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# Creating Well-Designed Affordable Housing: Opportunities and Obstacles

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*Photo by Robert Knight*

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# CREATING WELL-DESIGNED AFFORDABLE HOUSING: OPPORTUNITIES AND OBSTACLES

By Donald Taylor-Patterson and David Luberoff<sup>1</sup>

## OVERVIEW

How do the notoriously complicated funding and approval processes for affordable housing shape the design of those projects? In particular, are the funding and approval processes so complex that they make it difficult, if not impossible, to incorporate high-quality design into the planning and execution of affordable housing?

This research brief examines these questions in Massachusetts, particularly in greater Boston, where a variety of public, non-profit, and for-profit actors and entities have long been at the forefront of efforts to build well-designed affordable housing.<sup>2</sup> To do so, it draws on three sources of information: (1) a careful review of the guidelines used to allocate the state's annual allotment of federal Low-Income Housing Tax Credits (LIHTC), a key funding source for affordable housing; (2) interviews with 18 leading local experts in the field, a group that included non-profit and for-profit developers, architects, and several current and former public officials; and (3) observations and discussions at the Affordable Housing Design Leadership Institute (AHDLI), an annual event organized by Enterprise Community Partners that brings together non-profit developers and design professionals to discuss how to improve the design of proposed affordable housing projects. However, the research effort did not attempt to define "design excellence," which can be a very subjective assessment. Instead, the research focused on whether and how key actors and processes assessed the design quality of affordable housing developments.

Four key findings emerged from this research:

1. The LIHTC process in Massachusetts generally encourages "design excellence" for "invisible" project elements, particularly those elements that can be measured, such as energy efficiency or accessibility.
2. The harder-to-measure "visible" or "aesthetic" design elements generally are the product of the informal and formal ways that community groups and local governments review proposed affordable housing developments.
3. While funding and approval processes sometimes crowd out efforts to improve projects' design, key actors can bring design back into the picture, particularly if they can create (or take

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<sup>2</sup> See for example Alexander von Hoffman, *House by House, Block by Block: The Rebirth of America's Urban Neighborhoods* (New York: Oxford University Press, 2004).

advantage of) well-timed processes that bring together developers, designers and others for design-focused discussions that take funding and other constraints into account.

4. Although there is widespread agreement on some aspects of “design excellence,” the fact that each project’s physical, political, and financial context is unique makes it extremely difficult to use a regulatory process to specify what design excellence entails.

Taken together, these findings underscore how the complex interplay of funding, design, regulatory processes, and local politics creates both challenges to and opportunities for efforts to ensure that affordable housing projects are designed and built in ways most likely to benefit residents of those buildings as well as people in the neighborhoods that surround them.

## **BACKGROUND**

Since the passage of the Housing Act of 1949, the U.S. federal government has had a stated policy goal of providing “a decent home and a suitable living environment for every American family.”<sup>3</sup> Over the subsequent decades, federal, state, and local policymakers have used a variety of strategies to try to achieve this goal for low-income people. These have ranged from publicly funded and managed public housing projects to the provision of tax credits that not-for-profit and for-profit entities can use (or sell) to fund new affordable housing units. Today, the LIHTC program, which was created in 1986, provides about \$8 billion a year in tax credits for affordable housing, enough to support the addition (or preservation) of about 76,000 units of housing a year. This level of support means that LIHTC, which has created about 2.35 million units of affordable housing since 1986,<sup>4</sup> is now the nation’s “primary source of support for new affordable rental units.”<sup>5</sup>

Despite the various federal programs, only one in four households eligible for federal housing assistance currently receives that aid. As of 2016, almost 21 million rental households – about 47 percent of all rental households – spent more than 30 percent of their income on housing, the common measure by which housing is defined as unaffordable. Of these, more than half – about 11 million households – spent more than 50 percent of their income on housing, facing severe housing cost burdens.<sup>6</sup> (In the Boston metropolitan area, 49 percent of all households exceeded the 30 percent threshold and 25 percent exceeded the 50 percent one.<sup>7</sup>)

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<sup>3</sup> Housing Act of 1949, Public Law 81-171, Section 2. See also Alexander von Hoffman, “History Lessons for Today’s Housing Policy: The Political Processes of Making Low-Income Housing Policy,” *Housing Policy Debate* 22:3 (Summer 2012).

<sup>4</sup> U.S. Department of Housing and Urban Development Office of Policy & Development Research, “Low-Income Housing Tax Credits,” last modified July 10, 2017, <https://www.huduser.gov/portal/datasets/lihtc.html>.

<sup>5</sup> Joint Center for Housing Studies, “America’s Rental Housing 2017,” 32, [http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/harvard\\_jchs\\_americas\\_rental\\_housing\\_2017.pdf](http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/harvard_jchs_americas_rental_housing_2017.pdf).

<sup>6</sup> *Ibid.*, 4, 26.

