DESIGN FOR IMPACT

an outcomes-based design approach
with case studies and workbook
"THE CHALLENGES OF THE MANY HEALTH AILMENTS IN THIS COUNTRY SHOULD BE SEEN AS OPPORTUNITIES FOR DESIGN"

// Helene Combs Dreiling, AIA President
10.9 MILLION renters and 7.5 million homeowners are spending more than half their income on housing.
[Enterprise Strategic Plan]

45% of American households lack access to public transit, and millions more have inadequate service levels.
[American Society of Civil Engineers]

2.3 MILLION households live farther than one mile from a supermarket or food retailer.
[US Department of Agriculture]

23.4 MILLION households are living in unhealthy housing with characteristics that might negatively affect the health of its occupants.
[Center for Disease Control and Prevention]
3.1 MILLION Americans live on land that is projected to be below sea level or regular flood levels by the end of the century. [Climate Central]
HOW CAN HOUSING SOLVE FOR MORE THINGS?

HOW CAN DESIGN DECISIONS SEED GREATER IMPACT?

HOW CAN DESIGN BE HELD ACCOUNTABLE?
Introduction

What is Outcomes Based Design?
Why Outcomes Based Design?

Our Partners

Enterprise Community Partners
ISA + HealthxDesign
Fellows & Case Study Organizations

Method

Define
Is your project a blank slate? Start here

Identify
Is your project in preliminary design? Start here

Design
Have you already completed research? Start here

Measure
Is your project already built? Start here

Key Terms
Whether designers and developers are conscious of it or not, social impact is a dimension associated with every project. Design, and architectural design in particular, affects the physical environment and the experiences that it creates. Because of this, design shares common ground with fields that are working to affect various determinants of population well-being such as public health, education, and community development. We know that human health is greatly influenced by complex environmental, social, and economic factors. Central among these is the sustenance we experience in our relationships with other people, family, friends, and community. Designers and developers are able to affect these experiences. Large-scale spatial planning organizes the ways and sequence in which people move, while smaller-scale, site-specific design can create atmospheres where comfort, excitement, or social connection occur.

To address the pressing needs in communities today, multi-sector collaboration needs to realign toward a common purpose. In order to advance this, Enterprise has beta-tested an interdisciplinary outcomes-based design method. This booklet documents the beta-testing process and illustrates ways in which the process can strengthen design interventions at multiple scales and for targeted purposes.
WHAT IS OUTCOMES-BASED DESIGN?

Similar to how design professionals and the development community have increasingly embraced green building as standard practice, so too should we consider design practices that improve community well-being.

An outcomes-based design (OBD) approach (also called results-based or performance-based) is applied in fields ranging from business management to education to public health and social services. It defines the specific population focus, expected benefits, time frame, strategies, and indicators that will be used to demonstrate the project’s impact over time. In the case of affordable housing, an outcomes-based design approach provides guidance for designers and developers to improve the well-being of communities. This approach aims to optimize design and development decisions by identifying opportunities to influence the environmental and socio-behavioral factors that predict population-level outcomes. Because the predictors of population-level change are often context-specific, this method provides guidance for an informed, collaborative, iterative process.
An outcomes-based design approach provides a structured framework for organizing and communicating a thorough design process to diverse audiences and project team members. It is intended to help clients, designers, developers, funders, policy makers, experts, and community members work together to (1) discover the local character, needs, opportunities, and challenges of people and place; (2) design site-specific interventions that seed maximum impact; and (3) measure and track population-level outcomes as a result of the design. This method works in conjunction with existing pre-development design tools, plugging in team expertise and up-to-date research when appropriate to optimize resources, functionally serving as a project roadmap and translation guide.

A successful OBD approach will result in more than an aesthetically pleasing building or a well-used public space. When applied, this method will help cross-sector project teams collaborate efficiently, prioritize design decision-making, allocate funding appropriately, define and measure project success, and articulate specific population-level benefits of design.
DEFINE POPULATION
Who is your project focus group?

IDENTIFY CHANGE
What changes in outcomes and longer-term impacts need to be made? Over what period of time?

DESIGN STRATEGIES
What strategies will the design implement to promote impact?

MEASURE IMPACT
How will change be demonstrated, measured, and accounted for?
SET EXPECTATIONS
Establish clear goals and objectives up front as a team, and use them as an overarching project guide.

DEFINE TERMS
Establish shared language across disciplines and understand key terms to allow you to effectively communicate with partners.

PRIORITIZE RESOURCES
Assess community priority needs and tailor design strategies and investment to maximize impact.

PLAN FOR IMPACT
Define factors that predict for population-level change; map the range of design options that can be used and determine how impacts will be measured when the building is placed in service.

MEASURE SUCCESS
Track project metrics and articulate the project’s benefits to the community, decision makers, project partners, and potential funders.

LEARN + SHARE
Back up your claims with measured data that can be applied to future projects; accountability is essential to an organized approach.
Enterprise Community Partners is a nonprofit intermediary dedicated to affordable housing development in the United States. What sets Enterprise apart from others is how and where it chooses to work. Structured with local markets and national initiatives (Design, Green Communities, Transit-Oriented Development, and Health), Enterprise works across scales to have real impact and tackle issues of equity. Working both locally and nationally allows Enterprise to pilot industry-leading best practices with investors, federal policy makers, and large organizations while at the same time working on the ground with communities to get things done. Enterprise is positioned as a leader in both thought and practice – and continues this rich tradition with outcomes-based design thinking, policies, projects, and tools.

Leading this effort is Enterprise’s National Design Initiative, which is responsible for promoting community development that enhances long-term, holistic building performance. Enterprise’s approach is multifaceted: it invests in building the organizational capacity of our nonprofit partners, creates opportunities for architecture and design practitioners to network and learn from one another, and disseminates best practices and lessons learned in the form of case studies, toolkits, and training for the field.

Enterprise’s Design Initiatives team produces lasting impact in communities through the following programmatic activities:

- Enterprise Rose Architectural Fellowship
- Design for Equity Initiative
- Affordable Housing Design Leadership Institute
- Pre-Development Design Grants
- Outcomes-Based Design Research

Recognizing that simply promoting “good” design isn’t enough, the National Design Initiative team seeks new ways to assert accountability into the design and development of affordable housing.
In May of 2015, Enterprise partnered with the design firm ISA and the public-health initiative HealthxDesign to launch a year-long Outcomes-Based Design (OBD) Studio with Enterprise Rose Architectural Fellows. The purpose of the studio was to tailor a design methodology to assist community development corporations (CDCs) in effectively understanding and integrating an OBD approach into current projects.

Over the course of nine months, Fellows worked collaboratively in a virtual studio to apply each step in the OBD methodology. They assessed various design strategies including their implications for stakeholders and their impact on the community. Using their projects as case studies, the Fellows applied the OBD process to their projects, testing the approach in different contexts and scales.
Three Enterprise Rose Architectural Fellows and their organizations participated in the studio, tackling projects of varying scale, location, and intent. Fellows and host organizations include:

Annie Ledbury is hosted by the East Bay Asian Local Development Corporation (EBALDC) of Oakland, California. EBALDC is an organization with historic commitments to the Asian and Pacific Islander communities and an ongoing effort to build healthy vibrant and safe neighborhoods for the diverse population of the East Bay. EBALDC has a strong interest in improving neighborhood health outcomes; Annie works to further its Healthy Neighborhoods approach and to instill a culture of design thinking, collaboration, and creative community engagement within the organization.

Alexis Smith is hosted by Jewish Community Housing for the Elderly (JCHE) of Brighton, Massachusetts. JCHE provides safe and affordable independent housing where older adults of all backgrounds can age in community. Through this partnership, Alexis’s goal is to arrive at “a very rich and nuanced understanding of how to design the best possible housing for seniors.” In addition to focusing on design that improves resident health and wellness, her work looks at how design can foster supportive social networks not just within JCHE properties but with the neighboring community as well.

