

SOCIAL HOUSING

IN THE

UNITED STATES



**PETER GOWAN
& RYAN COOPER**

People's Policy Project

COVER & SECTIONS

Bauer, Paul. *Study #2.*

Photographs of Alt-Erlaa in Vienna. Images appear through license by the artist.

PAULBAUER.NET

ABOUT

People's Policy Project is a think tank founded in 2017. The primary mission of 3P is to publish ideas and analysis that assist in the development of an economic system that serves the many, not the few.

PEOPLES POLICY PROJECT.ORG

AUTHORS

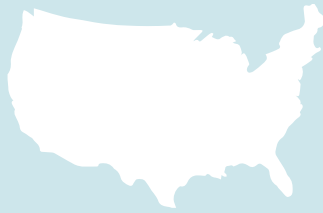
Peter Gowan is a Dublin-based researcher. His work has appeared in *Jacobin*; and he has performed research on housing and labor markets for the Irish Social Democrats.

Ryan Cooper is a National Correspondent at *TheWeek.com*. His work has appeared in the *Washington Monthly*, *The New Republic*, and the *Washington Post*.

COLOPHON

Titles are set in Futura PT.
Body is set in Neutraface Text.
Data values are set in Franklin Gothic.

Design by **Jon White.**



America faces a major shortage of affordable housing. Nearly half of all renters are paying 30% of their income on rent—or more. And the number of households who are renting is near postwar highs. Meanwhile, private market-focused policies have proven completely inadequate for ameliorating this problem.

In this paper, we shall argue that large-scale municipal housing, built and owned by the state, is by far the best option for solving the affordability crisis. In **PART I**, we will examine the history and policy failures that created the crisis. In **PART II**, we will make the case for municipal housing.



1

THE AFFORDABILITY CRISIS



THE AMERICAN POOR AND WORKING CLASS HAVE NEVER BEEN WELL- housed, but the 2008 financial crisis made a bad problem worse. It dramatically expanded the population of people seriously burdened by the need for shelter. The crash was rooted in the housing market, and the ensuing tidal wave of foreclosures (see People's Policy Project report: *Foreclosed*) resulted in a drop in the homeownership rate of 6 percentage points.¹

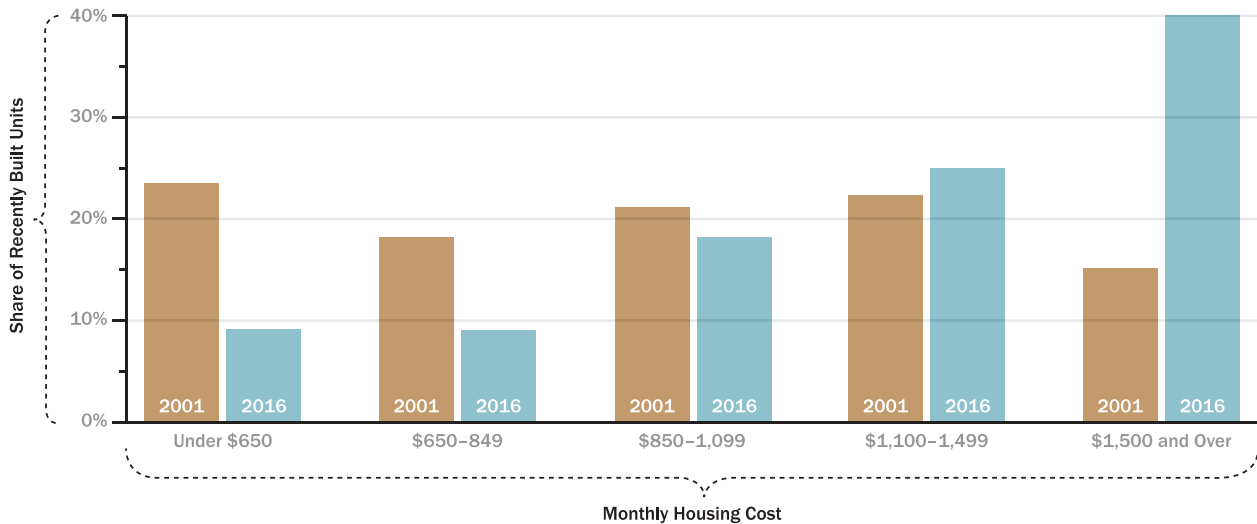
Most of those people ended up on the rental market. A 2017 study by Harvard's **Joint Center for Housing Studies (JCHS)** details how the population of renters has grown over the last decade to a total of about 43 million households. That increase of about 9 million² since the financial crisis roughly matches the number of homes lost during and after the crisis,³ and the growth in demand drove up rents across the country.

The growth in demand, in tandem with federal government stimulus spending,⁴ eventually sparked a construction boom. After an initial collapse to record lows for years after the crisis, residential investment increased sharply, led by new rental construction. By 2015, however, new unit construction had only reached 400,000 per year⁵—this matches unit construction levels in the late 1980s, when the population was 25 percent smaller.⁶

Meanwhile, new construction has been heavily concentrated in the luxury markets in major metropolitan areas. Where in 2001, construction was fairly equally distributed between cheap, mid-range, and luxury rentals, now the luxury market is by far the largest:

FIGURE 1

Additions to the Rental Stock Are Increasingly at the Higher End



NOTES: Recently built units in 2001 (2016) were constructed in 1999-2001 (2014-2016). Monthly housing costs include rent and utilities and are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items Less Shelter. Data exclude vacant units and units for which no cash rent is paid.

SOURCE: JCHS tabulations of US Census Bureau, 2001 and 2016 American Community Survey 1-Year Estimates.

Over the last year, the growth in rental households has stopped or even reversed—but rent prices are still growing (at 2-4 percent in 2017, down from 3-6 percent in 2015). And the number of burdened renters remains substantially above its pre-crisis level. In 2007, 8 million households spent 30-50 percent of their income on rent; in 2017, that number was at 9.8 million. In 2007, 9 million households spent 50 percent or more of their income on rent; in 2017, that number was at 11 million. These burdened renters (paying 30 percent of their income or more on rent) now account for 47 of all renters.⁸ Meanwhile, some people who would have been homeowners in decades past now appear leery or incapable of home buying. The share of households making over \$100,000 and renting has increased from

12 percent in 2006 to 18 percent in 2016,⁹ while stagnant or declining wages for many demographics mean a down payment is simply out of reach.¹⁰ Both developments mean further pressure on rental markets.

Despite the fact that rent pressure remains severe and future growth prospects for rental construction remain fairly strong, the construction boom is already slowing. As the Joint Center for Housing Studies concludes, “The rental market thus appears to be settling into a new normal where nearly half of renter households are cost burdened.” That includes many middle and upper-middle class households: 50 percent of those making \$30,000-45,000, and 23 percent of those making \$45,000-75,000.¹¹

The situation for poor and working-class households, of course, is even worse. An Urban Institute study identified 11.8 million **extremely low-income (ELI)** renter households (defined as those making less than 30 percent of the median income in their area), and only enough “adequate, affordable and available” housing for 46 percent of them—even when accounting for USDA and Housing and Urban Development subsidy programs¹² (see below).

Naturally, this tends to push people onto the street. Obama administration programs for homeless shelters and similar institutions precipitated a substantial decline in the number of homeless people between 2007 and 2016, but skyrocketing rents are overwhelming those programs in some cities. From 2016-17, homelessness increased by 0.7 percent overall,¹³ an increase driven mostly by West Coast cities experiencing spectacular rent increases. In Los Angeles, for example, rents have increased by roughly a quarter since 2010—and the homeless population increased nearly 26 percent last year. By itself, the city accounted for well over half of a 9 percent increase in the national unsheltered homeless population.

Efforts to remedy the housing shortage and ease the rent burden have been pitifully inadequate, both at the city and fed-

In Los Angeles, the homeless population increased nearly 26 percent last year.

eral level. The nation's major program to ease rents is the Section 8 voucher program administered by HUD, which assists about 2.5 million ELI households by subsidizing a portion of their market-rate rents.¹⁴ While that is certainly better than nothing, the program only covers about 22 percent of the 11.8 million ELI households who are eligible. Another 21 percent have been able to find market-rate housing, 2.5 percent are covered under the USDA Section 515 program, and the remaining 54 percent are simply left out.¹⁵

Thus, these programs are restricted to ELI households, and only help about a quarter of even that small population. They simply do not touch the vast majority of people trapped by the affordability crisis. What's more, like any open-ended subsidy to private providers, these sorts of rental subsidies can stoke the rental market further, raising prices overall and exacerbating the affordability crisis.



MEANWHILE, THE MAJOR STRATEGY TO CREATE MORE AFFORDABLE UNITS

is to coax the private market using tax incentives and zoning rules. The largest such program is the federal **Low-Income Housing Tax Credit (LIHTC)**, under which some 90 percent¹⁶ of new affordable housing is built. This gives a tax credit to developers for building low-income housing.

Once again, one of the biggest problems with this program is its pitiful size: it only provided about \$300 per rent-burdened household in 2017, at a total investment of just \$8 billion.¹⁷ This would not be remotely adequate to make a serious difference in the size of the housing stock even if the program were exceptionally efficient. But it isn't efficient, either: on the contrary, research suggests¹⁸ that at least some of the new housing created under the tax credit would have been created anyway. Crime also undermines the program's efficiency: a Frontline investigation discovered substantial corruption in the LIHTC process, helping to account for the fact that while the cost of the credit has increased by 66 percent from 1997-2014 the number of units created under the credit has actually fallen from over 70,000 per year to less than 60,000.¹⁹

Moreover, because subsidized units are often placed in poor neighborhoods to avoid political resistance, they tend to increase segregation and concentrate poverty.²⁰ The program also amplifies segregation in the other direction, according to a study from the Institute on Metropolitan Opportunity,²¹ which found that subsidized units occupied by white people (often designated especially for artists) tended to be placed in white neighborhoods.

Finally, the affordability requirements under LIHTC generally lapse after either 15 or 30 years. And the 2017 Republican tax bill also dented the usefulness of the credit (see below).



THE SECOND PRONG OF THIS HOUSING STRATEGY IS “INCLUSIONARY ZONING,” which mandates that new residential projects include some fraction of affordable units. There are a huge variety of approaches under this umbrella, but once again they are plagued by problems of scale and efficiency.

