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1

Our Surroundings, Ourselves

CONSIDER THESE TRUE and all-too-common stories. A woman walking on the South Side of Chicago is accosted by a man who puts a gun to her neck and takes her to a nearby abandoned building. When he is unable to get into the boarded-up building, he forces her into an empty lot and sexually assaults her.¹ A boy in East Saint Louis is laughing one minute and breathless from an asthma attack the next. An ambulance rushes him to the hospital, but, in a city where garbage collection can be sporadic and raw sewage backs up into people's homes, his asthma will only return.² A young man in suburban New Jersey is killed when the car in which he is riding crosses a roadway divider and hits oncoming traffic. The car, which was driven by another young man, is so badly damaged that firefighters need to forcibly extricate both driver and passenger.³

These are all tragedies that could have been avoided. Now consider the following true stories. A woman in Southwest Philadelphia decides to do something about the vacant lots in her neighborhood: eyesores created when abandoned homes were torn down and nothing replaced them. She transforms these spaces by picking up the trash and debris and planting grass. The abandoned space becomes a pocket park that is used for picnics, community meetings, and arts and crafts for local kids. With the transformation of these formerly vacant lots, crime drops in her neighborhood and her neighbors feel less stressed.⁴ A boy in the High Point neighborhood of Seattle moves into a home that has been specially designed to prevent asthma and other breathing problems. He is happier, healthier, and can breathe much better here, while his parents can finally get a restful night's sleep.⁵ A young man in Charlotte's Uptown neighborhood no longer needs to drive his car to work because he lives near a new light-rail line and a no-traffic bikeway. He is part of a new generation, less exposed to the dangers of the road because new transit options have made personal cars less attractive.⁶ An immigrant family in Los Angeles that lives near

and works in a newly revitalized, well-managed, and now thriving commercial district finds that they suddenly have a greater choice of goods and services, many of which are locally sourced, and their home neighborhood has become safer and more vibrant due to deeply invested community stakeholders and place managers.⁷

Real lives are changed in positive ways with thoughtful rehabilitations of places. Real lives are marred when we let places deteriorate and urban blight worsen. While it is easy to point to ways that urban environments are harmful, cities are already some of our safest places and ripe for further improvement. Accidents, poor health, and victimization are not always unavoidable mishaps that occur as a matter of poor luck or lack of individual determination.⁸ When someone in a disadvantaged neighborhood manages to live a safe and healthy life, it is easy to credit their personal drive in making the best out of their hard-scrabble surroundings. But that's only part of the equation, maybe even just a small part. Good health and personal safety result from more than just good individual choices and what we teach our children, especially for those living in dangerous and unhealthy surroundings.⁹ Paying close attention to those surroundings, as a first order of business, could be the path to lasting community benefits that even the best teachers and a load of gumption can't provide.

Why Places Profoundly Matter

Interest in reshaping places to improve the health and safety of the people who inevitably live, work, and play in them has grown over the past two decades.¹⁰ In many ways, these place-based programs are a departure from business-as-usual approaches in many fields (e.g., medicine, law enforcement, psychology) that have focused primarily on the characteristics of individuals and the myriad ways to get these individuals to modify their lifestyles in positive and sustained ways. Despite massive resource investments, individually focused intervention programs that seek to encourage better eating, more daily exercise, and safety precautions have fallen far short of expectations. While there are certainly examples of success, more can be done to supplement, or even supplant, individual-based programs with place-based programs that hold significant promise and, in some cases, have already been proven successful under rigorous scientific testing.

Even when they work, individually based programs can lose sight of the bigger picture. Medicine produced by pharmaceutical companies only works if people take it according to the correct timing and dosage. Twelve-step programs

only work if individuals consistently show up for their group sessions and stay committed to the behavior-change regimens they pledged. These programs are often so focused on the particular circumstances of each individual that they are difficult to deliver to large populations, thus often touching relatively few lives and ignoring how broader environmental influences can so strongly dictate individual decisions. Episodically treating small numbers of people for chronic stress, obesity, or lack of daily physical activity, while ignoring the unhealthy social and physical environments where they work, live, and play, has led society on a fifty-year wild-goose chase for individual “cures” and delayed efforts to create policies that address the causes of poor health and safety that are often rooted in the very places and mundane surroundings where we dwell.

