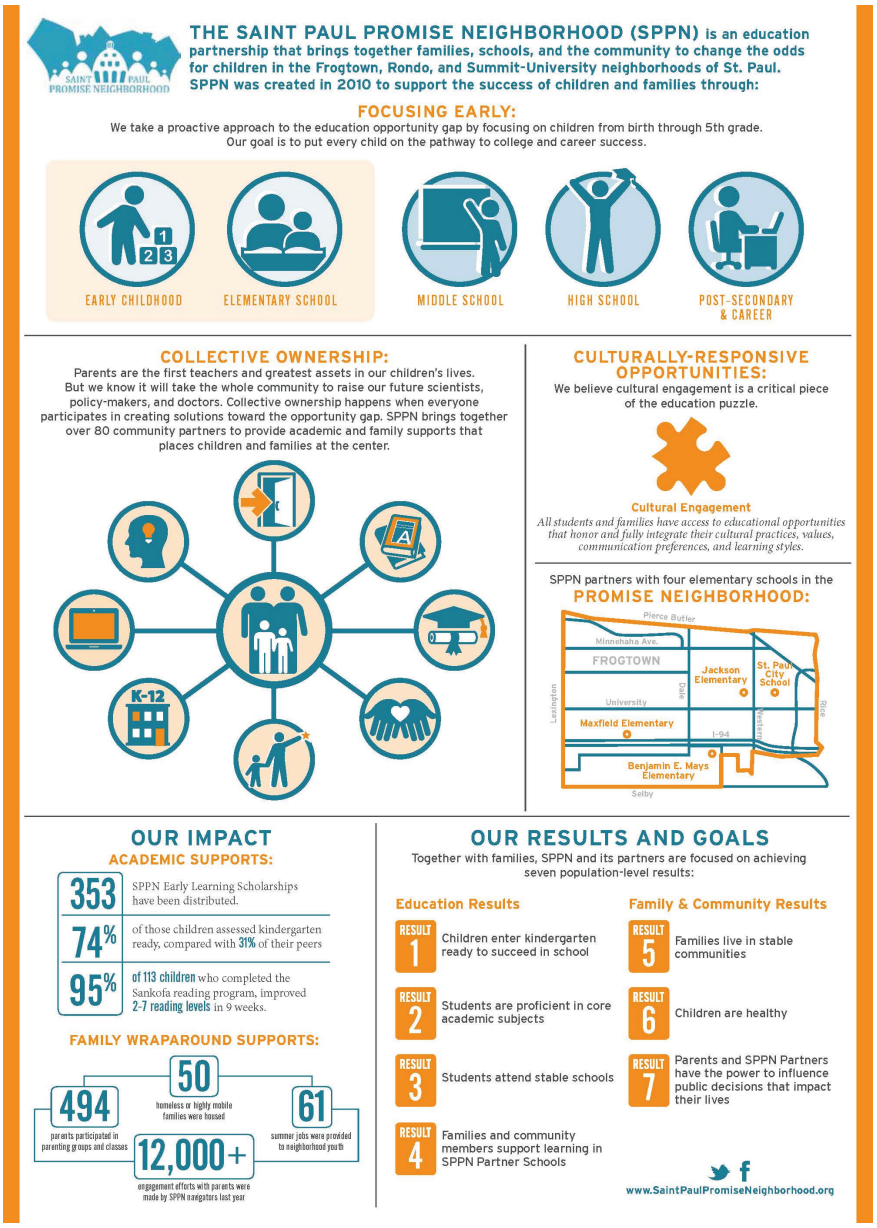
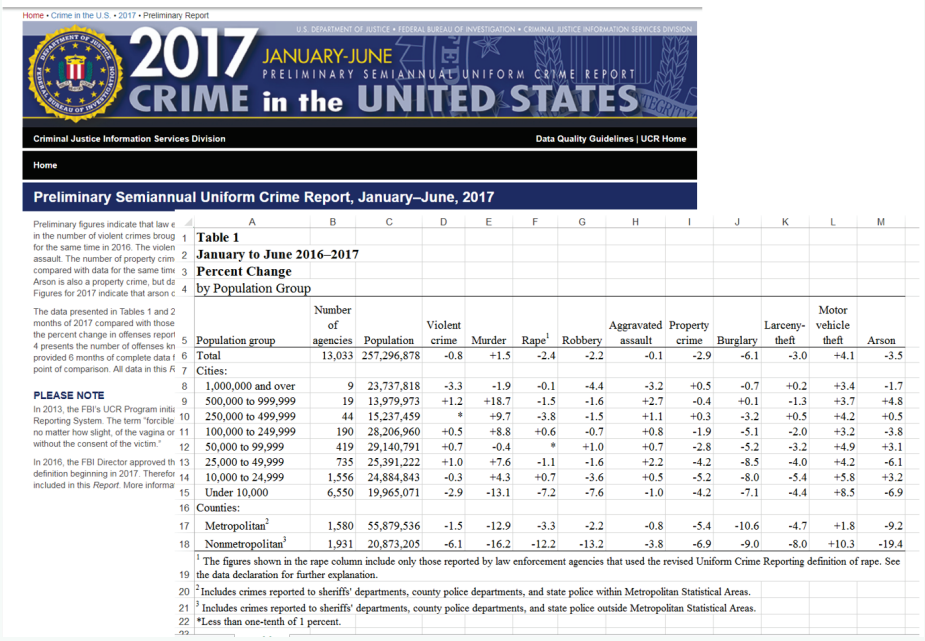


Figure 40: Comprehensive data and infographics serve different purposes.

Comprehensive Data: The data depicting crime in the United States from January to June 2017 presented in this way are very comprehensive, but the meaning(s) are difficult to grasp quickly.



Home • Crime in the U.S. • 2017 • Preliminary Report

U.S. DEPARTMENT OF JUSTICE • FEDERAL BUREAU OF INVESTIGATION • CRIMINAL JUSTICE INFORMATION SERVICES DIVISION

2017 JANUARY-JUNE PRELIMINARY SEMIANNUAL UNIFORM CRIME REPORT CRIME in the UNITED STATES

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Home

Preliminary Semiannual Uniform Crime Report, January–June, 2017

Preliminary figures indicate that law e
in the number of violent crimes broug
for the same time in 2016. The violen
assault. The number of property crim
compared with data for the same time
Arson is also a property crime, but da
Figures for 2017 indicate that arson c

The data presented in Tables 1 and 2
months of 2017 compared with those
the percent change in offenses report
4 presents the number of offenses kn
provided 6 months of complete data f
point of comparison. All data in this R

PLEASE NOTE

In 2013, the FBI's UCR Program initia
Reporting System. The term "forcible
no matter how slight, of the vagina or
without the consent of the victim."

In 2016, the FBI Director approved th
definition beginning in 2017. Therefor
included in this *Report*. More informa

Table 1
January to June 2016–2017
Percent Change
by Population Group

Population group	Number of agencies	Population	Violent crime	Murder	Rape[1]	Robbery	Aggravated assault	Property crime	Burglary	Larceny-theft	Motor vehicle theft	Arson
Total	13,033	257,296,878	-0.8	+1.5	-2.4	-2.2	-0.1	-2.9	-6.1	-3.0	+4.1	-3.5
Cities:												
1,000,000 and over	9	23,737,818	-3.3	-1.9	-0.1	-4.4	-3.2	+0.5	-0.7	+0.2	+3.4	-1.7
500,000 to 999,999	19	13,979,973	+1.2	+18.7	-1.5	-1.6	+2.7	-0.4	+0.1	-1.3	+3.7	+4.8
250,000 to 499,999	44	15,237,459	*	+9.7	-3.8	-1.5	+1.1	+0.3	-3.2	+0.5	+4.2	+0.5
100,000 to 249,999	190	28,206,960	+0.5	+8.8	+0.6	-0.7	+0.8	-1.9	-5.1	-2.0	+3.2	-3.8
50,000 to 99,999	419	29,140,791	+0.7	-0.4	*	+1.0	+0.7	-2.8	-5.2	-3.2	+4.9	+3.1
25,000 to 49,999	735	25,391,222	+1.0	+7.6	-1.1	-1.6	+2.2	-4.2	-8.5	-4.0	+4.2	-6.1
10,000 to 24,999	1,556	24,884,843	-0.3	+4.3	+0.7	-3.6	+0.5	-5.2	-8.0	-5.4	+5.8	+3.2
Under 10,000	6,550	19,965,071	-2.9	-13.1	-7.2	-7.6	-1.0	-4.2	-7.1	-4.4	+8.5	-6.9
Counties:												
Metropolitan[2]	1,580	55,879,536	-1.5	-12.9	-3.3	-2.2	-0.8	-5.4	-10.6	-4.7	+1.8	-9.2
Nonmetropolitan[3]	1,931	20,873,205	-6.1	-16.2	-12.2	-13.2	-3.8	-6.9	-9.0	-8.0	+10.3	-19.4

[1] The figures shown in the rape column include only those reported by law enforcement agencies that used the revised Uniform Crime Reporting definition of rape. See the data declaration for further explanation.

[2] Includes crimes reported to sheriffs' departments, county police departments, and state police within Metropolitan Statistical Areas.

[3] Includes crimes reported to sheriffs' departments, county police departments, and state police outside Metropolitan Statistical Areas.

*Less than one-tenth of 1 percent.

Source: FBI

Infographic: The infographic, on the other hand, makes it very easy to understand where robberies occur, but it would be difficult to draw additional conclusions beyond those the author intended to convey.

Source: http://www.supercircuits.com/

Apply Your Knowledge: Identify how to Visualize the Data

To complete *Part B: Evaluation Methods* in the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use), use column 6 to identify the data visualization strategy that will be used to interpret or share the data.

See *Part B: Evaluation Methods* in Appendix B to see how data visualization strategies can be identified to help answer and/or communicate information about each evaluation question.

- When choosing a data visualization strategy, consider what the data tell you, the key messages you want to convey, and your audience.
- Keep in mind that some strategies can be accomplished relatively inexpensively, while others can be quite resource-intensive.

An excerpt of the Evaluation Methods from the sample framework in Appendix B is included below. Use this as a reference to complete the template in Appendix A.