Some cities have tried a smaller version of the federal approach—most importantly New York City, which has a similar tax credit costing the city \$1.4 billion in 2016.²² The program has created some new housing, but some developers have also gamed the system by forcing tenants out of existing affordable units, destroying those buildings, and then collecting city tax money to build a new party high-end development. This is a waste of money and a waste of space: the luxury units private developers naturally include in their inclusionary projects tend to be much larger than affordable or mid-range units, meaning less housing per unit of land overall.

Efficiency problems aside, none of these programs are remotely big enough to match the scale of demand. For example, a

A Brooklyn development that was 80 percent affordable had over 87,000 applications for its 200 affordable units.

Brooklyn development that was 80 percent affordable—a far greater fraction than the usual scheme²³—had over 87,000 applications for its 200 affordable units.²⁴ Between 2013 and October 2017, the NYC government financed a mere 78,000 units.²⁵ And the vast majority of those units weren't new construction; they were existing units maintained at an affordable rate rather than lapsing into the upscale market.

Another strategy is rent control, which has been adopted in various forms in many cities. With "hard" rent control, the rate of rent increase is restricted based on a formula (typically tied to inflation), regardless of occupancy. With more common "weak" rent control, increase is restricted during a period of continuous occupancy, but when the tenant leaves, rent can be reset, typically at the then-prevailing market rate.²⁶

Rent control is a reasonable policy for allowing people to remain in their homes and preserve existing affordable units, especially in the face of a spike in demand.²⁷ However, it does little to enable the construction of new units; and stronger forms may actually impede new private construction when they cut into potential profits.

Many liberals and libertarians argue these sorts of housing regulations are actually a major culprit behind the affordable housing crisis.²⁸ In traditional economic models, if there is a spike in demand but restrictions on supply—in the form of a slow permitting process, low-density zoning requirements mandating single-family homes, parking requirements, setbacks, rent control, and so forth—then the price will increase. Therefore cities should deregulate their housing markets and enjoy cheaper rents.

There are many problems with this argument, however. First, "deregulation" is a questionable concept in general as all economic activities of any kind, market ones included, are fundamentally backstopped by the state. American zoning restrictions are often ludicrously anti-density and pro-automobile,²⁹ but that could easily be ameliorated by changing the zoning rules rather than removing them altogether.

Second, even in a best-case scenario it's not at all clear that removing restrictions on private market activity will lead to a more

affordable neighborhood. If a desirable neighborhood is removed from all market controls, builders will naturally build new luxury units due to greater profits and the simple fact that new buildings command higher rents, as seen above. Construction takes a long time and buildings last even longer—even if market processes do work, it could take decades for such units to “filter” down to lower market segments.³⁰

Private market construction is also self-limiting: it puts downward pressure on rents, which reduces expected future profits. Indeed, that appears to be precisely what has happened in the rental construction market over the past year, long before all potential profitable buildings have been built. (Whether private real estate investors are consciously colluding or not, it is clear that private real estate investors are quite happy with very tight rental markets and a steady stream of easy profits.)

In practice, a simple “deregulatory” agenda can easily create a worst of all worlds scenario that simply replaces affordable neighborhoods with expensive ones, pushing poor and working class families into far-flung exurbs or older houses built with hazardous materials. Owners of new high-end housing will naturally resist new affordable construction that might cut prices and lower their wealth (very often fueled by racist resentment of disproportionately-minority rental households³¹), as will owners of luxury businesses attracted by new development. Indeed, they will push for any new building to be similarly high-end, so as to keep property values up. And wealthy people living in a neighborhood naturally have far more political influence than low-income people who might someday move into that neighborhood, making it relatively easy to block new development once the whole area has been re-developed.

In other words, a neighborhood that is “deregulated” from explicit zoning and rent control can quickly become re-regulated by influential private residents. It is one major method by which neighborhoods become locked in a high-rent, no-change equilibrium—that is, gentrification. Several neighborhoods in New York City selected by then-Mayor Michael Bloomberg for deregulation, notably former industrial neighborhoods in Greenpoint and Williamsburg, have ex-

perienced precisely this process.³²

It's also worth noting that in many high-end cities, foreigners who are using real estate as a sort of safe deposit box—many of them almost certainly criminals laundering money³³—make up a substantial portion of the people buying housing. The American Community Survey conducted by the Census Bureau found that certain tony neighborhoods in Manhattan were over 50 percent vacant at least 10 months a year.³⁴ That adds pressure on rents by further restricting supply.



FINALLY, THE LAST PRONG IN THE US HOUSING STRATEGY IS PUBLIC HOUSING.

This is no longer a major priority for any city, but there are many legacy buildings still housing over 2 million people.³⁵ Despite over 40 years of disinvestment—the nationwide backlog of maintenance in such projects amounts to over \$26 billion³⁶ as of 2010—public housing is virtually the only available housing for poor people in many cities.

However, the American approach to public housing is also inadequate and has severe negative side effects. Two million units is simply not very many in a nation of over 320 million people. Where they do exist, means-testing units to only poor people means that rents will be very low, thus placing a large budgetary burden on cities and the federal government. As a result, even with strict qualifications and vast spending, there are not, in many cities, nearly enough units to house even the officially poor population. In Washington DC, for example, the waiting list for the meager 8,000 public units was closed to new applicants in 2013 when the total number waiting reached 70,000.³⁷

Worse still, poor-only public housing concentrates poverty in particular locations—directly creating³⁸ one of the worst social ills in American cities.³⁹ Concentrated poverty is associated with higher crime, racial segregation, poor educational outcomes, drug abuse, gang violence, and a host of other problems.

Finally, the expense and poor reputation of public housing

have fueled efforts to get rid of public housing altogether. The **HOPE IV** program helps demolish severely dilapidated units and replaces them with mixed-income lower-density ones,⁴⁰ while the **Rental Assistance Demonstration (RAD)** program sells them to private developers outright.⁴¹ As a result, the number of public units has eroded steadily over time, falling by 60,000 between 2006 and 2016.⁴²

Despite the terrific demand for public housing, and the fact that those units continue to provide functional shelter for many people, it is no coincidence that “the projects” are a notorious place in most cities where they exist. Applicants are driven by economic desperation, not a desire to live in run-down apartments in dangerous neighborhoods.

So all the existing policy approaches to fix the housing crisis have failed the American people. What should be done?

2

THE CASE FOR MUNICIPAL HOUSING





THERE IS A PRESSING NEED FOR POLICYMAKERS TO CONSIDER

new approaches for delivering affordable housing. An over-reliance on the for-profit private sector has led to underinvestment in communities which produce less profit—and to state subsidies to developers and landlords, simply to maintain some sense of a social fabric. Today, our housing policy bears a marked resemblance to our healthcare policy: an expensive band-aid over a gaping hole, left by the absence of a public sector alternative.

The international community has increasingly recognized that private-only housing models adopted in the 1970s and 1980s have failed. The recently-elected government in New Zealand has committed to restart the construction of state housing,⁴³ the Scottish Government resumed construction of state housing after 2011,⁴⁴ and the Labour Party under Jeremy Corbyn has promised to build 100,000 social houses every year if it wins the next election.⁴⁵ The centre-right Irish government faces mounting criticism from progressive opposition parties for not going further in spending on direct construction of municipal housing.⁴⁶

The United States is almost alone in the fierce resistance of the overwhelming majority of both its major parties to the involvement of federal and local government in the direct provision of affordable housing. We present below a review of several models from developed countries which may prove informative and helpful to campaigners and policymakers wishing to challenge the political consensus—one built on false premises—and to advocate for the development of sustainable, affordable, high-quality housing for all Americans.



INTERNATIONAL MODELS

WE HAVE BROADLY SOUGHT TO EXAMINE MODELS WHICH ADDRESS the flaws and issues with existing housing policy in the United States. To that end, we have selected three jurisdictions whose municipal housing policies have been designed to cater to people of various income levels, rather than just serving the “deserving poor”: **Vienna, Finland** and **Sweden**.

The purpose of this section is to establish that municipal housing does not need to be plagued by inefficiency, deterioration, segregation or poor planning. Throughout the world there are examples of all these things evident in both the public and private sectors. It is of course incumbent upon politicians to learn lessons not just from the United States’ own past, but from challenges and failures of other nations too; thus, the section on Sweden will discuss some problems which should be kept in mind while developing a 21st century housing policy.

To this date, the United States has failed to learn from the successes that many countries have experienced in providing affordable, integrated, and well-maintained municipal housing. It is time that changed.



VIENNA

“Living Side by Side”

The success of municipal housing when pursued as a policy goal with the necessary political will can be clearly seen in Austria’s capital city, where 3 in 5 residents live in houses owned, built or managed by the municipal government.

Austria is a federal republic, and for the last hundred years the Viennese state government has always been led or controlled by the Social Democratic Party, apart from the fascist period from 1934–45. After the First World War, when the party first took pow-

er, housing became their first priority and they began establishing massive publicly-owned housing complexes called *Gemeindebauten* or “municipality buildings.” The planners of what became known as “Red Vienna” started from nothing—and built high quality housing developments which are often still in use today.

By 1934, one in ten residents of Vienna lived in publicly-owned housing. The next eleven years, which saw a fascist coup, the annexation of Austria by Hitler, and the devastation of Second World War, took a massive toll on the city. Despite all this, however, when democracy was restored the new state government immediately got back to work on rebuilding social housing infrastructure.

Unlike the United States, Austria has never treated municipal housing as an option of last resort or a welfare program exclusively for the poor. No less than 80% of the country’s population is eligible to receive social housing by their income.⁴⁷ In Vienna, this threshold is about twice the average annual income.⁴⁸ Welfare recipients, politicians and sports stars live side by side in projects like Alt-Erlaa, which houses approximately 10,000 residents in a visually impressive and spacious community. The municipal government invests in upgrading older properties and in new developments such as SMART flats which have sliding partition walls, allowing residents to change the layout of their home in order to give them a unique character.⁴⁹

In addition to municipal housing, Vienna funds large non-profit housing cooperatives that house almost as many individuals as directly state-owned properties, all under strict conditions set by the government. Consequently, the per-capita living space for Vienna residents rose from 22m² to 38m² between 1961 and 2011.

Unlike public housing in the United States, subsidized rents in Vienna are based on the cost of the property and its maintenance. This has ensured a much higher quality of life in publicly-owned housing than exists in the United States, and indeed in much of Europe. The following table shows the various components of rent in a typical Viennese housing project as calculated by **CECODHAS**, the European Social Housing Observatory.