Changes to the built environment of places can impact the health and safety of everyone living or working in an area, influencing individual choices often by default and leading to positive and sustainable changes. Take the example of daily exercise. It is far easier to sustain an active lifestyle by walking to work as part of one’s daily commute than it is to get up early each day before work and drive to a gym. Driving itself offers no exercise benefit, and education campaigns and reminders from your doctor to get to the gym and exercise have been shown to be unsuccessful for the vast majority of us. By contrast, for people who live in an area where walking to work is feasible, or maybe even preferable because the physical environment around them promotes it, the choice to be active becomes much easier, more maintainable, and more successful as a personal health strategy.

A simple strategy in choosing place-based programs is to consider whether a program is making basic structural changes to places, whether the changes are scalable to multiple places and large groups of people, and whether it can be sustained over long periods of time. Successful programs that redesign places should be disseminated and replicated across cities. Unsuccessful place-based programs should be abandoned or retooled as part of a larger learning cycle to design cities in ways that best improve the health and safety of large populations.

Programs that focus on making changes to the structural features of the built environment where human activity occurs, such as creating new buildings or street infrastructure, can influence more people for longer periods of time than those that focus on individually based interventions. Leading researchers at the National Academy of Sciences have pointed out that it is unreasonable to expect peoples’ health to improve when the basic environment around them is, by design, working against such improvements.¹¹ If the basic

structures producing negative health in peoples' surroundings cannot be changed, the likelihood of truly transformational improvements is stunted right from the start.

Structural changes to places impact everyone using a space, not just those most affected or those most in need. Street grid adaptations, such as those pursued by the Smart Growth Coalition with their Complete Streets concept, seek to build healthier places through a broader public program to fix our unhealthy, car-centric transportation and mobility systems.¹² Complete Streets seeks to integrate pedestrian, bicycle, and mass transit in encouraging active living, an issue that is particularly important as aging populations become more and more sedentary.¹³ In making changes to the physical environment of cities, Complete Streets redesigns can be structured for widespread impact and greater access for all.

Other place-based programs, such as the US Department of Transportation's Safe Travel to School programs, have created safe corridors for pedestrians and bicycle travel to and from schools. In cities, the Safe Travel to School program tends to focus on crime and other safety issues for students, while its suburban and exurban versions are focused on safety issues related to poor road designs and dangerous crossings, lack of sidewalks or paths, inadequate lighting, and unsafe vehicle speeds.¹⁴ Regardless of where they get implemented, place-based designs that reduce the need to use a car and encourage more walking and bicycling positively impact everyone, young and old, students and workers, long-time residents and visitors alike.

The "popsicle test" is a great example of a health-and-place-focused metric. The basic metric measures the ability of an eight-year old child to walk safely to buy a Popsicle in their neighborhood and return before it melts. This concept captures many of the elements of a healthy place, including walkability, pedestrian safety, a connected community that looks out for their children, and mixed-use planning where people can walk to stores from their homes for simple items. Designing places with the health and safety of children in mind has become one of the more compelling themes in modern planning discussions. A recent movement toward "free-play" spaces for children rather than overly structured parks and organized athletics has also entered the planning realm. A recent book advocates for "playborhoods" where children's play is unstructured and aims to reduce fear and apprehension among parents about allowing children to use their neighborhoods as play spaces.¹⁵

In addition to changing basic structures, place-based programs also need to be focused on widespread impact if they are to be most effective and

transformational. To have widespread impact, place-based programs need to be scalable to entire populations, offering health benefits to people with a political voice as well as to those without. Think chlorination of public water. The painstaking scientific and political processes that led to widespread chlorination of drinking water is a prime example of structural, place-based change that was scaled to entire cities, with profound impact.¹⁶ Chlorination of public drinking water has saved millions of lives. Although such programs are undoubtedly ambitious, they need not to be overly complex or expensive if they are to be scaled up from one place and tailored to the needs of other places in producing widespread returns on health and safety. For instance, simple changes to sidewalks or streets to encourage walking are readily reproducible and scalable fixes that can have profound impact primarily because of the ease with which they can be transplanted from one place to the next. Scalability is thus defined by the likelihood of reproducing a program in additional places, a cardinal feature of truly transformational place-based programs.¹⁷