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy
Q1: How many houses have been rehabilitated, demolished and constructed? (output)	Process evaluation	# units rehabilitated # units demolished # units constructed	Secondary Data: Administrative records from partners	Quantitative Analysis: Descriptive statistics (count overall, by sector)	Trend line
Q2: What are the challenges with implementation?	Process evaluation	Type of challenges	Primary Data: Stakeholder interviews	Qualitative Analysis: Content analysis	Illustrative quotes
Q3: Has individual connectivity to neighborhood increased? (short-term outcome)	Outcome evaluation	Perceived connectivity to neighborhood (Group D)	Primary Data: Survey of residents	Quantitative Analysis: Descriptive statistics (mean overall, by sector), Comparative statistics	Trend line, GIS, infographics
Q4: Have the schools improved? (medium-term outcome)	Outcome evaluation	High school graduate rate (Group B)	Secondary Data: School district student records	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics
Q5: How many households are below the federal poverty line? (long-term outcome)	Outcome evaluation	Income (Group A)	Secondary Data: Census ACS	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics

Chapter 7

Reporting & Sharing Information

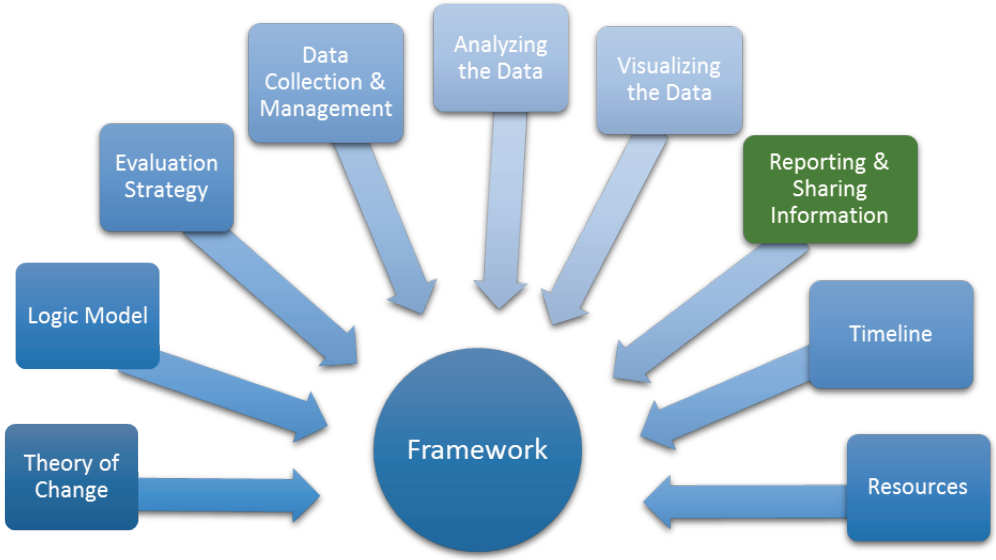
Chapter 7

Reporting & Sharing Information

Framework Elements Covered in this Chapter

Chapter 7 discusses approaches to reporting on and disseminating the information collected through the data and evaluation framework (see **Figure 41**).

Figure 41: Framework Elements – Reporting and Information Sharing Strategies



Once the data for an evaluation have been collected and analyzed, the next step is to make a plan for reporting the results to partners, other stakeholders, and the general public.[7]

Reporting may have numerous goals, such as to:

- Document work done and lessons learned.
- Encourage reflection and generate ideas for program improvement.
- Keep stakeholders informed throughout the evaluation process.
- Communicate accomplishments and benefits.
- Support continuous improvement for future programs (e.g., replication, scale up).

Want to know more?

To learn more about reporting and sharing evaluation information, see:

- Reporting and Using Evaluation Results from the Corporation for National and Community Service
- Developing Effective Evaluation Reports from the Centers for Disease Control and Prevention
- Evaluation Reporting: A Guide to Help Ensure Use of Evaluation Findings from the Centers for Disease Control and Prevention

[7] Much of the material in this section on reporting has been adapted from the Corporation for National and Community Service (2015). Reporting and Using Evaluation Results.

Reporting involves four key steps including assessing the needs and requirements, developing reporting products, disseminating those products, and then supporting the products' use by stakeholders, as depicted in **Figure** .

Figure 42: Steps in Reporting

Source: Adapted from Corporation for National and Community Service (2015). Reporting and Using Evaluation Results

Step 1: Assess Needs and Requirements

The first step in reporting includes determining how the information will be disseminated in order to meet the needs of the intended audiences. This includes considering reporting requirements for funders, and ways to make the information actionable for stakeholders and partners.

Dissemination strategies vary depending on who the key stakeholders are and which users are most likely to benefit from knowing the results of the evaluation. These might include key legislators in local government, key funders of the initiative, PZ partners, academics, residents of the neighborhood, as well as other individuals interested in the initiative. Different audiences will have different needs, and these needs will drive the reporting and dissemination strategies. They will direct the scope of the evaluation reporting, the way findings are presented, and the manner in which the report is delivered.

A dissemination plan, such as **Figure 43**, outlines how the evaluation findings will be used. It ensures that the evaluation findings and reports will be actionable and not "sit on the shelf." An effective dissemination plan clearly articulates the audience(s), the objective for communicating with the audience(s) about the evaluation, the product and method that will be used to communicate, and the timing of the communication.[8] These components assure an effective use of a wide range of reporting tools that are available in order to reach different stakeholders and ensure the results reach the dissemination objectives.

[8] Centers for Disease Control and Prevention. Evaluation Reporting: A Guide to Help Ensure Use of Evaluation Findings. Atlanta, GA: U.S. Department of Health and Human Services; 2013.

Figure 43: Dissemination Plan

Audience	Objective	Product/Dissemination Method	Timing
Program Implementation Team	Inform audience in real time about what's working well and what needs to be adjusted quickly during implementation	Briefing documents at monthly meetings	Monthly
Program Stakeholders	Promote program progress	Infographics on social media	Annually
Funding Decision Makers	Continue and/or enhance program funding	Executive summary and targeted program briefs to email list	Within 90 days of conclusion of funding
General Public	Communicate evaluation findings	Final report to stakeholders and posted on website	At project conclusion

Source: Centers for Disease Control and Prevention. Evaluation Reporting: A Guide to Help Ensure Use of Evaluation Findings. Atlanta, GA: U.S. Department of Health and Human Services; 2013.

Step 2: Develop Reporting Products

The second step in reporting is determining what types of products will be developed and used to communicate the findings. Potential reporting products include:

- Written products
- Presentations
- Visuals and graphics
- Products distributed via social media
- Multimedia products (e.g., videos, podcasts, photo-reporting)

Sample Written Product Formats

- Full evaluation reports
- Executive summaries
- Memos and short communication pieces
- Briefs: technical, practitioner focused, policy
- Academic papers or conference papers, working papers
- Press releases and media documents, newsletters

Before developing actual products, it is important to think through potential challenges that each type of product and the corresponding dissemination strategy might face, and think through possible solutions to help proactively avoid these challenges.

Check Your Work: Are you experiencing any of these dissemination challenges?

Challenge	Solution
Message and presentation format is not tailored to audience	• Know your audience (e.g., executives, technical experts, general public). • Create several dissemination products (e.g., full evaluation report, an executive summary, an infographic) • Create audience-specific products
Report is too technical	• Tell a story • Keep it concise • Avoid jargon • Pay attention to visuals • Put technical content in an appendix
Messaging is unclear or inconsistent across dissemination products	• Keep the central message consistent • Show why your findings are important to a broader audience • Don't overstate your findings
Dissemination channel is not appropriate for the audience	• Consider different dissemination channels for your message • Don't over-rely on technology

Step 3: Disseminate Products

It is easy to focus on developing products without having a clear sense of where and how they will be disseminated. Developing a dissemination plan early on, before product development begins, means that the products can be developed with the distribution strategy in mind, and distribution can begin as soon as the materials have been prepared. Steps involved in implementing the dissemination plan include:

Hear from the Speaker

Hear more about reporting and dissemination starting at about 1:12 of Session 4 - Data Analysis, Visualization, and Data-Driven Policy.

- **Assigning responsible creator/distributor for each product –** Not only should each product be assigned a creator, it is also important to think proactively about how the report will be distributed. Take advantage of the partners and their access to key stakeholders when thinking about how to get the evaluation report in front of the intended key audiences.
- **Prioritizing the distribution of various products based on resources –** Resources are not always available to create an array of products for all intended audiences. When facing a shortage of resources, prioritize the creation and distribution of products that can give the most "bang for the buck," and be helpful to a broad audience. Also, in order to save resources, consider repurposing already existing products rather than starting creation from scratch.
- **Taking advantage of emerging opportunities –** Sometimes a situation might present itself that gives the evaluation team a prime opportunity to present its findings to a wider audience, such as media or political interest in the initiative being implemented by the PZ. Taking advantage of this spotlight can generate public interest in the work of the PZ and lead to an influx of resources to support the work. It is also important to take advantage of events that might keep continued focus on the evaluation findings, such as workshops, meetings, and conferences.

- **Adjusting the plan over time –** Reporting should happen throughout the life of the evaluation and not just at the end of the evaluation. Just like it is important to be flexible with the evaluation plan, it is important that the dissemination plan be flexible to account for any unforeseen occurrences. Finally, involvement with stakeholders should continue beyond the dissemination of findings through planned convenings and facilitated discussions to help ensure that evaluation findings are used.

Step 4: Support Use by Stakeholders

Stakeholders play a key role in reporting results by offering input throughout the evaluation process to ensure effective and useful reporting of evaluation results. It is important to strategically encourage input and participation from this group at critical points along the way in order to increase the likelihood that evaluation findings will be used. Reports should:

- Provide information to help stakeholders improve their programs – This may involve suggesting changes to program design, implementation, and staffing; and specifying the logistics—who, when, what it takes (e.g., money, staff) to make changes.
- Provide information to help stakeholders decide whether enough evidence exists to justify program continuation, replication, or expansion.

To maximize stakeholder engagement and capitalize on their expertise, it is important to keep the lines of communication open throughout the entire evaluation, from the initial phases of planning through final reporting and dissemination. While the evaluation and subsequent reporting may not always address everyone's interests, it is important to always prioritize the needs of key stakeholders and, to the extent possible, support them in implementing the report findings.

Apply Your Knowledge: Identify How to Report and Disseminate Results

Using what you learned in this chapter, complete *Part C: Reporting and Dissemination* in the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use). Think not only about what products you will produce (column 2), but also who the products will be targeted to and the best ways to disseminate the products to those audiences. Keep in mind that you may have multiple audiences that are interested in answers to each research question, so you may need multiple products and/or dissemination methods.

See *Part C: Reporting and Dissemination* in Appendix B to see how reporting and dissemination strategies can be targeted differently according to the research question and intended audience.

- Make sure each reporting product connects back to your evaluation questions (column 1).
- Think about the format of the product(s) you will produce ('What?'), and enter that in column 2. This could include written products (e.g., evaluation reports, executive summaries, memos, briefs, and academic papers), presentations, visuals and graphics, or social media, and other creative products (e.g., photo-reporting).
- Think about the audience the product will be designed to reach ('Who?'), and enter that in column 3.
- Think about the dissemination strategy ('How?'), and enter that in column 4.

Example: Tools for Seeing Meaning in Data

The Los Angeles Promise Zone has systematized its process for tracking and organizing its data by developing two data management and information sharing tools.

