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Publicly Driven Development and Ownership of Housing:

A Feasibility Study for Rhode Island

NYU Furman Center for RIHousing and the Rhode Island Department of Housing

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Public Development and Ownership of Housing: A Feasibility Study for Rhode Island

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Executive Summary

Study Purpose

Rhode Island is experiencing a significant housing shortage, especially in multifamily rental housing that is affordable to low- and very low-income households. The state also ranks among the lowest in the U.S. for housing production. One proposal for addressing these issues is to create or utilize a government entity to play the role of affordable housing developer and owner. While public development was at one point a major source of affordable housing in the U.S., these efforts have been gradually limited and defunded over the last 50 years. Instead, publicly subsidized private development has become the common affordable housing development model, centered around the use of the Low Income Housing Tax Credit. In this model, federal, state, and local governments provide different forms of development financing, among other financial and regulatory tools, to maintain oversight rather than a direct ownership stake in a property. This report provides insights into the feasibility of public development and ownership models as a means of delivering affordable housing in Rhode Island through 1) case studies of both longstanding and emerging models of public development within the U.S. and internationally; 2) analysis of the Rhode Island development context; and 3) a review of financing and regulatory mechanisms that could facilitate public development in Rhode Island. Appendices provide more detailed descriptions of each of the case studies and of the financial analysis.

Study Methods

The research includes:

- More than 20 in-depth interviews with experts, including:
    - 13 public development leaders in the U.S.
    - 3 international scholars of social housing
    - 8 Rhode Island stakeholders
- Financial analysis drawing on programmatic documents and underwriting data
- Analysis of 9 domestic and 5 international models of public development
- Analysis of 11 financing and regulatory mechanisms used in public development models

What Is Public Development and Ownership?

Public development and ownership involve scenarios where:

- Local or state government entities act directly as a real estate developer, or engage closely (i.e., enter into a partnership or other development agreement) with development partners, with the end goal of ensuring some degree of public ownership in the project.

- Local or state government entities invest significant financial resources in exchange for an active role in the decision-making, development process, and ongoing management of housing, beyond basic regulatory oversight. This includes retaining a full or partial ownership stake in the properties.
- They are long-term owners of the housing or the land on which it is built, maintaining continuous public control and oversight over the properties.

Domestic Models Overview

The domestic models of public development and ownership are categorized into three groups:

- *Group A: Mixed-Income Housing (Affordable with Market-Rate)*
    - Models like those in Montgomery County, MD; Atlanta, GA; and Chicago, IL use low-cost revolving loan funds to finance a portion of the construction of mixed-income housing developments. These funds work alongside conventional construction loans from private or governmental entities to replace the capital typically provided through private equity investments. They are designed to acquire a stake in a project that is proportional to its investment, thereby giving the public entity control over a portion of the development. Recently, the state of Colorado also developed a model that aims to produce mixed-income housing through government-funded direct equity investment, rather than loans.
    - Examples: Housing Production Fund (HPF) (Montgomery County), Atlanta Urban Development Corporation (AUD), Chicago's Green Social Housing Revolving Fund, Colorado's Affordable Housing Financing Fund.
- *Group B: Public Housing Conversions*
    - Public housing authorities like those in Boston, MA; Cambridge, MA; and Hawaii are expanding their portfolios using programs like Faircloth-to-RAD. They leverage existing public housing to redevelop and add units while maintaining an ownership stake in the property.
    - Examples: Boston Housing Authority, Cambridge Housing Authority, Hawaii Public Housing Authority.
- *Group C: Affordable Housing (No Market-Rate Units)*
    - Established public or quasi-public models showcase long-term public development and ownership with and without federal tax credits.
    - Examples: Dakota County Community Development Agency (CDA) (Minnesota), The Housing Company (THC) (Idaho).

Financial Analysis

We analyzed Rhode Island rent, development cost, and operating expense data and constructed a simple analytical model of a hypothetical multifamily rental development. This allows us to better understand the financial obstacles and possible pathways to developing affordable housing that does not rely on Low-Income Housing Tax Credit equity in Rhode Island, given market conditions.

Key Tools for Emerging Public Development Entities

The study takes a closer look at 11 tools that public entities use to facilitate housing development, including financing tools such as revolving funds, tax-exempt bond recycling, and risk-share lending from

the Federal Housing Administration (FHA) and the Federal Financing Bank (FFB), as well as regulatory and programmatic tools such as land banking, self-insurance, and special tax levies.We discuss the potential impact of these tools and identify the statutes, rules, and conditions that shape how they may be used, including in the Rhode Island context.

International Models Overview

The study also explores models from Vienna, Helsinki, Copenhagen, Singapore, and Hong Kong. These models vary greatly due to different political and economic contexts but offer valuable lessons on cost-based rents, the use of public land, and the role of nonprofits in housing development.

Recommendations and Conclusion

Models of public development and ownership show promise for delivering new housing because they provide a package of financial resources and regulatory allowances that are designed to develop multifamily housing that includes some mix of affordable housing. The models also grow out of specific needs or historic experiences that make public development an evolution of their approach to building affordable housing. But many of the models we examine are new and largely untested, making it difficult to fully analyze their performance across different market cycles. This long-term analysis is critical when assessing potential value of a public developer over a private one, particularly at the end of a regulatory agreement, when affordability restrictions are set to expire. Others originated in market and political contexts that are very different from Rhode Island's; as such, these models cannot simply be copied and pasted wholesale. Nevertheless, this analysis uncovered the various tools, mechanisms, and capacities these models draw on, many of which can be applied in Rhode Island. It also suggested how Rhode Island can harness, build on, and streamline its many existing strengths (such as RIHousing's lending authority and expertise, and the fact that multiple Rhode Island public housing authorities (PHAs) are already doing public development) to promote affordable housing development. Based on this analysis, we recommend that Rhode Island:

- **Create a Publicly Capitalized Fund that Focuses on Creating New Affordable Housing:** Establish a publicly-capitalized, revolving, discretionary fund to flexibly lend to or invest in mixed-income or 100 percent affordable multifamily housing projects.
- **Identify Discrete Needs that only a Public Developer Could Fill:** Start small to build capacity, experience, and a deeper understanding of statutory barriers. The State should identify specific needs that a public developer entity could address, either because for- and non-profit organizations are unable to fulfill these roles, or because a public developer would have a distinct advantage. Examples include disposing of publicly-owned land for mixed-income housing, handling tax lien foreclosed properties, or rehabilitating distressed government-owned properties.
- **Establish Dedicated Funding Streams:** Explore ways to establish dedicated funding streams for public investment in housing, similar to Dakota County's property tax levy or Colorado's income tax levy.
- **Reform Multifamily Tax Exemption to Incentivize Affordable Housing Inclusion:** Reform the "8 percent tax"[1] to create a modernized multifamily tax exemption. This could be a model in

[1] See footnote 24.

which a deeper tax exemption is made available as-of-right to projects that provide a higher share of affordable units, or a smaller share of units that are more deeply affordable.

- **Maximize and Streamline Existing Programs:** Maximize the use of programs like the Low-Income Housing Tax Credit (LIHTC), FHA/FFB risk-share loans, and the U.S. Department of Housing and Urban Development's (HUD) Rental Assistance Demonstration (RAD) program to finance new affordable housing developments.
- **Examine the Capacity to Allocate Additional Private Activity Bond Funding to Multifamily Housing Development:** Assess the potential for increasing allocations to private activity bonds specifically for multifamily housing projects. This should involve a detailed evaluation of current usage rates, how the State uses private activity bonds to fund housing initiatives (between single-family and multifamily) compared to other eligible uses, the economic impacts of increasing limits, and the feasibility of directing these funds to high-need areas.
- **Create a Technical Assistance Network:** Create a technical assistance network for public housing authorities that 1) assists them in using Faircloth-to-RAD and other HUD programs that can facilitate (re)development; 2) helps them access RIHousing financing and federal tax credits; 3) identifies and facilitates access to skilled development consultants, planners, and appraisers; and 4) provides a direct line of communication to HUD.
- **Subsidize PHA Pre-Development Activities:** Continue to provide grants to PHAs to support site selection, financial planning, appraisals, land entitlement and other regulatory processes, building design and other activities that impose costs before the construction phase.[2]
- **Incentivize Density and Inclusionary Zoning:** Provide models for and incentivize municipalities to allow more density as-of-right and to adopt inclusionary zoning programs that require permanent affordability in exchange for greater density.
- **Understand How Government-Owned Land Can Be Turned into Multifamily Housing:** The State should create a statewide inventory of public land as well as institutionally owned land (e.g., land owned by healthcare facilities).The State should also consider drafting guidelines for repositioning this land for multifamily housing, including rules for its disposition, long-term ownership, and fair appraisals. Additionally, the State should establish a regulatory framework addressing key terms like affordability levels and rent increases. Finally, the State should require and assist PHAs to assess their available land's potential for new housing development.
- **Examine Solutions to Rising Insurance Costs:** Convene a working group to explore ways to tackle rising insurance costs in the multifamily market, such as self-insurance.

Determining whether Rhode Island should create a public development entity is challenging. Our analysis suggests that if Rhode Island pursues this approach, the entity's role should be well-defined and based on a clear need where it possesses unique authority to address specific issues in a cost effective manner. Rhode Island already has a sophisticated network of nonprofit housing organizations and PHAs capable of developing multifamily affordable housing. Nonetheless, should the State decide to pursue the creation of a public development entity, several considerations must be taken into account:

- **Market Conditions**: Understanding local market conditions, including land, construction, and labor costs, as well as rent levels, is vital. Cross-subsidization models, which rely on market-rate

[2] See footnote 15.

rents to subsidize affordable units, may be limited by local market conditions such as relatively high development costs.

- **Cost and Revenue Management**: Considerations of development costs, construction financing, operating costs, risk mitigation, and long-term revenue streams are essential. Public entities would need to balance these aspects to achieve financial viability, cost effectiveness, and maximum affordability.
- **Risks and Returns**: When public entities take on the role of real estate developers, they must navigate not only the risks associated with financing affordable housing but also the distinct and often greater risks inherent in development. Unlike lending, which is typically more cautious—especially for affordable housing projects funded through LIHTC—development carries a different risk profile. These include market risks, such as fluctuations in rental income and the possibility that projected rents are not met, as well as development risks like construction cost overruns. Public developers may also face unique challenges, such as the costs of overcoming public resistance to development, adapting to institutional changes under new political administrations, and managing long-term operational obligations with potentially insufficient resources. These risks must be carefully balanced against potential returns, which include the number of new housing units created, the depth and duration of affordability, profits that can be reinvested in further development or housing programs, and potential savings on future costs to preserve affordable housing.
- **Long-Term Sustainability**: Ensuring the long-term sustainability of publicly developed housing projects through proper maintenance, management, and reinvestment strategies would be critical. Such projects need re-capitalization every 15-20 years to address issues from aging building systems and require quality management for successful operations, including leasing, maintenance, and compliance with local, state, and federal laws.

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Introduction

Study Purpose and Methods

The state of Rhode Island faces a severe housing shortage, particularly multifamily rental housing affordable to low- and very low-income households.[3] Despite the shortage, Rhode Island ranks at the bottom of all U.S. states when it comes to housing production. Rhode Island is tied with Connecticut for issuing the fewest building permits for new housing per capita of any U.S. state.[4] One proposal for addressing these challenges is to support the development and ownership of affordable housing through one or more public entities, with the goal that such entities can find ways to achieve lower development costs than private actors, and, acting as owners, can do more to ensure the durability of the affordability.[5] Public development and ownership models exist across the globe, and in some cases, new ones are emerging. This study conducts a targeted scan of public development and ownership models both in the U.S. and internationally,[6] and of the key financing and regulatory tools that these models employ. We pair this analysis with a review of Rhode Island's development environment, regulatory context, and landscape of housing-related agencies to better understand how these models might translate to Rhode Island.

This report presents findings from a six-month study period. Through a set of more than ten, hour-long interviews with stakeholders who are pioneering public development models in the U.S. and with experts on social housing systems abroad, along with an in-depth review of programmatic documents, reports, and project-level underwriting (proformas), we identified models of particular interest for Rhode Island as well as key financing, regulatory, and programmatic tools that can facilitate public development and ownership. We then conducted eight additional interviews with Rhode Island stakeholders, including four PHA directors, a HUD official, two nonprofit leaders, and a municipal policy expert, to learn more about barriers to and opportunities for public development and ownership in Rhode Island. We also briefed two elected officials on interim findings and incorporated their feedback. Finally, we used data on Rhode Island's land, construction, and labor costs, rents, financing terms, and other conditions to inform an analysis of the feasibility of public development and ownership in the state.

What Is Public Development and Ownership?

For the purposes of this study, we define **public development and ownership** of housing as any scenario in which a local or state agency puts together some combination of the following criteria, with the end goal of ensuring some degree of public ownership.

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[3] National Low-Income Housing Coalition. (2024). *The Gap: A Shortage of Affordable Homes.* https://nlihc.org/gap

[4] U.S. Census Bureau, Building Permit Survey, Annual History by State. https://www.census.gov/construction/bps/annual.html

[5] For the context of this report, 'affordable housing' is housing whose cost consumes no more than 30 percent of a low-income household's income. Low-income households are typically categorized as those whose income is 80 percent of AMI or below.

[6] The scan conducted to identify case studies for this report was not exhaustive. Instead, it was targeted based on media coverage, accessibility to publicly-available information and interviewees, and other factors.

Public development and ownership involve scenarios where:

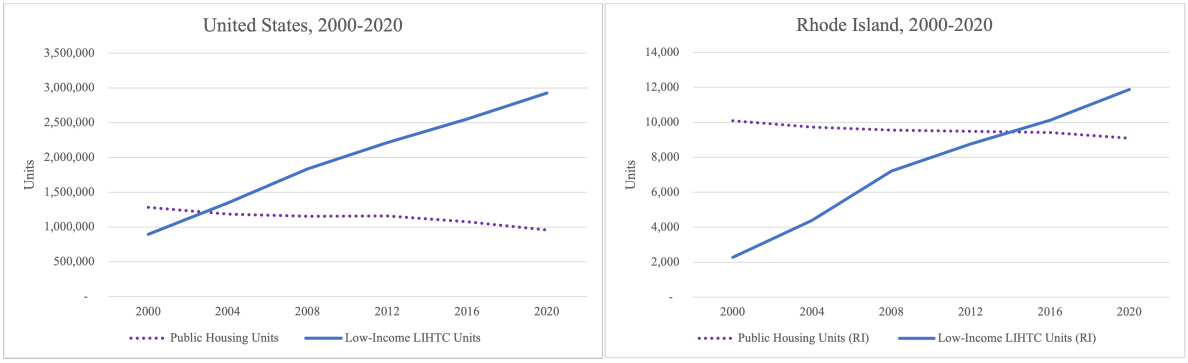
- Agencies act directly as a real estate developer, or engage closely (i.e., enter into a partnership or other development agreement) with development partners to secure some degree of public ownership in the project.
- Local or state agencies invest significant financial resources to secure an active role in the decision-making, development process, and ongoing management of housing, beyond basic regulatory oversight. This includes retaining full or partial ownership stakes in the properties.
- They are long-term owners of the housing or the land it's built on, maintaining continuous public control and oversight over the properties.

In theory, a public developer offers specific advantages over a private developer (non-profit or for-profit) in fulfilling public policy goals. For example, a public entity would have a mission-driven focus rather than being primarily motivated by maximizing financial returns (in the case of a for-profit developer). A public developer would also have enhanced accountability, being directly accountable to the community and elected officials, which could enhance transparency and align developments with public interests. Such an entity would also likely have control over public land, ensuring it is used for its intended purpose rather than being sold off for profit-driven developments. Additionally, a public developer would be able to leverage public resources that may not be available to private developers. Finally, a public developer can take a longer-term view on investments rather than focus on more immediate gains.

However, each of these could also be considered a potential disadvantage. Public developers may face bureaucratic delays and inefficiencies, slowing down project timelines and increasing costs compared to more streamlined private developers. Political influences and changing administrations can introduce uncertainty and instability, potentially impacting long-term planning and consistency. The need for public consensus and regulatory compliance can limit the flexibility and responsiveness of a public developer, making it harder to adapt to market conditions or innovate. Reliance on public funding can be precarious, as budget cuts and shifting policy priorities can reduce the availability of these resources, or make projects more expensive, in turn leading to funding gaps and project delays, along with accrued deferred maintenance. Long-term investments by public entities, such as spending more to address costly capital repairs, may face scrutiny, particularly when there is pressure to prioritize immediate needs.

In the U.S., our highest profile case study of public development and ownership of housing is public housing. America’s public housing portfolio has unfortunately encountered many of these challenges, affecting its overall sustainability and quality. In America’s public housing program, local PHAs own and manage public housing developments and are overseen by the federal government, which provides them with operating and capital subsidies. Production under the program has largely ceased. Instead, the prevailing paradigm for affordable housing production today is market-based, and largely relies on leveraging the Low Income Housing Tax Credit (LIHTC) that the federal government makes available for states to allocate to local projects. Figure 1 below shows low-income units built with LIHTC in relation to the public housing stock in the U.S. and in Rhode Island. Despite its creation in 1986, the number of low-income units that have been built using LIHTC is now more than double the number of public housing units nationwide, and the count of LIHTC units overtook the count of public housing units in Rhode Island by 2016.

Figure 1. Total Count of Public Housing versus Low-Income LIHTC Units



Note: the LIHTC trendlines represent all low-income units produced, regardless of expiration date, but exclude tax credit projects missing year-placed-in-service information. Sources: HUD Picture of Subsidized Households 2000-2020 and HUD LIHTC Property-Level Data 2000-2020.

There are two primary types of LIHTC (4 percent and 9 percent credits), but neither fully cover total development costs of affordable housing. To make projects feasible, State and Local entities often contribute some combination of soft (or "subsidy") loans, grants, property tax discounts, other tax credits or tax savings, and may facilitate pre-development zoning changes, to enable LIHTC-financed development. However, those government entities tend to be more financially cautious, and generally do not engage directly in development activities, hold an ownership stake in the buildings, or act as equity investors.[7] While LIHTC projects are required by statute to serve at least 20 percent of households at or below 50 percent of the Area Median Income (AMI) or 40 percent of households at or below 60 percent AMI, LIHTC-financed housing ends up serving many extremely low-income tenants who would otherwise qualify for public housing (about 50 percent of LIHTC tenants earned less than 30 percent AMI in 2021) because of the program's interaction with vouchers and other subsidies.[8]

[7] Financial capital is essential for building housing, with equity investors and mortgage lenders playing significant but distinct roles, each with different goals and risk profiles. Equity investors seek ownership in a property or company, which grants them voting rights and the potential for high returns through dividends and capital appreciation as the value increases. This ownership can be structured through direct ownership, joint ventures, partnerships, or real estate funds, each offering different levels of control and involvement. This form of investment carries higher risk because returns are not guaranteed and depend on the property's financial performance. In contrast, mortgage lenders aim for lower risk and stable income by providing loans secured by the property, prioritizing regular interest payments and being first to receive payments from a property's cash flow. Despite this priority, there is still a risk that the property may not meet its financial obligations. The primary return for mortgage lenders is the interest income from the loan, repaid over a defined term, often up to 30 years. This provides predictable returns and the security of foreclosing on the property in case of default. In sum, equity investors seek significant growth and ownership potential, while mortgage lenders focus on stable, reliable income with reduced risk.

[8] In 2018, a revision to the tax code introduced a new income averaging option for LIHTC whereby new buildings could rent to households who earn up to 80 percent of the AMI as long as the average rent and income limit of the units designated as affordable does not exceed 60 percent of the AMI. This rule made it somewhat easier to cross-subsidize in LIHTC developments.

Domestic Models

Public development and ownership has gained increasing attention across the U.S. over the past year.[9] Our scan identified nine domestic models that we consider far enough along in planning for or actually constructing new units that they offer valuable insights for Rhode Island. We divide them into three groups:

- **Group A: Mixed Income Housing (Affordable with Market-Rate).** These models–including the Housing Production Fund model pioneered by the Housing Opportunities Commission of Montgomery County, Maryland; the newly formed Atlanta Urban Development Corporation; Chicago's Green Social Housing Revolving Fund; and Colorado's Affordable Housing Financing Fund–invest, or intend to invest, public funds that take the place of private equity in the financing for large, mixed-income developments, and in turn, secure an ownership stake in these projects that goes beyond basic regulatory oversight. In this structure, any financial returns can be treated as profit that can fund other mission-based activities, or could be built into an individual project's operations to maintain affordability, fund capital investments, support social services, or create a reserve fund, among other activities.
- **Group B: Public Housing Conversions.** These models–including innovative approaches being taken by the Boston Housing Authority, Cambridge Housing Authority, and Hawaii Public Housing Authority–highlight the potential of public housing authorities to redevelop and expand their portfolios using the Faircloth-to-RAD program and harness the powers they retain to issue bonds, grant tax exemptions, and more.
- **Group C: Affordable Housing (No Market-Rate Units).** These models–including Dakota County Community Development Agency's senior housing program in Minnesota and The Housing Company in Idaho–are examples of public or quasi-public development that have existed for decades, yet have received little national attention. The former model draws on a special county tax levy and unique bond structure to build and own affordable senior housing without any tax credits. In the latter model, Idaho's housing finance agency spun off a nonprofit that acts much like any other affordable housing developer, but is partially governed by the public agency.

[9] In February 2023, Seattle, WA voters approved Initiative 135 to create a Seattle Social Housing Developer (SSHD) charged with developing and maintaining "social housing" in which higher-income tenants subsidize lower-income ones. The SSHD does not yet have a dedicated revenue stream, though advocates submitted another ballot initiative in February 2024 to fund it using a tax on salaries in excess of $1 million. Members of the California, Massachusetts, and New York state legislatures have each since submitted bills to create their own state-level social housing agencies. Governor Healey of Massachusetts has since included language for a social housing pilot in a housing bond bill. Other states have been making strides to enable public development without calling it social housing. For instance, Colorado passed a bill in 2022 to create the Middle-Income Housing Authority, which has the power to "acquire, own, operate, and finance affordable rental projects" by issuing its own tax-exempt bonds and by entering into public-private partnerships. Finally, in August 2023, the *New York Times* drew national attention to the mixed-income public development model with an article titled "This Is Public Housing. Just Don't Call It That" showcasing The Laureate, a newly opened apartment building in Montgomery County, Maryland in which the county's public housing authority had a 70 percent ownership stake.