<sup>7</sup> Joint Center for Housing Studies, “Millions of Americans Burdened by Housing Costs in 2015,” online mapping tool at <http://harvard-cga.maps.arcgis.com/apps/MapSeries/index.html?appid=6177d472b7934ad9b38736432ace1acb>



The limited supply of funding for affordable housing and the growing demand for it create strong pressures to hold down the costs of those projects. These pressures, many argue, can lead to design decisions that produce short-term cost savings but significantly reduce long-term benefits. For example, Deane Evans, an architect who heads the Center for Building Knowledge at the New Jersey Institute of Technology's Center for Building Knowledge, asserts that "good-quality design – too often considered an expensive amenity, rather than a cost-effective necessity – is usually one of the first components cut from a project in the name of cost containment. The result is a country dotted with projects that meet minimal shelter requirements but fall far short of the well-planned, well-designed, and well-landscaped environments usually associated with good-quality housing."<sup>8</sup> He adds that this is particularly harmful because good design "can be the critical difference between an affordable development that succeeds – one that satisfies its residents and neighbors, enhances the community where it is built, and continues as a stable part of that community for decades – and one that does not."<sup>9</sup>

Many others echo these views. Writing in *Urban Land* in 2015, architects David Baker and Amit Price Patel contend: "The design quality of affordable housing can have a substantial positive effect on both residents and the surrounding community. Good design uplifts residents, helping strengthen social connections, relieve stress, and enhance a sense of safety and belonging."<sup>10</sup> In a similar vein, Katherine Swenson, vice-president for national design initiatives at Enterprise Community Partners, has observed that her group's work has shown that "quality design can have a profound impact on resident health and deliver economic and environmental benefits to low-income communities, with little to no added costs for developers."<sup>11</sup>

## **METHODOLOGY**

While there are legitimate concerns that affordable housing programs may not incentivize high-quality design, there has been little work to systematically examine this issue. To fill this void, the research discussed in this brief sought to better understand the "ecosystems" needed to produce well-designed affordable housing projects and to identify the obstacles that might hinder the formation or operation of those systems.

In particular, the research began from a supposition that funding and approval processes for affordable housing projects in Massachusetts (particularly greater Boston) might actively discourage design excellence in those projects in one of three ways. First, the process for allocating the state's limited supply of credits from LIHTC might not reward – and actually might penalize – design excellence. Second, the process of securing local approvals might not reward – and also might penalize – design excellence. Third, while the funding and approval processes might not actively discourage design

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<sup>8</sup> Deane Evans, "Bringing the Power of Design to Affordable Housing: The History and Evolution of the Affordable Housing Design Advisor," *Cityscape*, 16:2 (2014): 87, <https://www.huduser.gov/portal/periodicals/cityscpe/vol16num2/ch5.pdf>.

<sup>9</sup> *Ibid*, 87.

<sup>10</sup> David Baker and Amit Price Patel, "11 Strategies for Building Community with Affordable Housing," *Urban Land*, last modified February 13, 2015, <https://urbanland.uli.org/planning-design/11-strategies-building-community-affordable-housing/>.

<sup>11</sup> Katherine Swenson, "Affordable Housing Design Leadership Institute Project Wins Design Award Ahead of 8th Annual AHDLI Next Week," Enterprise Community Partners blog, last modified July 14, 2017, <https://www.enterprisecommunity.org/blog/2017/07/affordable-housing-design-leadership-institute-project-wins-design-award-ahead-8th>.

excellence, they could be so complicated and time-consuming that key participants did not have the time, resources, or incentives needed to produce high-quality designs.

Exploring these hypotheses required that the research grapple with the question of whether and how to define “design excellence.” It quickly became clear that for a variety of reasons, doing so would be difficult and potentially futile. In part, this is because “design excellence” is a subjective assessment, which means there are no easy ways to define or measure its presence or absence in a particular project. Moreover, “design” itself is a broad term that applies to everything from the easily measurable, such as the efficiency of a building’s heating system or the extent to which it is accessible to people with limited mobility, to almost unmeasurable features, such as the quality of a building’s landscaping, massing, or facades.

Consequently, the research focused on exploring how the funding and review process shaped design-related decisions in affordable housing developments and how key actors defined high-quality design. The research had four components. The first was reviewing how the state allocates its allotment of Low-Income Housing Tax Credits. Second was interviewing key actors in the development process. Third was observing Enterprise Community Partners’ Affordable Housing Design Leadership Institute, an annual gathering that strives to “provide a structured forum where designers and developers [can] collaborate in real-time on real projects in the pre-development phase, and to take that step back and ask critically important questions, together.”<sup>12</sup> The fourth element was using the interviews and observations to ascertain how key actors defined “good design.”

Each of these research components is discussed in more detail below.

### **Reviewing the LIHTC Process**

The first part of the research consisted of a careful review of how Massachusetts allocates its allotment of Low-Income Housing Tax Credits, which incentivize developers of affordable housing to construct new or renovate existing affordable rental housing by providing a dollar-for-dollar reduction in federal income tax liabilities that can be used or sold by project developers. The credits are primarily focused on projects that provide affordable housing for low-income families (defined as families earning below 60 percent of the area median income) or very low-income families (defined as families earning below 50 percent of the area median income).

Each year, the federal government uses population (and a few other factors) to allocate available credits to state Housing Finance Agencies (HFA) and other local LIHTC-allocating agencies. These agencies, in turn, allocate credits to developers of rental housing according to federally required, but state-created, Qualified Allocation Plans (QAPs). These plans detail a competitive scoring system that HFAs use to assess applications for the credits (which together usually far exceed the amount of available credits).<sup>13</sup> In Massachusetts, the authority to determine preferences, score projects, and allocate credits rests with the state’s Department of Housing and Community Development (DHCD), a unit of the state’s Executive Office of Housing Economic Development. As is discussed below, about a quarter of the points available in the state’s QAP scoring system are in areas related to design, broadly defined.