Stephen Klimek is hosted by The Cornerstone Group, a mission-driven developer in Richfield, Minnesota. Stephen is working to create a district-level approach to investment and development decisions in Prospect Park and beyond. Cornerstone is exploring the possibility for district systems to promote redevelopment and improve efficiency in the use of common resources such as parking, storm water, energy, heating and cooling, green space, data, and waste.
"... it is about far more than just building affordable housing units; it is about building viable communities."

"... an opportunity to create and test new models of architectural practice that build capacity for communities and cities..."

"... take responsibility to understand the broader economic and social implications of our projects..."
DEFINE

IDENTIFY

DESIGN

MEASURE

COMMITMENT
PARAMETERS
TEAM
ENGAGEMENT

SCALE + SCOPE
PEOPLE
PLACE
GOALS
OBJECTIVES
SITE
PROGRAM

MACRO MOVES
MICRO MOVES

PATHWAYS
METRICS
This outcomes-based design method helps project teams understand what a project’s impacts are likely to be before it is built and provides a system for making decisions to promote intended results and benefits for communities. This method is not intended to limit the spontaneity of the designer’s core skills, but rather to guide and inspire those skills to be deployed in more effective ways.

This method is organized into four main components:

- Define
- Identify
- Design
- Measure

Components can be addressed sequentially or engaged in a nonlinear manner depending on the project’s specifics, such as partners, site, funding requirements, existing program, and goals. In many instances a project will already have certain parameters defined (sites/geography, population/community, a specific problem or opportunity). Approaching the process by articulating those “known” parameters first will help reveal how the process can encourage discovery and mine potential unknowns. While working through this methodology, pay close attention to the considerations to check, in addition to case studies. These will help structure productive conversations, partnerships, and output. Remember, this is an iterative and collaborative process that may yield more questions than answers at first.
IS YOUR PROJECT A BLANK SLATE?
(start here to get things moving)

DEFINE
COMMITMENT
PARAMETERS
TEAM
ENGAGEMENT
Establish project parameters, cross-sector team, and a collective understanding of an outcomes-based approach.

PARTICIPANTS
- Client
- Developer
- Designer
- Rose Fellow
- Health Expert
- Special Expert
- Evaluator
- Consultant
- Funder
- Community

HELPFUL TOOLS
- Pre-Development Design Toolkit*
- Participatory Design Toolkit *
- Roadmap to Community Development*
- Community Assessment Toolkit
- Promoting Health Equity: A Resource

Note: tools and resources are constantly evolving and may vary from place to place; this list is not intended to be exhaustive

* indicates existing Enterprise tool
COMMITMENT

Agree upon an overall project approach and desired project impacts. Prioritize time up front to familiarize core team members with a basic understanding of the methodology and benefits of OBD and discuss how the project fits well (or doesn’t) within this structure. As a team, decide collectively whether or not to use an OBD approach knowing that the most appropriate projects are those that respect a holistic, multifaceted design perspective and are driven by both value and results. Evaluate organizational mission statements and client goals to ensure compliance with project direction. Make a commitment as a group to prioritize process and solutions that promote healthy population-based community outcomes.

PARAMETERS

Establish initial project “knowns” and information to serve as a base case model and jumping off point for contextual research and further investigation. Parameters may change over the course of an outcomes-based process. Fixed parameters should be used as a starting point to efficiently navigate context and establish effective project teams.
This method is a good fit for your project if you seek answers to the following questions:

☐ How can our design move beyond performance based environmental thinking to address larger population issues related to social, physical, and economic health?

☐ Is there existing social science knowledge that can strengthen our design decisions and strategies for having specific social impacts?

☐ How will we know if we were effective in meeting our design objectives and ultimately accountable to the communities we aim to serve?

☐ Can our design strategies be evaluated and assessed for understanding the long-term, population-based outcomes?

☐ Is there a feedback loop we can build into our project implementation cycle that will allow us to learn throughout the implementation process?

Basic parameters include the following:
(Note: project teams should prioritize answering the following questions for aspects that are fixed.)

☐ Who? ..... project team, stakeholders, audience, funders

☐ What? ..... project program, use, units, size

☐ Where? ..... project site

☐ Why? ..... client mission, community priorities, needs assessment

☐ How? ..... project funding, schedule, delivery method
Assemble a project team that represents diverse perspectives and expertise that will help assess, identify, implement, and monitor achievable actions to intended and unintended design outcomes related to project, community, and site specifics. The core team is responsible for assigning roles and responsibilities, setting dates for task completion, and holding one another accountable for action. Most critically, this team is committed to a collaborative approach that incorporates collective expertise to inform unexpected design strategies that have maximum impact potential. At a minimum, each project should include the following:

- **Client / Developers**
  Provide initial project parameters and preliminary design and development goals and objectives.

- **Designers**
  Translate project parameters, context, and opportunities into compelling design strategies that directly address stated objectives.

- **Content / Thematic Experts**
  Inform objectives and strategies related to particular nuances that the project aims to address (e.g., education, public health, financial literacy, economic development, art and culture), including trends, locations, and target population groups. For example, a public health expert could provide input on health-promoting factors or health risks that could be addressed by the project.

- **OBD Consultant / Evaluators**
  Link design strategies to realistic and measurable population-level outcomes (Pathways/Theory of Change/Conceptual Model); create monitoring and evaluation plan (measurable population-focused objectives, indicators, data collection protocols and valid tools, analysis plan) and assess project against pre-defined performance measures.

- **Community / Resident Experts**
  Engage throughout all aspects of the design process to provide valuable insight to ensure project success (see “Engagement”). In many cases, a community engagement expert or community organizer is needed to ensure that the community engagement process is inclusive.
When identifying key team members consider the following:

☐ Is the list of functions accounted for as listed above?

☐ Which team members are positioned to inform particular nuances that the project aims to address, including trends, location, and target population groups?

☐ Can the proposed project team collectively function to link design strategies to realistic and measurable population-level outcomes, create a monitoring and evaluation plan, and hold the project accountable to performance goals?
Effective engagement, representation, transparency, and accountability are critical principles to advance the ability of communities to influence decision-making and thereby the project’s congruence with community needs and priorities. This section acknowledges the breadth of tools and participatory approaches that exist and should be identified as key components of the project. Engage local community groups, leaders, organizations, businesses, institutions, and residents who have an intimate understanding of neighborhood dynamics, assets, challenges, and opportunities throughout all phases of project development. In addition to the technical expertise of the “expert-citizen,” project stakeholders should include the “expert-citizen” perspective(s) as related to their community’s historic/cultural norms, lifestyle, and priorities, with a vested interest in creating long-term impact. Their direct and effective involvement throughout the design process bypasses assumptions, promotes project relevance, elevates impact, and fosters sustained community support and ownership.
When identifying key stakeholders consider the following:

- What defines your project’s community?
  - location, population groups, shared interests

- How mobilized is the community?

- Do certain parts of the community participate more than others?

- What has the community already said regarding priorities and needs?
  - existing plans, previous engagement processes, past projects

- What are barriers to engagement?

- How can your project’s stakeholder group promote equitable, diverse community representation?
  - age, race, gender, income, location, interests

- What are important institutions, organizations, businesses and decision makers that exist in your project’s community?

When identifying key stakeholders consider using a variety of tools:

- The Meeting
- The Interview
- The Event
- The Tour
- The Survey
- The Dinner

Other
Other
EBALDC works with and for all diverse populations of the East Bay to build healthy, vibrant, and safe neighborhoods through community development.

JCHE provides safe and affordable independent housing where older adults of all backgrounds can age in community, living a full life of connection and purpose in a dynamic, supportive environment.