Table 1. Characteristics of Selected Domestic Models

	Montgomery County	Atlanta	Colorado	Boston	Cambridge	Idaho	Dakota County*
LIHTC					✓	✓	
State Subsidy	✓				✓	✓	
Non-LIHTC Federal Subsidy	✓			✓	✓		
Property Tax Exemption or PILOT	✓	✓		✓	✓	✓	✓
Governance Level	County	City	State	City	City	State	County
Ownership	County-level PHA has majority ownership	Municipal PHA affiliate has majority ownership	State equity investment generates returns, but does not translate into ownership	Unknown	Municipal PHA retains small ownership stake and management responsibility	Nonprofit with public sector oversight owns in full[10]	County-level PHA owns in full
Affordability Mix	At least 30 percent of units are affordable	At least 30 percent of units are affordable	All units must be income-restricted, and restriction must average at or below 90% AMI	Unknown	Unknown	Close to 100 percent affordable	Close to 100 percent affordable
Units/projects completed or under construction**	731 units in 2 projects	None	None	None	203 units in 2 projects	2,010 units in 48 projects	1,800 units in 29 projects
Units/projects in pipeline**	2,399 units in 4 projects	Unknown, 2 projects	628 units in 6 projects	3,000 units in an unknown number of projects	1,500 units in an unknown number of projects	Unknown	Unknown

**For the purposes of this table, we focus only on Dakota County CDA's senior housing program.*

[10] When THC develops LIHTC properties, those are initially owned by a limited liability company, but THC includes a provision in the development contract ensuring that ownership transitions fully to THC after the LIHTC compliance period expires so that the nonprofit can ensure their continued affordability.

***Note that these numbers are drawn from a variety of sources, including interviews, presentations, and documents, which date from late 2023 through mid 2024.*

Rhode Island Context

Certain aspects of Rhode Island's housing market and development landscape provide important context for all three groups of models. There is widespread consensus on the need for new affordable housing, although interviewees stressed that additional subsidy beyond LIHTC is needed to build that housing. Interviewees from Rhode Island noted that 9 percent LIHTC credits can typically only fund about three projects a year, and that the state is not maximizing its allocation of 4 percent credits.[11] Interviewees also stressed the particular importance of housing targeted to extremely low-income households (earning less than or equal to 30 percent AMI).

Many financing tools and resources required for the models described below are available and/or actively used in Rhode Island, including risk-sharing, property tax exemptions, Faircloth units, and Small Area Fair Market Rents (SAFMRs). RIHousing, a national HFA, is approved by HUD for the risk-sharing program, allowing it to spread risk without necessarily reducing financing costs. With this approval, RIHousing can insure less than 50 percent of losses on risk-share loans and use its own underwriting standards and terms, thereby reducing risk and borrowing costs.[12] Rhode Island also has a law that can lower property taxes for properties that restrict either or both the rents that may be charged to tenants of the property or the incomes of the occupants of the property.[13] Municipalities can also grant property tax exemptions. Additionally, property owned by city-based housing authorities is exempt from property taxes (unlike property owned by other housing authorities such as RIHousing). Model B relies on leveraging "Faircloth units," which are capped at the number of units PHAs owned or operated in 1999. The state's 730 Faircloth units offer a modest opportunity to expand the number of public housing units. However, these units are not evenly distributed across the state–400 of those units are located in Newport. SAFMRs allow PHAs to align rents with small area payment standards, allowing for higher levels of federal subsidy in high-rent Zip Codes. Seven housing authorities in Rhode Island have implemented SAFMRs.

Financing new development in Rhode Island can be difficult, impacting the feasibility of the models outlined below. While many places in Rhode Island have high construction costs similar to those in neighboring markets like Boston, rental markets are not as strong and may not be sufficient to support

[11] Maximizing the allocation of 4 percent Low-Income Housing Tax Credits involves full use of a state's "volume cap" that is allowed by the federal government. The volume cap permits states to issue federally tax-exempt private activity bonds, which attract investors due to their tax-exempt status. These private activity bonds can finance a variety of projects, like highways or waste recycling facilities, but notably, they can also be used for multifamily housing development that includes low-income housing components. A unique advantage of using these tax-exempt bonds for multifamily housing is that they automatically qualify the projects for 4 percent LIHTCs. This dual benefit of tax-exempt bonds and 4 percent tax credits significantly enhances the financial feasibility of low-income housing projects. States that aim to maximize their 4 percent LIHTC allocation do so by dedicating a significant portion of their volume cap to multifamily housing development. By doing this, they not only optimize the available federal tax credits but also unlock additional federal funding that would otherwise remain untapped.

[12] For more information, see "FHA/FFB Risk-Share Loans" below.

[13] See footnote 24.

models like those in Group A. Rising insurance costs in the state have further elevated ongoing costs.[14] Group B models can benefit from the Moving-to-Work (MTW) designation–which facilitates shifting funds between programs–but no PHAs in Rhode Island have such a designation. Furthermore, interviewees observed a deficit of Community Development Financial Institutions (CDFIs) and other gaps in the local financing ecosystem (including funding for pre-development efforts, although some noted that recent grants for these costs have been helpful in filling the gap[15]) that make affordable housing development particularly challenging.

A public developer in Rhode Island would also face challenges related to land use and public support. While public land would help lower costs for public development in all three models below, interviews indicated that the state has a limited amount of publicly-owned land, and that an inventory of the available land would improve strategic planning for new development. In addition, many interviewees pointed out the difficulty of drawing on efficiencies of scale for affordable development in a state with largely single-family zoning. Interviews suggested that the parochial nature of Rhode Island's development environment (with 39 different cities and towns, and differing interpretations of zoning and land use), makes affordable development challenging. Finally, concerns about the difficulty of fighting public opposition to affordable development ("Not in my backyard (NIMBY)" attitudes) was another common theme in interviews with Rhode Island stakeholders. For the past several years, Rhode Island legislators have introduced a wide range of bills designed to streamline the development process, standardize land use and zoning requirements, and allow higher density housing by right, particularly developments that incorporate affordable housing.[16]

Critically, state and local housing agencies in Rhode Island already have affordable housing development experience, although additional in-house capacity and expertise would likely be needed to implement the models outlined below. RIHousing is a PHA and an HFA, and invested $1.2 billion into the state in 2023, including $244 million in the form of financing for new or rehabilitated affordable homes.[17] Indeed, interviewees elevated PHAs as the entities best-positioned to develop and own public housing, and some PHAs have already engaged in development at modest scales. For example, Coventry Housing Authority

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[14] Voghel, J. (2024, March 29). Higher insurance premiums hindering new affordable housing. Providence Business News. https://pbn.com/higher-insurance-premiums-hindering-new-affordable-housing/. Chen, D. (2024, June 7). 'Not Sustainable': High Insurance Costs Threaten Affordable Housing. The New York Times. https://www.nytimes.com/2024/06/07/us/home-insurance-homeless-affordable.html

[15] In 2023, RIHousing created a new program to make grants to PHAs for "costs associated with the development of public housing units" (including pre-development grants of up to $250,000 and technical assistance grants of up to $50,000) using State and Local Fiscal Recovery Funds that were appropriated through the American Rescue Plan Act (ARPA). By February 2024, the program had committed 5 pre-development awards, 7 technical assistance awards, and 3 housing development proposals. Sources: RIHousing. (2024). "Approval of Public Housing Authority Fund Program." *Request for Action by Board of Commissioners.* https://www.rihousing.com/wp-content/uploads/ARPA-PHA-Predevelopment-TA-Program-RFA-1.11.24.pdf; RIHousing. (2024). *Memo to Board of Commissioners,* February 2024. https://www.rihousing.com/wp-content/uploads/Board-ED-Report-2.15.24-Final.pdf

[16] RIHousing has summarized relevant bills introduced in 2023 here: https://www.rihousing.com/wp-content/uploads/MTAP_Bill-Summaries_082023.pdf. In 2024, the General Assembly passed 14 housing bills, several of which are designed to speed permitting and reform zoning: https://www.rilegislature.gov/pressrelease/_layouts/15/ril.pressrelease.inputform/DisplayForm.aspx?List=c8baae31-3c10-431c-8dcd-9dbbe21ce3e9&ID=374721

[17] RIHousing. (2024). *Annual Report 2023*. https://www.rihousing.com/annualreport2023/

created a development arm to build four projects since 1999 (three LIHTC properties and one HUD 202 project). In addition, Newport Housing Authority recently redeveloped 262 units. However, many PHAs have not developed properties in recent years, and even those who have would likely need to add capacity to engage in larger-scale initiatives.

Group A: Mixed-Income Housing (Affordable with Market-Rate)

Group A models invest, or intend to invest, public funds that take the place of traditional mezzanine financing and equity investments in the construction financing for large, mixed-income developments, and in turn, secure a degree of public ownership in these projects that goes beyond basic regulatory oversight. Many make this investment in part using a **revolving loan fund**, which is a pool of capital from which loans with favorable terms are made to finance housing developments. Once these loans are repaid, the funds are "revolved" back into that same pool, making them available for other projects. The loan fund is sustained using this replenished capital. An exception is Colorado, where there is less pressure for the state's investment to revolve, because its fund, the Affordable Housing Financing Fund (AHFF), is supported by a dedicated funding stream (a 0.1 percent state income tax). To the extent there are returns to the State's equity, , at least some of those returns will be distributed to tenants in the new buildings as a way to promote wealth-building.

In Montgomery County and Atlanta, revolving loan funds are seeded with public capital and are used to make short-term (5-year) construction loans. These loans are designed to replace higher-cost market-financing, complementing conventional construction loans to complete the capital stack required for housing development.[18] Because these revolving loan funds are publicly driven, they offer financing at lower interest rates compared to the private market. Similar to mezzanine financing, revolving funds provide construction financing that is subordinate to senior construction loans. Funds like these can participate as a hybrid of debt and equity, or as direct equity investments, but with the feature of accepting lower financial returns than private market investors due to their public-oriented goals.[19] In a hybrid structure, the investment might grant varying degrees of ownership or control. In some cases, the public entity may gain a direct ownership stake, while in others, it may have more limited influence, primarily receiving financial returns or using that stake to prioritize social outcomes. In Montgomery County, HPF loans come with interest rates that are significantly lower than those expected by private equity investors, reflecting the public-oriented goals of the investment.[20] Because the revolving loan is "taken out" (the principal is repaid) by other forms of capital when a project converts to permanent financing, its main

[18] A capital stack is the structure of the various financing sources used to fund a real estate project, and typically includes a combination of equity and debt. The stack determines who will receive the income and profits generated by the development and in what order (usually, senior debt lenders are paid first, followed by mezzanine debt or a "second" mortgage, then private equity). Each layer of the stack carries different levels of risk and return; senior debt is the least risky and therefore has the lowest return, while equity is the riskiest and demands the highest return. Often, a project has one set of loans with terms of 3-5 years specifically to finance the construction phase, followed by a permanent loan phase upon a project's completion.

[19] See footnote 7. In these cases, the entity might not act as a typical equity investor in that their primary goal is to achieve positive social outcomes. In the case of affordable housing with market rate units included, they might seek lower than market rate returns or to translate dividends back into building operations and/or other development activities. The key distinction is that the investor is not also acting as the mortgage lender.

[20] Underwriting documents suggested that the interest rate on HPF construction loans ranges 3.5 and 5 percent (with the higher rate assumed during the recent high inflation period).

function is to help overcome the hurdle of construction financing (whether due to the cost of capital or the lack of available capital altogether).

It is important to note that the model of a local government or HFA providing a low interest loan that subsidizes the development of affordable housing is not new. In fact, such subsidized loans are commonplace in affordable housing development. What is unique about this fund, which is relatively new having been created in March 2021, is that it creates an ownership stake for the local government entity (in combination with the use of other public financing tools). To establish the HPF, the county's PHA, called the Housing Opportunities Commission (HOC), issued a $50 million bond, with the County Council agreeing to fund the principal and interest payments.[21] The Council approved a second issuance of an additional $50 million in May 2022 for a total of $100 million raised through the sale of bonds. Each of the two $50 million fund tranches is expected to fund two projects at a time and revolve every five years. One of the first projects to receive an HPF construction loan paid interest on that loan during the construction period at a rate of 3.5 percent. The interest accrued during the construction term and was repaid to the county, along with principal, at permanent loan closing. The HOC underwrote the project to pay about $1.6 million in interest for a $14.3 million loan. The HOC anticipates that the HPF will cover a total of $250 million in construction loans, funding approximately 3,000 units over the first 20 years. The bond issuance is expected to be fully repaid within this period, after which they anticipate that the fund will revolve with no additional costs.[22] However, it is important to note that there might be ongoing costs associated with maintaining below-market-rate interest rates.

There are two main approaches Group A models use for identifying viable projects. The first is to enter a development project that has already secured permits, but has stalled due to lack of financing (such as due to a lack of affordable financing). Montgomery County has used this approach, where the public entity offers HPF financing in exchange for affordable housing commitments, effectively using government investment to ensure the development of affordable units. Similarly, developers must already have site control when they apply for an equity investment through Colorado's AHFF, and are expected to close within a year of receiving an equity award. A second option is to develop a strategy for using public land. For instance, Chicago is exploring the potential for mixed-income development on sites that will open up during the course of the Red and Purple Modernization, the largest capital project in the Chicago Transit Authority's history. This approach allows the public entity to manage projects from their inception.

These revolving loan funds are not designed to fully cover total development costs, rather, they fill a financing gap that exists after a conventional construction loan is secured. As such, Group A models rely on a package of public resources beyond a revolving loan fund. The HOC of Montgomery County is both a housing authority and an HFA, and has discretion to provide low-cost capital, tax-exempt and taxable bond financing, property tax exemptions, discounted land, and a County-run property insurance program.

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[21] The HOC calculates that in exchange for issuing a low-cost triple-A municipal bond for $50 million, the County might pay about $4.25 million per year in today's high-interest environment. But the fund revolves at no cost after 20 years, and in the meantime, the HOC earns a 5 percent development fee on each project–totalling to about $2.5 million per year–which it repays to the County. This means that the HPF may cost the County as little as $1.75 million per year.

[22] Housing Opportunities Commission of Montgomery County, MD. (2024). *Adopted Budget Book,* p.147. https://www.hocmc.org/images/files/Publications/FY_2024_Adopted_Budget_Book.pdf

The HOC also has two lines of credit with a local bank in an aggregate amount of $210 million, which allows it to act nimbly as a joint venture developer and/or lender, with more flexibility than comparable entities.[23] For example, in the case of the aforementioned HPF-financed deal, its financial feasibility relies on the use of a full property tax exemption, a 40-year mortgage loan (supported by the **FHA risk-sharing program**), cross-subsidy from market rate rentals (70 percent of all apartments), and a separate equity investment from the HOC itself. In the case of Atlanta, the AUD operates as a subsidiary of the city's public housing authority, Atlanta Housing. Georgia law allows PHAs and their subsidiaries to grant tax exemptions. The AUD also relies on public land, funding, and debt guarantees from the City of Atlanta, and underwriting and development capacity from the city's economic development agency, as well as FHA risk-share loans for permanent financing.

Some of the tools used to finance affordable housing development or lower development costs in group A models are actively used in Rhode Island, but not others. As mentioned, RIHousing is approved to use the FHA risk-sharing program. In addition, there are a number of ways a public developer could lower property taxes, whether via a statewide law that allows for capping taxes on affordable units,[24] municipalities' power to grant tax exemptions, and the exemptions applied to properties owned by city-based housing authorities. However, interviews suggested that there is not a large supply of publicly owned land in the state, and it has not been inventoried.[25] Finally, insurance costs were also significantly higher in Rhode Island mixed-income developments than in Montgomery County's. The effect of higher costs is to raise operating expenses, thereby lowering supportable debt.

Group A models are designed to create mixed-income housing by using the proceeds from market-rate rents from some units to subsidize the lower rents of affordable units that are targeted to the 50-80 percent AMI range. The projects tend to be built at a large scale, with typical projects including hundreds of units. These are substantially larger than the typical LIHTC development in Rhode Island and elsewhere in the

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[23] Housing Opportunities Commission of Montgomery County, MD. (2023). "New Issue: Multiple Purpose Bonds, 2023 Series C." *Bond Prospectus*, October 19, 2023, p.8. https://prospectus.bondtraderpro.com/$MDHSG23.PDF

[24] Under Rhode Island statute §44-5-13.11 (enacted in 1995), properties in which a covenant restricts either rents or tenants' incomes (or both) may be taxed at a rate that equals eight percent of the property's previous years' gross scheduled rental income, or a lesser percentage as determined by each municipality. There has been some debate about whether the preferential tax treatments apply only to low-income units, or to the entire property, and whether 'low-income' should be better defined. Providence City Council in April 2024 passed an ordinance restricting application of the '8-Law' to housing that restricts tenants' income to 80 percent of AMI, and where rent is capped at 30 percent of income. Source: Alexandra Leslie. 2024. "'8-Law' Tax Break Ordinance Passes Providence Council Despite Concerns." *WPRI,* April 19, 2024. https://www.wpri.com/news/local-news/providence/8-law-tax-break-ordinance-passes-providence-council-despite-concerns/. A recent report also found that not all low-income housing in Rhode Island uses the 8 percent tax treatment. Potential reasons include the completion of developments prior to the creation of the 8 percent% tax, the use of separate local tax stabilization agreements, or cases where the general tax structure is more advantageous.
RI Housing. (2024). *2024 Report on RIHousing Development Activity and 8% Tax.* https://www.rihousing.com/wp-content/uploads/2024-Report-on-RIHousing-Development-Activity-and-8-Tax.pdf

[25] Providence used $8.5M in ARPA funds to launch a land bank program in 2022, which acquires, holds, and transfers underused land for affordable housing. City of Providence. (October, 2022). *Mayor Elorza, PRA, Partners Announce Providence Neighborhood Land Bank*. https://www.providenceri.gov/mayor-elorza-pra-partners-to-announce-providence-neighborhood-land-bank/ RIHousing does manage the "Land Bank Program," which provides financing for non-profit and government entities to acquire properties, and could be used to support acquisition for projects under the Group A model. RIHousing. *Planning and Predevelopment: Land Bank Program*. https://www.rihousing.com/planning-predevelopment/

country.[26] Rhode Island's zoning does not lend itself to large-scale development in many cases; 87 percent of land is zoned for single-family housing by right, and only eight percent is zoned for properties with four or more units.[27] To better facilitate affordable and mixed-income development, Rhode Island could incentivize local zoning changes to allow higher-density development, as well as consider inclusionary zoning programs that allow greater density for projects with income-restricted units.

Market conditions matter on both the demand and supply side. On the demand side, market rents need to be high enough to generate income that can reliably act as a "**cross-subsidy**" to support the maintenance and operating costs of income-restricted units. However, when unexpected events occur–a major recession, for example, or a large storm–the government may need to step in to provide operating subsidies or support the cost of updating and replacing major systems. Under a public development model in which the expectation is that a public developer is self-sustaining over a long time horizon, there might be pressure to redirect excess cash flow that is beyond debt and equity obligations to also fund future projects. On the supply side, development costs must not be so high that the project becomes economically infeasible, even with public subsidies. High land, construction, or labor costs, or too-low rents, could make the model infeasible in certain markets. Indeed, Rhode Island interviewees noted that the state faces construction costs on par with other high-cost places in Massachusetts, but felt that it typically lacks the market rents needed to support Group A models. They suggested that outside of Providence's Jewelry District and certain coastal areas, market rents are not much higher than 120 percent of AMI, potentially limiting the degree to which projects could benefit from cross-subsidization. The financial analysis section of this report further investigates these conditions using market data. Local interviewees also emphasized the state's need for units targeted to extremely low-income households (those earning 30% or less of AMI) rather than the 50-80 percent AMI units typically produced in this model. They also anticipated opposition to using public resources for mixed income developments rather than purely affordable projects.

Group A's cross-subsidization model also relies on a willingness to use publicly-owned land and investment to develop what might be considered "workforce housing," as opposed to focusing only on the most deeply affordable units. Proponents argue that Group A models can 1) complement the more affordable projects already being built using competitive and limited LIHTC funding, filling an important gap on the housing affordability spectrum; 2) accommodate, and even focus on voucher-holders who face discrimination on the private rental market, thereby enabling deeper affordability; and 3) generate returns over time through rental income and appreciation in property values, which could then be reinvested in additional development and housing assistance programs. However, it is important to recognize that capitalizing on appreciating property values can conflict with maintaining housing affordability, so the degree of reallocating financial returns depends on the specific structure implemented (i.e. whether

[26] According to HUD data, the average size of LIHTC projects built between 2000 and 2019 is 80 units nationally and 78 units in Rhode Island. The size of projects may be constrained both by land use regulations and by LIHTC rules. Practitioners say that it is difficult to build tax credit properties that fall outside of a certain size range or that are mixed-income (see: Miriam Axel-Lute. (2023). "The Only Tool In the Box." *Shelterforce.* http://shelterforce.org/2023/12/08/the-only-tool-in-the-box-what-it-means-that-lihtc-dominates-affordable-housing/)

[27] HousingWorksRI. (2024). *Rhode Island Zoning Atlas*. https://www.housingworksri.org/learning-center/rizoningatlas

market rate residential units are included, and if so, whether the allowed rent growth is capped, or allowed to adjust to market rents, or whether commercial income is included).

In these models, a public entity directly assumes the role of real estate developer, which puts a premium on in-house capacity for, and experience with, real estate development and underwriting. Furthermore, depending on the management structure, a range of capacities may be needed to manage the new units in the long term. This could include directly managing a property's operations or overseeing the work of a private property manager, while also taking into consideration the risks of fluctuations in the market and operating costs.

Montgomery County's HOC has a high level of development expertise, which stems from the Commission's long history of public-private partnerships for mixed-income development. This proves crucial for troubleshooting and implementing the model. The HOC typically hires a general contractor, who is paid a "builder's fee" of 4-4.5 percent of the construction contract for a new HPF-financed building, but the HOC itself collects the developer's fee. Similarly, by bringing together three separate entities, Atlanta's AUD is able to benefit from each of their relative strengths.

In Rhode Island, many existing state and local agencies have important experience with development and financing, and if the state chooses to support a revolving loan fund, in addition to many budgetary considerations of such a decision, it would need to consider the best location for an associated program based on existing capacity and powers. Rhode Island interviewees suggested that PHAs might be the best situated to use this model, because some already have development experience via the RAD program and local development connections. However, in-house capacity and expertise may pose an obstacle for PHAs (some of which have not developed properties in recent history), and interviewees stressed the importance of working with a trusted developer partner. In addition, some PHA don't see building units targeted to households with 80 percent AMI or above as a key priority, given limited resources.

Key Takeaways

- Group A models are designed to produce large amounts of housing without the use of federal tax credits, especially in large developments located in high-opportunity areas that low-income households may not otherwise be able to access.
- The public ownership stake in these models can make it so that any excess cash flow can be redirected into additional development or other housing programs, if such profit is realized. At the same time, this approach also carries a higher degree of risk compared to traditional financing methods for affordable housing development, and efforts to maintain affordability may conflict with property value appreciation and the goal of generating returns. Depending on the design, a public ownership stake has the potential to generate durable affordability as well as long-term returns, but also exposes the public entity to the same risks and challenges any private real estate developer faces.
- These models require significant additional public investment beyond a revolving loan fund. Group A models pair these funds with favorable long-term financing (commonly generated from bond sale proceeds), property tax exemptions, and other tools to reduce total development costs and operating costs. Rhode Island actively uses some of these tools, but not others.

