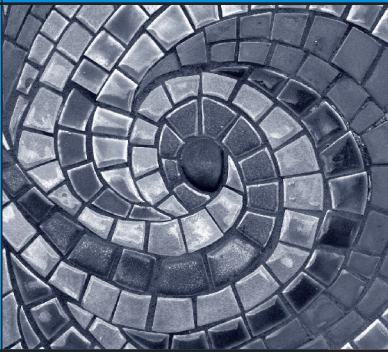




THE ASPEN INSTITUTE
Roundtable on Community Change



Complexity and Community Change

Managing Adaptively to Improve Effectiveness

SEPTEMBER 2014

Patricia Auspos
Mark Cabaj



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The Aspen Institute Roundtable on Community Change is a national forum in which leaders of innovative and promising efforts to improve conditions in poor communities can share lessons about their work and make progress on common challenges. The Roundtable's goal is to strengthen the quality of policies, research, and practice aimed at improving outcomes for children, youth, families, and communities in distressed areas.

Thirty years ago, complexity science was barely known outside the worlds of advanced mathematics and physics. In recent years, however, it has started to enter mainstream thinking in a variety of fields including the military, medicine, international development, the for-profit business world, and even some government agencies in Canada, Australia, and Europe. This book applies complexity science to the world of place-based community change efforts. We argue that community change actors experience complexity in two ways: by addressing complex problems and by working within complex adaptive systems. Both aspects of complexity have important implications for practice. We focus in particular on how place-based community change efforts can be improved if the various actors look through the lens of complexity and employ an adaptive approach to the complexity they encounter in their work. We refer to this as adaptive leadership and management.

Our exploration builds on the large body of work the Aspen Institute Roundtable on Community Change has produced over the past 20 years documenting trends, practices, debates, and achievements in a field that was first known as Comprehensive Community Initiatives but evolved into the broader world of “complex place-based change efforts” (Kubisch et al., 1997; Kubisch et al., 2002; Kubisch et al., 2010). The Roundtable has increasingly described this work as *complex*, *emergent*, and *adaptive*, terms borrowed from complexity science. Now we take a deeper dive to explore what a complexity lens adds to the field of place-based community change and how it can be used to improve practice and effectiveness.

Our primary focus is on managers (often called practitioners in this book) in organizations that are working on community change in distressed neighborhoods or communities. They are central actors in change efforts and a population that the Roundtable has followed closely over the years. But the issues and lessons we discuss are also useful for a broader audience in the ecosystem of community change: community residents, funders and other sponsors, evaluators and researchers, technical assistance providers, policymakers, and other organizations and change agents both inside and outside neighborhoods.

We recognize that many people in the community change field intuitively understand complexity and operate quite effectively as adaptive leaders and managers in their everyday work. Many of the terms and elements that define complexity and adaptive management practices will resonate with community change actors because they have been used to describe the challenges and tensions of place-based community change work without explicitly linking to their roots in complexity science. We want to make these ideas and practices more explicit and robust for the field of community change so they are more readily recognized, accepted, and supported as legitimate, and so more practitioners are aware of

them. We hope to contribute to the development of a common framework and vocabulary that will make it easier to understand and communicate about complexity and adaptive practice to others. We also hope to enlarge the repertoire of adaptive practice in community change efforts.

Making the complexity context clearer helps to bring long-standing debates up to date, provides new tools, and offers a framing that advances the current policy environment, which acknowledges the complexity of the problems in community change but often offers solutions that make adaptive responses more difficult. We are not suggesting that a complexity lens should replace traditional perspectives and practices of leadership and management in the field. To the contrary, we advocate that practitioners (and the funders, evaluators, and technical assistance providers who support them) **embrace situational leadership and management**. This means they should use whatever combination of traditional and adaptive approaches are required in a particular situation or context.

For example, it is essential to distinguish between *simple*, *complicated*, and *complex* problems, each of which requires a different type of planning, evaluation, and management from the others. If practitioners treat complex problems as simple or complicated and apply practices better suited to those contexts than to complexity, their efforts are unlikely to resolve the problems.

We focus particular attention on the adaptive (complex) side of this spectrum because it is newly emerging as a way to address the complex nature of community change; it is less well understood and less explored. However, we do not view complexity and adaptive management as a silver bullet or panacea that will resolve all of the challenges that make transformational place-based change notoriously difficult to accomplish. We acknowledge that because adaptive practices are not widely used there is no evidence of linking them to large-scale, lasting impact. In addition, we feel it takes more than using adaptive practices at the neighborhood level to change the structural conditions that produce many community problems. However, we do see evidence that adaptive management can help leaders and practitioners become more effective in day-to-day situations and, in certain cases, dramatically improve conditions. We believe that a more robust, wider adoption of adaptive practices that embrace complexity can cumulatively lead to better outcomes than we are seeing now.

We draw on three primary sources for this study:

- Complexity science and its application to management in general, of which there is a large and growing literature that ranges from planning and systems mapping to developmental evaluation
- The application of complexity ideas and practices in other disciplines (notably, the military, biology, business, and international development)
- The insights and practices of community change practitioners and funders, tapping into the feedback of a small advisory group and others in the broader field

Our analysis rests in between a basic introduction to complexity and an exhaustively broad and deep exploration of the topic: We explore a range of perspectives, principles, and practices that we believe have some practical application in the field of community change:

Chapter 1 offers a brief overview of some key principles of complexity (our version of Complexity Theory and Practice 101). It introduces the reader to three important concepts that are running themes throughout this book: complex adaptive systems, simple to complex issues, and situational leadership and management.

Chapter 2 examines three major functions that are integral to complex place-based change efforts—strategy and planning, adaptive management, and learning and evaluation—and examines how a complexity lens shapes the mind-set and practices needed for each function.

Chapter 3 looks more closely at how a complexity lens can inform two long-standing issues in community change: horizontal alignment (linking and integrating across programs, organizations, systems, and sectors) and vertical alignment (working at multiple levels). The complexity concepts explained in Chapter 1 and the approach to core functions described in Chapter 2 enable us to revisit the community change field’s concept of “comprehensiveness” in this chapter.

Chapter 4 explores the skills, competencies, funding and accountability practices, and organizational and management structures that adaptive managers and leaders of community change need to address complexity. We also suggest strategies for developing this essential infrastructure.

Chapter 5 offers recommendations for what key actors in the place-based change field—practitioners, community residents, public- and private-sector funders, and evaluators—can do to create an environment that is more responsive to complexity and more supportive of adaptive management and situational leadership.

Chapter 6 presents some overall reflections and takeaways on how complexity can improve place-based community change practice and what it contributes to an understanding of the change process.

We are not the only people working on this topic. Complexity has sparked the interest of people in many disciplines in many countries. An increasing number of projects, papers, studies, and blogs are exploring the application of complexity thinking to pressing challenges in the United States, in general, and in the field of community change and community development in particular. These activities include work by the Federal Reserve Bank of San Francisco in conjunction with the Scale Initiatives project at the Aspen Institute; Grantmakers for Effective Organizations; the Center for Evaluation; the U.S. Agency for International Development; and publications on collective impact, emergence, and strategic philanthropy by FSG’s John Kania and Mark Kramer.

We hope that this book serves as a coherent, accessible, and practical contribution to this growing field. We would like it to stimulate further discussion, debate, and elaboration. Most important, we hope it will help lead to stronger, more vibrant neighborhoods and communities.

Understanding Complexity

Vulnerable communities in rural and urban areas face many interrelated challenges, including underemployment, struggling schools, unsafe and unaffordable housing, poor health, and more. Over several decades, a genre of work has evolved to address those issues. Originally known as comprehensive community initiatives (CCIs) and now generally referred to as complex place-based (or “community”) change efforts, these interventions vary widely but share three primary characteristics: (1) They are focused on a defined geography and aim to affect the entire resident population; (2) they are comprehensive, meaning they work across a broad spectrum of social, economic, and physical conditions and at multiple levels (i.e., individual, family, organization, community, even systems); and (3) they value community-building objectives and outcomes, such as engaging residents in the improvement process, expanding social connections and community capacity, and strengthening civic voice. (For a full description, history, and assessment, see Kubisch et al., 2010.)

Throughout this volume, we refer to these interventions interchangeably as *complex place-based change efforts*, *community change efforts*, or *place-based change efforts*.

Increasingly, local residents, practitioners, funders, policymakers, and evaluators of community change efforts have begun to refer to the challenges as “complex” and to believe that viewing community issues through a “complexity lens” leads to better solutions. In adopting a complexity lens, the field of community change draws on a relatively recent but powerful set of ideas. The importance of complexity theory for place-based community change lies in how it contrasts with more traditional scientific concepts and how both the old and new paradigms have influenced modern leadership and management.

Traditional science is based on an early “mechanical” paradigm of the world that emerged in the 17th century during the scientific revolution. This paradigm positions the world (and universe) as a large machine whose operations can be understood by analyzing its constituent parts.

TERMS

COMPLEXITY: The English word *complexity* is rooted in the Latin *complexus*, which is formed from the adjective *plexus* (braided or entwined) and the prefix *com* (with). Complexity refers to the interconnectivity of elements within a system or a situation.

PLACE-BASED CHANGE EFFORTS: Efforts to improve outcomes that focus on a defined geography; work comprehensively across multiple areas (physical, social, economic) and at multiple levels (individual, family, organization, community, systemic); and value community building (engaging residents in decisions and activities, expanding social connections, and strengthening civic voice and community capacity to take action).

The machine metaphor dominated the fields of public administration and organizational management for much of the modern era. No wonder. As Meg Wheatley noted, it created “a seductive place filled with clockwork images promising us prediction and reliability, teaching us to view everything, including ourselves, as machines. We learned to manage by separating things into parts” (Wheatley, 1993). People who follow the traditional paradigm strive to lead and manage organizations and strengthen communities as if they are well-oiled machines with hierarchical structures, specialized units, and robust planning and performance models.

Complexity science, on the other hand, views the world as a large “living organism” in which the relationship between the parts generates behaviors and outcomes that are messy, unpredictable, and always evolving. The arguments for using a complexity lens began in the 1960s, when machine-based models and practices proved unable to support progress toward solving vexing societal issues. The most dramatic example was in the area of urban planning. In response to central planners’ top-down efforts to renew “city slums,” urban philosopher and activist Jane Jacobs argued against machine model–inspired measures, such as large-scale housing projects and slum clearances, and the urge to separate spaces according to their use (e.g., recreational, commercial, residential) because these approaches failed to appreciate that communities were ecosystems with “layered complexity” whose well-being and resiliency could be strengthened. Jacobs’s alternative to urban renewal efforts was to emphasize mixed-use development, driven by a process of bottom-up planning and an organic process of small-scale trial and error (Jacobs, 1961).

Soon after, the social planners Horst Rittel and Melvin Webber identified the limits of a mechanistic model for addressing other public issues. They argued that traditional management science worked well for “tame problems” in which cause-and-effect relationships are well understood and there are clear solutions (e.g., a vaccination campaign to eradicate illness) but could do little to solve “wicked problems” that had complex cause-and-effect relationships (e.g., reforming education, rebuilding a neighborhood) and involved diverse stakeholders who did not always agree on how to define the problem, the extent to which a problem existed, and the most desirable solution. Rittel and Webber went even further by arguing that some wicked problems could never be completely solved and that even partial solutions were, at best, temporary because the problem continued to evolve (Rittel & Webber, 1973).

Like Jacobs, Rittel and Webber recognized the importance of small-scale experimentation, but in acknowledging the social dimension of wicked issues they also emphasized the need “to make those people who are being affected into participants of the planning process. They are not merely asked but actively involved in the planning process” (Rittel, 1972). Rittel and Webber also developed new ways for stakeholders to visually map their understanding of the problem they were trying to address and its possible solutions, through methodologies such as issue-based information systems.

Complexity science more formally emerged in the late 1960s as a multidisciplinary field that weaves together insights from a variety of related disciplines (e.g., chaos theory, cybernetics, systems theory) and domains (e.g., mathematics, ecology-biology, weather patterns, economics, the military). Since then, the field has continued to evolve and expand, thanks in part to the establishment of the Santa Fe Institute in 1984, with a growing emphasis on the development of practical applications to assist people and organizations working in a variety of fields (e.g., visual modeling of complexity, managerial competencies for complexity, network analysis).

Despite its origins in social policy and community change 50 years ago, the practical application of complexity-based leadership and management has moved toward becoming a common perspective and practice in many fields. For example, the U.S. military uses the acronym VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) to describe its operating environment and has organized structures and processes to enable troops to operate flexibly in unpredictable, dynamic contexts (Pascale, Milleman, & Gioja, 2000). The world of commerce refers to markets as living systems and emphasizes distributed leadership, experimentation, and rapid learning (Sullivan, 2011). International development organizations are experimenting with complexity-aware planning and evaluation processes as they deliver foreign aid (Ramalingam, 2013). A growing number of hospital administrators apply complexity-based principles to encourage innovation and bottom-up restructuring of hospitals and larger health-care systems (Zimmerman, Lindberg, & Plsek, 2006). And security analysts view terrorist groups as resilient, distributed networks able to adapt their strategy and tactics over time in response to anti-terrorist measures (Ilachinski, 2010).

This chapter seeks to “reground” a complexity lens in its original soil of community and social change. It explores three important concepts in complexity-based approaches to leading and managing change—**complex adaptive systems, simple to complex challenges, and situational leadership**—and describes why they are critically important for actors in place-based community change.

Key Concept 1: Communities as Complex Adaptive Systems

One of the first steps in applying complexity theory to place-based community change is to view communities as complex adaptive systems (CASs), a cornerstone complexity concept.¹

In a complex adaptive system, agents interact with each other in dynamic, evolving, and unpredictable ways. There are complex adaptive systems all around us: biological (e.g., human body), ecological (e.g., a lake, valley, or prairie), or social (e.g., a family, an organization, a stock market, a street gang). Viewing the world through the lens of a complex adaptive system gives actors in place-based community change a broader and

1. Complex adaptive systems that involve people are often called complex adaptive social systems (CASSs) because they are the result of social interactions and because the actors are conscious of their role in the system and can adjust their behaviors and interactions with other actors.

deeper understanding of the nature of communities—especially vulnerable communities experiencing disinvestment and decline—and expands the possibilities for where and how to intervene productively in those systems and what might be expected in the way of results.

Communities encompass many CASs, including small- to large-scale systems (e.g., families, neighborhoods) and a variety of domain-specific systems (e.g., housing, employment, schools). Given the number and diversity of these interconnected systems, communities are sometimes called “super CASs” on a small scale.

The well-being of any geographic community and its residents is shaped by the characteristics of local CASs. Key characteristics include:

- 1. Multiple, diverse actors.** A CAS encompasses a wide range of diverse actors whose behavior is shaped by (a) their own values, interests, and perspective; (b) their relationships with other actors in the system; and (c) the larger political, cultural, and social context in which they operate. Community change practitioners must consider all actors’ roles when deciding whom to engage and how.
- 2. Emergent and self-organizing behavior.** There is no clear hierarchy or command-and-control mechanism in a CAS. Actors are constantly organizing and adapting their behavior to best fit and thrive in the system. The behavior and outcomes of a CAS cannot be predicted by examining the behavior of each of the system’s actors; rather, they are the cumulative results of interactions among all actors. In other words, the whole is greater than the sum of its parts.
- 3. Nested systems.** A complex adaptive system is nested within other systems. Moreover, many CASs function as systems that are composed of smaller systems.
- 4. Overlapping systems.** The boundaries between various complex adaptive social systems may be conceptually clear and distinguishable from other systems (e.g., a labor market, housing, education, food) but operate in an open and permeable way.
- 5. Nonlinear progress.** The relationship among “inputs” or “interventions,” behaviors, and outcomes is nonlinear. Thus, large-scale efforts to change system behavior can yield little to no results, while small interventions can create big effects.
- 6. Sensitivity to context.** The characteristics of CASs vary from place to place. These differences mean that actors in place-based change efforts may have to construct relatively unique solutions that fit their specific context.
- 7. Co-created evolution.** CASs are always evolving and changing in response to their own internal dynamics and external forces, which include the behaviors and relationships between actors and the cumulative results of their activities. This means that actors in

local change efforts must continually monitor the environment and adapt their responses to match evolution in the system

To see how these characteristics play out in real life, consider the example of a food desert (Figure 1), based on a description provided by the Food Empowerment Project. A food desert represents a dysfunctional system for connecting individuals with healthy, affordable food. Food deserts are “geographic areas where residents’ access to affordable, healthy food options (especially fresh fruits and vegetables) is restricted or nonexistent due to the absence of grocery stores within convenient traveling distance” (www.foodispower.org/food-deserts/). Instead, food deserts typically have a higher-than-average number of fast-food chains selling food that is high in fat, sugar, and salt, or convenience stores offering highly processed, more expensive items. People who live in a food desert encounter a variety of health-related difficulties; compared with members of the general population, they spend a higher-than-average proportion of their limited disposable income on food; they have statistically higher rates of diet-related health conditions such as obesity, type 2 diabetes, and cardiovascular disease; and they are unable to easily accommodate either dietary restrictions (e.g., lactose intolerance, gluten allergies) or cultural preferences (e.g., halal).

Community leaders, healthy food activists, government officials, and philanthropic organizations have developed a variety of responses to address the growing number of food deserts in the United States. These include financial incentives to encourage larger grocery stores to relocate in underserved neighborhoods and ventures to expand the number of local options for producing or purchasing food, including community gardens, farmers’ markets, and mobile food carts. The relative success or failure of their efforts cannot be understood without comprehending the properties of the complex adaptive social system in which food deserts are embedded.

Viewing the challenge of place-based community change in the context of a CAS has a number of significant implications for actors in place-based community change efforts:

- The challenge of tackling specific community issues and overall community well-being in general is affected by a diverse and interrelated array of factors.
- The diverse actors in place-based change efforts can *influence* but not *control* the behavior of all agents and actors at the local level. They have even less influence over actors outside the community.
- Interventions into communities yield unpredictable effects.
- The dynamic and evolutionary nature of CASs means that actors in place-based community change efforts need to constantly adapt their strategies and actions in order to keep pace with those changes.

FIGURE 1

A FOOD DESERT ILLUSTRATES CHARACTERISTICS OF A CAS

A struggling local food system has multiple, diverse actors, including food producers, wholesalers, distributors, grocery stores, consumers, and organizations that provide infrastructure for these actors

(e.g., financial institutions, planning departments, health departments, chambers of commerce, chemical producers).

The food desert is **emergent and self-organizing**: It has no “food manager,” grand plan, or explicit coordinating mechanism. The overall behavior of the systems is the cumulative effect of all the actions and interactions of independent actors. For instance, a drop in profitability prompts a large grocery store to close. Small grocery and convenience stores then arrive or expand to fill the gap, and consumers adapt their eating and purchasing behaviors accordingly.

A food store is **nested** because it has a “micro-system” with its own staff, customers, suppliers, and neighbors, which in turn belong to larger city, regional, national food systems. Similarly, neighborhood food deserts have emerged in part because local food production,

manufacturing, and distribution have been “de-coupled” from neighborhoods and centralized within the larger regional, national, and international food systems in which they are nested.

Boundaries overlap in a food desert because they are strongly shaped by low levels of economic activity, employment, and income in local neighborhoods, which in turn often trigger a downward spiral of middle-class flight, weaker housing markets, struggling schools, and exodus of commercial enterprises. These dynamics overlap with and reinforce the decline of food retailers in food deserts.

Efforts to reverse food deserts make **nonlinear** progress. For example, food and poverty activists in Chicago pushed hard to counteract the growing number of food deserts with campaigns and grass-roots efforts, such as community gardens, but they achieved only modest results over several years. But then a new mayor took office who energetically pursued a pledge to eliminate food deserts. This relatively minor shift in the region’s larger food system persuaded retailers to commit to placing 36 new food stores in the affected neighborhoods. Lawmakers also amended some policies, making it easier for regional producers to sell to local markets and to expand

the size of urban gardens. These efforts produced a significant drop in the number of people who live in Chicago food deserts (Spielman, 2013).

Solutions to food deserts are **context-sensitive** in the sense that southern California’s sunny climate, strong agricultural sector, and large population centers may make farmers’ markets and community gardens a more economically feasible response in Los Angeles than in northern Michigan, where food producers have a shorter growing season and lower population densities.

Food deserts are **evolutionary and adaptive** because their characteristics continue to evolve and adapt to shifts in the broader context. For example, a sudden rise in purchasing power in a neighborhood may trigger the return of larger-scale food stores. Similarly, the introduction of a community-owned store peddling fresh produce by a local community development corporation, and the expansion of a local farmers’ market showcasing produce from regional farmers may prompt existing stores to expand their own selection of groceries. The process of evolution and adaptation is continuous.

SOURCE: www.foodispower.org/food-deserts/

Key Concept 2: Different Challenges, Different Responses

Within the many complex adaptive systems that comprise local communities, actors in community change efforts face a variety of problems, situations, and contexts. Each challenge requires a different approach to leadership and management. The leadership and management framework we discuss here draws on frameworks developed by Ralph Stacey (2007) and by David Snowden and Mary Boone (2007) and insights provided by complexity experts Sholom Glouberman and Brenda Zimmerman (2002) and Adam Kahane (2012). Additional perspectives on complexity are summarized in Table 1.

TABLE 1

OTHER FRAMEWORKS TO DESCRIBE COMPLEX CHALLENGES

FRAMEWORK	AUTHOR	INSIGHTS INTO COMPLEXITY
Adaptive	Ronald Heifetz, Mark Kramer, & John Kania (2004)	Implementation of possible solutions requires learning.
Simple, Complicated, Complex	Brenda Zimmerman, Curt Lindberg, & Paul Plsek (2006)	Efforts to intervene into complex situations generate unpredictable results (e.g., in raising a child).
Wicked Problems	Horst Rittel & Melvin Webber (1973)	Wicked problems are difficult to frame and may never be fully solved.
Social Messes	Russell Ackoff (1974)	Some problems are extraordinarily complex because they encompass overlapping wicked problems (e.g., homelessness).

Our framework organizes the issues and actors found in place-based change efforts by two variables or dimensions (Stacey, 2007; Cabaj, 2012): (1) level of certainty—the extent to which cause-and-effect relationships in each context are understood; and (2) level of agreement—the extent to which the key stakeholders needed to make decisions and/or progress on an issue have aligned information, values, interests, and positions. Those two dimensions create five contexts in which complex challenges unfold: simple, complicated, social/political, chaotic, and complex. These five contexts cover many of the situations faced by people who are trying to improve communities.

We turn now to the leadership and management approach unique to each context in our framework.

CONTEXT 1: SIMPLE CHALLENGES

Simple challenges exist when the cause-and-effect relationships underlying the “problem” are straightforward and apparent, the results of interventions are known and predictable, and there is little or no debate among stakeholders over whether and how to proceed with addressing the challenge. Examples of simple challenges include immunizing community residents to guard against a disease or providing breakfast to children at a school serving low-income families.