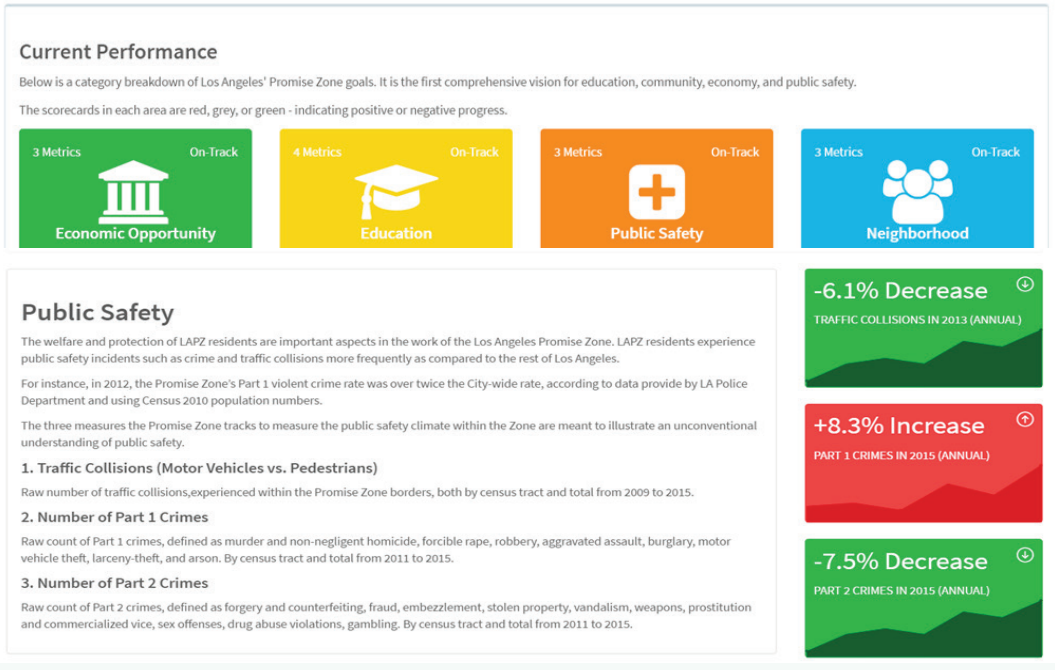
Initiative Scorecard: When data are collected, they are entered in a consistent format in a spreadsheet. Those data populate a scorecard organized by indicator, and color coding makes it easy to see trends.

Hear from the Speaker

This discussion starts at about 1:23 of Session 3 - Data Collection and Management.

PZ Strategic Goal	LAPZ Objective	Community Enabler	Sub-Category	Metric (All Metrics Reported for PZ Specifically)
Create Economic Opportunity	*Investment Indicator*	*ECONOMIC ACTIVITY*	*Poverty Concentration*	*% of Households below the federal poverty level*
Create Economic Opportunity	*Create Jobs*	*ECONOMIC ACTIVITY*	*Jobs Created*	*New/total jobs from businesses in/around the Zone*
Create Economic Opportunity	*Investment Indicator*	*ECONOMIC ACTIVITY*	*Private Investment*	*Dollar amount of total valuation for all construction permits (commercial & residential) for new and existing buildings*
Improve Educational Outcomes	*Improve School Attendance*	*EDUCATION*	*Academic*	*8th grade students at grade level in math*
Improve Educational Outcomes	*Improve School Attendance*	*EDUCATION*	*Academic*	*Third grade proficienty in English*
Improve Educational Outcomes	*Increase college readiness, enrollment and graduation*	*EDUCATION*	*Academic*	*Four-year graduation rate*
Improve Educational Outcomes	*Increase college readiness, enrollment and graduation*	*EDUCATION*	*Academic*	*% of 18-24 YO enrolled in college*
Make our Neighborhoods Safe	*Safety Indicators*	*PUBLIC SAFETY*	*Crimes & Accidents*	*Traffic Collisions MV vs. Ped (High Injury Network Street Ratings)*
Make our Neighborhoods Safe	*Safety Indicators*	*PUBLIC SAFETY*	*Crimes & Accidents*	*Number of Part 1 Crimes*
Make our Neighborhoods Safe	*Safety Indicators*	*PUBLIC SAFETY*	*Crimes & Accidents*	*Number of Part 2 Crimes*
Build Equitable, Livable and Sustainable Communities	*Preserve, maintain and expand the supply of affordable housing*	*SUSTAINABLE & LIVABLE*	*Housing Affordability*	*% of Households Paying over 30% of Income in Rent*
Build Equitable, Livable and Sustainable Communities	*Reduce and end local homelessness*	*SUSTAINABLE & LIVABLE*	*Homelessness*	*Total homeless population*
Build Equitable, Livable and Sustainable Communities	*Focus Resources on Public/Open Spaces*	*SUSTAINABLE & LIVABLE*	*Streets & Sanitation*	*% of acceptably clean streets (Clean Streets Initiative Ratings)*

Performance Dashboard: The detailed indicator data from the scorecard are further summarized in a Performance Dashboard to make it easy to share information with stakeholders.



An excerpt of the Evaluation Methods from the sample Framework in Appendix B is included below. Use this as a reference to complete the template in Appendix A.

Reporting and Dissemination

You may share your results in a range of formats including written products (evaluation reports, executive summaries, memos, briefs, academic papers, etc.), presentations, visuals and graphics, or social media, and other creative products (e.g., photo-reporting). The type of reporting will depend on who the audience is, what information will be included, the timing of the report, and other factors. Work with your team to identify how you will report your results. Identify each product you will provide, who the target audience is, how the product will be disseminated, and which evaluation questions it will answer.

1. Evaluation Question(s)	2. Product (What?)	3. Target Audience (Who?)	4. Dissemination Strategy (How?)
Q1	Quarterly implementation report Dashboard	PZ partners	Report emailed to key stakeholders Dashboard posted to a website
Q2, Q3, Q4, Q5	Annual progress report Brief Dashboard	PZ partners, community, HUD	Report emailed to key stakeholders 2-page brief distributed at a community meeting Dashboards or infographics posted to a website Links to information disseminated via twitter

Chapter 8

Complete Your Framework

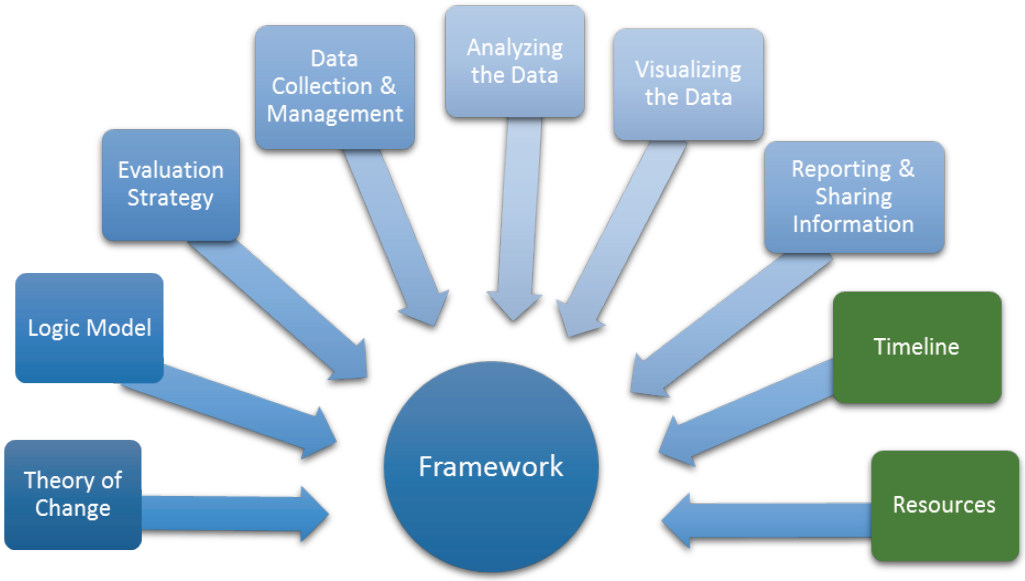
Chapter 8

Complete Your Framework

Framework Elements Covered in this Chapter

Chapter 8 covers timeline and resource issues (see **Figure 44**). It concludes with instructions for completing the framework, putting it into use, and continuing to improve it over the life of the Promise Zone Initiative.

Figure 44: Framework Elements – Timelines and Resources



With all the key elements of the Framework in place, it is time to think about logistics. Moving a Data and Evaluation Framework from the conceptualization stages to implementation requires planning, including establishing timelines and identifying resources. This chapter walks through these final steps required to complete the Data and Evaluation Framework.

Timeline

An evaluation is often bound by concrete schedules and deadlines. Developing a clear timeline that plans out all relevant components of the evaluation is an important step in creating an evaluation framework. As you consider the timeline, keep in mind the key steps in the evaluation process, as depicted in **Figure 45**.

Figure 45: Evaluation Framework Timeline

- **Evaluation Planning:** Everything covered to this point; designing the evaluation, choosing and operationalizing the indicators, and deciding how to collect the data and from whom, is a part of evaluation planning.
- **Clearance Process:** Before beginning data collection, get clearance from funders and any pertinent organizations like an Institutional Review Board (IRB) or Office of Management and Budget (OMB) if applicable. IRB focuses on the protection of human subject research for grantees; OMB applies to federally funded projects and focuses on assessing respondent burden resulting from federal data collection. OMB requirements are not triggered by receiving a PZ designation, but PZs should always be aware of this possible requirement if they receive other federal funds.
- **Data Collection:** This step focuses on either collecting primary data or getting secondary data for analysis from a third party usually through a data use agreement. One important part of this step is establishing a clear and comprehensive data management process.
- **Analysis and Visualization:** The analysis plan should be included in your evaluation plan.
- **Report Writing and Dissemination**: Make sure that the reports are targeted at the different audiences.

The timeline in Figure is linear for simplicity, however, keep in mind that for a 10-year initiative such as a Promise Zone, the steps will not be as tidy and sequential as shown in the figure. You will likely do annual (or even more frequent) evaluation planning to refine the tasks and focus of each year's activities. You can expect to collect data at multiple points in the process. You will do reporting and information dissemination multiple times over the course of the PZ designation. Moreover, you may be collecting data for one program while planning a detailed evaluation strategy for another. The initial timeline you develop will need to be relatively high level to capture the arc of the 10-year period, but you will certainly want to revisit the plan and refine it year by year to give your PZ a clear sense of deadlines required to achieve its evaluation goals.

Apply Your Knowledge: Activities and Timeline

Now that you have evaluation questions and evaluation designs sketched out in *Part B* of the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use), you are ready to use the information from this section to help you complete *Part D: Activities and Timeline.* Copy the Evaluation Questions to column 1 of *Part D: Activities and Timeline*. Then use column 2 to lay out the Activities that will be needed to implement the evaluation design associated with each research question, and sketch out short-, medium-, and long-term timelines in columns 3, 4, and 5.

See *Part D: Activities and Timeline* of Appendix B to see how research questions drive the activities and timelines needed to implement each evaluation design.

- Consider listing the activities at a fairly high level (e.g., data collection, analysis, and reporting) for each component of the evaluation.
- Identify who will be responsible for each activity; they can continue to add more details.
- Create rough estimates of how long each step will take.
- Look at all the activities listed, consider whether any of them will be occurring simultaneously, and plan accordingly. Sometimes concurrent activities can piggy back on each other effectively; other times they could interfere with each other.

Resources

An important part of planning the evaluation is to start by taking stock of all the resources available for the evaluation. Because a PZ designation does not come with designated funds, the resources a PZ Initiative has available are people's time—not financial resources in form of a budget. Those human resources are valuable, and during the resource stock-taking process, the initiative will want to capture this information. If an initiative has access to additional resources (e.g., software for data visualization), it can be helpful to list those, too.

PZ Initiative partners can often contribute to the evaluation process. Take time to understand what capabilities and experience partners can bring to long-term evaluation. It also helps to work up front with partners to get buy-in and understanding of program needs and goals. Often, partners can contribute valuable resources such as staff support, software, or meeting space for focus groups, for example.