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<sup>12</sup> Ibid.

<sup>13</sup> For a good overview of LIHTC see, Mark P. Keightley, “An Introduction to the Low-Income Housing Tax Credit,” Congressional Research Service, May 31, 2017, <https://fas.org/sgp/crs/misc/RS22389.pdf>.

## **Interviewing Practitioners**

The second part of the research sought to learn directly from those who have worked in the field and have had the most direct experience with LIHTC-funded projects, the QAP process, and the local approval process for proposed projects. In the end, 18 expert practitioners familiar with the process of developing affordable housing in greater Boston were interviewed for the project. Interviewees included non-profit and for-profit developers, architects, and current and former public officials. While interviewees agreed to be named as people consulted for this project, to encourage frankness, they were promised that they would not be quoted in discussions of particular issues or projects. (See Appendix B for a list of people interviewed for this project.) Conversations were intended to be free-flowing, but were structured around several key questions including but not limited to the following:

1. How do funding requirements like the QAP play a role in the design process and outcomes of affordable housing projects you have worked on?
2. How is the design process shaped by community review processes and formal approvals by local governments?
3. What factors outside of the QAP have the biggest impacts on the design of affordable housing projects?

## **Observing Efforts to Improve Design**

The third part of the research involved observing the 2017 Affordable Housing Design Leadership Institute. A yearly, three-day convening hosted by Enterprise Community Partners, AHDLI uses charrettes, interactive workshops, and informal discussions to help developers “improve design processes and address design earlier in future projects; build collaboration skills and more productive relationships with their architects; [and] amass compelling evidence to make the case for good design in affordable housing.”<sup>14</sup>

The charrettes, which are the central part of the Institute, give leaders of non-profit entities that build affordable housing projects opportunities to present pre-development projects to a roundtable of design professionals. Following the presentations, the designers ask clarifying questions and provide feedback. Watching these presentations and talking informally with attendees provided excellent opportunities to test and hone ideas that had emerged during the earlier reviews of the Massachusetts QAP and the more detailed practitioner interviews. (See Appendix C for a list of participants in the 2017 AHDLI.)

## **Understanding How Key Actors Understand Design Quality**

As noted above, interviews with practitioners and discussions at AHDLI also sought to reveal how key actors defined “design quality” in affordable housing developments. In particular, the interview protocol called for asking each person what, in their opinion, were the qualities of a well-designed

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<sup>14</sup> Enterprise Community Partners, Inc., “Affordable Housing Design Leadership Institute,” accessed July 2017, <https://www.enterprisecommunity.org/solutions-and-innovation/design-leadership/affordable-housing-design-leadership-institute>.

project. In addition to this question, interviewees were asked to share stories about well-designed or poorly-designed projects they had worked on or had knowledge of, and they were asked to share any other insights they had about both the process and the projects it produced.

## **FINDINGS**

Four key findings emerged from this research:

1. The LIHTC process in Massachusetts generally encourages “design excellence” for “invisible” project elements that are not necessarily observable by the naked eye, particularly those elements that can be measured, such as energy efficiency or accessibility.
2. The harder-to-measure “visible” or “aesthetic” project elements generally are the product of the informal and formal ways that community groups and local governments review and ultimately approve proposed affordable housing developments.
3. While the funding and approval processes sometimes crowd out efforts to improve projects’ design, key actors can bring design back into the picture, particularly if they can create (or take advantage of) well-timed processes that bring together developers, designers and others for design-focused discussions that take funding and other constraints into account.
4. Although there is widespread agreement on some aspects of “design excellence,” the fact that each project’s physical, political, and financial context is unique makes it extremely difficult to use a regulatory process to specify what design excellence entails.

Each of these findings is discussed below.

### **Finding 1:**

*The LIHTC process in Massachusetts generally encourages “design excellence” but generally does so for “invisible” project elements, particularly those elements that can be measured, such as energy efficiency or accessibility.*

The state’s QAP is divided into two sections: Fundamental Characteristics (required points) and Special Characteristics (bonus points).<sup>15</sup> The Fundamental Characteristics section is divided into five categories: Financial Feasibility, Design, Development Team, Marketability, and Readiness to Proceed. In each category, projects may receive a maximum of 20 points and are required to get at least 12 points. Thus, in the Fundamental Characteristics section, 20 of the 100 available points are allocated to design. The scoring is done by architects and/or cost estimators under contract to DHCD, who are also charged with evaluating “the proposed scope of work and overall cost of the project to determine whether the scope and costs are appropriate.”<sup>16</sup>

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<sup>15</sup> The state’s 2016 QAP, which was reviewed for this research, is available online at <http://www.mass.gov/hed/docs/dhcd/hd/lihtc/2016qap.pdf>. The state’s 2017 QAP is available online at <http://www.mass.gov/hed/docs/dhcd/hd/lihtc/2017qap.pdf>.

<sup>16</sup> Massachusetts Department of Housing and Community Development, “2016 Qualified Allocation Plan,” 30, <http://www.mass.gov/hed/docs/dhcd/hd/lihtc/2016qap.pdf>.