Simple challenges call for a leadership and management approach based on best practices. In this context, success relies on choosing a practice that has been tested or proven and codified so that others can implement it with fidelity.

CONTEXT 2: COMPLICATED CHALLENGES

In complicated situations, there may be more than one right answer or solution; the cause-and-effect relationships underlying the challenge are less clear and solutions need to be explored further. Examples of complicated challenges include testing the effects of a new drug, rescuing a decayed sanitation system in a rural town, and developing an application for cell phones that allows inner-city service providers to obtain real-time information on the availability of beds at a local homeless shelter.

The appropriate leadership and management responses in complicated contexts are to bring in people who have expertise on the specific challenge, give them time and space to analyze it further, and experiment with possible solutions. Given enough time, expertise, and resources, leaders and managers in complicated contexts are likely to uncover one or more solutions.

CONTEXT 3: SOCIAL/POLITICAL CHALLENGES

In social and political challenges, actors face marked differences—even conflict—among the values, interests, and positions of different stakeholders, although the underlying cause of the problem and the likely result of a proposed action may be clear. Examples include deciding where to locate a safe needle injection site in a neighborhood, whether to pass a municipal living wage bylaw, negotiating an agreement between labor and management, and encouraging a neglectful landlord to upgrade an apartment to meet safety codes. The greater the diversity and/or depth of differences in worldviews and interests among stakeholders, the more socially and politically challenging an issue is.

Successful leadership and management in the social/political context depends on the level and nature of disagreement among stakeholders, but it typically includes a focus on building relationships, finding common ground, and negotiating compromise. Extreme cases (e.g., matters of racism and civil rights) may require political organizing and movement building.

CONTEXT 4: CHAOTIC SITUATIONS

Chaotic situations exist when the context is highly turbulent and urgent, cause-and-effect relationships are unclear, the relationships between stakeholders are shifting and uncertain, and possible solutions are, at best, a guess. Chaotic situations typically emerge in the form of a crisis. Examples include providing clean water to survivors of a natural disaster; managing an organization's payroll after the director suddenly departs, leaving behind an empty bank account; and managing New York City's emergency response after the terrorist attacks of September 11, 2001.

Leaders and managers who face a chaotic situation have to get up to speed as quickly as possible, mobilize key stakeholders, and create clear communication channels wherever possible. Because a quick response is necessary, leaders and managers have little time to search for the "right" or "perfect" solution; they need to stabilize the situation right away. Just as a doctor in an emergency room performs triage to focus on the most pressing needs first, actors in a place-based community change effort that occurs in a chaotic context have to deal with the most threatening aspects first and develop a more systematic and thoughtful approach after the situation is under control.

CONTEXT 5: COMPLEX ISSUES AND SITUATIONS

An issue or situation can be complex in several ways, including:²

- **Socially**, when the actors involved have diverse and often conflicting values, interests, and perspectives. The various stakeholders may not agree on the definition of the "problem," whether it is a priority, or what the response should be. In a community change effort, for example, stakeholders may not agree on the causes of poverty, the need to address it, or which strategies are most promising. Actors in these contexts often have perceptions of each other, based on a long history of interaction, that make collaboration difficult.
- **Dynamically**, when the underlying causes and effects are separated by time and space, deeply rooted in systemic or structural factors, and prone to interacting in unpredictable ways. A good example of such an issue would be the high rate of incarceration experienced by African American men. This dynamism makes it difficult to develop a clear understanding of the issue and even more difficult to anticipate the effects of any attempt to address the situation.
- **Generatively**, because the context evolves constantly, making the future somewhat unpredictable. In addition, solutions that succeeded in the past may not work in the present or future. For instance, school reforms that were useful in the 1980s may no longer be effective in 2014.

2. This elaboration of the characteristics of complexity is provided by Adam Kahane (2012).

The issues with which community change efforts grapple—food deserts, affordable housing and homelessness, underemployment, poverty, struggling schools, and community safety, to name just a few—are all complex challenges embedded in complex adaptive systems, to some degree. Moreover, these issues are embedded in even larger complex contexts, such as climate change, globalization of financial markets, technological change, and health-care reform.

Complex contexts require an adaptive approach to leadership and management; best practices, traditional experts, command-and-control leadership, and consensus seeking have only limited usefulness. Instead, the appropriate approach in complex contexts is:

- **Participatory.** When diverse stakeholders cannot agree on the nature of the problem or even if it should be addressed, leaders and managers must encourage them to work together to develop trust, a shared understanding of the problem, and the ability to move forward collectively.
- **Systemic.** Because complex challenges are a manifestation of multiple interacting factors, solutions must reach beyond surface-level symptoms. Leaders and managers need to think in terms of reshaping the systems that drive the situation and crafting interventions that address root causes.
- **Experimental and emergent.** Because complex issues and contexts are dynamic, leaders and managers must be prepared to improvise and experiment with promising solutions and adapt their approach to reflect the shifting context.

Leaders and managers of place-based community change efforts have not universally embraced adaptive approaches yet, but seasoned actors have applied the principles (to varying degrees) since the earliest days of the field. These leaders and managers, who naturally gravitate toward adaptive responses, are committed to involving residents and working collaboratively with other organizations. They recognize the systemic nature of the issues. And they have demonstrated the ability to be creative, flexible, and able to adapt quickly to shifting circumstances.

These five contexts and the leadership and management approach appropriate to each are summarized in Table 2. We also point out that there is a long-standing debate about the differences between leadership and management. We find the distinction that John Kotter (2001) draws between management functions (planning and budgeting; organizing and staffing; solving problems) and leadership functions (setting direction; aligning people; providing inspiration and motivation) helpful. Nevertheless, the lines between *management* and *leadership* are blurry and overlapping, especially in community change efforts. In this volume, we use the terms interchangeably.

TABLE 2

SUMMARY OF CONTEXTS AND LEADERSHIP/MANAGEMENT APPROACHES

CONTEXT	CHARACTERISTICS	LEADERSHIP & MANAGEMENT APPROACH	EXAMPLES
Simple	Problems and solutions are well known. There is no debate among stakeholders about whether or how the problem should be addressed.	Choose the right “recipe” or “best practice” and implement it with high fidelity.	Vaccination campaign for meningitis
Complicated	Cause-and-effect relationships that contribute to the problem are uncertain but knowable. There are several different ways to solve the problem.	Bring in people with expertise in the problem and/or allow them to research and experiment to find a solution.	Building a health clinic; testing a new drug; building a clean water system
Social/ Political	Cause-and-effect relationships are known, but stakeholders do not agree on whether or how to address the problem.	Nurture relationships among actors, manage conflict, address extreme power imbalances, organize people to take action.	Sex education in schools; the location of a safe needle exchange
Chaotic	Cause-and-effect relationships are highly uncertain and moving quickly; stakeholders’ values, interests, and perspectives are all over the map.	Establish (or seek) temporary stability; manage crises; look for opportunities to innovate so that future events are more predictable/preventable.	Responses to natural disasters; the financial crisis of 2008
Complex	Cause-and-effect relationships are not always certain. Stakeholders’ values, interests, and perspectives are sufficiently different so that alignment is difficult.	Engage stakeholders in a collaborative process of experimentation; be prepared to adapt approaches and solutions over time.	Health-care reform; poverty; homelessness; neighborhood renewal

Key Concept 3: Situational Leadership and Management

In reality, people rarely encounter situations with such clear-cut boundaries as the ones defining simple, complicated, social/political, chaotic, and complex contexts. One reason is that the lines between contexts are blurry: A tried-and-true annual vaccination campaign may constitute a simple context, for example, but during a medical emergency decisions about where to locate injection sites and whom to put on the priority list for services bring the context into the social/political domain.

In addition, contexts evolve over time, and therefore so do the characteristics of challenges that practitioners face. For instance, a once-hotly contested debate about whether to have a needle exchange program in a neighborhood—an issue for which certainty is high but agreement is low—may over time become a less pressing, complex issue of sustaining the program once residents no longer resist its presence.

Furthermore, many situations overlap. The staff at a local community development corporation that manages the development of a new commercial venture may be simultaneously (a) dealing with a malfunctioning sewer system (a complicated issue); (b) embroiled in a dispute with neighboring businesses about the number of parking spaces it should be granted (a social/political issue); (c) trying to hammer out a deal with local organizations, schools, and criminal justice agencies to train and hire local at-risk youth as they exit prison (a complex situation); and (d) dealing with the bankruptcy of its major tenant (a chaotic challenge).

For these reasons, community change efforts require a situational approach to leadership and management, one that is driven by the circumstances and environment at hand. This affirms what most practitioners, residents, funders, and evaluators of community change already know: Understanding the context surrounding a challenge or issue and being willing and able to adopt a response that suits the context are crucial to a community change effort's success. In their groundbreaking work on complexity-based responses in the field of health care, for example, Sholom Glouberman and Brenda Zimmerman (2002) describe how leaders in South Africa and Brazil—countries with roughly similar health systems, economies, and demographics—responded differently to HIV epidemics early in the AIDS crisis. Brazil framed the issue as a complex challenge and responded adaptively. South Africa, however, treated the challenge as a complicated one and focused on finding a way to provide HIV-affected people with expensive drugs administered by expert staff in the current medical system. In 1990, Brazil's infection rate was twice that of South Africa's; by 2000, Brazil's rate had dropped to 0.6 percent while South Africa's soared to 25 percent.

The situational nature of leadership and management suggests two lessons for complex community change efforts:

1. Leadership and management styles should fit the context.
2. When fully embraced and implemented, a complexity lens and adaptive leadership/management approaches are effective tools for addressing complex challenges.

These lessons are easier to state than to apply, however. Many actors in place-based community change efforts intuitively understand the complex nature of their work and are quite skilled in adaptive responses. But the dominant culture, training, practices, and methods of leaders and managers typically reflect a more traditional view of how the world operates. Complexity experts point to the “stunning resiliency” of the machine model that undergirds traditional management perspectives and practices, and that encourages leaders to diagnose most issues as either simple or complicated:

It is hard to get people comfortable with the idea of step-by-step, good-enough-as-you-go, and not falling back into the idea that we can plan our way out of all this or avoiding the real issues by continually studying. The tendency is to get some experts, plan it and avoid talking about what the real issues are. (Zimmerman, Lindberg, & Plsek, 2006, 88)

In its study of workplace safety in the mining industry, for example, the consulting company Deloitte discovered that while the most significant safety issues in the industry were complex, the vast majority of responses fell into the domains of simple or complicated. Deloitte concluded that the prospects for substantial improvements in the industry’s safety record relied almost entirely on the willingness of leaders to acknowledge the complexity of challenges and adopt an adaptive stance to addressing them (Deloitte & Touche, 2009).

Traditional management approaches (i.e., reliance on best practices, experts, and command-and-control tactics) to complex issues can yield unproductive and even counterproductive results. The challenge for actors in place-based community change, therefore, is both philosophical and practical. Rather than project an image of certainty and control, they should embrace the messy reality of complexity and take the adaptive stance that allows them to better navigate these challenges. Instead of perceiving adaptive practices that are systemic in their analysis, participatory in their processes, and experimental in their planning and implementation as “second-best” strategies, they should acknowledge them as the most robust way to make progress on the messy, complex issues in communities across America.

The concepts of complex adaptive systems, complex challenges, and adaptive leadership and management described in this chapter provide important insights about the nature of place-based community change and how it might be navigated. In the next chapter, we explore precisely how practitioners apply these concepts in key operational areas of their day-to-day work.

Complexity-Based Practices for Three Key Functions

Much of the work that community change practitioners do can be clustered around three major functions: strategy and planning, adaptive management, and learning and evaluation. In the face of complexity, these functions require different mind-sets and practices. The act of crafting elaborate plans in exhaustive detail, implementing and monitoring them with high fidelity, and then assessing their effects must be replaced with an approach that allows for experimentation, real-time learning, and quick midcourse adjustments. We look at each of those functions here and end the chapter with some lessons about strategy, management, and learning and evaluation when confronting complex challenges.

Strategy and Planning

The Aspen Institute Roundtable on Community Change's research and conversations with a broad spectrum of actors in place-based community change efforts identified three flaws that emerge when traditional approaches to strategy and planning are used in the complex world of community change.³

The first flaw is excessive up-front preparation. The traditional approach to developing strategies and plans is largely a linear process that requires practitioners to invest a great deal of time and energy on steps that unfold in roughly the following order: (1) Clearly define the problem to be addressed; (2) analyze the context in which the problem is embedded; (3) surface, screen, and settle on strategic options; and (4) develop more detailed designs and action plans for the chosen options, which tend to be as elaborate as the problem being addressed.

On the surface, this emphasis on up-front analysis and careful consideration of options appears to be the best and most robust manner to deal with complex issues. And some of these preparatory activities do help orient local actors to the complex nature of problems they are trying to solve. But the heavy emphasis on planning before doing often leads to some perverse consequences, such as:

3. Planners in the private and public sectors began to identify these flaws in the 1960s and 1970s and have since developed alternative approaches to crafting strategy (Wildavsky, 1973; Mintzberg & Waters, 1985). Actors in place-based community change efforts have lagged somewhat in fully acknowledging these limitations and in matching the other sectors' pace in developing new practices, but their progress has now begun to accelerate.

- A sense that there is never enough time or data to understand the complexity of the challenge or to craft solutions (known as “paralysis by analysis”)
- An arms-length, somewhat abstract, ungrounded consideration of the nature of the problem, the context in which it operates, and realistic solutions
- A lengthy planning process that tests the patience of participants and produces plans that may not reflect the new realities of the context

The second flaw is weak learning. In traditional management, the assumption is that most learning happens at the front end of the process before implementation and the back end of the process after implementation. The front end includes the strategy and planning phase, during which practitioners analyze the problem and raise and select possible solutions. In the community change field, this is sometimes captured in a “theory of change.” Back-end learning occurs when evaluators compile the results of the intervention to determine whether it worked. The prospects for learning during the implementation process are limited to learning about unanticipated barriers to implementation that require midcourse corrections to the implementation schedule and/or minor adjustments to strategy.

The traditional paradigm for implementation limits the scope of learning to discussions of execution problems (single-loop learning) and ignores insights about the nature of the problems being addressed or the strengths and limitations of strategies being deployed (double-loop learning). This dramatically reduces the responsiveness and effectiveness of organizations working in complex contexts where both kinds of learning occur continuously.

The third flaw is rigid, inflexible implementation. In traditional management, once the strategy and plan are finalized it is time to turn them over to frontline staff to implement. This “plan the work and work the plan” paradigm is based on the idea that the plan was carefully prepared, and success now depends on high-fidelity execution by frontline organizations or people. In fact, this approach discourages practitioners from adapting the strategy and plan in response to shifts in context or new knowledge.

Actors in the field of place-based community change are well aware of the tension between the need to be intentional and focused and the need to be flexible and adaptive when tackling complex issues. Over the years, they have developed a variety of practices that allow them to balance and navigate this essential tension.

Practitioners tend to employ a continuum of strategies ranging from loose to tight, depending on the complexity of the problem they are addressing and the uncertainty of the context in which they are operating. These include:

- **Emergent strategy**, in which a group develops a strategy through a process of learning by doing
- **Planned strategy**, in which a group operates with relatively well-defined goals, clear priority areas and boundaries of action, and a well-articulated plan of activities

- **Umbrella strategy**, in which a group operates with relatively well-defined goals, and clear priority areas and boundaries of action, but leaves the details of the strategy to be sorted out by other actors or levels of the organization

Table 3 summarizes differences among the three strategies; however, we caution that the boundaries between strategies are loose and overlapping. While the characteristics of traditional planned strategy are quite well known, the attributes of emergent and umbrella strategy are relatively new to the field, even if practitioners employ them informally. Therefore, we explore those two strategy types more fully here.

TABLE 3 STRATEGY CONTINUUM			
	EMERGENT STRATEGY	UMBRELLA STRATEGY	PLANNED STRATEGY
Understanding of Challenge	Weak understanding of cause and effect	Weak understanding of cause and effect	Weak understanding of cause and effect
Theory of Change	Hoped-for results and pathways to change may emerge through experimentation	Results and general boundaries and processes of strategy are clear	Results and general boundaries and processes of strategy are clear
Plan and Implementation	Emphasis on learning by doing and rapid planning and implementation cycles	Left to discretion of distributed actors who align actions to fit within umbrella	Elaborate detail established in advance
Context	Dynamic and unpredictable	Dynamic but unpredictable	Often stable
LOW CERTAINTY	←-----→		HIGH CERTAINTY

EMERGENT STRATEGY

In emergent strategy, practitioners spend less time conducting exhaustive research on the challenge, surfacing possible solutions around which to develop a strategy, and making detailed plans and more time learning by doing. In essence, they reverse the traditional sequence of “plan the work and work the plan” by beginning with small-scale actions designed to get a firmer grip on the problem they are trying to address, what may or may not work (and why), and what areas warrant further development.

For example, a small network of local agencies in Surrey, a large suburban municipality in the metropolitan area of Vancouver, British Columbia, used an emergent strategy approach to address a rapid and mysterious increase in the number of people working part time (for

low wages) and sleeping in local parks. After admitting that they were stumped about the causes of the increase, the group embraced an action-learning approach guided by two simple practices: (a) follow homeless day laborers from morning to evening to get a close-up view of the barriers they experience every day, and then (b) bring system actors together to work on the bigger picture of addressing systemic issues that contribute to the barriers.

This simple process triggered an iterative process of discovery and response that caused several actions and results:

- When the group discovered that many shelters denied access for homeless day laborers because their screening criteria excluded anyone except persons receiving public assistance—a long-standing proxy for poverty—they persuaded shelter leaders to adjust their policy to accommodate day laborers whose income fell under the federal government’s poverty line.
- When local agencies discovered that private temporary employment agencies withheld up to 50 percent of a laborer’s wage as an administrative fee, they brokered several meetings with employers and agencies to find a way to bypass predatory employment agencies. This produced a process by which nonprofit agencies, which were already paid to provide employment support to homeless persons, would provide the same service at no cost to the laborer.
- When they discovered that many day laborers and employers had difficulty getting paid by automatic deposit because individuals could not get a bank account if they had no permanent address, the group worked with local credit unions to develop an alternative policy and practice.
- When they discovered that some day laborers struggled to stay in temporary housing because of issues related to social isolation, the group experimented with ways to help them reestablish relationships with family and join networks within their new community (e.g., faith-based groups, recreational leagues).

The net result of this experimental and adaptive process was a 50 percent drop in the number of homeless day laborers in the community within a year. The Surrey group translated their insights into a pilot, called Project Comeback, which eventually became an established program that connects clients with job supports, access to housing, and job placements with local construction companies. Project Comeback also became an anchor initiative of the community’s larger poverty reduction strategy (Cabaj, 2011).

Project Comeback illustrates the point that some strategies cannot be fully conceived and designed in advance: They have to emerge through a process of experimentation, trial, and error. Emergent approaches to strategy allow local actors to develop insights into the complex nature of the problem they are trying to solve and the unique context in which the solution must occur; manage risk through smaller-scale, safe-to-fail initiatives; surface options for “bigger bets” or further investment based on the earlier experiments; and develop trustful relationships and commitment to further action among diverse partners. The learn-by-doing

approach is now considered a bona fide approach to crafting strategy in the private sector when working in turbulent markets (Courtney, Kirkland, & Viguerie, 1997; Christensen, 1997; Mintzberg & Waters, 1985; Mintzberg, 1994, 2007; Pascale, Milleman, & Gioja, 2000).

While emergent approaches are a natural and informal process of problem-solving, practitioners have adopted more structured and formal methods as well. These range from traditional approaches that have been a central part of community development approaches since early in the 20th century, such as action research and action learning, to newer approaches like prototyping and human-centered design methods (Murray, Caulier-Grice, & Mulgan, 2010). (See Table 4.)

TABLE 4
EXPERIMENTAL METHODOLOGIES

APPROACH	DESCRIPTION	SOURCE
Participatory Action Research/ Action Learning	A variety of processes that emphasize learning by doing organized around a spiral of steps, each of which is composed of a cycle of planning, action, fact finding about the result of the action, and reflection	Dewey (1922), Lewin (1958), Freire (1970), Revans (1982)
Human-Centered Design/ Design Thinking	A structured approach to addressing complex issues that encourages social innovators to carry out detailed ethnographic research to understand the nature of the challenge, how it affects people, surfacing and prototyping possible solutions to assess their desirability, viability, and feasibility for eventual “scaling up”	Brown & Wyatt (2010)
Safe-to-Fail Experiments	A problem-solving technique that emphasizes controlled failure through conducting many varying experiments	Cognitive Edge (2014)
Positive Deviance	An asset-based, problem-solving, and community-driven approach that enables the community to discover successful behaviors of people and organizations in complex and vulnerable contexts and to develop a plan of action to promote their adoption more broadly across the community	Pascale, Sternin, & Sternin (2010)
Change Labs	A collection of methodologies designed to bring different actors in a complex challenge together to better understand the context in which they are working and to experiment with new approaches	Hassan (2013)

UMBRELLA STRATEGY

Umbrella strategies represent the middle ground between emergent strategies and the strategy-as-plan approach (Gavetti & Rivkin, 2008; Haeckel, 1999; Mintzberg, 2007). Practitioners use umbrella strategies when they have a relatively clear vision and sense of the results they would like to achieve and a general sense of how to accomplish them but are operating in a fast-moving, complex environment with partial or little control over other actors. In umbrella strategies, practitioners encourage actors to align their activities under the strategic umbrella.

The case for umbrella strategies is summarized by prominent experts in how business leaders manage complexity:

When the business landscape was simple, companies could afford to have complex strategies. But now that business is so complex, they need to simplify. Smart companies have done just that with a new approach: a few straightforward, hard-and-fast rules that define direction without confining it. (Eisenhardt & Sull, 2001, 107)

Umbrella strategies are now increasingly employed in other fields of practice, such as business, the military, and health-care reform (see Table 5). For instance, in the private sector many companies take a “strategy as simple rules” approach, which provides managers with guidelines on how to approach emerging opportunities in dynamic, complex, and fast-moving markets (Eisenhardt & Sull, 2001). In the U.S. military, senior staff lay out an overall strategic intent for an upcoming operation but allow lower-level combat units considerable flexibility in how to achieve that intent, in order to adapt to the ebb and flow of battle (Pascale, Milleman, & Gioja, 2000). Some hospital administrators have used a “minimum specifications” approach that lays out the basic elements of a strategy but not the details (Zimmerman, Lindberg, & Plsek, 2006).

