## Collecting, Analyzing, and Publicizing Data on Housing Turnover



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## **Executive Summary**

The Senate Committee Report supporting the 2024 Consolidated Appropriations Act tasked the Department of Housing and Urban Development (HUD) with identifying local best practices for collecting, analyzing, and publicizing data on housing turnover, including the following types of turnover:

- Evictions;
- Foreclosures, including both property tax and mortgage foreclosures; and
- Lost housing stock resulting from natural disasters and other unforeseen events.

The Senate Report further directed HUD to explore how these practices could inform federal data collection and a standardized measure of housing turnover (Senate Report 118-70).<sup>1</sup>

This report reflects research conducted by staff from HUD's Office of Policy Development and Research investigating the data available for each of the types of housing turnover identified in the Senate Report, the limitations of these sources, and examples of past and ongoing efforts to assemble and make public these data. Staff consulted with approximately 20 researchers and practitioners, many of whom are or have been involved in the highlighted local efforts, to learn about the barriers they encountered and best practices for collecting and assembling local housing turnover data. Based on these discussions and the identified best practices, the report presents considerations for federal action towards the creation of a standardized measure of housing turnover.

## Available Housing Turnover Data

For the purposes of this report, "housing turnover" refers to when individuals and families involuntarily lose their housing through various legal and extralegal processes. Housing turnover data in the U.S. is complex, varied, and inconsistent. Each type of housing turnover produces different forms of administrative data created through various judicial and non-judicial processes. Some types of housing turnover, such as turnover created by informal evictions, do not leave a paper trail in administrative data. When available, the administrative data tend to be maintained by multiple systems or offices, and, depending on the jurisdiction, there may be little to no assembly of this data into a format usable for analyzing housing turnover. In some cases, there may be one clear primary data source, and it may be a simple process to access and aggregate this data. In others, it may not be apparent which office holds the relevant records, if the records are accessible, and if they are in a format from which researchers or policymakers can readily extract data.

For those types of turnover that utilize judicial processes, the most detailed data are often in court records. These records include information on formal eviction filings and, to a lesser extent, judgments and executed evictions. Judicial foreclosure data can also be accessed through court records, which may include complaints filed by lenders and foreclosure judgments. However, access to court records can vary widely by jurisdiction, with some courts offering public access to searchable online databases and others restricting access to paper or PDF files that require a formal data request. Additionally, court records are

<sup>&</sup>lt;sup>1</sup> S. Rept. 118-70 - Departments of Transportation and Housing and Urban Development and Related Agencies Appropriations Bill, 2024, 118th Congress, 1<sup>st</sup> Session, July 20, 2023, https://www.congress.gov/congressional-report/118th-congress/senate-report/70/1.

often missing information on case disposition and on the characteristics of impacted households and regularly have data quality concerns.

Housing turnover data can also be found in other administrative data across many public offices at all levels of government. These include local county offices, such as tax assessors, treasurers, clerk's offices, recorders of deeds, and other offices that maintain data on non-judicial foreclosures and tax lien and tax deed sales. These records may include those recording notices of default, notices of sale, and auction results. Local administrative data may also include data on other types of forced moves, such as eminent domain takings, often managed by county or municipal departments. However, the accessibility and consistency of these records vary significantly by locality, and the records are often challenging to aggregate across jurisdictions. In addition to state and local data, federal administrative data can provide insights into housing turnover that interacts with or occurs within federal programs, such as foreclosure of federally backed mortgages and FEMA disaster response.

When accessing administrative data requires time and resources that localities or research organizations do not have capacity to accommodate, researchers often turn to private companies, such as CoreLogic and ATTOM Data Solutions, to aggregate comprehensive datasets on evictions, foreclosures, and property transactions generally. These private repositories are often structured and detailed, but they are also costly, which may limit access for local governments and nonprofit organizations. Furthermore, because private companies prioritize data with commercial value, their datasets may leave gaps in areas important for public policy purposes.

For those types of housing turnover that are not easily captured in administrative data, particularly informal evictions and natural disaster-related moves, surveys play an important role in filling this gap. For informal eviction, surveys can capture involuntary moves resulting from landlord threats or pressure or that otherwise occur outside of the court system. Surveys can also provide insight into natural disaster-related moves that is not typically available from FEMA data, such as how long a household may have been displaced from their home. Because survey data, unlike administrative data, is collected for research purposes, it typically also includes data on household demographics and economic circumstances that is valuable for understanding the impacts of housing turnover on different populations and identifying policy interventions.

#### **Best Practices**

Consultation with stakeholders, as well as desk research by PD&R staff, illuminated local best practices that help facilitate collection, analysis, and publicizing of housing turnover data. Key best practices include open data policies, data standardization, engagement with stakeholders, and robust data governance.

**Open data policies** ensure that data is accessible to researchers, policymakers, and community stakeholders, fostering transparency and enabling evidence-based decision-making. For instance, some researchers have data-sharing agreements with courts that allow almost real-time access to formal eviction data, allowing them to track trends over time.

**Standardization** of data collection and the inclusion of definitions allows for increased usability of data and comparison across states or regions. The information collected throughout turnover processes varies significantly across jurisdictions, and greater consistency of these data would aid in aggregation of housing turnover data. Standardization would ideally occur at the point of data entry, such as during the collection

of information for court cases. However, when standardization at the point of data entry is not feasible, and until there is a set of regional or national standardization practices, states could encourage and facilitate standardized reporting of available local data to a central entity in accordance with statewide standards. No matter the level of standardization, it is important to include definitions of terms to enable comparison across jurisdictions with differing processes.

As another best practice, **open communication** with and input from diverse groups of stakeholders from data collection to dissemination increases the usefulness of and trust in the data. Engaging with subject matter experts in the community aids in the determination of what data points would best capture the issue to be studied and in interpreting that data. Ongoing engagement and communication also build the trust and buy-in that is necessary to drive action following dissemination of the data.

Finally, good **data stewardship** and comprehensive data governance protocols need to accompany open data policies. Researchers and policymakers must be well-versed in the state and local privacy laws impacting the data they are using and ensure their data governance practices account for removing or anonymizing sealed or expunged records. Regardless of local law, researchers and policymakers should have practices in place to protect personal and sensitive information.

## Federal Approach to Housing Turnover Data

A federal approach to collecting and analyzing housing turnover data could provide a standardized framework that addresses inconsistencies and gaps in local data. With Congressional support, it could be possible for the federal government to develop a national measure of housing turnover through the addition of housing turnover questions to an existing U.S. Census Bureau survey instrument. Local and federal administrative data could then be used to validate and enhance the survey data, creating a robust national dataset. Adding housing turnover questions to an existing national survey would allow the government to collect the range of data needed to create a national housing turnover rate and to guide policy designed to minimize housing losses, but it would require substantial and sustained commitment from Congress as well as implementing agencies.

Additionally (or alternatively), the federal government could support local efforts to collect housing turnover data. Federal support in the form of grants, stakeholder convenings, and guidance on data definitions and data collection methods, could enable local governments to build capacity and incentivize the standardized collection and reporting of housing turnover data.

Grants could support local governments in building the data infrastructure and personnel capacity needed to develop comprehensive housing turnover datasets. Grants could also support efforts to standardize data collection practices at the point of entry, including through efforts to reform court processes. As each jurisdiction will have its own set of needs, pairing grants with technical assistance for the implementation of targeted best practices would ensure the full realization of the benefits of grant funding.

The federal government is also able to bring together stakeholders across different fields—including local governments, advocacy groups, academic researchers, and data experts—to share insights and identify best practices. Through such convenings, stakeholders could discuss challenges, share successful models, and collaboratively develop solutions to common data collection obstacles. Convenings could address key issues such as standardizing data fields, developing data privacy best practices, and improving access to administrative data. By facilitating these discussions, the federal government could build a

shared understanding of housing turnover metrics and promote alignment on standardized definitions and methods.

Finally, the federal government could issue technical guidance to local communities, outlining best practices for collecting and analyzing turnover data. Guidance could include standardized data definitions and fields, data integration protocols, data quality and validation practices, privacy standards, and reporting and visualization practices. Any insights gained from grantee experiences, technical assistance activities, and stakeholder discussions may be appropriate subject matter for federal guidance or toolkits.

These proposed activities are not mutually exclusive. The lessons learned from each activity can contribute to the ongoing development of the others. These efforts would support and incentivize the contribution of standardized local data to a national dataset, and along with federal survey data collection, they would represent a meaningful step towards a single measure of housing turnover.

## Introduction

The Senate Committee Report supporting the 2024 Consolidated Appropriations Act directed HUD to identify local best practices for collecting, analyzing, and publicizing data on housing turnover, including evictions, foreclosures (property tax foreclosure and mortgage foreclosure), and lost housing stock resulting from natural disasters and other unforeseen events. The Senate Report also directed HUD to explore how these best practices might inform federal data collection and a standardized dataset or measure of housing turnover (Senate Report 118-70). This report responds to these requests.

HUD has previously released two reports related to collecting and analyzing data on evictions. HUD's Office of Policy Development and Research is the lead author for both reports, as well as this report. The first of these reports, provided to Congress in March 2021, focused on how to collect better data on evictions from federally assisted housing. The second, provided to Congress in October 2021, addressed the feasibility of collecting data on evictions among all renters and analyzing the characteristics of the tenants and landlords involved in eviction. This report takes a broader approach, assessing the availability and local use of data to quantify household housing turnover.

This report discusses current federal, state, and local data collection practices and the availability of such data related to different forms of housing turnover, cross-cutting local best practices for analyzing and making housing turnover data public, and the potential path forward for federal data collection and a standardized measure of housing turnover.

## Purpose of the Study

The Senate Report states that "timely and consistent metrics are important to provide a comprehensive picture of the scale, scope, and drivers of turnover in the housing stock, as well as to inform potential Federal, State, and local policy decisions" (Senate Report 118-70). Housing insecurity is a multidimensional issue that encompasses a range of vulnerabilities and experiences resulting from barriers to accessing affordable, stable, decent, and safe housing (Tait and Carter, 2023). Much of HUD's longstanding research contributes to the understanding of housing insecurity in the United States. For example, the Worst Case Housing Needs Report tracks households experiencing severe rent burdens and substandard housing conditions. HUD also tracks the most severe form of housing instability through its Annual Homelessness Assessment Report, which includes both Point-in-Time counts and annual estimates of homelessness using local Homeless Management Information System data.<sup>3</sup>

A standardized measure of housing turnover could serve as another key indicator of social and economic vulnerability. Along with existing measures of housing insecurity, a comprehensive picture of the scope of housing displacement due to events like eviction, foreclosure, or natural disasters would give policymakers a better understanding of how well the Nation is doing in ensuring that residents are stably housed. Measuring not just instances of housing turnover but the specific forms of turnover would provide insight into the drivers and consequences of these destabilizing events. Different forms of turnover stem from

<sup>&</sup>lt;sup>2</sup> S. Rept. 118-70 - Departments of Transportation and Housing and Urban Development and Related Agencies Appropriations Bill, 2024, 118th Congress, 1<sup>st</sup> Session, July 20, 2023, https://www.congress.gov/congressional-report/118th-congress/senate-report/70/1

<sup>&</sup>lt;sup>3</sup> HUD tracks changes in the housing stock through the <u>Components of Inventory Change</u> (CINCH) report. As discussed further below, changes in the housing stock are outside the scope of this report.

complex economic and social dynamics and have distinct consequences for households. Each form of housing turnover may also require its own set of local, state, and federal policy solutions. However, the adoption of one standardized measure of housing turnover ensures that localities and states across the country, as well as the federal government, can track the cumulative impact of the most significant forms of housing turnover. Measuring each form of turnover individually while aggregating them into a single measure would illuminate broader patterns of housing turnover.

Furthermore, a standardized measure would help identify who is most affected by housing turnover, both geographically and demographically. Standardization allows comparison of the problem across states and regions. Additionally, a measure that includes specific demographic and geographic data would highlight the most vulnerable populations and aid policymakers in better targeting resources and developing interventions appropriate for their communities.

