Visualizing Critical Paths: Logic Models and Theories of Change

Healthcare Georgia Foundation
grantmaking for health

Community
EVALUATION SOLUTIONS

Acknowledgement and Citation

The Author

Dr. Ann Price is President of Community Evaluation Solutions, Inc., an evaluation consulting firm she founded in 2004. Much of Ann's work is with community coalitions, foundations, and nonprofits with a focus on systems change. Ann and her team conduct evaluations in many areas including youth substance abuse prevention, youth development, foster care advocacy, education, and public health. Her work is published in several peer-reviewed journals on topics related to coalitions as mechanisms for social change, success stories and public health prevention and evaluation. Her book with co-author Dr. Susan Wolfe, *Community Consulting: A Practical Guide to Collaborating with Communities* is due out in 2023 and will be published by Cambridge Press. She has a podcast called *Community Possibilities* where she speaks to community leaders doing the hard work of community systems change.

Acknowledgement

This publication was created in partnership with Healthcare Georgia Foundation. Healthcare Georgia Foundation is a statewide, charitable organization with a vision of health equity in Georgia where all people attain their fullest potential for health and well-being. Through strategic grantmaking, our mission is to enable, improve, and advance the health and well-being of all Georgians. For more information, visit healthcaregeorgia.org.

The author would like to thank CES Research Assistant Ms. Janine Bush, and Dr. Susan Wolfe for their review of this paper.

Suggested Citation

Price, A. (2022). *Visualizing Critical Paths: Logic Models and Theories of Change*. Community Evaluation Solutions. https://www.communityevaluationsolutions.com/resources

Contact:

Dr. Ann Price
President
Community Evaluation Solutions
aprice@communityevaluationsolutions.com

Introduction

In the 1990s, Logic Models (LM) and Theories of Change (TOC) became popular to explain how public health and social programs' strategies and activities lead to their desired outcomes. These visual tools provide compelling explanations to complex interventions. Funders began to require these tools, as well as the collection and submission of evaluation data. Historically, evaluations emphasized basic "process data" (e.g., number of clients served, basic demographics, number of classes offered, etc.). In today's climate of social unrest, competition for resources, and the recognized need for health and social equity, the importance of demonstrating outcomes has heightened. Increasingly, funders are requiring grantees to provide evidence that their strategies and programs result in the desired outcomes.

Why a LM or TOC?

Sometimes, it's challenging for nonprofit and community leaders to explain what their program or strategy is about and what outcomes they are trying to achieve. Without a clear message, funders and community members are left confused. Even in the best circumstances, it's challenging to get community members engaged as each represents different organizations or interests. If community members and funders do not fully understand the work and its end goal, it is hard to engage them in the work.

Both Logic Models and Theories of Change are useful in explaining a program or strategy in a succinct, visual way. LMs and/or TOCs help stakeholders envision a common purpose for their community. The process of creating a LM or TOC can help nonprofits work together and more clearly define their work. Additionally, LM/TOC helps depict and manage the critical pathways that lead to the desired public health outcomes, as well as serve as the basis for an evaluation plan.

Definition of Logic Models and Theories of Change

The terms "Logic Model" and "Theories of Change" are often used interchangeable and incorrectly. Understandably, there is a lot of confusion about what exactly a LM or TOC is, and when each should be used. This article will distinguish their differences and explain when each should be used.

A **Logic Model** is a visual explanation of a program, including required resources, proposed activities, and the outcomes expected (due to its implementation). LMs became popular in the 1990s in larger part because of the United Way's emphasis on nonprofit outcomes, and through the leadership of the Kellogg Foundation (2004). Many federal, state, and private funding agencies require grantees to provide a program logic model. This standard one-page template outlines a program's mission, and helps to explain the details of a program or strategy. Put in an oversimplified way, if we do X, then Y will happen (Cooper et al., 2020; Dhillon & Vaca, 2018; Knowlton & Phillips, 2013).