The Cornerstone Group transforms the spaces that surround us into the places that inspire us.
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<thead>
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<td>- CLIENT</td>
<td>Surveys, Questionnaires, Interviews with staff</td>
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<tr>
<td>- ENTERPRISE COMMUNITY PARTNERS</td>
<td>Engagement with Brighton Campus staff and care-givers. Minimal touch points to date with residents and community given early project stage.</td>
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<td>- HEALTH PARTNERS</td>
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<td>- PARKS AND REC</td>
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<td>- STAFF</td>
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<td>Touchpoints with health partners and steering committees in effort to get health impact assessment work up and running.</td>
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IS YOUR PROJECT IN PRELIMINARY DESIGN?
(start here for a gut check)
Determine the character, needs, and opportunities of the people with whom and the places in which you are working.

In the social and health sectors, this process is called a “needs assessment” and is used to identify opportunities for impact. In the design process, these considerations are part of design research and are mapped through analyzing existing conditions. The purpose of this step is to ensure that the design intervention is strategic in its response to the identified needs and achieves the desired outcomes (social, environmental, economic, health) and, ultimately, has a greater impact.

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Note: tools and resources are constantly evolving and may vary from place to place; this list is not intended to be exhaustive.
SCALE + SCOPE

Determine the scope of the design intervention(s) and the scale at which research trends are best understood. The scope of the project intervention and scale of research area may or may not be identical depending upon the project’s size and the intended impact.

The scope of the design intervention(s) should include project site and surrounding context that conveys existing physical trends, patterns, and/or landmarks that have the potential to influence design decisions – think site, block, neighborhood, census tract, city, etc.

The scale of research should include the project site and surrounding context that conveys existing social, health, economic, and demographic trends and patterns relative to project parameters—think neighborhood, city, region, state, nation, etc. Use these scales respectively to identify boundaries for contextual research of the physical condition and population trends.

PEOPLE

Identify prevalent social, economic, environmental, and health-related challenges that affect your project’s focus-population group (e.g., the existing “baseline” and pre-construction data and trends). Tailor the research to specific residents or a user population – identify trends, characteristics, and patterns that are specific to either geographic project location or project beneficiaries. Using community-based data (such as the Health Department and other local data sources) as well as community input (such as existing neighborhood plans, health needs assessments, and other outputs from community organizing processes), characterize how the project can contribute to advancing social, environmental, economic, and health outcomes for target populations. Also carefully consider the potential negative consequences and how those will be addressed at the outset in order to minimize unintended harm.
When identifying appropriate design scale boundaries consider the following:

- Where are project residents and/or users located or coming from?
- What are the natural physical boundaries? Are there perceived boundaries that inhibit movement in and around the site?
- How do you identify and map your project’s design scale?

When identifying appropriate research scale boundaries consider the following:

- At what scale(s) does your project aspire to affect population level change?
- At what scale(s) can project-related demographic trends be understood?

What are key challenges/population-level priorities and what are the trends and quantitative data that are needed?

- Are there populations among which need(s) are concentrated?
- What is the relationship between population challenges/priorities, concentration of need and geography? How do priorities map onto physical context and where are boundaries located?
- Brainstorm key considerations related to each population group; what social, environmental, economic, and health trends most influence these groups?

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**PROJECT WORKSHEET**

CHECK

When identifying appropriate design scale boundaries consider the following:

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- How do you identify and map your project’s design scale?

When identifying appropriate research scale boundaries consider the following:

- At what scale(s) does your project aspire to affect population level change?
- At what scale(s) can project-related demographic trends be understood?

Identify and map your project’s research scale

- ..... use boundary to guide population research

CHECK

What are key challenges/population-level priorities and what are the trends and quantitative data that are needed?

- Are there populations among which need(s) are concentrated?
- What is the relationship between population challenges/priorities, concentration of need and geography? How do priorities map onto physical context and where are boundaries located?
- Brainstorm key considerations related to each population group; what social, environmental, economic, and health trends most influence these groups?

- ..... consider various scales - national, regional, neighborhood, building
PEOPLE

Regardless of scale, project interventions directly and indirectly affect a number of user groups, including residents, neighbors, visitors, and staff. Population groups include:

Primary Population(s): Beneficiary group(s) directly influenced by your project and with the greatest potential for impact.

Secondary Population(s): Beneficiary group(s) influenced by your project but one step removed.

Tertiary Population(s): Beneficiary group(s) tangentially influenced by your project that may or may not have a direct connection to it.
What are the population-level inequities, assets, and challenges?
What are the trends and quantitative data supporting that need?
How are existing inequities expected to change over time?
What are community-identified assets and challenges?
What are social (cultural, language, lifestyle, network) trends?
What are environmental (air, noise, climate, development) trends?
What are economic (employment, income, educational) trends?
What are health (physical, mental, epidemiological) trends?
Are there populations among which need(s) are concentrated?
Among those groups, are there special needs or opportunities specific to a population group?
What social, environmental, economic, and health trends most influence these groups? ... Assess various scales
Can you identify the key considerations related to each population?
How does trend data overlap or diverge with community-identified priority issues?
What is the relationship between population needs and trends and priorities, and how do these map to geography?
Have you consulted key stakeholders working to address your identified population, issues, or opportunities?

Based on research related to your site opportunity and resident/user/community priorities, on what outcomes can you focus? What are your top priorities?

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<tr>
<th>SOCIAL</th>
<th>ENVIRONMENTAL</th>
<th>ECONOMIC</th>
<th>HEALTH</th>
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<tbody>
<tr>
<td>Social Connection / Cohesion</td>
<td>Environmental Stewardship</td>
<td>Equitable Ownership</td>
<td>Access to Health Services</td>
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<tr>
<td>Civic Engagement</td>
<td>Resource Conservation</td>
<td>Wealth Generation</td>
<td>Physical Activity</td>
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<tr>
<td>Social Justice / Empowerment</td>
<td>Ecological Resilience</td>
<td>Local Investment</td>
<td>Mental Well-being</td>
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<tr>
<td>Other</td>
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PLACE

Understand the physical conditions of the project, including natural and built features and development patterns, as well as the projected growth trends within your project’s design boundary. All will have the potential to influence your project through site, program, and/or strategy design. The design of the natural and built environment is an important predictor of overall community health. The built environment has a direct impact on qualities such as neighborhood safety, social connectedness and cohesion, physical activity levels, healthy eating, physical and mental health, and financial stability. Identifying the site’s opportunities for shaping specific environmental factors (predictors) or experiences is key to designing for impact.

GOALS

Identify broad ways in which the project seeks to influence population-level change. The term “project goal” refers to a general, often lofty long-term change, such as a change in health status at a statewide scale or in public policy. Due to limitations in the scope of the intervention, geographic location, and available resources, a single project will most likely not be able to achieve the goal by itself, but will contribute to the achievement of the goal. Because of this, the goal statement does not need to be directly measurable.
Map physical conditions that may influence project site and program. Examples include infrastructure, natural and built amenities, land use, informal paths, and spatial qualities. When identifying key physical conditions, consider the following:

When identifying key physical conditions consider the following:

☐ Where are project users located / coming from?

☐ What physical assets are there, and where are they located?
  ...... natural, built, programmatic

☐ What physical challenges are there, and where are they located?
  ...... natural, built, programmatic

☐ What aspects present opportunities for intervention?
  ...... availability, adjacency, networks

☐ What geographic areas are physically most vulnerable or at risk?
  ...... access, connectivity, safety, environmental hazards

☐ How are physical conditions anticipated to change over time?
  ...... development patterns, investment, zoning, climatic events

Goal: Contribute to advancing equity and related population-level social, economic, environmental, and health outcomes through design interventions in the public realm. These include but are not limited to community priorities such as social resilience, ecological improvement, landscape resilience against storm surge, safety, employment, economic investment, cardiovascular health, asthma, and obesity.
OBJECTIVES

Objectives refer to the specific changes (expected results or improvements in outcomes) for the focus population(s). Objectives are more precise than goals, specifying a location and time period over which change will occur as a result of project strategies and activities. As construction completes, post-construction metrics and evaluation tracking will begin in order to demonstrate the effectiveness of design interventions with respect to achieving project objectives.