	€/M ² /MONTH	€/HOME/MONTH	DETAILS
Construction, land, interest payments on loans	5.13	394.9	<i>Falls to €3.29/m²/month after loans mature.</i>
Maintenance and repairs	0.30	23.1	<i>Statutory maximums increase over time.</i>
Provision for vacancies	0.11	8.4	<i>2% of cost rent, maintenance and repairs.</i>
Cost of management	0.22	17.3	<i>Statutory upper limit.</i>
Utilities	1.50	115.5	<i>Actual costs.</i>
Value Added Tax	0.73	55.9	<i>10% of rent before VAT.</i>
Total	7.99	615	

Source: CECODHAS, July 2013.

The rents are linked to costs over the course of an approximately 35-year maturity period, after which this component falls to a statutory limit. Other components such as utilities, maintenance and repairs increase over time. The rents remain extremely reasonable compared to other major European capital cities, but the small number of residents who are unable to afford rents are covered by the welfare state (though it should be noted that austerity measures adopted after the financial crisis have caused difficulties in meeting costs for some welfare recipients).⁵⁰

Initial financing for social housing development is primarily accomplished through a combination of public and subsidized private loans: public loans with interest rates between 0 and 2 percent cover an average of 35% of construction and land costs, and bank loans (subsidized through tax incentives so as to ensure interest rates that are 50 basis points lower than ordinary loans) cover an average of 43% of the costs. Much of the remainder is financed through “tenant equity”, a quasi-loan by the prospective tenant. If they cannot afford this contribution a public zero-interest loan is provided to them by the provincial government.⁵¹

The Viennese model is attractive insofar as it prevents long-term deterioration of the social housing stock. The upkeep of homes is financed by their residents, who receive social assistance from the welfare state where necessary.

Vienna implements rent controls on many houses, but even those which are exempt from rent controls end up finding that the mass intervention of the state in the supply of housing sets effective caps on market rents, creating a more affordable rental market for everybody, whether renting privately or from the municipal housing system. The Viennese model interacts with the private rental market in a way that functions similarly to American proposals for a robust “public option” in the healthcare market—an initiative supported not just by the most progressive elements in the Democratic Party but by the vast majority of centrist and centre-left politicians.



FINLAND

“Diversity of Dwellers”

The Finnish housing system is remarkable for its success in combating a recent international trend of increasing homelessness. In 2008, the Finnish government officially adopted a model known as **“Housing First”**, which focuses on the provision of permanent supportive housing to long-term homeless individuals. This model has gained some international attention for its considerable success in pushing down the rate of long-term homelessness.

Housing First works by targeting homeless groups with specific needs and providing unconditional housing support to them—much like smaller-scale initiatives undertaken by the Bush and Obama administrations (primarily targeted at those with disabilities). Those programs have seen some success,⁵² though falling well short of the progress needed to meet Obama’s commitment to end homelessness within ten years.⁵³

What is important to note, however—and what has been ignored by some of the international advocates of this model—is that this program works in tandem with other measures that support those who are not adequately served by existing social housing structures. Before Housing First, the number of homeless people in Finland had already fallen to 8,000 people in 2007 from over 18,000

in 1987, when the country first began collecting statistics. Since then, that number has fallen to below 7,000 under the new Housing First program.⁵⁴ (It is worth noting that Finland uses a considerably broader definition of homelessness than the United States; these figures are not comparable on a cross-national basis.)

Finland's first postwar housing program established **ARAVA**, the National Housing Production Board. The board provided low-interest government loans for the construction of housing "for all Finns, not for low-income housing specifically."⁵⁵ Now called ARA, it primarily finances the construction of municipally-owned and non-profit housing through loans, guarantees and interest subsidies while also providing grants for upgrading the energy efficiency of older properties.⁵⁶

Finland has not been immune to the global intrusion of means-testing into universalist welfare states, and there are some concerning developments; though 73% of the population fall beneath the income requirements to obtain social housing, concentrated housing for the very poor has been introduced in some developments since the 1960s.⁵⁷ Nevertheless, the situation remains markedly superior to the United States and United Kingdom models, which are associated with the most extreme form of means-testing and concentrated poverty.

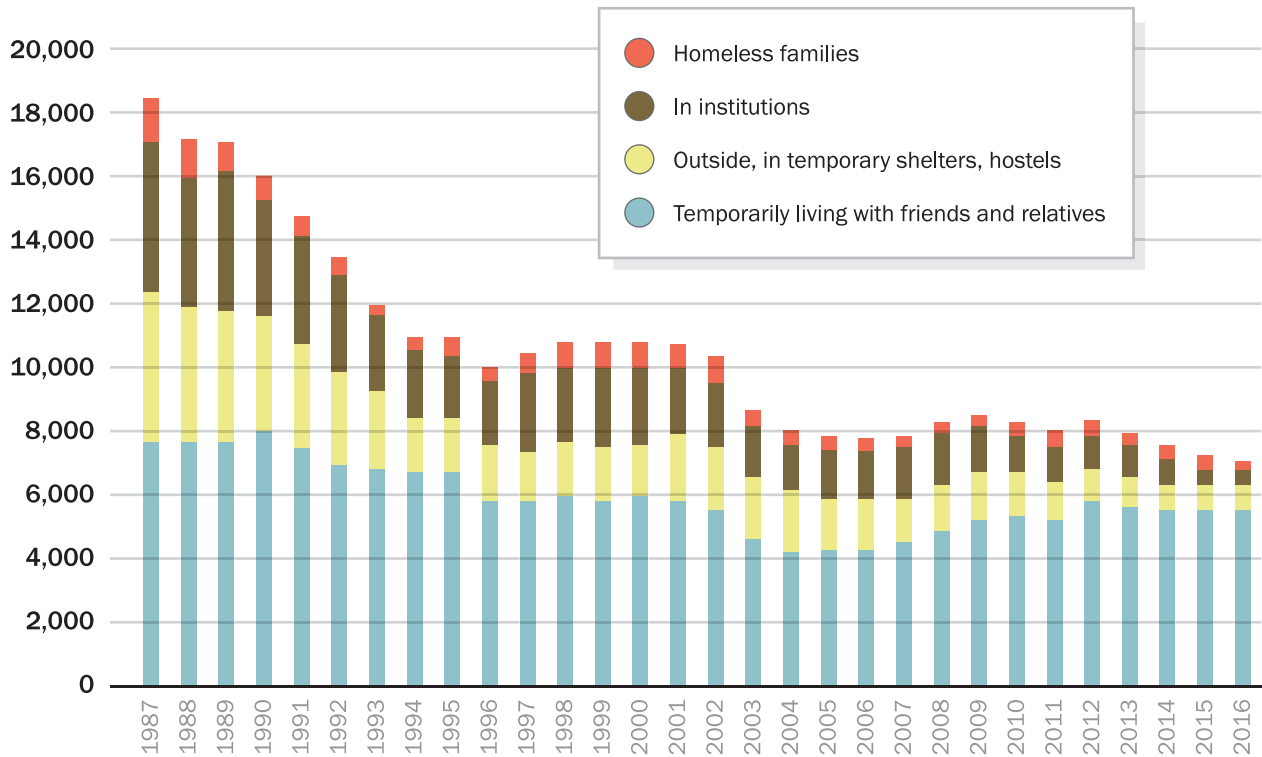
A 2013 CECODHAS study examined a typical ARA-funded property built by a municipally-owned holding company. Like all 43,000 dwellings owned by the Housing Company of the city of Helsinki, the property is built upon land owned by the municipality and leased to the holding company. ARA fixes nominal prices for social housing land at 60% of the market price in the area, and a yearly ground rent is charged to the Housing Company at 4% of that value. This subsidized access to public land is crucial to the viability of such projects, as are the subsidized loans from ARA, which has increased interest subsidies to enable cheaper borrowing by municipalities. For the property in the CECODHAS study, an ARA-subsidized bank loan comprised 95% of the funding, while a loan from the City of Helsinki made up the final 5%.

Like in Austria, rents are charged based on costs—divided relatively evenly between a “capital rent” and a “service rent”. The former is used to pay off interest on the property’s loans, and to amortize the old loan stock. The latter covers the cost of maintenance, management and renovations. Unlike Austria, however, properties built with public assistance can after 45 years be sold or let at market rates.⁵⁸

One positive form of targeting in Finland has been the increased recognition that housing policy must accommodate groups with diverse needs. Grants are provided by ARA to create housing specifically oriented towards groups such as the long-term homeless, refugees, students, people with mental health or substance abuse problems, disabled people, people suffering from memory illnesses and old people in poor physical condition—with subsidies between 10 and 50% of the cost of development depending on the number of accommodations required.⁵⁹

There is an important distinction between targeting housing at people because they are poor, and targeting housing at people because they need reasonable accommodations. The way to ensure people are not in poverty is to create a welfare state which eliminates poverty, and the way to ensure everyone has housing adequate to their needs is to build lots of houses, and tailor a portion of those houses to accommodate people who have specific needs. Finland’s Housing First and accommodative housing programs are the right kind of targeted social housing development, and this can be seen in the country’s success in relentlessly pushing down the rate of homelessness.

FIGURE 2



Source: Housing Finance and Development Centre of Finland

Rent per square meter per month in Helsinki averaged €10.55 during 2013.⁶⁰ This is higher than in Austria, but the same figure for Manhattan in 2016 was about \$60, and for Washington, D.C. about \$29.61. The Finnish housing development model—focused on providing housing rather than subsidising for-profit developers—has ensured greater levels of affordability and lower levels of homelessness than in countries whose housing models are reliant upon the free market and rental subsidies.



SWEDEN

“A Million Homes”

In the early 1960s, Sweden faced a severe housing shortage caused by an increase in incomes, migration from rural areas to cities, and the post-war generation reaching adulthood and requiring their own accommodation.⁶² Unwilling to tell young baby boomers they should simply live with their parents for the next decade, in 1965 the Social Democratic government embarked on a strikingly ambitious project to build one million homes over the course of ten years, demolishing 400,000 units of inferior or damaged housing stock in the process.⁶³ The scale of the challenge embarked on becomes apparent when one considers that “the total Swedish housing stock at the time was barely three million dwellings.”⁶⁴

To place that in context, the estimated total U.S. housing stock in late 2007 was 129.3 million homes—ten years later, it has risen to 136.7 million. In order to match the net increase in housing stock during the **Million Homes Program** of 600,000 (or 20%), the U.S. would have had to build an additional 18.5 million homes over the decade.

