Homes for Profit Phase 2: An analysis of corporate ownership networks

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Decades of inadequate housing production across Massachusetts and strong economic growth attracting workers to the region, resulting in shortages in local housing stock, have led us into the housing crisis that we face today. MAPC's 2023 Homes for Profit research investigates the role that speculative investment plays in the Commonwealth's housing market. We found that between 2004 and 2018, one in five Massachusetts homes were purchased by an investor. The figures below show how we classified residential transactions from The Warren Group's property sale data by both type and size of investor.

Investor Types

- **Count investors**, who purchased more than three residential properties within any five year window in the study period
- **LLC investors**, who purchased any residential property through a limited liability corporation (LLC)
- **Building investors**, who purchased any residential building with four or more units
- **Value investors**, who spent at least $3.45 million on residential properties over the 23-year period, or an average of at least $150,000 annually throughout the period

Figure 1: Investor Type Definitions

	Small	Medium	Large	Institutional
Count (# of purchases in a 5-year period)	3	4 to 5	6 to 9	10+
Value investors (total $ spend)	$3 to $5 million	$5 to $10 million	$10 to $53 million	$53 million or more
Building investors	All small			
LLC investors	All small			

Figure 2: Investor Size Definitions

In 2024, MAPC and our research collaborators at the Healthy Neighborhoods Research Consortium (HNRC) were awarded funding by the Urban Institute and the Robert Wood Johnson Foundation to build upon our original research. This white paper provides a first look at Phase 2 of our Homes for Profit research, where we are working to identify property ownership networks obscured by multiple LLCs. By incorporating a network analysis of corporate ownership records, we begin to see a more accurate picture of corporate ownership in Boston.

Phase 1 of this work summarized property portfolios based on the listed buyer's name, but we were unable to see where the same buyer was using multiple LLCs to purchase properties. This lack of insight into LLC ownership meant that we were unable to differentiate between an LLC that was created by an owner-occupant to purchase their home and an LLC that was one of many LLCs created by an investor or investor group to purchase homes for resale, flip, or rental. Research on the Boston area, like Hangen and O'Brien's analysis, and on other metropolitan areas in the U.S. has found that LLC and large-scale corporate ownership is associated with disproportionately higher levels of evictions[1], building code violations[2], and public reports of housing related issues like unsatisfactory living conditions or insufficient heat[3]. The section below shows one example of what a corporate ownership network using multiple LLCs can look like and how it impacts our analysis.

Illustrating the Problem

In February 2019, a two-family home at 78 Beacon Street in Somerville was purchased by 76-82 Beacon Street LLC. This $1.65 million sale is the only purchase by this buyer recorded in The Warren Group's data our Homes for Profit analysis is based on. With only one sale, this buyer did not meet our definitions of investors by type of building purchased, number of buildings purchased, or value of property purchased, and as such was classified as a small investor in our research released based on our LLC investor definition. After applying a network analysis of LLC beneficiaries, we can now see that this buyer is part of a larger ownership network made up of 32 additional LLCs and LLPs and one corporation. With 111 properties purchased between 2001 and 2022 for a total of $154.7 million, our new analysis more accurately categorizes 76-82 Beacon Street LLC and all associated entities in its network as institutional investors.

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[1] Dan Immergluck et al., "Evictions, Large Owners, and Serial Filings: Findings from Atlanta," *Housing Studies* 35, no. 5 (2020): 903–24, https://doi.org/10.1080/02673037.2019.1639635; Forrest Hangen and Daniel T. O'Brien, "Linking Landlords to Uncover Ownership Obscurity," *Housing Studies* 40, no. 4 (2025): 940–65, https://doi.org/10.1080/02673037.2024.2325508.

[2] Adam Travis, "The Organization of Neglect: Limited Liability Companies and Housing Disinvestment," *American Sociological Review* 84, no. 1 (2019): 142–70, https://doi.org/10.1177/0003122418821339; Brian Y. An et al., "Who Owns America? A Methodology for Identifying Landlords' Ownership Scale and the Implications for Targeted Code Enforcement," *Journal of the American Planning Association* 90, no. 4 (2024): 627–41, https://doi.org/10.1080/01944363.2023.2292674.