In place-based community change, umbrella strategies tend to be developed in one of two ways. They may represent the formalization of practices and insights gleaned from emergent strategies, such as the case in Surrey when participants codified the processes and lessons learned from Project Comeback into a formal strategy to reduce homelessness. Alternatively, organizations and residents may develop a general framework for local action from scratch by weaving together research, strategies employed in other contexts, and prior learning. For example, there are 240-plus Ten Year Plans to End Homelessness across the United States, many of which were informed by a framework to end homelessness developed by the National Alliance for Ending Homelessness (NAEH). The plans typically are organized around target groups (e.g., people who are temporarily to chronically homeless), core principles (e.g., housing first), strategies (e.g., expand wraparound services), broad performance metrics (e.g., the number of affordable housing units developed), and key roles and responsibilities (e.g., the United Way coordinates funding). Many homelessness coalitions have adopted the NAEH framework and adapted it to reflect their unique local context.

While the central case for using umbrella strategies in other fields of practice is to enhance learning and adaptability, umbrella strategies offer an additional benefit to place-based community change efforts: They give local actors a way to flexibly weave together resources and partnerships. For example, the umbrella strategy for Hope Community, a community-based organization in Minneapolis, is organized around building affordable housing, which serves as the group’s strategic driver and a platform for addressing other quality-of-life issues. Hope Community puts a heavy emphasis on engaging, connecting, and building the capacity of residents to exert civic voice, and on surfacing and addressing larger policy and systems issues that may emerge. This framework, developed over decades of practice, not only allows Hope Community to navigate shifts in local context but also supports partnerships with more than 30 other organizations.

TABLE 5
TYPES OF UMBRELLA STRATEGY

APPROACH	DESCRIPTION	SOURCE
Minimum Specifications	A concept from systems design used by leaders and managers in health systems to outline the intent and “minimum specs” of a strategy or program	Zimmerman, Lindberg, & Plsek (2006)
Framework for Change	A modified version of the theory-of-change approach that highlights a group’s hoped-for results, leverage points for change, key principles to guide action, and starting-point strategies but anticipates and allows for adaptive strategy and actions to emerge over time	Cabaj (2011)
Strategy as Simple Rules	A framework for decision making by private-sector companies operating in fast-moving contexts, which lays out a variety of rules: boundary, priorities, processes, timing, and exit	Eisenhardt & Sull (2001)
Boundary Planning	An approach to planning that gives diverse stakeholders guidance on how to achieve high-level objectives by focusing on actions, behaviors, strategies, and stakeholders to be avoided in the pursuit of results	Hummelbrunner & Jones (2013)
Strategic Intent	A device used by the U.S. military in which senior commanders clearly lay out the intended outcomes of an engagement, the overall strategy, and the sequence of events, but frontline units have a great deal of discretion in how they plan and adapt their actions during battle	Pascale, Milleman, & Gioja (2000)
Outcome Mapping	A planning, monitoring, and evaluation tool developed for complex, systems change-oriented, international development programs. It encourages stakeholder to be clear about the impact they want to achieve and the behavior changes required by system actors in order to achieve it, while leaving details on strategy and action to emerge over time.	Earl & Smutylo (2001)

The continuum of strategies described here provides a glimpse into strategies that reflect different levels of uncertainty in complex work. The continuum not only legitimizes the emergent and umbrella strategies as reasonable orientations to strategy, something that the private sector has increasingly embraced, but also provides clues into how practitioners manage, monitor, and evaluate their work in complex environments.

In practice, no strategy is purely emergent, planned, or umbrella. Some parts of a group's strategy might be laid out in elaborate detail (e.g., the creation of a commercial venture), while other parts might be completely emergent (e.g., testing new ways to link early childhood development services to workforce development supports).

Equally as important, a group's strategy can shift over time—and sometimes quickly. The typical progression is for groups facing a complex issue to begin with emergent strategy and, through a process of experimentation, develop an umbrella strategy and then ultimately a planned strategy. However, there are many examples of groups that replace their planned strategy with an emergent or umbrella strategy in the face of a shifting environment or new learnings that make their planned strategy obsolete. The work of crafting, testing, and upgrading strategy, like place-based community change itself, is an adaptive process.

Adaptive Management

Regardless of whether they are working with an emergent, umbrella, or planned strategy, practitioners need a mechanism to plan, implement, monitor, and adapt operational plans as they put strategies into action. In contrast to the traditional focus on planning first and then enacting, practitioners in a complex situation must be prepared to hold their plans lightly and adjust them frequently to reflect new learnings and shifts in context. This quality is best captured by the phrase *adaptive management*.

Adaptive management is a complexity-based approach that emerged in the domain of natural resource management (e.g., parks, ecosystems). It is a structured, iterative process of decision-making in the face of uncertainty that places a high value on both monitoring and learning about the effectiveness of different interventions (Williams, Szaro, & Shapiro, 2009). At the core of adaptive management is an assumption that in complex, shifting environments, be they natural parks or communities, the process of adapting strategies and plans is never-ending.

Adaptive management is more demanding than traditional management. It still requires planners and managers to develop coherent pathways for moving forward and practical measures for implementation. At the same time, they must be prepared to adjust these plans—often quickly. Glenda Eoyang & Royce Holladay (2013), close observers of how leaders and managers work adaptively in a variety of domains (e.g., business, education, health care, political advocacy), have summarized and distilled this method into three simple rules:

- **Plan to replan.** Understand from the beginning that plans will need to be reviewed and upgraded frequently.
- **Plan for many scales and horizons.** Plans usually are required for different levels of the organization (e.g., frontline, management, director, board) and for different time horizons (e.g., weekly, monthly, quarterly, yearly).
- **Plan for surprise.** Strategies and plans offer a picture of where a group is headed and what it would be like to create, but implementers should be prepared to spot and pursue additional opportunities that emerge if they align with the mission and strategy.

Adaptive management requires practitioners to use monitoring mechanisms that deliver robust, real-time feedback on activities, their effects, and the context in which they are operating. Monitoring may provide data that prompt practitioners to adjust their plans and implementation schedules (known as single-loop learning, or “doing things right”). It also may yield insights or questions that prompt practitioners to reconsider the larger strategy they are putting into practice (known as double-loop learning, or “doing the right things”). In complex environments, the lines between strategy and management overlap and blur.

In fact, practitioners learn a great deal about the problem they are trying to address, and what may or may not work, during implementation. For example, when the agencies involved in Edmonton’s Ten Year Plan to End Homelessness began placing long-term homeless individuals into permanent homes with significant wraparound support from service agencies—a cornerstone strategy of their Housing First philosophy—they were surprised that a significant percentage of clients eventually returned to the street because they felt socially isolated in their new home. As one client noted, “A house is a house; it’s not necessarily a home: I miss my community.” This new insight into the importance of relationships in the lives of homeless persons triggered a discussion among planners about the need to experiment with new ways to help Housing First clients sustain and expand their social networks.

Place-based change organizations have developed a rich variety of their own “in-house” models that capture adaptive management approaches. Many local groups involved in the national 100,000 Homes Campaign, for instance, use a 100 Day Campaign model, inspired by the work of the Rapid Results Institute, whereby community partners develop and implement a “rapid cycle project” with clear steps, tasks, and schedules to reduce by 2.5 percent the number of people who are homeless in their community (Schaffer & Ashkenas, 2005). After each project cycle, the group reviews the results and learnings of their efforts, explores the characteristics of the next cohort of participants, and develops a new action plan for the next cycle.

“No one thinks Apple’s iPhone is a failure, [yet] I am up to version 6.2.1 of the operating system. I think we should recognize that even a strong platform requires working the bugs out of the system. Adapting programs and services in place-based community change efforts is not a sign of failure; it is a sign of responsiveness to the dynamic contexts in which we work.”

—Susana Vasquez, Executive Director, LISC/Chicago

LISC/Chicago has found another way to structure flexibility into management: One of three planning areas or “buckets” in every 90-day cycle is devoted to emergent opportunities. This gives staff time and space to explore new opportunities to advance their mission and strategy and to consider shifts in local context that might influence their thinking about the overall mission and approach. It is critical in the organization’s ongoing efforts to adapt its strategies, organizations, and networks to reflect its very dynamic context and funding environment.

Learning and Evaluation

The Roundtable on Community Change has covered the thorny challenge of evaluating place-based community change extensively over the years. It published two seminal volumes on *New Approaches to Evaluating Community Initiatives* (Connell et al., 1995; Fulbright-Anderson, Kubisch, & Connell, 1998) and has continued to address emerging practice and applications in *Voices from the Field* volumes I, II, and III (Kubisch et al., 1997; Kubisch et al., 2002; Kubisch et al., 2010) and other publications (Auspos & Kubisch, 2004; Auspos & Kubisch, 2012). These sources described several important developments in the work of place-based change, including:

- The necessity of ensuring that practitioners and residents—not just external researchers and funders—are primary users of evaluation and strategic data
- The usefulness of a theory of change that links activities and short-term results to a longer-term pathway to community change and longer-term outcomes
- The need to move past reliance on randomized-controlled trials (RCTs) as the so-called gold standard for assessing change efforts to a wider assortment of evaluation methods
- The practice of establishing and using performance management and monitoring systems to support place-based change efforts
- The value of embedding evaluation in the larger process of creating a learning culture

In addition to the Roundtable’s insights, other practitioners, evaluators, and funders of community change have worked to complement the conventional focus on assessing programmatic outcomes and population-level changes by tracking the extent to which place-based community change efforts have helped to shift the complex systems (e.g., policies, structures, culture, power relationships) that shape community well-being and are often the targets of local efforts (Hargreaves, 2010; Patton, 2011; Williams & Hummelbrunner, 2010).

We do not seek to repeat these useful findings here. Instead, we focus on extra insights about learning and evaluation practices, revealed through a complexity lens, that are most relevant to actors in place-based community change efforts. These include the importance of designing evaluations that inform practitioners’ emergent and adaptive work; turning a wide-angle lens on outcomes when working in complex contexts; matching evaluation designs to their purpose and context; and making participatory assessment a central component of learning.

Use Evaluation to Inform Emergent and Adaptive Action

One of the most radical implications of a complexity-aware approach to evaluation is the need to design evaluation in a way that informs rather than short-circuits emergent and adaptive strategy and action. In traditional approaches, evaluators and practitioners are encouraged to create a theory of change, logic model, and outcome statements as a basis for developing evaluation designs. Once these have been established, evaluators typically focus on tracking progress against agreed-on measures of success and on surfacing issues that may require practitioners to make midcourse adjustments to their strategy or implementation plans.

While this approach may be suitable for strategies and interventions that are relatively well developed and stable, there are two reasons why it is counterproductive to expect this level of clarity for the emerging and adapting strategies typical of community change efforts.

First, practitioners must often work through a significant period of experimentation before they can develop baseline conditions for traditional evaluation. In the examples of efforts to address homelessness in Times Square, New York City, and Surrey, British Columbia, described elsewhere in this book, the groups' theory of change, understanding of appropriate outcome measures, and concrete practices emerged through and after a process of trial and error. Forcing either group to prematurely commit to a theory of change and to fixed-outcome measurements to satisfy the standards of traditional evaluation practice would have discouraged the experimental approach that made both efforts so successful in the first place.

Second, many strategies and interventions never achieve the stability required by conventional assessment practices. As practitioners learn more about the challenges they are wrestling with, as the context in which they work continues to shift, and as new actors arrive on the scene, they are apt to adapt their strategy. Asking practitioners to stick to an established strategy and evaluation design, no matter how hard-won, encourages rigidity and discourages the responsiveness and adaptability central to place-based community change.

To be relevant for practitioners working with emergent contexts, evaluations (and evaluators) need to embrace the following complexity-aware practices:

- **Use evaluative processes to inform the development of strategy and theory of change.** Evaluators can help practitioners track the learnings and results of their multiple probes and experiments and use them to craft a more robust theory of change and outcome expectations, a point at which more traditional evaluation practices may be appropriate.
- **Focus on providing practitioners with real-time feedback on their efforts.** The pace at which practitioners operate varies and shifts all the time. To be useful, evaluation should be designed to provide feedback that fits practitioners' window of usefulness rather than an artificially scheduled midterm and end-of-project reporting period.
- **Facilitate processes to help practitioners make sense of and use data.** The volume and diversity of data in emergent and adaptive work can be overwhelming. Evaluators can

help facilitate the translation of data into useful messages and link them to decision-making processes.

- **Adapt the evaluation design to co-evolve with the emerging strategy.** As practitioners' strategy and interventions emerge, so too will their evaluation questions and requirements. Evaluators should continually adapt their evaluations to match the evolution of practitioners' information needs.
- **Embed evaluators into the change process.** The complex nature of place-based community change makes it easier for evaluators to help practitioners learn and adapt in real time if they are working alongside the practitioners and have frequent opportunities to communicate, rather than drop into the process periodically at predetermined dates.

These simple features are characteristics of several fast-growing niches of complexity-based evaluation, for the world of evaluation in general and for place-based community change in particular. These approaches include **developmental evaluation** (Patton, 2011), an orientation to evaluation designed to fit the niche of emergent and adaptive change efforts, and **strategic learning**, a broader approach to learning and assessment in change efforts that encourages practitioners to draw on multiple sources of data (e.g., evaluation data, data on environmental shifts, data on emerging practice in other contexts) to inform their constantly evolving strategy (Coffman & Beer, 2011).

It is important to note that, in the spirit of situational leadership described in Chapter 1, developmental evaluation and strategic learning complement rather than replace more traditional formative and summative evaluation. When practitioners are operating with clear theories of change and relatively well-developed strategies and plans, traditional evaluation practices are entirely appropriate. When practitioners are still developing and/or significantly adapting their approaches, developmental evaluation or strategic learning are useful. When practitioners face both situations, traditional and complexity-based assessment practices can work concurrently.

Use a Wide-Angle Lens when Determining Outcomes

All interventions in complex adaptive systems generate both anticipated and unanticipated outcomes, and practitioners and evaluators must capture both in order to understand the full effects of their efforts (Morell, 2010). This is easier said than done, because the effects of even the simplest initiatives are hard to predict. For example, an initiative by health activists to improve local access to fresh vegetables through rooftop gardening in a Chicago neighborhood, intended to reduce bronchial ailments in the community, resulted in less-than-anticipated health benefits for vulnerable families. Nevertheless, the practice was—unexpectedly—more widely adopted once landlords discovered that the gardens improved the insulation of older apartment buildings and tenants enjoyed getting to know each other while tending the gardens (McKnight, 1996). Similarly, in a program designed to provide persons with mental health difficulties with productive employment to ease their transition out of institutional care back into the community, the emotional well-being

of many participants deteriorated because the job roles, expectations, and pressures were too demanding (Church & Creal, 1995). Unanticipated outcomes can be good, bad, or somewhere in between, depending on the perspective.

It is crucial for participants and evaluators of community change efforts to understand and capture the ripple effects of their activities. These data (a) provide a broader view of what is or is not being achieved; (b) offer deeper insight into the nature of the problem being addressed and the context in which people are operating; (c) trigger action to adjust or drop strategies that may not be delivering what planners hoped for; and (d) surface emergent and often unexpected opportunities for action. Without a complete picture of outcomes, the chance of achieving successful community change is dramatically reduced and the likelihood of unintentionally doing harm is substantially greater (Cabaj, 2014).

Unfortunately, traditional paradigms and methods are ill suited to capturing a broad range of outcomes (Bamberger, 2012; Morell, 2010). Logic models encourage strategists to focus too narrowly on the strategy's hoped-for results, ignoring the unavoidable side effects that accompany their efforts. Limited evaluation budgets pressure administrators to focus scarce resources on tracking difficult-to-measure progress toward goals and targets. Outcomes dashboards tend to highlight only the results that can inform planned-for results, and their aggregation of data may mask underlying trends. Together, these traditional practices can create multiple blind spots in complex change efforts (U.S. Agency for International Development, 2013).

Happily, it is possible for practitioners and evaluators to adopt a wide-angle lens on outcomes.

The process begins with asking better questions. Instead of asking, “Did we achieve what we set out to achieve?” they can ask, “What have been the many effects of our activities? Which of these did we seek and which are unanticipated? What is working (and not), for whom, and why? What does this mean for our strategy?” Simply framing outcomes in this broader way will encourage people to cast a wider net to capture the effects of their efforts (Patton, 2011).

There are many practical ways to answer these questions, including:

- Asking practitioners to brainstorm possible unplanned outcomes in advance of a strategy, so they become sensitized to the possibility of unanticipated outcomes and can look for them while implementing the strategy
- Contracting two evaluators—one who knows about the objectives of the assessment, the other whose task it is to simply surface what has changed as a result of an intervention—and comparing the results of both to get a fuller picture of what has unfolded (Youker & Ingraham, 2013)
- Retaining some of the evaluation budget so it can be used to further investigate unanticipated outcomes when they emerge
- Using wide-net techniques designed to spot and investigate the inevitable surprises of development work (e.g., most significant change, outcome harvesting)

Match Evaluation Methods to Their Purpose

A complexity-based evaluation offers insights into one of the long-standing debates in the field of place-based community change: What constitutes rigorous evidence, and what are the best methods to produce that evidence?

The debate can be simplified as a disagreement between experimental and inclusionary approaches (Schorr, 2012). Experimentalists argue that the only credible evaluation evidence is produced by randomized controlled trials (RCTs), in which a randomly selected treatment group is exposed to an intervention, a control group receives a placebo, and both groups are followed over a specified period of time to assess how each fares on a select set of measurable outcomes. Given the rigor of the RCT, many evaluators and actors in the field perceive it as the “evaluation gold standard.”

Inclusionists, on the other hand, argue that while there are some important niches for RCTs in place-based community change efforts, the method cannot be considered the sole—or even primary—method for assessing their work. Five reasons stand out:

- **Purpose.** RCTs typically are used when practitioners and funders want to test a model intervention in one context so it can be replicated in other contexts, and they therefore need to produce robust evidence on the intervention’s effectiveness. In most cases, however, practitioners simply need feedback on interventions that they have no intention of scaling.
- **Narrow focus.** RCTs are designed to provide robust data on an intervention’s effects, while practitioners also need ongoing real-time feedback on the rationale, design, and delivery of their interventions.
- **Demanding requirements.** Place-based community change efforts do not meet the requirements of RCTs: they are typically aimed at populations rather than individuals; they continually evolve rather than remain fixed; and they have too many variables and too few units of analysis (e.g., neighborhoods) to make randomization a reasonable choice.
- **High costs.** RCTs require a level of investment of time, money, and energy to design and implement that reaches well beyond the capacity (and willingness) of most local organizations and funders to support.
- **Limited window of use.** The process of administering RCTs is lengthy, and the results take so long to arrive that by the time they do practitioners may have already had to make decisions about the strategy or initiative based on whatever evidence they had on hand.

Despite these constraints on RCT use, Lisbeth Schorr (2012) identifies at least two niches for RCTs in place-based community change efforts: (1) to assess the results of targeted interventions that are neatly circumscribed, with a clear causal relationship and a set of hoped for outcomes; and (2) to establish whether the components of more complex interventions are effective. Often, the primary reason for introducing an RCT is that an actor outside the

community (e.g., a funder or policymaker) wants to test the effectiveness of the model to determine whether it is worth scaling, and that actor often assumes a lead role in funding and designing the RCT.

Instead of relying on RCTs, inclusionists argue that actors in place-based community change efforts should draw on a broader base of evidence and methods to inform their work. This includes prior research on best practices; evidence from evaluations with nonexperimental designs; firsthand insights from practitioners, community residents, and external experts; and, where and when appropriate, RCTs. It is the disciplined triangulation of these multiple methods and sources of data that can yield credible evidence required to make decisions.

Complexity, therefore, requires setting a new standard for excellence in evaluating place-based community change. As Michael Quinn Patton argues, “The real gold standard in evaluation is methodological appropriateness; namely, matching methods to the nature of the question and the purpose of the evaluation, rather than blind adherence to one particular design” (Patton, 2011).

Emphasize Participatory Approaches

Practitioners and evaluators have in varying degrees taken a participatory approach to assessing place-based community change since the 1960s, when the War on Poverty made resident participation a core ingredient of neighborhood renewal efforts. They have involved actors in community change efforts (including residents, partners, and staff) in establishing evaluation questions; gathering, analyzing, and interpreting data; and formulating implications or recommendations for next steps. Over the past 50 years, evaluators and practitioners have developed a wide range of participatory techniques—including resident-administered surveys, community report cards, and rapid urban appraisal methodologies—to put this commitment into practice. Participatory evaluation is now considered a legitimate dimension of any community change effort.

While it can be more time consuming, resource intensive, and difficult to manage, the traditional case for participatory assessment rests on its ability to offer three major benefits: (1) It is a democratic right for people and organizations who have stake in an issue to be involved in assessing the value of an intervention; (2) it builds the capacity of actors in place-based change efforts to steward and manage their own process of community renewal; and (3) it cultivates ownership, improving the odds that stakeholders will use the results of an assessment.

Complexity-based evaluation adds a fourth rationale for adopting a participatory approach to evaluation: to gain a well-rounded perspective of, and to reduce uncertainty in, the complex context in which they work. Bob Williams and Richard Hummelbrunner (2010), pioneers in developing a systems-based approach to evaluation, argue that understanding the experiences and perspectives of *all* key actors in a complex situation is critical for two reasons:

- Each actor in a complex situation has unique insights that practitioners need to fully understand the experience and effects of their interventions. Like the metaphor of the blind men trying to describe an elephant, who on their own can only gain insight on one element of the animal (e.g., a tusk, a leg, a tail), each actor in a place-based change effort has only a partial insight into what is going on. The greater the diversity of perspectives included in an assessment, the richer the understanding of a situation.
- How each actor perceives the situation will shape how he or she acts in that situation. The success of any intervention in a community change effort depends in part on understanding how the values, interests, and perspectives of multiple actors in the community will affect and be affected by the intervention.

In short, the effectiveness of practitioners depends in part on their ability to work with 360-degree understanding of a situation that is only knowable by drawing on all the insights of stakeholders in a change process.

Summary Lessons about Strategy, Management, and Learning and Evaluation in Complexity

Complexity-based approaches require situational leadership and management. When practitioners are working in stable environments with a high degree of certainty about what they want to achieve and how, they should use traditional approaches to strategy, planning, and evaluation. But the more uncertain and unstable the environment, the more that adaptive approaches are appropriate. Knowing when to operate tightly or loosely comes with experience.

Tension persists between complexity-based and traditional approaches. While there is tremendous interest in complexity-based practice, traditional leadership and management approaches and models of results-based management remain quite strong for many actors in place-based community change. Viewed through these traditional lenses, emergent and adaptive action and complexity-based practices may seem unfocused and ill disciplined, even though complexity-based approaches require discipline of an entirely different kind.

Practitioners have a rich arsenal of adaptive practices and are developing more. The field of place-based community change has a diverse array of experimental, systemic, and participatory practices to strategy, management, and assessment, and more are developing all the time. This is particularly true in the areas of emergent strategy and developmental evaluation. These practices deserve to be elevated and shared more broadly in the field.

Complexity-based practices place higher demands on all actors of place-based community change. Adaptive approaches require actors to be comfortable in emergent and adaptive contexts and able to apply a wide range of methods or practices that fit the context in which they operate. This has important implications for professional development, organizational design, and the broader ecosystem of support for place-based change.