Each of the components of a LM can be associated with indicators and serve as the base of an evaluation plan (Halimah, 2011; Kekahio et al., 2014; Kellogg Foundation, 2004). Creating a Logic Model helps stakeholders clearly identify outcomes, inputs, and activities. Logic Models **require identifying program components** (inputs, activities, outputs, and outcomes) so stakeholders can instantaneously identify outcomes which may be out of sync with inputs and activities. Logic Models explain the **What** of the initiative. They clarify changes expected at the individual level. These are referred to as **short, intermediate, or long-term outcomes** and include changes in knowledge, skills, abilities, attitudes, behaviors, health, or family functioning. Changes at the community level are referred to as **Impacts.** These may include changes in community health outcomes, economic conditions, housing education, and safety.

Theory of Change, on the other hand, was designed to explain more complicated initiatives, explaining the underlying assumptions and casual models, or the **Why** of a program or strategy. Like a LM, the TOC was developed in the 1990's, and serves as a communication tool to depict the expected results of a program or strategy.

If a LM is a ground level view, a TOC can be thought of as a 40,000 perspective. A TOC helps clarify and explain a program's theory (the **how** and **why** a strategy or program is believed to work) in a simple way. Rather than look at the specific connections (the inputs, activities, and outcomes), a TOC defines the **theory** (assumptions) about these connections. The TOC articulates the hypothesis about why an action will *cause* a result, rather the preconditions and sequence of interim outcomes needed to reach the long-term goal (Vaca, 2020; Dhillon & Vaca, 2018).

The value of a TOC, and its primary purpose, is to consider what ***influences* outcomes.** For example, social and health disparities experienced by vulnerable children and families are influenced by systems and environmental factors that surround them. These systems and factors may include institutions, service systems, community norms, partnerships, public will, policies, regulations, service practices, business practices and issue visibility. All of which influence community readiness for change and outcomes (Clark & Anderson, 2004; Lavinghouze et al., 2009).

Although often used at the organizational level to depict how the organization expects to achieve its mission, TOCS can also be used at the program or project level. Dhillon and Vaca (2018) explain how TOCs can also be helpful at various stages of program development and serve the interest of multiple parties (program implementers, program participants, staff, and other stakeholders) who may be engaged.

Whether you develop a TOC, a LM, or both, it is important to involve those most affected by the strategy or program (Q. Brown, personal communication, January 18, 2022). This can be done in many ways, including desk reviews, interviews, workshops, focus group discussions, and other participatory methods, all of which will help ensure the invested parties agree on the final product.

How to Determine Which Type of Model You Need

A TOC is most useful when an organization needs to get clarity on their mission and purpose, or are designing something new. A TOC is best used to explain the rationale for a **complex initiative or organizational strategy**. Explaining causal sequences can help determine why a strategy or initiative worked (or didn't) by pinpointing exactly what worked (or didn't).

A LM, on the other hand, is most helpful to explain a **program** in a visual way. A LM has the added benefit of identifying the specific data that needs to be collected. A LM also helps explain the program to others and helps stakeholders reflect on how their program or strategy *should* work. For example, while constructing a LM, one may ask, 'What would implementation be like in a perfect world?' With this said, one limitation of LMs is they are most useful when the chain of outcomes is linear. LMs are not as helpful with the development of complex, systems change strategies.

The two models are highly complementary; the theory of change depicting the how and why program activities will result in desired change, and the logic model depicting the path to success if the theory of change model holds true in practice (Hernandez, 2000; Yampolskaya, et al., 2004). Most funders will want to see one of these models.