## **Current Housing Turnover Measurement**

In consideration of a potential standardized measure, the Senate Report asked HUD to identify local best practices in assembling housing turnover data. The study team conducted a review of the available literature on data sources relating to each of the identified forms of housing turnover, including ongoing and one-off federal, state, and local data collection efforts. The study team also consulted approximately 20 individuals from academic, research, advocacy, and philanthropic organizations as well as local governments (see Appendix for a full list of entities or individuals consulted). The individuals consulted encompassed a range of perspectives on and experiences with local housing turnover data, including entities assembling local administrative data and those collecting their own survey data.

One possible model for a combined housing turnover measure is the one developed by New America in its "Displaced in America" study (Robustelli et al., 2020). New America's goal for their report was to break down the silos of different mechanisms of housing loss to view them as components of the same broader problem of housing instability. The result was the development of a county-level Housing Loss Rate, a metric of how many people lose their homes involuntarily via eviction and mortgage foreclosure over a given time period. Using county-level eviction and mortgage foreclosure data acquired from the Eviction Lab at Princeton University and ATTOM, respectively, New America calculated the housing loss rate for each county nationwide by adding the number of evictions and the number of foreclosures and dividing by the sum of the number of renters and number of owners with a mortgage.<sup>4</sup>

Through the research and consultation process, the PD&R study team did not identify any other localities or research organizations that have developed a combined measure of housing turnover. There are many examples of measurement of a single type of housing turnover and several examples of data efforts measuring multiple forms of housing turnover separately, particularly eviction and mortgage foreclosure. These efforts often include the data for each form of turnover in one public-facing dashboard. However, none of these examples present the data as one single measurement of housing turnover.

Furthermore, current data collection practices vary significantly across the different causes of housing turnover, and for some types of housing turnover, there is little tracking at all. Data sources may include

<sup>&</sup>lt;sup>4</sup> New America calculated the housing loss rate for only those counties for which both eviction and foreclosure data were available, approximately 70 percent of counties nationwide. The national average also only includes these counties.

local administrative data—such as court records or data held by county geographic information systems (GIS) offices—household surveys, or private data repositories. In the case of administrative data, there is little standardization between local jurisdictions, making the aggregation of state or national data both time- and resource-intensive. Some jurisdictions collect data on one or two types of housing turnover, typically eviction and mortgage foreclosure. However, even when multiple jurisdictions each collect data on the same type of turnover, they often do not collect the same information. For example, the data may capture different parts of the housing turnover process. One jurisdiction may track only eviction filings, while another may track eviction judgments or executed evictions. Similarly, mortgage foreclosure data often refers to foreclosure filing rather than the public auction that results in displacement of the homeowner. These inconsistencies create a significant barrier to a comprehensive national database of housing turnover.

This report will discuss in detail the available data sources for each of the forms of turnover that Congress specified, as well as several other forms of turnover. It will then identify examples of local best practices, drawing on a review of public datasets and materials and consultation with jurisdictions that have successfully combined multiple metrics to gain a better understanding of housing turnover in their communities.

## **Defining Housing Turnover and Loss**

The term "housing turnover" is generally understood to mean when ownership and/or tenancy of housing is transferred from one owner or tenant to another. Housing turnover does not inherently have a negative connotation or assumption that the household lost its housing and was forced to move. By contrast, "housing loss" has a negative connotation, implying housing turnover that is not the choice of the owner and/or tenant. While the Senate Report uses the term "housing turnover," the examples provided—evictions, foreclosures, lost stock due to natural disasters and other unforeseen events—are all examples of housing loss. Therefore, the term "housing turnover" for the purposes of this report refers to when individuals and families involuntarily lose their housing through various legal and extralegal processes, such as eviction, foreclosure, natural disasters, eminent domain takings, and heirs' property partition sales.

Because housing turnover in this report focuses on how households lose their housing, this report will not address losses to the physical housing stock. The <u>Components of Inventory Change</u> (CINCH) report measures changes in physical housing units in the U.S. every two years. Using data from the American Housing Survey, the CINCH report compares the characteristics of individual housing units over time, separating them into losses and gains. While information on housing units is important for understanding the nation's unmet housing needs, it is currently addressed in the CINCH and other reports.

Even with a focus on individuals and households, defining how to measure the ways through which people lose their housing is complex. The first challenge is defining "involuntary" housing turnover. Involuntary moves may occur through an official process, such as formal eviction, or they may occur outside of official processes, such as in the case of an informal eviction in which a tenant leaves a unit due to other

<sup>&</sup>lt;sup>5</sup> The housing turnover rate is an indicator used in housing market analysis. It is defined as the number of homes that are sold divided by the total number of sellable properties. See <a href="https://www.redfin.com/news/home-sales-turnover-2024/">https://www.redfin.com/news/home-sales-turnover-2024/</a>.

pressures, like threats from a landlord. Furthermore, the presence of compensation may impact the definition of involuntary housing loss. Some legal processes, such as eminent domain takings, may include compensation to the household. Another complication is that involuntary moves may be temporary or reversible: housing turnover resulting from a disaster may be temporary or permanent. Additionally, some moves may not be as clearly considered involuntary, such as those resulting from economic pressures (for example, a landlord increasing the rent substantially from one year to the next). Before determining the best method of measuring housing turnover, it is crucial to define what is being measured, and that in turn requires considering the multiple possible dimensions of involuntary housing loss.

Researchers have categorized residential moves in different ways, depending on the extent to which these moves are moves of choice. These include broad definitions of forced versus voluntary moves, or different gradations of involuntary moves, such as induced involuntary moves versus forced voluntary moves (Hatch, 2021). Other researchers have found that the type of move is directly related to residential outcomes, and that different types of involuntary housing displacement can lead to better or worse housing and neighborhood outcomes (Evans, 2021). One typology, developed by Matthew Desmond, categorizes moves based on a tenant's reasoning for moving: forced, responsive, and voluntary moves (Desmond and Shollenberger, 2015). Forced moves are those initiated by landlords or city officials where a tenant has no choice other than to move. These include formal and informal eviction, foreclosure, and eminent domain takings. Responsive moves are those motivated by housing or neighborhood conditions, such as an increase in rent. Voluntary moves are those that are intentional and unforced.

This typology of forced, responsive, and voluntary moves offers a useful starting point in determining how to define housing turnover in a way that is measurable. One consideration is whether responsive moves should be included in a measure of housing turnover. Responsive moves can provide information on residential displacement due to factors including rising rents or housing quality, and they can shed light on the availability of affordable housing. However, there are many gradations to responsive moves, and such moves are very difficult to measure without understanding specific circumstances. Responsive moves are also beyond the scope of Congress' directive because the examples provided in the Senate Report are forced moves. Therefore, this report addresses only forced moves.

Gentrification is a neighborhood process that is also often raised in discussions about forced and responsive moves and residential displacement. There are many definitions of gentrification and ways it is measured, but an early and still-relevant definition refers to new residents raising the economic status of a neighborhood, leading to a change in its "social character" (Glass, 1964). Researchers use a range of different measures to understand gentrification and its impacts on displacement, and these definitions of gentrification are often highly context-specific (Freeman, 2005; Barton, 2014; Zuk et al., 2017; Pries at al., 2020; Smith et al., 2024). While gentrification is tied to many cases of residential displacement, and to increases in both forced and responsive moves, it is a hard-to-define neighborhood process that can result in an increase in residential turnover due to increased demand and housing values, as opposed to being a direct cause of a forced move. The understanding of gentrification and its different measures are outside the scope of this report focused on the direct causes of forced moves.

## Data on Housing Turnover

There is wide variation in the amount of available data across different types of housing turnover. Each type of turnover produces different forms of administrative data collected through various judicial and non-judicial processes, and the data are often held by multiple systems or offices. In some cases, like formal eviction, the primary data source, court data, is generally known, and, depending on the local court system, it may be a simple process to aggregate the data. In other situations, like eminent domain, it may not even be clear which city or county office holds the relevant records. In addition, some forms of turnover, such as informal eviction, may not usually be captured by administrative data at all and are instead typically measured using surveys. The transparency and accessibility of the data sources for each type of housing turnover affects local efforts to compile and analyze the data. As a basis for understanding the best practices that have resulted from local data efforts, this section provides an overview of the landscape of available housing turnover data and the limitations of such data.

## Cross-Cutting Data on Residential Moves

There are certain types of data that are not specific to one form of housing turnover but can be used to measure housing turnover of different forms when combined with other information. USPS Vacancy data, AHS residential mobility data, and many datasets from private companies are agnostic to cause but can be used to measure residential mobility and resident departures in the wake of a natural disaster or other significant cause.

#### Federal datasets

The United States Postal Service (USPS) provides address data, including vacancy rates, to HUD on a quarterly basis. HUD aggregates the data to the census tract level. Addresses are tagged as vacant and either deliverable for mail service (vacant for rent or for sale) or not deliverable. While there is variation in the guidance the USPS gives to its postal offices and carriers, these data can be used to gain information on a quarterly basis of indications of housing unit damage due to disasters such as wildfire (DeWaard et al., 2024) and neighborhood change post-disaster (Din and Richardson, 2024). Longitudinal HUD aggregated USPS address data has been mapped and can be viewed online.

The USPS also shares change-of-address data, available at the ZIP code level. Beginning June 2023, these data are available monthly from the USPS's <u>Population Mobility Trends</u> dataset. They can be used to measure residential moves but do not contain information on reasons for moves. The U.S. Census Bureau (Census) also maintains a Master Address File (MAF) that is an up-to-date inventory of all known living quarters in the U.S., Puerto Rico, and U.S. Territories. Both the USPS data and the MAF have substantial access restrictions to protect data privacy. The U.S. Department of Transportation has been working with other federal, state, and local partners to produce a shared access database known as the <u>National Address Database</u> (NAD). The most recent release of the NAD has 80 million records but contains <u>substantial gaps</u>, with several states not participating or having minimal coverage.

Several federal surveys conducted by the Census contain information on residential moves, including The American Community Survey (ACS), The American Housing Survey (AHS), The Household Pulse Survey, and The Annual Social and Economic Supplements of the Current Population Survey (CPS ASEC). These surveys each provide information on different aspects of residential mobility, with different constraints related to survey question specificity, geographic granularity, and frequency of data collection. These

surveys are discussed in greater detail in the Data on Housing Turnover and Federal Data Collection sections. The Population Estimates Program also contains information on net population change (including births, deaths, and migration) and housing units.

Another federal data source for household moves—but not necessarily housing turnover or loss—is the Internal Revenue Service's <u>population migration data</u>, which is based on the year to year address changes reported on individual income tax returns.

#### Private sector datasets

Private companies aggregate and sell data on households and housing units that can be used to determine likely household moves. Consumer Reference Datasets, such as Infutor or DataAxle, contain residential history information at the individual and household level, allowing researchers and policymakers to trace residential moves over time at a granular level but without information on reasons for moves (Ramiller et al., 2024). Other companies such as CoreLogic, ATTOM, and Zillow sell bundled real estate data on housing unit sales, which can be used to understand residential unit turnover.

#### **Eviction**

Eviction is defined in several ways, which contributes to the difficulty of its standardized measurement. For example, some researchers define eviction broadly as "any involuntary move that is a consequence of a landlord-generated change or threat of change in the conditions of occupancy of a housing unit" (Hartman and Robinson, 2003). However, Merriam-Webster defines eviction more narrowly as "the dispossession of a tenant of leased property by force or especially by legal process." In addition, the definition sometimes encompasses eviction filings, which may or may not result in the tenant's loss of housing, and other times the definition refers only to the point at which the tenant is forced to move. Within these definitions, there are several types of eviction, both formal and informal. This section will provide an overview of the data currently available for formal and informal eviction, as well as data limitations.

#### Formal eviction

Formal eviction includes all court-ordered evictions, that is, eviction actions that take place through the legal system. The specific process varies across jurisdictions, but it typically begins with the landlord giving the tenant a Notice of Eviction, followed by filing a Summons and Complaint with the court. The Complaint filing is the point in the process often simply referred to as "eviction filing." Eviction proceedings often include a hearing, before or during which a judge may require the parties to negotiate or engage in mediation. Following the hearing, the court will issue a judgment, which may result in an eviction order that the sheriff's office or another enforcement entity executes, forcing the household to leave the home. At any point prior to the judgment, the case may also end with a settlement agreement between the parties or a dismissal by the court. Pecific local processes may include additional steps, or local court systems may refer to these steps using different names, but most courts generally follow this sequence of events.