Institutional practices need to evolve to support adaptive approaches. Even when actors in place-based community change efforts are eager and willing to adopt a complexity lens, they often find that institutional processes, administrative practices, and regulations get in the way. Traditional contracts and budgets for evaluation, for instance, typically are organized around an evaluation work plan that specifies deliverables and dates of delivery. This does not allow for the emergence and responsiveness of evaluation requirements in place-based change efforts.

Traditional approaches to strategy, management, and evaluation and learning are ill suited to the realities of complex issues. They require too much up-front effort, encourage a rigid approach to implementation, and limit strategic learning. Over the years, practitioners have developed practices that better reflect the demands of complex contexts. These include employing a continuum of strategies, from loose to tight, that reflect the uncertainty of their context; adopting different models of flexible planning and implementation; and using an evaluation approach that encourages experimentation and learning.

The challenge for the community change field is to develop practitioners' capacity to effectively choose among these practices and to create the broader funding and policy infrastructure needed to operate them with ease. We discuss these topics in more detail in Chapters 4 and 5. But first, we turn in Chapter 3 to considering how a complexity framing can lead to more strategic alignment and effectiveness in place-based change efforts.

Applying a Complexity Lens to Long-standing Issues in Community Change

Historically, people and organizations working to strengthen communities have dealt with the interrelated nature of issues by adopting a “comprehensive” approach. They have (a) expanded programs to serve more people, often without changing the basic nature of the work; (b) developed more holistic services or delivery systems through wraparound or colocated programs, “one-stop” locations that meet multiple needs, and individual case management; (c) concentrated intensive services or resources on a small, well-defined geographic space or on a subset of the overall population; or (d) developed catalyst projects in commercial development and housing, hoping that effects would spill over into other domains (Kubisch et al., 2010; Annie E. Casey Foundation, 2013; Walker, Rankin, & Winston, 2010; Tatian et al., 2012).

These approaches resulted in significant benefits for some residents and neighborhoods but did not transform distressed communities (Kubisch et al., 2010). The effort to be comprehensive often creates its own form of fragmentation as initiatives struggle to work on multiple problems simultaneously. In many cases, they produce an assortment of disconnected programmatic activities, spanning multiple domains, with resources spread thinly among them. The anticipated synergies rarely occur. In a few cases, given the effort expended, community change efforts may have amounted to less than the sum of their parts. Going forward, many initiatives are settling on addressing isolated pieces of a complex challenge in order to make their task more manageable.

An alternative is to revisit the concept of comprehensiveness through the lens of complexity.

The complexity field’s focus on interrelated factors and on how systems operate has potential to make community change efforts more strategic, synergistic, and aligned by helping us understand how factors are connected, how they interact to change other systems, and how those intersections might be leveraged for additional impact. Coupling these insights with the adaptive management practices discussed in the previous chapter heightens potential for improving overall management and effectiveness in community change interventions.

Viewing community change through a complexity lens offers a new way to think about two of the community change field’s long-standing, pivotal challenges in particular:

- **Horizontal alignment**—how to link and integrate across programs, organizations, systems, sectors, and other domains of activity that lie within a nested system to maximize opportunities for change and to leverage results

- **Vertical alignment**—how to work at multiple levels (e.g., strengthening individuals and families; transforming neighborhoods; improving regional markets, systems, or policies; and making social structures more equitable and supportive)

These are not the only dimensions of community change that complexity-based thinking can enhance, by any means. We use them to organize this chapter, however, because they cover so many aspects of managing and implementing community change and because they have shaped much of the knowledge base for community change developed by the Aspen Institute Roundtable on Community Change and others.

Horizontal Alignment: Linking and Integrating across Domains

As Chapter 1 explained, a complexity perspective emphasizes the interrelated and systemic nature of issues embedded in complex problems. For community change efforts, this suggests that: (a) actions often need to be taken in more than one domain to address complex problems; (b) actions taken in one domain may have unintended consequences for what happens in another domain; and (c) responses to the underlying issues may be less fragmented, more strategic, and more sustainable if they are linked and integrated across programs, organizations, systems, sectors, and areas of activity. The potential to generate cross-domain effects helps to bring stakeholders together around a common vision. And understanding how activities in one domain can foster or advance priorities in another domain creates mutual support and ownership across a spectrum of stakeholders, even if they are not directly involved in implementing each other's work.

Systems thinking suggests different ways to link and integrate work across domains:

- **Interventions with multiple components and purposes may target more than one bottom line**—for instance, by creating jobs that give local workers knowledge, experience, and income while also increasing the value of products and services. (Early Head Start's practice of hiring young mothers as school aides is a good example.) Programs of this type tend to be relatively small and service-intensive and therefore have limited effects at the population level. For some community-based programs, however, the concept of a double or triple bottom line offers a chance to add significant value to the community. The Jacobs Center for Neighborhood Innovation, for example, developed a financing strategy for its community center that shares ownership and profits with residents, while the Dudley Street

A COMPLEXITY LENS SUGGESTS THAT:

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Neighborhood Initiative's economic development work sustains the community's cultural diversity while also developing young residents' skills.

- **Single-purpose interventions may leverage actions in one domain or system to affect outcomes in others** without necessarily creating a direct programmatic link between the two. These efforts are intended to have ripple or spillover effects on outcomes in other domains. For example, bringing residential buildings up to code may not only improve housing stability among low-income families but also improve health outcomes by reducing children's exposure to lead and asbestos, asthma triggers, and accidents. These outcomes may also improve school attendance and academic performance by reducing illness, avoiding cognitive impairments, and lengthening the amount of time a child spends in one school. Less illness among children in turn may reduce parents' absence from work, which may increase job retention and family income. Similarly, evidence about the effects of stress on mental and physical health, especially on cognitive development in early childhood, suggests that efforts to improve neighborhood safety have potential to produce positive effects across multiple domains (Fox & Shonkoff, 2011; Ludwig et al., 2013).
- **Multicomponent, multilevel interventions address multiple causes of single issues.** Some efforts use a broad-based, cross-domain approach involving numerous stakeholders. For example, community groups, neighborhood schools, public agencies, and police in the Columbia Heights/Shaw neighborhood of Washington, D.C., collaborated to address gang violence by identifying involved youth, monitoring their behavior, educating parents and community members, and intervening to forestall opportunities for violence. When identified students failed to show up at school, staff notified workers at the community organizations, who tracked down the youth and prevented them from meeting up with other gang members. Gang-related suspensions were reduced, which kept the youth in a supervised setting rather than on the streets. Collectively, these interventions reduced gang deaths to zero over the three years that results were tracked (Center for Youth Policy Research, 2006).

In all three of these approaches, the integrated strategy is merely an entry point to address complex problems. The approaches do not by themselves represent holistic solutions to complex problems. Safe streets and homes may contribute to cognitive development and indirectly to school achievement, for instance, but achieving better educational outcomes will depend on addressing many other issues and factors affecting education and school achievement. The challenge is to use the linkages as starting points and to keep broadening and deepening the work to address more of the interrelated causes and effects of the complex problems being addressed.

Complexity principles and adaptive management practices offer additional guidance on ways to link and integrate components of community change efforts across domains and to manage the connections over time. We reprise and build on the discussions in previous chapters to suggest lessons that marry adaptive practice with systems thinking in ways that can help community change efforts be more strategic in addressing this long-standing challenge in the community change field.

Recognize that practices and policies in one system can have negative effects on outcomes in another, creating additional barriers that need to be removed.

For example, school discipline policies have been shown to affect the movement of youth into the criminal justice system as well as the students' school performance. Similarly, restrictions in numerous systems combine to severely limit the job opportunities of individuals who were formerly incarcerated.

Consider multiple perspectives and utilize integrative thinking.

Chapter 1 explained the importance of context in shaping community issues and solutions. In fact, it is very difficult to fully understand the context in which a community challenge occurs or to craft an effective solution without soliciting perspectives from many stakeholders. The trick is to reach across the silos—the particular mind-sets and approaches that traditionally separate institutions, systems, and sectors from each other—and blend the perspectives into an “integrative thinking” model.

Integrative thinking orients toward both/and options rather than either/or; it recognizes and addresses the paradoxes that underlie complex problems and situations. In this way, integrative thinking moves beyond making simple compromises and trade-offs between competing or contradictory perspectives to examine problems more deeply and identify a solution that contains the best of all possibilities.

Florence Nightingale, who catalyzed a revolution in hospital administration in 19th-century England, intuitively understood the value of the tension that comes from having to balance opposing interests. After studying the performance records of many hospitals, she concluded that hospital patients receive the best care when there is a “perpetual rub between doctor, nurse, and administrator” and no single power is ascendant (Sweet, 2014). It was an early insight into complexity that still drives many successful community builders today.

Think of the community as a system or collection of systems.

A systems frame keeps the big picture in mind, and in doing so it places issues in context. This helps to broaden the work and identify opportunities for integrating and linking

“If you just continue to do your work in your own way, things don't change. But asking people to take their expertise and put it ‘in the center of the room,’ so everyone can draw on it, enables integrated thinking.”

“We used to make a grid outlining the conundrums in front of us. On one side we listed different dynamics and conditions, and on the other we listed the opposing forces. We had to figure how to get to the middle—to create a structure that allowed ‘both/and.’ . . . We did this successfully [by convening] people who wouldn't normally be together to discuss viewpoints and make decisions.”

—Jennifer Vanica

Former President/CEO, Jacobs Family Foundation
and Jacobs Center for Neighborhood Innovation

actions. For example, focusing on the larger issue of housing markets rather than the narrower issue of housing production has led housing developers in the private sector to invest time, effort, and resources in ensuring that a high-quality local school exists in every neighborhood where they build mixed-income housing, because good schools help attract new residents and retain current residents (Khadduri et al., 2003). Similar thinking about the marketplace causes leaders of community change efforts to develop sectorial employment programs, which aim to increase both the demand for workers (by targeting employers and jobs in specific sectors) and the supply (through workforce development efforts). And as we saw in Chapter 1, some place-based initiatives are improving food markets by connecting residents who live in food deserts with farmers and producers outside the community and by enabling residents to grow their own food in community gardens and market it locally—efforts that could improve health outcomes.

Make sure that the intervention includes all of the components needed to produce multiple bottom lines and that the components are fully implemented according to their design.

Multicomponent, multipurpose interventions can't be effective on multiple fronts unless their design includes activities or services that are specifically intended to produce the intended results *and* those elements are all implemented and resourced appropriately.

Pick a starting point and build out from there, rather than trying to plan everything in advance.

As discussed in Chapter 2, complexity management theory and the experiences of community change efforts suggest that planners should not expect to fully develop a plan or map out all of the interconnections among issues before beginning to implement their work. This is because some strategies and leverage points only become apparent over time as the work develops, learning increases, new opportunities arise, relationships deepen, and participants' capacity grows. It makes sense, therefore, to pick a starting point and build out from it over time.

Many potential starting points exist. Groups that are looking for strategic connections across programs or systems often start with something easy to accomplish or with actions that benefit all of the people who are trying to work together. Another common approach is to target an action that has the greatest potential to catalyze change or drive progress on a specific issue or problem. A third option is to start with the issue of greatest concern (Rudolph et al., 2013). There is no clear recipe for choosing a starting point or for expanding it to include other actions, other than the general principle of community change that strategies should match the available resources, capacities, and goals (Kubisch et al., 2010).

Pause to reflect on and communicate about what stakeholders are learning as the work unfolds.

Many community change initiatives stick with the “easy wins” or become less innovative over time because stakeholders find it difficult (if not impossible) to keep learning, growing, and adjusting over time. Complexity theory offers a strategy to guard against this tendency: Continually assess and monitor what is happening in a way that draws insights from multiple perspectives. In part, this lesson pertains to evaluation; summative evaluations that assess the work only after it is finished often identify a critical component or strategy that was missing, which might have enhanced the effort’s impact if leaders and managers had known about it earlier. Informal (but deliberately scheduled) opportunities for reflection that occur outside an evaluation are also important, however. They enable participants to be responsive, emergent, and adaptive, making adjustments and improving performance as events unfold.

Think broadly about potential effects across domains and probe to find them. Be prepared to identify, track, and analyze unintended consequences and unexpected outcomes as well as targeted results.

Two insights from complexity science—the interconnectedness of systems and the difficulty of predicting cause-and-effect relationships in complex environments—heighten the need for designers, implementers, and evaluators of community interventions to think broadly about the potential for cross-domain effects and to be prepared to adjust the intervention as they learn more (Figure 2). Neighborhoods’ complex environments affect outcomes across a range of domains, through multiple sets of interactions and in ways that are not well understood or documented. By identifying and tracking outcomes related to the multiple bottom lines of a complex community change effort as the intervention develops and matures, leaders and managers acquire information needed not only to document success but also to refine their approaches, adopt better strategies, and discard tactics that are no longer appropriate. (Strategies and techniques to do this are discussed in Chapter 2.)

FIGURE 2

TRACKING UNEXPECTED OUTCOMES CAN YIELD VALUABLE INSIGHTS

For example, the original design of the multi-city **Moving to Opportunities (MTO) demonstration program** (which helped public housing residents move into neighborhoods of less-concentrated poverty) focused on the traditional outcomes of interest to labor economists: earnings, job training, and education. But early in-depth interviews revealed that health and safety issues were priority concerns for MTO participants. In response, evaluators began tracking health and safety outcomes, and they rethought their conceptual framework for understanding how moving out of high-poverty areas would affect participants’ lives (Kling, Liebman, & Katz, 2004). Contrary to the original expectations, the evaluation showed strong effects on adult health (reductions in extreme obesity and diabetes, and gains in mental health outcomes) but no consistent effects on adult economic self-sufficiency or children’s educational achievement (Ludwig et al., 2013). Had researchers not been attuned to the participants’ experiences, sensitive to the potential for interactive effects, and willing to respond adaptively to the new evidence, these insights and evidence would have been lost.

Vertical Alignment: Working at Multiple Levels of Nested Systems

Complex community change efforts seek many different kinds of results, so they often intervene at more than one level—for instance, with children, families, groups of neighbors, neighborhood service providers, organizations and institutions located outside the neighborhood, service systems, governance and policy-making bodies, and so on. Here we use a complexity lens to explore three that reflect the way complex adaptive systems are nested within each other, how action at one of these interrelated levels can leverage change at other levels, and how alignment across them can build the collective power of the community. We look first at how building relationships and connections among residents and using residents’ social networks can improve the design and implementation of a community change effort. We then explore how these relationships and networks can help neighborhood residents take collective action on behalf of their community, before examining how they can be used to leverage powers and structures outside the neighborhood. (Organizational capacity building and organizational ties are discussed in Chapter 4.)

LEVEL 1: RESIDENT CONNECTIONS AND NETWORKS

“Community building,” one of the core principles of community change efforts, emphasizes participatory processes that develop leadership, expand and enhance resident connections and networks, and strengthen a community’s civic voice and capacity for improvement (Kubisch et al., 2002; Kubisch et al., 2010). The core values of community building can be expressed as, *Do with people rather than for them; engage residents as partners in the change process; and help people acquire tools, knowledge, capacities, and opportunities to shape change.*

Community-building values lead community change efforts to emphasize resident engagement, which can be defined as efforts to involve residents in the work of improving their own communities by drawing on their knowledge and understanding of the community, incorporating their opinions and judgments, and promoting activities that harness their energy and commitment (see Figure 3 for principles of community engagement).

Community change efforts typically engage residents in envisioning desired changes, setting a strategic direction for efforts to achieve the goals, providing input into the design of specific projects or interventions, and participating in the processes of evaluating and learning from the intervention. Methods for involving residents and eliciting their views include resident participation on formal governance entities; resident leadership teams; small-grant programs that provide funds for projects designed and executed by residents, often with residents helping to select grantees; and various forums for discussion with and among residents, such as listening sessions, neighborhood or family “circles,” neighborhood summits, and house meetings.

Resident-centered community building focuses on building residents' relationships at several levels, including among residents, between residents and neighborhood institutions, and between residents and other community change agents (Kubisch et al., 2013). These relationships help to create two kinds of social capital: "bonding" capital—neighborly supports and assistance that make it easier to get through everyday challenges (e.g., watching a neighbor's children, running an errand for someone, giving someone a ride); and "bridging" capital, which helps people get ahead in their lives (e.g., by sharing information about job or housing opportunities, educational resources, medical care) (Briggs, Mueller, & Sullivan, 1997). These types of social capital in turn make communities function more effectively and efficiently to serve residents' needs.

Voices from the Field III urged practitioners, funders, and evaluators to embrace community building as both a guiding principle and deliberate set of actions, while cautioning that there are still unresolved questions about its place in the overall theory of change guiding community interventions. A complexity lens provides new insights into that debate in terms of the underlying assumptions for action and the practices used to take action.

Several assumptions embedded in complexity science reinforce the community change field's emphasis on resident engagement and community building, not as alternatives to so-called hard outcomes but as essential factors for achieving positive results when faced with complex issues. These premises have to do with:

- **Interconnectedness.** Complexity theory suggests that complex problems benefit from solutions that draw on many different perspectives and resources. As noted in Chapter 2, complexity requires 360-degree

FIGURE 3

PRINCIPLES OF RESIDENT ENGAGEMENT IN PLACE-BASED CHANGE EFFORTS

Residents' involvement should be ongoing, not a one-time activity. Ideally, initiative leaders create a "collaborative learning community" in which residents (and other partners) participate in an ongoing cycle of vision setting, collaborative design, shared experimentation, and public reflection.

Not everyone has to be involved in every activity, all the time, but there must be multiple channels and opportunities for participation open at all times.

Opportunities for engagement should foster participants' confidence, leadership ability, and other key capacities as part of the activities in which people are engaged, rather than cultivating those qualities in isolation (although formal training opportunities also usually exist). Community builders embed learning opportunities within activities as a way to build community strengths that will outlast the life of any program or initiative.

The activities in which residents engage must be useful to them as well as to the community change process. For instance, Hope Community uses a special process to shape dialogues with residents to ensure that they are productive and meaningful for participants as well as for conveners.

All parties should be honest about role that residents will play and the parameters of the work they are being asked to take on.

vision. When we apply this premise to community change, it suggests that residents and neighborhood groups should have a prominent and meaningful voice and role in community change efforts, not simply because of a moral imperative but because residents' viewpoints and contributions are an essential piece of the overall puzzle.

- **Context.** The complexity field's assumptions about context (see Chapter 1) align closely with the community change field's recognition that not all distressed communities are the same. Understanding the differences, and their implications for action, requires information and insights about a community's history, relationships, power structures, and institutional dynamics, and how these factors play out on the ground—information that comes from residents as well as others.
- **Networks.** Network theory, a branch of complexity science, holds that social networks can be a mechanism to affect the pace or scale of change. In addition, systems thinking suggests that changing the behavior of a small number of influential people can change the working of the entire system (or network), because others will follow their lead or adapt their behavior in response. These individuals can thus serve as leverage points to increase impact. For community change efforts, these concepts suggest that residents' social ties and social networks can be expanded, mobilized, and leveraged to accelerate the community change process or to increase certain impacts. They further suggest that community building is an essential component of community change because it unleashes the community's collective power to advance and sustain change.
- **Inclusive expertise.** Complexity theory broadens the concept of “expertise” to include not just the knowledge of professionally trained technical experts but also the wisdom gained by ordinary people through life experience. In a complexity framework, both kinds of expertise are needed to make an intervention powerful. For community interventions, this line of thinking opens the door to (a) valuing the unique knowledge and understanding possessed by residents and others working “on the ground”; and (b) giving residents a role in educating outsiders about their community, providing insights into the community's context, and raising issues and concerns that help to focus improvement efforts. Incorporating the “ground's-eye” view of people with firsthand knowledge of community context, conditions, and dynamics helps to challenge conventional assumptions about issues and solutions, make connections across areas of work, identify new areas for action, and spark new thinking about how to address long-standing problems.

Practices for engaging residents and building community can be enhanced by ideas and methods from the complexity field. The following lessons can help community change efforts incorporate the complexity concepts of interconnectedness, context, networks, and inclusive expertise.

Help residents identify their own expertise and integrate it with outside knowledge.

Complexity highlights the need to combine many diverse sources of wisdom and experience in order to design resilient, effective interventions—including and especially residents' understanding of their community's history, relationships, and cultural traditions; of their own aspirations and needs; and of how local institutions affect their daily lives.

Community change efforts need some sort of process for eliciting residents' knowledge,

balancing competing viewpoints, and communicating all of these pieces of information to others. Equally important are methods for putting their experiences in context and identifying possible actions. One practitioner described this process as working simultaneously from the bottom up and the top down: “Those living it know best what the problem is and how to solve it, but that’s not enough. They need access to other information and data to help refine raw ideas.”

Useful processes for lifting up and integrating residents’ expertise have several key elements, including (a) meetings of diverse residents in which well-prepared, skilled facilitators ask well-structured questions, listen carefully, and uncover issues not already on the table; (b) interactions and activities that build trusting relationships among residents and between residents and other participants, so that people are willing to share their knowledge and know that their opinions matter; and (c) language that is clearly understandable and nontechnical, so that everyone can participate in weighing options and making informed choices.

Following the double-bottom-line approach inherent in community building, practitioners emphasize the importance of using the process of eliciting residents’ expertise to build residents’ sense of ownership in their community, leadership abilities, and capacity to solve their own problems and those of their neighborhoods. Some community-based organizations have tried to initiate such a process by using experiential learning techniques, such as those developed by Paulo Freire and International Communications Associates. This process seems to work best when leaders add content and context on specific issues and strategies.

Cultivate multiple points of connection among residents.

Complexity science encompasses several findings that confirm the community change field’s commitment to helping residents connect in multiple ways:

- Neighborhoods are complex adaptive systems, and complex adaptive systems are made up of “a densely connected web of interacting agents” (Begun, Zimmerman, & Dooley, 2003). Creating or augmenting connections among residents helps community change efforts tap into this web.
- Complex adaptive systems that have many different patterns of connection and interaction are resilient and robust in the face of environmental changes and able to survive in a variety of environmental conditions (NAPCRG Resources, 2009).
- Complexity theory tells us to identify and harness the naturally occurring “energy” that already exists in a system and use it to build momentum for change. In the complex environment of innovation and unpredictability that surrounds most community change efforts, however, it isn’t immediately clear which actions will take hold and gain traction. It makes sense to seed many projects or areas of work and see which ones take root and develop organically—especially because efforts that develop organically tend to be more sustainable.

The idea of connecting residents to each other and to community organizations is not new to the community change field; organizations like Hope Community, the Jacobs Center for Neighborhood Innovation, and Dudley Street Neighborhood Initiative have for years used such connections to engage residents in solving community issues, and many philanthropic funders have used small-grant programs for the same purpose.