As a third cardinal feature, place-based changes must be sustainable, without the need for constant and conscious maintenance of positive behavior or the perpetual persuasion of individuals to be safe and healthy. Employee exercise programs, for example, require employees that are committed to volunteering and maintaining their involvement in the program.¹⁸ But what happens when people switch jobs? When people lose interest? When people forget or vary to adhere to exercise regimens? Maybe an employer is willing to pay their employees to be in the exercise program, but what if the payments aren't enough to motivate the employees? What if the economic situation of the company changes and they cannot continue the payments? Maintaining programs that target individuals and then sustaining the healthy and safe behaviors of these individuals is a big challenge. In many ways, place-based programs get past this sustainability problem because they often cost less, require little if anything of would-be beneficiaries, and are immersive, offering their benefits by default to those entering a newly improved space. But simplicity and cost are only part of the sustainability equation. Studies show that the more effort someone is required to make the less likely they are to make a healthy choice.¹⁹ People have an easier time making marginal changes in their lives than making major lifestyle changes. When a change is made to a place that makes it easier to walk rather than drive, to socialize with their neighbors, to access healthy food, or to experience green space, it is more likely to be successful than public education campaigns that repeatedly alert people to make the right decisions, ultimately fatiguing them into disregard.

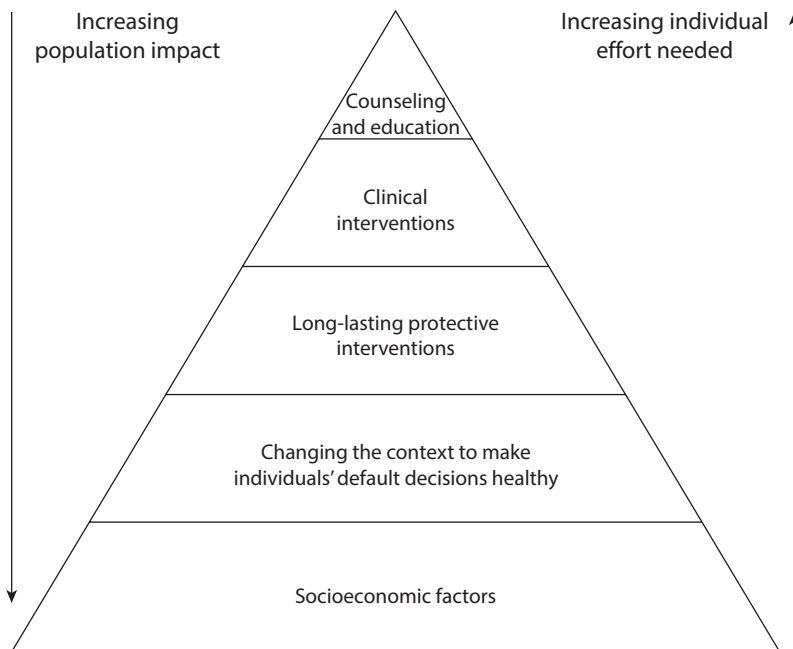


FIGURE 1.1. Scale of interventions directly affects how many people will benefit.
Source: Frieden, Thomas R., “A framework for public health action: the health impact pyramid,” *American Journal of Public Health* 100, no. 4 (2010): 590–95. © The American Public Health Association.