The Special Characteristics section of the scoring system provides an additional 84 possible points in 10 categories. Each category is weighted differently and none of the available points are required to receive funding consideration. In this section, 26 of the 84 available points are available in a category called “Emphasis on Environmentally Friendly Design and Enhanced Accessibility.” (See Appendix A for a summary of the design-related portions of the Massachusetts QAP.)

The high share of points devoted to design plus the separate reviews of design suggest that rather than stymieing good design, the QAP might actually reward it. However, closer examination of the QAP suggests a more nuanced situation. For example, the “Design” portion of the Fundamental Characteristics section, which accounts for 20 of the 100 available points, lists 12 separate items that reviewers should consider when scoring a project. Most of these items are non-visual elements, such as energy conservation, healthful material selection, and code compliance. Similarly, in the Special Characteristics section, 26 of 84 points – more than any other category in the section – are available in the area titled “Emphasis on Environmentally Friendly Design and Enhanced Accessibility.” As with the Fundamental Characteristics, most of the points in this category are for important but largely invisible design elements such as “efficient building systems” and “renewable energy.”<sup>17</sup>

Two bullet points in the Fundamental Characteristics section do directly focus on more visual design elements. The first highlights that points are given for projects in which the “architectural treatment is appropriate, given community standards and the surrounding neighborhood, as well as the project site.” The second calls for “proposed amenities [that] are sufficient, appropriate for the target population, but not excessive.”<sup>18</sup> This language, particularly in comparison to text related to other items, is highly subjective and open to interpretation. Moreover, as is discussed later in this brief, the focus on “sufficient, but not excessive” amenities hints at the charged question of whether some project elements can (or might) create political controversy if they were viewed by key people or groups as being “too good” for the residents of publicly-subsidized affordable housing units.

Many interviewees confirmed that the QAP’s scoring system pushed them to design for “invisible” elements. Many also noted that these elements are things that they would do without the prompting of the QAP and that in this regard, the QAP serves as more of a helpful checklist than a driver of design. In fact, a few developers noted that at one point their firms were actually ahead of the QAP in incorporating sustainability and energy efficiency measures into their projects. For these mission-driven firms, the addition of these elements to the QAP was appreciated as it provided points for actions they were already taking. Somewhat surprisingly, at least one interviewee contended that subsidized projects funded via the QAP process might actually have higher-quality “invisible” design elements than unsubsidized, for-profit projects because developers of those projects often focus more attention and funding on highly visible elements that will allow them to differentiate their projects in a crowded marketplace.

Some interviewees did note that the QAP also forced them to focus on costs, sometimes in ways that they did not think were productive. Illustratively, the executive summary of the 2016 QAP emphasized the need to better manage project costs as one of the most important issues to address in allocating that year’s funds. Moreover, the “Financial Feasibility” category of the Fundamental Characteristics

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<sup>17</sup> Ibid., 41.

<sup>18</sup> Ibid., 31.

section (which accounted for 20 points) warns that “projects which demonstrate significantly lower total development costs and/or significantly reduced subsidy costs per unit will receive higher points in this category.”<sup>19</sup> This focus on costs was further reiterated in the “Design” category where the guidelines state that DHCD’s architects and/or cost estimators will determine “whether the owner/developer has employed effective cost management techniques in the design process.”<sup>20</sup>

According to several interviewees, the combination of the QAP’s explicit support for “invisible” design elements (such as energy efficiency, healthy interiors, and universal design) and its focus on controlling costs sometimes meant that “invisible” elements took precedence over more “visible” aesthetic design elements. A few interviewees also noted that the focus on costs also sometimes became an issue when trying to meet other guidelines in the Design category such as the incorporation of “energy conservation measures that exceed those required by the Building Code.”<sup>21</sup>

## **Finding 2:**

*The harder-to-measure “visible” or “aesthetic” project elements generally are the product of the informal and formal ways that community groups and local governments review and ultimately approve proposed affordable housing developments.*

Interviews, observations at the Affordable Housing Design Leadership Institute (AHDLI) and conversations with some AHDLI attendees also made it clear that key decisions about many “visible” design issues – such as massing, materials, exterior building envelopes, and resident parking – were the result of local political processes rather than the LIHTC process. In particular, these elements were greatly shaped by the efforts to gain formal approvals from local regulatory bodies (such as zoning boards) and in the quest to gain informal approvals from residents and community groups whose views greatly inform official decisions.

In communities that are more resistant to affordable housing specifically, or density in general, it is usually quite difficult to move forward with planned projects.<sup>22</sup> Neighbors and local community groups may take issue with projects that they feel do not fit visually within the context of the neighborhood due to either building materials or density. These issues can usually be negotiated, and developers may be willing to make changes to address community members’ concerns. But other concerns are harder to address. Many residents contend that new projects will exacerbate traffic and parking problems in

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<sup>19</sup> Ibid, p. 30.

<sup>20</sup> Ibid, p. 31.