Connections and relationships among residents are important not only for individuals but also for communities. They promote “networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (Putnam, 1995); and they contribute to the “informal social control, cohesion, and trust” needed to create “collective efficacy,” which protects neighborhoods against social violence (Sampson et al., 1997). All of these benefits in turn can increase the efficiency and effectiveness of community interventions.

Connect social networks through network organizing.

Network organizing is an emerging approach to community organizing practiced at Lawrence Community Works, a community development corporation in Lawrence, Massachusetts, in which “weavers” connect individuals to various activities and also weave connections across activities. Network organizing applies network theory to efforts to connect residents with each other and to provide opportunities for residents to play a stronger role in public life. The intent is to create a healthy civic infrastructure that allows residents to make demands for change at the institutional, neighborhood, and city levels (Traynor & Andors, 2005)—to be proactive on their own behalf rather than merely reactive to circumstances.

Network organizing builds a network (not an institution) out of residents’ interconnections by knitting together otherwise isolated activities and individuals. Residents do some of this weaving themselves; so do staff of community organizations, community organizers, and partners in community change. Involving many weavers ensures that the network has many hubs or nodes of connection, which gives the network added strength and resilience.

The network model used in Lawrence Community Works (LCW) has a more fluid and flexible structure than a typical organization and more flexible membership rules than a traditional community organizing model such as the one promoted by Saul Alinsky. The LCW network is self-organizing: Individuals can join through many entry points, choosing how and when to join, what they want to do, and how much or how little they want to participate. The committees and programs that guide the network or are guided by it are constantly evolving and open to everyone. The result is greater capacity for collective decision making, information sharing, and action (Traynor, 2008).

Activate residents’ social networks to increase impact and accelerate change.

Systems thinking suggests that changing the behavior of a small number of key players who have the potential to influence others can alter how a system or network works as a whole, because as the behavior of these people changes, others will follow their lead or adapt their

FIGURE 4

SOCIAL NETWORKS CAN BE USED TO ACCELERATE CHANGE

By engaging pastors and other religious leaders in **diabetes prevention**, community-based initiatives have been able to use churches' organizational structures (classes, social groups, events) and communications systems (sermons, newsletters, bulletin boards, radio programs) to implement health programs, conduct outreach, and transmit messages about healthy eating and healthy lifestyles (Kaplan et al., 2006). This has increased the scope and scale of public education efforts and earned the endorsement of powerful, well-respected community figures. Similarly, public housing residents who were identified by peers as trusted sources of advice have successfully

involved other residents in community events designed to **increase AIDS awareness and prevention** (Sikkema et al., 2000).

Staff from the **Common Ground** program to house homeless people in west midtown Manhattan (forerunner of the 100,000 Homes Campaign and Community Solutions) focused on a subset of 18 individuals who were there night after night, all of whom were dismissed by other outreach workers who considered them resistant to or beyond help. Within the group one person stood out as their lynchpin; when he was housed, the others began to

follow because they believed they could be helped, too. Focusing on this core group within the homeless population accelerated the pace and scale of workers' efforts to reduce homelessness throughout the area.

The **Family Independence Initiative**, which operates in several locations nationally, uses peer networks and peer support groups to increase working poor families' access to resources, financial assets, role modeling, counseling, and other supports (Miller, 2011; Stuhldreher & O'Brien, 2011).

behavior in response. These individuals, working through their social networks, thus serve as leverage points to increase impact and accelerate change.

Some community organizations use residents' social networks to increase the number of people "touched" by a service or resource, through peer support and assistance programs. Others use social networks to try to break old patterns of thought and behavior in individuals and families. For example, the Latina Health Initiative and other initiatives have engaged residents as *promotoras*, "walkers and talkers," or "trusted messengers" who disseminate information quickly and widely through their social networks while also serving as role models to inspire change in fellow residents. Many more variations on this theme exist in the community change arena (see Figure 4).

As these lessons illustrate, the so-called tension between building capacities in residents and community and targeting "hard" outcomes is a false dichotomy when we view community change through a complexity lens. Resident engagement and community building are not add-ons to community change efforts but essential and integral components.

“Equity allows us to introduce power, to optimize the opportunity for people to participate. It changes the narrative of health. As a nation, we are heavy on individual responsibility and personal choice. We need to meaningfully advance policy with community values for sustainability.”

—Anthony Iton, Senior Vice President,
The California Endowment

LEVEL 2: NEIGHBORHOOD CHANGE: UNCOVERING AND ADDRESSING ROOT CAUSES

For neighborhood-level community change efforts, complexity offers a systems perspective that broadens the analysis of problems and the actions needed to address them. A complexity perspective, especially one that draws on a systems frame, shifts the focus away from individuals and highlights the role that institutional practices and policies, societal structures, and power relationships play in producing outcomes for neighborhoods and for the individuals and families who reside in them. This focuses attention on different types of action, different targets of action, and new sets of actors.

A systems perspective focuses attention on the underlying root causes of social problems that may be removed in time and space from symptoms and causes that are more immediately visible. Overlaying a complexity lens with additional lenses—an equity framework, for example, or a regional framework—can further sharpen a community change effort’s focus and its understanding of community context. An equity lens raises up issues of power and social justice and focuses attention on the deep-rooted, systemic policies and practices that serve to marginalize some people and produce and perpetuate racial disparities in every domain of culture and society. (For examples that combine systems thinking and racial equity analysis, see Menendian & Watt, 2008; Powell, Heller, & Bundalli, 2011.) A regional perspective reveals that distressed communities are part of a “broader pattern of urban sprawl” that creates inequities in housing patterns and supply, workforce opportunities, transportation, environmental health, and land use, and that current inequities are rooted in federal housing and transportation policies that date back to the 1930s and 1950s (Pastor & Turner, 2010).

Using any or all of these lenses to map and understand connections can help to develop more powerful and actionable community change agendas and spur action in new directions. For some, the implication is the need to fundamentally change systems rather than just tweaking current practice—that is, to change the rules of the game instead of just trying to obtain more resources for one particular group or community (Pastor et al., 2004).

A complexity lens offers the following guidance for uncovering and addressing root causes of community distress at the neighborhood level:

Work to overcome stereotypes and misrepresentations of people and communities.

A systems perspective and equity lens often reveal negative portrayals of low-income communities and people of color as one of the root causes of social and economic inequality.

Neighborhood organizations and initiatives can work to change stereotypes and the institutional practices based on them, and many already do. This often means shifting the way people think and talk about distressed neighborhoods and their residents. In a community building/community organizing effort to increase employment called Project Quest, for example, community groups emphasized that local workers could be trained and hired for hospital positions that were being filled by employees from abroad (Auspos, 2006). Similarly, The California Endowment's school discipline reform efforts involved changing stereotypes of young men of color: Having young people of color testify to state legislators and advocates about the effect of school disciplinary policy on their lives presented an image that contrasted sharply with the way these youths are often portrayed in the press (FSG, 2014).

“There is a realization across public health leadership that the [community] environment matters and policy matters. That's a big shift from the individual and behavioral approach.”

—Sana Chehimi & Larry Cohen (2013)

Frame issues in terms of systems and structures rather than individuals—even if the intervention is not intended to take on the challenge of changing systems.

A systems lens prompts people to reframe issues as institutional or structural challenges rather than individual ones and to change responses accordingly. For example, Hope Community had a practice of sending the neighborhood's 12- to 14-year-old youth to sleepaway summer camp. When some of the youth had trouble adjusting and were sent home, the organization's staff developed a five-week leadership training program to better prepare the young people for camp. Staff also discussed the counselors' lack of diversity with camp directors and worked to create a pathway for neighborhood youth into the camp's counselor-in-training program. Four young residents subsequently became counselors, with more in the pipeline.

A systems lens can also suggest critical points for intervention. By analyzing school outcomes data for youth in Boston, for example, staff of the Dudley Street Neighborhood Initiative (DSNI) learned that Kindergarten I (KI) attendance for four-year-olds (called prekindergarten in many systems) was a turning point in the school trajectory of children in Boston. They further realized that Dudley children were underrepresented in KI and that Dudley parents did not know how to navigate the complicated city system for enrolling children in the limited number of KI slots available. DSNI is working with local parents to overcome this system-related barrier.

The shift from individual to systemic problem solving is especially striking in the public health arena, where decision-makers are increasingly taking environmental factors into account as they tackle food deserts, lack of parks, the location of liquor stores, prevalence of fast-food restaurants, waste disposal, transportation barriers, and other challenges in struggling communities.

Provide leadership training opportunities that apply a systemic, equity, or regional lens and enable residents to take collective action on systemic issues.

The social ties and connections among residents discussed in the previous section help to create the trust needed for collective action. By themselves, however, these connections do not spontaneously generate collective action on behalf of the community. The bigger challenge is to connect people in ways that build collective power and capacity to make demands on power structures outside the community. This requires a different type of community building and capacity development from that of cultivating social ties among individual residents.

To address this need, many community change efforts offer leadership development programs. These programs prepare residents to assume public roles, train them in organizing methods and techniques, teach them about local power structures and dynamics, deepen their analyses of community issues, and help them assess options for addressing them.

These leadership development programs often combine complexity theory's adaptive management approach with the community change field's recommended practice of starting small and expanding the scope and reach of efforts over time. For example:

- Lawrence Community Works' PODER Leadership Institute teaches "reflective practice" in which participants take action, reflect on the action, and then take a larger step (Traynor & Andors, 2005). The cycle of doing and learning enables individuals and groups to address increasingly large issues and their underlying conditions over time. For instance, the first graduates of PODER initially organized an action to demand improvements in local garbage collection. The reflective exercise prompted the PODER graduates to consider the way city resources were distributed across neighborhoods. This led to questions about the city's budgeting process and efforts to make it more participatory.
- Hope Community developed its Sustainable Progress through Engaging Active Citizens (SPEAC) program to train youth and young adults in effective models of community organizing and leadership. SPEAC participants conducted several neighborhood Listening Sessions, and the themes that emerged inform their choice of civic action projects. SPEAC organizers have also expanded efforts to secure resources for the local park by working, in conjunction with other groups, for a racially equitable allocation of park resources throughout Minneapolis (see Figure 6).

LEVEL 3: CHANGES TO SYSTEMS AND POLICIES

What happens to individual residents and communities is profoundly affected by external systems, and many practitioners and observers of place-based community change efforts believe it is impossible to achieve transformational change at the neighborhood level if larger systems and policy environments continue to undermine the changes they are trying to accomplish. To have larger impact, place-based change efforts may decide to work at the macro level to influence larger systems and policies. This requires them to link what happens inside the neighborhood to resources and change agents outside the neighborhood.

Connections between distressed neighborhoods and decision-makers at the city, regional, and state levels are difficult for community groups to forge and leverage. Individual residents and community groups or organizations typically aren't connected to these systems: they are not involved in the decision-making processes and mechanisms, and they aren't known to the decision-makers.

Historically, many community change initiatives attempted systems change only indirectly—for instance, by creating a new charter school rather than working to change an existing school or the school system itself. Community change efforts tended to adopt a consensus organizing model rather than the more contentious (but often powerful) community organizing model. And communities relied on powerful champions and allies, such as foundations and the grantee organizations that serve as their intermediaries, to negotiate change or acquire resources for them. Some stakeholders and initiatives simply chose to ignore the issue of systems change altogether. “Because many stakeholders did not buy into the vision of achieving community level change, they did not seriously attempt it through policy and systems reform,” a recent assessment concludes (Annie E. Casey Foundation, 2013, 17–18).

Important examples of systems change efforts by community change initiatives do exist, however.

These include several sites in the New Communities Program (NCP), the initiative funded by the MacArthur Foundation in Chicago (Chaskin & Karlstrom, 2012); several sites in the Annie E.

Casey Foundation's Making Connections initiative, notably Des Moines (Senty, n.d.; Wright, 2004) and Denver (Read, 2006a; Read, 2006b); the Hewlett Foundation's Neighborhood Improvement Initiative, which promoted regional action by local neighborhoods (Pastor et al., 2004); and action on school disciplinary policy at the local and state level in The California Endowment's Building Healthy Communities Initiative (FSG, 2014; Martinez, Chandler, & Latham, 2013). (See Figure 5.) Although their record of success is mixed, these efforts covered a range of issues, targeted various levels of decision-makers (city, regional, state, even national) in both the private and public sectors, and utilized a range of tactics.

FIGURE 5

EXAMPLES OF SYSTEMS CHANGE BY PLACE-BASED COMMUNITY INITIATIVES

Medical debt: In Making Connections—Des Moines, a coalition of community residents and an organizing group negotiated changes in the way two major hospitals handled medical debt. They introduced a more forgiving debt policy for low-income patients, made the rules more transparent, and created a \$1 million fund to defray medical charges from doctors who were not hospital employees.

Community benefits: In Making Connections—Denver, a coalition of community groups, labor unions, and environmentalists, won a community benefits agreement requiring a local developer to provide affordable housing, preference in hiring neighborhood residents, and environmental testing.

Predatory lending: The Southwest Organizing Project (SWOP), the co-lead agency in the Chicago Southwest neighborhood of the New Communities Program, mobilized community support to pressure banks to adopt loan-modification procedures that would reduce foreclosures. SWOP succeeded in getting one bank to introduce changes in a pilot program. When implementation proved problematic, SWOP looked elsewhere. As of 2012, SWOP was pursuing the same strategy with a different bank.

We consider these efforts from a complexity perspective to gain insight into how community groups can go about changing systems and policies, recognizing that not every community group or neighborhood initiative can or should attempt work at this level. Systems and policy change is difficult and risky, and it can distract from more immediate problems. Nonetheless, community change efforts have generated some useful guidance on the use of adaptive management practices to navigate complexity for three challenges of system and policy change in particular: How local groups can connect with systems outside the neighborhood, how to shape policy and practice within larger systems, and how to manage adaptively in the environment in which advocacy and policy change efforts take place.

Connect to external networks, mobilize community networks, and knit the activities together.

Complexity science suggests that loose connections, fluid relationships, flexible structures, and multiple points of intersection with other groups may be more productive for neighborhood-based systems change efforts than very tight couplings and narrowly focused alignment strategies. Despite numerous examples of successful efforts by community groups to lobby city government for specific resources, in general neighborhood groups are too small or removed from the centers of power to achieve systems change on their own. Instead, community groups typically work with and through advocacy and organizing groups to increase their reach, power, influence, and numbers. In community change efforts, they have allied with professional community organizing groups like local branches of PICO or the Industrial Areas Foundation (IAF), labor unions, environmental organizations, social justice organizations, and advocacy groups in the region and state.

These external networks often have information, resources, strategies, connections, and influence that enhance the effort beyond what any single organization can provide. Connecting loosely with them gives community change efforts access to those resources without having to commit to every activity the external network pursues.

Apply a racial equity lens to expand the range of organizations that community groups can partner with to achieve system change goals.

Hope Community offers a good example (Figure 6). Neighborhood collaborators broadened their efforts to acquire more resources for its local park by lobbying for a racially equitable allocation of park resources throughout the city of Minneapolis, joining a citywide coalition of more than 30 organizations. Using a racial equity lens also enabled Hope to knit together several local networks that were otherwise not connected, creating a more resilient and sustainable base for local action.

Similarly, framing school discipline problems as a racial equity issue allowed The California Endowment to connect local groups in its Building Healthy Communities initiative with advocates and organizations involved in the statewide Alliance for Boys and Men of Color. Ultimately, a successful statewide effort to reform school discipline policy in California involved connecting community groups and youth leaders, to a coalition of three networks:

FIGURE 6

HOPE COMMUNITY AND PEAVEY PARK: A RACIAL EQUITY LENS REVEALS LEVERAGE POINTS FOR SYSTEMS CHANGE

For **Hope Community** in Minneapolis, applying a racial equity lens to disparities underscores the systemic nature of inequity and suggests ways to change municipal systems and policies that adversely impact the neighborhood. Hope's organizers are working at the neighborhood and city levels to advance equity by building a hub of opportunity, networks, and relationships.

Hope's racial equity work is rooted in Peavey Park, a rallying point for the community. Once a center of drug dealing and violence, it has value as a gathering space and a venue for sports, healthy living, the arts, and music. It also has symbolic meaning, because residents want the same benefits and resources available in more well-to-do neighborhoods. After a series of Listening Sessions organized by Hope in the late 1990s, a local leadership team and residents developed a community design for a revitalized Peavey Park. The Minneapolis Park and Recreation Board unanimously approved the community's design over the city-designed plan in 2001, but 13 years later the plan still has not been implemented (although some park improvements were made).

Hope's efforts to acquire more resources for the park continue. Participants in Sustainable Progress through Engaging Active Citizens (SPEAC), Hope's leadership training for young adults, have documented the fact that parks in more affluent areas of the city receive

a larger share of programming. Armed with this information, Hope organizers and residents are working with a citywide coalition of 35 organizations spearheaded by the Organizing Apprentice Project (OAP) to persuade commissioners to use a racial equity analysis when allocating park resources across the city. Hope mobilized 150 people to attend a candidate's forum in fall 2013 to press the issue and testify about the importance of parks in underresourced communities. Additional meetings were held in spring 2014, and Hope is working with other OAP member organizations to develop training that will help grassroots leaders understand the historical context of equity issues in their city and learn how municipal systems work.

Through OAP, Hope has links to other racial equity efforts, such as pilot educational equity efforts in four Minnesota school systems (including one in Minneapolis). Hope has also mobilized graduates of its SPEAC leadership program and its network of urban gardeners on behalf of racial equity efforts. Using them, Hope helped to persuade the Park and Recreation Board to include racial equity language in its urban agriculture plans for city parks and is advising Board staff on appropriate language.

Hope Community's connections and infrastructure have enabled leaders to manage change adaptively in the face of complexity—to take advantage of opportunities when they arise and to

work at a neighborhood level but not get stuck there, says Hope Director Mary Keefe. "There are times when you need very formal collaborative groups with formal relations and agreements. But for this work, more informal connections are often more useful," she explains. "Starting with the big idea and then building the collaborative would have been less productive than starting small at the center and building out. Building as you go allows community members to learn and participate and become leaders inside it. That allows the process and the organizational structure to be adaptive and self-energizing."

It takes intentionality, along with trained and skilled organizers, to catalyze and develop a responsive infrastructure and connections and then mobilize them effectively when opportunities arise. But the effort can make system reform efforts more powerful and sustainable. Hope's many connections and its focus on multiple strands of work have generated a group of allies who remain energized and active; no one person or organization has to do everything. Hope's position as the hub creates space for a range of solutions to underlying problems, allowing managers to select and activate the most useful options as the work unfolds. Leveraging the network connections of individuals and organizations has extended Hope's reach as an organization and a community. And working at multiple levels, on nested issues, strengthens and deepens the work at every level.

community and youth organizers, legal advocates (public interest law firms), and statewide advocacy organizations (Figure 7). The foundation continues to integrate its place-based work in Healthy Communities with Sons and Brothers (which it also funds), a statewide effort that focuses on improving outcomes for men and boys of color (see FSG, 2014).

Be prepared to use a variety of tactics ranging from confrontation and disruption to relationship building, persuasion, and negotiation.

As in every other aspect of their work, community change managers need to be good situational leaders in their system reform efforts. Complexity science suggests two possible approaches for changing the behaviors of individuals in a system and, thereby, the behavior of the system as a whole. One is to disrupt the normal working of the system so it is forced to behave differently. An example is the effort to disrupt normal patterns of gang behavior in order to reduce gang deaths in the Columbia Heights/Shaw neighborhood of Washington, D.C. (see p. 34). Another example is the work that Common Ground (later called Community Solutions) undertook to shelter homeless individuals in west midtown Manhattan during the early 2000s (see Figure 4, p. 43). In defiance of accepted practice, staff focused on housing the most vulnerable of the homeless population, people whom other organizations considered impossible to help. Common Ground developed new outreach practices, new ways to process housing applications, new referral procedures, and new ways of tracking placements, which began to reduce homelessness in the area. (One staff member recalled, “When anything I did was even mildly provocative, I knew I was on the right track.”) After strong initial resistance, other organizations adjusted their behavior and adopted Common Ground/Community Solutions’ practices.

Alternatively, a complexity perspective suggests the value of convincing key system influencers (“attractors”) to change and then using their influence over others to change the system as a whole. Many neighborhood-based systems change efforts use this approach; we saw examples among social networks, and it also applies to institutional systems.

Despite community organizing’s reputation as a sometimes strident activity, resident groups and community organizations often try to advance their goals by building relationships rather than by staging public protests; they are not intent on disrupting systems when other options for change exist. For instance, the community coalition in Making Connections—Des Moines met with hospital administrators and helped them craft the plan to address medical debt (see Figure 5; Senty, n.d.); the Making Connections—Denver community coalition held protests but also negotiated with the housing developer and state officials on key points of the community benefits agreement (Read, 2006a); and the Southwest Organizing Project in Chicago favored opportunities for direct negotiation over confrontation when it could engage high-level bank executives in discussions about changing their bank’s foreclosure practices (Chaskin & Karlstrom, 2012).

Complexity theory suggests that both disruptive and persuasive approaches can be appropriate, depending on context and circumstances, including an organization’s capacity, history, and position in the larger ecosystem. A good situational leader will understand when to use each.

FIGURE 7

THE CALIFORNIA ENDOWMENT: CONNECTING LOCAL AND STATE SYSTEM REFORM EFFORTS

The California Endowment

(TCE) funds 14 place-based efforts to improve health outcomes through Building Healthy Communities (BHC) and also works on state-level public education campaigns and policy changes to improve health outcomes for all Californians. Between 2010 and 2012, TCE supported efforts to ease harsh school discipline policies and align local and state efforts in a campaign to reform relevant state laws. TCE acted as convener, connector, and communicator and enabled local voices, especially youth, to be heard at the state level. Ten school discipline bills were introduced in the state legislature, seven were passed, and five became law in fall 2012. In 2012–13, statewide suspensions and expulsions were lower by 14 percent and 12 percent, respectively, than in the previous school year.

TCE's efforts built on 10 years of prior work by community and youth organizers. In 2010, several BHC sites requested funding to work on school policy reforms, arguing that harsh discipline affected students' social and emotional health and thus fell under the BHC rubric. TCE then funded long-term school discipline reform campaigns in three sites, a restorative justice project in one site, and a youth group to conduct action research in one site. BHC staff also raised the issue with the state level policy team, which began documenting the extent of the problem statewide and identified state laws that could affect outcomes in schools and districts.

In May 2011, TCE convened representatives from eight BHC sites, local organizers, and a state advocacy group to discuss their efforts to reform school discipline policy. This fueled interest in creating a coalition to seek state reforms. TCE provided funding and asked the advocacy organization to facilitate the effort. A loose coalition of three networks came together, all with complementary expertise and connections that extended their reach and influence. It includes community and youth organizers, legal advocates, and statewide advocacy groups.