Once the project is placed in operation, the project team must assess its objectives. When finalizing the project objectives, refer to your final Pathway (conceptual model/theory of change)—see Section 4, “Measure.” Your project objectives should clearly link to the Pathway (see p. 64) so that you can show how your aims will be achieved through your strategies.

Well-written objectives identify:

- Who will be reached?
- What change will be achieved?
- In what time period will the change be achieved?
- Where, in what location?

It should be noted that in order to assess the impact of your project—that is, the degree to which a change can be directly attributed to your interventions—appropriate resources and expertise must be available to undertake an experimental design that will allow you to make inferences. If your team feels such a demonstration is required then your evaluation team member can develop a more rigorous evaluation methodology. Once you have drafted your project goal and objectives, it is time to begin considering the key design strategies and indicators section of your Monitoring and Evaluation Plan.
When considering the population(s) that the project objectives aim to address, refer back to population need and where your project/design has opportunity to focus.

- Think about what success means for your project and how you would show that success.
- Refer to the intermediate results in your final pathways diagram (conceptual model/theory of change developed in section 4).
- Describe the focus population and the desired change among the population.
- Include the location and time period for each objective.

Objectives are directly linked to population outcomes, experiences, and spatial design moves. Objectives should be used to help identify and prioritize outcomes and experiences that can be designed for. The diagram below can be read laterally in either direction.
SITE

Identify urban and/or rural site opportunities through which design can achieve impact. Site opportunities are physical places that vary in scale depending on the scope of the project, objectives, impact areas, and target population groups. Site analysis steps include:

1. Identify locations that have the potential to maximize community impact through design.
2. Brainstorm site opportunities that are appropriate to the project’s goals, objectives, and context.
3. Select a site that can best address the priority need and the associated design strategies.
4. Match the site opportunity with the target population, population need, and programmatic opportunity.
5. Think broadly and at a range of scales – for example: underpass, corridor, front porch, work surface, open space, vacant lots, vestibule, clinic, planting beds, right of way.

PROGRAM

Identify opportunities—activities, amenities and services—through which design can achieve greater impact. Programmatic opportunities are uses and activities that can take place at various site locations. Opportunities will differ depending on project, objectives, impact areas, target population groups, and location. Think broadly: examples include a farmer’s market, pedestrian path, game table, community dining, public art, habitat restoration, pinup wall, public boat lunch, live/work studios.
Consider the following:

☐ How do community input and research priorities relate to existing conditions?

☐ What are priority site opportunities (access, connectivity, etc)?

☐ How can site(s) be layered / networked to optimize impact?

When identifying key sites consider using a variety of tools:

- The Walk
- The Photo
- The Map
- The Ride
- The Notebook
- The Talk
- Other

CHECK

☐ What services are currently provided in proximity to the project site?

☐ How can existing programs and services be improved?

☐ Where / what are inequities in service offerings- what are “the gaps”?

☐ How can new programs achieve greater impact?

☐ What are the local housing typologies (e.g., permanent multifamily, permanent single-family; rental; co-ops; mobile)? How does the housing stock address residents' needs (social, environmental, economic, health)? Does the housing stock limit residents' opportunities (social, environmental, economic, health) in any way?
CASE STUDIES

IDENTIFY

SCALE + SCOPE
PEOPLE
PLACE
GOALS
OBJECTIVES
SITE
PROGRAM

LION'S CREEK
EBALDC

- after school program facility renovation
- 150+ anticipated project users / year
- funding and grant support to be determined
- part of a larger master-planned area

JJ CARROLL APARTMENTS
JCHE

- 68 new senior apartments and amenities
- 52 unit renovation of existing low-income apartments
- master plan to link campuses
- 1000+ housing residents

LYNDALE GARDENS
CORNERSTONE GROUP

- town center destination built to prioritize health
- 152 units of new construction rental housing
- 20,000 sq ft anchor grocery co-op
- multi-use public space and amenities
Residents are 4X more likely to have less than a high school education than those of surrounding neighborhoods.

2/3 of 3rd graders are reading below grade level with major discrepancies for Latino and African American students (majority population).

20% of Boston’s population will be of senior age by 2030.

92% of age 65+ want to remain in their communities for as long as possible.

36% of residents report disability.

80% of residents have chronic disease.

90% of resident’s primary language is not English.

40-70% of caregivers have clinically significant symptoms of depression.

60% of US preventable US hospitalizations involve age 65+.

11% of the population lives below the poverty line.

20% of the population under age 18 lives below the poverty line.

65% of students receive free or reduced lunch.

33% increase in non-white population (10 yrs).

47% of 9th graders are over weight or obese.
### LION’S CREEK
EBALDC

- after school program facility renovation
- 150+ anticipated project users / year
- funding and grant support to be determined
- part of a larger master-planned area

### JJ CARROLL APARTMENTS
JCHE

- 68 new senior apartments and amenities
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- master plan to link campuses
- 1000+ housing residents

### LYNDALE GARDENS
CORNERSTONE GROUP

- town center destination built around health
- 152 units of new construction rental housing
- 20,000 sq ft anchor grocery co-op
- multi-use public space and amenities

### GOAL

Re-imagine Lion’s Creek family resource center to further promote academic success, expand youth opportunities, and create equitable conditions for children to achieve.

Promote community, social connection, support, purpose and vibrancy in aging through renovation and construction that will fully integrate JJ Carroll apartments into JCHE’s Brighton campus community and surrounding neighborhood.

Leverage town center investment, including market-rate housing, to improve health disparities by meeting the unmet needs of under-served populations, especially as they relate to opportunities for physical activity, access to healthy food, affordable childcare, and health-promoting social norms.
OBJECTIVES

Over a 1 year time period (post construction)...
(1) Strengthen safe environment through design focus on improving emotional safety, healthy environment, and accommodating environment.
(2) Improve supportive environment through design focused on warm welcome, session flow, active engagement, and child centered learning.
(3) Improve interaction through design focused on promoting leadership and experiences of belonging.
(4) Strengthen engagement through deploying design tactics that promote student choice.

Over a 1-3 year time period (post construction)...
(1) Strengthen mental, physical and social well-being among residents to prolong independent living.
(2) Reduce avoidable hospitalization and ER use among elderly.
(3) Optimize the caregiver/staff experience to improve visitor effectiveness and reduce stress and burnout.
(4) Improve neighborhood connectivity and transit access.

Over a 2 year time period (post construction)...
(1) Increase access to healthy food, especially for low-income populations.
(2) Increase physical activity among sedentary populations or others at risk for obesity and heart disease.
(3) Reduce health and economic risks for vulnerable young families and burnout.
HAVE YOU ALREADY COMPLETED RESEARCH?
(start here to begin design)
MACRO MOVES  →  MICRO MOVES
Define
Commitment
Parameters
Team
Engagement

Identify
Scale + Scope
People
Place
Goals
Objectives
Site
Program

Design
Macro Moves
Micro Moves

Measure
Pathways
Metrics

Identify and understand how design elements shape an environment to create experiences at various scales.