Community Resources

Consider developing a community asset map or table to help keep track of what resources are available to address the needs, identify any gaps, and consider how stakeholders can help. For example, there may be universities and businesses with financial resources that can provide staff and/or resources to support data collection over the long term.

Keep in mind that investing in the evaluation can have concrete benefits for the PZ partners who participate. Most obviously, evaluation can help improve the programs and serve the community better and inform whether a program can be replicated or scaled-up. In addition, the data collected can support grant writing and help obtain funding for additional programming. When considering what resources to employ and invest in, establish a realistic purpose and scope of evaluation. See Chapter 1 for additional thoughts about engaging partners.

It is rare for a community to feel like it has sufficient resources to conduct its ideal evaluation. It is true that resources can affect the extent of the evaluation that can be accomplished; however, more spending does not always lead to a better evaluation. A well-designed and efficiently implemented evaluation can cost less

than a poorly designed evaluation (e.g., data collection is often the most expensive, so choose wisely between primary vs. secondary).

Apply Your Knowledge: Identify Resources

To capture the resources needed to implement the activities identified in *Part D: Activities and Timeline* of the *Data and Evaluation Framework Template* found in Appendix A (or another template already in use), copy the Evaluation Questions and Activities to columns 1 and 2 of *Part E: Resources.* Use columns 3, 4, and 5 to identify the resources that will be needed to implement the required activities over the short-, medium-, and long-term. Typically, staff time will be the primary resource available to PZs for completing the activities listed, but if other resources are available, feel free to list them too. Use rough estimates if necessary, and then refine the resources items as the Framework takes shape.

See *Part E: Resources* in Appendix B to see how resources can be sketched out for different time periods.

Apply Your Knowledge: Complete your Framework

Once you have completed the *Apply Your Knowledge* sections in this document, you will have all of the elements of a Data and Evaluation Framework! Here are your next steps:

1. **Compile the Pieces.** If you have worked on any of the pieces separately, put them all together, either using the template provided or in another format already in use.
2. **Review the Framework Document.** Review all elements as a whole to be sure you are happy with the way the pieces fit together—at least for this iteration of the Framework.
3. **Share and Improve the Framework.** Plan ways to share this iteration of your Framework, which you may have developed quickly and without extensive consultation, with your partners. Look for ways to improve it, flesh it out, and gain buy-in and support from the partners who need to engage in implementation.
4. **Implement, with Continuous Improvement.** Begin implementing the data and evaluation plan, but keep in mind that this is a living document. Learn as you go and adjust as needed to ensure that the Framework remains meaningful for your Promise Zone.

CONGRATULATIONS ON COMPLETING YOUR DATA AND EVALUATION FRAMEWORK!!

Excerpts of the Timeline and Resources sections of the sample framework in Appendix B are included below. Use this as a reference to complete the template in Appendix A.

Timeline

Insert your research questions in Column 1. Then Identify the activities you expect to undertake to answer each evaluation question based on the evaluation design identified in Part B and insert them in Column 2. Each set of activities should include data collection, analysis, and reporting activities.

Identify which activities will be required in which timeframe: short-term (1-3 years), medium-term (4-6) years, or long-term (7-10 years). Insert this information in Columns 3, 4, and 5.

1. Evaluation Question(s)	2. Activities (collection, analysis, and reporting)	3. Short-term (1-3 years)	4. Medium-term (4-6 years)	5. Long-term (7-10 years)
Q1	Program administrative data	X	X	X
Q2	Stakeholder interviews	X	X	X
Q3	Survey for local data for short-term outcomes	X		
Q4	Group B indicator tracking for medium-term outcomes		X	
Q5	Group A indicator tracking for long-term outcomes			X

Resources

Insert your research questions and activities in Columns 1 and 2. Think through the resources you will need to implement each activity during the time frames you identified (short-term, medium-term, long-term). You may think about the resources in the form of annual full-time equivalents (FTEs); however you may choose to estimate the resources you will need in some other way.

1. Evaluation Question	2. Activity	3. Short-term (1-3 years)	4. Medium-term (4-6 years)	5. Long-term (7-10 years)
Q1	Program administrative data	0.4 FTE	0.4 FTE	0.4 FTE
Q2	Stakeholder interviews	0.1 FTE	0.1 FTE	0.1 FTE
Q3	Survey of residents for local data for short-term outcomes	0.3 FTE		
Q4	Group B indicator tracking for medium-term outcomes		0.2 FTE	
Q5	Group A indicator tracking for long-term outcomes			0.1 FTE

Appendix A

Data and Evaluation Framework Template

Appendix A

Data and Evaluation Framework Template

A **Data and Evaluation Framework**, also known as an evaluation plan, links evaluation questions about a program to indicators, data sources, data collection methods, and the outcomes the program seeks to achieve. Guided by the program's Theory of Change and Logic Model, the Framework describes and justifies the data collection and evaluation approach selected and provides a guide for each step of the evaluation process. It also includes a timeline and identifies resources to be used in the evaluation. PZs may use the template that follows to develop a Framework or may choose to use another format that includes the key elements of a Framework.

By working through each activity in this Guide, a PZ will emerge with a complete Data and Evaluation Framework that includes the following:

- **Part A: Theory of Change/Logic Model –** Describe your Theory of Change and insert your Logic Model.
- **Part B: Evaluation Methods –** Describe how your data and evaluation activities will be carried out. This includes identifying the evaluation question(s) and describing how you will use evaluation design, data sources and collection, and analysis and visualization to answer the evaluation questions.
- **Part C: Reporting and Dissemination –** Outline the types of reports to be produced, your target audiences, and the associated communication and dissemination strategies.
- **Part D: Timeline –** Describe your timeline for each evaluation activity (you may break the activity into subtasks if they extend across multiple periods).
- **Part E: Resources –** Discuss the resources required and full-time equivalents (FTE) (if applicable).

An electronic version of the template can be found On the Urban Promise Zones Data and Evaluation Framework site under session 2: https://www.hudexchange.info/resources/documents/Promise-Zones-Session-2-Data-and-Evaluation-Framework-Template.docx.

Promise Zone: _____

Lead Organization: _____

Address: _____

Part A: Theory of Change/Logic Model

1. Theory of Change

The Theory of Change is the foundation for your data and evaluation framework. It is a narrative description of why desired changes are expected to happen in a particular context. It does this by presenting a clearly expressed relationship between the populations (who?), outcomes (what?), and strategies (how?). Work with your team to describe your Theory of Change. Insert the PIT-B (problem/if/then/because) description you develop in the box below.

[Insert your PIT-B Theory of Change]

2. Logic Model

The Logic Model is a visual representation of the way your PZ will implement its programs in accordance with your Theory of Change. It translates the "why" you described in your Theory of Change into a fleshed out "how." Work with your team to build or refine your Logic Model, including defining inputs, activities, outputs, and outcomes (short-, medium-, and long-term), and identifying connections among these elements. Insert the Logic Model you develop or refine below. If appropriate, your Logic Model may include multiple sections corresponding to different focus areas.

[Insert Logic Model. Use as many pages as necessary.]

Part B: Evaluation Methods

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy

Part C: Reporting and Dissemination

Reporting and Dissemination

You may share your results in a range of formats, including written products (evaluation reports, executive summaries, memos, briefs, academic papers, etc.), presentations, visuals and graphics, social media, and other creative products (e.g., photo-reporting). The type of reporting will depend on who the audience is, what information will be included, the timing of the report, and other factors. Work with your team to identify how you will report your results. Identify each product you will provide, who the target audience is, how the product will be disseminated, and which evaluation questions it will answer.

1. Evaluation Question(s)	2. Product (What?)	3. Target Audience (Who?)	4. Dissemination Strategy (How?)

Part D: Activities and Timeline

Activities and Timeline

Insert your research questions in column 1. Then identify the activities you expect to undertake to answer each evaluation question based on the evaluation design identified in Part B and insert them in column 2. Each set of activities should include data collection, analysis, and reporting activities.

Identify which activities will be required in which timeframe: short-term (1–3 years), medium-term (4–6) years, or long-term (7–10 years). Insert this information in columns 3, 4, and 5.

1. Evaluation Question(s)	2. Activities (collection, analysis, and reporting)	3. Short-Term (1–3 years)	4. Medium-Term (4–6 years)	5. Long-Term (7–10 years)

Part E: Resources (e.g., annual FTEs required)

Resources

Insert your research questions and activities in columns 1 and 2. Think through the resources you will need to implement each activity during the timeframes you identified (short-term, medium-term, long-term). You may think about the resources in the form of annual full-time equivalents (FTE); however, you may choose to estimate the resources you will need in some other way.

1. Evaluation Question	2. Activity	3. Short-Term (1–3 years)	4. Medium-Term (4–6 years)	5. Long-Term (7–10 years)

Appendix B

Data and Evaluation Framework Example

Appendix B

Data and Evaluation Framework Example

This appendix provides a sample of how a PZ might complete each section of the Data and Evaluation Framework. This sample is for illustrative purposes only. Each PZ will have its own Theory of Change and Logic Model for its priorities, and all of the content will be aligned with those guiding documents; however, reviewing this sample may help clarify how different segments of the Framework are meant to fit together and build on each other.