TCE continued to create opportunities for youth voices to be expressed and heard. In October 2011, it worked with the national Dignity in Schools Campaign to convene youth from Los Angeles, Sacramento, Fresno, and Oakland with policymakers, through webcast, for a "virtual rally." Participants discussed the impact of harsh discipline policies on their lives and communities. The rally generated considerable media coverage and momentum. After reform bills were written by the legal service organizations and introduced in the legislature, the coalition's three networks mobilized their constituencies to lobby for passage, creating a broad base of support. Community and youth organizers brought young people to the state capitol in April, and the statewide Alliance for Boys and Men of Color (funded in part by TCE and convened by PolicyLink) mobilized more youth over the summer.

The actions made school discipline a priority issue and brought hundreds of youth to the state capitol in August 2012 to testify in support of the bills.

The TCE team publicized newly available data that documented suspension rates by race in more than 500 school districts throughout California; commissioned and publicized a poll that found voters overwhelmingly supported reform; and co-convened a public hearing in support of the legislation with the U.S. Department of Education Office for Civil Rights, the California Department of Education, and the State Attorney General's office.

These efforts were an exercise in adaptive management in the face of complexity. TCE aimed to address a root cause of a complex problem and respond to the interrelated nature and interactive effects of policies across several domains. By listening to the real-life perspectives of youth and families, BHC and TCE staff realized that school discipline is a health issue as well as a factor in educational achievement and criminal justice involvement. Reframing the issue as an institutional problem and racial equity issue enabled TCE and its allies to shape emerging opportunities and orchestrate organizational relationships to achieve vertical and horizontal alignment and to increase impact and influence by connecting activities across different communities. This example also shows how change on a broad scale—within the state school system—can improve outcomes for more youth than tackling one school or district at a time, while also making local experience a key component of change.

SOURCE: Martinez, Chandler, & Latham, 2013; California Department of Education, 2014

Use data and evidence to reframe the underlying problem, make a compelling case for change, and attract audiences outside the neighborhood.

To secure broad-based support for system and policy change, actors have to frame issues in a way that changes the nature and content of the conversation and makes people think differently about the problem. In community change efforts, residents and community organizations have succeeded in reframing the issue when they arm themselves with facts, comparative analyses, and detailed maps that delineated the extent of the problem, evidence about the hardships that resulted, and suggestions for what can be improved. Evidence about how specific issues or policies play out in the context of specific communities, and data showing how specific neighborhoods and populations are affected, are especially valuable and compelling because they show how institutional policies and practices, rather than individual decision-making, contribute to poor outcomes. For example:

- By documenting the extent of foreclosures and physically mapping the location of foreclosed properties in a neighborhood, the Southwest Organizing Project in Chicago framed widespread foreclosures as a *community* problem, not the result of poor decision-making by individual homeowners.
- California's school discipline reform campaign framed school suspensions and expulsions as an equity issue by drawing on studies that found disproportionate effects of these policies on students of color and by documenting that similar offenses were punished more severely when committed by black and Latino students than by whites and Asians.
- Community groups in Des Moines used data on medical debt to underscore the fact that the debt rate was much higher in the Making Connections communities than in other local neighborhoods or cities nationwide, which influenced the course of discussions with hospital administrators.

Use the public sector to influence the private sector.

Private systems are particularly difficult for community groups to influence, in part because private businesses often do not see themselves as accountable to the public. In some cases, community groups have achieved changes in private practices by using public systems, rules, or regulations as a lever. For example, Denver city officials provided the developer of a mixed-use, mixed-income project with public subsidies in exchange for a community benefits agreement with residents of the Making Connections neighborhood and other groups; part of the organizing effort by labor unions and community groups involved helping city officials and department staff understand the demands they could make on the developer. And in the work of Making Connections–Des Moines to address medical debt, a key leverage point was that the hospitals' nonprofit status required them to provide "charity care."

Manage adaptively: Be flexible, able to respond to opportunities, and willing to adjust tactics and targets.

Systems theory tells us that no matter how well-executed a place-based lobbying campaign or advocacy effort is success is not guaranteed, because the environment constantly changes. State and city officials and government staff change jobs or leave office, public opinion shifts, and policy contexts change. Events outside a community's control can stymie efforts, and time frames are unpredictable. School discipline reform efforts in California moved quickly at the end but built on 10 previous years of work by activist groups. The key is to continually adjust tactics and targets, and be adaptive in planning, implementing, and evaluating the work in response to unexpected twists and turns.

Create ways for outside decision-makers to obtain and use evidence about neighborhood conditions and the effects of specific policies on neighborhood residents and organizations.

Connections and relationships that help information flow within and across neighborhood boundaries are vital to community change efforts, and they often are an unexpected benefit of community-based systems change efforts (Chaskin & Karlstrom, 2012). These connections can potentially open doors for distressed communities and their residents by helping actors at the metropolitan, state, regional, and federal levels learn about the experiences of people living in distressed communities, understand community contexts, and use neighborhood stories to advocate for change (Figure 8).

An encouraging trend, documented in several case studies on neighborhood-driven systems change, is the growth of interest in finding better ways to make these connections (Chaskin & Karlstrom, 2012; Martinez, Chandler, & Latham, 2013; FSG, 2014). Advocates and policymakers outside neighborhoods are newly recognizing that they need stronger connections to people within neighborhoods, just as people in communities need better connections to allies outside. Nevertheless, the challenges of coordinating action between community actors and other levels are great, especially when community groups feel they are shut out from decision-making roles. (See, for example, Martinez, Chandler, & Latham,

FIGURE 8 COMMUNITIES AS CONDUITS OF INFORMATION

In MacArthur's New Communities Program, key outcomes for sites that engaged in policy change included relationships with new, influential allies—politicians and policymakers at the city, state, and federal level—even when the advocacy efforts were not wholly successful.

For community groups, these relationships opened channels for ongoing communication and laid the groundwork for future action; community groups also benefited from an expanded sense of civic empowerment.

The politicians and policymakers, meanwhile, gained information about community experiences, needs, and priorities that they could not obtain on their own, which helped them better understand how specific issues play out in neighborhoods and strengthened their ability to take action.

SOURCE: Chaskin & Karlstrom, 2012

2013; Pastor et al., 2004.) Funders and intermediaries as well as community-based managers can play important roles in forging these connections and creating opportunities for community groups to reach a larger audience.

New opportunities for vertical alignment are likely to emerge as the next generation of place-based community change efforts develops. Several new initiatives aim to marry civic engagement and advocacy efforts with substantive antipoverty programs in various locations: The Open Society Foundations' Open Places Initiative aims to advance justice, equity, and democracy at a local level and create more effective civic capacity. Grants have been awarded to teams in Buffalo, San Diego, and Puerto Rico (www.opensociety.org). The Center for Community Change's Economic Justice Strategy plans to build a social movement by connecting grassroots partners with progressive allies to create good jobs, improve low-wage jobs, and remove barriers to employment for the formerly incarcerated (Center for Community Change, 2014). And the faith-based organizing group PICO is working to develop strategies and structures to better integrate neighborhood perspectives into their state and national organizing.

At the same time, there are more tools and resources today to help communities and community-based organizations develop systemic analyses, equity frameworks, and regional analyses and translate them into action plans.⁴ Several initiatives at the state and national levels that focus on boys and young men of color are applying a racial equity frame to their work, and numerous groups at the municipal level are also addressing racial equity issues. All of these efforts could provide new communication conduits for community groups and new partnerships, allies, coalitions, and networks to work with.

Nevertheless, we have seen that opportunities for neighborhood groups in place-based change efforts to accomplish systemic change are limited. Pressure from the neighborhood level is not the only way to accomplish systems change, and perhaps not even the most important way to do so. For greater progress to be made, higher level decision-makers must work to change policies and practices that undermine distressed communities (see Sharkey, 2013; Turner, 2013); they must also provide more opportunities for local groups to participate in decision-making.

4. See, for example, www.policylink.org; www.diversity.berkeley.edu/haas-institute; www.kirwaninstitute.osu.edu; www.aspenroundtable.org.

This chapter discussed some of the ways that applying a systems lens can strengthen and improve community change efforts. An understanding of systems dynamics and interactions and how complex adaptive systems operate offers new insights into how community change practitioners might more strategically integrate across project and systems, reframe actions for more effect, and align their work across multiple levels of action. We focused in particular on the role of resident and organizational networks as potential levers of change both within and outside the community. In the next chapter, we look more closely at how adaptive management and leadership can be developed and sustained, and the organizational structures that can support it.

Building Infrastructure to Navigate Complexity

The challenges of complex place-based work demand that leaders of the change process acquire new skills, expertise, competencies, and ways of thinking about change. Leaders also need funding and accountability practices and organizational and management structures that encourage and support more inclusive participation and decision-making. Collectively, these elements comprise the infrastructure needed to navigate complexity. The infrastructure needs to support the organizations and individuals leading change and their interactions with neighborhood residents and other organizations.

By *expertise*, we mean not only knowledge but the ability to recognize situations and respond appropriately. By *competencies*, we mean having the skills, knowledge, and attitudes required to fulfill a function. These qualities again underscore our theme that managers of community change need to be situational leaders. As discussed in Chapter 1, they need to know when it is appropriate to apply traditional management techniques and when it is more useful—even imperative—to use adaptive strategies and practices to navigate complexity.

This chapter examines the adaptive skills, capacities, and funding and accountability practices that leaders and managers of complex community efforts need; suggests strategies for developing them; and discusses some useful nontraditional management structures, paying particular attention to networks.

Skills and Competencies Needed by Adaptive Leaders and Managers

As we noted previously, complexity science helps to clarify several management and leadership challenges in place-based community work, including these tasks:

- **Convening stakeholders and building alignment around a shared goal**—getting individuals and organizations with widely differing perspectives, expectations, values, performance requirements, and agendas to (a) develop a shared vision for what needs to change and a common course of action; and (b) hold themselves accountable to each other for how they pursue the vision and plan
- **Thinking in terms of systems**—examining the root causes of issues, understanding how multiple factors interact, and assessing how changes in one system will affect all of the interrelated systems

- **Adapting to emerging, dynamic, unpredictable, and often uncontrollable events and conditions**—being comfortable with the uncertainty and risk that come from operating in a context described as “volatile, uncertain, complex, and ambiguous” (Gerras, 2010) in which the best strategy may not be obvious, results are not guaranteed, and past performance does not ensure future success
- **Managing tensions**—negotiating the inevitable conflicts over competing viewpoints, holding multiple interests in balance, and enabling tension to become a creative force through which innovation emerges

Complexity theorists and management experts have applied complexity concepts to management practice since the early 1990s, producing a fairly extensive body of literature on the topic and many helpful resources for practitioners. This literature distinguishes between “ordinary” management and the “extraordinary” management skills and capacities required in complex environments (McKergow, 1996). Ordinary management tends to be top-down and authoritative, concerned about established strategies and stability. It values “efficiency, effectiveness, and control” (Rosenhead, 1998, 9). Extraordinary management, in contrast, values decision-making by multiple people representing different points of view; it emphasizes innovation and creativity. (Additional attributes of each type of management are summarized in Table 6.)

TABLE 6 COMPARISON OF LEADERSHIP STYLES	
LEADERS IN COMPLEX ADAPTIVE SYSTEMS	LEADERS IN TRADITIONAL SYSTEMS
Are open, responsive, catalytic	Are controlling, mechanistic
Offer alternatives	Repeat the past
Are collaborative, co-participating	Are “in charge”
Are connected to others	Are autonomous
Are adaptable	Are self-preserving
Acknowledge paradoxes	Resist change, bury contradictions
Are engaged, continuously emerging	Are disengaged, nothing ever changes
Value persons	Value position and structures
Adapt as processes unfold	Hold formal positions
Prune rules	Set rules
Help others	Make decisions
Are listeners	Are “knowers”

SOURCE: Reprinted from Center for the Study of Healthcare Management, Plexus Institute, and Mayo School of Continuing Medical Education, 2003.

In particular, leaders and managers of complex community efforts require skills and competencies that are more associated with “transformational leadership than transactional leadership.” In an environment of shared leadership and reciprocal and dynamic relationships, they need “advanced relationship management skills” and “political acumen” (Remington & Zolin, 2011). Practitioners in community change efforts are very familiar with these conditions. Core components—and key challenges—of their work are (a) developing and maintaining a complex web of relationships with residents, community organizations, funders and sponsors, evaluators, and technical assistance providers; and (b) managing teams in which authority and responsibility are distributed and leadership is shared (as in a collaborative governance structure). Therefore, community change leaders must be able to elicit and articulate a collective vision of change and inspire others to implement it. They must always be politically astute; sensitive to how proposed strategies, actions, and programs are likely to be viewed by various stakeholders; and resourceful in overcoming barriers and negotiating a path forward when conflicts arise.

The complexity field’s analysis of the “extraordinary” skills required to lead and manage complexity affirms and illuminates what researchers in the community change arena have written about the adaptive, emergent nature of place-based work and the management challenges that make community change work so difficult to carry out (Kubisch et al., 2010; Heifetz, Kania, & Kramer, 2004; Kania & Kramer, 2011). Community change managers must:

- Be deliberate and intentional but also adaptive and flexible when facing new challenges and opportunities
- Be clear about goals and theory but not overly prescriptive in actions
- Be comfortable with not having control but do not slide into “chaos”
- Share responsibility but maintain accountability
- Allow things to be emergent but not totally rudderless or contradictory
- Balance clarity and intentionality with the organic, developmental, and dynamic nature of the work

Complexity science, like the conclusions of *Voices from the Field III*, suggests that these tensions and paradoxes are inevitable and ongoing—an integral part of the work. They cannot be avoided or eradicated; they can only be managed or negotiated. Complexity science further suggests that these tensions produce immensely creative forces that can strengthen the process of change and the results achieved (Wheatley, 1993). Nonetheless, they also pose considerable management challenges.

Funding and Accountability Practices That Support Complex Community Change

The community change field has known for some time that funders must be able to work with a broad scope of financing. In earlier Roundtable research, community change actors confirmed that their efforts expand beyond specific programs into community building, capacity building, and core operational activities, all of which must be supported financially. A complexity lens reveals the need for an even broader and longer-term approach to financing. Complex contexts require practitioners to constantly develop, adapt, and even wind down initiatives in response to new knowledge, shifts in context, and the arrival of new actors. Community change may take 10 to 20 years to unfold, which does not match the three-to-five-year time frame of most traditional initiatives. Moreover, community change efforts are unavoidably risky, and results are unpredictable. Even the most well-researched, carefully developed, and skillfully executed strategy can yield very little in the way of results, because the factors that shape complex adaptive systems are unpredictable and lie outside local control (Kania, Kramer, & Russell, 2014). In the experimental and emergent strategy so characteristic of complex, highly uncertain change efforts, the results are even more unpredictable (Patton, 2011).

It is easiest for funders to support discrete interventions with hard timelines and relatively certain outcomes. In the long run, however, funders who want to move the needle on complex issues must accept the challenges of developing a broader, longer-term investment strategy that embraces the unavoidable risk of investing in community change.

Foundations' ability to be more helpful in community change depends, in part, on their willingness to be more comfortable with risk. This challenge is, by itself, a complex topic as it involves an examination of the culture, strategy, and different tools and techniques of organizations that need to invest in social innovation and complex change (Brest, 2012; Govindarajan & Trimble, 2010; Kasper & Marcoux, 2014; Pearson, 2007). One way to manage risk is for funders to think of their community change grants in terms of an investment portfolio, with different levels of risk and returns associated with different investments. As a board member of a community foundation explained:

If foundations approach their grants more like a portfolio of stock market investments, it would be easier to avoid the temptation of treating all their work with a one-size-fits-all approach. Funding a school breakfast program is a relatively risk-free investment because you have a pretty good idea of the kind of results it'll produce. A breakfast program by itself is not going to change a neighborhood, but it's still important and is more like investing in a predictable low-yield bond. Funding activities to help the families of those kids exit poverty, or for the kids to make it to postsecondary education, have the potential for far greater impact but are certainly long term, and their pathways and results are unpredictable. Those are more like a higher-risk, higher-return, equity investment.

If foundations thought about their community investment work like they did their endowments, they would expect different risks and returns with each kind of investment, and judge and support them accordingly.

Another way to encourage greater risk taking is to embrace the inevitability of some failure and emphasize “robust learning” as a legitimate outcome of promising, albeit less predictable, investments. Just as the funders of every unsuccessful scientific effort to solve a complex problem (e.g., diabetes, certain forms of cancer) expect scientists to publish their findings on what did not work, what new insights into the problem were revealed, and what promising new avenues of experimentation emerged, funders and practitioners of community change can treat every intervention as investment in learning. Janice Stein, a commentator on complex international development challenges, encouraged participants at a philanthropy conference to regularly ask themselves the following question:

What smart failures did we have this year? If you tell me none, you are not where you should be. A smart failure is a risky project in which the risks are understood and the foundation decides to proceed regardless—the risks are reasonable. When it fails—not if it fails, but when it fails—then you do an analysis to find out what can be learned from the failure, how much is controllable, what can be changed. Great failures define a great foundation. (Quoted in Pearson, 2007, 24)

Funding practices are intimately connected to accountability, so a complexity lens also suggests that the field of community change needs a new paradigm and practices for accountability. In community change efforts, the focus of accountability traditionally has been on holding organizations (grantees) accountable to funders outside the community for producing plans, implementing them with high fidelity, and producing results on a fixed schedule. This paradigm is backed up by a variety of planning and administrative practices, such as results-based budgeting, performance agreements, and reporting schedules.

In complex contexts, however, these accountability arrangements can be unhelpful and even counterproductive. They discourage practitioners from adopting the adaptive approach (i.e., systems thinking, participatory methods, experimental actions) necessary to tackle complex issues. Moreover, the extra documentation and reporting requirements create burdens on thinly supported community organizations and can erode the trustful relationship between funder and grantee (Haynes, 2003; Phillips & Levasseur, 2004). In essence, traditional accountability practices can “become the enemy of social innovation” (Westley, Zimmerman, & Patton, 2006).

While there are relatively few examples of new, complexity-based accountability relationships between funders and grantees, the most promising shift appears to lie between a narrow, one-way accountability approach in which the grantee is accountable for delivering a certain product to the funder, and a broader practice of two-way accountability for both products and processes. Given the level of uncertainty present in complex situations, grantees must be

able to show meaningful progress towards their desired results as well as a disciplined adaptive process for achieving them (Kania & Kramer, 2013). This type of accountability includes a demonstrated commitment to and excellence in systems thinking, participatory approaches, and experimental actions. It also includes a longer focus on adaptive action, including mechanisms for robust, real-time feedback; adherence to data-based decision-making; and the practice of adapting goals, strategies, and plans when appropriate. The more complex the challenge a community is addressing, the greater the emphasis on robustness or process. (In complex contexts, overspecifying pathways up front, followed by rigid implementation, is actually a sign of poor discipline and little rigor.)

A new paradigm of accountability also would hold grantmakers accountable to grantees for investing in a way that strengthens—not weakens—their prospects for working adaptively and achieving results. This includes agreeing on reasonable performance objectives; using administrative and reporting practices that reflect the adaptive nature of the work; and mutually committing to adjusting goals, strategies, and terms of investment as needed. It is this collective vigilance, learning, and accountability that create the kind of funder-grantee partnership required to navigate complex change efforts.

A complexity lens further confirms that investing in community change may become easier if funders are more intimately involved in the change effort. If trust and knowledge can reduce the uncertainty in complex contexts, funders may find it easier to invest in community change if they are directly involved.

The practice of embedded grant-making is not new to the field. There are a variety of ways that foundation representatives can get involved and develop closer relationships with grantees (e.g., making frequent site visits, sitting on committees, participating in management meetings). The costs and benefits of this approach are also well known. On the upside, relationship-based granting helps funders develop insight and empathy for the community, an understanding of the adaptive choices required as a community change effort unfolds, and where and how they might offer needed additional assistance. Most important, they create an opportunity for grantor and grantee to develop a trustful working relationship. On the downside, it may lead to grants based purely on relationships rather than merit, it can

“Results need to be defined with the grantees and need to be constructed in a way that embraces their reality. Of course you want discipline. You want rigor. But we can’t put them in a set of boxes with arrows and expect [that] that actually authentically represents the experience of social change on the ground, because it’s complex. It’s emergent. It’s unpredictable. And that ambiguity[—]we in philanthropy need to embrace smartly, with our eyes wide open, and with some degree of realism about what can be done in a one-year or two-year cycle, and why, therefore, the need to invest for the long haul is often what’s needed.”

—Darren Walker
President, Ford Foundation
(*Shelterforce*, 2014)

produce tension because of the natural power imbalance between funders and grantees, and it is more time-consuming and demanding for program officers. Clearly, embedded grant-making is not a silver bullet and must be managed well in order to be effective (Brown et al., 2007). However imperfect and difficult to do well, relational grant-making may be a critical ingredient in creating the more trustful relationships between grantors and grantees that are so necessary in complex change efforts.

Strategies for Developing Adaptive Skills and Competencies

It isn't easy to develop competencies and, eventually, expertise in managing complex situations adaptively. In fact, the necessary shifts in attitude, skills, and ways of thinking about issues can feel overwhelming—in part because true expertise and adaptive competencies are acquired not by learning a technique but by applying and practicing adaptive strategies over time. Thus, it is far simpler and more familiar for most people to manage using the traditional techniques designed for a simple context. However, an emerging body of practice can help managers and their staffs develop the necessary skills and feel more comfortable dealing with complexity. Here we explore two strategies for preparing and developing leaders and staff of complex community efforts for adaptive management: coaching and technical assistance, and sensitizing people to complexity.

COACHING AND TECHNICAL ASSISTANCE

Professional development in the nonprofit world (typically funded through philanthropy) has traditionally focused on individuals' skills through leadership training, fellowship programs, sabbatical leaves, executive coaching, and similar opportunities. The increasing use of collaborations in place-based change efforts has prompted some leadership development and technical assistance efforts to focus on building the collective skills of teams rather than individual leaders. One example is the Annie E. Casey Foundation's Leadership in Action Program, which trains leadership teams from several organizations in ways to address tensions around race and class and to develop a broader, deeper analysis of the systemic nature of community problems (Annie E. Casey Foundation, 2006).

Numerous community change efforts use “community coaches” to help collaborative teams clarify roles and responsibilities, settle conflicts, move from planning to action, provide opportunities for reflection and learning, and develop fluid and adaptive management structures (Hubbell & Emery, 2009; Hubbell, Emery, & Polka, 2011). These approaches do not explicitly adopt a complexity frame, although they include some concepts relevant to complexity (e.g., systems thinking and analysis, seeing the bigger picture, addressing root causes such as race) and could potentially incorporate complexity into their curriculum or coaching repertoire.

SENSITIZING PEOPLE TO COMPLEXITY

Several tools and techniques can help sensitize managers, staff, teams, and stakeholders of community change efforts to complexity and become more comfortable with the inherent ambiguities and uncertainties of complex problems and environments. To illustrate, we draw from methods already used within the community change field and in other fields in which managers struggle with complex issues, including business, the military, and medicine (Gerras, 2010; Marion & Uhl-Bien, 2001). The tools and strategies discussed here can be used to develop a general appreciation of and orientation to complexity. They can also be used to tackle a specific complex issue.