Participants
- Client
- Developer
- Designer
- Rose Fellow
- Health Expert
- Special Expert
- Evaluator
- Consultant
- Funder
- Community

Helpful Tools
- Green Communities Criteria*
- Design & Construction Excellence 2.0
- Building Healthy Places Toolkit
- Healthy by Design
- Active Design Guidelines

Note: tools and resources are constantly evolving and may vary from place to place; this list is not intended to be exhaustive

* indicates existing Enterprise tool
MACRO MOVES

Macro moves are large-scale design strategies that can create significant potential for impact. Large-scale can be defined in terms of geography, cost, or complexity. It is important to identify and understand how large-scale design elements are deployed to advance specific impacts. By carefully planning and networking macro design elements to generate specific experiences, population-level impact can be advanced. Macro design moves are thereby grounded in place, connect to project objectives, and advance population needs. Ultimately, by defining the various macro moves that are possible, they can be considered and prioritized against different tradeoffs in outcomes (as revealed through Pathways—see section 4, “Measure”).
Consider the following:

- What design strategies can influence the population needs defined?
- How can the design be tailored to the specific needs of subpopulations or project beneficiaries (direct or indirect) as defined in the objectives?
- At what scale would the design need to intervene in order to influence specific population-level change as described in the objective?
- What impact do various design strategies have on holistic performance?
- What impact do various design strategies have in terms of scale, populations, geographies?
MICRO MOVES

Micro moves are small-scale design tactics that can amplify favorable impacts. It is important to identify and understand how micro design elements enhance an experience at a zoomed-in scale. User experience directly influences short- and long-term outcomes (reference “Pathways”). Considering the project from the individual user’s experience will amplify and increase the quality of life for users and affect various indicators of success. Micro design moves are grounded in place, connect to project objectives, and advance population needs. Design nuances that advance strategic pathways while also providing overall user delight are prioritized.
Consider the following:

- How can design strategies network together to respond to project objectives?
- How can design strategies be compared against one another? What are the trade-offs between different design options in terms of population benefit?
- Can certain design strategies—macro moves, micro moves, or both—be prioritized based on their potential to create favorable impacts?

**Diagram**

<table>
<thead>
<tr>
<th>EXPERIENCES</th>
<th>SHORT-TERM OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SENSE OF CALM</strong></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Stress reduction</td>
</tr>
<tr>
<td>Environmental</td>
<td>Improved attention</td>
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<tr>
<td>Economic</td>
<td>Active acceptance</td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td><strong>CLEANLINESS AND ORDER</strong></td>
<td></td>
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<tr>
<td>Social</td>
<td>Stress reduction</td>
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<tr>
<td>Environmental</td>
<td>Healthy environment</td>
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<tr>
<td>Economic</td>
<td>Hazard free environment</td>
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<tr>
<td>Health</td>
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<tr>
<td><strong>ACCESS TO OPEN SPACE</strong></td>
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<tr>
<td>Social</td>
<td>Physical fitness</td>
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<tr>
<td>Environmental</td>
<td>Stress reduction</td>
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<tr>
<td>Economic</td>
<td>Intergenerational contact</td>
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<td>Health</td>
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<tr>
<td><strong>CULTURAL APPRECIATION</strong></td>
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<tr>
<td>Social</td>
<td>Resident engagement</td>
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<tr>
<td>Environmental</td>
<td>Active acceptance</td>
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<tr>
<td>Economic</td>
<td>Sense of belonging</td>
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<td>Health</td>
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<td><strong>HEALTHY FOOD KNOWLEDGE</strong></td>
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<tr>
<td>Social</td>
<td>Healthy food shopping</td>
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<tr>
<td>Environmental</td>
<td>Health seeking behavior</td>
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<tr>
<td>Economic</td>
<td>Food system awareness</td>
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<tr>
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<td><strong>PHYSICAL STABILITY</strong></td>
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<tr>
<td>Social</td>
<td>Fall reduction</td>
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<tr>
<td>Environmental</td>
<td>Range of motion</td>
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<tr>
<td>Economic</td>
<td>Sustained independence</td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
</tbody>
</table>
CASE STUDY

STUDIOS 1-4  /  09.17.15   ENTERPRISE  /  ISA  /  HXD

DESIGN STRATEGIES / MACRO SCALE DIAGRAM

BRIGHTON CENTER

NORTH

Entrance

Node

Active Design

Caregiver Resources

Campus Connectivity

LION’S CREEK

EBALDC

NEIGHBORHOOD

CONNECTION

HABITAT, RECREATION & GREEN SPACE

COMMERICAL

RESIDENTIAL

PROJECT ENGAGEMENT

SITE ACTIVATION

Arterial

Residential

DEFINITION

COMMUNITY

PARAMETERS

TEAM ENGAGEMENT

IDENTIFICATION

SCALE

PEOPLE

PLACE

GOALS

OBJECTIVES

SITE

PROGRAM

DESIGN

MACRO MOVES

MICRO MOVES

CASE STUDIES

LYNDALE GARDENS

CORNERSTONE GROUP

JJ CARROLL APARTMENTS

JCHE
**Micro Moves**

**Acoustic Hallway**

- Kid-sized nook: encourage kid autonomy, reflection, and individual decision making.
- Automatic door closers: reduce acoustic transfer between classrooms and family resource center.
- Privacy shades: protect client and parent privacy.
- Acoustic ceiling: absorb noise to reduce distraction and improve student concentration.

**Before After**

- Interactive walls: promote student ownership, leadership, and individuality.
- Mobile walls: provide visual and acoustic barriers to hallway traffic, add flexibility, and student display space.

**Design Strategies**

- Node: front porches provide direct connections to outdoor space and activate nodes.
- Game courts: provide a more social way to be active outdoors.
- Resident art: promotes ownership and cultural identity.
- Window boxes: activate hallway and provide visual interest.
- Graphic signage: reinforce the path and guide residents between destinations.
- Bright palette: provide opportunity for rest and social gathering.

**Phases**

- Active Living
- Healthy Eating
- Cultural Identity

**Locations**

- **01** Community Room
- **02** Artist in Residence
- **03** Plaza
- **04** Interim Garden
- **05** CO-OP
- **06** Ampitheater
- **07** Trail
- **08** Gateway
- **09** Garden

**Mental Wellbeing**

- Flex zones: areas for programmed activities and classes.
- Resting areas: foster people watching and social gathering.

**Social Connection**

- Game courts: provide a more social way to be active outdoors.
- Front porches: provide direct connections to outdoor space and activate nodes.

**Physical + Mental Wellbeing**

- Resident art: promotes ownership and cultural identity.
- Graphic signage: reinforce the path and guide residents between destinations.
- Bright palette: provide opportunity for rest and social gathering.

**Diverse Interaction**

- Window boxes: activate hallway and provide visual interest.
- Resting areas: foster people watching and social gathering.

**Macro Scale Diagram**

- Entrance
- Node
- Active Design
- Caregiver Resources
- Campus Connectivity

**Cultural Identity**

- Game courts: provide a more social way to be active outdoors.
- Front porches: provide direct connections to outdoor space and activate nodes.

**Social Connection**

- Game courts: provide a more social way to be active outdoors.
- Front porches: provide direct connections to outdoor space and activate nodes.

**Physical + Mental Wellbeing**

- Resident art: promotes ownership and cultural identity.
- Graphic signage: reinforce the path and guide residents between destinations.
- Bright palette: provide opportunity for rest and social gathering.
IS YOUR PROJECT ALREADY BUILT?
(start here to assess impact)
PATHWAYS
METRICS
Identify desired program performance and assess quantitative and qualitative design outcomes.

Measurement and evaluation is a technical field that helps demonstrate the effectiveness of projects by using metrics and data synthesis to link designs to measurable project outcomes. Engaging expert evaluators ensures that the project collects, tracks, and measures reliable data in a consistent fashion. The section below is intended to introduce project stakeholders to the overarching goals and methodologies involved in measurement and evaluation. A basic literacy in these key concepts will enable projects to better define the kinds of technical assistance or capacities they need to bring into the process.