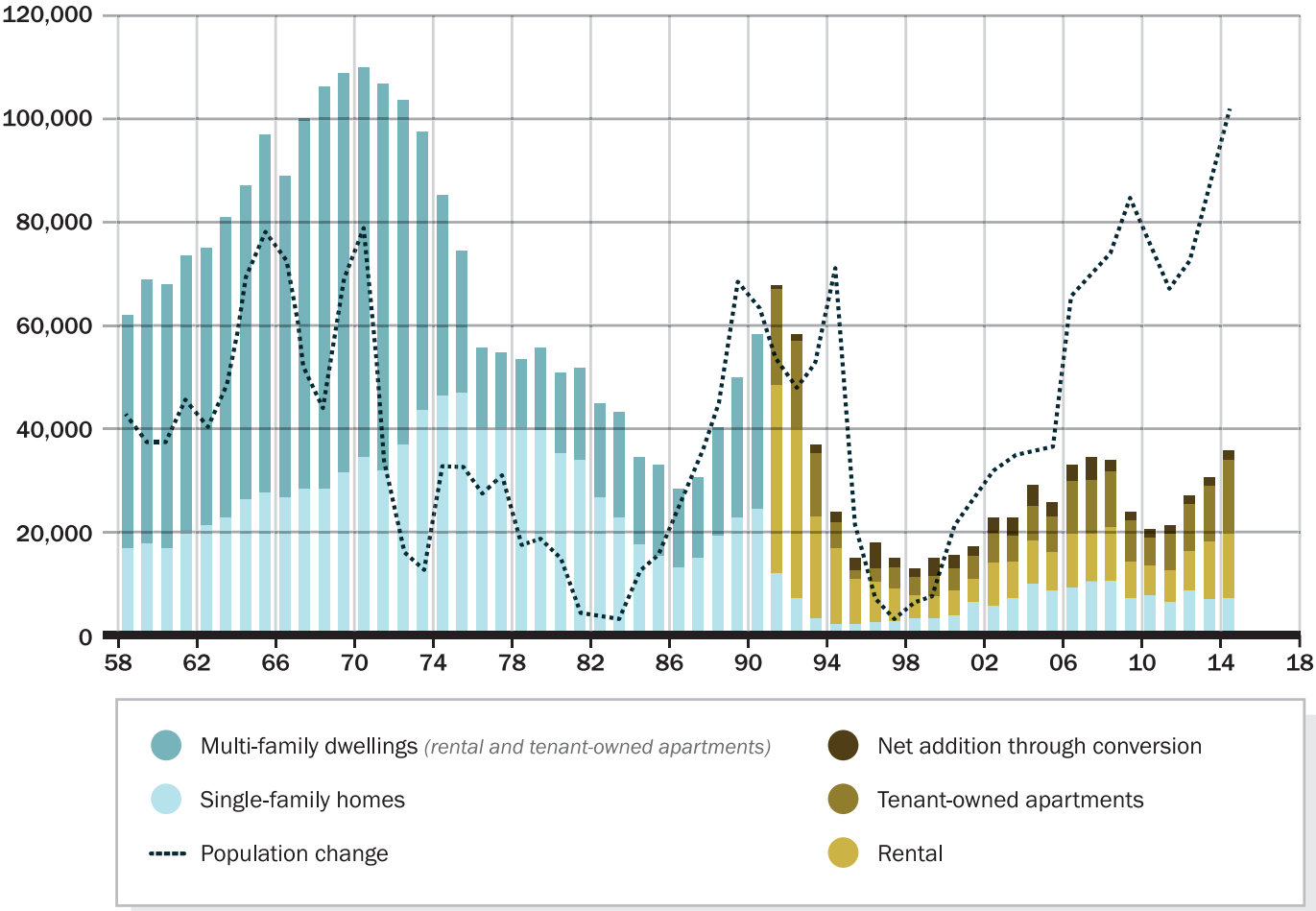
The scale of this accomplishment cannot be overstated: these were not luxury condominiums and McMansions built for the wealthy, they were municipal homes designed *allmännytt*a—“for the benefit of everyone,” not just the very poorest—and the rents charged in such housing became the norm for rent levels across the entire economy.⁶⁵ Even though it did not rely on the luxury McMansions and condominiums which created immense gains for property developers in the U.S. housing boom, the Million Homes Program still outperformed that boom in net per-capita housing construction by a considerable margin.

The actors who took on most of the responsibility for building the houses were housing authorities owned by cities, as well as housing cooperatives, such as the Riksbyggen cooperative established by construction workers’ unions in 1940. The central govern-

ment ensured that sufficient credit, capital and labour was available to those who were building the homes, even ordering the central bank to free up more credit for housing construction in 1967 after a drop in pace in 1966.⁶⁶ Throughout the late 1960s, demand continued to fill new houses with new households, and many families moved from “old, deficient and crowded accommodation” into much better-quality flats.

Sweden’s experience isn’t exclusively positive. The Million Homes Program addressed an issue of undersupply and unaffordability in the Swedish housing market, but it also ended up creating an over-supply of multi-family accommodation which caused many of the newly completed flats after 1970 to remain empty for prolonged periods.⁶⁷

FIGURE 3
Number of housing units completed and number of new inhabitants per year



Source: Emanuelson, 2015. Data from Statistics Sweden and the Riksbank.⁶⁸

The drastic reduction in the demand for new housing combined with complaints that the surroundings of many of the housing units were “monotonous” and that some homes had technical defects.⁶⁹ Public transport links were not always integrated into the projects, and in some cases rail connections for large populations were not delivered for years afterwards—in the case of Tensta in Stockholm, the first tenants moved in during 1967 while the Blue Line orbital route did not open until 1975.⁷⁰ Tensta, along with neighboring Husby and Rinkeby, became a centre of concentrated poverty among minority communities and was home to rioting in 2013.

Of course, one cannot dismiss the entire project due to these issues. The Million Homes Program rapidly rebuilt a third of Sweden’s entire housing stock, and any program of that scope is bound to have some unforeseen consequences. Nevertheless, it is important to learn lessons from what went wrong; it appears, for example, that there may have been too many homes built and too little spending on public transport, amenities, and urban beautification.

Such problems are not, as some suggest, inherent in or exclusive to the state funding of housing. Indeed, a review published in *Planning Perspectives* compared housing from the 1960s and 1970s in Sweden to housing in Berlin, Madrid, Rome, Paris, Riga, Budapest, Bratislava and the United Kingdom; it concluded that “in Sweden, the technical quality of the construction is higher, the flats are better planned and equipped, greater interest is devoted to the external environment and public and private services are better developed.”⁷¹

The lesson which should be drawn from the Million Homes Program is that state financing of municipal housing can eliminate a major housing shortage over a short period of time. Sweden still has a housing surplus in most cities, except for Stockholm where a shortage developed in 2011.⁷² Policymakers would be wise to study the allocative and infrastructural issues that caused oversupply, concentrated poverty and segregation in some Swedish developments—but the Swedish example still represents an efficient, ambitious and quantitatively successful example of mass construction of municipal housing.

HOUSING AMERICA

If we are to take the housing crisis in the United States seriously, after reviewing international models, we see only one conclusion—local governments, supported by the federal government, must build a very large amount of affordable, mixed income, publicly-owned housing, initially by developing existing publicly-owned land. Our policy proposal, outlined below, highlights specific targets, principles, and areas of concern.

1. Building Houses

WE BELIEVE THAT A TARGET OF TEN MILLION MUNICIPAL HOMES IN TEN years could be delivered with sufficient political will. This should be funded through a variety of federal policy instruments in addition to local resources. The most important of these would be the provision of low-interest loans and partial capital grants to municipal housing authorities, utilizing the government’s borrowing and taxation powers to close the gap between affordability and costs in the short run. In the long run, “solidarity rents” on wealthier tenants would ensure municipal housing developments are self-sustaining or even profitable.

The form of the federal programs would be as follows. First, the federal government would borrow funds at existing Treasury yields and loan those funds out as required to municipal housing authorities at that rate plus a single basis point. This would provide much-needed capitalization for local housing developments without costing the federal government anything, assuming the loans are repaid.

Secondly, the federal government would provide capital grants to municipalities who construct mixed-income housing developments. The capital grants would be equal in value to whatever a private sector developer would receive from the Low-Income Housing Tax Credit (LIHTC) program for a similar development. Put simply:

the inequality between public sector and private sector access to federal capital subsidies for housing construction would be eliminated. The Faircloth Amendment⁷³ capping the number of units for which local public housing authorities can receive federal subsidies should be immediately repealed.

Thirdly, additional capital grants should be allocated for developing accessible and supportive housing for groups with specific needs. These groups include the formerly homeless, people suffering from drug addiction, refugees, those with disabilities, and elderly people with mobility issues.

The local administration should be responsible for providing adequate sites for municipal housing developments and ensuring a streamlined planning process. Fixed rents for public land should be set to ensure that land is not severely misused, but these charges on housing authorities should be limited to incentivize municipal housing development.

We support the use of the vast quantities of existing public land for municipal housing—and where such sites are unavailable, unusable, or exhausted, we also support the requisitioning of abandoned properties and vacant sites for development (a 2000 survey found huge quantities of such land in most cities⁷⁴). Additionally, public land trusts could be established to identify new potential sites where they come up for sale, and to be responsible for maintaining a supply of viable sites for municipal housing construction.

The scale of the proposed program is moderate compared to major municipal housing initiatives in other countries, reflecting the fact that schemes like the Million Homes Program (which constituted an increase of 20% over the pre-existing housing stock, as against 7.3% in this proposal) were carried out in countries which already had a substantial public-sector housing delivery infrastructure. We see no reason why this target could not be revised upwards after a few years if policymakers decide it is insufficient. We do not anticipate any risk of the United States experiencing a housing oversupply at this juncture.

2. Ensuring Fairness

THERE SHOULD BE CONDITIONS PLACED UPON THESE INCENTIVES

to guarantee that federal money is spent effectively, to prevent discrimination, and to maintain standards and income profiles for housing, thus ensuring quality service provision into the future.