<sup>&</sup>lt;sup>6</sup> See <a href="https://www.merriam-webster.com/legal/eviction">https://www.merriam-webster.com/legal/eviction</a>.

<sup>&</sup>lt;sup>7</sup> For the documentation generated and the kind of information typically collected at each stage in the formal eviction process, see <a href="https://www.newamerica.org/future-land-housing/reports/us-eviction-court-data/what-court-eviction-data-could-tell-us-but-doesnt-always/">https://www.newamerica.org/future-land-housing/reports/us-eviction-court-data/what-court-eviction-data-could-tell-us-but-doesnt-always/</a>.

Data on the prevalence of formal eviction can illuminate where evictions are happening the most, who is most impacted, the type of housing or housing ownership where eviction is most likely, and the individual landlords or management entities with disproportionately high eviction rates. Data collection and analysis could provide an opportunity to intervene to reduce evictions in areas with high eviction rates—through investments in legal assistance, court reforms, changes to housing regulations, the provision of emergency rental assistance, and other interventions. Ongoing data efforts can subsequently measure the impact of policy interventions.

#### Available Data

Policymakers, researchers, and advocates measure evictions using court records, which are public records of eviction-related cases. The step in the legal process at which eviction can be measured (e.g., filing, judgment, or execution) varies depending on the information collected by the court system. Access to court records themselves or structured eviction data extracted from these records may be available through several channels. Researchers may request court records directly from the state or county court system. They may also use web scraping tools to extract data from public online portals, such as court or sheriff's office databases. In addition, researchers may purchase eviction data from third-party aggregators, such as LexisNexis.

Data on **eviction filings** are the most easily obtainable formal eviction data, although accessing complete data is still a challenge, as described in the next section. Several organizations are leading an effort to assemble national datasets from eviction filing data, and they utilize a range of sources in doing so. The most comprehensive dataset of court-ordered eviction cases is the <u>Eviction Tracking System</u> from the Eviction Lab at Princeton University. The Eviction Lab tracks weekly eviction filings in ten states and thirty-four cities. Although the Eviction Lab obtains some records directly from states and court systems, for those states that do not centralize their eviction data or are unwilling to share their records, the Eviction Lab relies on datasets of public eviction records from third-party aggregators LexisNexis Risk Solutions and American Information Research Services Inc. (Eviction Lab, n.d.a., 2022). The <u>Eviction Tracker</u> from Legal Services Corporation's (LSC) Civil Court Data Initiative covers eviction filings for 1,250 counties and municipalities across thirty states and territories. LSC's primary data collection method is scraping individual court records on the courts' public websites. LSC also engages in data-sharing directly with courts and works with software developers who collect local court records (LSC, n.d.).<sup>8</sup>

Locally, states and communities, as well as universities and advocacy organizations, also assemble eviction filing data. For example, the University of Florida's Shimberg Center for Housing Studies produces the Florida Housing Data Clearinghouse, which includes monthly statewide eviction filings by county. This data is obtained from Florida's Office of the State Courts Administrator. Shimberg Center then provides its eviction data to the Eviction Lab, and the Eviction Lab geocodes it. Another local example is the Child Poverty Action Lab's North Texas Eviction Project (NTEP). The NTEP is a dashboard that shows a summary of eviction filing data for four Texas counties: Dass, Collin, Denton, and Tarrant. The Dallas data is provided

<sup>8</sup> LSC has developed a software to systematically identify all eviction cases filed from 2016 to the present on public court lookup websites. However, data-sharing is the preferred method of acquiring eviction data because it carries less of the risk of inaccuracy that comes with scraping individual records. The datasets are typically provided from the courts as a bulk extract that is updated periodically or as daily extracts.

by Dallas County, and the data for the other three counties is provided by January Advisors, a data science consulting firm (North Texas Eviction Project, n.d.).

As opposed to eviction filings, outcomes of eviction lawsuits are harder to define across jurisdictions because court systems have different processes and terminology for court-ordered evictions (Zainulbhai and Bonnyman, 2024). As a result, there are no national collections of eviction judgment data, and collection varies across local jurisdictions. The Eviction Lab's original data, which spans 2000-2018, includes eviction judgments for some states, but the Eviction Lab's website cautions that the data quality for eviction judgments is low (Eviction Lab, n.d.b., 2022). However, some localities and organizations have been able to make data on eviction judgments public depending on the availability of outcome information from the courts. For example, the Polis Center at Indiana University, Indianapolis, publishes the Indiana Evictions and Foreclosure Dashboard, which provides statewide data on eviction and mortgage foreclosure, and its overview of evictions in Indiana includes data on total eviction filings and judgments, as well as filing and judgment rates, at the census tract level. The Polis Center obtained this data directly from the Indiana Supreme Court through a bulk data request for all eviction and foreclosure data from 2020 through 2023. Arizona State University's Knowledge Exchange for Resilience (KER) published the Arizona Eviction and Foreclosure Dashboard, which includes eviction filing and judgment data through May 2024. KER acquired the data from the state and several county court offices. Hennepin County, Minnesota, also publishes an eviction dashboard that includes both eviction filings and eviction judgments, broken down by type of judgment, down to the ZIP code level. Hennepin County's dashboard also provides statewide filing and judgment rates by county. Each of these examples also uses Census demographic data to better understand the neighborhood characteristics of areas most impacted by eviction filings and judgments. Data on neighborhood characteristics substitute for demographic data on the eviction defendants, which are largely not available from court records.

Data on executed evictions, as evidenced by records like eviction orders or Writs of Eviction, are much more difficult to track. This information would offer the best evidence of a household's actual displacement or housing loss due to eviction. However, as with eviction judgments, the processes and terminology vary across jurisdictions for executed evictions and other post-judgment actions. Furthermore, some courts do not record information on whether an eviction judgment was executed by law enforcement (GAO, 2024). For example, the Massachusetts Trial Court Department of Research and Planning publishes dashboards with eviction case data, including executions issued, which allow the landlord to evict the tenant through a sheriff or constable, but they do not indicate whether or not the eviction has occurred. Execution data is sometimes available directly from sheriff's offices or other law enforcement agencies responsible for executing evictions. For example, the City of Alexandria, Virginia's Office of Performance Analytics tracks eviction trends in Alexandria. Its <u>public dashboard</u> includes Writs of Eviction issued, which instruct the sheriff to schedule an eviction, but do not indicate whether the action was carried out by the sheriff's office. However, the city also has a data sharing agreement with the sheriff's office that includes executed evictions, and while this data is not available publicly, the city does share it with its partners and stakeholders. The Furman Center at New York University maintains an eviction tracker for New York City. Furman Center obtains its data from both the New York State Office of Court Administration and New York City's Department of Investigation in order to provide updated information on executed eviction warrants across New York City (Furman Center, n.d.). Even when execution data is available, it is difficult to collect comprehensive data on the displacement of households following eviction judgments because evicted

tenants may choose to move following the eviction judgment and prior to any post-judgment actions. Therefore, most analyses stop at eviction judgments.

#### **Data Limitations**

Formal eviction data collection and analysis face the challenge of working with data that are incomplete, inaccessible, and of poor quality. The information typically collected and shared from an eviction filing includes the date of filing, the address where the tenant lives, the name and address of the landlord, and the name of the tenant (Zainulbhai, 2023). Some important data points are typically not collected at all, such as household demographic characteristics like age, race, ethnicity, gender, household size, or household income. Researchers sometimes rely on statistical imputation to estimate the impact of eviction on people of different races and ethnicities and by gender. 9 They may also overlay geocoded eviction data with Census demographic data to estimate the impact of eviction using neighborhood demographics, but rarely is specific demographic data for evicted households available (Graetz et al., 2023). Case records may also be missing judgment or disposition information or addresses, which limits possible analysis. Shimberg Center staff noted that, in the state's collection of eviction data, judgment information does not include which party judgment was in favor of, making it difficult to include any judgment data in their analyses. Similarly, the court data that KER obtained for the Arizona Eviction and Foreclosure Dashboard included addresses only for eviction judgments. Therefore, KER was only able to map eviction judgments and not filings. In addition, records may not include information on the landlord or the reason for eviction (Panfil et al., 2021).

Depending on a court system's categorization, data may also not be specific enough to disaggregate eviction cases at all. A court's case type designation may only broadly identify the type of case as a civil case or a landlord-tenant case, preventing disaggregation of eviction cases. For example, until 2021, Indiana coded eviction cases as "SC," the same coding as all other small claims cases. <sup>10</sup> In 2021, the Indiana Supreme Court changed its coding of evictions to "EV," which enabled Polis Center to disaggregate eviction cases for its statewide eviction data analysis.

When the data does exist, it may be inaccessible. Not all jurisdictions offer electronic filing, and some only provide it for certain types of cases. Those jurisdictions that do not have electronic filing often do not digitize their court records. Even when digitized, the records often remain in PDF printouts rather than in a format readily usable for analysis. Researchers sometimes utilize machine learning techniques, such as natural language processing, to create structured data from scanned court documents (Thomas et al., 2024). However, converting the data using machine learning programs is still time consuming and involves rigorous cleaning and standardization. Furthermore, the use of machine learning techniques requires significant technical capacity, and local policymakers are not likely able to fully take advantage of these tools. Therefore, high-quality, structured datasets that enable analysis remain the primary goal (Hepburn, 2024). To access structured datasets, researchers often purchase data from third-party aggregators, such

<sup>&</sup>lt;sup>9</sup> Eviction Lab uses defendant names and addresses included in eviction case filings to impute their likely race/ethnicity and gender. For the specific methods utilized to impute demographic information, see https://evictionlab.org/eviction-tracking/methods/.

<sup>&</sup>lt;sup>10</sup> See complete methodology for the Indiana Evictions and Foreclosure Dashboard at https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A14a869b0-3bf3-33a8-bbb0-936a452c1f44.

as vendors that sell data to tenant screening services and credit agencies. This data may not be as comprehensive as that collected by researchers directly from courts (Panfil et al., 2021).

In addition to limitations regarding completeness or inaccessibility, eviction data often have quality issues. The two most common challenges are ambiguous records and duplicate records. Ambiguous records are those that do not clearly identify the case outcome. Duplicate records are the result of either a court record-keeping mistake or serial filing, both of which can inflate the prevalence of evictions (HUD, 2021). The rate of ambiguous and duplicate records varies significantly across states but often ranges as high as 30-40% of court records (Porton et al., 2020; Peiffer, 2018). These obstacles require researchers to spend significant time de-duplicating records and attempting to decipher and standardize ambiguous information (Eviction Lab, 2022).

As a result of these limitations in eviction court records, the analysis of formal eviction data is time-consuming and resource intensive. The most complete data assembly still results in a likely significant underestimation of formal eviction cases because researchers can't include those records that are missing critical information or those that can't be deciphered. In addition, many other evictions occur outside of the legal system entirely.

#### Informal Eviction

Informal evictions, or extra-legal evictions, are those that take place outside the court system. The fear of a formal eviction filing and the impact an eviction record may have on a tenant's ability to secure housing in the future may motivate tenants to move before their landlord can file an eviction action. Landlords may use intimidation, force, or neglect to either force a tenant to move or enforce rent collection. It is estimated that informal eviction occurs at least twice as often as formal eviction. <sup>11</sup> Therefore, it is essential to develop comprehensive measures of informal eviction to capture the full scope of eviction experiences.