Promise Zone: _____

Lead Organization: _____

Address: _____

Part A: Theory of Change/Logic Model

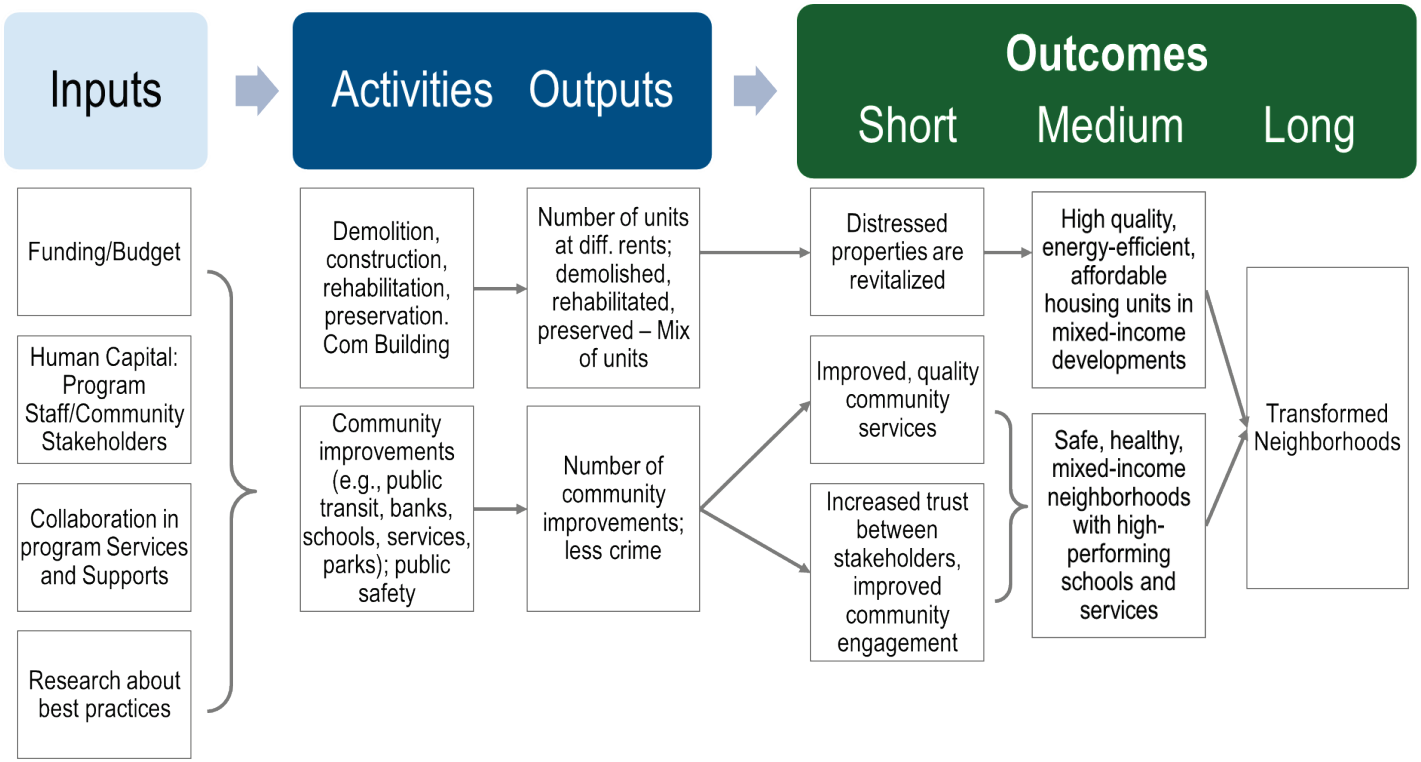
1. Theory of Change

The Theory of Change is the foundation for your Data and Evaluation Framework. It is a narrative description of why desired changes are expected to happen in a particular context. It does this by presenting a clearly expressed relationship between the populations (who?), outcomes (what?), and strategies (how?). Work with your team to describe your Theory of Change. Insert the PIT-B (problem/if/then/because) description you develop in the box below.

- Our **problem** is that the neighborhood is distressed. The poor state of the buildings decreases the availability of safe and affordable housing units. Along with a lack of basic amenities (e.g., public transit, schools, and services) and safety, the physical distress of the neighborhood negatively affects the economic opportunities available to residents by discouraging commercial establishments from moving into the area.
- **If** we rehabilitate the buildings in the neighborhood, demolish the most run-down, distressed ones, and construct new buildings in their place; and if we improve the safety and amenities of the community;
- **Then** we will be able to transform the neighborhood into one that provides the resources and environment that will attract mixed-income residents.
- This is **because** revitalizing distressed properties will increase the number of high quality, energy efficient, and affordable units available both for housing and commercial use in the neighborhood. Efforts to improve community services will improve the quality of these services while increasing the trust and engagement of stakeholders, leading to a safe and healthy community with high performing schools and services. These improvements will ultimately transform the neighborhood.

2. Logic Model

The Logic Model is a visual representation of the way your PZ will implement its programs in accordance with your Theory of Change. It translates the "why" you described in your Theory of Change into a fleshed out "how." Work with your team to build or refine your logic model, including defining inputs, activities, outputs, and outcomes (short-, medium-, and long-term) and identifying connections among these elements. Insert the Logic Model you develop or refine below. If appropriate, your Logic Model may include multiple sections corresponding to different focus areas.



Part B: Evaluation Methods

Evaluation Methods

This section is where you will describe how your data and evaluation activities will be carried out.

- Identify your evaluation questions and evaluation design. Insert that information in the first two columns below.
- Identify data indicators to help answer each evaluation question and determine how you will obtain that data. Insert that information in columns 3 and 4 below.
- Identify a strategy for how you will analyze your data and display it visually for each question. Insert that information in columns 5 and 6 below.

Make sure that each piece of information you add connects back to your evaluation questions.

1. Evaluation Questions	2. Evaluation Design	3. Indicators	4. Data Sources	5. Data Analysis Strategy	6. Data Visualization Strategy
Q1: How many houses have been rehabilitated, demolished, and constructed? (output)	Process evaluation	# units rehabilitated # units demolished # units constructed	Secondary Data: Administrative records from partners	Quantitative Analysis: Descriptive statistics (count overall, by sector)	Trend line
Q2: What are the challenges with implementation?	Process evaluation	Type of challenges	Primary Data: Stakeholder interviews	Qualitative Analysis: Content analysis	Illustrative quotes
Q3: Has individual connectivity to neighborhood increased? (short-term outcome)	Outcome evaluation	Perceived connectivity to neighborhood (Group D)	Primary Data: Survey of residents	Quantitative Analysis: Descriptive statistics (mean overall, by sector), Comparative statistics	Trend line, GIS, infographics
Q4: Have the schools improved? (medium-term outcome)	Outcome evaluation	High school graduation rate (Group B)	Secondary Data: School district student records	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics
Q5: How many households are below the federal poverty line? (long-term outcome)	Outcome evaluation	Income (Group A)	Secondary Data: Census ACS	Quantitative Analysis Descriptive statistics (mean overall, by sector)	Trend line, GIS, infographics

Part C: Reporting and Dissemination

Reporting and Dissemination

You may share your results in a range of formats, including written products (evaluation reports, executive summaries, memos, briefs, academic papers, etc.), presentations, visuals and graphics, social media, and other creative products (e.g., photo-reporting). The type of reporting will depend on who the audience is, what information will be included, the timing of the report, and other factors. Work with your team to identify how you will report your results. Identify each product you will provide, who the target audience is, how the product will be disseminated, and which evaluation questions it will answer.

1. Evaluation Question(s)	2. Product (What?)	3. Target Audience (Who?)	4. Dissemination Strategy (How?)
Q1	Quarterly implementation report Dashboard	PZ partners	Report emailed to key stakeholders Dashboard posted to a website
Q2, Q3, Q4, Q5	Annual progress report Brief Dashboard	PZ partners, community, HUD	Report emailed to key stakeholders 2-page brief distributed at a community meeting Dashboards or infographics posted to a website Links to information disseminated via Twitter

Part D: Activities and Timeline

Timeline

Insert your research questions in column 1. Then Identify the activities you expect to undertake to answer each evaluation question based on the evaluation design identified in Part B and insert them in column 2. Each set of activities should include data collection, analysis, and reporting activities.

Identify which activities will be required in which timeframe: short-term (1–3 years), medium-term (4–6 years), or long-term (7–10 years). Insert this information in columns 3, 4, and 5.

1. Evaluation Question(s)	2. Activities (collection, analysis, and reporting)	3. Short-Term (1–3 years)	4. Medium-Term (4–6 years)	5. Long-Term (7–10 years)
Q1	Program administrative data	X	X	X
Q2	Stakeholder interviews	X	X	X
Q3	Survey for local data for short-term outcomes	X		
Q4	Group B indicator tracking for medium-term outcomes		X	
Q5	Group A indicator tracking for long-term outcomes			X

Part E: Resources (e.g., annual FTEs required)

Resources

Insert your research questions and activities in columns 1 and 2. Think through the resources you will need to implement each activity during the timeframes you identified (short-term, medium-term, long-term). You may think about the resources in the form of annual full-time equivalents (FTE); however, you may choose to estimate the resources you will need in some other way.

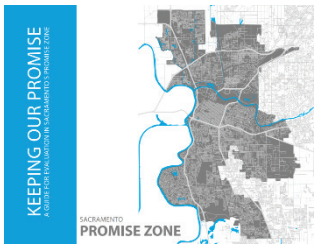
1. Evaluation Question	2. Activity	3. Short-Term (1–3 years)	4. Medium-Term (4–6 years)	5. Long-Term (7–10 years)
Q1	Program administrative data	0.4 FTE	0.4 FTE	0.4 FTE
Q2	Stakeholder interviews	0.1 FTE	0.1 FTE	0.1 FTE
Q3	Survey of residents for local data for short-term outcomes	0.3 FTE		
Q4	Group B indicator tracking for medium-term outcomes		0.2 FTE	
Q5	Group A indicator tracking for long-term outcomes			0.1 FTE

Appendix C

Examples of Data and Evaluation Frameworks for Promise Zone and Other Community Change Initiatives

Appendix C Examples of Data and Evaluation Frameworks for Promise Zone and Other Community Change Initiatives

This Guide provides a framework for PZs to follow when developing a Data and Evaluation Framework, but many different formats can be used to accomplish the same purpose. The links below highlight three very different frameworks (two from Promise Zones and one from a different community change effort) to provide insight and inspiration about how a framework can be as simple or as refined as the community chooses to make it—as long as the key elements of a Framework are incorporated.



Keeping our Promise: A Guide for Evaluation in Sacramento's Promise Zone

https://regionalchange.ucdavis.edu/news/keeping-our-promise-guide-evaluation-sacramentos-promise-zone

Data and Evaluation Framework for AmeriCorps Food for All Program

https://www.nationalservice.gov/sites/default/files/resource/Sample_Evaluatin_Plan.pdf

Los Angeles' Promise Zone Data and Evaluation Framework

https://static1.squarespace.com/static/5715611ae707ebe76fcc2b25/t/5723f93745bf21105b574e4f/1469663322251/LAPZ+Strategic+Plan_final+%281%29.pdf

Appendix D

Glossary for Data and Evaluation for HUD Promise Zones

Appendix D

Glossary for Data and Evaluation for HUD Promise Zones

*Key terms are designated with an asterisk

Assessment/Test The process of evaluating learning outcomes about topics of interest, for example, by testing students and reporting scores.

Attribution The assertion that certain events or conditions were, to some extent, caused or influenced by a program, meaning that the program has produced incremental effects.

Attrition Loss of subjects from the defined sample during the course of a study.

Baseline The status of services and outcome-related measures such as knowledge, attitudes, norms, behaviors, and conditions before an intervention, against which progress can be assessed or comparisons made.

Benchmark A standard against which results are measured.

Bias A consistent alignment with one point of view. A measurement process is biased if it systematically overstates or understates the true value of the measurement.

Case study A data collection method that involves in-depth studies of specific cases or projects within a program. The method itself is made up of one or more data collection methods (such as interviews and file review).

Causality The relationship between one event (the cause) and another event (the effect), which is the direct consequence of the first.

Coding The process of organizing and sorting data. Codes serve as a way to label, compile, and organize data. They also allow data to be summarized and synthesized. In linking data collection and interpreting the data, coding becomes the basis for developing the analysis.

Community change initiative* Those initiatives that provide funding, flexibility, technical assistance or other support to help selected communities (or regions) align their efforts across multiple governmental programs, organizations and departments to serve communities in a more effective and efficient manner.

Comparison group	A group not exposed to a program or treatment in a quasi-experimental design. It provides a basis for contrast with a treatment group (i.e., the group of people participating in the program or project being evaluated). Sometimes the term is used interchangeably with "control group."
Content analysis	A set of procedures for organizing and analyzing non-structured information into a standardized format that characterizes the meaning of written and otherwise recorded material.
Control group	In an experimental design, a randomly assigned group that does not receive the services, products, or activities of the program being evaluated. Sometimes the term is used interchangeably with "comparison group."
Correlation	A statistical measure of the degree of relationship or interdependence between or among variables.
Cross-sectional data	Data collected at one point in time from various entities.
Data*	Material gathered during the course of an evaluation that serves as the basis for information, discussion, and inference.
Data and evaluation framework*	A written document, also known as evaluation plan, that links evaluation questions about a program to indicators, data sources, data collection methods, and the outcomes and outputs of the program. The document includes a timeline and resources to be used in the evaluation. It describes and justifies the data collection and evaluation approach selected. It provides a guide for each step of the evaluation process and usually starts with an analysis of the program's theory of change or logic model.
Data collection*	The process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes.
Data usage agreement (DUA)*	A contractual document used for the transfer of data that has been developed by nonprofit, government, or private industry, where the data is nonpublic or is otherwise subject to some restrictions on its use.
Data visualization*	A general term that describes any effort to help people understand the significance of data by placing it in a visual context. Patterns, trends, and correlations that might go undetected in text-based data can be exposed and recognized more easily with data visualizations.
Descriptive statistical analysis	Numbers and tabulations used to summarize and present quantitative information concisely.