Examples of sensitizing strategies include scenario planning, case study analysis, mapping of systems and interactive effects, games and simulations, and structured dialogue.

Scenario planning. Scenario planning is used in the business world, the community organizing field, and the military to plan for alternative contingencies and respond to emerging developments. The Dudley Street Neighborhood Initiative (DSNI) used scenario planning to identify the resilient elements for economic development. Staff asked community members to consider questions such as, “If the community had economic power, what would it look like? Of that, what do we have? What do we need?” Participants then created pathways to reach the vision. They tested the pathways by considering how viable each component would be under different conditions or scenarios—if the economy collapsed, for instance, or local political leadership changed. Approaches that passed the resiliency test became DSNI’s operating principles for economic activity: economic cooperation rather than competition, livable wages, and richly cultured economic activity. According to one manager, this process “tied systems thinking to developing a vision and thinking about how to make it happen.”

Case study analysis. Many law and business schools use a case method approach to teach students, and some medical training programs are beginning to use it to prepare medical students to navigate complexity and improve their effectiveness as doctors. Faculty at the Mayo Clinic, for example, try to counteract the effects of multiple-choice testing (which encourages learners to think only in terms of one “right” answer) by having students analyze complicated case studies in which there is no single, clearly best strategy but many reasonably acceptable ones (Zuger, 2014). The Evaluation Roundtable Teaching Forum provides similar opportunities for foundation leaders and staff to analyze and learn from evaluations of real-world community change efforts.

Systems and effects mapping. Mapping represents a complex situation in a way that supports analysis and action. It is meant to generate a picture or cognitive graphic of how a diverse group thinks about an issue, challenge, problem, or situation. This includes who the key actors or forces are in a complex adaptive system, how they behave and interact with each other, and how they are affected (and affect) the broader environment in which they operate. For example:

- Community groups in Boston worked with systems engineers to develop a sophisticated computer model of youth violence based on input from gang members and community organizations. The project developed an interactive “strategy lab,” which enabled users to simulate and study the possible effects of different interventions (Youth Violence Systems Project, 2011).
- Through a facilitated process, DSNI used a cross-impact matrix to identify potential leverage points among the 14 items on its community agenda by exploring the relationship of every agenda item to each of the others. For instance, they asked whether an increase in neighborhood safety would cause economic development to increase, decrease, or stay the same, and vice versa. Tracing the interconnections revealed that 7 of the 14 agenda items would have a high impact on others and so could catalyze change. DSNI then organized the seven down into three strategic areas: sustainable and economic development, youth opportunity/development, and community empowerment.

Many organizations now offer guides, exercises, and frameworks that spark systems thinking and help groups map systems and their interactive effects. More tools and strategies come out of the complexity world and can be used by community change practitioners. Despite the increasing sophistication of systems thinking and system mapping, however, we offer two caveats. First, mapping can only reveal some of the complexity of complex adaptive systems. Second, it’s important to keep mapping to a “digestible” amount. The process challenges long-held beliefs and can generate an overwhelming amount of ideas, data, and even emotions. Participants can easily become overwhelmed, dispirited about the prospects for effective action, or be more likely to revert to traditional “simple” mind-sets. Local actors need to tailor mapping processes to participants’ ability to absorb insights and put them to use.

Games and simulations. The central aim of games and simulations for social change is to give participants a “worm’s-eye” view of a complex situation by allowing them to experience it in some meaningful way. This usually occurs through structured exercises or games designed to help participants “walk a mile in someone else’s shoes” and then reflect on the experience and what it might mean for future action.

Some exercises seek to give participants greater insight and empathy into the experience of those most affected by a challenge, such as homelessness (e.g., live on the street for a night) or hunger (e.g., live on a low-income diet for a month). Others aim to uncover the structural or systemic causes of a problematic situation, such as racism (e.g., a modified game of Monopoly that penalizes players based on their racial or ethnic background). All focus on using experiential learning to create shared understanding of a complex situation.

Unlike systems mapping, in which the product is a “map” of complexity, the outcome of games and simulations is that participants have deeper insight into the problematic situation, greater empathy for those experiencing a challenging situation firsthand, and a stronger impetus to act.

Structured dialogue. While systems mapping is largely a diagnostic process, and games and simulations a tool for building insight and empathy, dialogical techniques⁵ are designed to help local actors understand each other's values, interests, and positions in a complex situation. This not only enriches each actor's own understanding of the situation but also strengthens the relationships or social capital between them—a crucial ingredient for collaborative work. Examples of more structured methods and techniques used among deeply divided stakeholders include soft systems methodology, strategic assumptions surfacing and testing, and TransFormative scenario planning (see Kahane, 2012).

While some of the techniques described here are well documented and relatively straightforward to apply, others require a great deal of expertise to design and deliver. Therefore, practitioners should be ready to identify and recruit the requisite amount of technical expertise. They also should be prepared for the sensitization process to be long-term, ongoing, and iterative. Unlike in simple or complicated contexts, where it is possible to gain a relatively complete picture of the challenge before taking action, practitioners in complex contexts need to continually map new insights about the systemic factors underlying their challenges, stakeholder concerns, and ongoing shifts in local context while they are planning and implementing solutions.

Organizational and Management Structures

As the community change field has long recognized, complexity requires a shift in management structures as well as in leadership styles, because authority needs to be more evenly distributed across organizations and groups, and decision-making needs to be shared. Within organizations, useful management structures include cross-disciplinary teams and matrices. For external relationships, useful structures include collaborations and networks.

CROSS-DISCIPLINARY TEAMS

Traditional management structures are top-down, hierarchical, and divided into narrow silos of focus and accountability, with staff organized into separate departments that work on separate programs. Many managers find that forming silos makes it easier to manage staff and to get work done. However, cross-disciplinary and matrix teams offer alternative structures that can facilitate more participatory, inclusive decision-making and integrate varied perspectives and expertise. These are not path-breaking, innovative management structures, but it is only recently that many organizations involved in place-based community change, including foundations and intermediaries, have adopted them.

Cross-disciplinary teams typically serve multiple purposes, providing opportunities for colleagues to align and connect their work across domains; think creatively and innovatively;

5. For example, *Systems Concepts in Action: A Practitioner's Toolkit* (Williams & Hummelbrunner, 2010) explores 12 methods, while *Social Analysis Systems* (www.sas2.net/) has a field book with more than 40 different techniques.

and reflect, solve problems, and adapt. As one manager of a community-based organization commented, “Teams can be jazz sessions on program design.”

The success of cross-disciplinary management structures depends on the ability to cultivate relationships, trust, and a sense of teamwork among participants. When those qualities are present, organizations involved in community change can benefit from cross-disciplinary teams in several ways:

- **Teams improve the implementation and effectiveness of community solutions.** For example, The California Endowment credits cross-departmental teams and work groups with achieving more alignment between local site efforts and state advocacy efforts around enrolling people in health-care exchanges established under the Affordable Care Act, changing school discipline policy, and meeting the health-care needs of undocumented Californians. Similarly, a cross-disciplinary management team at the Jacobs Center for Neighborhood Innovation (JCNI) worked with residents to develop the initial public offering that enabled neighborhood residents to become co-owners of the Market Creek Plaza development, turning the idea into what a staff member describes as “a pioneering community development tool.”
- **Team meetings give staff a chance to learn, adapt, improve practices, and respond to emerging issues together.** As a member of the Action Team at Hope Community explained, “[We] focus on what works and what doesn’t, what surprised us, what we learned, and where to take this. It’s very energizing. . . . Discussions can get very heated. We are trusted and respected enough to be challenged, to be asked to explain. This is important to how we handle conflict. Crises management, staying at the table, is a big deal.” A member of JCNI’s cross-disciplinary team similarly observed, “We learned to be okay working in the middle of contradictions. Being aware of them was important; if people are aware they can keep moving. Moving ahead is more difficult if the contradictions are not clear or surfaced, because then people are more likely to assign blame.”

It can be difficult for organizations to shift to cross-disciplinary teams, especially when the change disrupts long-standing culture and traditional power structures. Nonetheless, several successful examples exist (see Figure 9).

MATRIX STRUCTURES

An organizational matrix is a more complicated and layered structure than a cross-disciplinary team. It brings together staff from different departments to work on specific projects, mixing staff who have expertise in specific functions (e.g., community organizing, data collection and analysis) with staff who have expertise in programmatic content areas (e.g., education, employment). A staff member can sit on several different teams, and no team has exactly the same membership, although they might have overlapping members.

In a matrix structure, teams shift and change as the work evolves. This allows an organization to be more fluid and dynamic than one using a traditional departmental structure.

The matrix structure also is less hierarchical than a structure in which department heads plan, inform, oversee, and move projects along. In a matrix organization, the team is empowered to make decisions, and team members are accountable to the other members of the team rather than to their department head or another superior within the organization.

The strengths of the matrix structure are that it supports complex decision-making and adjustments

to changes in an unstable environment, and it allows for flexible sharing of resources. The challenges are that it requires good interpersonal skills and collegial relationships, so it is essential to invest time and effort in fostering relationships among team members. The team process can be time-consuming, requiring frequent meetings and conflict resolution sessions. Consequently, teams can take a long time to make decisions, and accountability is not always clear. In contrast, organizations that are organized by function (i.e., siloed) may be slow to respond to environmental changes, have poor horizontal coordination and a narrower view of organizational goals, and are likely to be less innovative (Duncan, 1979).

Matrix arrangements can also be temporary, pulled together, and dissolved as required. JCNI provides an example of using a matrix structure in the community change field; JCNI created teams that worked together for 90 or 120 days on specific projects and then disbanded.

COLLABORATIONS AND NETWORKS

In a community change effort, it is impossible for one organization to do everything. Change agents and organizations must work in teams, partnerships, collaborations, or networks. The previous section examined teamwork and team structures within community change organizations; this section explores what a complexity lens adds to our understanding of how organizations can work together and what types of interorganizational structures and relationships can support their efforts.

FIGURE 9

CROSS-DISCIPLINARY TEAMS

When the [Skillman Foundation](#) launched its Good Neighborhoods/Good Schools/Good Opportunities initiative in Detroit in 2006, leaders restructured the foundation's job descriptions to reduce programmatic silos; introduced team meetings, at which senior staff from two traditionally separate departments shared information and helped to shape strategies across programs; and added informal lunch meetings where staff could update each other and socialize. Staff described these changes as a "huge shift" in the organizational culture, but one that strengthened both their place-based work and their citywide schools work (Brown, 2012, 87).

At [The California Endowment](#), two separate departments work on the Building Healthy Communities initiative launched in 2009. Healthy California manages statewide advocacy on health issues, while Healthy Communities manages efforts to create healthy communities in 14 places across the state. Until 2011, there was no organizational structure to bring the two teams together and no organizational culture to support collaborative work within the foundation. Now, staff of the two departments meet regularly and have formed work groups with members of both departments.

Much has been written about the challenges of managing formal collaborations in place-based change efforts (Kubisch et al., 2010; Erickson, Galloway, & Cytron, 2012). The collective impact movement has provided a very useful set of management strategies for collaborations that involve multiple community stakeholders working together to produce a desired outcome such as school success (Kania & Kramer, 2011). Collective impact strategies seem to apply best when the goal is to produce outcomes on a specific issue rather than for more comprehensive efforts, and to produce changes at the individual level by way of organizations that already exist to work on the issue and have data-tracking capacity.

Networks serve a different purpose and aim for types of outcomes different from those of collaborations. A wide variety of change-making efforts are using networks of organizations and individuals to advance their goals. Unlike the formal collaboratives used in many place-based and collective impact efforts, these organizational networks are more loosely connected and less focused on achieving specific agendas and outcomes. They are used as mechanisms to integrate projects, create synergies, increase effectiveness, spark innovation, strengthen influence, catalyze broader action, and develop scale. The philanthropic sector has paid particular attention to the potential to increase effectiveness by creating networks of grantees (Scarce, 2011; Easterling, 2012; Scarce, Kasper, & Grant, 2009, 2010).

In Chapter 3, we discussed networks from the perspective of connections between and among neighborhood residents (e.g., social networks) and networks as vehicles for community groups to take on systems change work. Here we focus on networks of organizations and networks of organizational leaders. These networks can help connect organizations within and across domains, enabling participants to integrate perspectives and programs in ways that benefit all of the member organizations. For example:

- The **Boston Green and Healthy Building Network**, created and supported by the Barr Foundation, linked 10 public health–oriented groups that focused on unhealthy buildings as a root cause of illnesses like asthma with environmental groups that wanted to make buildings energy-efficient and nontoxic. Participating in the network broadened members’ thinking about the connection between energy efficiency and good health. They became less competitive and more collaborative, willing to share connections and access to policymakers, and coordinated their efforts to bring buildings up to code (Tener & Nierenberg, 2008).
- The **Massachusetts Smart Growth Alliance** brought together seven organizations with different specialties including architecture, housing advocacy, affordable housing development, and the environment. The groups combined their perspectives in a holistic policy strategy (Plastrik & Taylor, 2006).
- Instead of starting new networks to increase the scale and impact of its work, **the Mary Reynolds Babcock Foundation**, a regional foundation based in North Carolina, works to strengthen existing networks that organizations pursuing social and economic change have formed on their own. Program officers (known as “network officers”)

serve as capacity builders, weavers, and connectors for these networks. They help make connections between networks and across sectors, introduce networks to new organizations that could potentially join, and help individual networks become more strategic by questioning and adapting their strategy when they encounter successive obstacles and by engaging in systems thinking (Easterling, 2012).

One purpose of networking organizations lies in the hope that connecting their work will lead to greater effects of scale, but network outcomes are not predictable and can't be imposed from the outside. The primary and immediate goal is not collaboration around a specific project but, rather, the exchange of ideas, increased flow of information, exposure to new ideas, and shared contacts. Therefore, weavers and funders of networks need to be comfortable with the idea that the work will emerge and not feel the need to control the process. Network members need to understand and help others to understand that “uncertainty and flexibility are advantages, not limitations, of a network” (Tener & Nierenberg, 2008, 21).

Ties and connections among network members develop and grow over time. As they do, the way the members connect to and interact with each other changes, and the shape of the network changes as well. In the beginning, member organizations typically are more strongly connected to the person or organization weaving the network and to the hub of the weaver's connections than to each other. As networks mature, however, they display more member-to-member connections that don't go through the central hub, and new hubs develop throughout the network structure (Plastrik & Taylor, 2010). This strengthens the capacity for joint action and makes the network a good vehicle for rapidly disseminating information (Krebs & Holley, 2006).

Over time, some networks evolve from looser to tighter connections and begin to act in more strategic ways. Examples of unanticipated collaborations involving community change that have emerged from well-cultivated networks include:

- **The Barr Foundation's Fellowship Program** for Boston-based nonprofit leaders was designed with an understanding of complexity theory. The program is intended to stimulate leaders in a variety of fields to take on innovative work and to build a citywide network of nonprofit leaders who can collaborate. The Barr Foundation selects a cohort of 12 Fellows every two years. Their three-month sabbatical, which begins with a two-week group trip to countries like Haiti or Mexico, is intended to be a “disruptive experience”; the expectation is that bonding with other fellows in an unfamiliar environment filled with challenges will strengthen participants' ability to work together in the future. The foundation convenes fellows from time to time, but staff do not set an agenda or a timetable, suggest how the fellows might work together or what they should work on, or set expectations for outcomes.

Several fellows worked together to develop the first bilingual English-Spanish high school in Boston, which opened in 2012. And relationships forged through the network

helped Boston nonprofits coalesce around a collaborative neighborhood transformation effort headed by the Dudley Street Neighborhood Initiative under the leadership of Barr Fellow John Barros. In 2011, the plan won a \$6 million implementation grant in the second round of federal Promise Neighborhoods funding. Barr fellows participated in work groups on housing, parenting, family health, and the environment, and enriched planning with their diverse perspectives (Hughes & Goldenhar, 2012; Lanfer, Brandes, & Reinelt, 2013).

- The creators of the [Appalachian Center for Economic Networks \(ACEnet\)](#) wove together a network of uncoordinated food clusters in southeast Ohio to incubate a project that prepared and packaged food items. The network expanded by involving clusters of restaurants and small farmers in the design process, and these connections opened up other business opportunities (Krebs & Holley, 2006).

Social capital is the basis for networks of organizations, just as it is for networks of individuals, cross-disciplinary teams, and adaptive management in general. Numerous reports and studies on networks emphasize that the ability to coordinate and collaborate rests on relationships, not formal structures or processes, for coordination. Moreover, the relationships cultivated in networks of organizations are what create the social capital necessary to support future work (Krebs and Holley, 2006; Tener and Nierenberg, 2008; Wei-Skillern & Silver, 2013).

Networks flatten power hierarchies among organizations. In networks, like collaboratives, authority is distributed across the membership. Network members decide together what they want to do and are accountable to each other for getting the work done. (It is worth noting that most studies focus on networks of peer organizations that work in different domains; the fact that the organizations are on equal footing improves members' ability to exchange knowledge and information, coordinate, collaborate, and be answerable to each other. It is not clear whether networks operate equally well when members possess different amounts of power or have hierarchical power structures that must be overcome.)

Working in an organizational network requires a change in how organizations' staff think about and behave toward other organizations (Wei-Skillern & Silver, 2013; Meehan et al., 2012). Members have to regard their work together as vital to the work of any one organization if the network is to become more than the sum of its parts. Instead of focusing on their own organization's growth and control, network members have to focus on the overall mission and learn to trust each other. Instead of focusing on garnering resources, network members try to share resources. And instead of having a narrow definition of the issue, networks try to focus on the big picture. A similar shift in thinking is required among the network's weavers and funders.

The attributes of the network mind-set are strikingly similar to the shift experienced by "extraordinary" leaders and are consistent with the leadership needed within organizations involved in community change and in relationships with community members.

The infrastructure described in this chapter—composed of extraordinary and “transformational” leadership skills; new funding relationships; coaching, sensitization, and other experiences that foster team growth; and organizational and management structures that distribute power evenly and support broadly shared decision-making—is necessary to help participants in community change efforts apply the complexity-based concepts, strategies, and practices discussed in Chapters 1, 2, and 3. In the next chapter, we suggest specific ways in which various actors in the community change field can help create a system that is more responsive to complexity.

Implications for Key Actors in the Field of Community Change

This volume seeks to help practitioners in place-based community change efforts become more aware of and responsive to the complex nature of place-based community change. It suggests several ways to frame the nature of complex issues, complex adaptive systems, and adaptive and situational leadership. It describes a variety of complexity-based practices in the key areas of strategic planning, adaptive management, evaluation and learning, and aligning work across domains and at different levels of systems. And it identifies elements of infrastructure needed to support a complexity-aware approach to community change.

Our exploration suggests that applying a complexity lens to place-based change efforts has important implications for an array of actors who engage in and support place-based community change, including practitioners, community residents, public- and private-sector funders, and evaluators. Our guidance for each group of actors is as follows.

Implications for Practitioners

- Emphasize the importance of situational leadership in place-based community change and press to adopt a complexity lens when appropriate.
- Encourage local stakeholders to understand and map the complexity of their situation so that they are less likely to fall into traditional styles of leadership and management when adaptive management is needed.
- When faced with complexity and uncertainty, spend less time on up-front planning and more time learning by doing, using emergent strategy and flexible management processes.
- Develop robust monitoring and evaluation systems designed to provide real-time feedback on strategy, paying extra attention to data on anticipated and unanticipated effects. Include multiple lines of evidence and perspectives.
- Use a systems lens to develop strategic links across programs and domains, identify leverage points, monitor progress, and track interrelated outcomes.
- Explore the systemic and structural dimensions of community context, issues, and problems—not just the individual and familial aspects. Be open to working in coalitions, alliances, and networks—including organizing and advocacy efforts—to address systemic and structural barriers that limit opportunities for distressed communities and their residents.

- Focus on cultivating managers, organizations, and networks that can work with a systems lens, participatory processes, and experimental approaches.

Implications for Community Residents

- Share your understanding of local issues, needs, and priorities. Your expert knowledge and experience are the on-the-ground truth that should help shape every aspect of a community change effort, including its priorities, goals, measures of success, strategy, implementation, and assessment.
- Seek to understand the various perspectives and interests of other residents and actors in place-based community change efforts. Everyone has insights that can help develop a richer understanding of what is happening in a community.
- Get fully involved in order to make a difference where you can. It is the cumulative effects of many change efforts, big and small, that lead to positive community change.
- Take time to develop and nurture informal and formal networks in your community. They strengthen community life, amplify citizen voice, and can be springboards for collective action.

Implications for Public and Private Funders

- Emphasize the importance of achieving tangible outcomes, but be clear about what is plausible and reasonable to expect of efforts that tackle complex issues in vulnerable communities.
- Embrace a paradigm of accountability in which grantees excel at real-time feedback, evidence-based learning and adaptation, and long-term progress toward outcomes rather than developing elaborate plans, implementing strategies with rigid fidelity to the original plan, and delivering results on a fixed schedule.
- Adopt embedded and relational funding practices that foster a trustful working relationship with the grantee and produce greater understanding of their emerging strategy and context—two preconditions for allowing grantees the flexibility to work adaptively.
- Consider adjusting investment strategies to include the following:
 - > Support for community building as a critical piece of social infrastructure and for deliberate, robust participatory practices as a central part of any community change initiative
 - > Support for networking, planning, and coordinating activities as a central and necessary ingredient of place-based efforts to tackle complex community issues (not as an external overhead cost that should be covered by someone else)
 - > A portfolio approach that balances investment in straightforward strategies and predictable results with higher-risk strategies—much like the balance between bonds and equity investments in the stock market

- Be open to opportunities to work with practitioners and other funders to link place-based interventions to broader reform efforts that tackle more deeply entrenched systemic problems.

Implications for Evaluators

- Balance the need for evaluation as a tool for accounting for investments with the ongoing and critical need to give practitioners real-time, information-rich feedback on their efforts.
- Approach the emergent nature of theories of change and outcomes as a normal part of developing and adapting strategies rather than a barrier to developing measures and designing evaluations.
- Seek out feedback on anticipated and unanticipated outcomes of community change work. Together, they provide a true picture of what is unfolding, offer insight into the nature of complex challenges, and can signal whether strategies are on track or require small to radical adjustments.
- Be robust and practical about generating “evaluative evidence” in complex change initiatives. Collect multiple types of data and lines of evidence. Use randomized control trials only in those select niches of community change for which they are feasible and helpful to address key questions. Employ participatory approaches that meaningfully involve all the relevant actors of community change.
- Be prepared to adjust evaluation design and measures quickly to accommodate shifts in the community change effort’s context, or in practitioners’ understanding of the issue, strategies, goals, and metrics for success. All of these factors will shape the questions that need to be answered and, therefore, the evaluation design that is needed.