#### Available Data

Data on informal eviction are essential to a complete understanding of the magnitude of housing displacement in the United States. However, informal eviction does not leave behind a formal record, making it difficult to measure. The typical method for capturing informal evictions is through household surveys. One of the first methodological examinations of eviction, including informal evictions, was the Milwaukee Area Renters Study (MARS), which was designed by sociologist Matthew Desmond and administered between 2009 and 2011. The survey contained over 250 questions that captured a range of forced-move experiences (Desmond, 2016; Desmond, 2016b). The MARS approach has since been adapted by national surveys, including the American Housing Survey (AHS). The AHS, which is funded by HUD and fielded by the Census, included a module on eviction in 2017, which adapted questions from MARS (Bucholtz, 2021). This AHS module was the first national-level survey on evictions. The eviction module has not been repeated as part of the AHS due to limitations discussed in the following section. However, the Housing Insecurity Research Module in the 2023 AHS included questions related to forced moves. It asked respondents whether they have received an eviction notice in the past 12 months, whether they are likely to be evicted, and how worried they are about being forced to move. The AHS also currently

<sup>&</sup>lt;sup>11</sup> The results of the Milwaukee Area Renters Study indicate two informal evictions for every formal eviction. Desmond and Shollenberger, 2015. However, the eviction module in the 2017 American Housing Survey found that the ratio of informal-to-formal evictions is even higher at 5.5 informal evictions for every formal eviction. Gromis and Desmond, 2021.

asks about forced moves as part of its questions for recent movers. It asks whether the respondent was forced to move by a landlord, a bank or other financial institution, or the government. However, it does not disaggregate moves related to eviction from other forced moves.

Other national surveys have addressed eviction in various ways. The Household Pulse Survey is an experimental data product from the Census Bureau in partnership with numerous other federal agencies. It began in 2020, in response to the COVID-19 pandemic, with the purpose of measuring how emergent social and economic issues impact households. 12 The current survey, as of July 2024, asks about whether the respondent has ever felt pressure to move and whether they did move as a result of this pressure in the previous six months or will likely have to move as a result of eviction in the next two months. Several other household surveys related to economic wellbeing that are potential sources of informal eviction data are the Annual Social and Economic Supplement of the Current Population Survey (CPS ASEC), which is conducted by the Census and the Bureau of Labor Statistics, and the Survey of Household Economics and Decisionmaking (SHED), conducted by the Federal Reserve Board. The CPS ASEC asks about the reason for a respondent's recent move, and it includes an option to write in a response. The SHED asks renters who recently moved whether the main reason was due to a rent increase and whether any of the following contributed to their move: eviction or eviction notice, landlord told to leave, missed rent payment and feared eviction, or property condemned (Federal Reserve Board, 2023). Other national surveys that include questions on eviction are surveys related to health and social wellbeing. These include the National Longitudinal Study of Adolescent to Adult Health, 13 the Future of Families and Child Wellbeing Study, 14 and the <u>Panel Study of Income Dynamics</u>. <sup>15</sup> These surveys include questions regarding whether the respondent was evicted or the reason for a recent move.

Local surveys have also adapted the MARS questions to measure forced moves. For example, the Poverty Tracker is a longitudinal study of poverty and wellbeing in New York City that began collecting data on eviction in 2017. The survey is conducted by Columbia Center on Poverty and Social Policy (CPSP) and the non-profit organization Robin Hood and surveys a representative sample of New York City households every three to four months for up to six years. It includes questions related to multiple forms of housing turnover, including formal and informal eviction, foreclosure, and condemned buildings. The survey separates informal eviction into two categories, "landlord told tenant to leave" and "missed rent and feared eviction" (Collyer and Bushman-Copp, 2016). A recently launched effort in Philadelphia, the Philadelphia Economy Equity Project (PEEP), is building on the work of the Poverty Tracker. Conducted by the School of Social Policy & Practice at the University of Pennsylvania, PEEP intends to capture experiences of hardship

<sup>&</sup>lt;sup>12</sup> For the complete current Household Pulse Survey questionnaire, see https://www.census.gov/data/experimental-data-products/household-pulse-survey.html.

<sup>&</sup>lt;sup>13</sup> The National Longitudinal Study of Adolescent Health includes a question about whether the respondent has been evicted in Waves I, III, IV, and V. For the complete questionnaires and public use data from each wave of the study, see https://www.icpsr.umich.edu/web/ICPSR/studies/21600/datadocumentation#.

<sup>&</sup>lt;sup>14</sup> The Future of Families & Child Wellbeing Study, formerly known as the Fragile Families & Child Wellbeing Study, is a longitudinal birth cohort study with a sample of about 5,000 children born between 1998 and 2000, with an oversampling of births to unmarried mothers. The study's follow-up parent surveys each include a question about whether the respondent experienced eviction in the previous 12 months. To view each survey questionnaire, see https://ffcws.princeton.edu/data-and-documentation/public-data-documentation.

<sup>&</sup>lt;sup>15</sup> The Panel of Income Dynamics does not specifically ask about recent evictions, but it asks the respondent to provide a reason for a recent move. For all PSID questionnaires and documentation, see https://psidonline.isr.umich.edu/Guide/default.aspx.

not only through survey data, but also by linking administrative data and collecting qualitative data by following a representative group of households for multiple years. The baseline survey was fielded in 2023, and, as of December 2024, PEEP is currently in the field with a follow-up survey wave. The baseline and follow-up surveys both include basic housing questions, and a more detailed mid-year module on housing and employment is in development. Local surveys like these could be an effective vehicle for collecting data on not just informal eviction, but on forced moves as a whole, and they offer an opportunity to get a more complete picture of resident experiences and outcomes.

#### Data Limitations

As measurement of informal eviction relies on surveys, poor survey design risks undercounting experiences of informal eviction. The most significant barriers to collecting survey data on informal evictions include: having a large enough sample size to estimate evictions at a local level; capturing hard-to-reach populations; and asking questions that encompass a respondent's definition of eviction.

For data on informal eviction to be useful in informing interventions on a local level, a survey should provide estimates at the county level or lower (HUD, 2021). Because informal evictions, while significant, have a low incidence rate relative to the general population, a large sample size is essential to capturing higher geographic granularity (GAO, 2024). To provide a representative sample, oversampling of populations that are most vulnerable to informal eviction is also needed to ensure their experiences are represented in the survey data. Previous national survey efforts have not had large enough samples to produce estimates at the county level, nor have they utilized strategic oversampling to capture a representative sample (HUD, 2021). For example, the lowest levels of geography captured by the AHS are some states and 25 metropolitan areas. Furthermore, the sampled units that received the 2017 eviction module were limited to renter-occupied units where the respondent moved from another renter-occupied unit within the past two years. This limited eligibility from 84,879 housing units in the full sample size to 8,600 households. As a result, the survey did not capture enough eviction occurrences to produce reliable estimates (HUD, 2021; Bucholtz, 2021).

Additionally, the populations that are at highest risk of eviction are also the most difficult to reach. Distrust, fear of retaliation, focus on immediate survival needs, and many other factors may lead to nonresponse. Households that have faced eviction may also move frequently or experience periods of homelessness, making them difficult to reach. Thorough interviewer training on both the content of the survey and connecting with respondents, as well as incentives for respondents, can help mitigate these concerns and increase response rate. For example, MARS interviewers received three full days of training during which they studied the introductory script and practiced the interview questions. In addition, interviewers offered respondents a \$20 incentive for participating in the study (Desmond, 2016b). The study's response rate of over 80 percent illustrates the impact these strategies can have on response rate, but adopting them for a national survey would require significant time and resources (GAO, 2024).

Finally, a narrow definition of eviction and respondents' differing interpretations of their specific circumstances can prevent consistent and accurate measurement of informal eviction. Informal eviction can encompass a wide range of actions, from subtle pressure, like neglecting repairs, to more overt actions, like harassment or cutting off utilities. Respondents may have differing understandings of what constitutes eviction and whether it encompasses their experience, leading to inconsistency of responses. Therefore, surveys must not rely on the respondent's interpretation of eviction and should instead include descriptive questions that capture a wide range of actions and situations.

#### Foreclosure

Foreclosure is the forced sale of a home resulting from the owner's failure to pay some type of financial liability, e.g., mortgage payment or property tax. The processes across jurisdictions and types of foreclosure vary significantly. This section will provide an overview of the typical legal processes for mortgage and property tax foreclosures, as well as the available data and data limitations for each.

#### Mortgage Foreclosure

Mortgage foreclosure is the forced sale of a home by a lender after a homeowner has been delinquent on mortgage payments. There are two types of processes for mortgage foreclosure: judicial and nonjudicial foreclosure. About half of U.S. states require judicial foreclosure, which involves court supervision throughout the foreclosure process. Following several missed payments, the lender files a Complaint against the borrower, seeking permission to foreclose, following which the borrower has an opportunity to respond. If the court ultimately finds in favor of the lender, it will issue a judgment of foreclosure and set a date for the sale of the property. Nonjudicial foreclosure does not require court involvement, and the lender can proceed based on the terms in the mortgage agreement, provided it is allowed under state law. The lender will typically issue a Notice of Default to the borrower. If the borrower fails to cure the default, the lender will issue a Notice of Sale, which includes when and where the property will be sold. Properties are typically sold at public auction.

Collecting detailed data on mortgage foreclosure can inform policy decisions aimed at preventing foreclosure and helping homeowners cure their delinquencies. Detailed data would allow states to effectively allocate resources towards efforts such as implementing new or evaluating existing loss mitigation, borrower counseling, and loan modification programs. Additionally, because foreclosure processes vary significantly depending on state law, collecting detailed data on mortgage foreclosure creates an opportunity to compare the impact of different processes on borrowers.

#### Available Data

Researchers can access mortgage foreclosure data from a variety of sources, including surveys, administrative data, reporting from federal programs, court records, administrative data held by sheriff's offices or other county offices, and privately held repositories from data aggregators like CoreLogic, ATTOM, and Black Knight.

National data is primarily collected through surveys. The <u>National Mortgage Database Program</u> (NMDP), funded and managed by the Federal Housing Finance Agency (FHFA) and the Consumer Financial Protection Bureau, is a nationally representative five percent sample of residential mortgages in the United States, collected through a monthly survey (FHFA, n.d.). The sample includes conventional loans and government-insured loans. Data is available for the nation, census regions, states, and 100 metropolitan areas, and performance data includes loans in the process of foreclosure, bankruptcy, or deed-in-lieu of foreclosure (CRS, 2023; FHFA, 2024). The Census' Household Pulse Survey also provides estimates for the nation, states, and the 15 largest MSAs by tracking the previous month's payment status for owner-occupied housing units and the likelihood of having to leave the house in the next two months due to foreclosure (Census, 2024a). The Housing Insecurity Research Module of the 2023 AHS asked respondents if they received a foreclosure notice in the past 12 months, whether their home was currently in foreclosure, and where they would go if they had to leave their home due to foreclosure. The AHS also

currently asks as part of its questions for recent movers whether the respondent was forced to move by a landlord, a bank or other financial institution, or the government. The SHED, conducted by the Federal Reserve Board, asks whether one of the following foreclosure-related experiences contributed to a respondent's move in the last year: bank took possession of home in foreclosure, received bank notice of plan to foreclose, and missed mortgage payment and fear of foreclosure (Federal Reserve Board, 2023). One nongovernmental survey is the <a href="National Delinquency Survey">National Delinquency Survey</a>, which is a survey of mortgage servicers conducted by the Mortgage Bankers Association. It provides quarterly delinquency and foreclosure data at the national, regional, and state levels for almost 40 million first-lien mortgages.

Federal administrative data provides performance data for government-owned or government-backed loans. For example, the FHFA produces monthly and quarterly reports on enterprise mortgage performance and delinquencies, including state-level foreclosure starts and sales. The Federal Housing Administration and the Department of Veterans Affairs also both report foreclosure data for mortgages in their portfolios (CRS, 2023).

Local mortgage foreclosure data is available through public records, such as court records or data from other county offices, or through private data providers, whose data may be accessible for a fee. For judicial foreclosures, researchers may be able to access foreclosure data through court records, either those requested directly from a court or made available on a public website. For example, Polis Center obtained Indiana foreclosure data through a data request with the Indiana Supreme Court through the Court's public case records portal (Polis Center, n.d.). For both judicial and nonjudicial foreclosures, data may also be available from county offices such as sheriff's offices, GIS offices, county recorder's offices, or county treasuries. Foreclosure filings, notices of default, and auction details are often recorded at the county level and may be accessible from one of these sources depending on the jurisdiction.