Dissemination*	The communication of evaluation processes, results, and conclusions, by written, oral, and/or audiovisual reporting to foster knowledge of the evaluation findings among all stakeholders.
Document review	A review of a variety of existing sources (e.g., documents, reports, data files, and other written artifacts) with the intention of collecting independently verifiable data and information.
Effect	Intended or unintended change due directly or indirectly to an intervention (related terms: results, outcomes)
Evaluability	Extent to which an intervention or program/intervention can be evaluated in a reliable and credible fashion.
Evaluation*	The systematic collection and analysis of information about program activities, characteristics, and outcomes to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming.
Experimental (or randomized controlled trial) designs	Designs that try to ensure the initial equivalence of one or more control groups to a treatment group by administratively creating the groups through random assignment.
Findings*	Factual statements based on evidence from one or more evaluations.
Focus group	A group of people selected for their relevance to an evaluation that is engaged by a trained facilitator in a discussion designed for sharing insights, ideas, and observations on a topic of concern.
Formative evaluation*	A type of evaluation intended to improve the performance of a program or intervention. A formative evaluation is usually undertaken during the design and pre-testing of the intervention or program, but it can also be conducted early in the implementation phase, particularly if implementation activities are not going as expected.
Generalizability	The extent to which information about a program, project, or instructional material collected in one setting can be used to reach a valid judgment about how it will perform in other settings.
Group A indicator*	For HUD PZs, indicators and measures that can be easily tracked consistently across PZs using administrative or other national data sets. Examples include jobs created, job sectors, income, employment by sector, poverty concentration, and property values.

Group B indicator* For HUD PZs, indicators that are consistent across PZs but require local data sources. Examples include building permits, crime rates, high school graduation rates, and chronic absenteeism

Group C indicator* For HUD PZs, indicators that are locally defined and require operationalizing. The data are likely drawn from federal and/or local sources. Examples include measures of school quality, workforce development, college entry, accessibility to pre-K or early childhood education, detailed measures of healthy food access, and homeownership.

Group D indicator* For HUD PZs, indicators that are accessible through surveys, crowdsourcing, and other individual-level data collection methods. Examples might include perceived neighborhood quality, perception of safety and community trust in law enforcement, and community connectedness.

Impact A result or effect that is caused by or attributed to a project or program. Impact is often used to refer to higher level effects of a program that occur in the medium or long term, and can be intended or unintended, positive or negative.

Impact evaluation* A type of evaluation that assesses the net effect or impact of a program by comparing program outcomes with an estimate of what would have happened in the absence of a program. Impacts on a population seldom can be attributed to a single program/intervention; therefore, an evaluation of impacts on a population generally entails a rigorous design that assesses the combined effects of a number of programs/interventions for at-risk populations. Sometimes the term is used interchangeably with "outcome evaluation."

Indicator* A specific, observable characteristic that can be measured to show the progress a program is making toward achieving a specified outcome.

Inputs The financial, human, and material resources used in a program/intervention and reflected in a logic model.

Institutional Review Board (IRB) A committee that reviews proposed research methods to ensure they are ethical. Such boards are formally designated to approve (or reject), monitor, and review biomedical and behavioral research involving humans. They often conduct some form of risk-benefit analysis in an attempt to determine whether or not research should be completed. Also known as an independent ethics committee (IEC), ethical review board (ERB), or research ethics board (REB).

Instrument* An assessment tool adopted, adapted, or constructed for the purpose of the evaluation.

Intervention*	A specific activity or set of activities intended to bring about change in some aspect(s) of the status of the target population.
Interview	A method for collecting research data that consists of a conversation where questions are asked to elicit information. The interviewer poses questions to the interviewee in an alternating series of usually brief questions and answers.
Level of significance	The probability that the observed difference did not occur by chance.
Logic model*	A systematic and visual way to present the perceived relationships among the resources available to operate the program, the planned activities, and the anticipated changes or results.
Longitudinal data	Data collected over a period of time, sometimes involving a stream of data for particular persons or entities over time.
Measurement	A procedure for assigning a number to an observed object or event.
Mixed Methods*	Use of both quantitative and qualitative methods in an evaluation.
Monitoring	Routine tracking and reporting of priority information about a program/project, its inputs and intended outputs, outcomes and impacts.
Non-response	A situation in which information from a subject is unavailable. Non-response may lead to bias that would skew what is learned about the sample.
Objective*	A statement of a desired program/intervention result that meets the criteria of being Specific, Measurable, Achievable, Realistic, and Time-phased (SMART).
Observation	A method for collecting research data that involves watching a participant and recording relevant behavior for later analysis.
Outcome*	Changes resulting from a program's activities/services. Quantifiable changes in knowledge, attitude, behavior, or condition (for example, increased knowledge, changed attitudes or beliefs, reduced tobacco use, reduced TB morbidity and mortality).
Outcome evaluation*	An evaluation that addresses how a program is related to changes in its participants or beneficiaries and provides evidence about whether the program caused these observed changes. Sometimes the term is used interchangeably with "impact evaluation."

Outputs*	The direct products of program activities; immediate measures of what the program did in a logic model.
Performance measurement*	An activity that allows program managers to assemble and review selected performance indicators on a recurring and frequent basis (e.g., monthly, quarterly, yearly) and use these measures to adjust resource flows and make midcourse corrections in program operations.
Population*	The total number of individuals or objects that the evaluation will make inferences about.
Post-test	A test to determine performance after the administration of a program, project, or instructional material.
Pre-test	A test to determine performance prior to the administration of a program, project, or instructional material.
Primary data*	Information collected directly by the researcher, rather than culled from secondary sources (data collection by others). In program evaluation, it refers to the information gathered directly by an evaluator to inform an evaluation.
Probability	The extent to which an event is likely to occur, measured by the ratio of the favorable cases to the whole number of cases possible.
Process evaluation*	An evaluation that examines how well the way a program is being implemented matches the theory behind its creation. Sometimes the term is used interchangeably with "implementation evaluation."
Program evaluation*	The systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development.
Qualitative data*	Information that is difficult to express in numerical terms (e.g., knowledge, attitudes, perceptions, and intentions).
Quantitative data*	Information that can be expressed in numerical terms, counted, or compared on a scale.
Quasi-experimental design	Study structures that use comparison groups to draw causal inferences but do not use randomization to create the treatment and comparison groups. The treatment group is usually given. The comparison group is selected to match the treatment group as closely as possible to allow for inferences about the incremental impacts of the program.

Random Control Trials (RCT)	Research studies that use an experimental design by randomly assigning participants into a treatment group or a control group so that they are statistically equivalent at the beginning of the study. Any difference after the intervention can be attributed to the program.
Randomization	Use of a probability scheme for choosing a sample. This can be done using random number tables, computers, dice, cards, and so forth.
Recruitment*	The process of trying to get individuals selected during sampling to participate in an evaluation. Together with sampling, it determines the initial quality of the sample to be evaluated.
Reliability*	The extent to which a measurement, when repeatedly applied to a given situation, consistently produces the same results if the situation does not change between the applications. Reliability can refer to the stability of the measurement over time or to the consistency of the measurement from place to place.
Research*	A study that intends to generate or contribute to generalizable knowledge to improve practice, i.e., the study intends to generate new information that has relevance beyond the population or program from which data are collected. Research typically attempts to make statements about how the different variables under study, in controlled circumstances, affect one another at a given point in time.
Sample*	A part of a population.
Sample size*	The number of individuals in a population to be sampled.
Sampling method	The method by which the sample is selected (such as systematic or stratified sampling).
Secondary data*	Data collected by someone other than the user. Common sources of secondary data for social science include censuses, information collected by government departments, organizational records, and data originally collected for other research purposes.
Stakeholders*	Entities (governments, agencies, companies, organizations, communities, individuals, etc.) that have a direct or indirect interest in project, program, or policy and any related evaluations.
Statistic*	A summary number that is typically used to describe a characteristic of a sample.

Summative evaluation*	Evaluation designed to present conclusions about the merit or worth of an object and recommendations about whether it should be retained, altered, or eliminated.
Survey	Systematic collection of information from a defined population through interviews or questionnaires.
Theory of change*	A comprehensive description and illustration of how and why a desired change is expected to happen in a particular context.
Treatment*	A project, program, or policy that is the subject of an evaluation.
Triangulation*	The analysis of data from three or more sources obtained by different methods. Findings can be corroborated, and the weakness or bias of any of the methods or data sources can be compensated for by the strengths of another, thereby increasing the validity and reliability of the results.
Validity	The soundness of the use and interpretation of a measure.

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- U.S. Agency for International Development. (2009). *Glossary of Evaluation Terms*. http://pdf.usaid.gov/pdf_docs/Pnado820.pdf

Appendix E

Matrix of Common Measures for Key Quality of Life and Economic Indicators

Appendix E Matrix of Common Measures for Key Quality of Life Indicators

The matrix below was compiled by the Urban Institute under contract with the U.S. Department of Health and Human Services (HHS). It contains information about a range of data sources that may be helpful to PZs because they are available at small geographies. For an Excel version of the matrix, see https://www.neighborhoodindicators.org/library/catalog/list-national-data-sets-small-area-data.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Decennial Census	Context	Aggregate	Census block	U.S. population	Population, race, ethnicity, age, gender, housing units, housing tenure	Number of children ages 0–5, homeownership rate	Federal	Yes	Most recent year: 2010.
National Change of Address Database (USPS)	Context	Individual	Mailing address	Individuals receiving mail	Mobility	Percent of households with a move, percent of movers leaving the neighborhood	Federal	No	May be necessary to purchase through commercial vendors.
American Community Survey	Context, create jobs, increase economic activity, affordable housing, expand educational opportunities	Aggregate	Block group	Sample of the U.S. population	Population, race, ethnicity, age, gender, housing units, housing tenure, income, poverty, occupation, educational attainment, housing characteristics.	Unemployment rate, poverty rate, median rent, number of rental units in buildings with 5 or more units	Federal	Yes	Large margins of error for small geographies and need to use 5-year estimates. Most recent 5-year estimate: 2008-2012.
Old-Age, Survivors, and Disability Insurance (OASDI) beneficiaries	Context, increase economic activity	Aggregate	ZIP code	Beneficiaries of Social Security or Disability	Disability, elderly	Number and types of beneficiaries, amount of benefits paid, number of beneficiaries over age 65	Federal	Yes	Most recent year: 2013.
Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES)	Create jobs, increase economic activity	Aggregate	Census block	Workers covered by unemployment insurance and federal employees.	Employment, industry sectors, location of jobs, low-wage jobs	Total number of jobs in neighborhood, number of neighborhood residents working in the neighborhood, number of retail jobs	Federal (collected from states)	Yes	Most recent year: 2011. (Production of LODES has been delayed recently).