[3] Hangen and O'Brien, "Linking Landlords to Uncover Ownership Obscurity."

Our Approach

For Phase 2 of this work, MAPC partnered with Dr. Eric Robsky Huntley at MIT, and members of the HNRC, Dr. Patrice C Williams at Northeastern University, and resident researchers at HNRC. Dr. Robsky Huntley shared with us the results of their network analysis – a series of tables that connect individual LLCs and other business entities into corporate ownership networks based on shared beneficiaries listed in corporate filing documents[4]. Dr. Williams and the resident researchers supported this work by sharing personal stories of corporate investment in their neighborhoods, reviewing our research findings through the lens of their experiences working in their communities, and by providing policy recommendations and feedback on our own policy priorities.

Methods

For our analysis, we first start by utilizing the name cleaning and address standardization functions from Dr. Robsky Huntley's analysis on the addresses and buyer names in the Warren Group's data on home sales in Massachusetts. Next, we pulled in the 'owners.csv' output table from Dr. Robsky Huntley's work that has one row per unique owner name-address pair and filtered it to only owners that were identified as institutions. We chose to only include institutions, as the focus of this phase of our analysis is understanding the true scale of LLC and LLP ownership in the state.

Additionally, the Warren Group data, unlike state parcel data, does not include the owner's address so differentiating between owners with the same first and last names may not always be possible and could have led to the creation of inaccurate ownership networks. Next, we joined the filtered owners table to the Warren Group data and created a new 'final_name' field that reflects the network name in cases where the buyer's name matched into a network, and the buyer's name where no network match was made. The Warren Group data is then run through our original Homes for Profit investor assignment script using the 'final_name' field (in place of the buyer's name we used in the first phase of this work, to group property sales together). The type and size of an investor is now identified based on the characteristics of entire network rather than the individual LLC within that network, giving us a more accurate picture of ownership in the Greater Boston region.

Limitations

[4] Robsky Huntley, Eric, Aizman, Asya, & Chuttani, Milan (2025). Who Owns Massachusetts Processing Workflow (v1.0.0). [Computer software]. https://doi.org/10.5281/zenodo.15364560

One of our goals in this new phase of work is to be able to eliminate the LLC investor definition and identify investors only by building type, number of properties purchased, and value of properties purchased. With a fully successful network analysis this would allow us to categorize only LLCs that are part of larger ownership networks as investors, and any LLCs that were started by an individual to purchase only the home they live in would not be counted as investors. While the methods we applied in this second phase of research have made many ownership networks transparent that were not identified in our original research, we were unable to do a complete network analysis. Dr. Robsky Huntley's analysis used owner names and addresses from the most recent vintage of the statewide parcel database to match owners into larger networks. State parcel data only contains the owner at the time the parcel was assessed, not any historical data on who owned the property before that. This means that the ownership networks identified in that work only contain the names of owners that have made purchases in the past several years. The Warren Group data we use for our analysis goes back as far as 2000 and therefore contains many buyers, LLCs included, that do not show up in Dr. Robsky Huntley's network analysis.

We were able to match 100,000 transactions in the Warren Group data, including 1 in 3 of all unique LLCs and LLPs in our dataset, to ownership networks identified by Dr. Robsky Huntley's work. For the years between 2018 and 2022 we were able to match more than half of all LLC and LLP transactions into networks, but between 2000 and 2010 we were matching no more than 1 in 5 LLCs and LLPs into networks. While our hypothesis entering this work was that most LLCs were part of networks rather than one-off entities created by owner-occupants, these partial results did require us to reconsider. To check if our hypothesis was correct, we spot checked 100 LLCs and LLPs manually using the state's corporate database search tool. This process included searching for the LLC or LLP name in the corporate database and then doing a second search using the individuals' names listed on the business entity's record to see how many other LLCs or LLPs that individual was tied to. This check confirmed our hypothesis, with 73 of the 100 LLCs and LLPs we checked being linked to larger ownership networks.