However, as with eviction data, accessing and compiling publicly available foreclosure data is time-consuming. Therefore, private data aggregators are a commonly used source of mortgage performance data. ATTOM, CoreLogic, and Black Knight are three such companies with coverage of foreclosures nationwide ranging from 75 (CoreLogic) to 99 (ATTOM) percent (CRS, 2023). Each of these companies offers paid options for accessing their loan-level databases, analyses, and proprietary tools and platforms. They each have data for every step of the foreclosure process, including notice of default, filing, auction outcomes, and reversion of ownership to the bank (REO properties). For example, DePaul University's Institute for Housing Studies maintains a public Housing Market Indicators Data Portal that includes foreclosure filing and auction data, including those resulting in REO. The data originated with the Cook County Clerk's Office, but the Institute acquired it from Property Insight, a company that provides title research services (DePaul University, n.d.). As these companies primarily serve real estate professionals such as mortgage lenders, servicers, title companies, and investors, they are often the most detailed and comprehensive sources of loan-level data available.

#### **Data Limitations**

There are several challenges associated with collecting, accessing, and analyzing mortgage foreclosure data. Unlike formal eviction data, which is primarily pulled from court records, mortgage foreclosure data may come from a multitude of sources, including court records, lenders, or various county offices. Which sources are available is in part dependent on whether a state requires a judicial or non-judicial process. For example, Indiana requires judicial foreclosure. Therefore, Polis Center can assemble foreclosure data through court records. However, in Arizona, most foreclosures are non-judicial. As a result, to obtain the

most complete data, KER obtained foreclosure data by purchasing it from ATTOM. In localities that allow either process, researchers may have to engage with multiple local government offices and access multiple databases to compile a comprehensive dataset for one jurisdiction.

In addition, the same barriers that impact the accessibility and usability of eviction data are present in mortgage foreclosure data as well. Court and county records may be provided in a format that requires significant processing and cleaning before analysis is possible. The amount of variation in local processes not only impacts which entity initially records the data, but also how it is reported, which makes processing the data particularly important and time-consuming. States differ in their requirements relating to not only judicial and non-judicial foreclosures, but also the types of notices required, types of sales permitted, and whether or not there is a redemption period following the foreclosure sale. This complexity results in a long list of potential outcomes of the foreclosure process, including deed in lieu of foreclosure, short sale, public auction, REO, or, in rare cases, redemption. Furthermore, different localities may use different terms to describe the same stage of the process or outcome, or they may use the same term to describe slightly different processes or outcomes. All this variation in what information is collected and how it is recorded and reported across jurisdictions makes it difficult to compile comprehensive and reliable datasets.

Consequently, researchers often purchase data from private data aggregators that specialize in detailed property data. These companies offer up-to-date, consistent, and standardized data. However, access to these proprietary databases can be expensive, and the cost may be prohibitive for smaller organizations or even some local governments. These entities also may have commercial interests that influence what metrics they track and which markets they cover. Therefore, some of the data that would best inform policy may be missing.

#### Tax Foreclosure

Tax foreclosure is the sale of a property or lien on a property resulting from the owner's failure to pay their tax liabilities, typically their property taxes. States fall into two different categories of processes for dealing with delinquent property taxes: tax lien sales or tax deed sales. Like mortgage foreclosure, tax foreclosure can also operate through either a judicial or non-judicial process. In some jurisdictions, both options are available. (Local Housing Solutions, 2021).

As of 2023, 23 states exclusively allow tax deed sales, 17 states and D.C. exclusively allow tax lien sales, and 11 states use both or a hybrid of the two (LaPoint, 2023). The lien is represented by a tax lien certificate, which may be sold through a public auction. Upon sale, the authority to enforce the lien is transferred to the lien purchaser. The redemption period during which the original owner can pay off the lien plus accrued interest and maintain possession of the property ranges from six months to four years, depending on the state. Following the redemption period, the lien holder may initiate a judicial foreclosure proceeding. In a tax deed sale, the government sells the property itself, rather than a lien on the property, to recover the outstanding taxes. This sale also takes place through a public auction with a minimum bid of the amount of back taxes owed, plus interest and costs associated with selling. The redemption period for tax deed sales is typically much shorter than for tax lien sales (Local Housing Solutions, 2021).

Comprehensive collection, reporting, and analysis of tax foreclosure data could inform policy decisions related to tax relief programs and the foreclosure process. Within local jurisdictions, understanding the demographic and geographic distribution of tax foreclosure may aid in resource allocation. In addition, differences in outcomes across jurisdictions may provide insight into the impact of the type of process

utilized, i.e., tax deed or tax lien sales, or of different variations in the process, such as adequate notice and redemption rights.

#### Available Data

Tax foreclosure data is primarily available only at the local level. While there is some aggregation of data by private companies, there are no publicly available governmental centralized repositories (Robustelli et al., 2020). Several third-party data vendors, such as CoreLogic, Tax Sale Resources and PropertyRadar, aggregate data on tax sales nationwide and offer subscription-based services that provide historical data on tax lien and tax deed sales as well as redemptions. However, these companies primarily serve investors, and therefore their data may not align with the needs of researchers or policymakers.

Local data sources include court records and information collected by county offices that are responsible for collecting property taxes and managing delinquency and foreclosure, typically the county tax assessor or the county treasurer's office. These offices typically make public information on properties in the foreclosure process and upcoming auctions, as well as auction results. Lists of properties up for public auction are often also available through the sheriff's office. Some larger cities may have their own tax collection offices independent of the county that make public similar information.

While ongoing efforts to assemble and make tax sales data publicly available remain limited, there has been research in the last few years that compiles tax sale records over the post-2000s period. One of these projects, led by economist Cameron LaPoint, aggregated tax foreclosure across multiple jurisdictions. LaPoint developed a nationwide database of local tax sales in major U.S. metropolitan areas with the purpose of examining how property tax delinquencies facilitate real estate investment by limited liability companies (LLCs) and institutional investors. LaPoint compiled these records by scraping administrative records of tax sales from county tax office and treasury websites and merging them with data from CoreLogic, which contains flags for local tax liens and mortgage foreclosures (LaPoint, 2023). LaPoint's work to create a database with coverage beyond major metropolitan areas is ongoing.

However, most research to date has been focused on the impact of tax foreclosure in a single city. For example, Loveland Technologies <u>mapped</u> every tax foreclosure in Detroit, Michigan between 2002 and 2016. The 2002-2013 data were assembled from a database hosted on Data Driven Detroit, and the 2014-2016 data were assembled from Loveland's own auction tracking. The Data Driven Detroit data was acquired from the Wayne County Treasurer's tax foreclosure auction list (Urban, n.d.). Although the research team did not identify any public databases that assemble up-to-date tax foreclosure data on an ongoing basis, these examples offer insight into the data sources available for such an effort.

#### **Data Limitations**

As with other housing turnover data, data availability and quality can vary significantly across jurisdictions. Given the variability in the data, compiling a comprehensive and accurate dataset requires a thorough understanding of the local jurisdiction's processes and the data maintained by different offices.

One other major limitation in tax foreclosure data is that the percentage of homeowners that are displaced may be low. During a tax deed sale, the purchaser gains title to the property itself, but a tax lien purchaser receives the right to repayment of the lien or to foreclose on the property in the absence of payment (Local Housing Solutions, 2021). Data on tax lien sales sheds light on how many people enter the tax foreclosure process, but the exact rate of homeowners that pay off their back taxes and retain ownership following a tax

lien sale is unknown, and research offers varying opinions (Robustelli et al., 2020). In addition, many tax delinquencies are the result of the owner abandoning the property, in which case, foreclosure itself would not result in household displacement (Eisenberg et al., 2019). To understand the number of households displaced as a result of a tax lien foreclosure, it is necessary to compile data for not only tax lien sales but also subsequent foreclosure or eviction proceedings or real estate transactions.

#### Natural Disasters

Natural disasters, unlike evictions and foreclosures, often result in people losing their housing as well as destruction of the housing unit itself. This section will focus on sources that provide data on disaster-driven household displacement, although data collection on loss of housing stock also informs the understanding of displacement when information on household moves is not available.

Another difference between natural disasters and other forms of housing turnover is the need to define when displacement should be considered housing turnover. A household may be displaced from their home for a short or long period of time, and they may or may not return to their home. It is important to have a clear definition of housing turnover, whether that includes only those households who never returned to their damaged or destroyed home or if it may include those households that were displaced for a certain amount of time and did return home.

Data on disaster-driven household displacement could provide useful insights into demographic and geographic disparities in the impact of natural disasters. This data would aid policymakers in making decisions regarding allocating resources, anticipating needs for emergency assistance, and evaluating disaster response efforts.

#### Available Data

The most comprehensive data specifically related to household displacement resulting from natural disasters come from surveys. The Household Pulse Survey began asking questions about displacement due to a natural disaster in December 2022 (NLIHC, 2023). The survey asks if the respondent was displaced from their home in the past year because of a natural disaster, the type of disaster, and how long they were displaced from their home, including an option for never returning to the home (Census, 2024). The American Housing Survey asks about recent moves and whether the respondent was forced to move because of a natural disaster or fire. It then asks about the specific type of disaster, including fire, earthquake, tornado, hurricane, landslide, flood, or other (HUD, 2023). The Annual Social and Economic Supplement of the Current Population Survey asks about the main reason for a move, which includes an option for natural disasters. Finally, the SHED, from the Federal Reserve Board, asks about natural disaster-related experiences, including property damage, need to evacuate temporarily, and longer-term displacement from the home (Federal Reserve Board, 2023).

Although administrative data from the Federal Emergency Management Agency (FEMA) is primarily used to determine loss to the housing stock, some information can be inferred about household displacement. For example, FEMA's Individuals and Households Program provides housing assistance to homeowners and renters, which may include funding for temporary housing or repair or replacement of owner-occupied homes, and other needs, such as funds for replacing damaged essential household items or for disaster-related child-care expenses (FEMA, n.d.). <a href="OpenFEMA">OpenFEMA</a>, FEMA's open data portal, provides Housing Assistance Program Data for both owners and renters. For each group, the datasets provide the number of

applicants approved for assistance nationally by ZIP code. It also provides the total amount of assistance, including rental assistance and repair or replacement assistance approved in dollars. <sup>16</sup> However, the datasets do not include the number of applicants approved specifically for rental assistance (FEMA, 2024). Therefore, while this data provides how much of FEMA's household assistance is for rental assistance, it does not specify the number of households receiving rental assistance, which would better help understand the scope of disaster-driven displacement. As described in the section on Cross-Cutting Data on Residential Moves, USPS data can also be used to measure residential mobility and neighborhood change post-disaster (Din and Richardson, 2024).

#### **Data Limitations**

The overarching limitation of data on disaster-driven displacement is that many current estimates are derived from data collection on housing damage, and displacement is assumed (Paul et al., 2023). These estimates do not capture the duration of displacement, which is essential for determining the scope of housing turnover. For example, even if FEMA's household assistance data provided the number of applicants approved for rental assistance, this would not capture the length of time the households were displaced. Much of the other data on residential mobility, including federal as well as private sources, are not cause-specific but can be combined with information on natural disasters to approximate possible displacement associated with a disaster by comparing pre- and post-disaster move-out rates.

Similarly, survey respondents may have differing definitions of displacement and may not include a short-term displacement in their responses. Therefore, it is essential to follow any questions regarding displacement resulting from disaster with questions regarding the length of time the household was displaced or an intent to return to the damaged home.

#### Other Unforeseen Events

The ways in which people lose their housing are not limited to eviction, foreclosure, and natural disasters, although these are the forms of housing turnover that are the best understood and most studied. Housing turnover may also result from other unforeseen events such as heirs' property partition sales and eminent domain takings. The current data sources on these forms of housing turnover are primarily the result of limited administrative data collection and one-off research efforts. However, in order to gather a comprehensive view of the scope of housing turnover, it is important to include events like these in data collection efforts.

#### **Eminent Domain Takings**

Eminent domain is the government's taking of private property for public use with compensation to the property's owner. State legislatures may delegate eminent domain authority to state or quasi-public entities, including housing, transportation, or urban renewal authorities, as well as local governments, which may also further delegate their authority (GAO, 2006). Some states also grant eminent domain authority to private companies, like utility companies. Some purposes for the use of eminent domain include building roads and other transportation infrastructure and building state and municipal facilities. The process generally begins with land valuation, a formal offer to the owner, and an attempt to negotiate purchase of the property. If the authority cannot locate the owner, the owner does not agree to sell, or other

<sup>&</sup>lt;sup>16</sup> Although FEMA data refers to "rental assistance," temporary housing funds can be used for rental assistance or reimbursement of hotel costs.

circumstances arise preventing the sale, the government can begin a formal legal process to acquire the property.