Public-health professionals have long recognized that filling in a brackish tidal pool is far more likely to reduce malaria years after funding has ended than the expectation that local community members will continue regular applications of larvicide.²⁰ Stemming from this sort of thinking, the Centers for Disease Control and Prevention (CDC) are now promoting the motto “making the healthy choice the easy choice” as a way of touting the importance of changing people’s contextual surroundings and promoting high-impact pathways to health. The CDC’s “health impact pyramid” (shown in figure 1.1) lists changes to contexts and places as among the highest impact interventions available—higher than counseling, education, health care, vaccinations, and other more traditional, individual-based approaches to improving people’s health and safety.²¹

The idea of “making the healthy choice the easy choice” is analogous to work that cognitive psychologists and behavioral economists have argued for “default”

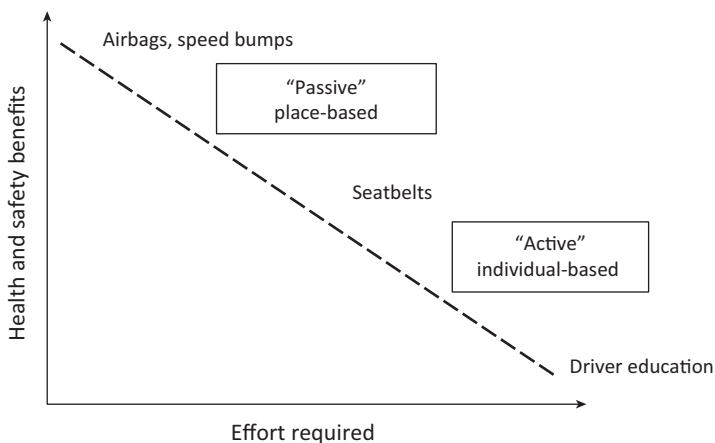


FIGURE 1.2. Interventions more likely to be successful require less effort. *Note:* Adapted from Baker, S. P., “Childhood injuries: the community approach to prevention,” *Journal of Public Health Policy* 2, no. 3 (1981): 235–46.

interventions, sometimes referred to as “nudges.”²² These concepts are basically the same. The less you ask of would-be beneficiaries in terms of personally being responsible for their own health and safety, the more likely the program is to be successful in terms of actually improving health and safety. It’s an inversely proportional relationship between effort and success that can be illustrated via a number of salient examples.

We use a motor vehicle safety example here and in figure 1.2 because it provides a clear example, but there are a host of others in which places can be redesigned to passively protect people’s health and safety without asking them to make conscious changes to their habits or choices. Consider airbags. Airbags have been highly successful in many ways because they ask nothing of the people whom they benefit during a car crash. When someone crashes a car, an airbag deploys and can save a trip to the hospital while requiring no active knowledge or maintenance or actions on behalf of that car’s occupant. The same cannot be said, however, of driver-education programs that multiple scientific studies show have minimal impact.²³ Our physical environments can be similarly changed to require less of us, but still provide intense benefits. If done right, well-designed places can protect people as part of their daily lives. However, these changes require forward-thinking societal investments in the science of optimal design and the restructuring of our greatest opportunities for place-based change: the built environments of our cities.

Places Change Us in Fundamental Ways

“Making the healthy choice the easy choice” is an important way forward in creating high-impact, sustainable changes to people’s health and safety.²⁴ This follows a long history of so-called “passive” interventions that public health and engineering professionals have been promoting for decades, albeit without sufficiently widespread uptake.²⁵

Perhaps the concept of “making the healthy choice the easy choice” via place-based interventions is anathema to those who favor focusing on personal responsibility over what might seem to be a paternalistic approach to health and safety. However, place-based interventions need not threaten personal liberties. If done right, place-based changes have the potential to enhance personal freedoms and open up new opportunities and locations that might once have been uninhabitable or inaccessible. Place-based interventions also need not be seen as sterile engineering solutions in situations one might argue need more connections between people. Place-based changes are fundamentally about people and augment how they interact with their surroundings. An appropriately engineered place is, by its very nature, designed to bring people together for as much interaction as possible. To be successful, however, place-based designs need to engage the public and know what will draw people to use newly created spaces.