We would urge that the federal government resist the temptation to delegate responsibility for this to states by means of block granting—many states with large minority populations in urban areas are already responsible for de-facto discriminatory policies with regards to voting, welfare, and Medicaid. Instead, the federal government should partner directly with municipal governments who have a need for additional affordable housing in their communities: the administrations in Jackson and Houston are more likely to be willing partners than state governments in Mississippi and Texas.

Mass incarceration has had a grossly disproportionate impact on low-income households and communities of color,⁷⁵ and existing policies by many public housing authorities barring those with arrest records or convictions (and often their families) from accessing affordable or subsidized housing should be repealed or drastically reformed.⁷⁶ Providing stable supportive housing for individuals who have been released from prison and treatment facilities will, in the long term, do more to address anxieties about criminality and drug abuse in public housing than the present failed strategy, which condemns such people to a cycle of homeless shelters and imprisonment.

Inaccessibility for disabled people has serious impacts on their quality of life, and authorities should seek to go beyond the requirements in the ADA to ensure that there is no implicit discrimination in their developments. Direct capital grants should be given out to assist in providing accessible units, and permanent supportive housing should be given to those who suffer from substance abuse issues—along the lines of the Finnish model.⁷⁷

Housing developments should be mixed-income, adequately served by public transport, and have easy access to amenities and shops. They should comply with strong regulations to prevent racial

segregation—including regulations that prevent disparate impacts through reviews. Such reviews are provided for in the Affirmatively Furthering Fair Housing guidelines recently delayed by the Carson HUD department.⁷⁸ The presence of some market-rate tenants in developments can help to ensure quality services and incentivize better-quality housing units and surroundings, as this will increase the potential revenues from each development.

The federal government should not permit its funds for municipal housing to be used for any development which displaces tenants or otherwise reduces the amount of low-income housing available on that site. The aim must be to increase the housing stock, not to socially cleanse areas which local governments consider a “problem.”⁷⁹

It is likely that this program will employ and train a large number of people in the variety of occupations needed to expand housing construction at this scale. One major benefit of an ongoing government investment in municipal housing is an increase in job security for people involved in municipal housing construction—while the supply of housing being built may vary somewhat over time, it need not do so to the same extent that any individual private developer’s workload fluctuates.

Working positively with labor unions to ensure a sustainable, productive and mutually beneficial settlement on increasing the size of the public service is very desirable. A nationwide collective bargaining agreement which regulates training, pay, and working conditions for those involved in publicly-funded housing developments would play an important role in ensuring the process runs smoothly and effectively while avoiding exploitative conditions for the workers involved in delivering affordable housing. Progressive policies should be delivered in a progressive way.

3. Local Initiatives

LOCAL GOVERNMENT COULD IMMEDIATELY BEGIN FUNDING PROJECTS

of this type before federal assistance becomes available. We understand that our target of ten million municipal homes over ten years will not materialize without considerably more support than that which can be offered by cities alone, but the municipal bond markets offer a way to immediately begin investing in new housing without subsidizing developers. (See the **Appendix** for a more in-depth discussion of the potential options for self-funding housing projects.)

The capacity of local governments to press ahead with such initiatives in the absence of federal assistance depends on specific conditions, such as their own land endowments, the cost of construction, the interest rates on municipal bonds, and their own willingness to provide shallow subsidies to the initiative to improve its viability where necessary. Though there may be circumstances where municipal housing is comparatively suboptimal, as federal incentives are stacked against them, there are almost certainly a large number of cases where municipal housing would be a beneficial investment even without federal incentives. Local governments struggling with profit-gouging developers should analyze the situation and consider the viability of doing it themselves—obtaining a sustainable asset and putting developers on notice that the administration will consider cutting them out in the future.

This is a long-term reward: a local administration which can build its own housing can never be held hostage by developers expecting an unreasonable profit margin again. Even if local authorities do not wish to end their public-private housing partnership schemes at this minute, developing a publicly owned alternative affords them greater autonomy and bargaining power in future procurement decisions; and it does not require them to release large amounts of public land which they cannot easily recover.

Local administrations might also seek investments from ‘anchor institutions’ such as schools, universities, and hospitals which are largely geographically fixed in the area,⁸⁰ on the understanding that helping to provide lower housing costs will have a positive

impact on both the reputation of those institutions and the cost of living for their locally-based employees. Some of these institutions already own underutilized land and capital endowments which could enable substantial housing developments at a limited cost to the local government.

4. Covering Costs

ASSUMING AN AVERAGE COST PER UNIT OF BETWEEN \$150,000–\$220,000, the government could finance and build ten million houses directly in a revenue-neutral fashion—simply by repealing the Republican tax plan.⁸¹

This is not our proposal; and we acknowledge that the final cost per unit will depend on a range of factors, and indeed may be higher than that range in some cases. What it highlights is the scale of funding available to federal policymakers if they adopted a serious political commitment to housing—indeed, our proposal for ten million houses costs a mere fraction of the giveaway to wealthy donors by Paul Ryan and the Trump administration.

Since tenants in these houses will pay rent that covers ongoing expenses, and since much of the construction costs will be returned through loan repayments, the long-term cost to the federal government will be far lower than the cost of building all the houses itself—and the continuing annual costs will only run as high as the amount of new loans or grants it decides to issue that year. Loans—whether subsidized or profitable—do not cost as much as grants, and issuing grants worth 10% or even 50% of construction costs is still less expensive than paying for the full total.

If we assume a capital cost per unit of \$300,000 and that the federal government absorbs 20% of this capital cost in losses (an immensely pessimistic estimate), ten million houses could be financed through less than half the revenue which would be raised simply by restoring the corporate tax rate to its pre-TCJA level.⁸²

Rents should be set such that a parcel of housing units is able to finance its operating costs, maintenance costs, and capital costs

after subsidies. In some cases, especially where it is difficult to make housing affordable otherwise, primarily market-rate developments may be used to cross-subsidize mixed-income developments, but inter-development subsidization should be strictly limited in its scope; federal authorities could set regional caps between 0–20% of long term operating and capital costs which can be covered through profits from other developments in each city depending on construction costs and market rents. Examples of self-financing rental models can be seen in the **Appendix**.

Investing in large-scale municipal housing developments will have long-term benefits to the public purse—once loans are paid off in a few decades, tenant rents that once merely covered costs will instead begin delivering substantial organic profits to the municipal housing authorities which own the houses, a dividend which could be shared between the existing tenants in the form of lower rents, and the city in the form of an additional funding source for the next generation’s housing developments.

Crucially, we do understand that this is not a simple task. Atrophied public sector housing institutions will take time to rebuild capacity and efficiency, and there is no need to immediately eliminate existing policies while this process takes place. LIHTC, section 8 vouchers, and other rental subsidies may be necessary in the immediate future, but as noted in **Section 1** we caution against over-reliance on their use—they only further deepen the dependence of government upon private developers, and the dependence of private developers upon ever-increasing subsidies.

However, it is our contention that once the public sector has rebuilt its housing delivery infrastructure, learning from a hundred years of lessons and practices at home and abroad, the benefits to the public could be immense: a country where high quality affordable housing is a right available to everyone, not a privilege of the wealthy few.

Building ten million homes in ten years wouldn’t get us all the way there—but it’d be a damn good start.

APPENDIX

**SELF-FINANCING
RENTAL MODELS**

THE FOLLOWING SECTION EXAMINES DIFFERENT SCENARIOS FOR AN

entirely theoretical housing development of 500 units. These units are cost-neutral under the finance scheme at a mean rent of \$1,000 per month (or \$500,000 for the entire development). We will assume that market rents are constant at \$1,300 in all cases.

The **area median income (AMI)** is \$70,000, meaning the monthly affordable rent thresholds (30% of monthly income) for various income categories are as follows:

30% AMI	<i>ELI threshold</i>	\$ 525
40% AMI		\$ 700
50% AMI	<i>VLI, HCVP and 20-50 LIHTC threshold</i>	\$ 875
60% AMI	<i>40-60 LIHTC threshold</i>	\$ 1,050
70% AMI		\$ 1,225
80% AMI	<i>LI threshold</i>	\$ 1,400

The following diagrams represents alternative self-financing models for the development. For a municipal housing development to be self-financing, the green area (rents collected in excess of costs, or “profits”) must be the same size or larger than the red area (costs in excess of rents collected, or “losses”). The blue areas show rents paid up to the cost level for each tenant, and the brown areas show profitable rents which have been foregone.

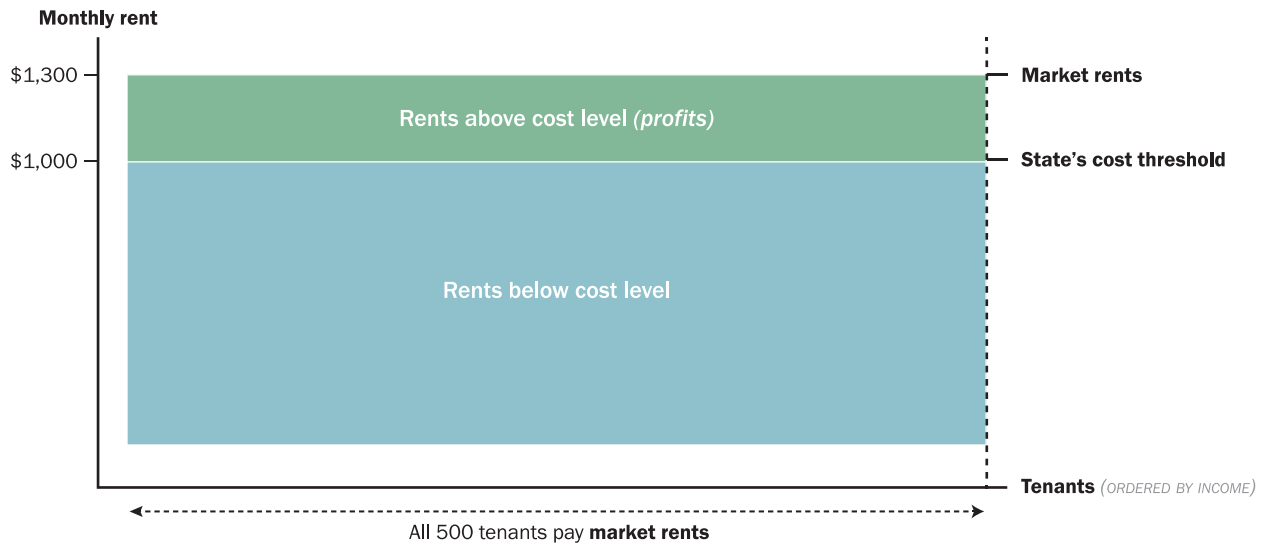


FIGURE 1 (above) shows a profit-maximising use of the development by the state. In this circumstance, the units are rented out at market prices and the profits are put back into the municipal housing authority. These properties are not affordable (at the 30% of monthly income standard) to many people below 80% AMI in the absence of other rental subsidies, but serve a social benefit insofar as they will introduce a supply-side constraint on overpriced rental housing in the private sector, in addition to the potential for using the profits to construct additional affordable housing elsewhere.