Eminent domain data can sometimes be extracted from court records. For example, the Colorado Judicial Branch publishes an annual statistical report, which breaks down district court civil case filings by type, including condemnation cases (Colorado Judicial Branch, 2024). However, in state court, while condemnation cases would include eminent domain cases, they would also include those buildings condemned for safety reasons. Furthermore, the report does not provide any information regarding the outcomes of the cases or the addresses impacted. The federal government compiles similar data for federal courts, and in federal court, a condemnation case represents the federal government's exercise of eminent domain (DOJ, n.d.). The Administrative Office of the U.S. Courts provides summary data that includes the number of condemnation-of-land cases that occurred during the reporting period (U.S. Courts, 2024). This data offers some insight into the number of annual eminent domain takings by the federal government. However, court records only include those situations in which legal proceedings were necessary and not those where the owner agreed to sell.

Records of the use of eminent domain may also be captured by administrative data of the entity exercising eminent domain, which varies depending on the purpose. The entity could be the state department of transportation, the local transit authority, state or local development corporations, park districts, school districts, and other government entities that have eminent domain authority. However, these entities do not typically compile and make public data on their use of eminent domain. When they do, the data are not sufficient to determine the number of people displaced because of eminent domain. For example, the Texas Comptroller requires all entities with general or specific authority to exercise eminent domain to submit information annually about the purpose of their authority, when it was acquired, and whether they have exercised it in the previous year (Texas Comptroller, n.d.a.). However, the database does not include the number of times an entity exercised its eminent domain authority or the impacted addresses (Texas Comptroller, n.d.b.).

Estimating housing turnover resulting from eminent domain takings also presents its own set of definitional questions. Because the property owner is compensated for the taking, their displacement may not be considered housing turnover, even though it is forced. Conversely, if the property is a multifamily building, the residents who lose their homes and are not compensated for them may not currently be represented in eminent domain data but are important to include in an estimation of housing turnover. A broad housing turnover data collection effort would need to confront these foundational questions.

#### Tangled Titles and Heirs' Property

Tangled Titles, referred to in some locations as "heirs' property," are situations in which the deed to a property bears the name of someone other than, or in addition to, the apparent owner. This issue can happen in several ways, but it commonly occurs when property is passed to family members by inheritance without a will or other estate planning. Property ownership may not automatically transfer, leaving the property in the deceased's name. Alternatively, the property may pass to multiple heirs, each of whom has a right to use the property but doesn't have clear or marketable title. Any of these individual owners can force a partition sale. Tangled titles make owners vulnerable to a third-party investor acquiring a small share of the property to force a sale and acquire the entire property, potentially for a price well below fair market value. This third-party acquisition can result in the displacement of those living in the home (Uniform Law Commission, 2010).

Tangled titles also leave residents at risk of housing turnover due to lack of access to assistance programs for repairs or property tax relief. For example, heirs may not receive notice of overdue property taxes because they are not the owners of record, and by the time they do learn of the amounts due, the taxes are often too high to pay all at once. If their name is not on the deed, they may not be able to access property tax relief options that would prevent foreclosure on the home (Bopp Stark and Williamson, 2023). Similarly, following a disaster, owners may be required to submit proof of ownership to access disaster recovery funding (Housing Assistance Council, 2023). Clearing a title and completing the probate process can be time-consuming and expensive. If long-time residents of a home are unable to obtain clear title, they risk losing their home altogether.

Although there has been an increasing amount of research on this topic in the last few years, there are few data collection efforts related to heirs' property generally, let alone on forced partition sales or foreclosures on the property. Data collection efforts have also mostly been one-time research efforts rather than ongoing data collection. The United States Department of Agriculture (USDA) developed a methodology for identifying land parcels that have an increased probability of being heirs' property using data from county-level taxing authorities (Pippin et al., 2017). Similarly, the Housing Assistance Council, with assistance from Fannie Mae, estimated the prevalence of heirs' properties nationally using tax assessment data (Housing Assistance Council, 2023). The Pew Charitable Trusts conducted research in Philadelphia, Pennsylvania estimating that there are at least 10,407 tangled titles in Philadelphia (Hincken, 2021). While these efforts have shed light on the scope of tangled titles and heirs' property, more research and data collection are necessary to understand the risks of housing turnover and that result.

## **Local Best Practices**

Consultation with local entities illuminated the need for a robust set of practices at the local level to successfully collect, assemble, and make housing turnover data public. Insights from these local initiatives revealed best practices across four primary areas: a commitment to open data, standardization, communication and engagement, and data governance.

## Commitment to Open Data

Strong open data policies are essential for access to housing turnover data. Housing turnover data is often held in silos across various city or county departments, court systems, and non-governmental organizations. Without open data policies, both institutional barriers, such as cumbersome court protocols, and cultural barriers, such as adversarial relationships between offices, can make it difficult to access data. Furthermore, successful open data efforts require consistent communication and collaboration among different systems (Lee et al., 2022).

In the data projects undertaken by the localities and organizations consulted, evidence of successful open data policies includes a combination of willingness to share datasets, often by the court system, and the availability of publicly searchable platforms. For example, the Polis Center shared that the State of Indiana has a strong data transparency policy. The Indiana Supreme Court maintains a public platform where users can search filings and access almost any publicly available documents. The Polis Center was able to acquire much of its needed eviction and foreclosure data through the portal. The court was also willing to provide additional eviction judgment data directly to Polis Center, which required some data cleaning by the court.

Another important aspect of an open data policy is access to real-time data. For example, Hennepin County, Minnesota has a data sharing agreement with the county court system where the County receives weekly extracts of eviction data. The City of Alexandria, Virginia also accesses weekly data. Alexandria was unable to acquire real-time data directly from the Virginia Supreme Court, but the court maintains a public database that is updated regularly. Therefore, Alexandria has been able to compile real-time data by building a scraping program to extract eviction data from the database weekly. This program has been crucial for the Alexandria's work using its eviction data as the original purpose of the effort was to use the data to inform the distribution of Emergency Rental Assistance Program funds, requiring up-to-date information.

#### Standardization

Standardization in both data entry and analysis enhances data usability and comparability across communities and regions. A current lack of standardization limits the ability to study and track housing turnover, particularly for forms of turnover that rely on court data. New America's "Displaced in America" report notes that housing data is not standardized at a national or even state level (Robustelli et al., 2020).

Consulted entities noted that clear and consistent coding at the court level would be the best way to standardize data collection to allow for aggregation. In state court systems that use a single case management system, court data is more likely to be standardized across all jurisdictions, making it easier to aggregate court data. For example, the State of Indiana connects its over 400 trial courts across 92 counties using a single, statewide case management system that creates consistency and greater access

across jurisdictions while supporting county-specific rules (Indiana Judicial Branch, n.d.). States may also require standardized reporting of local court data to a central entity, regardless of how the information is recorded in the court's case management system (Pew Charitable Trusts, 2023). For example, Florida requires state trial courts to report case data to the Office of the State Courts Administrator using its Uniform Case Reporting (UCR) system. If a court's case management system does not collect one of the data elements required by the uniform case reporting system, the data must be derived from multiple fields, and if the data can't be determined, updates may be required to the case management system (Florida OSCA, n.d.). Therefore, when the Shimberg Center receives eviction filing data, it is standardized across jurisdictions. However, standardization is much more difficult when states use multiple systems across jurisdictions and don't have centralized reporting (GAO, 2024).

When it is not feasible to standardize at the court level, it is important to have definitions and explanations of terms to make comparisons across jurisdictions possible. For example, the City of Alexandria includes definitions for different court orders and parts of the legal process in its eviction dashboard. Other communities noted that it is also helpful to have standard tools and methods of analysis, which allows them to see comparable county or state data in the same format. For example, KER at Arizona State University used New America's Foreclosure and Eviction Analysis Tool (FEAT). FEAT is a web-based data tool that processes and analyzes address-level housing loss data, links demographics and socioeconomic data from the ACS, and produces summaries of housing loss over time (New America, n.d.). The resulting geocoded datasets are standardized, enabling comparison across jurisdictions.

## **Engagement and Communication**

Open communication and input from stakeholders throughout the data collection process can increase the usefulness of and trust in housing turnover data. It is important to gather input from a diverse group of stakeholders beginning with engagement regarding the determination of appropriate measures. For example, in developing the Hennepin County eviction dashboard, the team sought input from landlords, tenants, court staff, and other stakeholders to make sure that the dashboard would produce data that was relevant to stakeholders. It is also important to engage these and other stakeholders as subject matter experts who can help researchers understand the indicators and interpret the data. On-the-ground expertise is valuable because the processes involved in different forms of housing turnover vary significantly across jurisdictions, particularly when there is court involvement. It takes local knowledge to understand the resulting data. One example of local expertise in practice is from KER in developing the Arizona Eviction and Foreclosure Dashboard. The research team included an attorney with substantial experience with evictions in Arizona who was able to educate others on the specific steps and orders involved in the formal eviction process. The courts providing the data also made a staff person available to KER to help support the effort and interpret court filings. These partnerships with subject matter experts are essential to both defining indicators and understanding the assembled data.

Stakeholder engagement not only ensures that data measures housing turnover accurately, but it also builds trust in the data and develops the buy-in that is necessary to drive policymaking. Trust building efforts vary depending on the specific stakeholder and their existing relationship with the individuals or entity conducting the research; however, some amount of relationship building is usually required before presenting the data. For example, Polis Center staff hosted meals with advocates and other stakeholders to discuss housing issues generally before inviting them to a forum to discuss the Indiana Eviction and

Foreclosure Dashboard. KER staff traveled to different cities around Arizona and presented the relevant local data at each stop. Illustrating the relevance of the data to each community has encouraged action. The subject matter experts engaged during indicator formation and data interpretation are also a valuable resource for communicating the data.

#### **Data Governance**

With the rise of open data and increased access to housing turnover data, researchers must address the challenges presented at the intersection of transparency and privacy, particularly when the data involved can impact an individual's future access to housing. Good data stewardship not only protects the privacy of sensitive information but can also foster greater support for data collection efforts. Many of the consulted entities discussed the important balance between making data public (while protecting the privacy of the individuals whose data they are utilizing) and complying with record sealing and expungement laws.

In some cases, data privacy protections were required by privacy or expungement laws. Particularly regarding evictions, there has been an increase in state legislation related to sealing or expunging court records (Lake and Tupper, 2021). Currently, ten states have active legislation that addresses the sealing or expunging of eviction records, and other states and localities have similar pending legislation (Hussein et al., 2023). When records are sealed or expunged, they may have already been previously provided to or accessed by third parties, such as consumer reporting agencies or researchers, and sealing or expunging them does not automatically remove the records from these third-party sources (ABA, 2018). Therefore, researchers must be well-versed in the state and local laws impacting the data they are using and ensure their data governance practices account for removing or anonymizing sealed or expunged records. For example, Hennepin County staff work within the requirements of the Minnesota expungement law by going through eviction data each week and extracting the newly expunged evictions from the dataset. This practice not only ensures that individuals with expunged evictions are fully protected, but also that the dashboard is accurate.

Regardless of current legislative protection of records, researchers should have practices in place to protect personal and sensitive information. For example, City of Alexandria staff noted that while it is important to have data publicly available for analysis, there is also a need to be a good steward of the data and store it safely. To that end, although Alexandria receives data from the local sheriff's office, which contains eviction execution data and includes names and addresses, this data is not included in the public-facing dashboard. Alexandria instead only shares this data directly with service providers, including eviction diversion providers, housing providers, and homelessness/Continuum of Care providers, when necessary. Similarly, research staff from the Columbia Center on Poverty and Social Policy shared that their number one priority in conducting the Poverty Tracker survey is protecting the privacy of respondents. Everything included in the public use data has been scrubbed of highly sensitive information, such as geographic identifying data. They allow users to access more sensitive data only through data use agreements.