Key Findings

We hypothesized that many large-scale property owners employed this practice of purchasing properties through multiple LLCs, and as such, Phase 1 of our work was likely underestimating the number of large and institutional ownership networks involved in the Greater Boston housing market. By successfully integrating a network analysis of LLC owners into our methods, we expected to see a movement of small- and medium-sized investors into the large and institutional investor categories as networks previously obscured through multiple layers of LLCs were revealed.

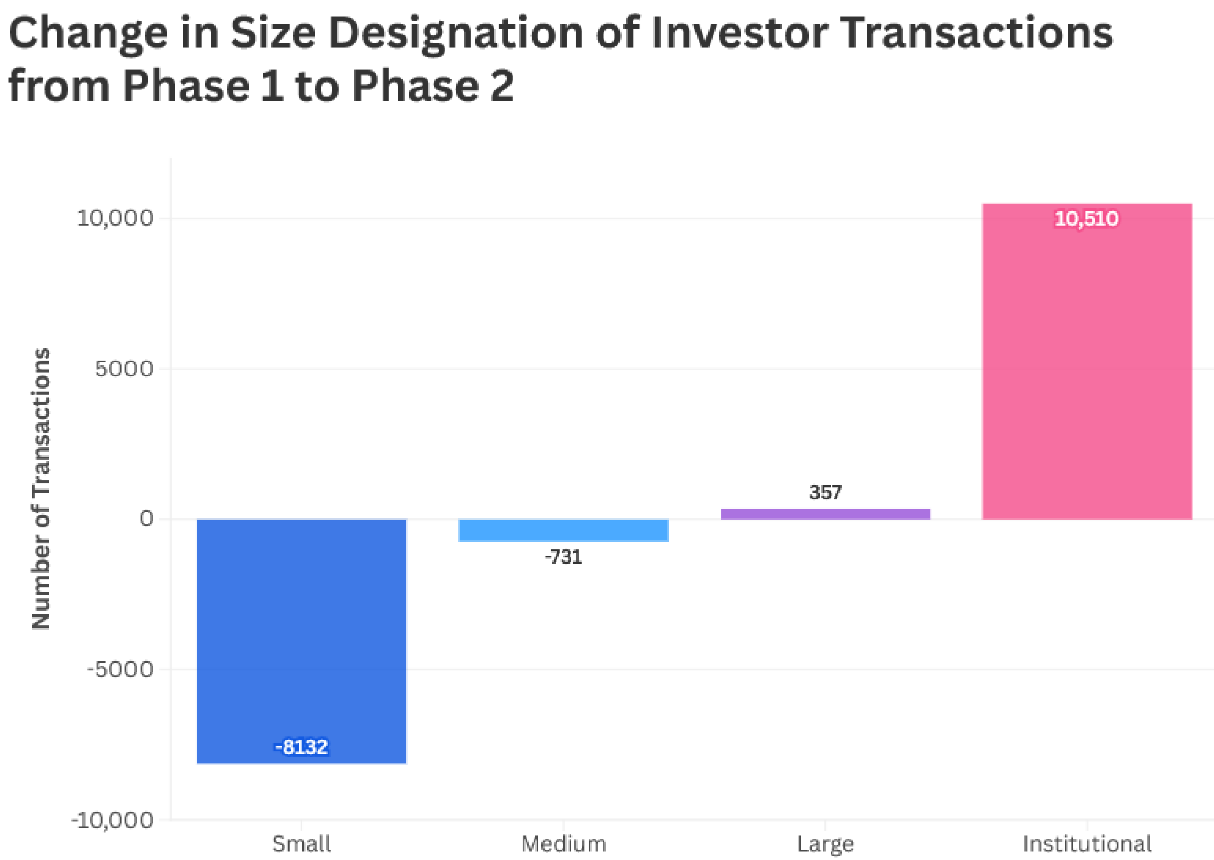
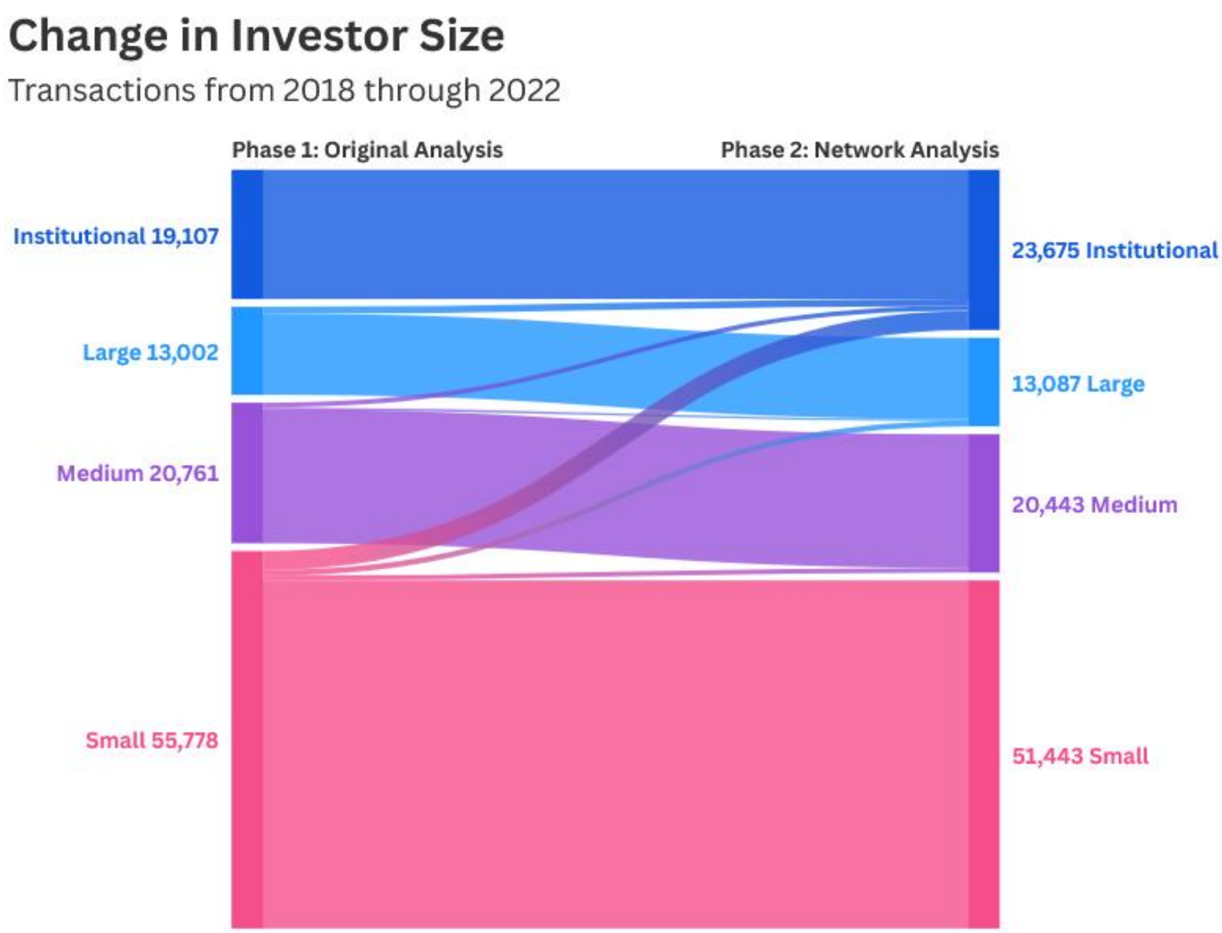


Figure 3: Change in Overall Count of Investor Transactions by size in MA from Phase 1 to Phase 2

Figure 3 shows how the count of transactions by investor size changed from Phase 1 to Phase 2 of our analysis. As predicted, once we incorporated Dr. Robsky Huntley's work into our analysis, we found that small LLC investors from Phase 1 of our analysis were often part of larger networks of investors who bought multiple properties. In addition, we found that institutional investors from our initial study were matched into larger networks, revealing these already large-scale networks were even larger than our initial research found.