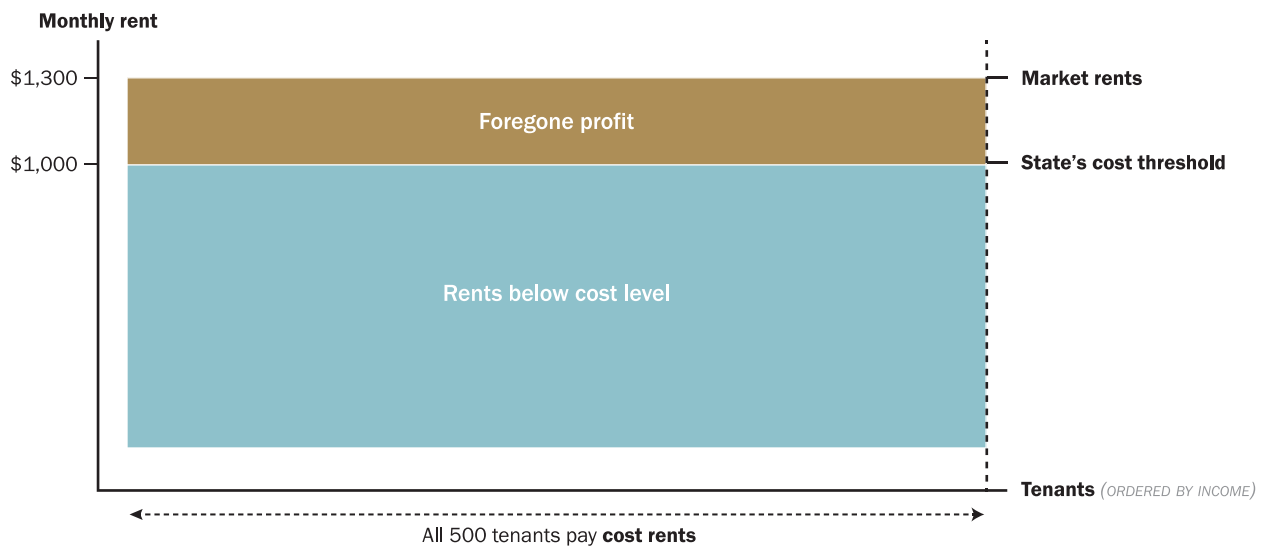


FIGURE 2 shows a Vienna-style cost rent system. In this case, 100% of the tenants pay cost rents of \$1,000—in this area affordable at 60%

AMI, but nobody is subsidized further than that through the rental system. The properties do not make any long-term profit (short-term profits may finance provisions for vacancies, maintenance and repairs over time). In the United States at present, this model may present access difficulties for those on very low incomes in some cities, as rental assistance programs are not universal entitlements.

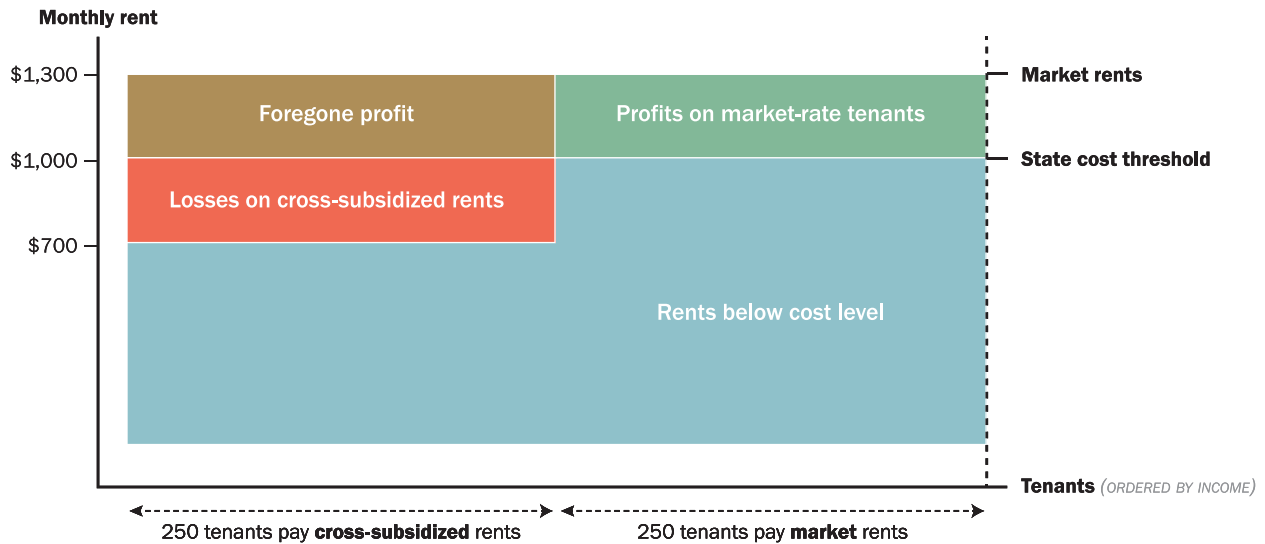


FIGURE 3 (above) shows a 50/50 cross-subsidisation. In this case, 250 market-rate tenants paying \$1,300 subsidize 250 tenants paying \$700, affordable at 40% AMI. However, this is a simple cross-subsidization model which has a rather steep drop-off between the two income categories. Though it is possible to use numerous developments to serve each particular set of housing needs, it is also possible to construct a more complex cross-subsidization model which performs the same role in a single development, as seen below.

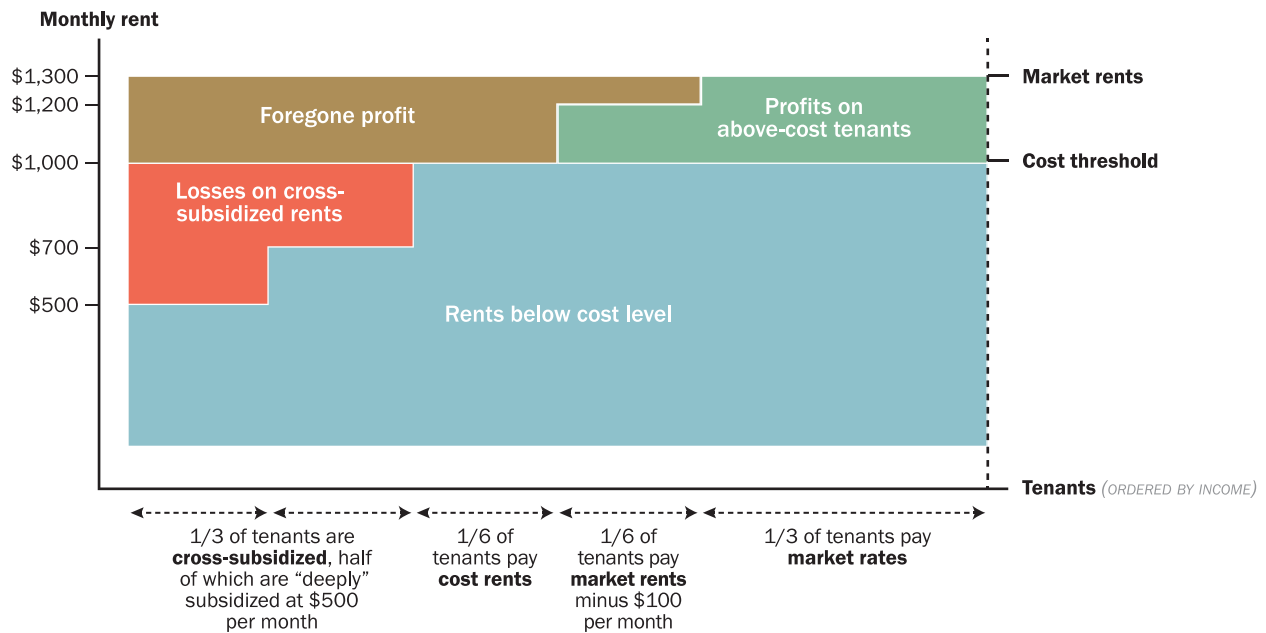
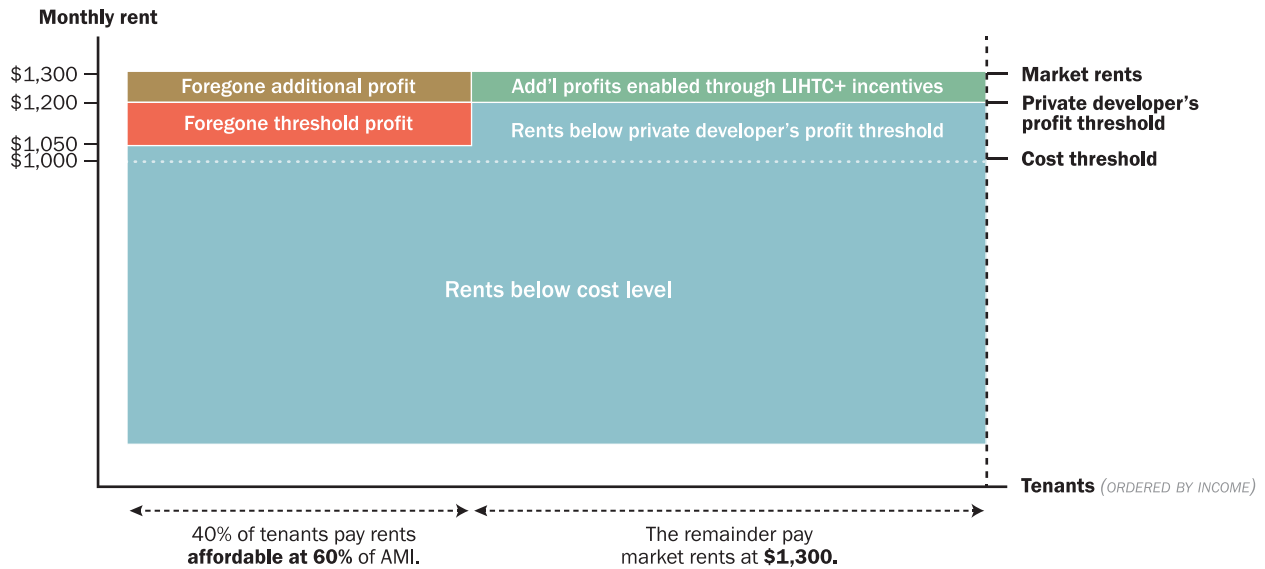


FIGURE 4 (above) shows a cross-subsidization model which serves a variety of low- to middle-income households. 1/6 of houses pay \$500 a month, affordable to ELI households in this area. Another sixth of households pay \$700 a month, affordable to households at 40% AMI. A sixth of households pay cost rents of \$1,000 a month, affordable at 60% AMI; a sixth of households pay limited-profit rents of \$1,200 a month, affordable at 70% AMI; and the final third of units pay market rents.