### PARTICIPANTS
- Client
- Developer
- Designer
- Rose Fellow
- Health Expert
- Special Expert
- Evaluator
- Consultant
- Funder
- Community

### HELPFUL TOOLS
- STAR Community Rating System
- Mariposa Healthy Living Initiative
- Livable Communities Evaluation Guide
- The SEED Evaluator
- Green Communities Criteria*

Note: tools and resources are constantly evolving and may vary from place to place; this list is not intended to be exhaustive.

* indicates existing Enterprise tool
PATHWAYS

Pathways (also referred to as conceptual model or theory of change) represent a framework or roadmap which catalogs (1) project design moves (macro moves and micro moves), (2) the experiences those design moves might seek to create, and (3) the population-level outcomes that those experiences have on people. Mapping the links between design moves, experiences, and outcomes articulates the various ways in which design increases the project’s impact.

Whether intentional or not, all design moves shape outcomes. Pathways enable project stakeholders to understand and evaluate design moves for targeted outcomes while also minimizing unintentional and/or potentially negative side effects. For example, a public park project with the goal of addressing senior health may incorporate planted earth berms that leverage site opportunities to create areas for social gathering, exercise, and contemplation. Based on a host of social-science research, in addition to site analysis, we can assume that those same experiences (social gathering, exercise, and contemplation), if deployed tactically, will likely lead to population-level outcomes such as improved social connectivity, increased physical fitness levels, and reduced stress. In many instances, one design move may influence multiple social, environmental, economic and health outcomes. At the same time, many outcomes may be achieved by several different and distinct design moves.

Evidence-based research, best-practices, and expert advice should be referenced to identify and/or verify links between design moves, experiences, and outcomes. Data-driven industry standards are constantly reinventing themselves and should be sourced when appropriate, but intuition and common sense should also be utilized in instances where a strong evidence base simply doesn’t exist.

The activity of diagramming and visualizing pathway connections should be used early in the design process to evaluate potential outcomes, define tradeoffs and ultimately bolster the design decision-making process. Once the project is complete and put into operation, this same Pathway diagramming will help translate how design-decisions were made and allow for thorough tracking of the project’s success. “Pathway Diagramming” is an accepted standard for the multiple sectors that comprise philanthropy, government, and nonprofit organizations with a focus on advancing community impact.
Consider the following:

☐ What experiences do you want users to have? How will those influence outcomes and long-term impact?

☐ What design decisions will maximize those user experiences?

☐ What combination of design strategies work together to influence short and long-term outcomes?

☐ Reality check: Are there research, best practices, or experiences that can corroborate that desired outcomes can be met with the proposed design intervention?

**PATHWAYS / INDICATOR DIAGRAM (EXAMPLE)**

**MACRO DESIGN STRATEGY**
- Objective 1
  - Link Neighborhood Nodes
- Objective 2
  - Accessible Open Space
  - Waterfront Green Trail
  - Creative Placemaking
- Objective 3
  - Resilient Shoreline

**MICRO DESIGN STRATEGY**
- Habitat Restoration
- Deposition Surfaces
- Green Infrastructure
- Interactivity
- Cultural Identity
- Social Interaction
- Storm Surge Protection
- Traffic Calming
- Visibility / Lighting

**OUTCOME**
- Social Connectedness / Socialization
- Biodiversity
- Road Safety
- Stormwater Management
- Civic Engagement
- Cultural Preservation
- Hazard Mitigation
- Microclimate

**IMPACT**
- Traffic Related Accidents
- Reduction in Sewer Overflow
- Stewardship
- Mental Health
- Ecosystem Health
- Water Quality
- Social Capital
- Landscape Resilience
The metrics (or indicators) of a project are selected based on the outcomes defined in your Pathway Diagrams. They are organized in the Monitoring and Evaluation (M&E) Plan that reports on project objectives—including the extent to which results were measured as well as the process by which they were achieved (or not achieved). Two key types of indicators are used to evaluate project success including (1) process and (2) results (which includes the continuum of outcomes to longer-term impact). Process indicators document the program implementation (responding to how results were achieved), while results indicators demonstrate the short and medium-term outcomes of the process, determining the extent to which the project objectives were achieved at the program or population level.

**Process:**
Process indicators reflect the extent to which a project is moving in its intended direction. They are commonly referenced for project management as well as after project completion in order to shed light on why a project was successful or not. Both qualitative and quantitative data can be collected to understand the process. For example, it may be important to understand the effectiveness of engagement strategies from the perspectives of those who participated in community events. Qualitative information gathered from questions such as, “How effective were engagement activities in achieving diversity in community participation?” in conjunction with more concrete quantitative data related to engagement participation numbers, can inform how the project was implemented or how actual implementation shifted from planned activities. Process indicators provide feedback throughout the project cycle, allowing for course correction. Therefore, process indicators should be collected and reviewed periodically throughout the life of the project.

**Results:**
Result indicators provide information about the extent to which completed projects successfully address project objectives. The development of measurable objectives (see section 2), together with appropriate methodologies and data sources, is essential for demonstrating change and attributing that change to project activities. For example, if a project objective reads, “Strengthen mental, physical, and social well-being among senior residents to prolong independent living,” one may elect to track and compare the number of residents taken to the emergency room as a result of a fall, both before and after project completion.
The team should reference project Pathways to help determine what outcomes or results your project can realistically measure (with consideration to resources and/or timeframe). Then, select those that are most relevant to your project and ones in which you have available resources to collect and analyze desired data. It will be necessary to provide data and information for each indicator in your Monitoring and Evaluation Plan, so you should include only those that are feasible for the project team (both in terms of financial resources and also existing technical capacity to collect valid data). Whenever possible, use the many indicators that have already been devised for the social impact your project aims to address. Consulting an evaluator will be important to ensure that you are using standardized, validated measures. This is important not only for the credibility and certainty with which your project can claim results, but essential for collective learning that advances the broader field by contributing data that is measured in the same way.

It is best to identify a manageable number of indicators (between process and result indicators), keeping in mind the accessibility of information and resources it takes to collect and interpret that information—both in terms of staff/consultant time and financial investment in monitoring protocols. Indicators should be selected based on discussions with project staff, expert advisors, and project stakeholders. Determining whether an indicator is a “process” or a “results” indicator is relative to the project purpose and timeline. For example, the indicator “number of youth aged 15 to 24 trained in urban agriculture” may be a process indicator (since it gives information about the activities being implemented), but if the objective is to increase youth training opportunities, it could be a results indicator. The important thing to remember is that the indicator relates to the objective. For different projects, the same indicator can represent a benchmark for a process or be the result itself.

Data collection should be frequent enough to make the information collected actionable. It should be collected and analyzed regularly, so that the project team can correct problems during the design, construction, and early operations of the project, but should not be so frequent that it becomes burdensome. You may wish to collect data more often at the initial stages of implementation to inform project planning. As you finalize your Monitoring and Evaluation Plan, you should also think about who will collect and analyze the data; these activities should be included in your project work plan.

In order to demonstrate that your project has contributed to a change, the collection of baseline data (pre-construction and pre-program) is important. Baseline data (see Section 2, “People”) also helps further target the intervention to address inequities and disparities.

Baseline data:
1. Provide information about the pre-intervention situation

2. Gather data from multiple sources such as service statistics or surveys that can be linked to the geography of your site (if not exactly, then as a “proxy” or estimate for trends in your
PROJECT WORKSHEET

CHECK

Consider the following:

☐ Are there existing metrics / processes that your organization already uses that could be coupled with evaluation?

☐ At what frequency should data be collected?

☐ Over what period of time should data be collected?