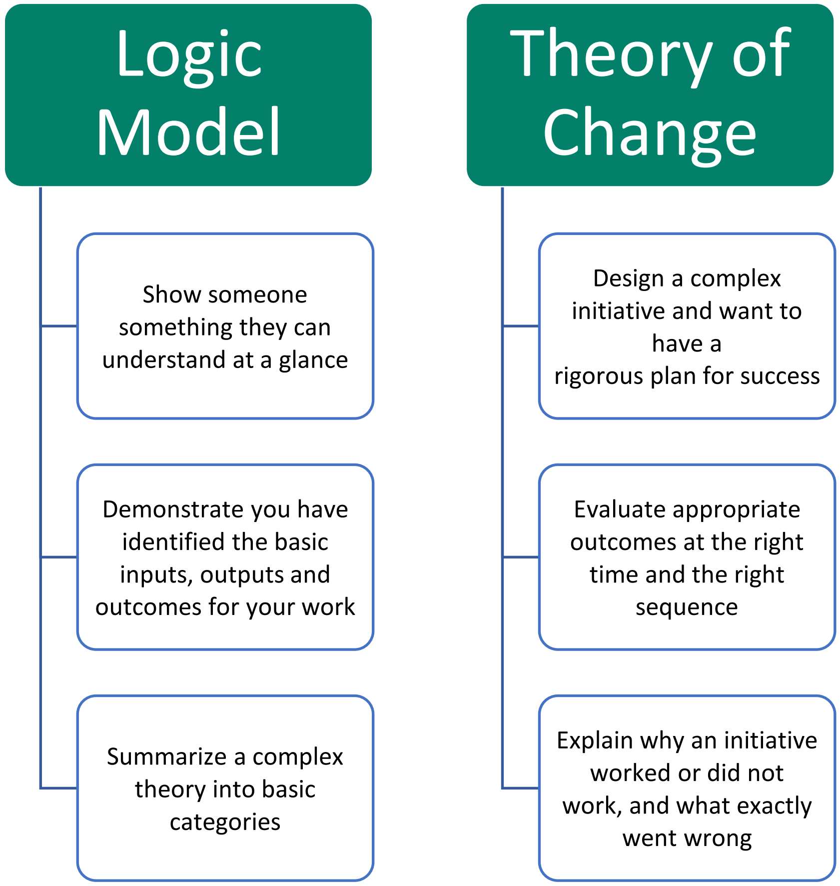

Table 1. Differences Between LMs and TOCs

Logic Models	Theories of Change
Descriptive	Explanatory
The What	The What, the Why and the How
List of Components	Explanatory Causal Pathway
Logic Models *usually* start with a program and illustrate its components.	Theories of Change may start with a program, but are best when starting with a goal, before deciding what programmatic approaches are.
Programmatic Level	Organizational Level (usually)

Putting your LM or TOC into Action

How can one use a LM or TOC? Logic models and Theories of Change are not magical; their real power comes from using them.

- Use a LM or TOC to explain an initiative to others. The power of a LM or TOC is that it helps explain the program or strategy in a visual, 1-page document. Either document can help grab the attention of community members, partners, and funders.

- **Use the development of a LM or TOC as an organizational development opportunity.** Going through the process of developing a LM or TOC will help an organization define its vision, goals, strategies, and desired outcomes, as well as help individuals understand their contribution. Both also serve as a program management tool as they will drive an organization's workplan.
- **Use the LM as a program planning tool.** Originally conceptualized to identify performance measures, LMs are also useful as a program or strategy planning tool (McCawley, 2001). A LM helps define the purposes of the program, explains the components of a project, outlines the expected sequencing of activities, and describes the hoped-for accomplishments.
- **Use a LM or TOC to inspire actionable evaluation questions.** A program or strategy designed with evaluation in mind is more likely to result in beneficial data. Evaluative questions set a group up for learning and decision making. Good evaluation questions, when answered, helps an organization make course corrections and monitor progress. For example, instead of simply asking "Who did we serve?" one might ask "Did we serve those we intended to serve?" or "Did we implement at the scope and intensity we intended?"
- **Use the LM or TOC to clarify what the collaboration (and its board) should say "Yes" or "No" to.** A LM or TOC helps clarify what is feasible, achievable, and keeps an organization from veering in too many directions. A LM or TOC keeps an organization mission focused.
- **Use the LM or TOC as a project management and learning tool.** At least once a year, gather the board, community members and key stakeholders and ask the following questions: What is working? What new programs or strategies are in place? What things need to be dropped? Who else needs to be engaged in the work?
- **Use the LM or TOC to help test the logic of a program or strategy**. Are the collaborative's actions, *really* resulting in the proposed outcomes?
- **Use a LM or TOC to demonstrate commitment to high quality work.** A LM or TOC not only satisfies a funder's request, it also demonstrates an organization is serious about its work.