It is slightly more difficult to see on the graph here, but the profits on the wealthiest half of tenants are equal to the losses on the poorest third of tenants, making the development cost-neutral overall.

In the case of private developers, cost neutrality is largely meaningless. Developers almost always have many potential opportunities they consider, and an affordable housing project is almost always considered alongside other potential profitable developments. This means that the average rent threshold is not set at a self-financing level, but at a percentage above this level (in **FIGURE 5**, below, we assume it is 20%), which as you will see has a severe impact on the affordability of the housing made available.



The most notable thing here is that due to the profit requirement, LIHTC subsidies can be required in order to incentivise the construction of houses in which no tenants are causing the developer to make a loss. Their problem is not that they are unprofitable, but that they are not profitable enough to be worth housing without the state further subsidizing the developer's profit margins. In exchange for the state's investment, 200 housing units are rented out at a small profit while the other 300 are rented at market rates. None of the profits go to the state for further developments.

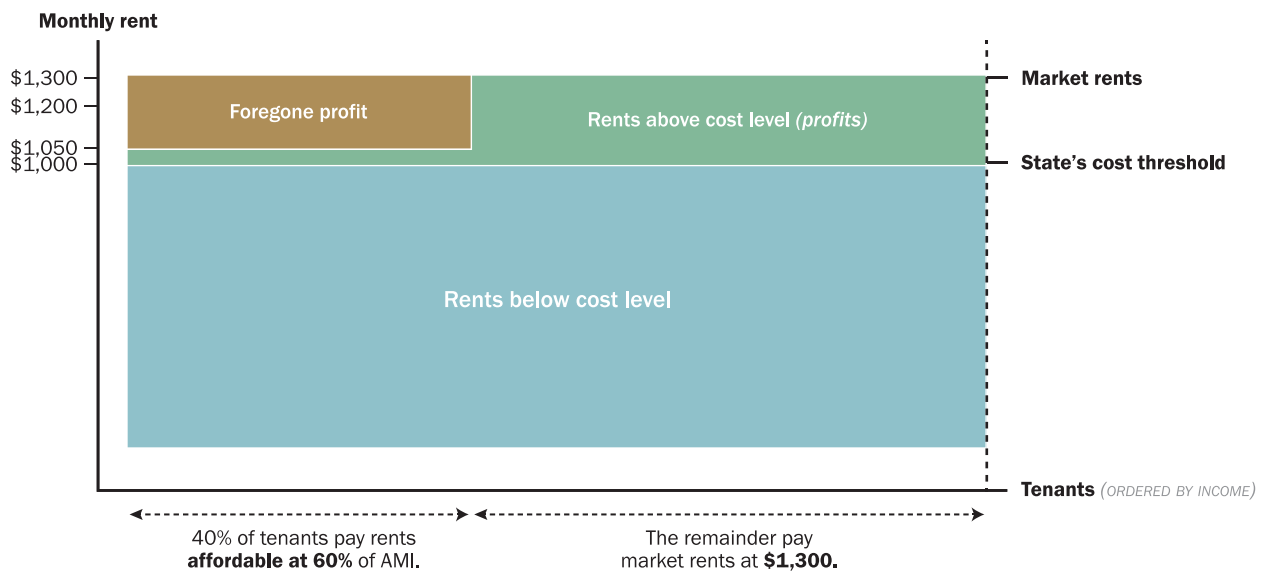


FIGURE 6 (above) shows the exact same development, with the exact same tenants paying the exact same rents, except this time the

property is held in public ownership. Instead of the state making a long-term loss on the property through subsidies, the 500 tenants make them an average \$200 profit each per month. That's \$1.2 million in profits for the local government every year.

Of course, this is not an exhaustive list of potential rental models for publicly-owned housing, but it is intended to demonstrate the manifest case for reducing our dependence on profit-oriented actors for generating affordable housing. Whether the state chooses to spend the developer's profit wedge on cross-subsidization, spends it on new housing developments, or whether it chooses to eliminate it entirely by charging Vienna-style cost rents, additional social benefits will come to be enjoyed by low- and middle-income members of the public rather than capital owners in the real estate sector.

As discussed in **Part II**, in some cities it may not be the case that all developments are fully self-financing, as the diagrams here are—and a proportion of costs (we suggest almost never more than 20%) could be covered out of revenues from connected profitable developments elsewhere. This should not be an ordinary occurrence under a national housing program as it has an inimical impact on both the mixed-income and self-financing principles behind such housing schemes, but in certain areas (especially without the introduction of federal incentives) it might be the case that building profitable houses on high-value land allows for the construction of deeply affordable housing which is sorely needed elsewhere.

ENDNOTES

1. U.S. Bureau of the Census, Homeownership Rate for the United States, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/RHO-RUSQ156N>, January 28, 2018.
2. Joint Center for Housing Studies, "America's Rental Housing 2017," <http://www.jchs.harvard.edu/research/publications/americas-rental-housing-2017>
3. Kusisto, Laura, "Many Who Lost Homes to Foreclosure in Last Decade Won't Return – NAR." Wall Street Journal, April 2015. <https://www.wsj.com/articles/many-who-lost-homes-to-foreclosure-in-last-decade-wont-return-nar-1429548640>
4. Neighborhood Stabilization Program. <https://www.ncsha.org/advocacy-issues/neighborhood-stabilization-program>.
5. JHCS study, p. 2.
6. US Census figures. Accessed at <http://www.multpl.com/united-states-population/table>
7. JHCS study, p. 4.
8. Ibid, p. 5.
9. Ibid, p. 1.
10. Shambaugh et al., "Thirteen Facts about Wage Growth." Hamilton Project, September 2017. http://www.hamiltonproject.org/papers/thirteen_facts_about_wage_growth
11. JCHS study, p. 4.
12. Urban Institute, "Mapping America's Housing Crisis." <http://apps.urban.org/features/rental-housing-crisis-map/>
13. U.S. Department of Housing and Urban Development, "The 2017 Annual Homeless Assessment Report (AHAR) to Congress," December 2017. <https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf>
14. Urban Institute, "Mapping America's Housing Crisis." <http://apps.urban.org/features/rental-housing-crisis-map/>
15. Ibid.
16. Peterson, Justin, "LIHTC Program Now Funds About 90% of U.S. Affordable Housing Projects." Reis, March 2017. <https://www.reis.com/cre-news-and-resources/bisnow-lihtc-program-now-funds-about-90-percent-of-us-affordable-housing-projects>
17. U.S. Department of Housing and Urban Development, "Low-Income Housing Tax Credits." <https://www.huduser.gov/portal/datasets/lihtc.html>
18. Malpezzi et al., "Does the low-income housing tax credit increase the supply of housing?" Journal of Housing Economics, December 2002. <http://www.sciencedirect.com/science/article/pii/S1051137702001237>
19. Frontline, "Poverty, Politics, and Profit," (May 2017). <https://www.pbs.org/wgbh/frontline/film/poverty-politics-and-profit/>
20. Orfield et al., "High Costs and Segregation in Subsidized Housing Policy." Housing Policy Debate, June 2017. <http://www.tandfonline.com/doi/full/10.1080/10511482.2014.963641>
21. "The Rise of White-Segregated Subsidized Housing." Institute on Metropolitan Opportunity, May 2016. <https://www.law.umn.edu/sites/law.umn.edu/files/metro-files/imo-white-segregated-subsidized-housing-5-18-2016.pdf>
22. Bagli, Charles, "Affordable Housing Program Gives City Tax Break to Developers." New York Times, April 2017. <https://www.nytimes.com/2017/04/10/nyregion/affordable-housing-city-tax-break-developers.html>