CHECK

Issues to Consider When Selecting Indicators:

☐ Relevance
☐ Availability of information
☐ Ease in measuring
☐ Understandability
☐ Resources (money, personnel expertise and time)
☐ Stakeholder interest (e.g. community, government agency, funder)
Consider the following:

- Referencing the Pathways, how far along the continuum of impact do you see your project being realistically able to go? Based on this, which indicators can you prioritize to assess the contributions of your project to population impact?

- What are the desired project indicators (post-design) that will determine if the objectives developed in Section 1 have been met? Note: When defining appropriate indicators, think about:
  - Relevance
  - Validity and reliability
  - Availability/accessibility of information
  - Ease in measuring
  - Understandability
  - Resources (money, personnel expertise, and time)
  - Stakeholder interest (e.g., community, government)

How will investing resources in evaluation help you and your project? Why are you investing resources in assessing performance?

What methods, tools, or instruments (quantitative and qualitative) can be used to acquire data?

Are there existing metrics or processes that your organization already uses that could be coupled with evaluation?

Who collects data, where is it stored, how is it analyzed, and how does it influence decision-making on this project (during operations)?

At what frequency should data be collected?

Over what period of time should data be collected?

How will data be disseminated to key stakeholders? How will you ensure legibility and accessibility to communities?

What mechanisms are in place to foster institutional and collective learning across the field in order to inform future projects and design and development more broadly?
OBJECTIVES

- STRENGTHEN SAFE ENVIRONMENT THROUGH DESIGN FOCUS ON IMPROVING EMOTIONAL SAFETY, HEALTHY ENVIRONMENT, ACCOMMODATING ENVIRONMENT, AND NOURISHMENT.

- IMPROVE SUPPORTIVE ENVIRONMENT THROUGH DESIGN FOCUS ON WARM WELCOME, SESSION FLOW, ACTIVE ENGAGEMENT, AND CHILD CENTERED SPACE.

- IMPROVE INTERACTION THROUGH DESIGN FOCUS ON PROMOTING LEADERSHIP AND EXPERIENCES OF BELONGING.

- STRENGTHEN ENGAGEMENT THROUGH DEPLOYING DESIGN TACTICS THAT PROMOTE STUDENT CHOICE.

MACRO-MOVES

STUDENT ZONE

PERFORMANCE OBJECTS

ACOUSTIC WRAP

MICRO-MOVES

INTERACTIVE WALLS

SOUND MITIGATING MATERIALS

KID-SIZED SPACES

FLEXIBLE STORAGE CLOSETS & BUILT-INS

MOBILE PARTITIONS

AUTOMATIC DOOR CLOSERS

PRIVACY SHADES

TEACHING KITCHEN

INDOOR / OUTDOOR CONNECTIONS

MICRO-GARDEN

PLAY AREA CARPET

COMMUNITY ROOM MESSAGE BOARD

STUDENT DISPLAY / WALLS

KID-SIZED FURNITURE AND FIXTURES

DIVERSE GATHERING ZONES
EXPERIENCES

OBJECTIVES
STRENGTHEN SAFE ENVIRONMENT THROUGH DESIGN
FOCUS ON IMPROVING EMOTIONAL SAFETY, HEALTHY ENVIRONMENT, ACCOMMODATING ENVIRONMENT, AND NOURISHMENT.

IMPROVE SUPPORTIVE ENVIRONMENT THROUGH DESIGN
FOCUS ON WARM WELCOME, SESSION FLOW, ACTIVE ENGAGEMENT, AND CHILD CENTERED SPACE.

IMPROVE INTERACTION THROUGH DESIGN
FOCUS ON PROMOTING LEADERSHIP AND EXPERIENCES OF BELONGING.

STRENGTHEN ENGAGEMENT THROUGH DEPLOYING DESIGN TACTICS THAT PROMOTE STUDENT CHOICE.

SHORT-TERM OUTCOMES

LONG-TERM OUTCOMES

FACTORS
TEAMWORK / INCLUSIVENESS
CLEANLINESS / ORDER
VENTILATION
CALMING
REDUCED NOISE
FOOD SYSTEMS ENGAGEMENT
THERMAL COMFORT
APPROPRIATENESS
WELCOMING
CHILD CENTERED ENVIRONMENT
BELONGING
SCHOOL-AGED LEADERSHIP
INDEPENDENCE / CHOICE
REFLECTION

SHORT-TERM OUTCOMES
PERSONAL IDENTITY / AUTONOMY
IMPROVED STUDENT ATTENTION
SOCIAL NETWORKS
SENSE OF COMMUNITY
SOCIAL AWARENESS
HEALTHY / HAZARD FREE ENVIRONMENT
EMOTIONAL SAFETY
INFECTION PREVENTION
COMMUNICATION
FOOD SYSTEM AWARENESS
INTERACTION / ENGAGEMENT
PERCEIVED OWNERSHIP
STRESS REDUCTION
STUDENT PRIDE
STUDENT FOCUS

LONG-TERM OUTCOMES
SAFE ENVIRONMENT
MOOD
STAFF MENTAL / BEHAVIORAL HEALTH
POSITIVE DEVELOPMENTAL OUTCOMES
SUPPORTIVE ENVIRONMENT
IMPROVED SCHOOL PERFORMANCE
HEALTHY EATING
SOCIAL COHESION

EXPERIENCES

PROFESSIONAL IDENTITY / AUTONOMY
IMPROVED STUDENT ATTENTION
SOCIAL NETWORKS
SENSE OF COMMUNITY
SOCIAL AWARENESS
HEALTHY / HAZARD FREE ENVIRONMENT
EMOTIONAL SAFETY
INFECTION PREVENTION
COMMUNICATION
FOOD SYSTEM AWARENESS
INTERACTION / ENGAGEMENT
PERCEIVED OWNERSHIP
STRESS REDUCTION
STUDENT PRIDE
STUDENT FOCUS

Safe Environment
- #, average score for: safe, healthy, accommodating environment
- #, % students with garden exposure
- #, % students food system awareness
- #, % students reporting they ate at least 3 servings fruits/vegetables in the last day

Supportive Environment
- student centered design criteria (related to warm, session flow, active engagement, child centered space) that are met
- key barriers to supportive environment addressed (as diagnosed by teachers pre-design) including noise level, attention level, lack of flow

Interaction / Engagement
- Perceptions of teachers and parents about:
  - quality of interaction
  - belonging / friendship networks
  - cultural identity / community price
**OBJECTIVES**

- Strengthen mental, physical and social well-being among residents to prolong independent living.
- Reduce avoidable hospitalization and ER use among elderly.
- Optimize the caregiver/staff experience to improve visitor effectiveness and reduce stress and burnout.
- Improve neighborhood connectivity and transit access.

**SPACEUAL DESIGN MOVES**

**MACRO-MOVES**

- Internal + external nodes - JJ Carroll and JCHE Brighton.
- Universal and active design for seniors
- Caregiver resources and support spaces.
- Neighborhood / campus connectivity.