Creating a Logic Model

Perhaps the best-known guide, W.K. Kellogg Foundation's Logic Model Development Guide, was first published in 2004. Simple and clear, it provides the basic steps in developing a straightforward logic model. Be sure and look at all the Exercises included in the Guide. For example, one can use Exercise 1 in the Guide with its group to determine whether its organization is ready to begin creating a logic model. The exercise will help a group reflect on key readiness indicators. Some readiness indicator questions include: "Has the collaborative engaged an inclusive audience?", "Is the intensity of the program likely to produce the intended effect?", "Are the outcomes achievable within the timeframe specified?" These and other questions will help define if a group is ready for the LM process.

The basic steps of building a LM include:

- **Context.** Your LM should include information about the context of the social problem. That is, the situation surrounding the work or the assumptions defining a situational statement. A situation, or problem statement should clearly communicate the readiness and the relevance of an organization's work. The situational statement should describe people affected by the problem, where they live and work, and who they support. It should also describe the social, economic, and/or environmental consequences of the problem. Sometimes the statement mentions other organizations or entities working on the problem, such as the business community. The situational statement is not exclusively negative. A strong statement includes the assets the community brings to the work.
- **Inputs.** Inputs are all the resources that an organization needs to do the work. This includes staff, funding, key partners, equipment, and office space. Anything needed to implement a program or strategy is an input.
- **Activities.** Activities include all the essential activities that will lead to the desired change. They may be activities an organization is already doing, or new activities needed to create change.
- **Outputs.** Often confused with **Outcomes**, **Outputs** are the products of activities. They are things which can be measured. Typical outputs include the number of people served, participant demographics, the number of sessions planned versus implemented, and the types of things provided (number and types of training sessions, number of resource guides shared etc.).
- **Outcomes: Short, Intermediate, and Long-term.** Outcomes are typically thought of as changes in people or their situation.
    - **Short-term outcomes** are the initial or immediate changes expected because of the program or strategy. Short-term changes are often described as changes expected within the first year of implementation. They include changes in people's knowledge, skills, and attitudes. Program satisfaction is another common short-term outcome.
    - **Intermediate outcomes** are changes in participants' actions and behaviors. Though the timeframe varies, intermediate outcomes are changes expected between 1 to 3 years.
    - **Long-term outcomes** are changes that occur in people and the community between 3 to 5 years. Ideally, long-term outcomes include changes to systems and policies that lessen barriers and increase access to services and opportunities.
- **Impact.** Impacts describe the <u>ultimate</u> change desired. If the public health problem were overcome (or achieved), what would success look like? For example, "We achieved our goal of reducing maternal death among Black women in Georgia from 66 per 100,000 to 20 per 100,000" would describe an impact goal for a state strategy working to reduce maternal death among pregnant Black mothers.

The timeframes for short, intermediate, and long-term outcomes noted here are meant to be guidelines. The timelines will depend on the complexity what you are trying to accomplish. For example, for a program that provides emergency shelter and then transitional housing services to women and children, a long-term outcome may be that women attain permanent housing within 90 days of entering transitional housing. Whereas a rapid rehousing program might define a short-term goal as placing women and children in permanent housing and intermediate and long-term goals focusing on the supportive services needed to support their stability.

In addition, when it comes to impact, it most often takes more than a single organization or program to move population-based outcomes. It is often difficult to measure the extent to which a program contributed to impact. Some organizations hesitate to define desired impacts fearing they will be accountable if the impact goal is not reached. Nonetheless, defining a desired impact helps keep your stakeholders focused on the big changes they want to see in their community.