## Considerations for Federal Collection and Analysis of Housing Turnover Data

The Senate Report directed HUD to explore how local best practices might inform federal data collection and a standardized measure of housing turnover. Discussions with entities assembling or collecting state or local housing turnover data, as well as review of public materials describing these and other local, state, and national efforts, underlined the importance of granular local data in understanding housing turnover in a community. Obtaining data at the smallest geographic unit possible is crucial for localities measuring the impacts of local policies or determining the distribution of scarce resources.

Federal survey data collection on its own may not feasibly provide the same level of detail as local administrative or survey data, but it would fill many of the gaps left by local data collection. For example, it would offer standardized national data. In addition, federal survey data would be available for communities that do not currently have the capacity or resources to assemble their own local data. As a result, federal survey data would provide greater opportunity for comparison across jurisdictions. In addition, a survey could include questions about forms of housing turnover that are more difficult or impossible to measure through administrative data, such as informal eviction. A combination of federal, state, and local data and a combination of survey and administrative data is the best path towards a more complete understanding of the scope and drivers of housing turnover.

The remainder of this section begins by outlining the potential avenues for assembling housing turnover data nationally, including through federal collection of housing turnover data via survey and validation using administrative data from all levels of government. This is followed by potential roles for the federal government beyond data collection that would support local measurement of housing turnover.

#### Federal Data Collection

Assembling housing turnover data nationally would likely require the federal government to engage in its own data collection efforts, most feasibly using an existing Census survey. As described in previous sections of this report, there are several surveys that already address related housing issues like housing stability, rent burden, and recent moves. Each offers its own set of tradeoffs between geographical precision, scope, and frequency. Regardless of the path for federal data collection, validation using administrative data will be crucial to ensuring the accuracy of federal survey data.

## Federal Surveys

#### American Community Survey

Of the existing surveys conducted by Census, the ACS offers reliable data at the smallest geographic level, though block group and census tract data are only available at the 5-year level. The 1-year ACS data is available down to the county level (Census, 2020). The ACS is the only Census demographic survey that allows for county level estimates. The ACS currently includes housing questions related to the type of building a respondent lives in, when the building was built, the number of rooms in the housing unit, utility costs, rent or mortgage costs, tax and insurance costs, and housing quality. In relation to moves, the ACS currently asks when the respondent moved into the home and whether the move was within-county,

within-state, from a different state, or from abroad (Census, 2024b). Adding a follow-up question regarding the reason for the move would offer significant insight into housing turnover across the country.

However, while the ACS would offer the most geographic granularity, it also has the most extensive content development process, and adding a question is a multi-year process. Adding a question to the ACS requires a proposal from a federal agency, and the proposing agency must show that it needs frequent data at small geographies, that no other sources of information are available, and that the agency's mission would be compromised if the question is not added. The Office of Management and Budget and Census need to determine that the request merits further consideration, and the process involves extensive testing, review, and evaluation over a five-year period (Census, 2017). Therefore, while the ACS would offer the most granular data, it is a very expensive and time-consuming approach.

An additional drawback of the ACS is that it is a cross-sectional survey, which means that it samples a new group of people each time it is conducted. By contrast, a longitudinal survey follows the same individuals, households, or housing units over time. A cross-sectional survey provides a snapshot of a population at one point in time, which limits insights into casual relationships. A longitudinal design allows a deeper understanding of how and why housing turnover might occur and the longer-term outcomes related to housing turnover for the sampled population.

#### American Housing Survey

Another survey option is the AHS, which is sponsored by HUD and conducted by Census and is a longitudinal survey of housing units. The AHS does not offer the same granularity as the ACS; the lowest levels of geography currently captured by the AHS are some states and 25 metropolitan areas. Beginning in 2025, the AHS will produce estimates for 17 states and 20 metropolitan areas. However, adding additional questions related to forced moves to the AHS is more feasible and has been done in the past. The 2007-2013 waves of the survey asked if the respondent's most recent move was due to eviction. Asking about eviction allows some insight into the turnover of households. However, this question did not distinguish between formal and informal eviction (Bucholtz, 2021; Gromis and Desmond, 2021).

In 2017, the AHS included an eviction module with questions adopted from the MARS eviction questions, which were designed to capture both formal and informal evictions. HUD has not made the data from the 2017 eviction module available for public use due to the potential under- or over-estimation of formal evictions (GAO, 2024). The potential under- or over-estimation is likely because the module did not have a large enough sample size to reliably estimate the prevalence of eviction. Eligibility to receive the eviction module questions was limited to those respondents who recently moved from a prior residence at which they were a renter, regardless of whether anyone else in the household recently moved. Furthermore, even if the respondent had moved as a renter and was eligible to receive the module, any other movers in to or out of the household were not captured (HUD, 2021). These limitations and sample size concerns would need to be addressed in any future development of an AHS module designed to capture housing turnover experiences. Currently, the AHS includes several questions on forced moves among its questions for recent movers. It asks whether the respondent was forced to move by a landlord, a bank or other financial institution, or the government. However, it does not disaggregate moves by the specific type. The only reason for moving it asks about specifically is disasters. It asks whether the respondent was forced to move because of a natural disaster or fire and about the type of disaster.

A general constraint with the AHS is that, although it is a longitudinal survey, it follows housing units, not people. Housing turnover, as defined in this report, is a people-centered issue, and following individuals rather than housing units would better capture how individual-or household-level events and changes over time impact housing turnover. Following individuals would also allow researchers to document the sample population's housing trajectories, including persistent housing instability. A survey that follows people would be better situated to capture turnover experiences over time as well as different types of housing turnover.

#### Survey of Income and Program Participation

One example of a household-based longitudinal survey is the <u>Survey of Income and Program Participation</u> (SIPP), which is sponsored and conducted by Census. SIPP is a nationally representative survey that focuses on the dynamics of income, employment, household composition, and government program participation. Individuals are interviewed annually over several years regarding many topics related to economic wellbeing. When a sample member moves to a new address, interviewers attempt to locate them and continue interviewing them annually at their new address, along with other household members who live there. If the entire originally sampled household moves, the interviewer tries to follow each household member to their new address or addresses.

The SIPP includes a section on residence, which collects information about an individual's residence history throughout the year. It includes questions about where the respondent has lived, how long they have lived at the current residence, why they moved there, tenure status, type of living quarters, and receipt of housing assistance (Census, 2023a). The SIPP asks about the primary reason for the respondent's move to their current address and allows the respondent to select one of the following: "disaster loss (fire, flood, hurricane, etc.)," "eviction/foreclosure," or "other reason (specify)" with an opportunity to provide additional information (Census, 2023b). Additional housing turnover data could be gathered by adding other response options for reasons for moving and allowing respondents to pick more than one reason.

A significant drawback of the SIPP is its small sample size. With smaller sample sizes, SIPP provides estimates only at the national level and for select states.

#### Household Pulse Survey

Another key consideration is the frequency of the survey. A dynamic measurement of housing turnover would best capture the impacts of policy and the drivers of turnover. The AHS is conducted every other year, and the SIPP and ACS are conducted annually. The only Census instrument conducted more frequently than annually is the Household Pulse Survey (HPS). At the time of writing, Census is redesigning the HPS and will relaunch it in January 2025 as the Household Trends and Outlook Pulse Survey (HTOPS) (Census, 2024c). The HPS content will be incorporated into the HTOPS, which will have a longitudinal design (a change from the HPS' cross-sectional design), with data collected every other month and released at a national level. Similar to the SIPP, while the HPS lacks geographic granularity, the specificity of its questions provides detailed insight into housing dynamics.

The new panel will start with the housing questions that were on the HPS. These included questions about displacement due to a natural disaster, including the type of disaster and how long the respondent was displaced from their home. The HPS also asked whether the respondent felt pressure to move in the previous six months due to any of the listed reasons, with an option to select all that apply and add a

written response, and whether the respondent did move as a result.<sup>17</sup> Finally, the HPS asked about the likelihood of the respondent needing to leave their current home in the next two months because of eviction or foreclosure. These questions offer a good foundation on which to base one or several questions relating to housing turnover.

The potential paths for the collection of survey data related to housing turnover are not limited to those surveys discussed in this report. These examples are intended to illustrate the considerations and tradeoffs necessary for determining the best approach. Other Census survey instruments may be appropriate for understanding housing turnover, and Census and HUD would need to engage in additional conversations to determine the best channel for a survey of housing turnover.

#### Small Area Estimation

The limitation of surveys like the SIPP and the HTOPS (currently the Household Pulse Survey) is that they have a smaller sample size than both the ACS and AHS and are representative only at the national level, although the SIPP offers reliable state-level estimates for select states. However, these surveys or another survey designed for national estimates could be supplemented using small-area estimates. Census has experience conducting small-area estimations for surveys that do not produce reliable direct estimates at the county or state level (Census, n.d.). Small-area estimation uses statistical modeling to borrow strength from larger surveys or other data sources in order to produce more granular, indirect estimates from national surveys. For example, small-area modeling can be used to borrow strength from ACS estimates to improve estimates from smaller surveys like the SIPP, the HTOPS, or the Current Population Survey (Census, n.d.). The SIPP program is already working on the development of small-area estimates based on current SIPP content (e.g., wealth, work arrangements, assets, and program use), leveraging ACS and administrative data. Therefore, if additional housing turnover content was added to the SIPP, small-area estimation could provide a framework for improving granularity, which ensures that the cost of data collection remains sustainable.

### Ongoing Need for Administrative Data

While federal survey data collection may provide the framework for a standardized and comprehensive measure of housing turnover, administrative data remains an important tool for accurately and comprehensively assessing turnover. Administrative data at all levels of government can be used to validate and fill in the gaps of national survey data to help develop estimates for smaller areas or with greater frequency. Triangulating data sources could also be useful in capturing more transient populations who are not easily reached by survey.

Administrative data could come from any of the sources discussed throughout this report, including courts, local or county offices with data on various types of housing turnover or moves in general (e.g., county tax assessors, county clerks, sheriff's offices, GIS offices, county recorder's offices, etc.), federal entities (e.g., FEMA or CFPB), or private companies that sell aggregated housing data (e.g., ATTOM or CoreLogic). For the federal government to effectively access and integrate data from state and local governments, it would

<sup>17</sup> Some of the listed reasons included: because the landlord raised the rent; because the respondent missed a rent payment and thought they would be evicted; because the landlord did not make repairs; because the respondent was threatened with eviction or told to leave by the landlord; and because the landlord changed the locks, removed the respondent's belongings, or shut off utilities.

need to incentivize and support the collection of standardized and comprehensive data. Potential incentives and strategies for the federal government to support local data collection are discussed in the next section.

#### Other Potential Federal Roles

The activities discussed in this section arose from stakeholder consultation and discussion. Regardless of the next steps for federal survey data collection in relation to housing turnover, stakeholders made clear that federal support for state and local data collection is crucial. Potential federal activities, such as providing capacity-building grants, convening stakeholders, and developing guidance would advance local data efforts and the understanding of housing turnover. These activities also support a nationally standardized housing turnover data environment that is crucial for validating survey results and essential for comparing local data across regions.

#### Capacity-Building Grants

One approach would be for Congress to fund grants to help build state and local capacity to measure housing turnover in their jurisdictions. These grants could help jurisdictions develop the resources and infrastructure needed to systematically track housing turnover events like eviction, foreclosure, lost stock resulting from natural disasters, and other forms of turnover. Many local governments lack the funding, data management systems, or trained personnel to collect and analyze housing data comprehensively. Grant funding could support investments in data infrastructure, technology upgrades, and personnel training and/or hiring. For example, grant funds could enable the development of data scraping and cleaning tools to increase efficiency in data collection and improve the accuracy of data used in housing turnover analyses. Development of data infrastructure is the biggest barrier for many jurisdictions, and federal grant funding could help overcome this obstacle and build automated and sustainable data environments.

Grants could also support data quality and availability by enabling standardization at the point of entry where the relevant housing turnover data is recorded. For example, funding could support the adoption of standardized eviction and foreclosure data recording practices in court systems. Standardized recording procedures could make more complete data on turnover available by ensuring key data are collected and could improve data quality and streamline data processing through standardization. Funding could similarly support the development of digital recordkeeping systems, which would decrease administrative burden and enable faster data sharing.