- The feasibility of these models depends on specific local market conditions. As the financial analysis section of this report shows, Rhode Island has relatively high construction and operating costs, and relatively low rents. An analysis of census data surfaces only five census tracts where the 75th percentile of monthly contract rent exceeds $2,500; all of these tracts are located in coastal areas–including Melville (between Portsmouth and Middletown), Barrington, Portsmouth, and Little Compton–with the exception of one in North Providence (the village of Greenville).[28] According to CoStar data, the average rent in Providence was $1,920 (with a high of $2,180 in its most expensive submarket) as of summer 2024.[29] This limits the potential for cross-subsidization.
- Public land is useful, but not always essential, in Group A models.
- In some cases, an already existing entity is better positioned to act as a public developer, while in other cases, it appears to require the creation of a new legal entity.
- A key consideration is the opportunity cost of each public dollar, as state or local funding allocated to one area cannot be used elsewhere. This is important because, in the context of Group A models, the absence of federal tax credits would almost always require additional local funding if the goal is to achieve the same affordability levels mandated by LIHTC rules.

Group B: Public Housing Conversions

The second set of models involves the redevelopment and expansion of existing public housing. Using federal and other subsidies, Boston, Cambridge, and Hawaii's public housing authorities aim to preserve or replace existing affordable units, add additional deeply affordable units, and in some cases add market-rate units to cross-subsidize rent-restricted units.

Importantly, the models in Group B all leverage **Faircloth-to-RAD**[30] conversions. Faircloth-to-RAD is a relatively new tool for public housing development. It allows PHAs to build new public housing units and immediately convert them to units funded with project-based Section 8 subsidies, which often allows public entities to unlock additional subsidies, but still, those subsidies come from a limited funding pool. In the models we examined, PHAs used or anticipated using Faircloth-to-RAD to add new units as part of redeveloping existing public housing sites. They also intended to retain an ownership stake in and management responsibility for these units.

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[28] These figures reflect American Community Survey (ACS) 5-year estimates from 2018 to 2022, reported in 2023 dollars, and may not fully capture recent rent increases in some neighborhoods.

[29] RIHousing. (August, 2024). *Underwriting Report: 99 Water St.*

[30] The Faircloth Amendment prohibited the construction of any new public housing beyond the number of units PHAs owned as of October 1, 1999. Many PHAs have since de-densified their public housing stock through HOPE VI and other programs, and so are below their "Faircloth Limit." Faircloth-to-RAD allows these authorities to convert their unbuilt Section 9 public housing units into Section 8 project-based vouchers. In 2021, HUD first offered guidance for Faircloth-to-RAD conversions. Faircloth-to-RAD builds on the Rental Assistance Demonstration (RAD) Program, which was created in 2011 to enable PHAs to preserve and improve their public housing by converting it from Section 9 to project-based Section 8. Section 8 contracts are stable, predictable, and can unlock opportunities to increase the subsidy the federal government pays for the unit relative to public housing operating subsidies, though there are limits on when those opportunities are available. PHAs use this margin to reinvest in their public housing stock. Faircloth-to-RAD uses the same model to enable housing authorities to build *new* units.

Faircloth-to-RAD comes with several caveats that PHAs must navigate. First, PHAs can only harness this tool to build up to the number of units they owned or operated as of 1999 (their 'Faircloth Limit'); some PHAs have much less Faircloth capacity than others. Rhode Island PHAs collectively have approximately 730 unbuilt Faircloth units, and the majority of these (more than 400 units) are concentrated in Newport. Second, although PHAs can better leverage Section 8 project-based vouchers to attract other private or public financing for development, Faircloth-to-RAD typically still leaves a financing gap. The housing authorities we include in our scan are finding different ways to address this gap. The Boston Housing Authority, as a non-MTW authority that has implemented SAFMRs,[31] has a special ability to increase RAD rents to their small area payment standards, creating a deeper level of ongoing federal subsidy in high-rent zip codes. The Cambridge Housing Authority, on the other hand, is an MTW authority, and so does not have the ability to implement SAFMRS. Instead, the Cambridge Housing Authority must combine Faircloth-to-RAD with LIHTC financing in order to make new development financially feasible. Rhode Island does not have any PHAs with MTW status, but seven housing authorities have implemented SAFMRs as of 2024.[32]

Also critical to these models is PHAs' capacity, experience, and reputation as a developer or development partner. The Boston Housing Authority has significant in-house development capacity which has allowed them to successfully partner with private developers in large-scale public redevelopment projects. The Cambridge Housing Authority has gained so much development expertise that it acts as a development and preservation consultant to at least two other Massachusetts housing authorities. Some Rhode Island PHAs have development experience, though at different scales. For instance, Coventry Housing Authority (a relatively small agency that has a portfolio of 195 public housing units and 282 vouchers and has never issued a bond) responded to the lack of nonprofit housing developers locally by creating its own nonprofit development arm in 1999. The nonprofit, with the help of a consultant, has developed four new projects, including three LIHTC properties and one HUD 202 development. In doing so, it collects rents and earns a development fee that it can use much more flexibly than its other funds. The authority has recently begun advising Smithfield on how to emulate this approach. Newport Housing Authority also has development experience, having recently completed Phase IV of a five-phase redevelopment of Park Holm, a 262-unit site. It partners with TAG Associates Inc., a small technical assistance provider focusing on housing authorities, for all its development activities. Newport hopes to use its Faircloth authority to add new units, but worries it may run out of land. Other PHAs, including Providence Housing Authority (the largest PHA in the state with 2,606 public housing units and around 2,600 vouchers), have not engaged in development in recent years. Providence Housing Authority solicits developers to apply for project-based vouchers but focuses its own capacity on renovation and repairs, and on expanding services

[31] Moving to Work (MTW) is a demonstration program for PHAs that gives participating agencies the opportunity to design and test new strategies. It exempts from many existing public housing and voucher rules and allows greater flexibility with how they use their federal funds. Small Area Fair Market Rents (SAFMRs) are payment standards for Section 8 voucher holders that are calculated at the Zip Code level, rather than at the level of the entire metropolitan area. SAFMRs are designed to allow voucher holders to access high-cost neighborhoods by increasing the amount a PHA can pay in those neighborhoods. HUD permits non-MTW agencies to augment Faircloth-to-RAD rents in certain scenarios, including in zip codes where 90 percent of the SAFMR is more than 110 percent of the metropolitan area FMR.

[32] The PHAs that have implemented SAFMRs are Providence, North Providence, South Kingstown, Bristol, East Greenwich, Narragansett, and RIHousing.

for their extremely low-income residents. In interviews, PHA leaders noted a tension between allocating limited resources for current services versus developing new public housing.

Because of limited and uneven Faircloth authority and development expertise, Group B models may be difficult to replicate at scale in Rhode Island. Nevertheless, by combining elements of Group B models with Groups A or C, the state may be able to take advantage of Faircloth-to-RAD, tax-exempt housing authority-owned land, and certain PHAs' expertise for public development and ownership.

Key Takeaways

- Group B models take advantage of the important statutory powers retained by PHAs in order to improve the quality of existing public housing and add new, deeply affordable units.
- Group B models are best suited for housing authorities with sizable Faircloth capacity, like Newport Housing Authority in Rhode Island. Even with this capacity, the Faircloth-to-RAD program usually does not offer a deep enough subsidy on its own to cover the costs of development, leaving a financing gap that must be filled with tax credits and other sources.
- Group B models rely on public housing authorities' development expertise. Some Rhode Island authorities have relevant experience, but on a relatively small scale. Others have not developed new housing in recent years, instead focusing their energy and resources elsewhere.
- Nevertheless, there is potential to combine elements of Group B with elements of models in Groups A and C.

Group C: Affordable Housing (No Market-Rate Units)

While Groups A and B include emerging models, there are longer-standing models of public development and ownership in the U.S. One example is the Dakota County CDA in Minnesota, which has developed new affordable housing for seniors without using federal tax credits since the 1980s. Minnesota state statute allows the CDA to issue tax-exempt "essential function" bonds, which are credit-enhanced with a general obligations pledge from Dakota County, to finance new senior housing developments. Each new bond issuance is amended to join one, large **common bond**, which allows the CDA to pool revenue from across its developments to service the debt. Aggregating all operating revenue and costs also allows the CDA to spread out the cost of major repairs such as new roofs, windows, and siding over time – something that is increasingly important as its earlier projects turn thirty and forty years old. Importantly, in addition to its rent revenue, the CDA relies on a **special property tax levy** authorized by the Minnesota legislature in 1999 to service a portion of the bond debt.

Because the CDA does not use any LIHTC financing for its senior housing program, it has more freedom to design its projects without more expensive amenities such as dishwashers, in-unit washers, or large common spaces. These construction cost savings are passed along in the form of more deeply affordable rents. According to the CDA, it has not experienced any lack of demand for its units despite the absence of such amenities, but it is not clear whether the same would be true in buildings aimed at families.

Dakota County's approach has elements that appear particularly promising in the Rhode Island context. It creates relatively small, 100 percent affordable buildings, which are likely to be more politically palatable

in many Rhode Island communities than large-scale mixed-income developments. The Dakota County CDA works with municipalities across the county to identify suitable sites, sometimes accessing municipal land and other local subsidies; a Rhode Island public developer would need to work with each of the state's 39 municipalities in a similar way. In order to replicate this model, Rhode Island would need to identify or create an entity with sufficient real estate development expertise and set up a dedicated funding stream. Rhode Island interviewees typically pointed to PHAs as best-situated to engage in public development, and no state-level entity surfaced as a clear candidate for such a role. Finally, it is important to note that Dakota County CDA's approach is successful partly because of its large portfolio, which helps support the model. In contrast, Rhode Island, starting with a smaller portfolio, would likely face greater risks and challenges during the initial implementation.

Another long-standing model in Idaho highlights the importance of developing a strategy to avoid cannibalizing existing funding streams for affordable housing. The state's HFA, the Idaho Housing and Finance Company, created a nonprofit called The Housing Company (THC) in 1992, when there was little competition for the state's LIHTC allocation. THC has since become an effective affordable housing developer, producing units all over the state, and like the Dakota County CDA, uses this large portfolio to leverage investment into new developments. THC must perform a careful balancing act, however. On the one hand, because it competes with other nonprofits for the state's allocation of tax credits, it must be seen as not benefitting from the HFA's favoritism. On the other hand, its expertise and public mission have made it an attractive way to funnel non-LIHTC financing, including Idaho's American Rescue Plan Act (ARPA) funds, into affordable housing. Replicating this model in Rhode Island today would risk pitting a public developer against a well-established nonprofit housing sector. Rhode Island interviewees instead stressed the need for more support for the current affordable housing development sector, including more support for pre-development work and additional subsidy.

Key Takeaways

- Group C models create relatively small, 100 percent affordable buildings rather than large mixed-income developments.
- Some Group C models keep construction costs lower by building a different kind of end product than what LIHTC rules might require, which can translate to greater affordability. This approach would require careful review of building codes and political support for a model that does not provide certain amenities to households living in affordable housing.
- These longer-standing models show that public development can be sustainable over time and underline the value of developing a large portfolio of units, which can be used to spread out the cost of financing, management, and repairs.
- Group C highlights the importance of creating public development models that are additive rather than competitive. Public developers can complement the existing affordable housing development community and enhance existing efforts.
- For public development to succeed under any model, development capacity and expertise are key. Partnering with outside consultants, developers, and contractors can reduce the burden on public entities, but some in-house underwriting and real estate development capacity is essential in every case. Models across Groups A and C also underline the usefulness of combining this development capacity with HFA status.

Financial Analysis

Using an Analytic Tool to Evaluate Obstacles and Opportunities

To explore the financial obstacles and possible pathways to developing affordable housing in Rhode Island without LIHTC equity, we developed a simple analytic model of a hypothetical multifamily rental project. Our goal was to arrive at a basic understanding of the magnitude of financial gaps in a prospective project, as well as the potential impact of deploying various resources and strategies to fill those gaps. To streamline the analysis, we made several simplifying assumptions, which are noted in the discussion of variables below. It should be noted that the economics of this model hold regardless of whether the development is owned and developed by a public, nonprofit, or for-profit entity. It is also important to emphasize that this model cannot serve as a substitute for a full financial analysis of an actual project.

Equally important to underscore is what this analysis does *not* show, that is, whether public development or ownership generates long-term benefits that make it worthwhile, especially compared to the prevailing model of nonprofit-led tax credit-financed development. Such an analysis would depend on the specific structure of the public entity, the way it is capitalized and funded, its staff capacity and expertise, its authority and ability to manage risk, the market competition it faces, and its access to public land, Section 8 subsidies, and other public goods. It also depends on long-term projections about the Rhode Island context for developing and operating housing. While such an analysis is outside the scope of this study, these are questions that Rhode Island would ultimately need to weigh if it chose to pursue a public development and ownership model.

Variables

The analytic model utilizes several key variables:

- *Project Scale.* Our baseline case assumes a 100-unit rental project, which can be scaled up or down (as previously mentioned, this is larger than a typical LIHTC funded project in Rhode Island). For simplicity, the model assumes that the project contains only 2-bedroom apartments, each sized at 800 square feet. Both the number of units and average square footage per unit are variables that can be manipulated.
- *Income Mix.* The baseline model assumes the following mix of apartments by affordability:
    - *Market-Rate Units.* In the base case, 70 percent of the apartments (70 units) are available at market rents of $3,000 per month, which represents rents at the very highest end of the market, and the likely rent in a few years when a project is completed and leased up. In general, market rents vary by location (see Figure 2, below), and this market rent is not supported in Rhode Island's lower-cost areas. Conversely, a well-located project with desirable amenities will support a higher market rent. Highlighting the aggressiveness of this assumption, an analysis of ACS microdata suggests that the 75th percentile of contract rents exceeds $2,500 in only five census tracts in Rhode Island, which are located primarily in coastal areas–Melville (a very small Census-designated place between Portsmouth and Middletown), Barrington, Portsmouth, and Little Compton–with

the exception of a tract in North Providence (the village of Greenville). These figures reflect ACS 5-year estimates from 2018 to 2022, and may not fully capture any recent rent increases. These tracts also all have high homeownership rates (averaging more than 85 percent), which suggests that it may be difficult to build new multifamily rental buildings in these areas even if market rents would support development.

- *Moderate-Income Units.* The model provides the user an opportunity to include moderate-income units affordable to households at 80 percent of Rhode Island's AMI, although the base case assumes no units at this affordability band.
- *Low-Income Units.* 20 percent of the apartments in the base case (20 units) are priced at rents that are affordable to low-income households earning 60 percent of AMI. In this model we assume a monthly rent for these apartments is $1,686.
- *Very Low-Income Units.* Finally, 10 percent of the apartments (10 units) are priced at rents that are affordable to households earning 40 percent of AMI. In this model, we assume monthly rent for these apartments will be $1,124.

The model allows the user to change the distribution of units and the rents charged for each unit type. The affordable rents presented in the base case are based on statewide averages. Actual AMI-based rents vary by region. Additionally, for simplicity, the model does not adjust for utility allowances. In an actual rather than a hypothetical mixed-income project, utility costs borne by low-income tenants are deducted from rent, resulting in a modest decrease in the revenue available to support the project.

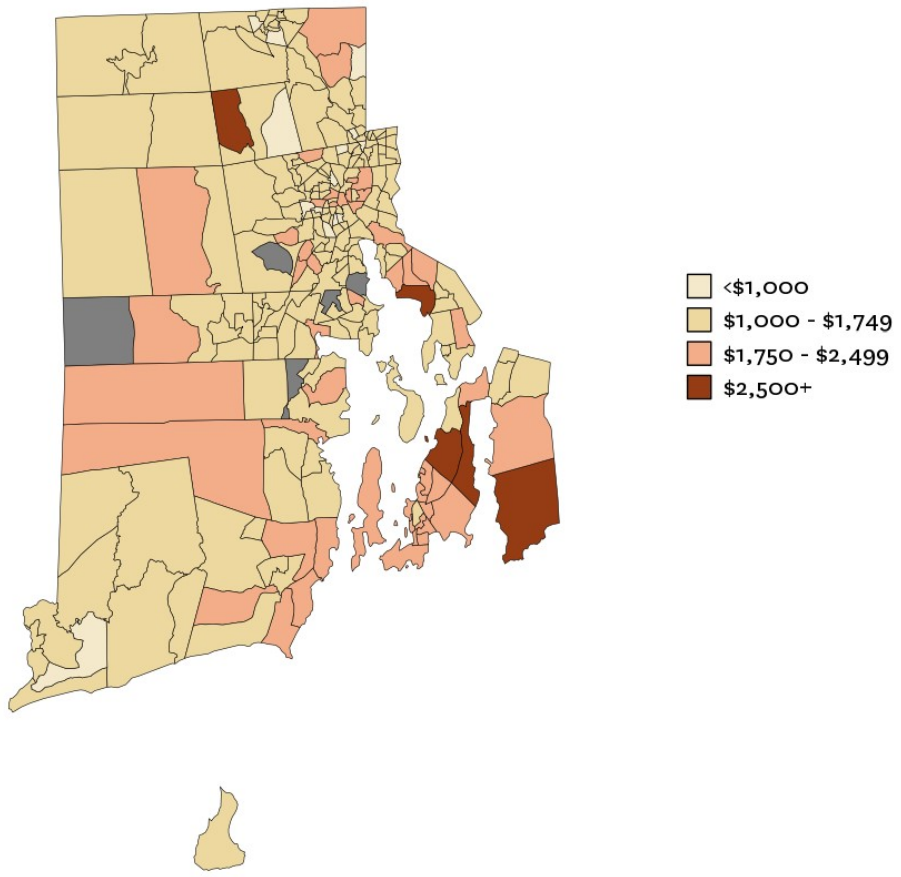
- *Operating Expenses.* Based on an analysis of comparable market rate multifamily rental projects in Rhode Island, the baseline model assumes that it will cost $9,150 per unit per year to fund the operations of the project before property tax obligations. Operating expenses include maintenance and repairs, electricity and heating costs for the common areas of the building, water and sewer expenses, insurance, property management fees as well as staffing and administrative costs. It is possible to adjust operating expenses to reflect projects designed to operate at a lower cost, if, for example, passive house standards are used to reduce energy use, or if government co-insurance programs are available to reduce insurance premiums. They can also be adjusted upwards, if, for example, insurance costs escalate.
- *Property Taxes.* In the baseline case, we assume that the property will benefit from the 8-Law, which sets property taxes at 8 percent of scheduled gross rental income ($2,448 per unit).[33]
- *Debt Sizing.* Our model assumes that first mortgage debt is sized based on a 1.15 debt service coverage ratio, with a 30-year loan term and a fixed interest rate of 5.7 percent. Lending institutions use a debt service coverage ratio to lend to all developers, whether nonprofit or for-profit. The return on equity for the developer/owner is factored into this debt service coverage ratio. All three of these variables may be adjusted to understand how financing rates and terms can impact financing gaps. Under the baseline case, the project can support a maximum mortgage loan of $21.8 million.
- *Development Costs.* The following variables are used for the development budget, all of which can be manipulated:
    - *Acquisition Cost.* For this hypothetical analysis, we assume zero land acquisition cost.

[33] See footnote 24.

- *Hard Construction Costs.* Based on recently developed comparable projects, the analysis assumes hard costs of $325,000 per unit.[34]
- *Soft Construction Costs.* For simplicity, we assume that soft costs are equal to 30 percent of hard costs, which equals $97,500 per unit. Soft costs generally include architectural and engineering fees, legal fees, permitting fees, environmental assessments, title fees, financing fees and carrying costs during the construction period.

- *Developer Cash Equity.* The analysis assumes that the developer invests 20 percent cash equity.

Figure 2. 75th Percentile Contract Rent by Census Tract in Rhode Island, (2022$), 2018-2022 5-year ACS Estimates.



[34] This per unit cost translates to a hard cost of $325 per gross square foot. CoreLogic, Inc. (2024). **SwiftEstimator Commercial Estimator: Gross Hard Cost per Square Foot (Luxury and Non-Luxury 10-Story Residential Apartment Building with Elevators in Providence, Rhode Island).* Marshall & Swift Licensed User Certificate.

Baseline Case

The baseline model presents a 100-unit mixed-income project (70 percent market-rate and 30 percent affordable) in which there are zero land costs and the project receives 8 percent property tax treatment.

As shown in Figure 3, below, the Base Case generates a financing gap of $12 million ($120,000 per unit) to achieve breakeven, *even with free land and preferential tax treatment.* In this analysis, we rely on aggressive assumptions about residential rental income, assuming rents at the very highest end of Rhode Island's sub-markets. We also do not include an upfront reserve requirement. Despite being aggressive on residential rents, we conservatively do not include commercial or ancillary income, which would help a project's financial feasibility especially in markets where mixed-use commercial corridors are common. We assume a 20 percent equity investment. If a government entity were also taking the place of an equity investor, the subsidy per unit figures would need adjustment to account for both the subsidy loan and equity investment.

Figure 3. Hypothetical Mixed-Income Project, Base Case

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,000	45.00	2,520,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	1,686	25.29	404,640
Rental Revenue - Low-Income Units 40%		10%	10	1,124	16.86	134,880
Gross Potential Rental Revenue		**100%**	**100**	**2,550**	**38.24**	**3,059,520**
Residential Vacancy		5%				(152,976)
Effective Gross Income						**2,906,544**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
Property Tax (Applying 8% Law)				(2,448)	(3.06)	(244,762)
Net Operating Income						**1,746,782**
Max First Mortgage Debt Service	$21,808,811 max debt	30 year term	115.0% DCR	(15,189)	(18.99)	(1,518,941)
Net Cash Flow				**2,278**	2.85	**227,841**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	218,088	272.61	21,808,811
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	-	-	-	-
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**302,588**	**378.24**	**30,258,811**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**(399,706)**		**(119,912)**	**(149.89)**	**(11,991,189)**

Closing the Gap

There is no one single way to close a gap of this magnitude. Capital gaps are usually narrowed by employing a variety of interventions. To better understand how changes in variables can impact project feasibility, we modeled a variety of interventions and impacts.

In Figure 4, we show the impact of a **full property tax exemption,** which would relieve the property of its estimated $2,448 per unit per year property tax liability and reduce the capital gap to $8.9 million.

Figure 4: Impact of a Full Property Tax Exemption.