Typically, a logic model process uses a linear, sequential approach using the sequence above. However, Millar et al. (2001) cautions that this approach to logic models (inputs though outcomes) may reflect a natural tendency to limit one's thinking and may fosters a defense of the status quo rather than encouraging new ideas or concepts. To help one think 'outside the box,' Millar suggests that the planning sequence be inverted by starting with the desired outcomes and working through the process backwards. I have successfully used this approach myself. Utilizing this method, the question becomes "What needs to be done?" rather than "What is being done?"

Another logic model approach that is particularly effective with community groups is the Tearless Logic Model Approach. This method avoids confusing jargon like inputs, outputs, and outcomes, and instead moves to the questions which help a group define their road map. After all, that is exactly what a logic model is, a map of what accomplished. Think of the LM as an organization's GPS.

Creating a Theory of Change

Like a LM, a TOC is a picture or map of how different types of outcomes relate to each other, and like a LM, a TOC can help clarify what a group intends to do. Sometimes, TOCs are referred to as an outcome map. As mentioned earlier, it illustrates what will happen because of initiatives, strategies, activities, and programmatic efforts.

Outcomes can be mapped in a linear or causal sequence and can be depicted horizontally or vertically. A TOC is often complex. For example, outcomes may occur sequentially, simultaneously, occur independently from other outcomes, or be interrelated. Additionally, outcomes may result from a single strategy or multiple strategies, and lead to common goals or separate ones.

Like a logic model, the power of a TOC is the connection between outcomes and their relationship with each other. A "so that" chain reflects the work of building core capacities, as well as implementing specific strategies and program actions.

An organization should sit together, answering 3 simple questions to prepare its members for participation in a TOC:

1. What do we need to do to create change? (Strategies)
2. What changes would we expect to see in the behaviors/actions of those we serve? (Outcomes)
3. If we really got it right, what would success look like? (Impact Goal)

The basic steps of building a TOC include:

Step 1. Clarify Goals: Ideally, an organization's impact is an ambitious statement that describes the state of a community if all was right with the world. For example, "A community where children and families are healthy, safe and thriving." The impact statement is <u>not a</u> specific program goal or a client goal. Vaca (2020) suggests these questions to get you started:

- What are you trying to do?
- What are you trying to achieve?

Each answer a group develops should be its own box. Secondly, consider order. Is this answer a result, or an action? This step will help make cause and effect linkages clearer.

Step 2: Identify a Powerful Strategy or Strategies: A TOC depicts the powerful strategy, or more likely strategies, that lead to the goal or goals. It depicts all change efforts (i.e., positive social norm campaigns, community collaboration, capacity-building efforts, advocacy, etc.), and since health disparities have multiple causes, a group will likely be implementing simultaneous strategies that lead to desired outcomes. The sequencing must be included in the TOC. Outcomes may occur independently from each other or be highly interrelated; they may result from a single strategy or multiple ones, and they may lead to common goals or separate ones.

Step 3: Create 'So That' Chains. Identify the first strategy and create a "so that" chain based on the following question:

> "When we implement **X** strategy, **what results** happen for who we serve?" This could be individuals, families, organizations, or communities, depending on your approach.

The answer to this question <u>is the outcome</u>. Continue until **each** strategy is linked to a series of outcomes and the goal.

Step 5: Test the Logic and Relevance. It's time to review the TOC with key stakeholders. Gather key stakeholders together and work through the logical linkages between the strategies, outcomes, and impacts.

A group should ask:
- Have all strategies have been included?
- Are the most relevant outcomes included?

- Are the outcomes related and do they lead to our desired end goal?

Step 6: Articulate Assumptions. While the TOC offers a visual sketch of the pathways to achieving outcomes, the work is embedded in a community context. Step 6 helps a group clearly articulate the assumptions that influenced the TOC. At the top of the TOC, include brief information about the context of the work. You should also brainstorm things that might happen if the chain of influence is disrupted.