With varying degrees of success, planners have long sought to engage the public in the placemaking and redesigning process. Emerging from the politically turbulent 1960s and concerns with the “top-down” planning models encouraged by federal urban renewal programs of that period, planners sought to build on the idea of a democratic planning process.²⁶ Planning educators began to suggest engagement models based on the principle that more citizen voices make for better places.²⁷ Public participation in the planning process has been used successfully in the past to block the construction of freeways that would have dissected and disenfranchised entire city neighborhoods.²⁸ Jane Jacobs’s famous battle to prevent New York City Planning Commissioner Robert Moses from building a highway through lower Manhattan is a prime example of successful community opposition to what is now seen as reckless top-down planning. One should consider this a success, as many cities today are tearing down expensive and divisive highway systems and replacing them with promenades, biking trails, parks, and housing.²⁹ Sustained citizen engagement, however, has been difficult to achieve in practice, as citizens are busy and often lack information and the political power to influence larger planning processes that seek to change the built environment around them. Still, involving citizens in the planning process

can provide the benefit of generating a marketplace of ideas and testing the best plans to ensure that they are maximally beneficial to the public.

With effective public engagement, well-designed built environments allow individual and lifestyle programs to work as intended, making place-based changes a linchpin that must be addressed *first* in order to make truly consequential advances for the health and safety of cities. Despite efforts to educate, medicate, vaccinate, or police our way out of the negative consequences of the physical environment on people, we continue to be faced with a striking and unavoidable reality. If the environment that surrounds much of the population is decrepit, dangerous, and unhealthy, then it is self-evident that our best efforts to lift up these same people will be stymied and undone by toxic places that reduce their chances for success.

Unfortunately, place-based programs have been primarily viewed as mere adjuncts to programs that focus on individuals. For instance, policy makers have incorrectly thought of small changes to places as an accessory to individually based efforts such as erecting neighborhood-watch signs to warn potential burglars that a neighborhood is not fair game, exercise signs in parks to remind people that the space can be used for physical activity, and municipal signs to inform people that their dogs need to be leashed and they have to clean up their waste. Public education campaigns can certainly be beneficial, but they should be complements to place-based changes to the basic structures that necessitate educational signage in the first place. New streets and parks structured specifically for better health and safety are not simply adjuncts to educational campaigns. Quite the opposite: they represent major opportunities for positive change that can stand on their own and, in some cases, may not need follow-up education and training.

The federal government during the Clinton and Obama administrations did recognize the importance of place.³⁰ They promoted several high-profile community development initiatives through the Department of Housing and Urban Development that targeted federal money to highly distressed neighborhoods in the form of direct grants to cities or nonprofits for extra services (e.g., police, social workers), tax benefits to businesses for hiring local community members, and tax credits to real-estate developers for building mixed-income developments.³¹ These federal programs were general mechanisms for funding place-based economic development, although the design of the places was not always a central element in what ultimately emerged. While there is evidence that the Empowerment Zone initiative helped create jobs in targeted areas, they came at a high cost of more than \$100,000 for each job created.³² And housing

prices rose in Empowerment Zones, suggesting that the benefits of job creation came at the cost of higher rents, which arguably hurt longer-term residents who were renters.

There is little evidence of lasting benefits of federally initiated place-based economic development initiatives. This is not surprising, as many place-based economic-development initiatives primarily focus on directing money to promote job growth in places that are no longer growth centers.³³ When place-based economic development is successful, it may spur migration from outsiders seeking jobs. This in-migration of outsiders tends to increase property values, as there is more competition for housing. While increasing property values has largely been seen by planners and city budget managers as a positive outcome related to place-based revitalization strategies, it is important to recognize the dangers of displacement faced by long-term renters and fixed-income residents when housing values increase.