<sup>21</sup> Ibid. p. 33

<sup>22</sup> In Massachusetts, this power is limited in at least some communities because of the state’s “Comprehensive Permit Act,” more commonly known as Chapter 40B. This law, which passed in 1969, allows state officials to overrule local denials of projects if at least 20-25 percent of the units in the proposed project meet the state’s definition of “affordable” and if less than 10 percent of the housing in that community meets the law’s definition of “affordable.” Sixty-seven of the state’s 351 cities and towns exceed the 10 percent threshold. These include Boston and most of the state’s other large cities (e.g., Springfield, Worcester, Cambridge, Lowell, New Bedford, Fall River, and Brockton). See Massachusetts Department of Housing and Community Development, “Chapter 40B Subsidized Housing Inventory (SHI) as of September 14, 2017,” online at [https://www.mass.gov/files/documents/2017/10/10/shiinVENTORY\\_0.pdf](https://www.mass.gov/files/documents/2017/10/10/shiinVENTORY_0.pdf). More information on 40B is available at <http://www.mass.gov/hed/community/40b-plan/>. See also <https://www.chapa.org/chapter-40b>.

already dense neighborhoods. Reducing a project's density can be difficult because projects need a minimum number of units to be financially feasible. Another potential solution, the inclusion of additional on-site parking, also tends to significantly impact a project's financial feasibility and its design. Even harder, of course, is the fact that concerns about materials, density and parking may be stalking horses for concerns and biases (spoken and unspoken) about low-income populations, particularly people of different races and ethnicities. These issues, of course, can rarely be addressed via changes in design.

Localities that are less resistant to affordable housing development may be easier to navigate, but may also come with their own set of challenges. The City of Boston, for example, is actively encouraging the development of more affordable housing.<sup>23</sup> However, it also has strict guidelines for how that development should look. Several developers who have worked in Boston noted, for example, that compared to other localities, Boston's Department of Neighborhood Development's (DND) design guidelines are very prescriptive and particularly hard to navigate. Illustratively, several said DND's specific guidelines for kitchen countertop linear footage and spacing were excessive and too prescriptive, although those requirements were removed in an updated version of the guidelines released in August 2017.<sup>24</sup>

Similarly, at AHLDI, designers offering ideas as part of a charrette to one project outside of Boston (but in a community generally supportive of affordable housing) suggested the project might benefit from additional ground-floor community space. The developer replied that this would be difficult to achieve because the locality required that the project incorporate protected, ground-floor space to park over 100 bicycles, which limited the amount of space available for other uses. Another developer interviewed for this project said that some communities press for ground-floor retail even when such uses made little financial sense. Despite such challenges, most developers noted that while the community review process is challenging, they not only understood it was necessary but also found that it sometimes even improved their projects' designs.

### **Finding 3:**

*While the funding and approval processes sometimes crowd out efforts to improve projects' design, key actors can bring design back into the picture, particularly if they can create (or take advantage of) well-timed processes that bring together developers, designers and others for design-focused discussions that take funding and other constraints into account.*

The process for developing LIHTC-funded projects in Massachusetts can be time-consuming, strenuous, and stressful. As noted earlier, when asked how they navigated the need to incorporate "invisible design elements" while keeping costs under control, some developers noted that they sometimes cut back on or curtail more visible, aesthetic items, such as landscaping, which can play a major role in making projects successful. Moreover, even developers open to better designs noted that they have to

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<sup>23</sup> See City of Boston, "Housing Boston 2030," <https://www.boston.gov/departments/neighborhood-development#housing-boston-2030>.

<sup>24</sup> See City of Boston Department of Neighborhood Development, "Multifamily New Construction Design Requirements and Guidelines," (August 2014), [https://www.boston.gov/sites/default/files/14-1\\_design\\_standards-final-august\\_2014\\_leed\\_rev.pdf](https://www.boston.gov/sites/default/files/14-1_design_standards-final-august_2014_leed_rev.pdf) and City of Boston Department of Neighborhood Development, "Multifamily New Construction Design Requirements and Guidelines" (August 2017), [https://www.boston.gov/sites/default/files/design\\_standards-revised-2017-08-17.pdf](https://www.boston.gov/sites/default/files/design_standards-revised-2017-08-17.pdf)

simultaneously juggle various aspects of the project, from gaining local support and approval, to securing funding, to meeting deadlines. The problem, they said, is that they might not have the capacity or the resources needed to make design improvements beyond those necessary to gain funding and approvals. This, they added, is especially true if such improvements are perceived to add time and cost to their already challenging project.

Several architects and developers also brought up challenges related to architects' fees as a potential obstacle to better designs. The issue is that architects and other design professionals often forgo some or all of their fees for affordable housing projects until the projects' developers secure funding for them. Several people said this is not an issue when designers had longstanding relationships with developers. But several also worried that the need to forego fees could limit the pool of potential designers. Specifically, while larger, more established firms may have the capacity to work without compensation for some time, the same may not be true for smaller or younger firms. It is not possible to say whether or not this situation stymies potential design excellence, but it is clearly an issue that merits further attention. Despite these obstacles, the interviews along with the conversations and observations at the Affordable Housing Design Leadership Institute (AHDLI) made it clear that the current funding and approval processes do not preclude good design.

Somewhat more surprising is that the impetus for design excellence can come from many sources. Sometimes, designers take the lead and play the role of persuading developers to consider more creative and thoughtful designs. While this can be challenging within an existing client/architect relationship, where the paradigm for working together already exists, new relationships, as well as charrette-type events that bring developers together with designers not on their project teams, can provide unique opportunities for designers to elevate project design features.