Step 7. Does it make sense? A TOC is only valuable if it is used, and it will only be used if it makes sense to the collaboration and its members. Vaca (2020) suggests a few reflective questions to ask at the end of the process.

- Does this TOC reflect what we are doing?
- If we do all of this, will we achieve our desired outcome?
- Is the TOC detailed enough? Summarized enough? There is a balance between too much detail and not enough.
- Did we use language that is easily understood?
- Can we explain it ourselves?
- Is there one idea per box?
- Is everything linked?

TOCs and LMs through an equity lens

While the elements of TOCs and LMs reviewed here are fundamental, they are not sufficient for guiding a TOC or LM design in a culturally responsive fashion. A culturally responsive approach to designing a TOC or LM provides a systematic way to incorporate research, theory, social determinants of health, and community views in program creation to ensure that interventions are not only useful but get used (Meyer et al., 2021).

Culturally responsive approaches:

1) Involve community members, specifically people with lived experience and most affected by the program or initiative, in the development of the long-term outcomes.
2) Consider context and the needs of program beneficiaries. The consideration of social, cultural, political, economic, and environmental circumstances helps to ensure that long-term goals are not only feasible, but desirable, and appropriate for the intended participants (Bledsoe & Donaldson, 2015).
3) Dialogues with community members occur throughout the process, and are corroborated and influenced by extant literature to inform the development of the TOC or LM (Meyer et al., 2021). Community members and those most affected by the problem must have decision-making power.

4) Identify areas or domains that summarize key constructs. Some evaluators define these before defining long-term goals Mayne (2015). Others follow Chen's (1990) recommendation of creating domains after establishing an overarching long-term goal. The most important take away is that these domains are well defined, and act as subconstructs that additively contribute to the abstract or broad long-term goal. For example, improved mental health of BIPOC youth, is too broad of a concept. Instead, measurement of this domain should be clear and observable; this helps everyone from participants to program designers, to evaluators, understand (and agree) what facilitating the achievement of that long-term goal looks like.

With an emphasis on context, TOCs are particularly useful tools for considering how systemic issues may interfere with achieving program outcomes especially while working with diverse populations (Eisenbruch, 2018). For example, recognizing external influences (e.g., racist, and discriminatory systems) that may impact participants, program designers can act and explore ways in which the program can address these external issues (Caldwell & Bledsoe, 2019). In fact, interventions created <u>without</u> considering community culture, may harm rather than help, ethnically and racially diverse and immigrant communities (Meyer et al., 2021). It is critical that community-based programs seeking a positive impact are created with communities of color: their voices, their aspirations, their visions for their community.

Final Considerations

- Each TOC and LM should be unique to its program or strategy. Though templates and examples are helpful, to be useful, a TOC or LM should reflect the distinct intervention being designed. The TOC or LM should be developed in partnership with program beneficiaries and should use the terminology its community members are comfortable with.
- The TOC or LM should include information about the community context, and the assumptions behind the planned programs or strategies.
- A TOC or LM should clearly demonstrate how it will address health disparities and make equity explicit.
- The TOC or LM should take time for its members to develop a model that is useful. Expectations should be set early, by communicating to all members that to obtain a useable, clear final product, the process may involve several revisions.

For more information about culturally responsive and equitable evaluation, please see W.K. Kellogg Foundation's 3-part series, *Doing Evaluation in the Service of Equity*, written by Community Science Principal Associate and Vice-President, Dr. Kien Lee https://communityscience.com/blog/w-k-kellogg-7foundation-releases-doing-evaluation-in-service-of-racial-equity/

- The weakness of a TOC or LM is that they both apply a linear model to simulate solutions to complex, multi-dimensional, health and social problems.
- In the end, a TOC or LM should be both simple and useful. If it is overly complicated, no one will want to read, or use it. Alternatively, do not make it so simplistic that it doesn't capture the extent of the work and all the outcomes expected. Try to strike a balance.