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,000	45.00	2,520,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	1,686	25.29	404,640
Rental Revenue - Low-Income Units 40%		10%	10	1,124	16.86	134,880
Gross Potential Rental Revenue		**100%**	**100**	**2,550**	**38.24**	**3,059,520**
Residential Vacancy		5%				(152,976)
Effective Gross Income						**2,906,544**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
100% Property Tax Exemption					-	
Net Operating Income						**1,991,544**
Max First Mortgage Debt Service	$24,864,693 max debt	30 year term	115.0% DCR	(17,318)	(21.65)	(1,731,777)
Net Cash Flow				**2,598**	3.25	**259,767**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	248,647	310.81	24,864,693
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	-	-	-	-
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**333,147**	**416.43**	**33,314,693**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**(297,844)**		**(89,353)**	**(111.69)**	**(8,935,307)**

In Figure 5, we apply **project-based Section 8 subsidies**. These operating subsidies will increase the rental income on the affordable units, thereby allowing the project to support more debt. Project-based Section 8 rent subsidies would increase rental income on all affordable units to $2,250 while still ensuring the tenants housed have incomes below the specific AMI requirement. This would allow the project to support debt of $24.7 million, which would reduce the capital gap to $9 million. However, assuming all affordable units would receive project-based subsidies, it's important to note that Davis Bacon wages would be required in the project's construction; we do not model increased construction costs here (which is an additional aggressive assumption).

Figure 5: Impact of Using Project-Based Section 8 Subsidies.

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,000	45.00	2,520,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	2,250	33.75	540,000
Rental Revenue - Low-Income Units 40%		10%	10	2,250	33.75	270,000
Gross Potential Rental Revenue		**100%**	**100**	**2,775**	**41.63**	**3,330,000**
Residential Vacancy		5%				(166,500)
Effective Gross Income						**3,163,500**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
Property Tax (Applying 8% Law)				(2,664)	(3.33)	(266,400)
Net Operating Income						**1,982,100**
Max First Mortgage Debt Service	$24,746,783 max debt	30 year term	115.0% DCR	(2,154)	(21.54)	(1,723,565)
Net Cash Flow				**2,585**	3.23	**258,535**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	247,468	309.33	24,746,783
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	-	-	-	-
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**331,968**	**414.96**	**33,196,783**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**(301,774)**		**(90,532)**	**(113.17)**	**(9,053,217)**

Next, we explore the impact of **local or state soft loans (subsidy loans)**. Subsidy loans from government entities in the form of below-market subordinate loans to the affordable units are often used to narrow financing gaps, whether in the form of a dedicated fund or trust, or just a direct loan from the government entity itself. Figure 6 shows how $50,000 per affordable unit in a government subsidy loan would reduce the overall financing gap by $1,500,000. A typical form of federal subsidy, again when not relying on LIHTC, is funding under the HOME program. Using such a subsidy to fully close the gap would cost upwards of $120,000 per unit, and about $400,000 per affordable unit created.

Figure 6: Impact of Using Government Soft Loans.

Development Program							
Residential Rentable SF							80,000
Maximum Dwelling Units							100
Average Unit Size per Unit (SF)							800
Operating Proforma			**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units			70%	70	3,000	45.00	2,520,000
Rental Revenue - Moderate Income Units 80%			0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%			20%	20	1,686	25.29	404,640
Rental Revenue - Low-Income Units 40%			10%	10	1,124	16.86	134,880
Gross Potential Rental Revenue			**100%**	**100**	**2,550**	**38.24**	**3,059,520**
Residential Vacancy			5%				(152,976)
Effective Gross Income							**2,906,544**
Operating Expenses Before Property Tax					(9,150)	(11.44)	(915,000)
Reserves					-	-	-
Property Tax (Applying 8% Law)					(2,448)	(3.06)	(244,762)
Net Operating Income							**1,746,782**
Max First Mortgage Debt Service	$21,808,811 max debt		30 year term	115.0% DCR	(1,899)	(18.99)	(1,518,941)
Net Cash Flow					**2,278**	2.85	**227,841**
Development Budget					**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost					-	-	-
Residential Hard Construction Cost					325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)				30%	97,500	121.88	9,750,000
Total Development Cost					**422,500**	**528.13**	**42,250,000**
Permanent Sources							
First Mortgage (Bank or Government)				5.7% interest rate	218,088	272.61	21,808,811
LIHTC					-	-	-
Soft Government Loan			per affordable unit:	$ 50,000	15,000	18.75	1,500,000
Cash Equity				20%	84,500	105.63	8,450,000
Total Sources					**317,588**	**396.99**	**31,758,811**
Residual Land Value / (Financing Gap)	Gap per affordable unit:		**(349,706)**		**(104,912)**	**(131.14)**	**(10,491,189)**

Longer loan terms can also improve the financing package. As shown in Figure 7, **extending the loan term to 40 years** allows for an additional $2.1 million in debt to support the project. If the government, rather than a private bank, is the lender for such a 40-year loan, it would need to raise that capital from borrowers, likely through general obligation bonds or project-level bonds.

Figure 7: Impact of Using a 40-Year Loan Term.

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,000	45.00	2,520,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	1,686	25.29	404,640
Rental Revenue - Low-Income Units 40%		10%	10	1,124	16.86	134,880
Gross Potential Rental Revenue		**100%**	**100**	**2,550**	**38.24**	**3,059,520**
Residential Vacancy		5%				(152,976)
Effective Gross Income						**2,906,544**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
Property Tax (Applying 8% Law)				(2,448)	(3.06)	(244,762)
Net Operating Income						**1,746,782**
Max First Mortgage Debt Service	$23,907,660 max debt	40 year term	115.0% DCR	(1,899)	(18.99)	(1,518,941)
Net Cash Flow				**2,278**	2.85	**227,841**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	239,077	298.85	23,907,660
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	-	-	-	-
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**323,577**	**404.47**	**32,357,660**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**(329,745)**		**(98,923)**	**(123.65)**	**(9,892,340)**

Projects located in very high-rent locations may be able to support **higher rents** that generate more revenue, thereby increasing borrowing capacity. As shown in Figure 8, increasing the rents on market rate units from $3,000 to $3,500 would allow the hypothetical project to support $26.3 million in debt, reducing the financing gap to $7.4 million.

Figure 8: Impact of Higher Market Rents.

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,500	52.50	2,940,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	1,686	25.29	404,640
Rental Revenue - Low-Income Units 40%		10%	10	1,124	16.86	134,880
Gross Potential Rental Revenue		**100%**	**100**	**2,900**	**43.49**	**3,479,520**
Residential Vacancy		5%				(173,976)
Effective Gross Income						**3,305,544**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
Property Tax (Applying 8% Law)				(2,784)	(3.48)	(278,362)
Net Operating Income						**2,112,182**
Max First Mortgage Debt Service	$26,370,879 max debt	30 year term	115.0% DCR	(2,296)	(22.96)	(1,836,680)
Net Cash Flow				**2,755**	3.44	**275,502**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	263,709	329.64	26,370,879
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	-	-	-	-
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**348,209**	**435.26**	**34,820,879**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**(247,637)**		**(74,291)**	**(92.86)**	**(7,429,121)**

Using **all of the above interventions in combination** would eliminate the financing gap and make a project financially feasible. With a full property tax exemption, $5,000/unit soft subsidy, very high market rate income, a 40-year loan term, and the affordable units covered with rental income from Section 8 vouchers, such a project would have a residual land value of nearly $2.6 million (keeping in mind the assumption that land acquisition is zero). Given Rhode Island's development conditions, it is likely that if a public developer were created to build and finance mixed-income projects like this, it would need access to this full array of tools to make development realistic. See Figure 9.

Figure 9: Impact of Combined Interventions.

Development Program						
Residential Rentable SF						80,000
Maximum Dwelling Units						100
Average Unit Size per Unit (SF)						800
Operating Proforma		**Unit Distribution**	**Units**	**$ / Unit**	**$/ NSF**	**Total**
Rental Revenue - Market Rate Units		70%	70	3,500	52.50	2,940,000
Rental Revenue - Moderate Income Units 80%		0%	-	2,248	-	-
Rental Revenue - Low-Income Units 60%		20%	20	2,250	33.75	540,000
Rental Revenue - Low-Income Units 40%		10%	10	2,250	33.75	270,000
Gross Potential Rental Revenue		**100%**	**100**	**3,125**	**46.88**	**3,750,000**
Residential Vacancy		5%				(187,500)
Effective Gross Income						**3,562,500**
Operating Expenses Before Property Tax				(9,150)	(11.44)	(915,000)
Reserves				-	-	-
100% Property Tax Exemption					-	
Net Operating Income						**2,647,500**
Max First Mortgage Debt Service	$36,235,498 max debt	40 year term	115.0% DCR	(2,878)	(28.78)	(2,302,174)
Net Cash Flow				**3,453**	4.32	**345,326**
Development Budget				**$ / Unit**	**$/ NSF**	**Total**
Acquisition Cost				-	-	-
Residential Hard Construction Cost				325,000	406.25	32,500,000
Soft Costs (As % of Hard Costs)			30%	97,500	121.88	9,750,000
Total Development Cost				**422,500**	**528.13**	**42,250,000**
Permanent Sources						
First Mortgage (Bank or Government)			5.7% interest rate	362,355	452.94	36,235,498
LIHTC				-	-	-
Soft Government Loan		per affordable unit:	$ 5,000	1,500	1.88	150,000
Cash Equity			20%	84,500	105.63	8,450,000
Total Sources				**448,355**	**560.44**	**44,835,498**
Residual Land Value / (Financing Gap)	Gap per affordable unit:	**86,183**		**25,855**	**32.32**	**2,585,498**

Financial Analysis Summary

Our financial analysis model highlights the challenges and opportunities of developing affordable housing in Rhode Island without relying on LIHTC equity, emphasizing that such an effort would demand a substantial commitment of public financing from state or local funds. Using data about Rhode Island's existing construction costs and market conditions, we find that in the baseline mixed-income case, there is a substantial financing gap of $120,000 per unit (and nearly $400,000 per affordable unit). This is the case even assuming no site acquisition cost. This gap highlights the necessity of deploying multiple strategies to achieve financial feasibility. Key interventions such as project-based Section 8 subsidies, government capital subsidies, extended loan terms, and targeting construction in higher rent markets could collectively mitigate or eliminate this gap. In the next section, we provide detailed descriptions of how these various tools work in practice.

This analysis does not address whether public development or ownership generates long-term benefits that justify its cost, particularly in comparison to the prevailing tax credit-financed development model. Such an analysis would depend on several factors, including the specific structure of the public entity, its capitalization and funding, staff capacity and expertise, authority and ability to manage risk, competition, and access to public land, property tax exemptions, Section 8 subsidies, and other public goods. While this deeper analysis is beyond the scope of our current study, these are critical questions that Rhode Island would need to consider in order to grapple with the question of standing up a public developer entity.

Key Tools for Emerging Public Development Entities

FHA/FFB Risk-Share Loans

Background

The Section 542(c) Housing Finance Agency Risk-Sharing Initiative is a joint program of HUD and the U.S. Department of the Treasury to share the risk of losses deriving from loan defaults across federal and local agencies. Risk-share loans enable state and local HFAs to offer low-interest multifamily loans that are credit enhanced by HUD's Federal Housing Administration (FHA) mortgage insurance and then purchased by the Treasury's Federal Financing Bank (FFB). FHA risk-share loans were first introduced in 1992, and the program was strengthened in 2015 when HUD formally enlisted the FFB to provide the capital for the loans. FFB's ability to participate was allowed to lapse in 2018, but was reauthorized on a temporary basis in 2021. The program was set to cease accepting applications in September 2024 but has since been extended indefinitely, highlighting the volatility of programs that public developers could rely upon.

HFAs must apply for HUD's approval in order to participate in the program. Currently, 22 agencies are approved to participate, with some lending more actively than others. RIHousing has Level II approval, which allows the agency to insure less than 50 percent of any losses on risk-share loans and use its own underwriting standards and loan terms for Level II loans. The HUD Office of Multifamily Housing oversees the program.

FHA/FFB risk-share loans come with affordability restrictions (20 percent of units in a risk-share-financed project must be set aside for families with incomes at or below 50 percent of AMI, or 40 percent of units for families at or below 60 percent AMI), but these are typically less restrictive than those imposed by the other sources or programs involved in a given project. The loans can be used both for new construction and preservation or rehabilitation, including of occupied buildings. HUD is currently working on an improvement to the program that would create greater interest rate certainty during long construction timeframes.[35]

[35] Handelman, E. Deputy Assistant Secretary for Multifamily Housing Program, HUD. (2024, July 12). *Public Development Community of Practice Quarterly Meeting*.

Impact

FHA/FFB risk-share loans are typically the lowest-cost capital available for multifamily housing development; by lowering interest rates on a first mortgage by 100 to 200 basis points, they can make a critical difference in a project's feasibility. The loans can be especially valuable for jurisdictions that have spent all of their volume cap for the year (see **tax-exempt bond recycling**, below).[36]

Since first receiving approval to participate in the risk-share program in 1994, RIHousing has executed $319 million worth of risk-share transactions in over 31 projects, resulting in 3,200 new or preserved affordable housing units. Although RIHousing has primarily used the program for preservation, with interest rates climbing, it increasingly uses risk-share loans for new construction (a recent example is West House II, a 54-unit senior building in Middletown). Kara LaChapelle, Chief Financial Officer of RIHousing, reported earlier this year that taxable bonds have interest rates significantly higher than FFB rates (she estimated the difference to be 1.7 percent).[37]

Risk-share Loans in Action

Montgomery County's HOC, which is both a local housing finance agency and a public housing agency, has used FHA/FFB risk-share loans as a source of permanent financing in its own developments, including The Laureate. HOC Senior Vice President of Real Estate Zachary Marks notes that risk-share loans trigger Davis-Bacon provisions requiring the HOC to pay contractors and subcontractors locally prevailing wages, which adds to the cost of construction. At the same time, however, they are an excellent source of low-cost, long-term financing with up to 40-year terms and lower interest rates than Fannie Mae or Freddie Mac loans.[38] In contrast, Rhode Island insures loan at a project's permanent loan phase, and does not rely on it during construction, as a way of keeping hard costs lower.

Tax-Exempt Bond Recycling

Background

The Internal Revenue Service (IRS) allows state and municipal agencies to issue tax-exempt bonds for endeavors with a qualified public purpose, including the development of affordable housing. Investors who buy these bonds can exclude the interest income from federal taxes, which in turn lowers financing costs for developers. This benefit can also indirectly reduce costs for localities by making it more feasible to undertake affordable housing projects. Tax-exempt bonds also provide as-of-right 4 percent LIHTC to housing projects that meet certain requirements.[39] Every year, the IRS sets a "volume cap" limiting the

[36] Handelman, 2024.
[37] Mamet, Abram. (2024, June 1). Risk-Sharing Initiative Extended Indefinitely. *Tax Credit Advisor*. https://www.taxcreditadvisor.com/articles/risk-sharing-initiative-extended-indefinitely/
[38] Marks, Zachary. Senior Vice President of Real Estate, Housing Opportunities Commission of Montgomery County (2024, January 30). *Public Development Community of Practice Quarterly Meeting.*
[39] Biber, Joe. (2007). *Financing Supportive Housing with Tax Exempt Bonds and 4% Low Income Housing Tax Credits*. Center for Supportive Housing. https://www.csh.org/wp-content/uploads/2012/01/Report_financing-withbondsand-litch_1012.pdf

maximum issuance of tax-exempt private activity bonds for each state. In 2023, this cap was set at the greater of $120 multiplied by the state population or $358.8 million.[40]

The Housing and Economic Recovery Act of 2008 (HERA) first enabled the creation of tax-exempt bond recycling programs.[41] Under these programs, state and local housing finance agencies can reuse tax-exempt bonds that have been repaid for other housing projects, as a way of generating additional capital to fund multifamily projects. This is accomplished through the issuance of new bonds, which, for federal tax purposes, are treated as refunding bonds for the bonds that financed the original project. By doing so, new projects can be financed without the allocation of additional volume cap. However, recycled bond-funded loans do not generate additional as-of-right tax credits, and therefore are not eligible for LIHTC. As a result, recycled bonds are often used to encourage affordability in mixed-income projects and provide a source of capital to do so.

Impact

If a state does not fully allocate its volume cap towards multifamily housing, as is the current case in Rhode Island,[42] then using the tax-exempt bond recycling program will not be necessary because it is more likely that such agencies could just allocate additional tax-exempt bonds. In New York City, for example, the lending activities of the Housing Development Corporation (HDC) generates roughly $150 million to $200 million in recycled bond cap per year (a substantial portion of its allocation), after exhausting its volume cap that generates LIHTC credits.[43] Through 2019, HDC has recycled approximately $3 billion in bonds and financed 120 projects with over 35,000 units.[44]

Tax-Exempt Bond Recycling in Action

In addition to HDC, the California Housing Finance Agency (CalHFA) recycles its tax-exempt private activity bond volume cap through its Bond Recycling program. The program functions in a similar fashion to the one operated by HDC, in that CalHFA issues new bonds from loan prepayments and therefore recycles volume cap that would otherwise expire. These recycled bonds can only be recycled once, and must be issued within four years of the original issuance. Moreover, the recycled bonds can only be used for multifamily housing, and cannot generate LIHTC credits. Examples of eligible projects include 100 percent affordable projects and projects reaching the end of their tax credit compliance period for preservation purposes.[45]

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[40] Internal Revenue Service. (2022). *Revenue Procedure 2022-38* (p. 15). https://www.irs.gov/pub/irs-drop/rp-22-38.pdf

[41] Housing and Economic Recovery Act of 2008, Pub. L. No. 110-289, 122 Stat. 2654 (2008). https://www.congress.gov/110/plaws/publ289/PLAW-110publ289.pdf

[42] Novogradac. (2022). *2022 State Bond Caps and Deadlines.* https://www.novoco.com/resource-centers/affordable-housing-tax-credits/2022-state-bond-caps-and-deadlines

[43] National Council of State Housing Agencies. (2013). *Joint NYC HDC/NYS HFA Joint Recycling Program.*

[44] California Housing Finance Agency. (2019). Presentation on the New York City Housing Development Corporation and the use of Recycled Private Activity Bonds. https://www.calhfa.ca.gov/about/events/board-meetings/books/2019/20191219/20191219-handout-1.pdf

[45] California Housing Finance Agency. (2022). Bond Recycling Program Term Sheet.

Property Tax Abatements and Exemptions

Background

Property tax abatements reduce the total amount of tax owed, usually for a fixed period of time, whereas tax exemptions adjust the rate of taxation or the value of the property that is subject to taxation, thereby "exempting" some designated value from taxation. Jurisdictions may restrict eligibility for abatements or exemptions based on the type of new housing built, its location, or its share of low-income units.[46]

Many states bar municipalities from collecting property taxes on housing projects owned by the federal government or by local public housing authorities (regardless of who manages the project). In some cases, housing authorities may still be required to make payments in lieu of taxes (PILOTs), which may be calculated according to a statewide formula or negotiated at a municipal level.[47] In some states, certain nonprofits or "public charitable institutions" may also enjoy or be able to apply for property tax exemptions.

Impact

Property tax abatements and exemptions effectively lower a project's total operating costs, thereby increasing the amount of debt that can be supported to finance a property's construction. For example, a 2020 appraisal for a 62-unit mixed-income housing development in Providence estimated that property taxes per unit would normally be more than $5,000. However, applying the state's tax abatement would reduce average per-unit taxes to about $3,300. This amounts to approximately $114,300 in savings for the project per year, or about 15 percent of operating expenses.[48] By forgoing this amount of tax revenue, the municipality of Providence reduces revenues it receives and could spend for other public purposes. At the same time, if it were fully taxed, the project would have required additional upfront subsidy to be built. Conversely, if the project were fully taxed, it would have required additional upfront subsidy to be viable. Although both approaches constitute forms of public funding, providing an upfront subsidy requires a larger initial capital outlay compared to property tax discounts, which are spread out over time through smaller, ongoing reductions.

Property Tax Relief in Action

Property tax relief is key to public development models. Many of the public development entities captured in our domestic scan are public housing authorities whose property is exempt from taxes, including the Boston Housing Authority, Cambridge Housing Authority, Montgomery County HOC, Dakota County CDA. Atlanta Urban Development Corporation, as a wholly-owned subsidiary of the housing authority Atlanta Housing, is also property tax-exempt. Under Georgia state law, housing authorities and their subsidiaries can enter Private Enterprise Agreements (PEAs) with for-profit

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[46] Local Housing Solutions Lab. (2021, February 25). *Tax Abatements or Exemptions.* https://localhousingsolutions.org/housing-policy-library/tax-abatements-or-exemptions/

[47] See, for example, Connecticut policy on this topic: McCarthy, K. E. (2004, February 20). *Property Taxes On Hud-Run Housing*. Connecticut General Assembly. https://www.cga.ct.gov/2004/rpt/2004-R-0193.htm

[48] See footnote 24.

developers, managers, and owners of housing and grant them property tax exemptions for any units with stabilized rents affordable to households earning below 140 percent of AMI.[49] In Idaho, low-income housing owned by nonprofits like THC is exempt from taxation.[50]

In Rhode Island, all state-owned property is tax-exempt,[51] as is property owned by municipal housing authorities, though they may be required to pay a PILOT.[52] Rhode Island also allows for property tax exemptions for new projects with rent or income restrictions.[53] Nonprofits are not exempt from property taxes in Rhode Island; instead, exemptions for certain properties belonging to certain nonprofits have been written directly into state statute.

Faircloth-to-RAD

Background

The Faircloth-to-RAD program, established in 2021, allows PHAs to build new public housing (Section 9) units and immediately convert them to units with project-based Section 8 contracts. Importantly, PHAs must remain within their "Faircloth Limit," that is, the number of units they owned or operated as of 1999. Many PHAs have lost units since 1999, and so have a certain number of units which they could now add using Faircloth-to-RAD, which is sometimes referred to as their "Faircloth authority."[54] Through Faircloth-to-RAD, PHAs can usually access deeper subsidies from RAD rents as compared to public housing (Section 9) subsidies. The program guarantees a rental assistance contract prior to construction, which PHAs may use to leverage other funding streams, including private debt and equity, to build new units or preserve existing affordable housing. To use Faircloth-to-RAD, PHAs must first identify a development opportunity and request a Notice of Anticipated RAD Rents (NARR) from HUD.[55] After HUD calculates RAD rents and issues the NARR, PHAs must submit a Mixed-Finance Development Proposal (MFDP) for additional HUD approval.[56] Once HUD approves the MFDP and issues the RAD Conversion Conditional Approval (RCCA), PHAs can begin construction of new units.[57] This process typically takes several months. Post-construction, RAD closing occurs, triggering the beginning of Section 8 Housing Assistance Payments (HAP) in January of the following year.[58]

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[49] Georgia Code §8-3-8 (2022). https://law.justia.com/codes/georgia/2022/title-8/chapter-3/article-1/part-1/section-8-3-8/
[50] Idaho Code §63-602GG (2002). https://legislature.idaho.gov/statutesrules/idstat/title63/t63ch6/sect63-602gg/
[51] RI Code §44-3-3 (1896). http://webserver.rilin.state.ri.us/Statutes/TITLE44/44-3/44-3-3.HTM
[52] RI Code §44-25-30 (1956). http://webserver.rilin.state.ri.us/Statutes/TITLE45/45-25/45-25-30.htm
[53] See footnote 24 for more detail. RI Code §44-5-13.11 (1995). http://webserver.rilin.state.ri.us/Statutes/title44/44-5/44-5-13.11.htm
[54] See footnote 30 for more detail.
[55] U.S. Department of Housing and Urban Development. (2023). Faircloth-to-RAD guide (p. 5).
[56] HUD 2023. *Faircloth-to-RAD Guide*, p. 5.
[57] HUD 2023. *Faircloth-to-RAD Guide*, p. 5.
[58] HUD 2023. *Faircloth-to-RAD Guide*, p. 16.