While these results confirm our hypothesis that large buyer networks were being obscured from our original analysis through the creation of numerous LLCs, they still don't show the full picture. Dr. Robsky Huntley's network analysis tables are based on owners found in the statewide parcel database, whereas our Homes for Profit work relies on home sales data purchased from the Warren Group. The parcel database is not a historical record and reflects only the most recently reported owner of the property. This mismatch in data sources and the recency of the parcel data, compared to the 23 years of data we have from the Warren Group, meant we were only able to match a portion of buyers in our data to those in Dr. Robsky Huntley's network tables.

To begin to address this mismatch, we took a closer look at residential property sales in Massachusetts from 2018 to 2022, the period in which we were able to match the most LLCs in our data to those in the networks from Dr. Robsky Huntley's analysis. Overall, we were able to match 51% of all LLC and LLP buyers who purchased property during these years into Dr. Robsky Huntley's networks (about 11,000 entities). Over this period, we see 4,335 transactions by buyers that were previously categorized as small investors moving into the medium, large, or (as is the case for more than half of these transactions) institutional buyer categories. Additionally, we see another 2,035 transactions originally classified as being purchased by medium or large investors to move into larger investor categories.



https://public.flourish.studio/visualisation/24056173/

Figure 4: Change in Size Designation of Investor Transactions from 2018 to 2022 in MA from Phase 1 to Phase 2 of Homes for Profit

We see similar results for all 100,000 transactions we matched into networks from 2000 to 2023. More than 9,000 transactions by entities like LLCs, LLPs, businesses, and trusts that were categorized as small-investor transactions in our original analysis moved up to larger investor sizes, with more than half now being flagged as purchases by institutional investors. Overall, we saw 8,000 unique buyers move into larger investor categories due to the addition of Dr. Robsky Huntley's network analysis results to our process. Another 1,500 buyers that previously were not being categorized as investors are now being flagged as investors in our analysis due to the combination of name cleaning methods and network tables from Dr. Robsky Huntley's work.

Community Input

In addition to updating our methods, Phase 2 of our work also included a series of workshops, which were facilitated by Dr. Williams, with resident researchers, Dr. Robsky Huntley's team, and our team at MAPC. In these workshops we shared research products and findings, heard how our findings resonated with residents' experiences, collected feedback on recommendations for improvement, and discussed what policies or actions for improvement could look like.

We heard from the resident researchers that our findings on the scale of investor ownership in the region resonated with their own experiences of housing and landlords in their neighborhoods. They shared stories of realizing that a single entity was behind what appeared to be multiple different property ownership companies and the impact that bad actor landlords have had on their neighborhoods. Through their own work serving their communities, the resident researchers have seen the importance of understanding the true owner behind a property and are excited about the work being done to make these ownership networks transparent.

These workshops also yielded a wide range of recommendations around actions that could be taken to help mitigate the impacts of the housing crisis. In addition to more transparency around LLC ownership networks, resident researchers suggested actions to limit the impact of speculative investment on their neighborhoods, support residents in search of housing, and for public officials to encourage community input and make data on rents, evictions, and code violations more accessible to researchers and the public. MAPC will explore more in-depth strategies in each of these areas as we continue this research.

Policy Recommendations

This research further reinforces the need for the three types of policies detailed in our original Homes for Profit publication: policies that mitigate the negative impacts of speculative investment on the housing market; provide housing assistance; and generate new resources for affordable housing and housing assistance programs. The results of our analysis and conversations with resident researchers support our previous conclusions about the outsized impact speculative investors have on the housing market and the harm that this type of investment can cause.

Phase 2 of our research has also shown the importance of better promoting existing policies the state has to support residents and the need for new policy and practice around data collection and publication. Below is a short list of policy and practice priorities that have come out of the two phases of our Homes for Profit research.