Two charrettes that took place at the 2017 AHDLI suggested that under the right circumstances, designers can shape developers' approaches in positive ways. In both cases the developers came in with preconceived design ideas that had emerged without careful consideration. In the first, the developer shared a preliminary design that they had commissioned based on their existing notions of what an apartment building in a suburban community "should" look like, rather than how it might best serve its residents and fit into the surrounding community. In the second, the developer showed plans for a rehabilitated building that were based on the building's historic layout rather than on a careful examination of a wide range of possible configurations. In both cases, the designers who were part of the AHDLI were able to convince the developers to reconsider the constraints that they had placed on their projects and, in doing so, to consider entirely new ways of carrying out the projects.

Sometimes the impetus for better design comes from developers. One person interviewed for this project stated that their organization often pushed for more vibrancy and liveliness in the design by telling their architects to remember that children would live in the building. Finally, sometimes key public officials press for improved designs, playing an advocate role during the design review process or in shaping design standards for their municipality. In sum, design excellence is typically the result of at least one or more key actors in the process pressing the issue.

The AHLDI also made it clear that intriguing design ideas emerge when developers are able to step back and allow room for ideas to flow.<sup>25</sup> However, the discussions also suggested that the ways in which this could occur were closely linked to where projects were in the development process. When projects were still in their early conceptual phases, it was hard for designers to provide specific feedback to developers. Instead, designers offered thought-provoking questions that revealed unconsidered project elements that the developers were taking for granted. These questions, which led developers to see their own blind spots, allowed them to push for design excellence. For instance, the developer mentioned above, who had come in thinking there was only one approach to their apartment building and therefore had not questioned the design, left AHLDI having decided to pursue a new architectural team that could help re-conceptualize the building.

On the other hand, projects that were further along in the design process generated much more specific discussion from designers and produced more nuanced ideas for project developers. Discussion about the bicycle-challenged project mentioned above, for example, generated some ideas from designers that seemed feasible and appealing. While that particular developer was able to integrate some of the changes suggested, some developers of other projects that were close to construction said that while some of the changes proposed by designers were appealing, financial considerations and other constraints made it too difficult to make those changes at this point in the process. The point is that while it appears beneficial to bring designers and developers together and create space for them to step back and consider design options, the timing of this step and the ways it is carried out are crucial.

#### **Finding 4:**

*Although there is widespread agreement on some aspects of “design excellence,” the fact that each project’s physical, political, and financial context is unique makes it extremely difficult to use a regulatory process to specify what design excellence entails.*

As noted earlier, defining “design excellence” has been one of the most pressing issues over the course of this research. At the start of the research, it was clear that an attempt to define design excellence as a broad term would be a futile effort, as “design” can take various forms. Rather, as part of the interview component of the research, interviewees were asked what they believe are the qualities of a well-designed project. While answers varied, there were a few responses that frequently came up. “Durability” was highlighted by many interviewees as a requirement for a well-designed project. For example, projects should function well both in year 1 and year 40. “Manageability” was also a common theme. Interviewees gave examples of situations in which a project might look good, but might not be easy to manage. For example, if a project has many winding halls, it can become difficult (and expensive) to keep clean. Aspects of “livability” were also frequently given as responses. For example, interviewees noted that tenants above all want a place they can call home, where basic things like heating and plumbing function as they should. “Sustainability” was another common theme. Interviewees noted that projects should be energy efficient and environmentally conscious.

“Aesthetics” also came up in many conversations. However, beyond noting that projects should be aesthetically pleasing and fit into the context of the neighborhood, many interviewees did not expand

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<sup>25</sup> For a good discussion on how to structure effective charrettes, see Enterprise Green Communities, “The Success of Charrettes: Evidence in Practice for Engaging in an Integrative Design Process,” Enterprise Community Partners (2011), <https://www.enterprisecommunity.org/download?fid=2075&nid=14040>.



on how to assess a project's aesthetic quality. The fact that aesthetic qualities are immeasurable and are often quite subjective, probably explains the fact that aesthetic considerations are only a small part of the design-related factors in the QAP scoring system. The simple fact of the matter is that it is difficult, if not impossible, to establish meaningful metrics for aesthetics in a statewide program. What is appropriate in the aesthetic context of a neighborhood in Boston may be completely unacceptable in a smaller town in western Massachusetts. Moreover, as discussed earlier, even at the local level, aesthetic requirements might be too prescriptive and create a host of unexpected design problems for project developers.

In addition, design excellence in affordable housing has a significant political dimension. As discussed earlier, the issue of whether certain elements might create controversy if key leaders or constituencies viewed them as "too good" for affordable housing came up in multiple conversations. In fact, a few interviewees gave examples of situations where they could not make certain design decisions because of what they felt were preconceived notions about what was "acceptable" for affordable housing. For example, one designer argued that granite countertops are more cost effective in the long run as they are much more durable than the laminate countertops required by Boston's Department of Neighborhood Development. The designer wondered if this requirement stemmed from a concern that granite countertops might be perceived as "too good" for affordable housing.