Impact

While Faircloth-to-RAD primarily invests federal funds, the program may require additional local subsidy depending on variables such as MTW status, FMRs, and whether the project is new construction or preservation. The productivity of the program ultimately depends on each PHA's Faircloth authority. However, some estimates indicate that Faircloth-to-RAD could generate up to 260,000 new units nationwide.[59]

Faircloth-to-RAD in Action

Under Faircloth-to-RAD, new contract rent levels are calculated to cover operating costs alone and are oftentimes not sufficient to enable new development, leaving a financing gap. As a result, many PHAs are combining Faircloth-to-RAD with other tools. For example, voucher reserves can be used to augment rent levels to 110 percent of FMR, and non-MTW agencies will see their annual voucher allocation increase to cover those augmentations after the first year.[60] PHAs can also transfer voucher reserves across agencies, meaning that RIHousing could transfer reserves to a municipal PHA with Faircloth Authority.[61] The Boston Housing Authority has combined Faircloth-to-RAD with SAFMRs to increase RAD rents and achieve a greater level of subsidy. The Cambridge Housing Authority has blended Faircloth-to-RAD with LIHTC financing to help projects pencil out.[62]

In addition to the financing gap, Faircloth-to-RAD conversions come with additional considerations. For example, Davis-Bacon rules about prevailing wages, as well as HUD standards for accessibility and siting, each apply to Faircloth-to-RAD projects.[63] The program also requires two closings and multiple approvals from HUD, which may result in additional paperwork and extended timelines. Lastly, careful planning is necessary to account for the timing of HAP payments for Section 8, which commence in the January following post-construction closing.

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[59] HUD 2023. *Faircloth-to-RAD Guide*, p. 3.
[60] HUD 2023. *Faircloth-to-RAD Guide*, p. 9.
[61] HUD 2023. *Faircloth-to-RAD Guide*, p. 2.
[62] Although the New York City Housing Authority (NYCHA) didn't use Faircloth-to-RAD to create new units, it is relying on RAD as part of an initiative to preserve existing public housing units. As of 2022, residents in select developments can vote to remain in Section 9 (public housing), convert to Section 8 (project-based vouchers) via the Permanent Affordability Commitment Together (PACT) program, or convert to Section 8 under the Public Housing Preservation Trust. Under the Trust, NYCHA can gain access to additional funding streams while still remaining the owner and manager of a property. This funding, raised via bond issuance, will be used to complete building renovations at a higher quality and a faster rate. The Trust will also preserve existing rent caps and ensure resident representation on its nine-member board. New York City Housing Authority. (2023). *Residents Vote*. https://www.nyc.gov/site/nycha/residents/voting.page. New York City Housing Authority. (2022). *Public Housing Preservation Trust*. https://www.nyc.gov/site/nycha/about/public-housing-preservation-trust.page
[63] HUD 2023. *Faircloth-to-RAD Guide*, p. 10.

Revolving Loan Funds

Background

Revolving loan funds are pools of capital that provide loans for housing development, including acquisition and construction. Upon repayment, funds are returned to the pool for use in other projects. These funds are often seeded with public capital, either sourced by general obligation bonds or other debt, or sometimes via a direct revenue stream. The public is able to accept a lower rate of return than private investors, which means these funds can offer lower-cost financing for housing development than private lenders or investors. In the context of public development, PHAs and local governments may create and authorize revolving funds via local statutes as a means of replacing private equity and securing a public stake in development.

Impact

In Montgomery County, the HOC issued a $50 million bond to seed a Housing Production Fund (HPF), with the County Council agreeing to fund the principal and interest payments on the bond.[64] The Council approved the issuance of an additional $50 million for the HPF in May 2022. The fund is used to make low-cost, short-term (2-5 year) construction loans that replace more expensive private equity in the construction capital stack for new housing developments. When construction is completed and the project converts to permanent financing, the HPF loan is repaid into the revolving fund. The bonds used to seed the HPF will be repaid over the course of 20 years, after which point the fund will continue to revolve at no additional cost to the county. The annual net cost to the county for the $100 million fund is approximately $2.7 million.[65] Overall, roughly $54 million in taxpayer funds will help enable roughly $2 billion in investment and 6,000 units.[66]

Revolving Loan Funds in Action

In addition to Montgomery County, various cities have created and seeded revolving loan funds. The San Francisco Housing Accelerator Fund (SFHAF), for example, made its first loans in 2017 and to date has invested $448 million to finance construction of 740 new affordable units and 32 commercial spaces and preservation of 547 units.[67] The fund combines public, private, and philanthropic capital, is managed by a nonprofit organization created for the purpose, and offers a variety of loan products for predevelopment, acquisition, rehabilitation, construction, and permanent financing. San Francisco's Low Income Investment Fund (LIIF) manages multiple revolving loan funds, including a $50 million transit-oriented

[64] HOC 2024. *Adopted Budget Book,* p.147.
[65] U.S. Department of Housing and Urban Development. (2024). *PD&R Quarterly Update: How Local Governments Innovate to Meet Community Housing Needs*.
[66] U.S. Department of Housing and Urban Development. (2024). *PD&R Quarterly Update: How Local Governments Innovate to Meet Community Housing Needs*.
[67] San Francisco Housing Accelerator Fund. (2024). *By the Numbers*. https://www.sfhaf.org/statistics/

affordable housing (TOAH) fund and a $49 million preservation pilot fund.[68] LIIF also manages a $15 million transit-oriented development (TOD) fund with Invest Atlanta.

Mixed-Income Housing with Cross-Subsidy

Background

In stronger housing markets, income produced by market-rate units can be used to subsidize the costs of affordable homes at either the building or portfolio level. Inclusionary housing programs, which are increasingly widespread, depend on the ability of developers to cross-subsidize. Many PHAs also have some experience with mixed-income housing development as a result of the HOPE VI and RAD programs. Mixed-income housing can be an attractive option, as it is often high-quality and may help revitalize the surrounding neighborhood.[69]

Impact

Cross-subsidization is only possible if revenues from market-rate units are significantly higher than the cost to build and operate the property, which limits this tool's efficacy outside of high-cost areas. Housing vouchers can pay higher rents and provide a degree of cross-subsidization, but they are not a limitless source. Project size is also an important criterion with larger projects more easily able to support a share of affordable units.

Mixed-Income Housing with Cross-Subsidy in Action

In Montgomery County, cross-subsidization occurs at the building level, with individual rental developments including both market-rate and income-restricted units. Revenues from market-rate units (up to 70 percent of units in the building) subsidize the lower rents of the income-restricted units (at least 30 percent of units), which typically target the 50-70 percent AMI range.[70] In Atlanta, the AUD aims to pair public land with cross-subsidization to set aside one-third of units for households making less than 80 percent of the AMI, and half for households making less than 60 percent of the AMI.[71]

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[68] Federal Reserve Bank of San Francisco. (2019). *Funds for Kickstarting Affordable Housing Preservation and Production.* https://www.frbsf.org/wp-content/uploads/funds-for-kickstarting-affordable-housing-preservation-and-production-lessons-for-new-investors.pdf

[69] Local Housing Solutions. (2021). *Developing mixed income housing*. https://localhousingsolutions.org/refine/developing-mixed-income-housing/

[70] "At least 20% of units in a development financed using the HPF must be affordable to households earning 50% or less of area median income with at least another 10% of units affordable to households earning incomes eligible for the Moderately Priced Dwelling Unit (MPDU) program." In the MPDU program, income eligibility is capped at 65 percent of AMI for a garden apartment and 70 percent of AMI for a high-rise apartment. Source: NMia, N., & Jong, E. (2023, February 1). *Housing Opportunities Commission (HOC) - Housing production fund update* [Memorandum to Planning, Housing, and Parks Committee]. Montgomery County Council. https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2023/20230206/20230206_PH2.pdf

[71] Keenan, S. (2023, July 3). *Atlanta plans to embrace "European-style social housing"*. https://atlantaciviccircle.org/2023/07/03/atlanta-launching-urban-development-corporation/

Inclusionary Zoning

Background

Inclusionary zoning encompasses policies that incentivize or require new housing developments to include a share of below-market-rate units. Localities can pass ordinances, such as Montgomery County's Moderately Priced Dwelling Unit (MPDU) law, to specify the zones where developments must include rent-restricted units, the size and affordability of this set-aside, and the bonuses (additional density, parking waivers, and etc.) that a developer may receive in return.[72] Inclusionary zoning ordinances also determine whether the inclusionary zoning policy is mandatory or voluntary, and whether developers may pay into a fund instead of developing the required share of rent-restricted units themselves. After enactment, housing and city planning agencies may oversee implementation to ensure that developers abide by the ordinance and that tenants meeting income eligibility requirements access the set-aside units. In Montgomery County, the Department of Housing and Community Affairs administers the MPDU program.

Impact

Since inclusionary zoning policies rely on market dynamics, they tend to require little public subsidy, though localities may trade density rights and other public goods to incentivize development. They create the greatest number of affordable units in markets with strong market-rate development activity. In Montgomery County, for example, the MPDU program has produced more than 16,000 units since 1976, including roughly 10,000 for-sale units and 6,000 rental units.[73] Each year, the program produces an average of 130 new affordable rental units and 226 for-sale units.[74] The program markets these units to households earning up to 70 percent of the AMI.

In Montgomery County's public mixed-income housing development model, having a robust inclusionary housing program means that the infrastructure for verifying income and eligibility standards for affordable units, setting rents and prices for affordable units, and allocating inclusionary units is already in place. But instead of abiding by a pre-imposed set-aside, through public development, the HOC can underwrite a proposed development and determine the maximum amount of affordable housing that can be provided in that particular project at that particular time that allows the project to acquire financing and remain viable long-term.

Inclusionary Zoning in Action

Outside of Montgomery County, various cities employ both mandatory and voluntary inclusionary zoning policies to increase their stock of below-market-rate housing. According to a 2016 survey conducted by the Grounded Solutions Network, there are 886 jurisdictions across 25 states with inclusionary housing

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[72] Montgomery County, Md., Code ch. 25A (1973). https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-133930

[73] Montgomery Planning. (2023). *Overview of moderately priced dwelling unit (MPDU) program* (p. 4).

[74] Montgomery County Department of Housing and Community Affairs. (2024). *MPDU: By the Numbers*. https://www.montgomerycountymd.gov/DHCA/MPDU/index.html

programs. Across these programs, incentives included zoning variances and expedited permitting, though density bonuses were most common.[75]

Public Land

Background

Localities with a surplus of public land may engage in practices that leverage vacant, underdeveloped, or otherwise available parcels for new construction. By strategically using public land for housing, local governments can reduce development costs that would normally arise from the acquisition of private land. Public developers can also gain additional flexibility by using public land, as it may streamline zoning changes and other regulatory approvals. However, in some localities, developing public land may also trigger processes that may not apply to private land, such as additional public hearings or environmental reviews. If jurisdictions choose to leverage public land, they can employ different strategies, including: acquiring vacant or underused land that is expected to appreciate in value (for instance, land near future transit stations or in areas that will be upzoned); targeting blighted or structurally unsound properties for demolition to make way for more intensive development of affordable or mixed-income housing; or co-locating new housing with schools or other public buildings.

In many cases, municipalities create land banks and municipal real estate entities to acquire, assemble, and convey publicly-owned land for new development or rehabilitation. While Rhode Island Senate Bill 2760 would have established a statewide "housing land bank" to buy, receive, and hold property for the development of housing by PHAs or nonprofits, it did not pass this year.[76] However, a 2022 bill that did pass requires school systems to share information on vacant schools that may be available for redevelopment.[77] Finally, a special legislative commission on vacant and abandoned properties owned by Rhode Island is currently building an inventory of those properties.[78]

Impact

For each locality, the breadth of savings will vary depending on the availability of public land. However, given that rising land costs serve as one of the greatest barriers to development, the use of public land has the potential to reduce development costs by millions of dollars. As a result, development may become possible even in high-cost, amenity-rich neighborhoods, although it is less likely that state or local governments own land in these areas.

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[75] Grounded Solutions Network. (2018, January). What Do We Know About Inclusionary Housing? Lessons from a National Survey of Programs. https://inclusionaryhousing.org/wp-content/uploads/2018/02/grounded-solutions-network_ih_policy_highlight_january_2018.pdf

[76] Rhode Island Senate Bill 2760 (2024). https://legiscan.com/RI/text/S2760/id/2955116

[77] R.I. Gen. Laws § 45-53-10. For more information, see Rhode Island Department of Housing. *Repurposing vacant schools for affordable housing program*. https://ohcd.ri.gov/media/2596/download

[78] Rhode Island Department of Administration. (2023). *Vacant Properties Commission*. https://www.rilegislature.gov/commissions/VPC/commdocs/02-13-2023---DOA%20Vacant%20Property%20Commission%20FINAL.pdf

Public Land in Action

In Atlanta, the AUD partners with the city, Atlanta Housing, Invest Atlanta, and other public partners to assess the development potential of publicly-owned land. After consolidating these properties, the AUD works with private developers to redevelop the land into mixed-income housing. On a larger scale, THC in Idaho has leveraged the considerable surplus of public land to finance and develop affordable housing statewide.

Self-Insurance Programs

Background

Housing developments must be insured against many kinds of risk, including property damage and bodily injury that can result from natural disasters, fire, personal accidents, and so on. Insurance costs have been rising rapidly in the multifamily housing sector. Fannie Mae reports that multifamily property insurance premiums rose by 75 percent in just four years between 2018 and 2022.[79] This is likely due to a number of factors including the increasing frequency and severity of climate-change-related weather events and the rising costs of labor and replacement materials. But there is also evidence that insurers are discriminating against low-income housing in particular.[80] Initiatives that reduce the cost of insurance can have a significant impact on the feasibility of affordable housing development.

Montgomery County has a self-insurance program that provides various kinds of coverage, including property insurance, general liability, worker's comp, and auto liability, to approximately twenty public agencies, including the HOC. Many of these agencies' assets are masonry non-combustible buildings (schools, firehouses, and commercial buildings), which is relatively low risk. The HOC's buildings, which are typically wood frame or wood frame on top of 1-2 stories of masonry, are comparatively more risky. Thus, by pooling its risk with other county agencies, the HOC can access lower property insurance rates than it otherwise might. Another benefit is that if Montgomery County were to experience a large, damaging event, all of the agencies insured by the self-insurance program would have the same cause of loss; they would not each be responsible for separate deductibles to third-party carriers. Finally, the self-insurance program allows the HOC to access attorneys employed by the County who may have much more capacity and be more invested in the public interest than attorneys at a commercial insurance firm. HOC staff noted that there are also some challenges associated with the self-insurance program, including that banks and investors are more skeptical of self-insurance and that municipal programs may require less detailed information from participating agencies than a commercial insurer would, which can result in partial coverage if the agency underreports its risk.

Another model that is attracting growing interest is captive insurance companies, which are insurers that are wholly responsible to the entities that they insure; any profits they make are distributed to the insured

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[79] Fannie Mae. (2024, May). Higher Insurance Premiums Continue to Impact the Multifamily Sector. *Multifamily Economic and Market Commentary*. https://www.fanniemae.com/media/51396/display

[80] Fee, Rachel. (2024, April 5). Stop Insurance Carriers from Discriminating Against Affordable Housing. *City Limits*. https://citylimits.org/2024/04/05/opinion-stop-insurance-carriers-from-discriminating-against-affordable-housing/

parties. In the context of affordable housing, captives have the potential to allow housing providers to bypass discrimination among third-party insurance companies and access coverage tailored to their needs. They also provide much greater transparency about how risks align with pricing, and allow housing providers to exert some control over pricing decisions.

Finally, it is worth noting that some policymakers are working to combat insurance discrimination against affordable housing through regulatory action. During New York State's FY2025 legislative session, elected officials enacted into law a measure to ban insurance carriers from discriminating against affordable housing properties. The statute prevents insurers from inquiring about, canceling, refusing to renew, or increasing the premium of a policy based upon 1) a property having a regulatory restriction that limits occupancy to specific income levels; 2) property or residents receiving rental assistance, including, but not limited to, Section 8; 3) the level or source of income of a property's residents; or 4) ownership of a property by a limited-equity cooperative, public housing agency, or other affordable cooperative corporations.[81]

Impact

Montgomery County's self-insurance program is funded through contributions from participating agencies, which are based upon an annual actuarial analysis of their exposures and outstanding and projected future claims. Its total operating budget in 2024 was $95 million, which includes worker's compensation, auto liability, and other non-property claims. Roughly $5.2 million of the budget (5.5 percent) is allocated for personnel costs.[82] HOC staff estimate that participating in the County's self-insurance program yields savings of about 50 percent when it comes to property insurance. The agency is less able to benefit from other forms of insurance offered by the County, however; it must purchase general liability coverage from commercial carriers for many of its multifamily buildings which have external property managers who are not comfortable with the County program's caps on losses.

With respect to captive insurance companies, the impact on insurance costs and affordability may vary greatly depending on who is selected to participate in the captive and how the captive is structured.

Self-Insurance Programs in Action

In Montgomery County, the self-insurance program insures up to $250,000 of a given claim, and losses beyond that are insured by a commercial carrier, FM Global. The HOC was not an original member of the program but gained admission several years ago. According to an interview, convincing the County to admit the HOC required making a strong case that the HOC is an expert manager and has deep knowledge of its risks and liabilities. At the HOC, the insurance division is currently staffed by two people. The Director of Risk Management sits on a countywide panel that meets for three hours monthly to discuss

[81] VanAmerongen, D. (2024). New York State budget prohibits discrimination in insurance for affordable housing. *Nixon Peabody,* April 23, 2024. https://www.nixonpeabody.com/insights/alerts/2024/04/23/new-york-state-budget-prohibits-discrimination-in-insurance-for-affordable-housing

[82] Montgomery County, MD. (2024). FY24 Operating Budget and Public Services Program, *(*p.30-1). https://www.montgomerycountymd.gov/OMB/Resources/Files/omb/pdfs/FY24/psprec/30-Finance-FY2024-REC-Publication-Report.pdf

losses and lawsuits and works closely with the HOC's broker and with third parties. The second staff person handles claim activity and intake for new projects.

One example of a captive insurance company specifically for affordable housing providers is the Housing Partnership Insurance Exchange, or HPIEX. This captive is exclusively for affordable housing providers that belong to the Housing Partnership Network (HPN). These providers tend to be larger owners with portfolios of 1,500 units or more. As of 2019, HPIEX had 26 members and provided property insurance for 80,000 units.[83] Each member must each contribute capital to the captive in order to become an insured member. The members govern the company and share each other's risk. HPIEX was formed in 2004, and HPN worked with Merrill Lynch to provide $3 million in loans that members then used as their initial equity in HPIEX (these have all since been repaid). HPN also retains an equity stake in HPIEX.[84]

In recent years, HPIEX has done better than the insurance sector at large (to date, HPIEX has returned $13 million to its members), though risks and losses have increased in recent years. Members are notified of what premium they owe on January 1st of each year; the premium is based on actuarial review of expected losses over the next year (a combination of each member's individual loss history over past 5 years, and industry trends). The insurance premiums paid by members are used to cover administrative costs, property insurance (covering up to $500,000 losses), and reinsurance (losses exceeding $500,000). If losses exceed a certain amount, the loss amount is distributed among the members, just as any profit is distributed among members. This structure incentivizes members to invest in risk management, because their own premium will respond.[85]

Common Bond Funds

Background

A common bond fund is a financing structure in which new bond issuances are amended to join a single, large bond. This arrangement allows agencies to pool revenues and costs across developments to pay operating expenses and debt services for all buildings, which enables efficient debt service and spreads out risk.

Impact

The Dakota County CDA has developed about 1,800 units of affordable housing for seniors using its common bond fund.

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[83] Donna Kimura. (2019). "People on the Move." *Affordable Housing Finance*, November 26, 2019. https://www.housingfinance.com/management-operations/people-on-the-move-11-26-19_o

[84] Housing Partnership Network. (2023). "Owning Our Own Risks," April 26, 2023. https://housingpartnership.net/newsroom/articles/owning-our-own-risks

[85] Dolan, B. (2024, May 3). Insurance Risk Mitigation Strategies. *Webinar,* Enterprise Community Partners.

Common Bond Funds in Action

The Dakota County CDA includes all of its senior housing developments in a common bond fund. All rent revenues (supplemented by a special tax levy) enter a revolving fund where they pay operating costs and debt service on the common bond. The CDA maintains a debt service coverage ratio of 1.15; in addition it implements portfolio-wide replacement reserves, operating reserves, and insurance.

Many state HFAs already have some experience pooling several projects into one bond issuance in order to lower upfront expenses and insurance costs. Another related innovation is the New York City Housing Development Corporation's (HDC) Multifamily Housing Bond Resolution, established in 1993. The resolution, sometimes called an "open resolution" or "parity resolution," allows HDC to issue an unlimited number of parity bonds that do not take precedence over another in the payment of debt service to bondholders. The proceeds of the bond issuance are then allocated to first mortgage and subordinate debt financing for individual developments. This resolution has become HDC's "largest single asset and most flexible financing vehicle."[86] By capturing the spread between its debt service obligations to bondholders and its first mortgage debt to deals (which would normally go to a bank), HDC manages to generate very large surpluses, which, in turn, are lent back to deals in the form of subsidy loans.

Special Tax Levies

Background

Special tax levies can be a direct and reliable source of funding for affordable housing efforts. In Minnesota, the state legislature passed enabling legislation in 1993 that allows Housing and Redevelopment Authorities (HRAs) to levy a special tax upon all taxable property within their city or county's boundaries to fund that jurisdiction's housing plan. The maximum levy may not exceed 0.0185 percent of taxable market value.[87] The Dakota County CDA is an HRA that was created in 1971 and today is both a PHA and an HFA. The CDA partnered with Dakota County in 1988 on a ten-year plan to locally finance and construct affordable housing for seniors (they have since partnered on several additional phases) and began levying a special property tax.[88]

Impact

The size of the special tax levy in Dakota County averaged $7.3 million per year between 2010 and 2020, and the amount of tax proceeds paid towards housing development bond debt service averaged $5.4 million. The CDA has used these funds to build around 1,800 new affordable apartments for seniors to date.