Case Sample

In 2015 Healthy Savannah received a Direct Services Grant and developed several LMs to guide their work. The Logic Model for their REACH project is depicted in Figure 1. The organization and its partners worked with local community convenience stores in neighborhoods that have been identified as 'food apartheid areas'. The goal of REACH is to increase the number of convenience stores offering healthy fruits and vegetables, as well as increase the number of these stores that accept SNAP benefits. Through educating store managers and owners, providing training on marketing and technical assistance on SNAP enrollment, Healthy Savannah works to achieve its goal to increase community members ability to access and purchase healthy food.

Figure 1. Healthy Savannah Logic Model.

Healthcare Georgia Foundation
grantmaking for health

Healthcare Georgia Foundation Direct Services: Logic Model for Healthy Savannah

INPUTS

The resources of **WHAT YOU HAVE** to carry out the program (i.e., time, expertise, funding, technology, partners, information)

- Healthy Savannah board & staff
- YMCA of Coastal Georgia Staff
- Funding from CDC's Racial and Ethnic Approaches to Community Health (REACH) grant
- Forsyth Farmers Market
- Step Up Savannah
- Chatham Area Transit
- Results from 2020 Community Survey
- HealthMPowers Corner Store Training Program and Materials

OUTPUTS

WHAT YOU DO
(i.e., the specific activities you will undertake like meetings, press releases, training, direct services)
and
WHO WILL PARTICIPATE OR BE REACHED
(i.e., for each activity, the people you are trying to reach)

Activities

- Enroll stores in Corner Store Initiative
- Provide technical support to stores and store owners
- Assist store owners with fresh food marketing
- Expand number of stores that accept SNAP/EBT benefits
- Monitor stores for implementation and success
- Increase visibility for Healthy Corner Stores

Participation

- Corner store owners and managers
- Healthy Savannah Corner Store Manager
- StepUp Savannah
- FarmTruck912
- Media
- Community members

OUTCOMES

WHAT HAPPENS OR CHANGES as a result of what you do
(i.e., what will be different in the short-term (e.g., 1 year), intermediate (e.g., 2-5 years), and long-terms (e.g., >5 years) if you are successful?)

The short-term outcomes identified here should be consistent throughout the evaluation plan and grant proposal.

Short-term

- Greater variety of healthy food options at corner stores
- Increased access of healthy foods in food insecure neighborhoods
- Increased purchases of healthy food at a variety of settings

Intermediate

- Increased consumption of fruits and vegetables
- Increased collaboration among community partners to promote healthy food options

Long-term

- Reduction in cases of cardiovascular disease and diabetes
- Better management of symptoms related to cardiovascular disease and diabetes
- Healthy food is available in every zip code and near every Savannah neighborhood
- Improve health outcomes in underserved areas

References

Ashlee D. Lien, Justin P. Greenleaf, Michael K. Lemke, Sharon M. Hakim, Nathan P. Swink, Rosemary Wright, Greg Meissen. Tearless logic lodel. *Global Journal of Community Psychology Practice* [Internet]. 2011 Dec [cited 2015 Apr 10];2(2). Available from http://www.gjcpp.org/pdfs/2011-0010-tool.pdf

Bledsoe, K. L., & Donaldson, S. I. (2015). Culturally responsive theory-driven evaluation. In S. Hood, R. Hopson, & H. Frierson (Eds.), *Continuing the journey to reposition culture and cultural context in evaluation theory and practice* (pp. 3–28). Information Age Publishing.

Caldwell, L. D., & Bledsoe, K. L. (2019). Can social justice live in a house of structural racism? A question for the field of evaluation. *American Journal of Evaluation*, 40(1), 6–18. https://doi.org/10.1177/1098214018815772

Chen, H. T. (1990). *Theory-driven evaluations*. Sage.