**MICRO-MOVES**

- Connect nodes (indoor & outdoor)
- Pedestrian paths of varying difficulty
- Adult activity / recreation areas
- Connection to services
- Street connectivity
- Flexible zones / outdoor classrooms
- Guest suites
- Informal areas for child play
- Culturally specific installations
- Way-finding signage
- Lighting visibility and color
- Distance markers
- Frequent rest areas
- Sensory garden, native plantings
- Community garden
- Retail space
- Public seating at campus edges
- Visual connection to nature
- Game courts
- Front porches
- Diverse seating options
- Resident art
- Caregiver support resources
- Private relaxation areas
- Personalized spaces
**EXPERIENCES**

**FACTORS**
- SOCIAL INTERACTION
- MOBILITY
- CALM
- REFLECTION / CONTEMPLATION
- INDEPENDENCE / AUTONOMY
- CULTURAL APPROPRIATENESS
- NOISE CONTROL
- SENSORY STIMULATION
- PHYSICAL STABILITY
- PHYSICAL FITNESS / BALANCE
- PERSONAL CONTROL
- REPRIEVE / REST
- REFLECTION
- PLEASANTNESS
- PUBLIC TRANSIT ACCESSIBILITY
- ACCESS TO OPEN / GREEN SPACES

**SHORT-TERM OUTCOMES**
- INCREASED PHYSICAL ACTIVITY
- SOCIAL CONNECTION
- SOCIAL NETWORKS
- SOCIAL SUPPORT
- INCREASED USE OF SERVICES
- LONGER SUSTAINED INDEPENDENCE
- RANGE OF MOTION
- COGNITIVE FUNCTION
- FALL REDUCTION
- HEALTH AIDE STRESS REDUCTION
- REDUCED FAMILY STRESS
- RESIDENT FAMILY STRESS
- ACTIVE CAMPUS ENGAGEMENT
- INTERGENERATIONAL CONTACT
- PERCEIVED CONNECTION TO NEIGHBORS
- REDUCED RESIDENT STRESS

**LONG-TERM OUTCOMES**
- REDUCED HOSPITALIZATIONS
- DECREASED NURSING HOME TRANSFERS
- DEPRESSION / ANXIETY REDUCTION
- DECREASED HEALTH AIDE TURNOVER
- SENSE OF BELONGING
- SENSE OF INDEPENDENCE
- SENSE OF PURPOSE
- WELF-BEING
- MEDICATION COMPLIANCE
- DEMENTIA REDUCTION
- FEWER PREVENTABLE INJURIES
- FASTER RECOVERY FROM INJURIES

**Mental/Physical Well-being**
- #, % of residents rating their quality of life as “high”
- #, % of avoidable hospitalizations and ER visits related to falls
- #, % of residents with improved range of motion

**Neighborhood Connectivity**
- perceptions of social interaction in neighborhood
- #, transit users / pedestrian counts

**Caregiver Stress**
- #, % of user focused strategies implemented (way-finding, guest suites, relaxation area, support resources)
- #, % of health aides reporting burnout
## OBJECTIVES

- Increase access to healthy food, especially for low-income and at-risk populations
- Increase physical activity among at-risk and sedentary populations
- Reduce health and economic risks for vulnerable young families

### MACRO-MOVES

- Urban Agriculture Grow Landscape
- Trail Access & Neighborhood Connection
- Creative Place Making & Art Making

### MICRO-MOVES

- Community Garden / Interim Plots
- Farmers Market
- Healthy Food Co-op
- Connection to Green / Open Space
- Trail System / Activity Paths
- Learning Landscape
- Pedestrian Linkages
- Signage / Way-Finding
- Neighborhood Connections
- Fitness Space & Programming
- Artist in Residence
- Public Art Making Project
- Plaza with Stage & Amphitheater
- Community Room Programming
- Community Kitchen
- Distance Markers
- Urban Farm
- Diverse Gathering Spaces
## Objectives

- Increase access to healthy food, especially for low-income and at-risk populations
- Increase physical activity among at-risk and sedentary populations
- Reduce health and economic risks for vulnerable young families

### Short-term Outcomes

<table>
<thead>
<tr>
<th>Factors</th>
<th>Short-term Outcomes</th>
<th>Long-term Outcomes</th>
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</thead>
<tbody>
<tr>
<td>Availability of healthy food</td>
<td>Civic engagement</td>
<td>Social connection</td>
</tr>
<tr>
<td>Affordability of healthy food</td>
<td>Intergenerational social interaction</td>
<td>Healthy eating &amp; preparation</td>
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<tr>
<td>Appropriateness of food</td>
<td>Spontaneous democratic interactions</td>
<td>Decreased diabetes rate</td>
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<tr>
<td>Physical accessibility to food</td>
<td>Youth leadership</td>
<td>Lower BMI / weight loss</td>
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<tr>
<td>Healthy food prep knowledge</td>
<td>Employment opportunities</td>
<td>Respiratory health</td>
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<td>Cultural / social norms</td>
<td>Self efficacy / confidence</td>
<td>Cardiovascular health</td>
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<tr>
<td>Food system awareness</td>
<td>Healthy food shopping</td>
<td>Mental health</td>
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<tr>
<td>Physical activity</td>
<td>Social connection</td>
<td>Reduced stress related illness</td>
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<tr>
<td>Neighborhood connectivity</td>
<td>Health seeking behavior</td>
<td>Reduced chronic stress</td>
</tr>
<tr>
<td>Accessibility / inclusiveness</td>
<td>Physical fitness</td>
<td>Increased neighborhood investment</td>
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<tr>
<td>Job opportunities</td>
<td>Sense of ownership</td>
<td>Social resilience</td>
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<tr>
<td>Public art</td>
<td>Community engagement</td>
<td>Agency &amp; political mobilization</td>
</tr>
<tr>
<td>Cultural engagement</td>
<td>Social networks</td>
<td>Stewardship</td>
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<tr>
<td>Accessible retail</td>
<td>Increased local purchasing</td>
<td>Ecosystem health</td>
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<tr>
<td>Health literacy</td>
<td>Perceived neighborhood safety</td>
<td>Culture of health &amp; wellbeing</td>
</tr>
<tr>
<td>Healthcare knowledge</td>
<td>Sense of belonging</td>
<td></td>
</tr>
<tr>
<td>Social interaction</td>
<td>Community pride</td>
<td></td>
</tr>
</tbody>
</table>

### Physical Activity Opportunities

- Perceptions of residents / under-served groups around physical accessibility / barriers to site accessibility
- #, % population with positive beliefs related to physical activity
- #, % population reporting exercising (10 consecutive minutes) in last 24 hours
- #, % of adults reporting healthy food options
- #, % of purchases using local food stamp program
- Perceptions of residents / under-served groups around appropriateness of available food

### Health Outcomes

- Decreased diabetes rate
- Lower BMI / weight loss
- Respiratory health
- Cardiovascular health
- Mental health
- Reduced stress related illness
- Reduced chronic stress
- Increased neighborhood investment
- Social resilience
- Agency & political mobilization
- Stewardship
- Ecosystem health
- Culture of health & wellbeing
A determinant is a type of factor. For our purposes, they are closely related. A factor in this context refers to a variable or predictor in the social science literature for specific outcomes. Most outcomes have multiple factors that influence them (e.g. physical activity and healthy eating are both factors that influence obesity). Behaviors are influenced by a variety of factors which, in turn, are dependent on differences in relationships, settings, cultures, and economic conditions. These factors are called “determinants” as they determine, or influence, individual behaviors.

A project goal is a general, often lofty, long-term change your project aims to contribute to, such as a city-wide change in health status (obesity) or socio-economic characteristic (poverty).

Impact relates to achievement of the Goal and typically is not measured at the level of a project, rather monitored at a city, county, state, or national scale; it reflects the collective contributions of multiple project/service and policy interventions.

An indicator reflects the metric and methodology for how the project will assess both the process of project implementation (process indicators) and results (results indicators), and thereby success against objectives.

A project objective is a measurable, time-bound, change your project aims to achieve with a specific population and related geography.

An outcome refers to the result of a project at a population-level. Whether it is qualified as short or long-term relates to the project’s Pathway/Theory of change, and is relative to project timeframe and objectives.

A pathway (or theory of change) articulates the logical, sequential, temporal progression by which the project design proposes to achieve impact, linking project design moves to Factors and Short/Long-Term Outcomes as well as Impact.

Population-level change refers to trends at a large scale (community, neighborhood, cities, counties, nations) versus individual level change. Population-level change requires a population-based approach where action is directed at a population, or sub-population, rather than individuals. Focusing on the health of populations also necessitates the reduction in inequalities in health status between population groups.