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[86] New York City Housing Development Corporation. (2014.) Funding Housing Programs and Using Wealth Created in a Parity Resolution. *NCSHA Qualified Entry Form.* https://www.ncsha.org/wp-content/uploads/2018/05/NCSHASubmission_mgmtinnovation_final_07012014_v2.pdf

[87] Minnesota Code §469.003 (1993). https://www.revisor.mn.gov/statutes/cite/469.033

[88] Dakota County Community Development Agency. (2024.) About. https://www.dakotacda.org/about/

Special Tax Levies in Action

The Dakota County CDA issues housing development bonds to finance the acquisition and construction of senior housing developments. These bonds are credit enhanced by the County but are secured by and payable from the pooled gross rent receipts and other operating revenues related to the operation of housing developments financed by these bonds (in addition to an annual pledge of $5.6 million from the special property tax levy). The property tax levy is certified in December of each year to finance the budgeted expenditures of the subsequent fiscal year beginning on July 1st.[89]

A more recent example is Colorado's Proposition 123, which directed 0.1 percent of state income tax revenue to a statewide affordable housing fund. Some of these funds are used to make direct equity investments of up to $15 million per project in mixed-income housing developments, which in exchange must maintain an average affordability level of 90 percent of AMI or below for at least 30 years. The first projects to receive equity investments as part of this program will be announced in the summer of 2024.[90]

International Models

We also studied five models of public development and ownership in international contexts: Vienna, Austria; Helsinki, Finland; Copenhagen, Denmark; Singapore; and Hong Kong. These models are closely tied to their historical, political, and socio-cultural contexts and have evolved in environments that are often very different from Rhode Island's. Factors including political movements, reliance on low-cost foreign labor, or the gradual accumulation of land by the government over the course of decades have played a role in shaping some of these systems and have no equivalent in the U.S. While it may be tempting to view them simply as financing structures, they also reflect the political economy and culture of their respective places, and may be difficult to transplant.[91] Nevertheless, non-U.S. examples offer important lessons.

Public development and ownership in the international context is often referred to as '**social housing**.' This term has distinct connotations. It evokes models wherein the housing produced is available to a very broad sector of the population (for instance, in Vienna, more than three quarters of residents are currently eligible to access social housing). This has allowed social housing to escape much of the poverty-concentrating effects and stigma associated with 'public housing' in the U.S. or 'council housing' in the United Kingdom.

Many—though not all—social housing models have **cost-based rents**. This means that rents are calculated based on the cost of developing, operating, and maintaining a housing development. This cost may be calculated at the project level or set at the portfolio or national level. Rents are lower than they are in privately-owned units only because 1) they are not expected to generate a profit and 2) governments

[89] Dakota County Community Development Agency. (2022.) Annual Comprehensive Financial Report for the Year Ended June 30, 2022. https://www.dakotacda.org/wp-content/uploads/2016/02/CDA-2022-ACFR.pdf
[90] Colorado Housing Financing Fund. (2024.) Equity. https://coloradoaffordablehousingfinancingfund.com/equity/
[91] For instance, Vienna's political history of socialism, combined with a largely homogeneous population, created favorable conditions for social housing, though this system may face challenges with the arrival of migrants.

lower development costs by using publicly-owned land at no acquisition cost, lower-than-market-rate interest loans, and other mechanisms. In these models, households do not pay higher rents or lose their home if their income increases. An additional "housing allowance" (rental assistance that is not tied to the unit) is available to ensure housing stability for the lowest-income households in Vienna, Helsinki, and Copenhagen, while in Singapore, lower-income households benefit from additional mortgage assistance. In some countries, robust healthcare, educational, and other social supports may also contribute to helping households afford cost-based rents.

Key features of the models we studied include:

Vienna, Austria

- Social housing rents are calculated based on the cost of developing, operating, and maintaining housing.
- In some Viennese social housing, tenants contribute equity to help cover the costs of land acquisition and construction.
- Low-cost development loans issued to limited-profit housing associations are partially revolving; as they are repaid, each region reinvests in new development.
- After these loans are repaid, rent decreases to a level sufficient to cover day-to-day administration and maintenance, as well as renovations.

Helsinki, Finland

- After mortgage loans guaranteed by the national government are repaid, rent restrictions on social housing expire, and municipal and nonprofit housing associations are free to privatize the housing or raise rents.
- Although, as in Vienna, rents are cost-based, housing associations have the ability to "equalize" them across their portfolios. This means that rents for new construction can be kept lower.

Copenhagen, Denmark

- Municipalities and nonprofit housing associations collaborate closely to decide when, where, and how much social housing to build, and to allocate units to applicants.
- After mortgage loans are repaid, rents remain steady, and the revenue formerly used to service the loans flows into a National Building Fund that is used to make major renovations, invest in new construction, and fund programming for social housing residents.

Singapore

- Although Singapore's housing authority retains perpetual ownership of the land on which social housing is built, residents can buy, sell, and inherit units, making them valuable commodities that can build residents' wealth over time.
- Mandatory personal savings accounts for every employed person are the principal way residents pay their mortgages, as well as a fund the government borrows against.
- New development occurs on a build-to-order basis (i.e., prospective residents "order" a unit, and ground does not break on a new social housing project until 70 percent of its units have been bought).
- Public land and low-cost imported labor from South Asia keep development costs low.

Hong Kong

- The region's housing authority owns a diverse portfolio of commercial and residential property The revenue from leasing these assets, and from selling some units as homeownership housing, helps subsidize public rental housing.
- Deep and direct investment by the Hong Kong government, including grants of public land, infrastructure, and social programming, help the housing authority keep rents extremely low in a high-cost market.

Table 2. Selected Characteristics of International Models

	Vienna	Helsinki	Copenhagen	Singapore	Hong Kong
Cost-based	✓	✓	✓	✓	
Income-based					✓
Public land	✓	✓	✓	✓	✓
Low-cost labor				✓	
Participation of nonprofits	✓	✓	✓		
Ownership option	✓			✓	✓
Privatization or resale option		✓		✓	

Key Takeaways

- Scale and social mix can create financial and political stability for social housing systems in the long term.
- Cost-based models in Vienna, Helsinki, and Copenhagen point to the value of pushing rents down as far and as close to operating cost as possible, rather than legislating a certain level of affordability upfront.
- Social housing models are countercyclical; they tend to generate the most new affordable units when conditions are unfavorable for market-rate development.
- Singapore's model is idiosyncratic, but suggests the potential of social housing as a wealth-building tool.
- Hong Kong's model shows how non-housing public investments, including in revenue-generating infrastructure and social programs, can help make a social housing system financially feasible.

Conclusion

This study reviewed nine domestic and five international models of public development and ownership, and in doing so identified distinct model types as well as a suite of tools that public developers rely on to develop affordable housing. The models varied in terms of governance structure, and in the type, volume, and level of affordability of the housing produced. The most innovative approaches combined regulatory and financing authority in new ways and knit together a variety of tools to support new development.

Many of these models, particularly in the U.S., are novel and have not been tested across different economic cycles. They are also rooted in their particular political and economic context, and so may be hard to wholly transplant. Nevertheless, they offer important lessons for Rhode Island about the groundwork needed for public development, including establishing a strong financial framework and clearing regulatory pathways to ensure housing can be developed. They also speak to both the opportunities and to the risks and challenges that are inherent in public development and ownership.

Rhode Island must carefully consider whether there is a distinct, unmet need that a new public development entity could address more effectively than the current landscape of for- and nonprofit developers. This analysis should extend beyond merely identifying gaps; it should also assess the potential for a public entity to effectively bridge these gaps given the possible limitations such an entity would be likely to encounter. Independent of this decision about whether to pursue public ownership, establishing new financing mechanisms such as a publicly capitalized fund could support housing projects broadly; exploring reforms in tax policy and land use regulation; and more strategic use of federal housing programs could increase the impact of existing resources, and in turn, the availability of sorely needed affordable housing.

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Appendix 1: Case Studies

Montgomery County, Maryland

The Housing Opportunities Commission (HOC) is the public housing authority of Montgomery County, Maryland. It also acts as a public developer and a housing finance agency, with the ability to issue taxable bonds rated A2 by Moody's.[92] The HOC is governed by a volunteer commission appointed by the County Executive and approved by the City Council. The Commission's FY24 operating budget of $339 million mainly consists of voucher funding and federal subsidy pass-throughs, while its capital budget of $255 million is funded by bond proceeds and tax credit equity.[93] Importantly for the model, the HOC has a lot of development experience, including developing mixed-income housing. The HOC's real estate division includes about seventeen staff members, including project managers, analysts, quality oversight, relocation managers, and construction professionals. The HOC typically hires a general contractor, who is paid a "builder's fee" of 4-4.5 percent of the construction contract for a new HPF-financed building, but the HOC itself collects the developer's fee.

The HOC's Housing Production Fund (HPF) seeks to provide "revolving, low-cost, construction-period financing to HOC's developments."[94] These revolving funds are designed to replace market-based equity investments ("private equity") in the construction financing capital stack. HPF loans have a 5 percent interest rate, which is significantly lower than the 15-20 percent rates of return expected for private equity investors. The revolving loan is repaid before a project converts to permanent financing, which means that its main function is to help overcome the hurdle of construction.

According to local officials, the HPF arose from necessity: Montgomery County needed to expand their pipeline of affordable housing but they were running out of private activity volume cap. The HPF was approved by the Montgomery County Council in March 2021, and the Council agreed to fund the principal and interest payments up to $3.4 million annually for a $50 million bond issuance by the HOC. The Council then approved a second issuance of an additional $50 million in May 2022 for a total annual appropriation of $100 million in bond revenue.[95] The HOC anticipates that the HPF will cover a total of $250 million in construction loans, funding approximately 3,000 units in a 20-year period.[96] Over this period, the bond issuance will be fully repaid, after which point it will revolve at no additional cost.[97] It is important to note that separate from the HPF, the HOC has two lines of credit with PNC bank in an aggregate amount of $210 million, which allows the HOC to act nimbly as a joint venture developer and/or lender, with more flexibility than comparable entities.

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[92] Housing Opportunities Commission of Montgomery County, MD. (2018). *We Are Housers: Strategic Plan 2018-2022.* https://www.hocmc.org/images/files/ResourceDocs/Strategic_Plan_Current.pdf
[93] Housing Opportunities Commission of Montgomery County, MD. (2023). *Presentation to Public Development Community of Practice*. November 2, 2023.
[94] Housing Opportunities Commission of Montgomery County, MD. (2024). *Adopted Budget Book Fiscal Year 2024,* p.147. https://www.hocmc.org/images/files/Publications/FY_2024_Adopted_Budget_Book.pdf
[95] HOC 2024. *Adopted Budget Book,* p.147.
[96] HOC 2024. *Adopted Budget Book,* p.147.
[97] HOC 2024. *Adopted Budget Book,* p.147.

The HOC often leverages publicly-owned land, including aging public housing developments, as a way to lower total development costs (TDC). For example, its first HPF-financed project, The Laureate, was recently constructed on the site of a 95-unit public housing development adjacent to a metro station.[98] However, in other cases, the HOC has paid market prices to acquire land for HPF projects. In the HOC's experience, using public land lowers the cost of the project by 10-15 percent: a substantial but not tremendous impact.

The HOC's status as both an HFA and a qualified risk-share lender is extremely useful in this model in that it allows them to issue fixed-rate, lower cost debt and combined development with other tools like vouchers. With FHA risk-share, the HOC is able to fund projects with a 40-year amortization in term, at a relatively low rate.

As is often the case for income-restricted new housing development, HPF projects pull together a number of tools to make their projects financially feasible. What is unique in this model is the non-reliance on LIHTC. Achieving this requires a mixed-income model that is supported by a mix of different types of operating subsidies and fee reductions. For example, HPF projects partially rely on tenant-based subsidies. Although the HOC has not executed any Faircloth-to-RAD projects yet, in the future, the HOC's publicly-developed housing projects could be paired with Faircloth-to-RAD allowances and vouchers that provide deep operating subsidies for a portion of the units, which has the advantage of being able to house extremely low-income residents, while collecting closer to market rents.[99] Other tools include reductions in operating costs and development fees. The HOC's ownership of the completed properties allows them to unlock reductions in property tax liabilities (via tax exemptions), which have the effect of lowering a property's operating costs. In addition, if a certain share of units in the property (greater than 25 percent) are deemed affordable, the project qualifies for impact fee reductions and other exemptions from the County. In the case of The Laureate, the financing is structured such that after construction, the developer will stay in the deal with the addition of a mezzanine lender, possibly a mission-focused private investor. The permanent debt will cover the construction loan and pay off as much of the HPF financing as possible, with FHA risk-sharing between FHA and the HFA coming through at permanent loan conversion.[100]

Compared to a typical market-rate developer, the HOC can access less expensive construction financing through the HPF, unlock tax abatements, lower the cost of insurance (through self-insurance mechanisms), and help guide the project through local approvals, shortening the entitlement process. In addition, the requirement to include affordable units acts as a boon in some ways, because those units lease up relatively quickly. Montgomery County can be a challenging development environment, and the HOC is sometimes able to enter a project that has stalled to help move it forward. As an example of this model in practice, the HOC's current projects include one begun by a private developer who was awarded permission to develop on private land but then faced financing issues, which allowed the HOC to enter the deal, infuse the project with affordable units, and also gain control of the development.

[98] HOC 2023. Presentation to Public Development Community of Practice.
[99] HOC 2023. Presentation to Public Development Community of Practice.
[100] HOC 2023. Presentation to Public Development Community of Practice.

Atlanta, Georgia

The Atlanta Urban Development Corporation (AUD) is an incorporated subsidiary of Atlanta Housing (AH), the housing authority of the City of Atlanta. AH is well represented on the AUD board; four board members are also board members of AH, and three others are recommended by the Mayor and approved by AH. As a wholly owned subsidiary of AH, the AUD can issue bonds, own property, and award property tax exemptions just like a PHA.[101] As a start-up entity that does not share AH's balance sheet, however, the AUD generally relies on a "benefactor" like the City or Invest Atlanta to issue debt on its behalf.

The AUD is also responsive to the City of Atlanta and Invest Atlanta, the City's economic development authority. Besides recommending the three AUD board members, the City supports AUD with seed funding. The City is currently considering acting as a debt guarantor for AUD projects (the City is AA+ rated). Invest Atlanta's role includes helping intake, underwriting, project approval and closing, and it may also work with AUD to develop long-term public financing in the future.

Funded by the 2023 Housing Opportunity Bond, a $38 million appropriation from the City of Atlanta, the Housing Production Fund (HPF) is structured to provide "mezzanine-level, low-interest construction loan to developments that commit to long-term affordability through AUD ownership."[102] The joint effort requires AUD to identify HPF projects, with Invest Atlanta managing the bond financing and controlling and approving fund drawdowns. The AUD HPF model calls for the loans to cover up to 20 percent of the construction capital stack for up to a five-year period, with the below-market loans intended to be taken out at permanent loan conversion. By providing the interest-only construction financing at lower than market rates, and building on publicly-owned land (which reduces overall construction costs, thereby acting as a form of additional equity), the AUD HPF model – like the HOC's HPF – is designed to lower total development costs in exchange for the creation of affordable units.[103]

Because the HPF was created so recently, the AUD is exploring different financing structures. The AUD has released two Requests for Qualifications (RFQs) to date, the redevelopment of Fire Station 15 and Phase I of the redevelopment of Thomasville Heights. In these, AUD outlined an example capital stack: 5-10 percent of TDC would be AUD land acting as equity; another 5-10 percent of TDC would be additional (investor or private) equity; up to 20 percent lower-cost debt, funded by the HPF as described above (at an interest rate of 6 percent or lower); and the remaining 60 percent of funding in the form of a market-based construction loan.[104] Importantly, the projects will be able to leverage Private Enterprise

[101] It is important to note that while PHAs in Georgia are exempt from property taxes, special exemptions, and payments in lieu of taxes, and can exempt for-profit housing developers and managers from property taxes through a "private enterprise agreement," the same is not true in every state. O.C.G.A § 8-3-8 (2010).
[102] Atlanta Urban Development. (2024). *Request for Qualifications for Phase 1 of the Redevelopment of Thomasville Heights,* p.21. https://assets-global.website-files.com/657ad30f1454198c9d8e1d97/65f348991e2b812a59cdc5a4_Thomasville%20Heights%20RFQ_Final.pdf
[103] AUD 2024. *RFQ for Thomasville Heights*, p. 21.
[104] AUD 2024. *RFQ for Thomasville Heights*, p. 21; Atlanta Urban Development. 2024. *Request for Qualifications for Redevelopment of Fire Station 15 with Integration of New Affordable and Market Rate Housing,* p.12. https://assets-global.website-files.com/657ad30f1454198c9d8e1d97/65a1dea1fa5edfde7724124c_01%2011%202024%20-%20Midtown%20Fire%20Station%20RFQ.pdf

Agreements (PEAs), which allows PHAs to grant a full (100 percent) tax exemption for City, County, and school taxes for all units in the project that are affordable up to 140 percent AMI. The participation of a public entity like AUD in these deals can also speed up the entitlement process, creating additional savings.

As the AUD explores different approaches to project financing, it is taking a number of factors into consideration. First, the agency is weighing standardization and scalability. While pairing HPF loans with more conventional financing could increase the model's ability to scale, the team is also open to other, less scalable funding structures, including a 100 percent bond-financing deal where the AUD would be the full owner. The timing of when public money can enter a project is also a critical consideration. Funding a project with public money in the pre-development phase can increase return on investment for investors, allowing investors to ask for less return when the project is finished. However, such an approach would open the AUD up to more risk, and they would plan to take more of a leadership role on those projects. A third and final consideration is the availability and flexibility of complementary public finance tools. For example, Tax Increment Financing (TIF, a way to capture property tax revenue from new development in order to fund improvements needed for the development) can help with funding the construction of affordable housing, but none of its funding can be used in the pre-development phase.

In terms of exiting a project, there are a number of considerations. Primarily, the AUD will want to have a controlling stake in the project and determine the exit by deploying permanent financing (with the goal of achieving low-cost permanent financing in the future). When considering how to allocate the equity stakes of a project, the AUD will consider the relative risk for the corporation. For example, the AUD might be more interested in retaining a full equity stake and compensating its development partner with a developer fee for a project providing workforce housing that should have no trouble finding households interested in leasing up units affordable at 80 percent AMI. Alternatively, projects with more market-rate units are riskier because units with higher rent levels will be more challenging to fill. However, those units have higher returns and help finance projects in higher-opportunity markets. In those cases, the AUD might be more interested in pursuing an equity position for the developer partner to ensure that the entire team has a stake in the successful outcome of the project.

The affordability of AUD projects will vary depending on the project structure. In the RFQ for both Fire Station 15 and Thomasville Heights, the AUD notes that all AUD projects must have at least 20 percent of rental units affordable to households earning at or below 50 percent of AMI and 10 percent of rental units targeted to households at or below 80 percent AMI. The Thomasville Heights project should also include homeownership units, including equivalent levels of affordability or deeper. The RFQs also note that neither project should make use of LIHTC funding. Instead, that equity is meant to be replaced by the following combination: no land acquisition; lower-cost equity investment from a government entity; an exemption from property tax payments; and cross-subsidizing with market based rents.

This model needs three components to work as designed: land, public investment, and capacity. Capacity is key; the public entity needs a very skilled development entity or PHA to support with underwriting and structuring the deal. Bringing these components to the project allows the AUD to lead on the structure of the deal.

Chicago, Illinois

Modeled on the Montgomery County and Atlanta HPFs, the Green Social Housing Revolving Fund in Chicago is intended to help fill a funding gap for affordable housing as almost 45 TIF districts expire over the next three years. The fund will be seeded with $115-135 million out of a $1.25 billion bond issuance approved by the City Council in the spring of 2024. Similar to the HPFs described above, the revolving fund will provide lower cost construction loans, which would be repaid over three to five years. The bond book notes that the developer would "sell the building back to the local government when it is completed" and that the government would then contract with a third party for property management.[105]

Because the Fund is so new, much of the structure of the final program remains unclear. However, the City would likely create a separate entity through a program ordinance to run the program. The Chicago Department of Housing would likely be involved, and would be able to contribute underwriting experience gained from its role on LIHTC deals. The City is looking into a number of ways to lower total development costs and subsidize affordable units, many of which were also used or explored by Montgomery County and Atlanta. For example, projects in the program would be able to get a tax abatement under a statewide program. In addition, there is a hope that the Illinois Housing Development Authority would be able to collaborate as a risk-share lender to help lower costs. Finally, Chicago has some of the largest numbers of Faircloth units in the country, and the City is also interested in using the program on Faircloth-to-RAD projects to inject additional subsidy for affordable units.

Although the proposal states that the properties would include affordable units and would not require longer-term subsidies (like LIHTC), more detail on the selection criteria and process for developing new projects would be determined by a program ordinance that would need to be passed by the City Council. The City estimates that the revolving fund would produce 600 or more new rental units each year.[106]

The City is weighing a couple of options in terms of building out a potential pipeline of projects. The first would be to enter a project that has stalled and offer financing in exchange for a stake in the final project and the inclusion of affordable units. A second option would be to consider sites that will open up during the course of the Red and Purple Modernization, the largest capital project in the Chicago Transit Authority's history.[107] The higher rents in some of those neighborhoods could be sufficient to subsidize mixed affordable properties and would allow the City to manage projects from the beginning of their development.

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[105] City of Chicago. (2024). *2024-2028 Housing and Economic Development Bond: June 2024,* February 2024. https://www.chicago.gov/content/dam/city/sites/business-and-neighborhood-development-strategy/pdf/Housing-and-Economic-Development-Bond-Book-(Updated-2024.07.03).pdf

[106] City of Chicago. (2024). *2024-2028 Housing and Economic Development Bond: June 2024,* February 2024. https://www.chicago.gov/content/dam/city/sites/business-and-neighborhood-development-strategy/pdf/Housing-and-Economic-Development-Bond-Book-(Updated-2024.07.03).pdf

[107] Chicago Transit Authority. "About the RPM Phase One Project." Accessed April 8, 2024. https://www.transitchicago.com/rpm/about/

Boston, Massachusetts

The Boston Housing Authority (BHA) is a traditional federally-funded public housing authority.[108] The agency is managed by an administrator who is appointed by and serves at the pleasure of the Mayor of Boston. The Mayor also appoints a nine-member Monitoring Committee – of which five members are public housing residents and one is a voucher-holder – to oversee the work of the BHA and report on its activities.[109]

BHA is currently engaging in a major redevelopment and expansion of the Mary Ellen McCormack complex, the city's oldest public housing development, located in South Boston.[110] The redevelopment will demolish the existing structures on the land and rebuild all 1,016 affordable apartments, as well as adding another 2,000 middle-income and market-rate units.[111] BHA is doing so in partnership with a private developer. BHA will continue to own the land under Mary Ellen McCormack while the private developer will own the buildings. BHA provides the subsidy for the replacement public housing units. The project's market-rate units will also help to cross-subsidize some of the affordable and middle-income units. Construction of the redevelopment will be financed with a combination of private debt, LIHTC (for the first redevelopment phase only), BHA equity, private developer equity, and grants from both the city and state. At stabilization, BHA will receive rental payments on the land, transaction payments if the private partner resells the building, and a portion of profits if the market-rate rents pass a profitability threshold. While Mary Ellen McCormack is *not* an example of "public development" as defined above, it does involve a public entity partnering in the construction of new, cross-subsidized development and retaining long-term control over the outcomes of that development.