Clark, H. and Anderson, A. A. (2004). *Theories of change and logic models: Telling Them Apart* [Conference Presentation]. American Evaluation Association Conference, Atlanta, GA, United States. https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/TOCs_and_Logic_Models_forAEA.pdf

Cooper, C. R., Rocha-Ruiz, M., & Herzon, C. (2020). Using integrated logic models to build equity in students' pathways and Systemic Change. *Equity & Excellence in Education*, *53*(1-2), 105–120. https://doi.org/10.1080/10665684.2020.1757534

Dhillon, L., & Vaca, S. (2018). Refining theories of change. *Journal of MultiDisciplinary Evaluation*, *14*(30), 64–87. Retrieved from https://journals.sfu.ca/jmde/index.php/jmde_1/article/view/496

Eisenbruch, M. (2018). Violence against women in Cambodia: Towards a culturally responsive theory of change. *Culture, Medicine, and Psychiatry*, 42(2), 350–370. https://doi.org/10.1007/s11013-017-9564-5

Halimah, E. (2011). *Using logic models for strategic planning and program development; Using logic models for assessment and evaluation*. University of California.

Hernandez, M. (2000). Using logic models and program theory to build outcome accountability. *Education and Treatment of Children*, 23, 24–40.

Kekahio, W., Lawton, B., Cicchinelli, L., & Brandon, P. R. (2014). *Logic models: A tool for effective program planning, collaboration, and monitoring* (REL 2014–025). U.S. Department of Education, Institute of Education Sciences. https://ies.ed.gov/ncee/edlabs/regions/pacific/pdf/REL_2014025.pdf

Kellogg Foundation. (2004). *W. K. Kellogg Foundation logic model development guide: Using logic models to bring together planning, evaluation, and action.* W.K. Kellogg Foundation.

Knowlton, L. W., & Phillips, C. C. (2013). *The logic model guidebook: Better Strategies for Great Results*. SAGE.

Lavinghouze, S. R., Price, A. W., & Parsons, B. (2009). The environmental assessment instrument: harnessing the environment for programmatic success. *Health promotion practice*, *10*(2), 176–185. https://doi.org/10.1177/1524839908330811

Mayne, J. (2015). Useful theory of change models. *Canadian Journal of Program Evaluation*, 30(2), 119–142.

McCawley, P.F. (2001). *The Logic Model for Program Planning and Evaluation*. University of Idaho. https://www.extension.uidaho.edu/publishing/pdf/cis/cis1097.pdf .

Meyer, M. L., Louder, C. N., & Nicolas, G. (2021). Creating with, not for people: Theory of change and logic models for culturally responsive community-based intervention. *American Journal of Evaluation*. https://doi.org/10.1177/10982140211016059 .
Millar, A., R.S. Simeone, and J.T. Carnevale. (2001). Logic models: a systems tool for performance management. *Evaluation and Program Planning 24*:73-81.
Doing Evaluation in the Service of Equity: Debunk Myths. (2021). W.K. Kellogg Foundation. https://communityscience.com/blog/w-k-kellogg-foundation-releases-doing-evaluation-in-service-of-racial-equity/
Doing Evaluation in the Service of Equity: Deepen Community Engagement. (2021). W.K. Kellogg Foundation. https://communityscience.com/blog/w-k-kellogg-foundation-releases-doing-evaluation-in-service-of-racial-equity/
Doing Evaluation in the Service of Equity: Diagnose Biases and Systems. (2021). W.K. Kellogg Foundation. https://communityscience.com/blog/w-k-kellogg-foundation-releases-doing-evaluation-in-service-of-racial-equity/
Vaca, S. (2020). *Facilitation of the Theory of Change Process Masterclass*. [Video]. Retrieved March 25, 2021, from https://www.annmurraybrown.com/theory-of-change-videos?wix-vod-comp-id=comp-ka2hgkf7&paymentType=sale&wix-vod-video-id=56760120e225417db4ba837a43ada57a.
Yampolskaya, S., Nesman, T. M., Hernandez, M., & Koch, D. (2004). Using concept mapping to develop a logic model and articulate a program theory: A case example. *American Journal of Evaluation*, 25(2), 191–207. https://doi.org/10.1177/109821400402500204