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
IRS-Statistics of Income	Create jobs, increase economic activity	Aggregate	ZIP code	Individuals and households who file tax returns	Household income, Earned Income Tax Credit (EITC) receipt, household characteristics	Percent of households claiming EITC, average adjusted gross income	Federal	Yes	Most recent year: 2012.
IRS-Statistics of Income	Create jobs, increase economic activity	Individual	Tax filer address	Individuals and households who file tax returns	Household income, EITC receipt, household characteristics	Percent of households claiming EITC, average adjusted gross income	Federal	No	Limited research availability. Some possible through interagency agreement but needs to meet purposes in statute.
IRS-SPEC (Stakeholders, Partnerships, Education, and Communication)	Create jobs, increase economic activity	Aggregate	ZIP code	Individuals and households who file tax returns	Household income, EITC receipt, household characteristics	Percent of households claiming EITC, average adjusted gross income	Federal	Yes	Most recent year: 2012. Available through Brookings tool. http://www.brookings.edu/research/interactives/eitc
National Directory of New Hires	Create jobs, increase economic activity	Individual	n/a	New hires, workers (covered by state workforce agencies and federal government), UI applicants and claimants	Employment, unemployment	Number of new hires, average wages earned, number of UI claimants	Federal	No	Currently, could only be obtained for research purposes with SSNs.
Detailed Earnings Records (Social Security Administration)	Create jobs, increase economic activity	Individual	Address	People working in the U.S. and paying Social Security tax	Employment, low-wage jobs	Number of workers, average wages earned.	Federal	No	

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Child Care Subsidies (under the Child Care and Development Block Grant)	Create jobs, increase economic activity, expand educational opportunities	Individual	County (Federal); Address (state/local)	Parents and children receiving child care subsidies	Child care, early education, employment	Percent of children receiving child care subsidies attending accredited programs; number of children receiving child care subsidies in home-based care	Federal (collected from states on form ACF-801), state or local departments of human services	No	No longer collecting SSNs (as of 2015), 4 states only submit sample data. Currently don't have geographic information on providers.
Office of Head Start Program Information Report	Create jobs, increase economic activity, improve child and maternal health, expand educational opportunities	Aggregate	Local grantee service area	Children in Early Head Start or Head Start	Childcare, early education, health	Number of children in Head Start, number of children in Early Head Start	Federal (collected from local grantees); local Head Start grantees	Yes	List of Head Start Centers with latitude and longitude is available from Office of Head Start (doesn't have count of children served)
Temporary Assistance for Needy Families	Create jobs, increase economic activity	Individual	State (Federal); Address (state/local)	Households receiving TANF assistance	Public assistance	Number of households receiving TANF assistance, average cash assistance amount	Federal (collected from states on form ACF-899), state or local departments of human services	Yes, microdata with state ID; no otherwise	23 states report only sample data.
Fair Housing Equity Assessment Data	Create jobs, expand educational opportunities, increase quality affordable housing, improve neighborhood quality	Aggregate	Block group	U.S. block groups and census tracts	Poverty concentration, segregation, neighborhood opportunity	Dissimilarity Index (segregation), school proficiency index, job access index	Federal	No	Data was distributed to Sustainable Communities grantees and may be available in the future through HUD's Affirmatively Furthering Fair Housing tool.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
ZIP Business Patterns	Create jobs, increase economic activity, leverage private investment, neighborhood quality	Aggregate	ZIP code	Business Register maintained by the Census Bureau (known establishments with paid employees)	Employment	Number of establishments by industry; number of grocery stores	Federal	Yes	Most recent year: 2012.
Home Mortgage Disclosure Act	Increase private investment, increase economic activity, increase quality affordable housing	Aggregate	Tract	Mortgage applications and approvals by covered lenders	Housing, housing finance, borrower characteristics	Number of home purchase mortgages, home purchase mortgage denial rates, number of mortgages with high cost rates	Federal	Yes	Most recent year: 2013.
FDIC-Insured Summary of Deposits	Increase private investment, increase economic activity	Individual	Point	Full-service and limited service bank branches	Asset building, consumer finance	Number of banking institutions, level of deposits per capita	Federal	Yes	Most recent year: 2014.
HUD Neighborhood Watch	Increase economic activity, increase quality affordable housing	Aggregate	ZIP code	Federal Housing Administration (FHA) loans	Housing, housing finance	Number of FHA loans 90-days delinquent during their first 2 years	Federal	Yes	Updated monthly. Could be used for program management if targeting FHA borrowers.
HUD USPS Address Vacancies data	Increase economic activity, improve neighborhood quality	Aggregate	Tract	U.S. addresses on mail delivery routes	Housing, vacant housing, commercial	Number of long-term vacant residential address, number of commercial addresses vacant for 90 days	Federal	Yes	HUD transforms USPS data from ZIP codes to census tracts and releases the data quarterly. Could be used for performance management as lag is only 6 months (or less). Most recent quarter: 4th 2014.
NCCS Core Public Charities Database	Increase economic activity, increase private investment, improve neighborhood quality	Individual	Point	Registered charitable organizations	Social services	Number of charities by type, average revenue of charities	Urban Institute	Yes	Only for nonprofits required to file taxes ($25,000 revenue and above). Most recent year: 2012.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
NCES Common Core of Data	Expand educational opportunities	Aggregate	School	Publicly funded U.S. schools	Education	Number of students receiving free and reduced priced meals, student-teacher ratio	Federal	Yes	Most recent year: 2012/13.
Civil Rights Data Collection	Expand educational opportunities	Aggregate	School	Publicly funded U.S. schools	Education, Equity	Percent of Black students with out-of-school suspensions compared to the overall enrollment, number of third graders retained in grade by race	Federal	Yes	Most recent year: 2011/12. Survey conducted biennially.
National Student Clearinghouse	Expand educational opportunities	Individual	N/A	Students enrolled in colleges and universities	Higher education	Number of students enrolled in a 2- or 4-year college or university after graduation	Nonprofit	No	Requires submission of student names and affiliated secondary institution to the National Student Clearinghouse. Fee for service.
Free Application for Federal Student Aid (FAFSA) Completion Records	Expand educational opportunities	Aggregate	High School	High school students submitting completed FASFA applications	Higher education	Number of completed FAFSAs	Federal	Yes	
CMS Administrative Data Research Center: Master Beneficiary Summary File; Medicare and Medicaid Utilization	Improve access to health care and healthy food, improve child and maternal health	Individual	Address	Medicaid and Medicare beneficiaries	Health, public assistance	Number of beneficiaries, number of claims for preventive care visits	Federal	No	

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
USDA SNAP Retailer Locator	Improve access to health care and healthy food	Individual	Point	Establishments accepting SNAP benefits	Health, public assistance	Number of retailers accepting SNAP benefits in the neighborhood	Federal	Yes	
USDA-Food Access Research Atlas	Improve access to health care and healthy food	Aggregate	Multiple	N/A	Health	Distance from nearest supermarket, access to automobiles (measure of food access)	Federal	Yes	Most recent year: 2010. Update schedule unknown.
PIC/TRACS (Inventory Management System (IMS)/ PIH Information Center and Tenant Rental Assistance Certification System)	Increase quality affordable housing	Individual	Address	Individuals and households living in assisted housing or with housing vouchers	Household characteristics, subsidized housing	Number of households in public and subsidized housing units	Federal	No	
Low Income Housing Tax Credit (LIHTC)	Increase quality affordable housing	Individual	Point	Projects receiving LITHC	Housing, housing units	Number of LIHTC units	Federal	Yes	Most recent year: 2012.
Multifamily Assistance and Section 8 contracts	Increase quality affordable housing	Aggregate	Tract	Housing units covered by Section 8 contracts	Housing, subsidized housing	Number of Section 8 certificate holders	Federal	Yes	Updated every 2-3 months; data from 2015 are available. Could be used for program management.
National Preservation Database	Increase quality affordable housing	Individual	Address	Integrated data set of housing subsidies for each federally subsidized project	Housing, subsidized housing	Number of federally subsidized properties	National Low Income Housing Coalition and Public and Affordable Housing Research Corporation	Yes	Varies by data.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Location Affordability Index	Increase quality affordable housing	Aggregate	Block group	N/A	Housing, transportation	Percent of family cost allocated to combined cost of housing and transportation	Federal	Yes	Most recent available: 2006-2010. Update frequency unknown.
A Picture of Subsidized Housing	Increase quality affordable housing	Aggregate	Point/Tract	De-identified summary level of individuals and households living in assisted housing or with housing vouchers	Household characteristics, subsidized housing	Number of households in public and subsidized housing units	Federal	Yes	Most recent year: 2013.
Consolidated Plan/ Comprehensive Housing Affordability Strategy (CHAS) Data (HUD Special Tabulations)	Increase quality affordable housing	Aggregate	Tract	Sample of the U.S. population	Housing, housing cost	Number of cost-burdened renter households, share of households with income under 30 percent of area median income	Federal	Yes	Based on the American Community Survey 5-year estimates. Most recent available: 2007-2011.
Public Libraries in the U.S. Survey	Expand educational opportunities, improve neighborhood quality	Individual	Point	U.S. public libraries	Neighborhood amenities	Number of public libraries	Federal	Yes	Most recent year: 2012.
Museum Universe Data File	Expand educational opportunities, improve neighborhood quality	Individual	Point	U.S. museums	Neighborhood amenities	Number of museums	Federal	Yes	Most recent years: 2014-15.
EPA Enforcement and Compliance History Online (ECHO)	Improve neighborhood quality, improve child and maternal health	Individual	Point	EPA regulated facilities	Environment, community health	Location of waste discharge sources, location and amount of air pollutants emitted	Federal	Yes	A collection of many individual EPA data sources related to air emissions, surface water discharges, hazardous waste, and drinking water systems. Year of data varies by source.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Toxic Release Inventory	Improve neighborhood quality, improve child and maternal health	Individual	Point	Hazardous waste sites, facilities that produce air pollutants, and permits to discharge water	Environment, community health	Number of hazardous waste sites, amount of toxic chemical releases	Federal	Yes	Most recent year: 2014.
EPA Smart Location Database	Improve neighborhood quality, increase economic activity	Aggregate	Block group	N/A	Environment, land use, built environment	Aggregate transit service frequency, jobs within a 45-minute transit commute, street intersections per square mile	Federal	Yes	Summarizes more than 90 different indicators associated with the built environment and location efficiency. Year of data varies by source.
EJSCREEN: Environmental Justice Screening Tool	Improve neighborhood quality, increase economic activity	Aggregate	Block group	N/A	Environment, demographics	Environmental justice index	Federal	No	Data are forthcoming
Unemployment Insurance (UI) Wage Records	Create jobs, increase economic activity			Workers in the state covered by unemployment insurance	Employment, industry sectors, location of jobs, low-wage jobs	Number of employees, quarterly wages earned, number of weeks worked	State		Likely, SSNs need to be submitted to get data.
UI Claimant File	Create jobs, increase economic activity			Individuals who have filed for unemployment insurance	Unemployment	Number of UI claims filed, average number of weeks on UI	State		Usually contains address of claimant.
Childcare subsidies under the Childcare and Development Block Grant	Create jobs, increase economic activity, expand educational opportunities			Parents and children receiving childcare subsidies	Childcare	Percent of children receiving childcare subsidies attending accredited programs; number of children receiving child care subsidies in home-based care	Local departments of human services		

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Temporary Assistance for Needy Families (TANF)	Create jobs, increase economic activity			Households receiving TANF assistance	Public assistance	Number of households receiving TANF assistance, average cash assistance amount	Local departments of human services		
Childcare licenses	Create jobs, increase economic activity, expand educational opportunities			Licensed childcare providers	Childcare	Number of childcare slots by type, number of childcare slots at accredited centers	Local departments of human services		May contain information on quality rating of providers (rating systems vary by state).
Office of Head Start Program Information Report	Create jobs, increase economic activity, improve child and maternal health, expand educational opportunities			Children in Early Head Start or Head Start	Childcare, early education, health	Number of children in Head Start, number of children enrolled in Early Head Start	Local Head Start grantees		
Business licenses	Create jobs, leverage private investment, increase economic activity			Businesses that require licenses	Employment, industry sectors	Number of establishments by industry	State or local regulatory agencies		Varies by state and locality on what types of business or economic activities must be licensed (and what data are reported on the license).
ES202	Leverage private investment, increase economic activity			Employer quarterly reports of industry classification, total employment, and payroll	Economic development, workforce development, financial security	Percent of change in total employment, percent of employment in firms by size	State employment services agencies		Also collected at the federal level under the Quarterly Census of Employment and Wages program (released at state and metro area levels).