These observations offer a starting point for addressing the wide range of individual, organizational, and field-wide capacities needed to work more effectively in place-based community change—and to improve outcomes for vulnerable communities and the children and families who live there. We turn next to a few big-picture reflections for practitioners to consider as they encounter complexity in communities.

Reflections and Questions for Further Exploration

Turning a complexity lens on community change brings some familiar things into sharper focus and highlights other dimensions that were previously outside the range of view. A complexity lens helps us see in more detail what is close up and near at hand, while widening our field of vision to reveal things that are farther away.

Our exploration of how a complexity lens and adaptive practices can be used to improve community change efforts has identified helpful practices in several areas of activity. We have seen how the practices play out in efforts to link strategically across domains and across levels, how they inform efforts to change systems, and how they create institutional infrastructure to support adaptive work. Some of these practices improve the traditional landscape and focus of place-based community work, while others push them in new directions.

This chapter begins by offering eight summary reflections—essential points that practitioners should bear in mind as they confront complexity in their work. We then summarize the challenges and misconceptions that community change practitioners face when addressing complexity and managing adaptively. We conclude by posing three questions about complexity and adaptive management that the community change field should take up as it moves forward.

Summary Reflections

REFLECTION 1: COMPLEXITY REQUIRES A NEW MIND-SET.

A complexity lens offers a profoundly different view of the world from the machine model that dominated scientific inquiry and popular thinking for many centuries. Complexity science views the world as dynamic and alive, made up of complex adaptive systems that are self-organizing and always changing. In this world of multiply interrelated systems, cause and effect are not always clear, change is nonlinear, and results are unpredictable. Recognizing and responding to this new reality is no easy task. It challenges assumptions about the way the world works that are deeply embedded and constantly reinforced through everyday experiences. Not responding to complexity, however, limits the chance of making progress on the kinds of problems that community change efforts address.

REFLECTION 2: COMPLEXITY DEMANDS SITUATIONAL LEADERSHIP.

Community change practitioners should use whatever combination of management approaches best suits the situation in which they find themselves. Not all problems that community change practitioners deal with are complex. When simple issues are involved (that is, when cause-and-effect relationships are clear, results are predictable, and stakeholders are mostly in agreement), traditional management is appropriate. When things are complex, then adaptive leadership is not only desirable but essential. Applying a simple framing and traditional approaches to the complex problems and complex environments that define community change efforts will not solve or improve them. An effective situational leader knows when to apply each approach and how to navigate between them.

REFLECTION 3: COMMUNITY BUILDING IS MORE IMPORTANT THAN EVER.

Viewed through a complexity lens, the community change process looks more social and less technical and mechanistic, and the participation of local residents is not just desirable but essential. This is by no means a new insight for community change agents, but it gains potency with a complexity lens and an understanding of complex adaptive systems. To the traditional principle of democracy—that those who are affected by decisions must be involved in shaping the decisions—a complexity perspective adds the conviction that participation is essential because it is impossible to understand and address complex problems and the interactions of multiple systems without input from a full range of actors, including those who experience those interactions in their own lives. Community members need to be capable and empowered to be involved and take action; this requires skill building and social capital development. Building, catalyzing, and mobilizing social capital through relationships, connections, and networks are important at all levels of a community change effort: among residents, within and across organizations, and within and across communities.

REFLECTION 4: COMPLEXITY AMPLIFIES THE PROCESS-PRODUCT TENSION BUT PROVIDES WAYS TO NAVIGATE IT.

Change is a process, and like any process it takes time. Some practitioners believe that the process of being inclusionary, of developing a collective vision and plan for action, and of building trust, must precede action—however long it takes. Others feel pressured to produce tangible results more quickly. The community change field calls this the process-product tension and views it as an ongoing management challenge in place-based work. Complexity braids both views into a paradoxical resolution: going slower in the beginning makes it possible to go faster later on. In other words, instead of starting with a large-scale, elaborate project, first conduct small experiments to test the waters, learn from them, and build out over time. The takeaway here is that there are no shortcuts to being inclusionary and building social capital, but there are practices that can help groups navigate the process better. Using a planning and implementation process that matches the reality of the empowering and self-organizing processes creates preconditions that enable practitioners to work more deeply and quickly in communities over time.

REFLECTION 5: COMPLEXITY EXPANDS THE SCOPE AND VISION OF CHANGE.

A complexity lens reaffirms that place-based community change efforts should ultimately be about changing the way business is done and not just doing more of the same. This requires multiple types of change at multiple levels: the individual, the familial, the organizational, and the systemic. Changing communities involves changing mental models and stereotypes along with individual behaviors, institutional practices, and policies. Over the years, a number of community change efforts seem to have lost sight of this holistic vision of change; the complexity lens brings it back into focus.

Understanding how complex adaptive systems operate also suggests new sources and leverage points for catalyzing change—not mechanical levers that can be manipulated to increase or speed up impact but relationships, networks, and a deep knowledge of community context.

REFLECTION 6: COMPLEXITY BROADENS THINKING ABOUT SYSTEMS CONNECTIONS AND ROOT CAUSES.

A complexity or system perspective helps practitioners in place-based community change efforts look for the causes and connections behind the outcomes experienced by individuals, families, and neighborhoods. This offers a new way to think about both problems and solutions—one that recognizes and responds to the role of institutional practices, policies, social structures, and power relationships as well as the actions of individuals. Practitioners' thinking becomes richer still when the complexity lens is combined with additional lenses, such as an equity or regional framework.

REFLECTION 7: COMPLEXITY CONFIRMS THAT THE COMMUNITY IS A CENTRAL LOCUS OF ACTION.

Several factors explain why neighborhood- or community-level interventions are needed and why they are potentially powerful vehicles for improving the quality of life for individuals, families, and communities. Neighborhoods offer important opportunities for leveraging change because so many factors that shape individual development and long-term opportunities are concentrated in and reinforced by neighborhood conditions and connections. Neighborhoods offer a more manageable scale to address the interconnected factors underlying quality of life; at a larger scale, these interconnections are harder to see and harder to address in their totality. Working at the neighborhood level also allows change efforts to tap into underutilized resources that are powerful drivers of change: the skills, knowledge, and networks of neighborhood residents and groups. Finally, by winning the commitment of local actors, neighborhood-level interventions can kick-start a longer-term, self-generating process of renewal, because local residents have a high stake in the outcome. (External funding and resources are also essential to maintain that process, of course.)

REFLECTION 8: COMPLEXITY ALSO REVEALS THE LIMITATIONS OF LOCAL ACTION.

Along with the power that comes from community-level action, described in Reflection 7, a complexity lens also highlights the limits of place-based efforts to create the conditions for truly transformative change. This is another inherent paradox for place-based community change efforts: Communities are profoundly affected by what happens in the larger systems around them—by events, developments, and decisions that are outside the community’s control. Therefore, truly transformative social, economic, and political change will also require work by people and institutions at the city, regional, state, and federal levels as well as in the community. Nevertheless, community-centered place-based work remains essential, for the reasons discussed in Reflection 7, and because it can inform and contribute to the work at other levels. The complexity lens and adaptive management practices offer opportunities to improve the effectiveness of efforts at all levels.

Challenges and Misconceptions

Our investigation found that numerous community change practitioners respond to the complexity framing because it describes the way they naturally work. Complexity captures the dynamic, unpredictable conditions in which they operate and many of the practices that they intuitively follow. A complexity lens makes sense of the tensions they struggle with in their efforts to strengthen communities and offers helpful guidance to navigate and manage the challenges they face.

Nevertheless, practitioners face four basic challenges that limit their ability to fully address complexity and to be adaptive managers: (1) It is difficult to communicate the concepts and premises of complexity to others; (2) internal resistance comes from their staff and boards; (3) current practice in philanthropy and policymaking supports traditional rather than adaptive management; and (4) the fear of risk must be balanced with the need for experimentation.

CHALLENGE 1: COMMUNICATION

Complexity and adaptive management can be a hard sell to residents, staff, board members, funders, sponsors, and policymakers. Practitioners find it difficult to convey the theoretical underpinnings and underlying science, and the terms and vocabulary that explain complexity can be both incomprehensible and off-putting. Translation and analogies are needed to help people understand complexity and to show how it is directly relevant to their work.

CHALLENGE 2: INTERNAL RESISTANCE

Grappling with complex problems and environments can leave people feeling overwhelmed and disempowered—not just because they are dealing with multiple partners, projects, and levels of change simultaneously but because they resist the notion of a world characterized by a multitude of interactions, untraceable cause-and-effect relationships, nonlinearity,

uncertainty, and unpredictability. It is difficult and unsettling for many people to acknowledge that there are not always clear answers or ways to proceed.

Resistance to the complexity mind-set occurs widely, and not just in the community change world. For example, some medical students objected to the Mayo Clinic's case method approach to sensitize them to decision-making amid complexity (see Chapter 4) because they found that weighing alternatives and crafting an appropriate response took too much time and resulted in what one called "cognitive overload." Others recognized the complexity of the medical situations they were analyzing but still wanted to be told "the one thing to do" (Zuger, 2014). Part of the challenge for managers of complex efforts is to relieve some of this pressure.

CHALLENGE 3: EXTERNAL PRESSURE

Pressure to support only "evidence-based" strategies and results-based planning and implementation has several consequences that can limit practitioners' ability to address the inherent complexity of their work. It is precisely because traditional methods and approaches have not solved the complex problems that community change efforts must try new strategies, many of which lack a comprehensive evidence base. Moreover, the information that makes up the most rigorous evidence base often draws on a narrow set of questions and practices, which further limits its relevance for complex community change efforts. And complexity poses doubts about the relevance of any research base over time. As locations and circumstances change, and the context and larger environments shift, repeating a well-established intervention may not yield the same results. These facts argue for using more innovative efforts even if unproven, particularly to address deeply entrenched complex problems that have resisted previous interventions. The appropriate response, adaptive practice suggests, is to try new things on a pilot or experimental basis and learn from the experience.

Equally difficult for community change managers is the current trend of requiring results-based planning and implementation. Measuring progress and outcomes is important, but results-based planning is better suited for "plan-the-work-and-work-the-plan" types of interventions than for adaptive and emergent approaches. Results-based planning and implementation methods also work best when outcomes are sought at the individual level. They work less well for outcomes related to community capacity and assets that are not just aggregates of individual characteristics—the outcomes that are important to community builders and to many of the processes that define complexity.

CHALLENGE 4: MANAGING RISK

Another challenge for practitioners of community change involves dealing with risk (even calculated risks) in a funding environment that focuses on results. As noted throughout this volume, complex community issues often require innovative approaches because better-known strategies have not produced the transformative changes that are needed. Complexity

theory suggests that creative and innovative solutions can emerge when people manage the tensions that define complex place-based work and balance the discordant views and perspectives of multiple stakeholders. However, difficulties and challenges—even missteps—are also to be expected when trying something new. They should be seen as learning opportunities and steps in a process that eventually leads to better outcomes, not as risks to be avoided at all costs.

The message for place-based change practitioners is to use tried-and-true approaches when it makes sense to do so, but not to fear innovation when old methods aren't working and there is reason to believe that a new strategy, approach, or program could work better. The key is to build in a process to monitor, assess, review, and evaluate how the innovation plays out and to rethink the assumptions and design if warranted—that is, to learn from the experience.

In addition to the general challenges described here, practitioners often struggle to overcome misconceptions about complexity and adaptive management. Combating these erroneous views can help to make a case for the value of a complexity-based approach to community change. We highlight two misconceptions in particular.

MISCONCEPTION 1: COMPLEXITY IS CHAOS, AND ALL ATTEMPTS TO DEAL WITH IT ARE CHAOTIC.

Many people confuse complexity with chaos and assume that adaptive responses are chaotic as well. Practitioners are concerned that if they begin many different things, wait to see where the energy is and what emerges, continue to develop new strategies, and adapt and adjust over time, it will appear that they don't know what they are doing—that they are lurching from one strategy or idea to another, or being reactive rather than proactive.

In reality, complexity is less chaotic than it may first appear; underlying patterns and simple rules provide some guidance and order. The same is true of adaptive management practices. The following observations suggest ways that community change practitioners maintain constancy in the face of unpredictability, interconnectedness, adaptations, and emergence:

- Complex community change efforts do emphasize processes to develop and support inclusive decision-making, collaborative management, trust, relationships, and social capital and to make sure the work has sufficient support to grow and emerge over time. But it is equally clear that in complexity theory, moving to action is part of the process; thus the focus on “minimum specifications,” “good-enough” vision, frequent reviews, and so on. Adaptive management practices create a cycle of shorter-term planning, action, reflection, and adaptation—*not* an endless process of planning and deliberation.
- It is entirely appropriate to adapt and learn in something as complex and interrelated as a community revitalization effort. It's like using a GPS device to reach a destination: one knows the general direction to go, but the precise route will vary if there is road construction, an accident, or heavy traffic; if the car breaks down and needs repairs; or if a new road opens up, providing a more direct path.

- The values, mission, and methodology that a manager or organization follows—all of which are honed over time—provide a way to remain strategic in the face of obstacles and opportunities. These elements keep practitioners from simply responding blindly to shifting circumstances. Consistency can also be found in the management practices and structures used in an adaptive change effort. Actions and impacts are strengthened not only through mutually reinforcing strategies but also through mutually reinforcing ways of managing and structuring the change process and through the relationships between managers and staff, among organizations, and between organizations and community groups.
- Consistency and coherence also come from the principles, processes, and practices that define adaptive management, as discussed throughout this report. The techniques, tools, and practices of adaptive management are interrelated and coherent, giving resiliency and internal consistency to the effort.

MISCONCEPTION 2: ADAPTIVE MANAGEMENT IS TOO MUCH ABOUT PROCESS AND NOT ENOUGH ABOUT ACTION AND OUTCOMES.

A common misapprehension is that the uncertainties and interconnections within complex problems are so overwhelming that they paralyze action and, consequently, that the effort to understand complexity and develop appropriate solutions focuses too much on process and not enough on action and outcomes. To counteract this misconception, we offer these observations:

- Building a resilient infrastructure of connections, relationships, networks, and social capital into the planning and design phase helps to jump-start implementation and provides an ongoing source of ideas and knowledge that can be the basis for action. As one manager explained, “We say we have built a platform for action that entails shared knowledge, shared infrastructure, and a shared methodology—all of which allows us to be quicker to the game, more efficient in the process, and more effective.”
- Complexity’s emphasis on adaptiveness, emergence, and learning by doing makes it essential to know what is happening in real time. Thus adaptive managers do not disregard data and evidence; they use them to assess performance just as traditional managers do. However, adaptive managers are open to multiple forms of evidence, and they emphasize the need to use data and evidence in context. Their advice is: “Understand what the data mean in the context of real neighborhoods and real lives. Don’t be driven just by the numbers, and don’t let data control you. Be data-informed and learning-driven, not data-driven.”

Questions for Further Investigation

As the use of complexity frameworks and adaptive management matures in the field of place-based community change, several questions will require further investigation.

QUESTION 1: CAN COMPLEXITY MOVE THE NEEDLE ON POPULATION CHANGE?

We know that a complexity lens can help people weave projects and networks together more effectively; tackle interrelated issues; elicit a richer and fuller picture of a community; and, at a small scale, adapt to fast-moving contexts. This empowers local actors to do more and to be better managers in their own spheres of influence. Nevertheless, this work continues to be constrained by the demands of the community change ecosystem and by the actions of external systems and structures. As noted earlier, funding constraints, evaluation frameworks and time frames, reporting requirements, pressure to produce certain types of outcomes, and the push for evidence-based policy all undermine and circumscribe practitioners' ability to manage adaptively and address complex problems.

Because the entire system in which community change organizations function does not operate adaptively or support adaptive practice, there is as yet no evidence to show whether applying a complexity lens can move the needle on population change. Lone organizations that apply a complexity lens have only minor leverage for leading change adaptively. For adaptive work to take root and flourish, actors and organizations at all levels of the place-based community change field need to bring a complexity lens to their work and to support and facilitate adaptive management in other organizations.

QUESTION 2: WHAT ARE THE INSTITUTIONAL OR ORGANIZATIONAL IMPLICATIONS OF FULLY EMBRACING A COMPLEXITY LENS?

Our study highlighted complexity perspectives on community change practices and their implications for community change organizations. In other fields of practice (e.g., the military, business, foreign aid), organizations that fully embraced a complexity lens have reorganized themselves to be more decentralized, nimble, and responsive. What can these examples teach the field of place-based community change? To what extent do they ultimately lead to better outcomes? Where are comparable examples in the field of place-based community change, and what can we learn from them?

While we have some sense of the answers from examining organizations in the community change field that are beginning to work within a complexity framework, the fuller answer to this question requires more examples and further investigation.

QUESTION 3: IF THE WHOLE ECOSYSTEM OF COMMUNITY CHANGE ADOPTED COMPLEXITY, WHAT WOULD IT LOOK LIKE?

This volume focused largely on the emerging practices of a few managers in place-based community change and, to some degree, the actors who support them. But what would the place-based community change field look like if everyone adopted a complexity lens and adjusted their organizational design and practices accordingly? How would residents, managers, evaluators and researchers, funders, and technical assistance providers work together in a systemic, experimental, and participatory fashion? It is not possible to design an ideal complexity-based community change ecosystem from scratch, but exploring these questions would help to enlarge understanding of the expertise, competencies, methodologies, and structures that can support adaptive work and strengthen actors' ability to grapple with the complex problems they are trying to solve. The ongoing challenge will be to build the capacity to address complexity more systematically.

This report explored what might be called “first-generation” adaptive leadership and management practices in place-based community change. These were largely developed organically over time, often with little direct reference to complexity science or an explicit framing of adaptive practices. They provide an important grounding for the field and offer rich lessons that others can draw on, and we hope we have accurately captured insights from this emerging work.

As the field moves forward, we expect to see a second generation of place-based work that is more explicitly grounded in complexity thinking and practice. We hope that others will investigate it to build more and better evidence about effective practices that can help practitioners strengthen their work and improve outcomes for communities and their residents. In the meantime, we hope this early exploration of complexity and community-focused change will help practitioners and other actors make sense of something they have long felt but could not always describe: that the world is complex, and when we recognize that complexity it changes both what we do and how we do it.

Appendix A: Organizations of the Advisory Team Members

THE CALIFORNIA ENDOWMENT

The California Endowment, founded in 1996, is a private, California-focused health foundation whose mission is to expand access to affordable, quality health care for underserved individuals and communities and to promote fundamental improvements in the health status of all Californians. In 2010, it launched Building Healthy Communities, a 10-year, \$1 billion effort in 14 underserved, geographically and ethnically diverse communities across the state. To make their communities healthier, residents and other community leaders work with a variety of organizations and institutions to improve individual, family, and community health outcomes by improving employment opportunities, education, housing, neighborhood safety, environmental conditions, and access to healthy food. Healthy California, the foundation's policy and communications arm, operates the Health Happens Here campaign, which challenges conventional assumptions about health and aims to advance social justice and equity in underserved communities. (See www.calendow.org.)

COMMUNITY SOLUTIONS

Community Solutions works to prevent homelessness by helping communities across the country identify high-need individuals and families and connecting them to housing and services that end their homelessness and improve their health and self-sufficiency. Community Solutions (formerly called Common Ground) coordinates the 100,000 Homes Campaign, a national movement of more than 235 cities, counties, and states that together committed to housing 100,000 vulnerable and chronically homeless individuals and families by the summer of 2014. Community Solutions also helps communities transform key physical spaces into community spaces and housing. Working with the Brownsville Partnership in Brooklyn, New York, it coordinates the work of residents and a multisector network of organizations to solve economic, housing, health, and public safety challenges. Community Solutions engages in similar work with the Northeast Neighborhood Partnership in Northeast Hartford, Connecticut. (See www.cmtysolutions.org.)

DUDLEY STREET NEIGHBORHOOD INITIATIVE

The Dudley Street Neighborhood Initiative (DSNI), formed in 1984, is a nonprofit community-based planning and organizing entity rooted in the Roxbury/North Dorchester neighborhoods of Boston, one of the poorest sections of the city. DSNI's comprehensive, resident-driven approach to neighborhood revitalization focuses on economic, human, physical, and environmental growth; it prioritizes sustainable economic development, community empowerment, and youth opportunities and development. Through the unprecedented acquisition of eminent domain and partnership with the city, DSNI established a community land trust with permanently affordable housing and antireforeclosure protections. It has created more than 400 affordable homes and several community spaces in accordance with the community's collective vision for the neighborhood. DSNI currently

serves as the lead agency in the multipartner collaborative that operates the Boston Promise Initiative. (See www.dsni.org.)

HOPE COMMUNITY

Hope Community started as a small shelter and hospitality house in the Phillips neighborhood in downtown Minneapolis in 1974. In the 1990s, after the area had experienced decades of property abandonment, neglect, and disrepair, Hope Community committed to revitalizing the neighborhood. It couples the development of affordable housing and public spaces with extensive opportunities for community engagement. Each year, hundreds of neighborhood youth, adults, and families engage in learning opportunities, art projects, leadership training and organizing, community dialogues known as Listening Projects, and community and cultural events. More than \$70 million of public and private investments have fueled the physical transformation spearheaded by Hope Community. It has developed affordable housing; built or renovated apartment buildings, individual homes, commercial spaces, a community center with office space, playgrounds, and community gardens; and worked on improvements for the local park. (See www.hope-community.org.)

JACOBS CENTER FOR NEIGHBORHOOD INNOVATION

Founded in 1995, the Jacobs Center for Neighborhood Innovation (JCNI) is an operating nonprofit foundation that works in partnership with the Jacobs Family Foundation and residents of San Diego's Diamond neighborhoods to build a stronger community through entrepreneurial projects, hands-on learning relationships, and the creative investment of resources. JCNI brings residents, organizations, and funding partners together to build the social well-being of the neighborhoods; create businesses, jobs, and community wealth; enhance the physical environment through neighborhood-owned assets; and expand opportunities for residents to participate in planning, decision-making, implementation, and ownership of community change. In partnership with residents, JCNI planned, designed, built, and leased Market Creek Plaza, a 10-acre commercial and cultural center, and developed the Joe and Vi Jacobs Center, a community space and conference center. Both will ultimately be owned by community residents. (See www.jacobscenter.org.)

LOCAL INITIATIVES SUPPORT CORPORATION/CHICAGO

The Local Initiatives Support Corporation (LISC/Chicago) connects neighborhoods to the resources they need to become stronger and healthier. LISC/Chicago operated the MacArthur Foundation's comprehensive community development initiative, the New Communities Program in 16 Chicago neighborhoods from 2003–13. LISC/Chicago continues to work with the New Communities Program Network of lead agencies, which now serve 27 community areas, and also supports a variety of projects and initiatives in 10 additional Chicago neighborhoods. These include the Center for Working Families, Eleve8 schools, and Smart Communities, a federally sponsored program that focuses on digital skills training, and other projects in health, housing, business, safety, and education. (See www.lisc-chicago.org.)

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