Improvements to public data collection and sharing

Data is integral to understanding a community's housing landscape, capturing opportunities, challenges, and gaps in affordable and healthy housing, and identifying how to best improve housing affordability, protect tenants, and increase housing production. Collecting housing data, such as affordable unit counts and building code violations, is often complicated at the local scale and near impossible at a regional or state scale in Massachusetts. Data standards are different across jurisdictions, and there is no centralized mechanism or requirement to collect these data across the state. Implementing new standards around what data is collected at the municipal level and requiring that data be shared with the state and the public will help municipalities, state agencies, housing advocates, researchers, and the public better understand the current state of housing across Massachusetts and in their communities and inform effective policy and planning to address the housing crisis. Municipal rental registries, which collect landlord contact information as well as details about the property like the number of units, rent collected, and last inspection data, are one way to improve data collection, standardization, and access in Massachusetts while also allowing for improved enforcement of building code violations, resulting in better housing conditions for tenants.

In addition to the state's aggregating and sharing data collected by municipalities, there are many datasets that the state stewards that should be made more accessible to municipalities, researchers, policymakers, and the public. For example, the state makes records of evictions and corporate ownership filings public through tools that allow users to search for individual records but does not share this data in a bulk machine readable format. The lack of bulk access to this data was a significant limitation in this work and makes it difficult for municipalities, housing advocates, and researchers to understand the scale of evictions or corporate ownership in their jurisdictions. The IMAGE HD Act

(H.1543/S.970), proposed by Massachusetts legislators to create a centralized tool that provides accurate and detailed data on municipal affordable housing stock is a first step toward standardization, collection, and dissemination of municipal data by the state. Legislation to make accessible important state-owned data sources like evictions and corporate filing data are also needed.

Better Promote First-Time Homebuyer Programs

There are numerous first-time homebuyer programs available across Massachusetts, including national, state, and municipal programs, like the state's ONE Mortgage Program, which is a financial resource for low- and moderate-income households. The term 'first-time homebuyer' can be misleading, however, because under the HUD eligibility definition previous homeownership does not disqualify someone from the program's benefits. In fact, if an individual has not owned a home in at least three years, they are considered 'first-time homebuyers.' The eligibility criteria also include single parents, displaced stay-at-home partners, mobile homeowners, and owners of homes that couldn't afford to bring their home up to code. We heard from HNRC's resident researchers that they and others in their communities were unaware that the eligibility for first time home buyer programs was so expansive. The state should work with residents, municipalities, and community-based organizations to better promote these programs and educate the public on who is eligible for them.

Local Option Right of First Refusal/Tenant Opportunity to Purchase Act (TOPA)

Creating a local option to allow cities and towns to establish a tenant's right of first refusal allows tenants in a building the right to either a) match a third-party offer when their homes are being sold, or b) designate that right to a non-profit, local housing authority, or other affordable housing developer. When a tenant or their designee can get the financing together to match a third-party offer, tenants are able to stay in their homes and avoid displacement that can come when large-scale corporate owners purchase buildings and raise rents by hundreds of dollars. Our Homes for Profit report highlights local instances of these practices and how community-based organizations, municipalities, and community land trusts have been able to support tenants in these situations. Passing right of first refusal legislation would give these organizations additional avenues to directly support tenants, prevent displacement, and carry out their missions.

Next Steps

Our initial work in Phase 2 of this project confirmed our hypothesis that there are numerous large and institutional investor networks that were obscured in our original analysis due to the use of multiple LLCs. Our next step in this work is to adapt the network analysis Dr. Robsky Huntley developed to use homeownership data MAPC has purchased from the Warren Group, rather than on the parcel-based records used in the current analysis. A full report upon completion of Phase 2 of this work will be made available at https://homesforprofit.mapc.org/. In that, we will share what we heard from resident researchers, our updated methods for this analysis, and the new and improved findings from integrating the network analysis into our process in more detail.

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