BHA intends to branch out beyond the Mary Ellen McCormack model in an effort to build income-restricted units without the need for LIHTC, as the Group A models do. To do so, BHA intends to use HUD's Faircloth-to-RAD program. Because of significant de-densification since 1999, the BHA has about 3,000 units of Faircloth authority today. However, the Faircloth-to RAD program typically does not provide enough subsidy to finance new construction. To bridge the gap, BHA intends to issue debt on the project-based vouchers it will receive for these 3,000 units, generating significant leverage. Prior to the Faircloth-to-RAD program, BHA was unable to take advantage of its unbuilt Faircloth authority. Leverage on the approximately $800-per-month Section 9 subsidy was insufficient to support new construction. In this case, converting Section 9 subsidies to project-based vouchers through Faircloth-to-RAD increased the level of subsidy to about $1,200 per month per unit.

Boston's transformative opportunity stems from the combination of Faircloth-to-RAD with SAFMRs. SAFMRs allow PHAs to provide housing subsidies for vouchers at a neighborhood – instead of metropolitan – level, so tenants have access to much higher subsidy levels in more expensive

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[108] Boston Housing Authority. *Mission and History.* Accessed April 8, 2024. https://bostonhousing.org/en/About-BHA.aspx

[109] Boston Housing Authority. *Monitoring Committee.* Accessed April 8, 2024. https://bostonhousing.org/en/Center-for-Community-Engagement/Resident-Empowerment/Monitoring-Committee.aspx

[110] DeCosta-Klipa, N. (2023). In Southie, Boston's Oldest Public Housing Project Is Getting a Makeover. *WBUR Boston,* December 15, 2023. https://www.wbur.org/news/2023/12/15/mary-ellen-mccormack-housing-redevelopment-south-boston-newsletter

[111] Winn Companies. *Mary Ellen McCormack.* Accessed April 8, 2024. https://www.memredevelopment.com/home

neighborhoods. In July 2023, HUD gave non-MTW housing authorities that have implemented SAFMRs the ability to raise Faircloth-to-RAD subsidy levels to the small area payment standard (MTW authorities are not able to do the same). This will give BHA up to $3,200 per unit per month in subsidy in certain neighborhoods, instead of $1,200.[112] The increase in federal subsidy per unit will enable BHA to more than double the debt it could generate for construction, broadening the scope of feasible development.

BHA manages most new development and redevelopment projects in partnership with private developers who provide expertise or technical capacity. As it embarks on its Faircloth-to-RAD development pipeline, the agency anticipates exploring alternate management models, including possibly bringing all development in-house or hiring private developers for turnkey projects. BHA also often relies on partnerships with the City of Boston and MassHousing, the state housing finance agency, to execute on its deals. BHA has bonding authority but relies on MassHousing to support financing at the scale of its recent, large developments. Furthermore, many of BHA's redevelopment efforts have utilized grant funding from the City of Boston or the state budget to support non-construction needs like remediation or tenant relocation.

Thus far, all of BHA's development and redevelopment efforts have been on land already owned by BHA and therefore exempt from property taxes. As the agency creates a plan for developing its 3,000 Faircloth units over the next decade, it has identified 50 publicly owned sites of varying sizes that could support development.

BHA's federal subsidies create significant flexibility in its rent mix, and the agency can thus target development priorities to the highest needs in the Boston area. BHA is the only developer in the area that is able to build homes that support extremely low-income families (those with incomes at or below 30 percent of AMI), so the agency attempts to maximize units affordable to those households. BHA projects over the past decade have typically included 80 percent of units with market-rate rents and 20 percent targeted towards extremely low-income households using project-based vouchers. The agency also finds that efforts to provide homes affordable to households with incomes 60-70 percent of AMI are relatively well-resourced locally, homes targeting rents affordable to households with incomes 80-100 percent of the area's AMI are relatively scarce. As BHA expands its public development work over the next decade, it is interested in evolving its model to support more homes affordable to households with incomes just below 100 percent AMI.

Cambridge, Massachusetts

The Cambridge Housing Authority (CHA) is a federally-funded public housing authority like BHA. It is managed by a five-member board: one resident, three community members appointed by the town manager, and one community member appointed by the Governor.[113] CHA has already begun using the Faircloth-to-RAD model to great success – with some local innovations and creative alterations to the program.

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[112] SAFMRs set voucher rents at the 40th-percentile rent of a given zip code rather than an entire region, which enables much higher voucher payments in expensive neighborhoods. See also footnote 31.

[113] Cambridge Housing Authority. *Board of Commissioners.* Accessed April 8, 2024. https://cambridge-housing.org/about/board-of-commissioners/

CHA is not able to blend Faircloth-to-RAD conversions with SAFMRs in the way that has made BHA's Faircloth-to-RAD financing so promising. Unlike BHA, CHA has a MTW designation from HUD, giving it greater flexibility to shift funds between programs but excluding it from the special ability to raise Faircloth-to-RAD subsidy levels in line with small area payment standards. Instead, CHA combines Faircloth-to-RAD with LIHTC, soft debt from the state HFA, and, in some cases, investments from the city of Cambridge.

A recent CHA redevelopment project has used this model and is about to begin construction. The project relies on $10-12 million from LIHTC, approximately $12 million in soft debt from the state, debt on Faircloth-to-RAD subsidies, and $44 million in funding from the city of Cambridge. Unlike BHA's recent development efforts, CHA's project is 100 percent affordable, with many units put aside for extremely low-income residents. CHA is placing much less of an emphasis on cross-subsidization and mixing incomes and is prioritizing deep affordability.

Most of CHA's redevelopment work in recent years has relied on LIHTC, but caps on tax-exempt private activity bonds have slowed CHA's development plans. Private activity bonds are issued by states annually to fund projects in the public interest and are exempt from taxes. When private activity bonds are used for housing projects, they automatically come with 4 percent LIHTC, which can be a useful piece of a complex capital stack in affordable housing development (as seen in CHA's stack discussed above).[114] The federal government places a cap on the amount of private activity bonds that a state can issue every year, and in recent years many states, including Massachusetts, have run up against the cap.[115] In the absence of the cap, CHA could be working on up to 15 affordable housing projects, but with the cap in place, they are limited to one or two per year. The cap on private activity bonds and resulting bottleneck of LIHTC has driven CHA to begin to explore other financing options.

CHA has a long history of innovation in preservation and development and began using Faircloth-to-RAD before many other PHAs. As such, it has begun working as a consultant and development partner with other PHAs that have unbuilt Faircloth authority – particularly small PHAs in the Boston region that do not have the technical expertise to make full use of HUD's financing tools. Massachusetts allows PHAs to operate anywhere in the state which enables CHA to blend its own subsidies with other PHAs in other towns and cities and operate across town lines. Given the complexity of some of these projects and the fact that Faircloth-to-RAD subsidies are often insufficient to generate new housing units on their own, CHA sees these consulting partnerships with other PHAs as an important effort to operationalize Faircloth-to-RAD.

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[114] Local Housing Solutions Lab. *Increased Use of Multifamily Private Activity Bonds to Draw Down 4 Percent Low Income Housing Tax Credits.* Accessed April 8, 2024. https://localhousingsolutions.org/housing-policy-library/increased-use-of-multifamily-private-activity-bonds-to-draw-down-4-percent-low-income-housing-tax-credits/

[115] McAnaney, P. (2024, March 8). How Federal Stimulus Accidentally Bottlenecked Affordable Housing in D.C. *Greater Greater Washington.* https://ggwash.org/view/93101/how-federal-stimulus-accidentally-bottlenecked-affordable-housing-in-dc

Hawaii

The Hawaii Public Housing Authority (HPHA) is governed by an eleven person Board of Directors appointed by the Governor and is also overseen by the state legislature.[116] In partnership with the Hawaii Housing Finance and Development Corporation, HPHA has recently explored large-scale redevelopment of its statewide portfolio under a similar program as Boston and Cambridge. The authority recently received approval from the Hawaii state legislature to build mixed-income housing (as opposed to housing targeted just to low-income households) and has identified a private developer partner – Highridge Costa Development Co – to implement HPHA's Ka Lei Momi project.[117]

Under Ka Lei Momi, the HPHA and Highridge Costa Development Co will work together to build and manage 10,000 new units of affordable and workforce housing on 9 properties already owned by the HPHA. These units will be financed by RAD conversion of both existing public housing units and unbuilt Faircloth authority (like BHA and CHA above), as well as supplemental funding from HPHA's MTW funds, LIHTC, and private equity financing through Highridge Costa.

Dakota County, Minnesota

The Dakota County Community Development Agency (CDA) was created in 1971 as an independent legal entity and is now a recognized and respected affordable housing developer in the communities it serves. During the first 20 years of the CDA's senior housing program, the Dakota County Board, which is elected, appointed the CDA's Board of Directors. In approximately 2010, however, members of the County's board appointed themselves to serve as the CDA's board. This has the effect of holding the CDA directly accountable to county residents for high-quality development and fiscal responsibility.

When planning a new development, the CDA's typical practice is to look for underused sites in the county. Occasionally these sites are publicly-owned, but that is not the norm. They work closely with municipalities within Dakota County to identify ideal sites, especially redevelopment opportunities. The CDA has two distinct housing programs: publicly-owned senior housing and workforce housing (typically townhomes for families with children). All of the CDA's projects have an affordability component. Its workforce housing utilizes LIHTC and sets affordability levels accordingly, while the senior housing program targets households with incomes at or below 80 percent of AMI.

The CDA's senior housing program constitutes true public development and ownership according to our definition. Minnesota state statute allows the CDA to issue tax-exempt "essential function" bonds, which are credit enhanced with a general obligations pledge from Dakota County, to finance new senior housing developments. Each new bond issuance is amended to join one, large common bond, which allows the CDA to pool revenue from across its developments to service the debt.[118] Aggregating all operating

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[116] Hawaii Public Housing Authority. *Our Team.* Accessed April 8, 2024. https://hpha.hawaii.gov/team

[117] Office of the Governor, Hawaii. (2023, July 3). *The Hawai'i Public Housing Authority Announces Master Developer To Create More Than 10,000 Affordable Rental Units: Press Release.* "https://governor.hawaii.gov/newsroom/news-release-the-hawai%CA%BBi-public-housing-authority-announces-master-developer-to-create-more-than-10000-affordable-rental-units/

[118] Dakota County Community Development Agency (CDA). Senior Housing Development Program. *Presentation.* Shared with the research team via private email.

revenue and costs also allows the CDA to spread out the cost of any major repairs such as new roofs, windows, and siding – something that is increasingly important as its earlier projects turn thirty and forty years old. Importantly, in addition to its rent revenue, the CDA relies on a special property tax levy authorized by the Minnesota legislature in 1999 to help service its bond debt.[119] This allows Dakota County's backing of the bonds to remain strictly a credit enhancement; it does not use its own tax receipts to service the bond.

Typically, the CDA begins construction on a new senior housing development immediately after floating a new bond, without the need for separate construction loans. The CDA generally hires a general contractor through a public bidding process (it does not negotiate) and simply draws down the funds needed to make each month's construction payment. The agency pays a sales tax on the construction contract, but can obtain a rebate on construction materials from the state at the end of construction. Another important aspect of the development package is that the CDA is exempted from property taxes (though it does pay a PILOT in order to help pay for public services for their affordable senior projects). The CDA chooses to pay prevailing wages for the construction of all its senior housing developments, even though they are typically not using any federal financing that triggers Davis Bacon laws.

The common bond structure serves as a safety net across the properties and underlines the advantage of building up a larger portfolio. Today, the CDA owns and operates more than 1,700 senior units in nearly 30 properties. The ability to issue the tax-exempt bonds to fund development is reflected in the rent structure. Initially, the CDA set a minimum and maximum rent for each building and residents paid 30 percent of their income towards rent within that range. More recently (for the newest 10-12 buildings), the agency has transitioned to a flat rent structure. Because most of its projects are small (the CDA now aims for ~65-unit buildings), cross-subsidization is less feasible and the agency has not pursued a mixed-income approach to date.

CDA senior housing is high quality, but the agency has deliberately chosen not to include expensive amenities such as dishwashers, in-unit washers and dryers, and common areas in order to maximize affordability for its residents. This has not appeared to deter interest in the developments. The CDA has the freedom to make this choice, as well as greater flexibility with rent structures, because the essential function bond and county-level tax levy come with few strings attached compared to using LIHTC. The CDA also has its own maintenance staff and conducts all property management in-house.

Idaho

The Idaho Housing Finance Association (IHFA) is the state's self-sufficient housing finance agency, operating much like a nonprofit. Its core responsibilities include administering housing tax credits and overseeing the state's HUD-insured developments. In 1992, in response to the underutilization of LIHTC in the state, the IHFA created The Housing Company (THC) to be a 501(c)(3) nonprofit development and property management organization. THC's Board of Directors consists of 50 percent independent members and 50 percent IHFA-appointees – a structure that HUD accepted. As a nonprofit developer that

[119] Office of the Revisor of Statutes. (1999). Chapter 238, S.F. no 1876. Minnesota Legislature. https://www.revisor.mn.gov/laws/1999/0/248/#laws.0.3.0

uses LIHTC, THC does not meet our criteria for public development and ownership. Nevertheless, its public mission and relationship with IHFA makes it relevant for this report.

THC typically coordinates with municipalities to identify new development opportunities, sometimes drawing on the considerable surplus of public land throughout the state. Alternatively, sometimes land is donated to THC, although this occurs less frequently. In terms of financing, THC acts much like a typical affordable housing developer. It commonly relies on LIHTC – both the 4 percent and 9 percent credits. THC projects also use CDBG funding when it is available. THC has used HOME funding for several of its rural projects which are usually smaller in size, from six to 15 units per project. THC also sometimes receives philanthropic donations to subsidize its developments, including for single-family homes with deed restrictions to ensure long-term affordability or with a shared-equity model. In recent years, THC successfully accessed $50 million of ARPA funds, used in combination with 4 percent credits, to create approximately 1,200 workforce units. This is a model that THC would like to replicate with future funds from the state.

THC manages, and to some extent owns, all of its properties. With tax credit projects, the investor LLC holds majority ownership in the project while THC only owns a small stake, but THC includes a provision that passes full ownership to the organization after the compliance period. By serving as a property manager, THC can and does exercise the option to raise rents more slowly than the market would merit, thereby keeping units as affordable as possible. All of THC's projects have some affordability component, and they typically establish a preference for voucher holders.

THC is now recognized for its long history as a successful developer. This reputation, combined with the rules established to clearly distinguish THC from IHFA and the straightforward and transparent nature of the state's QAP, is key in protecting THC from a perception of a conflict of interest due to its relationship to IHFA. Experts in Idaho expect that this model may be hard to replicate today because developers may view a similar entity as a competitor with an unfair advantage for receiving tax credits.

Colorado

In 2022, Colorado voters approved Proposition 123, a ballot measure that funds housing initiatives by setting aside 0.1 percent of state income tax revenue. The measure is expected to generate over $300 million in 2025, and 40 percent of those funds are set aside for the Department of Local Affairs (DOLA) through the Division of Housing (DOH). DOLA and DOH administer the Affordable Housing Support Fund, which supports programs that prevent homelessness, promote affordable homeownership, and develop local planning capacity.[120]

The remaining 60 percent of the Proposition 123 funds go to the Office of Economic Development and International Trade (OEDIT).[121] OEDIT and the Colorado Housing and Finance Authority (CHFA) manage the Affordable Housing Financing Fund (AHFF), which finances affordable housing

[120] Colorado Department of Local Affairs. (2023). Proposition 123 Commitment Updates. https://engagedola.org/prop-123/news_feed/proposition-123-commitment-updates
[121] Colorado Affordable Housing Finance Fund. (2023). About Proposition 123. https://coloradoaffordablehousingfinancingfund.com/about/

developments across the state. To receive funding from AHFF, localities must first commit to increasing their affordable housing stock by 3 percent per year for three years.[122]

AHFF oversees three primary initiatives: a land banking program, a concessionary debt program, and an equity program. Roughly 15 percent to 25 percent of the AHFF is allocated to the land banking program, which provides grants and forgivable loans to local governments and eligible nonprofits. Funding must be used for the acquisition or preservation of land for affordable for-sale or rental homes. The program prioritizes high-density, mixed-income housing, with income limits set at 60 percent of the AMI for rentals and 100 percent of the AMI for homeownership.[123]

Approximately 15 percent to 35 percent of the AHFF is allocated to the concessionary debt program, which provides gap financing for LIHTC projects and other low- and middle-income multifamily rental developments. The average income for tenants in income-restricted units cannot exceed 60 percent of the AMI. Up to 25 percent of the development's units may be market-rate; however, those units are not eligible for financing via the program.[124] The concessionary debt program also offers debt financing for modular housing, which includes tiny homes, kit homes, and 3D-printed homes.[125] Interviewees estimated that the program will fund approximately 3,000 units this year.

The remainder and bulk of the AHFF, roughly 40 percent to 70 percent, is allocated to the equity program. In this program, the state makes below-market-rate equity investments for the construction of new mixed-income housing developments.[126] The program prioritizes mixed-income housing for low- and middle-income households, but maintains affordability by ensuring that income-restricted units do not exceed an average of 90 percent of the AMI.[127] As of July 2024, the program announced $39.4 million in equity investments for 628 units across six new buildings, with the individual awards ranging from $2.8 to $15 million[128] Funding for the equity program is expected to more than double in 2025, which will increase the number of developments funded (awards are capped at $15 million). Tenants in these units will also be enrolled in the Tenant Equity Vehicle (TEV), a program designed to allow renters to tap into the value of their buildings. After living in a state-equity-financed building for at least a year, and in exchange for on-time rent payments, tenants will begin to access monthly and end-of-year cash payouts that they can either use or save up, e.g. for a future downpayment on a home. The exact parameters of the

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[122] Colorado Office of Economic Development and International Trade. (2023). Proposition 123 - Program Summary. https://oedit.colorado.gov/proposition-123-colorado-affordable-housing-financing-fund

[123] Colorado Affordable Housing Finance Fund. (2023). Land Banking. https://coloradoaffordablehousingfinancingfund.com/land-banking/

[124] Colorado Affordable Housing Finance Fund. (2023). Concessionary Debt. https://coloradoaffordablehousingfinancingfund.com/concessionary-debt/

[125] Colorado Housing Finance Agency. (2023). Innovative Housing and Modular Manufacturer Financing. https://www.chfainfo.com/business-lending/loan-programs/innovative-housing-manufacturer-financing

[126] Colorado law limits how the state interacts with private businesses, so these equity investments will yield returns for the state but do not currently translate into an ownership stake, though this may evolve in the future.

[127] Colorado Affordable Housing Finance Fund. (2023). Equity. https://coloradoaffordablehousingfinancingfund.com/equity/

[128] Office of Colorado Governor Jared Polis. (2024). More Housing Now: Proposition 123 Funds to Help Create 628 Affordable Housing Units. https://www.colorado.gov/governor/news/more-housing-now-proposition-123-funds-help-create-628-affordable-housing-units

TEV are still under development. Funding will initially come from the interest the state collects in its concessionary debt program, but may eventually come from the appreciation of equity-financed buildings themselves.

Vienna, Austria

In Vienna, social housing accounts for more than 43 percent of all housing units–one of the highest proportions in the world.[129] This 43 percent is nearly evenly split between two social housing systems: 'municipal housing' built and owned by Wiener Wohnen, a city-owned company whose budget is approved by the Viennese City Council, and 'limited-profit housing' built by limited-profit housing associations (LPHAs). Both systems 1) exclusively produce rental housing, which is owned by either the municipality or LPHA indefinitely[130]; 2) base rents on the cost of developing and maintaining the housing; 3) have broad eligibility, such that households of varying income levels, etc. can access this housing stock.

LPHAs can be organized as limited liability companies, public liability companies, or cooperatives, but – in order to receive LPHA status and receive access to low-interest government loans – they must abide by an Austrian law (the *Wohnungsgemeinnützigkeitsgesetz,* or WGG) that dictates how they calculate the cost of a given development and prohibits them from charging rents either above *or below* the cost-recovery level for a given development.[131]

Municipal housing in Vienna is financed primarily by a federal income tax. A portion of the tax revenue is distributed to each of Austria's nine states, which decide whether to use it for housing construction or for subsidies (since the early 2000s, they may also invest it in infrastructure). The City has an annual budget for new development and renovation of about $700 million, of which $530 million comes from the national government.[132]

Financing for limited-profit housing is more complex. New LPHA developments are usually financed with 1) a low-interest, subordinate loan from the regional government, making up 30-40 percent of the capital stack; 2) a bank loan, also making up 30-40 percent of the capital stack, typically with a 25-30 year term and an interest rate of 1-1.5 percent (when interest rates increase, special-purpose housing construction banks exist to offer affordable rates); 3) equity from the LPHA itself, comprising 10-20 percent of the stack; 4) a tenant equity contribution making up 5-10 percent of the total investment; and 5) additional public grants, often 5 percent of the stack, to cover the expense of meeting secondary policy objectives such as adding renewable energy sources.[133]

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[129] Kadi, J. & Lilius, J. (2022). The Remarkable Stability of Social Housing in Vienna and Helsinki: A Multi-Dimensional Analysis. *Housing Studies.* DOI: 10.1080/02673037.2022.2135170

[130] Except in the case of right-to-buy units, see information on tenant equity contributions below.

[131] Pittini, A., Turnbull, D., & Yordanova, D. (2021). Cost-based Social Rental Housing in Europe: The Cases of Austria, Denmark and Finland. *Housing Europe, December 2021*. https://www.housingeurope.eu/resource-1651/cost-based-social-rental-housing-in-europe

[132] Forrest, A. (2019, February 5). Vienna's Affordable Housing Paradise. *HuffPost,* February 25, 2019. https://www.huffpost.com/entry/vienna-affordable-housing-paradise_n_5b4e0b12e4b0b15aba88c7b0

[133] Pittini et al. (2021).

The regional low-interest loans that finance LPHA development are, in part, revolving. Historically, as LPHAs repaid their loans, regional governments were required to reinvest these funds in new development. This statutory obligation no longer exists, but LPHA loan repayments still account for about two-thirds of the funds used to issue new LPHA development loans. The remainder comes from the regional government's own revenue, often drawing on a regional housing-specific tax of 1 percent on gross salaries. LPHAs do not have to service the interest on these regional loans until their other loans have been repaid.[134]

The City of Vienna also subsidizes social housing, where possible, through public land. Wohnfonds Wien, a public land bank, has been acquiring public land for the last forty years. In order to be granted an opportunity to buy public land or (more recently) access it via a 99-year ground lease, LPHAs must go before a jury, and if the project is large, compete against other proposals. Entries are judged based on criteria of economic feasibility, ecology, architectural quality, and social sustainability. Municipalities can also specially zone land for LPHA housing, helping to limit the cost of land. Nevertheless, rising land prices combined with cheap financing available on the private market for non-social housing in recent years has dampened LPHA production. Conditions are only now becoming more favorable due to rising interest rates.