On the other hand, some interviewees gave examples of scenarios where they were compelled to use materials they felt were too costly for their projects. Interestingly enough, this seemed to happen more with exterior than with interior materials, and at the local level rather than in the state funding reviews. For example, one developer highlighted Boston's Department of Neighborhood Development's policy against vinyl siding, which they said could be cost-effective. (The interviewee further noted that the logic of this policy seemed to contradict the logic behind DND's opposition to granite countertops.) Another developer gave an example of a scenario where they were required to use brick for the project's entire facade. They noted that this requirement added to the project's cost, which meant there was less money available for higher-quality interior finishes and amenities.

Taken together, these observations make it clear that it is difficult, if not impossible, to define "design excellence" – particularly for aesthetic project elements – in ways that can be codified in law or regulations. In contrast, it is clear that regulations and guidelines, such as the QAP scoring system, can be used in ways that achieve measurable goals in areas such as energy efficiency or accessibility. However, the research also suggests that carefully timed review processes, like the AHDLI, can encourage excellence in important but less quantifiable elements of project design. While regulatory and funding processes might require such reviews, the operative question is how to structure those requirements in ways that would foster meaningful, rather than pro forma, reviews.

## **CONCLUSION**

Realizing design excellence for affordable housing projects is difficult but achievable. This is particularly true if the work plan for project development encourages and incentivizes processes that allow key players to step back and allow project designs to be challenged and pushed to a higher standard. While state and local regulations and approvals, both formal and informal, may impact design, it is up to these key players to decide whether they will push their projects beyond what they are required to do. Processes like the Affordable Housing Design Leadership Institute (AHDLI) that create space for these interactions clearly can play a major role in improving design.

Looking forward, efforts to understand and improve the design process might benefit from additional research into three questions suggested by this study. The first question is: how do design questions manifest themselves in other states, via both their QAP processes and local land-use regulatory systems? While this research revealed that the Massachusetts QAP primarily affected “invisible” design elements while local regulations were more likely to affect “visible” design elements, this may not be the case in other states.

The second question is: how do local review processes shape the design of projects? While this research highlighted the importance of these reviews, it did not examine them closely and it examined them only in Massachusetts. Any effort to improve the design of affordable housing needs to better understand how local officials use their land-use review powers to shape the design of affordable housing projects. Such research might explore how this process plays out in different locales, focusing not only on the dichotomy between locales that are more and less supportive of affordable housing, but also on municipalities with more and less capacity to carry out sophisticated design review processes. The review should also look at how these processes play out in different states.

The third question that merits further study is: how have review processes like AHDLI shaped some notable projects? While it appears that these types of review processes help push projects closer to design excellence, there needs to be a focused investigation into their effectiveness. This research might also focus on whether and how regulations requiring such design reviews could be structured to ensure that the reviews are actually meaningful.

In the end, such research can hopefully strengthen efforts to ensure that design considerations do not get overlooked or ignored (or given short shrift) in the complicated process of planning, funding, constructing, and ultimately operating buildings with affordable housing. If such design considerations can become a more integral part of the process, perhaps we can move a little closer to the longstanding goal of helping ensure that more people have access to truly “decent” homes and “suitable” living environments.

## **APPENDIX A**

### **2016 Massachusetts QAP Scoring Breakdown<sup>26</sup>**

<b>Fundamental Project Characteristics (100 points) (Each category has a possible 20 points; 12 points required)</b>	<b>Maximum Points Available</b>
A. Financial Feasibility	20 points
B. Design	20 points
C. Development Team	20 points
D. Marketability	20 points
E. Readiness to Proceed	20 points

#### ***Scoring for Design***

According to the QAP: “The design elements and the proposed scope of work for each 2016 tax credit project will be reviewed by architects and/or cost estimators under contract to DHCD. The architects and/or cost estimators will carefully evaluate the proposed scope of work and overall cost of the project to determine whether the scope and costs are appropriate. In addition, the architects and/or cost estimators will evaluate the architectural aspects of each project to determine:

- Whether the project conforms with all applicable laws, regulations, code requirements, including those specific to accessibility;
- Whether the project has incorporated certain aspects of “universal design” to increase the usefulness of the project to the widest range of residents possible[;]
- Whether the architectural treatment is appropriate, given community standards and the surrounding neighborhood, as well as the project site;
- Whether proposed amenities are sufficient, appropriate for the target population, but not excessive;
- Whether the site layout and site design adequately address environmental issues; parking needs; rainwater management; appropriate open space requirements; outdoor improvements appropriate for the target population, visitability, etc.;
- Whether the owner/developer has incorporated energy conservation measures that exceed those required by the Building Code[;]

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<sup>26</sup> Taken from Commonwealth of Massachusetts Department of Housing and Community Development, “2016 Qualified Allocation Plan,” <http://www.mass.gov/hed/docs/dhcd/hd/lihtc/2016qap.pdf>.

- Whether the project complies with energy efficient building envelope guidelines such as EPA's Energy Star standards, for appliance and light fixture selection as well as air sealing and insulation measures, which will result in both greater comfort and operating cost efficiencies;
- Whether the owner/developer has incorporated material selection consistent with promoting a healthful interior environmental quality;
- Whether the owner/developer has incorporated mechanical ventilation measures to control humidity and promote good indoor air quality;
- Whether the owner/developer has provided interior CO detectors as mandated by state regulations;
- Whether the project conforms to state and local coded-mandated regulations for water conservation requirements (1.6 gal toilets, low-flow devices, etc.) as well as storm water retention/recharge[;]
- Whether the owner/developer has provided for sufficient construction oversight, building envelope testing, and building system commissioning to ensure that the design and efficiency measures are properly installed and adjusted[;]
- Whether the owner/developer has employed effective cost management techniques in the design process, including but not limited to Integrated Project Delivery methods, significant involvement by the contractor early in the design process, cost-effective building approaches (such as modular construction, innovative but proven building materials, etc.)."<sup>27</sup>

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<sup>27</sup> Ibid., 30-31.