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Building and demolition permits	Leverage private investment, increase economic activity, improve neighborhood quality			Permits issued	Economic development, housing, workforce development	Total value of construction, number of residential units in the building pipeline, number of buildings demolished	Municipal building departments		Permits may also distinguish between new construction and renovation.
Local real property records	Leverage private investment, increase quality affordable housing			Property records maintained for taxing purposes	Economic development, housing	Percent of properties that are residential, median assessed value for single-family homes, median age of housing units	Local tax assessor		Local property records may also contain flags for owner-occupancy, for example in locations with property tax credits for owner-occupants.
Local recorder of deeds	Leverage private investment, increase quality affordable housing			Deed transfers and sales	Economic development, housing	Number of residential property sales by type	Local recorder of deeds or property transfers		Non-judicial foreclosure states may record notices of foreclosure with the recorder of deeds.
Public transit	Increase economic activity, improve neighborhood quality, increase connectedness, improve access to health care and healthy food			Bus and commuter rail routes and schedule	Transit, employment, location of jobs	Distance to job concentrations (if job nodes are known), location of transit stops, share of population within 1/4 mile of a bus stop or 1/2 mile of rail stop	Regional or local transportation agencies		
Automobile registrations and licenses	Increase economic activity, improve neighborhood quality, increase connectedness, improve access to health care and healthy food			Vehicles and drivers' licenses	Transit, employment, health	Number of automobiles per capita, percent of population with valid drivers' licenses, average BMI in a neighborhood	State bureau or department of motor vehicles		BMI can be calculated if height and weight are captured. Total vehicle miles traveled may be captured where annual or biennial inspections are required.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Public school records	Expand education opportunities			Students enrolled in public schools	K-12 education, pre-kindergarten (as applies), safety	Percent of children absent more than 10 percent of school days (chronic absenteeism), percent of children passing proficiency exam, number of suspensions by race	Local school district or state longitudinal data system		Individual-level student data protected by FERPA.
Crime reports	Increase public safety, improve neighborhood quality			Individual crime incidents or reports	Safety	Number of part I violent crimes, number of part II crimes	Local police departments of regional agency		Often at the block level on open data portals.
Arrest records	Increase public safety, improve neighborhood quality			Individuals who have been arrested	Safety	Number of arrests for violent crimes	Local police departments of regional agency		
911 calls for service	Increase public safety, improve neighborhood quality			Calls to local emergency dispatch system	Safety	Number of calls for domestic violence, percent change in calls over time	Local police departments of regional agency		
Juvenile Court filings	Increase public safety, improve neighborhood quality			Charges in court filed against or on behalf of juveniles	Safety	Juvenile crime rate, percent of juvenile filings that are for violent offenses	Local juvenile courts		
Prisoner Reentry	Increase public safety, improve neighborhood quality, increase economic activity			Prisoners leaving prisons to return to communities	Safety, public services	Number of returning prisoners per 1,000 residents, percent of returnees under supervision	Local, state, and federal corrections departments		

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Coroner's Reports	Increase public safety, improve child and maternal health			Records of autopsies	Safety, community health	Percent of homicides involving firearms, number of suicides involving drugs	Local coroner		
Liquor Licenses	Increase public safety, improve neighborhood quality			Permits to sell alcoholic beverages	Safety, community health	Number and type of outlets	State liquor control agency		
Supplemental Nutrition Assistance Program (SNAP)	Improve access to health care and healthy food, improve child and maternal health			Households receiving SNAP benefits	Health, public assistance	Number of households receiving SNAP assistance, average amount of SNAP benefits	Local departments of human services		
Sexually transmitted diseases screening	Improve access to health care and healthy food			People screened for STDs	Health, community health	Number of cases of sexually transmitted diseases	State or local public health department		
Emergency department admittance records	Improve access to health care and healthy food, improve child and maternal health, increase public safety			Individuals treated in emergency departments	Health, public services	Rates of injury by age, rates of treatment for preventable diseases (e.g., asthma, diabetes)	Hospitals or injury surveillance consortia		
Community referral (211) services	Improve access to health care and healthy food, improve child and maternal health, improve neighborhood quality			Community referral programs database on agencies and calls	Public and social services	Number of agencies by service area, percent of calls by type	Local information and referral agencies and 211 programs		

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Death records	Improve access to health care and healthy food, improve child and maternal health, increase public safety			Deaths in the locale	Health, population, community health	Mortality rate, disease-specific mortality rates	State or local public health department		
Birth records	Improve child and maternal health, improve access to health care and healthy food			Births to mothers living in locale	Health, population, community health	Percent births that are low birth weight, teen birth rate, percent of births with adequate prenatal care	State or local public health department		
Fetal death certificates	Improve child and maternal health			Deaths of children under 1 year	Health, community health	Infant mortality rate	State or local public health department		
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	Improve child and maternal health, improve access to health care and healthy food			Recipients of WIC benefits	Health, public assistance, community health	Number of children receiving WIC benefits, average food costs per person	Agency administering WIC		
Lead poisoning screening	Improve child and maternal health, increase quality affordable housing			Typically, children under 5 are screened	Health, housing	Percent of children screened with elevated blood lead levels	State or local public health department		
Immunization status	Improve child and maternal health, improve access to health care and healthy food			Young children	Health, immunization	Percent of children entering school appropriately immunized by age	Local public health departments		Source may vary by locality. States do not require this data collection.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Medicaid claims	Improve child and maternal health, improve access to health care and healthy food			Individuals submitting claims or encounter forms for service	Health, public services	Annualized rates of ambulatory care use, percent of newborns with appropriate number of well child visits in first year	State Medicaid agency		
Child welfare records	Improve child and maternal health, increase public safety			Children in custody or receiving protective services	Health, public services, child safety	Number of children taken into custody annually, number of children under agency supervision per 1,000 child population	State or local child protective services agency		
Mental health and substance abuse services	Improve child and maternal health, increase economic activity, improve access to health care and healthy food			Individuals receiving services from mental health and substance abuse agencies	Health, public services	Rates under treatment, in-patient days per capita	Mental health board and alcohol and other drug boards		
Child maltreatment or neglect	Improve child and maternal health, increase public safety			Reports for child abuse and neglect made to child protection authorities	Child health, safety	Number of children with maltreatment reports per 1,000 children, percent of reports that involve neglect	State or local child protective services agencies		
Voter records	Increase connectedness			Voter registration	Civic engagement	Percent of eligible voters who are registered, percent of registered voters who voted	State or local boards of elections		
Housing code enforcement	Improve neighborhood quality, leverage private investment			Records of violations	Housing	Percent of properties with violations	Municipal building departments		Code violations could be environmental, cosmetic, or structural, and in some cases could indicate blighted or vacant properties.

Data Source	Promise Zone Goal/Outcome	Type	Geographic Level	Population	Domain	Potential Indicators	Produced By	Publicly Available	Special Notes
Judicial foreclosures and housing actions	Improve neighborhood quality, leverage private investment			Court dockets on foreclosure, evictions, and code enforcement actions	Housing	Number of completed foreclosures per 1,000 residential properties	County or municipal court		
Public utilities	Improve neighborhood quality, increase quality affordable housing			Records of utilities such as water, electric, and gas	Housing	Number of properties with water shut off for >1 month	Utility companies		Proxy for vacant housing.

Appendix F

List of Resources in the Desk Guide

Appendix F

List of Resources

- The Annie E. Casey Foundation Organizational Research Services. Theory of Change: A Practical Tool for Action, Results and Learning.
- BetterEvaluation.org
- Center for Community Health and Development, University of Kansas. Community Tool Box. Using Evaluation to Understand and Improve the Initiative.
- Center for Innovation in in Research and Teaching. Analyzing Qualitative Data
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Division of Nutrition, Physical Activity, and Obesity. Developing an Effective Evaluation Plan.
- Centers for Disease Control and Prevention. Develop SMART Objectives.
- Centers for Disease Control and Prevention. CDC Evaluation Resources.
- Centers for Disease Control and Prevention. Developing Effective Evaluation Plans.
- Centers for Disease Control and Prevention. Developing Effective Evaluation Reports.
- Centers for Disease Control and Prevention. Glossary.
- Corporation for National & Community Service. Evaluation Core Curriculum Courses.
- Corporation for National & Community Service. Evaluation Design.
- Corporation for National & Community Service. Laying the Groundwork Before Your First Evaluation.
- Free Statistics Help
- Frechtling, J. (2010). User Friendly Handbook for Project Evaluation. Prepared for the National Science Foundation. Westat.
- Gillespie, S. & Tatian, P. The Urban Institute. (2015). Six Steps to Success: Collecting and Using Performance Data in Place-Based Initiatives.
- Hanleybrown, F., Kania, J. & Kramer, M. Channeling Change: Making Collective Impact Work, *Stanford Social Innovation Review*, January 2012.
- Harvard University, Program on Survey Research. Tip Sheet on Question Wording.
- Informing Change. Evaluation Capacity Diagnostic Tool.
- Long, M. and MacDonald, A. (2017). *Data analysis and use*. Prepared for OneStar Evaluation Institute. ICF.
- NVivo. Explore, present and share visualizations to gain deeper insights from your data.
- Opportunity360 Index Methodology
- ORS Impact and Spark Policy Institute. When Collective Impact has an Impact.
- Philadelphia Division of Housing and Community Development. Neighborhood Plan (pp. 46-49).
- Project Oracle Children & Youth Evidence Hub. Creating an Observation Guide.
- Promise Neighborhood Research Consortium. Research Design Issues for Evaluating Complex Multicomponent Interventions in Neighborhoods and Communities.

- Qualtrics. 10 Tips for Building Effective Surveys.
- Sacramento PZ Guidebook
- Sacramento PZ Toolkit
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