Tenant equity contributions are another distinctive component of LPHA financing and are often invoked when a development incurs high land acquisition or other up-front costs. In this model, tenants are required to make a down payment at move-in. These down payments have risen significantly in recent years because of the rise in land prices. In Vienna today, they may vary between 200 and 800€ per square meter ($20-80/ft^2), and so could reach 30.000€ ($32,400). The down payment is returned to tenants–minus a deduction of 1 percent per year–when they move out. Tenants whose down payment exceeds a certain amount have the right to buy their unit after a tenancy of five years. Nevertheless, the tenant equity contribution represents a significant barrier for some, so Vienna offers loans to cover it. The absence of this requirement in Vienna's municipal housing makes it more accessible than LPHA housing for low-income households.[135]

In Vienna, social housing rents are based on the cost of developing and maintaining a given project. The WGG, which regulates rent calculations in limited-profit housing, factors in all planning, construction, financing, and management costs for a development. Because calculations must occur at the level of an individual development, cross-subsidization between developments–even those owned by the same LPHA–is impossible.[136] Once the LPHA's loan is paid off, a development's rents typically decline, though not precipitously. LPHAs continue to charge a base rent (set by the WGG at 1,87€/m^2 in 2021, updated every two years, and indexed to CPI), plus maintenance, service, and renovation costs. Surpluses are reinvested by the LPHA in new development.[137] Meanwhile, in Vienna's municipal housing, rents are set by the City in line with federal rent regulation laws, and are slightly cheaper than LPHA rents.[138]

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[134] Pittini et al. (2021).
[135] Kadi, J. (2015). Recommodifying Housing in Formerly 'Red' Vienna. *Housing, Theory, and Society* 32: 247-265.
[136] Pittini et al. (2021).
[137] Pittini et al. (2021).
[138] Kadi and Lilius (2022).

In 2016, average rents in Vienna's municipal housing was 3,97€/m^2 (40¢/ft^2), compared to 4,84€/m^2 in limited-profit housing and 6,34€/m^2 in private housing.[139] A version of LPHA housing called "smart housing," which has efficient ground floor plans and fewer amenities, also has lower rents and down payments. Social housing recipients may also be eligible for a housing allowance–but these are fairly rare in Vienna because rents remain largely affordable.

Together, the municipal and LPHA systems have helped keep housing affordable in Vienna. Only 10 percent of households report that meeting their housing needs represents a "heavy financial burden," compared to nearly 30 percent in the EU as a whole.[140]

Social housing is available to much of the Viennese population. The application process and basic eligibility requirements for municipal and limited-profit housing are the same; the 2023 after-tax income cap of 53.340€ ($57,600) for an individual – and higher amounts for larger households – qualifies about 75 percent of the population.[141] Municipal housing is now additionally restricted to those who have lived at their current address in Vienna for at least two years; this was introduced as an "exclusion mechanism" in the early 2000s as a response to rising international migration. Tenants in both municipal and limited-profit housing can only receive a unit that fits their current household size (with some exceptions), and municipal housing is prioritized for those with urgent needs (overcrowding, doubling-up, or cost burden).[142]

Vienna's social housing system dates to the 1920s, when the city's Social Democratic government built 60,000 municipal apartments in vast "people's palaces" (*Wolkswohnungspaläste*).[143] Today, Wiener Wohnen owns and manages about 221,000 units in Vienna.[144] The city's 58 LPHAs manage another 200,000 units.[145] Between 2001 and 2020, there was a net increase of about 60,000 units of social housing units in Vienna.[146] The massive scale and age of the social housing system in Vienna creates advantages that would be hard to replicate elsewhere; buildings whose mortgages have long since been paid continue to generate rent revenue that can be used to cover repair needs and invest in new development, and the system is so established that it is immune from the whims of politics. On the flip side, there have not been any new LPHAs founded in Vienna in the recent past, as it is difficult to newly enter the social housing space.

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[139] Lukas Tockner. 2017. "Mieten in Österreich und Wien, 2008 bis 2016." *Arbeiterkammer.* https://www.arbeiterkammer.at/infopool/wien/Mieten_in_Oesterreich_und_Wien_2008_bis_2016.pdf

[140] EU-SILC database, Table [ilc_mded04].

[141] Stadt Wien. "Flat Allocation Criteria." Accessed March 28, 2024. https://socialhousing.wien/tools/flat-allocation-criteria

[142] Kadi and Lilius 2022.

[143] Richard Conway. 2023. "Vienna Launched a Public Housing Revolution in the 1920s." *Bloomberg CityLab,* November 8, 2023. https://www.bloomberg.com/news/features/2023-11-08/the-design-history-of-vienna-s-world-famous-social-housing

[144] Wiener Wohnen. 2022. *Geschäftsbericht.* https://www.wienerwohnen.at/ueber-uns/geschaeftsbericht.html

[145] Stadt Wien. "Limited Profit Housing Construction." Accessed March 28, 2024. https://socialhousing.wien/tools/limited-profit-housing-construction

[146] Kadi and Lilius 2022.

Helsinki, Finland

In Helsinki, social housing accounts for 19 percent of the housing stock as of 2020,[147] compared with 11 percent of the housing stock in Finland as a whole.[148] The Finnish social housing sector bears some resemblance to Vienna's dual system of municipal and limited profit housing associations. ARA, the national agency which regulates social housing, partners with about 800 social housing providers across the country. These can be either municipalities (or housing associations principally owned by a municipality) or ARA-approved nonprofits specializing in social housing development. In reality, up to 80 percent of social housing in Finland is managed by municipally owned housing associations.[149] The largest provider in the country, with about 50,000 units, is Heka, Helsinki's municipal housing association.[150] The most important aspects distinguishing Finland's system are: 1) new social housing is financed primarily by bank loans, but these are guaranteed – and interest rates are subsidized – by the state; 2) after these loans are paid off, the rent restriction period comes to an end and the social housing provider has the option to gradually increase rents, privatize the units, and/or decide on their own allocation criteria; and 3) social housing providers in Finland (unlike in Austria) are permitted to equalize rents across their stock, making some cross-subsidization possible.

The principal financier of social housing in Finland is MuniFin, a bank collectively owned by the Republic of Finland, Finnish municipalities, and the public sector pension fund. Munifin finances not just housing but schools, hospitals, and other infrastructure, and grants loans with terms of up to 41 years.[151] It lent 827 million euros for new social housing in 2020 and made a net profit of 197 million euros. Loans from MuniFin and other private financial institutions typically make up 95 percent of the cost of developing a new social housing project, but loans are guaranteed by ARA to reduce risk and improve the loan terms.[152] As interest rates currently exceed 3.9 percent, the state has intervened further to reduce debt service costs for social housing providers. Social housing providers must invest the remaining 5 percent in the development cost, either out of their own savings or via a separate, non-guaranteed bank loan.

The City of Helsinki owns a large amount of land, which represents an important input for affordable development. The City leases land to social housing providers at about 10 percent below market rent. (Other cities have chosen to sell public land directly to social housing providers). In either case, the ARA sets a maximum price or rent that is pegged to the social housing provider's market value.[153]

Rents in Finland's social housing are regulated by the ARA, which caps them at the cost of providing the housing, factoring in development, maintenance, renovation, and administration costs. A key distinction

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[147] City Hall, Helsinki. 2020. *Asumisen ja siihen liittyvän maankäytön toteutusohjelma*. https://dev.hel.fi/paatokset/media/att/57/575b338de14f698c1228a244265057ed428f7ed4.pdf

[148] Pittini et al. (2021).

[149] Pittini et al. (2021).

[150] City of Helsinki. *Heka rental apartments.*\ Accessed March 28, 2024. https://www.hel.fi/en/housing/rental-housing/heka-rental-apartments

[151] MuniFin. (2022, November 18). *Finnish System for Affordable Social Housing Supports Social Mixing and Brings Down Homelessness*. https://www.munifin.fi/whats-new/finnish-system-for-affordable-social-housing-supports-social-mixing-and-brings-down-homelessness/

[152] Pittini et al. (2021).

[153] Pittini et al. (2021).

from the Austrian cost-based model is that Heka and other social housing providers can "equalize" rents across their entire stock–including even units whose mortgages have been repaid, and are therefore no longer rent-restricted, as long as the effect is to lower rents in the restricted units. This means that rents can be low even in newer, more expensive housing, and that the cost of major renovations or repairs can be spread out across a large group of tenants.[154]

About 40 years after construction, when the loans for a social housing project have been repaid, cost-based rent rules longer apply. The ARA can also end the restriction period for a project early if, for instance, population decline has resulted in an oversupply of social housing and it is challenging to find households willing to pay the cost-based rent. Generally, though, the projects are still owned by the same municipal housing association at the end of the restriction period and the same social motivation remains.[155] Studies show that rents do not change after the rent restriction period in about 80 percent of cases.[156]

The differential between private and social rents is especially large in high-demand areas like central Helsinki. In 2017, social housing in Helsinki rented for an average of 12,75€/m^2 ($1.28/$ft^2$), compared with 19,58€/$m^2$ ($1.96/$ft^2$) for market-rate units.[157] Low-income households may also be eligible for rental assistance.

All households are theoretically eligible for social housing in Finland. In practice, preference is given based on the household's income, wealth, and urgency of need. Helsinki's allocation process is somewhat opaque but designed to promote a social mix such that people who all speak a certain language, or who are all unemployed, will not be grouped in a single building. About 3,000 social apartments become available in Helsinki every year, but there are 10,000 applications in the queue at any given time. Applicants must reapply every three months until they are selected.[158]

Finland's social housing sector underwent a major change in the late 1990s, when two major nonprofit developers transformed their business strategy and became real estate investors. They have since converted and sold off most of their social housing stock. Nevertheless, the overall share of social housing in Helsinki has remained stable thanks to municipal production of about 3,200 new units between 2001 and 2020.[159]

Finland is experiencing a slow shift away from promoting housing affordability purely through social housing production toward subsidizing housing costs for low-income households. This shift jeopardizes the many advantages that a large stock of social housing brings, including very high-quality, affordable housing in desirable neighborhoods. There is also ongoing political debate about whether the government

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[154] Pittini et al. (2021).
[155] Pittini et al. (2021).
[156] Hietala, M., Kaleva, H., Kumpula, S., & Lahtinen, R. (2021). Rajoitksista vapautuneet ARA-khotet 2010-2020. *Reports of the Housing Finance and Development Center.* https://www.ara.fi/fi-FI/Tietopankki/Julkaisut/Aran_raportteja_julkaisusarja/Rajoituksista_vapautuneet_ARAkohteet_201(61475)
[157] City of Helsinki. (2017). *Vuokranmäärits Hekassa*, cited in Kadi and Lilius 2022.
[158] City of Helsinki. *Hekan vuokra-asunnot*. Accessed March 28, 2024. https://www.hel.fi/fi/asuminen/vuokra-asunnot/hekan-vuokra-asunnot
[159] Kadi and Lilius. (2022).

should periodically verify income for social housing tenants, in order to encourage those whose means have improved to transition to private housing; Helsinki has opposed this proposal.

Copenhagen, Denmark

Denmark's social housing sector is, in reality, a nonprofit housing sector. There are over 500 nonprofit housing associations in the country, which (though they vary widely in size) all have the same basic legal structure and all produce exclusively rental housing. These nonprofits have produced over 560,000 housing units, making up about 20 percent of the Danish housing stock as of 2021.[160] This housing type is thought of as "social" for two reasons. First, as in Austria and Finland, rents must be purely cost-based. National law requires that the income and expenditures of nonprofit housing organizations match, and rents must be determined annually based on an operating budget for the coming year. The State also sets a maximum per-square-meter cost of new nonprofit housing construction by housing type and region, which helps keep rents low.[161] Second, municipalities – including Copenhagen – work closely with nonprofit housing associations to decide how much and where to build, and have the right to directly administer the tenant screening and selection process for a quarter of the units in every development. In exchange, municipalities typically pay about 10 percent of the cost of new construction. Every year municipalities and nonprofit housing associations engage in "dialogues" in which they jointly plan for new construction.

A distinctive aspect of the Danish system is that when the mortgage is paid off for a given social housing project, its rents do not decrease. Instead, they continue to increase in line with a national home price index until the 45th year after loan take-up, after which the nominal rent level is maintained in perpetuity. The share of rents previously used for debt service then flows into a National Building Fund (NBF). Denmark uses the NBF to subsidize renovations, fund social programs, and sometimes to invest in construction of new social housing, for example, through the remediation of environmentally damaged sites. The NBF is a critical element in the social housing system; it creates a permanent, dedicated stream of revenue for social housing, and prevents politicians as well as residents from perceiving social housing tenants as welfare-dependent.

In 2015, Denmark began encouraging municipalities to set aside up to a quarter of large new developments for social housing units. This policy was intended to address the reality that developing social housing is more difficult during economic growth periods when land prices soar. So far, this approach has been principally tested only in the major cities of Copenhagen and Aarhus, and will be formally evaluated in 2024-5.[162] One early problem with the approach is that the nonprofit-developed social housing units were often the last to be built, and so their rents were set when the costs of construction were the highest. A new law has forced a stop to this practice, and a single developer now typically builds the entire complex at once, handing the keys to the nonprofit for the social units when they have been constructed.

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[160] Pittini et al. (2021).
[161] Pittini et al. (2021).
[162] Nielsen, R. S., Nordberg, L. W., & Andersen, H. T. (2023). Taking the Social out of Social Housing? Recent Developments, Current Tendencies, and Future Challenges to the Danish Social Housing Model. *Tidsskrift for Boligforskning,* 6(2): 136-151.

Singapore

Singapore's social housing system is of a scale and design that wholly departs from those found in Europe. Beginning in the 1960s, Singapore's Housing and Development Board (HDB) began churning out massive, high-rise projects as a way to combat informal communities (*kampongs*) forming on the urban periphery.[163] This public housing stock (which exceeds a million units and continues to grow) today houses nearly 90 percent of the country's citizens and permanent residents.[164]

There are four especially noteworthy aspects of Singapore's model. First, a large majority of social housing residents are effectively homeowners, because they can buy, sell, and inherit their government-built units–though in reality, HDB sells them a 99-year lease and the agency perpetually retains ownership of the land on which social housing is built. As of 2021, only 3 percent of the resident population are renters.[165] In 2021-2022, the price of a typical one-bedroom unit ranged from SGD $372,000 to $525,000 (USD $276,000 to $389,400).[166] Generous housing grants are available to first-time homebuyers with lower incomes.

Second, Singapore has a unique way of financing this public homeownership. The country's Central Provident Fund (CPF), which started out as a retirement savings scheme, creates a compulsory savings account for every employed Singaporean. Account-holders contribute 20 percent of their wages and their employers contribute another 17 percent each month.[167] The Singaporean government sells bonds to the CPF board in order to access CPF savings, which are then used to finance the public building program through various loans and grants to the HDB.[168] Meanwhile, beginning in the 1960s, the government began allowing individuals to withdraw from their CPF accounts before retirement. This has allowed CPF accounts to become the primary way that families repay their HDB mortgage loan; no private financial institutions are involved in the transaction.[169]

A third salient characteristic of the Singapore model involves the nation's strategy for keeping development costs low. An eminent-domain-style land acquisition program dating to the 1960s means that the government today owns 90 percent of the country's land, and it awards construction contracts for

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[163] Seng, L. K. (2009). The Politics of Fires in 1950s Singapore and the Making of the Modernist Nation-State, Ch. 5., in *Reframing Singapore: Memory, Identity, and Trans-Regionalism.* Amsterdam University Press, pp.89-108.
[164] Chua, B. H. (2014). Navigating Between the Limits: The Future of Public Housing in Singapore. *Housing Studies* 29(4): 520-533.
[165] Housing and Development Board. 2023. *Key Statistics: HDB Annual Report 2021/2022.* https://assets.hdb.gov.sg/about-us/news-and-publications/annual-report/2022/ebooks/Key%20Statistics%20FY21.pdf
[166] Housing and Development Board 2023.
[167] The CPF contribution rates fluctuate with the economy. They reached as high as 25 percent from both individuals and employers in the early 1980s. Employers' contributions were lowered in order to keep labor costs low. Employer contribution rates also get progressively lower for workers older than 50. Source: Chua, B. H. (2014).
[168] Phang, S. Y. (2007). The Singapore model of housing and the welfare state. *SMU Research Collection School of Economics*. http://ink.library.smu.edu.sg/soe_research/596/
[169] Hoe N. K. (2018). Public housing policy in Singapore. *Lee Kuan Yew School of Public Policy, National University of Singapore.* https://lkyspp.nus.edu.sg/docs/default-source/gia-documents/public-housing-policy-in-singapore_with-graphics(1).pdf?sfvrsn=7c4b6c0a_2

entire urban districts to private construction companies whose only customer is the state.[170] Another important input is cheap, foreign labor. Singapore does not have a minimum wage and relies on low-paid temporary workers from elsewhere in South Asia to construct new social housing. These workers are not eligible for HDB housing themselves and instead live in crowded dormitories.[171]

Fourthly, in response to a period of oversupply when HDB units were sitting vacant, the agency has shifted to a build-to-order model. Prospective residents purchase an apartment plan, and HDB begins construction on a new project only when 70 percent of units have been presold. This strategy creates up-front financing for the government, but also leads to longer waits (3 to 5 years) for households acquiring a new unit.[172]

Ultimately, the structure of Singapore's model creates a delicate balancing act for its conservative government. There is an active resale market for HDB units, and resale units can be significantly more expensive than HDB units. Singaporean homeowners of course benefit when home prices rise, as this increases the value of the asset which represents their retirement savings.[173] The HDB must try to protect the appreciation of existing units, while also providing affordable units to newly formed households.

Hong Kong

Hong Kong until recently has been one of the most expensive housing markets in the world.[174] In this context, public housing is an especially important resource. The Hong Kong Housing Authority (HKHA), established in 1973, is the primary provider of public housing in the region. As of 2023, the authority owned 193 public rental housing estates, containing more than 800,000 units.[175] Perhaps the most distinctive characteristic of HKHA's model is that the authority owns a diverse portfolio that includes market-rate commercial and industrial spaces, car parks, and former warehouses converted to apartments that it leases. HKHA also leases commercial spaces within its public housing projects at near-market rates.[176] In 2020, HKHA's total income was HK $46 billion, of which 45 percent came from rent collections in commercial, industrial, and rental properties and 50 percent from the sale of apartments via

[170] Woltersdorf, A. (2018). A Bold Approach to Public Housing. *The Politics of Housing.* IPS Journal, June 18 2018. https://www.ips-journal.eu/in-focus/the-politics-of-housing/a-bold-approach-to-public-housing-2800/
[171] Kirk, M. (2015, June 9). The Peculiar Inequality of Singapore's Famed Public Housing. *Bloomberg CityLab.* https://www.bloomberg.com/news/articles/2015-06-09/for-migrant-workers-in-singapore-it-s-build-high-live-low
[172] Lee, M. (2023, August 10). Housing Lessons from Singapore. *PolicyNote,* August 10, 2023. https://www.policynote.ca/singapore-housing/
[173] With Singapore's society beginning to age, the government has created two new programs to help retirees tap the value in their homes. Very low-income retirees are allowed to sell their lease back to HDB in exchange for a monthly income and without having to vacate their unit. Others are allowed to sublet, creating a stream of income while still allowing them to bequeath their home to their children. Source: Source: Chua, B. H. (2014).
[174] Wong, J. (2024, February 29). How the World's Priciest Property Market Stumbled. *Wall Street Journal*. https://www.wsj.com/economy/housing/how-the-worlds-priciest-property-market-stumbled-9b5d3eec
[175] Hong Kong Housing Authority. (2023). *Annual Report 2023, Key Figures.* https://www.housingauthority.gov.hk/mini-site/haar2223/common/pdf/1-Key-Figures.pdf
[176] Hui, E. C. M., and Wong, F. K. W. (2004). The Hong Kong Housing Authority and its Financial Arrangement over the Past 50 Years. *Department of Building and Real Estate, the Hong Kong Polytechnic University, HKSAR, China.* https://www.housingauthority.gov.hk/hdw/ihc/pdf/thkhafa.pdf

its Home Ownership Scheme. These profits are used to subsidize the maintenance of public housing estates and to build new housing.[177]

To finance new development, the HKHA draws on its own reserves, supplemented by permanent capital or loans from the government.[178] It also receives grants of free or very cheap land; in Hong Kong, all land is owned by the People's Republic of China and managed by Hong Kong's special administrative government.[179] Finally, the HKHA benefits from free infrastructure and social services provided by the government.[180] Thus, public rental development is primarily financed purely with public funds, rarely leveraging any private investment.

Rents in Hong Kong's public rental housing are income-based, not cost-based. Rent caps were first implemented in 1997, requiring that the ratio of median rent to income cannot exceed 10 percent. HKHA certifies tenants' income every two years and makes rent adjustments accordingly. As of March 2020, public housing monthly rents averaged only HK $2,070 ($265), compared with HK $20,000 ($2,550) for a private-market apartment.[181] The deep rent discount means that public housing estates sometimes operate at a deficit and also makes these units extremely attractive.[182] Using a centralized application system, the HKHA channels applicants onto three waiting lists: one for families of low income (with income capped at about $3,750 for a family of four), another for low-income elderly applicants, and a third for non-elderly single applicants. Waiting times for families usually exceed five years. Younger single applicants wait longer, since although about 10 percent of units are reserved for this group, large numbers of Hong Kong residents apply as soon as they are 18.[183]

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[177] Li, X. & Shamsuddin, S. (2022). Housing the Poor? A Comparative Study of Public Housing Provision in New York, Shenzhen, and Hong Kong. *Housing Policy Debate* 32(4-5): 678-696.
[178] Li and Shamsuddin (2022).
[179] Community Legal Information Centre. Basic knowledge of land ownership in Hong Kong. *Law and Technology Centre, University of Hong Kong.* https://www.clic.org.hk/en/topics/saleAndPurchaseOfProperty/basic_knowledge_of_land_ownership_in_hong_kong
[180] Hui and Wong (2004).
[181] Li and Shamsuddin (2022); Liu, P. & Lam, J. (2018, August 20). Nearly half of Hong Kong flats rent for US$2,550 a month – 70 per cent of median household income. *South China Morning Post.* https://www.scmp.com/business/article/2160554/nearly-half-hk-flats-rent-us2550-month-70-cent-median-household-income
[182] Hui and Wong (2004).
[183] Li and Shamsuddin (2022).