Special Project Characteristics (82 points) (points vary by category; <u>no required points</u> )	Maximum Points Available
A. Official Local Support	2 points
B. Inclusion in a Comprehensive Neighborhood Revitalization Effort	6 points
C. MBE/WBE Membership on the Development Team	6 points
D. Non-Profit Sponsorship	5 points
E. Person with Disabilities or Special Populations as Intended Consumers	8 points
F. Inclusion of Market Rate Units in the Project	6 points
G. Location in an Area of Opportunity	14 points
H. Conformance with Section 42 Code Preferences	3 points
I. Emphasis on Environmentally Friendly Design and Enhanced Accessibility	26 points
J. Proximity to Transit	6 points

***Points are available in the “Environmentally Friendly Design and Enhanced Accessibility” for the following project elements:***

- Energy Efficient Envelope Design: 5 points maximum
- Efficient Building Systems: 5 points maximum
- Healthy Indoor Air Quality: 4 points maximum
- Site Design: 4 points maximum
- Renewable Energy: 2 points maximum
- Enhanced Accessibility: 6 points maximum<sup>28</sup>

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<sup>28</sup> Ibid., 41-43.



## **APPENDIX B**

### **Interviewees**

1. **Michelle Apigian**, Associate, ICON Architecture
2. **Donald Bianchi**, Senior Policy Advocate, Massachusetts Association of Community Development Corporations
3. **Michael Binette**, Vice President/Principal, The Architectural Team
4. **Leslie Bos**, Director of Real Estate, Jamaica Plain Neighborhood Development Corporation
5. **Jane Carbone**, Director of Development, Homeowners Rehab Inc.
6. **Lawrence Curtis**, President and Managing Partner, Winn Development
7. **Marla Curtis**, Architect, The Architectural Team
8. **Pam Goodman**, Chief Executive Officer, Beacon Communities
9. **Aaron Gornstein**, President and CEO, Preservation of Affordable Housing; Former Undersecretary, Massachusetts Department of Housing and Community Development
10. **Edward Marchant**, Lecturer in Public Policy, Harvard University; Principal, EHM/Real Estate Advisor
11. **Margaret Moran**, Director of Planning & Development, Cambridge Housing Authority
12. **Kairos Shen**, Lecturer, MIT Center for Real Estate; Former Director of Planning, Boston Redevelopment Authority
13. **James Stockard**, Lecturer in Housing Studies, Harvard University; Principal, Stockard & Engler & Brigham
14. **Russell Tanner**, Vice President of Real Estate, Madison Park Development Corporation
15. **Mathew Thall**, Housing and Community Development Consultant, Former Interim Executive Director, Southwest Boston CDC

## **APPENDIX C**

Participants in the 2017 Affordable Housing Design Leadership Institute

### **Design Resource Team**

Matthew Littell, Principal, Utile  
Sierra Bainbridge, Senior Director, MASS Design Group  
Gina Ciganik, CEO, Healthy Building Network  
Bryan C. Lee, Jr., Director, Colloqate  
Guido Hartray, Founding Partner, Marvel Architects  
Braden Crooks, Co-founder, Designing the We  
Gamar Markarian, Urban Practitioner Healthy Materials Lab  
Josh Safdie, Principal, Kessler McGuinness & Associates  
Nadine Maleh, Executive Director, Institute for Public Architecture

### **Participating Developer Teams**

Homeowner's Rehab Inc.  
*Concord Highlands, Cambridge, MA*

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Jane Carbone, Director of Development  
Rebecca Schofield, Project Manager  
Will Monson, Project Manager

People United for Sustainable Housing  
*Green Development Zone Homes, Buffalo, NY*

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Jen Kaminsky, Director of Planning and Community Development

Services for the Underserved (SuS)  
*Starhill Redevelopment, New York, NY (Bronx)*

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Arlo Chase, SVP Real Estate  
Aaron Hoffmann, Sr., Project Manager  
Kyle Ervin, Project Manager

Gila River Indian Community  
*Gila River Sustainable Housing Initiative, Sacaton AZ*

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Truman Kiyaani, Project Manager  
Wanda Dalla Costa, Visiting Eminent Scholar, ASU  
Joseph Kunkel, Executive Director, Sustainable Communities Collaborative

North Shore Community Development Coalition  
*2 Littles Court, Merrimac, MA*

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Ilene Vogel, Senior Project Manager  
David Valecillos, Senior Project Manager

A Community of Friends  
*Casa del Sol, Los Angeles, CA*

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Rachel Feldstein, Chief Operating Officer  
Chul Gugich, Project Manager

Preservation of Affordable Housing (POAH)  
*Barlett Yard - Lot 3, Boston, MA*

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Julie Klump, VP for Design and Building Performance  
Aly Stein, Project Manager  
David Parker, Design and Building Performance Associate

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