Federally supported place-based economic development initiatives are rarely guided by scientific evidence on what will likely work to improve the well-being of residents in a given neighborhood. When urban renewal policies have been funded to address blighted land and rehabilitate neighborhoods, they have most often taken the form of slum clearance, the development and demolition of high-rise public housing, and the development of scattered-site developments.³⁴

The Choice Neighborhoods initiative launched under the Obama administration is a recent exception to traditional federally supported place-based economic development in that it specifically advocates for neighborhood designs.³⁵ Choice Neighborhoods most closely resembles the place-based approaches discussed here, as improving the physical design of places can be an indispensable precursor to enhancing people's wellbeing. The goal of this initiative was to leverage public and private dollars to implement a comprehensive design plan for select neighborhoods. The design plan was supposed to come from a collaboration of local leaders, residents, nonprofits, the public housing authority, and other stakeholders seeking to revitalize blighted neighborhoods into mixed-use, mixed-income areas. Cities like Atlanta, Boston, Denver, and St. Louis were beneficiaries of these plans, and the areas they created were intended to draw new residents and allow longer-term residents to benefit from the neighborhood improvements.³⁶

Choice Neighborhoods recognizes that many communities contain contributors to health and safety: for example, housing, roads, schools, medical clinics, parks, and shops. They also contain the embedded social and cultural understandings related to building a healthy, safe, and connected society. At

some level, most people inherently understand that places matter and that our surroundings impact us. Structuring places to facilitate the healthiest and safest living situations should be a major focus of urban planning policy.

But how do we know if a place-based program is successful? That a community development model like Choice Neighborhoods works? How do we know if a place-based intervention will become an urban planning success, or, in the words of American urban planner Alexander Garvin, “a public action that will produce a sustained and widespread private market reaction”?³⁷ Relevant scientific evidence should be used for guidance on which place-based changes to cities will have the greatest health and safety benefits. Interest groups will of course advocate for designs that meet their own agendas. For example, land developers will push for mixed-use zoning when commercial construction projects are more lucrative or financeable than residential ones. Yet choices should be guided by evidence from scientific studies testing how changes to the design of places impacts health and safety.

Despite this, evidence from scientific testing alone may be insufficient to justify a change to the design of neighborhoods, streets, and transit options. Cost is likely to become an obstacle to making design changes. Evidence of the cost-effectiveness of a place-based initiative can be used as a justification for up-front and scalable investments to entire neighborhoods or even entire cities. For example, work showing that the investment of one dollar in the remediation of abandoned housing results in a first-year return of five dollars to taxpayers and seventy-nine dollars to society has caught the eyes of policy makers, perhaps more so than the reduction in gun violence that fixing abandoned housing may generate.³⁸ Cost-benefit evidence, however, doesn’t actually address how to finance place-based initiatives. Smaller-scale pilot studies could demonstrate effectiveness and be used to mobilize political support to overcome the resistance to financing and eventually implementing place-based interventions.

In this book we highlight examples of changes made in the places people live, work, and play that have been shown to be effective through scientific testing in the real world. Examples include a newly built light-rail system in Charlotte that lowered obesity and body mass index for users compared with car drivers, newly designed “breathe-easy” homes in Seattle that lowered asthma symptoms among children, business improvement districts that revitalized neighborhoods and reduced crime in Los Angeles, and thousands of newly greened vacant lots in Philadelphia that reduced violent crime, stress, and inactivity for nearby residents. These are just a few key examples of the kinds of changes that can be

made to places and scientifically evaluated to show that they work before recommending they be implemented in other places and in other cities. At the same time, these are isolated examples, and more are needed in every city to figure out what place-based interventions work, are locally feasible, and can be taken to scale.

Place-based programs that sustainably change basic structures for large populations have long been in existence, but scientific evidence remains in short supply in determining what works and is most effective for improving health and safety. While it is impossible for all place-based changes to achieve their intended benefits, place-based policies for redesigning cities and neighborhoods should focus on those that achieve the greatest benefit for greatest number of people. Changing places can be used to protect the boy in East Saint Louis, the young man in New Jersey, and countless others that never make the news. If scientific evidence helps guide the choice of the best place-based programs, it is possible to improve the health and safety of the community at large in the coming decades.

Some place-based ideas have long been in existence and are in need of scientific testing, while others have yet to emerge. Discovery and testing of these ideas with rigorous scientific models is certainly in order to figure out what will work in different contexts and to mobilize community groups, practitioners, and policy makers to redesign basic urban structures and places with health and safety as a first consideration.

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