23. Schuetz et al., "31 Flavors of Inclusionary Zoning: Comparing Policies From San Francisco, Washington, DC, and Suburban Boston." *Journal of the American Planning Association*, October 2009. <http://www.tandfonline.com/doi/full/10.1080/01944360903146806>
24. Krogan, Lore. "Nearly 90,000 applications for affordable apartments at City Point in Downtown Brooklyn," *Brooklyn Eagle* <http://www.brooklyn eagle.com/articles/2016/3/16/nearly-90000-applications-affordable-apartments-city-point-downtown-brooklyn>
25. Goodman, J. David, "De Blasio Expands Affordable Housing, but Results Aren't Always Visible." *New York Times*, October 2017. <https://www.nytimes.com/2017/10/05/nyregion/de-blasio-affordable-housing-new-york-city.html>
26. Arnott, Richard, "Time for Revisionism on Rent Control?" *Journal of Economic Perspectives*, Winter 1995. <https://pubs.aeaweb.org/doi/pdf-plus/10.1257/jep.9.1.99>
27. Mason, J.W., "Pity the Landlord." <http://jwmason.org/slackwire/pity-landlord/>
28. Yglesias, Matthew, *The Rent Is Too Damn High: What To Do About It, And Why It Matters More Than You Think*, 2012.
29. Hirt, Sonia, *Zoned in the USA: The Origins and Implications of American Land-Use Regulation*, 2014.
30. Rosenthal, Stuart, "Are Private Markets and Filtering a Viable Source of Low-Income Housing? Estimates from a "Repeat Income" Model." *American Economic Review*, February 2014. <https://www.aeaweb.org/articles?id=10.1257/aer.104.2.687>
31. U.S. Department of Housing and Urban Development, "Housing Discrimination against Racial and Ethnic Minorities," 2012. https://www.huduser.gov/portal/Publications/pdf/HUD-514_HDS2012.pdf
32. Rosenburg, Eli, "How NYC's decade of rezoning changed the City of Industry." *Curbed*, January 2014. <https://ny.curbed.com/2014/1/16/10154488/how-nycs-decade-of-rezoning-changed-the-city-of-industry>
33. Story, Louise, "U.S. to Expand Tracking of Home Purchases by Shell Companies." *New York Times*, July 2016. <https://www.nytimes.com/2016/07/28/us/us-expands-program-to-track-secret-buyers-of-luxury-real-estate.html>
34. Satow, Julie, "Pied-à-Neighborhood: Pieds-à-Terre Owners Dominate Some New York Buildings." *New York Times*, October 2014. <https://www.nytimes.com/2014/10/26/realestate/pieds-terre-owners-dominate-some-new-york-buildings.html>
35. National Center for Health in Public Housing, "Demographic Facts: Residents Living in Public Housing," May 2016. <https://nchph.org/wp-content/uploads/2016/10/Demographics-Fact-Sheet-2016-1.pdf>
36. JCHS study, p. 5.
37. DeBonis, Mike. "D.C. public housing waiting list to close; no new applicants after April 12." *Washington Post*, April 2013. https://www.washingtonpost.com/local/dc-politics/dc-public-housing-waiting-list-to-close-no-new-applicants-after-april-12/2013/04/03/9cf7abe4-9c96-11e2-a941-a19bce7af755_story.html?utm_term=.4cfba2e0bece
38. Schill et al., "The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America." *University of Pennsylvania Law Review*, May 1995. http://www.jstor.org/stable/3312477?seq=1#page_scan_tab_contents
39. Kasarda, John, "Inner-city concentrated poverty and neighborhood distress: 1970 to 1990." *Housing Policy Debate*, 1993. <http://www.tandfonline.com/doi/abs/10.1080/10511482.1993.9521135>
40. Popkin et al., "A Decade of HOPE VI: Research Findings and Policy Challenges." *Urban Institute*, May 2004. https://www.urban.org/research/publication/decade-hope-vi/view/full_report
41. U.S. Department of Housing and Urban Development, "Rental Assistance Demonstration (RAD)." <https://www.hudexchange.info/programs/rad/>
42. JCHS study, p. 5.

43. Interview with Jacinda Ardern (October 2017), <https://www.interest.co.nz/news/90462/cooling-housing-market-could-continue-labour-seeks-ramp-kiwibuild-reduce-demand-pressure>
44. 'What is the SNP doing to promote affordable housing?' https://www.snp.org/pb_what_is_the_snp_doing_to_boost_affordable_housing
45. UK Labour Manifesto (2017) <https://labour.org.uk/manifesto/secure-homes-for-all/>
46. <http://www.thejournal.ie/campaign-for-public-housing-3665507-Oct2017/>
47. Amman and Mundt, The Austrian System of Social Housing Finance (2005), p. 11 http://www.iut.nu/FindOutMore/Europe/Austria/Social-housing_finance_Amman_Mundt.pdf
48. Hraby, Denise, 'Why Rich People in Austria Want To Live In Public Housing Projects' (October 2015) Public Radio International. <https://www.pri.org/stories/2015-10-26/why-rich-people-austria-want-live-housing-projects>
49. Schantl, Helige, Stranz and Parker, 'Municipal Housing in Vienna. History, facts & figures' (2013) City of Vienna <https://www.wiener-wohnen.at/dms/workspace/SpacesStore/aa75756e-2836-4e77-8cfd-f37cc15e2756/1.0Wiener-Gemeindebau-engl.pdf>
50. Amman and Mundt, 'Housing benefits and minimum income schemes - Is Austrian housing still affordable for welfare recipients?' (June 2015) ENHR 2015 Lisboa, conference paper [http://iibw.at/documents/2015%20\(Art.\)%20Mundt_Amann.%20Is%20Austrian%20Housing%20Still%20Affordable.%20EN%20HR.pdf](http://iibw.at/documents/2015%20(Art.)%20Mundt_Amann.%20Is%20Austrian%20Housing%20Still%20Affordable.%20EN%20HR.pdf)
51. CECODHAS, 'Study on Financing of Social Housing in 6 European Countries' (July 2013), p. 8 www.housingeurope.eu/file/217/download
52. The 2017 Annual Homeless Assessment Report to Congress (December 2017), Department of Housing and Urban Development, p.8 <https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf>
53. Pugh, Tony, 'Obama Vows to End Homelessness Within Ten Years', (June 2010) McClatchy: <http://www.mcclatchydc.com/news/nation-world/national/economy/article24585973.html>
54. Y-Foundation, A Home of Your Own: Housing First and ending homelessness in Finland (2017). https://ysaatio.fi/assets/files/2018/01/A_Home_of_Your_Own_lowres_spreads.pdf
55. Myntti, Cynthia, 'Putting Finnish Housing Design into Context: The Helsinki Experience' (March 2007) City of Helsinki Urban Research Unit. https://www.hel.fi/hel2/tietokeskus/julkaisu/pdf/07_04_03_Tutkkats_2_Niska.pdf
56. Ibid, pp. 11-12
57. Ibid, pp. 8-9
58. CECODHAS, 'Study on Financing of Social Housing in 6 European Countries' (July 2013), pp. 25-28
59. Housing Finance and Development Centre of Finland (2017). http://www.ara.fi/en-US/Housing_finance/Investment_subsidy_for_special-needs_groups
60. CECODHAS, 'Study on Financing of Social Housing in 6 European Countries' (July 2013), p. 29
61. Szekeley, Balasz, 'How Much Space Does \$1,500 Rent You in the 30 Most Populous US Cities?' (July 2016) RentCafe Blog. <https://www.rentcafe.com/blog/apartment-search-2/what-does-1500-rent-you-apartment-size-in-the-top-us-cities/> Figures adapted through author calculations.
62. Hedman, Eva, 'A history of the Swedish system of non-profit municipal housing' (Oct 2008) Swedish Board of Housing and Planning, pp. 13-14 https://www.boverket.se/globalassets/publikationer/dokument/2008/history_of_the_swedish_system_of_non-profit_municipal_housing.pdf
63. Steiner and Ahmadi, 'Renewal of The Swedish Million Dwelling Program, the Public Housing Company and the Local Community, Hindrances and Mutual Aid' (2013) in International Journal of Economics and Management Engineering 7(3): pp. 937-943 <https://waset.org/publications/11022/renewal-of-the-swedish-million-dwelling-program-the-public-housing-company-and-the-local-community-hindrances-and-mutual-aid>

64. Hall and Vidén, 'The Million Homes Programme: a review of the great Swedish planning project' (August 2005) in *Planning Perspectives* 20(3): pp. 301-328 <http://www.tandfonline.com/doi/abs/10.1080/02665430500130233>
65. Hedman, Eva, 'A history of the Swedish system of non-profit municipal housing' (Oct 2008) Swedish Board of Housing and Planning, p. 7
66. Hedman, Eva, 'A history of the Swedish system of non-profit municipal housing' (Oct 2008) Swedish Board of Housing and Planning, p. 15
67. Ibid, p. 16.
68. Emanuelson, Robert, 'Supply of Housing in Sweden' (2015) in *Sveriges Riksbank Economic Review* 2015:2, p. 49 http://www.riksbank.se/Documents/Rapporter/POV/2015/2015_2/rap_pov_artikel_3_150917_eng.pdf
69. Hedman, Eva, 'A history of the Swedish system of non-profit municipal housing' (Oct 2008) Swedish Board of Housing and Planning, p. 15.
70. Zilliacus, C.P., 'A Million New Housing Units: The Limits of Good Intentions' (September 2013), *New Geography*, <http://www.newgeography.com/content/003811-a-million-new-housing-units-the-limits-good-intentions>
71. Hall and Vidén, 'The Million Homes Programme: a review of the great Swedish planning project' (August 2005) in *Planning Perspectives* 20(3): pp. 322-323
72. Emanuelson, Robert, 'Supply of Housing in Sweden' (2015) in *Sveriges Riksbank Economic Review* 2015:2, p. 53
73. U.S. Department of Housing and Urban Development, "Maximum Number of Units Eligible for Capital and Operating Subsidy," November 2017. https://www.hud.gov/sites/dfiles/PIH/documents/Faircloth_List_11-30-2017.pdf
74. Pagano, Michael and Bowman, Ann. 'Vacant Land in Cities: An Urban Resource' (2000): Brookings Institution Center on Urban and Metropolitan Policy, <https://www.brookings.edu/wp-content/uploads/2016/06/paganofinal.pdf>
75. Lewis, Nathaniel, 'Mass Incarceration: New Jim Crow, Class War or Both' (January 2018) People's Policy Project: <http://peoplespolicyproject.org/2018/01/30/mass-incarceration-new-jim-crow-class-war-or-both/>
76. Carey, Corinne, 'No Second Chance: People with Criminal Records Denied Access to Public Housing' (2004) Human Rights Watch: <https://www.hrw.org/sites/default/files/reports/usa1104.pdf>
77. Y-Foundation, *A Home of Your Own: Housing First and ending homelessness in Finland* (2017), p. 20
78. Dovey, Rachel, 'HUD May Be Trying To Quietly Kill Obama-Era Fair Housing Rule' (January 2018) NextCity: <https://nextcity.org/daily/entry/hud-may-be-trying-to-quietly-kill-obama-era-fair-housing-rule>
79. Williams, Sabrina, "From HOPE VI to HOPE SICK?" (2003) in *Dollars and Sense Magazine*. <http://www.dollarsandsense.org/archives/2003/0703williams.html>
80. Manley, Julian, 'Local democracy with attitude: the Preston model and how it can reduce inequality' (November 2017): LSE British Politics and Policy, <http://blogs.lse.ac.uk/politicsandpolicy/local-democracy-with-attitude-the-preston-model/>
81. 'The Tax Cuts and Jobs Act, as Reported by Conference Committee (12/15/17): Static and Dynamic Effects on the Budget and the Economy' (December 2017) Penn Wharton Budget Model, University of Pennsylvania: <http://budgetmodel.wharton.upenn.edu/issues/2017/12/18/the-tax-cuts-and-jobs-act-reported-by-conference-committee-121517-preliminary-static-and-dynamic-effects-on-the-budget-and-the-economy>
82. Ibid.