Each jurisdiction has its own needs and challenges for collecting, assembling, and analyzing its data. The grants could be paired with technical assistance to help local jurisdictions implement best practices related to collecting, processing, and analyzing turnover data. This assistance could range from navigating state law and procedures for altering court systems and processes to training on data management techniques such as data integration and geospatial analysis. This targeted expertise would ensure that the benefits of the grants are fully realized and result in standardized data shared with the federal government.

## Convening Stakeholders

Another role for the federal government is bringing together stakeholders—including state and local grantees, researchers, housing advocates, and data experts—to share best practices for measuring

housing turnover. The convening of a community of practice to share insights, innovations, and lessons learned from each jurisdiction's experience could advance housing turnover data standards and methodologies to the benefit of both state and local data initiatives and federal data collection. As a community of practice would include a diverse group of stakeholders with differing expertise and needs, this effort could include working groups specific to different levels of administrative data or types of housing turnover. Convening stakeholders regularly would ensure that the best practices that emerge are developed collaboratively and tested and refined across diverse settings.

New America's work offers an example and a foundation on which to build a community of engaged stakeholders on housing turnover. In October 2023, New America and The Rockefeller Foundation convened leaders across fields including housing, economic development, civil rights, and statistics to discuss the development of a National Housing Loss Rate. This convening focused on a survey-based approach and resulted in insights regarding the characteristics of a viable measure of housing loss and data collection strategies to meet this need (Panfil, 2024b). New America subsequently formed working groups to continue engagement with this effort, including a methodology working group.

A federal effort to convene stakeholders could build on New America's work by providing an ongoing environment for collaboration between local data experts, researchers, federal stakeholders with expertise related to relevant federal data sources, and federal survey experts. Guided by their experience in measuring the various types of housing turnover, stakeholders could help define, pilot, and refine the components of a standardized measure of turnover. Pilot projects could test an integrated approach incorporating both survey-based and administrative data in select communities, for example those receiving capacity-building grants. The insights gained from these pilots could help inform the measure's adaptability across different jurisdictions and would allow the community of stakeholders to iteratively improve and scale the measure.

#### Federal Guidance

The development of clear, practical guidance that aims to standardize practices across jurisdictions is a pivotal role that the federal government could play in supporting local housing turnover data collection. Guidance can help share knowledge with jurisdictions that are not able to benefit directly from federal grant funding or the insight of expert stakeholders. Guidance could help local governments understand what data points to collect, how to structure data collection systems, and how to integrate data across sources to capture a comprehensive picture of housing turnover. To ensure that this guidance is effective and adaptable across diverse communities, HUD (or an alternative lead agency) could draw on the insights gained from stakeholder convenings and local communities' experiences.

One example of guidance that was mentioned repeatedly during stakeholder discussions was standardized data definitions and fields. A limitation that spans several types of housing turnover is the inconsistency of what data are collected across jurisdictions, including data captured in court records or by other public entities, and often the data of interest to researchers and policymakers are not captured, such as the final outcome of a case or the reason for an eviction. Furthermore, definitions of legal processes vary significantly between jurisdictions and require a thorough understanding of local processes to interpret. HUD or another agency could develop a guide that provides essential data fields that localities should capture for tracking housing turnover, along with clear definitions for each. This guidance would encourage

consistency of data across jurisdictions, which would enable aggregation and comparison at the national level.

Another area where guidance may be warranted is data integration protocols. Because housing turnover data relies on multiple data sources across various public entities, guidance could offer technical recommendations for linking housing data across different agencies and systems. Guidance may also be appropriate for data quality and validation practices, privacy standards, or reporting and visualization practices. Any insights gained from grantee experiences, technical assistance needs, and stakeholder best practices may be an appropriate avenue for federal guidance.

Each of the proposed federal activities—grants, stakeholder convening, and guidance—has the potential to feed into the others. Grantees are valuable stakeholders whose experience can contribute to the development of standards and best practices, which can be shared through federal guidance. Federal guidance can guide the standardization practices put in place by future grantees. These efforts, along with federal survey data collection and a federal effort to link administrative data sources at all levels and use those sources to validate survey results, would be meaningful steps towards the creation of a standardized measure of housing turnover.

## Conclusion

The current state of housing turnover data in the United States remains fragmented and inconsistent, with significant variation across jurisdictions and types of housing turnover. While some states and local communities, often through efforts led by external researchers, have developed methods of tracking individual types of housing turnover, few are tracking more than one or two. Furthermore, no examples were identified of communities combining their data into a comprehensive, unified measure of housing turnover. Public data sources for each type of housing turnover vary widely, from court records and other administrative data to household surveys, and they exist in different forms at all levels of government. Each data source has limitations that require significant time and resources to process and validate.

Through consultation and discussions, stakeholders from local government, academic institutions, and philanthropic and advocacy organizations with experience measuring housing turnover at the state and local level highlighted several overarching best practices for collecting housing turnover data. Open data policies, standardization, stakeholder engagement, and robust data governance can facilitate and improve the collection of, access to, and usability of local housing turnover data. Localities that prioritize these practices are better equipped to understand and address the dynamics of housing turnover in their communities.

A federal approach to assembling housing turnover data could play a vital role in bridging the gaps left by state and local efforts, gaps left both by the data that is assembled locally and by the lack of data in communities without the resources and capacity to undergo similar efforts. Federal survey data collection could provide a consistent, national framework for measuring and analyzing housing turnover. Federal survey data could be combined with continued support for the collection of detailed state and local administrative and survey data. Ultimately, a combined data environment would offer the best approach for developing a granular standardized measure of housing turnover.

## References

Administrative Office of the U.S. Courts (U.S. Courts). 2024. *Table C-2—U.S. District Courts – Civil, Statistical Tables for the U.S. Judiciary (June 30, 2024*). Washington, D.C.

https://www.uscourts.gov/statistics/table/c-2/statistical-tables-federal-judiciary/2024/06/30.

American Bar Association (ABA). 2018. "What is 'Expungement?"

https://www.americanbar.org/groups/public\_education/publications/teaching-legal-docs/what-isexpungement-

Barton, Michael. 2014. "An Exploration of the Importance of the Strategy Used to Identify Gentrification," *Urban Studies*, 53(1), 92-111. https://doi.org/10.1177/0042098014561723.

Board of Governors of the Federal Reserve System (Federal Reserve Board). 2023. *Economic Well-Being of U.S. Households in 2023: Appendix*. Washington, DC.

https://www.federalreserve.gov/publications/files/2023-supplement-economic-well-being-us-households-202405.pdf.

Bopp Stark, Andrea and Odette Williamson. 2023. *Property Tax Foreclosure on Heirs Property: The Devastating Consequences and Recommendations for Prevention*. Boston, MA: National Consumer Law Center. <a href="https://www.nclc.org/wp-content/uploads/2023/08/202308\_Property-Tax-Foreclosures-on-Heirs-Property.pdf">https://www.nclc.org/wp-content/uploads/2023/08/202308\_Property-Tax-Foreclosures-on-Heirs-Property.pdf</a>.

Bucholtz, Shawn. 2021. "Can the American Housing Survey Provide Reliable Estimates of the Prevalence of Eviction?" *Cityscape*, Vol. 23(2): 259-267.

Collyer, Sophie and Lily Bushman-Copp. 2019. *Spotlight on Forced Moves and Eviction in New York City*. New York: Columbia Population Research Center and Robin Hood. <a href="https://robinhood.org/wp-content/uploads/2023/07/POVERTY\_TRACKER\_REPORT15.pdf">https://robinhood.org/wp-content/uploads/2023/07/POVERTY\_TRACKER\_REPORT15.pdf</a>.

Colorado Judicial Branch. 2024. Annual Statistical Report – Fiscal Year 2024.

https://www.coloradojudicial.gov/sites/default/files/2024-09/FY2024%20Annual%20Statistical%20Report%20FINAL%20%28Final%29\_0.pdf.

Congressional Research Service (CRS). 2023. *Sources for Frequently Requested Foreclosure Statistics*. Washington, DC. <a href="https://crsreports.congress.gov/product/pdf/R/R47651/2">https://crsreports.congress.gov/product/pdf/R/R47651/2</a>.

DePaul University, Institute for Housing Studies. n.d. *Housing Market Indicators Data Portal*. Chicago, Illinois. <a href="https://www.housingstudies.org/data-portal/browse/?indicator=total-auctions&area=chicago-community-areas&property\_type=1&view\_as=view-table">https://www.housingstudies.org/data-portal/browse/?indicator=total-auctions&area=chicago-community-areas&property\_type=1&view\_as=view-table</a>.

Desmond, Matthew. 2016. Evicted: Poverty and Profit in the American City. New York: Crown Publishers.

\_\_\_\_\_. 2016b. *MARS User's Guide*. Madison: University of Wisconsin - Madison, University of Wisconsin Survey Center.

https://dataverse.harvard.edu/file.xhtml?persistentId=doi:10.7910/DVN/BLUU3U/IUXSBR&version=3.0.

Desmond, Matthew and Tracey Shollenberger. 2015. Forced Displacement From Rental Housing: Prevalence and Neighborhood Consequences, Demography, Vol. 52: 1751-1772. https://doi.org/10.1007/s13524-015-0419-9.

DeWaard, Jack, Alexander M. Din, Kathryn McConnell, and Elizabeth Fussell. 2024. "Population Change in Wildfire-Affected Areas in the United States: Evidence from U.S. Postal Service Residential Address Data," *Popul. Res. Policy Rev.*, Vol. 43: 59. https://doi.org/10.1007/s11113-024-09904-4.

Din, Alexander M., and Todd Richardson. 2024. *Mapping Neighborhood Change Using Near Real Time Administrative Data*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <a href="https://www.huduser.gov/Portal/pdredge/pdr-edge-spotlight-article-061124.html">https://www.huduser.gov/Portal/pdredge/pdr-edge-spotlight-article-061124.html</a>.

Eisenberg, Alexa, Roshanak Mehdipanah, and Margaret Dewar. 2019. "It's Like They Make It Difficult for You on Purpose': Barriers to Property Tax Relief and Foreclosure Prevention in Detroit, Michigan," *Housing Studies*, Vol. 35 (8), 1415-1441. https://doi.org/10.1080/02673037.2019.1667961.

Evans, Megan. 2021. "The unequal housing and neighborhood outcomes of displaced movers," *Journal of Urban Affairs*, Vol. 43(9), 1214–1234. https://doi.org/10.1080/07352166.2020.1730697.

Eviction Lab. 2022. Methodology Report. Princeton, New Jersey: Princeton University.

Eviction\_Lab\_Methodology\_Report\_2022.pdf.

\_\_\_\_\_. n.d.a. "Methods." https://evictionlab.org/methods/#data-source.

\_\_\_\_. n.d.b. "Help & FAQ." https://evictionlab.org/help-faq/#how-many-eviction-judgments.

Federal Emergency Management Agency (FEMA). 2024. "OpenFEMA Dataset: Housing Assistance Program Data – Owners – v2." Washington, DC: U.S. Department of Homeland Security (DHS). https://www.fema.gov/openfema-data-page/housing-assistance-program-data-owners-v2.

\_\_\_\_ n.d. "Assistance for Housing and Other Needs." Washington, DC: DHS.

Federal Housing Finance Agency (FHFA). *National Mortgage Database (NMDB) Residential Mortgage Performance Statistics, Quarterly Report (2024 Q1)*. Washington, DC.

https://www.fema.gov/assistance/individual/housing.

https://www.fhfa.gov/sites/default/files/2024-06/NMDB-Mortgage-Performance-Statistics-Report-2024Q1.pdf.

\_\_\_\_\_. n.d. "National Mortgage Database (NMDB) Aggregate Statistics." <a href="https://www.fhfa.gov/data/national-mortgage-database-aggregate-statistics">https://www.fhfa.gov/data/national-mortgage-database-aggregate-statistics</a>.

Florida Office of the State Courts Administrator (OSCA). n.d. *Uniform Case Reporting – Frequently Asked Questions*. Tallahassee, Florida.

https://www.flcourts.gov/content/download/534770/file/UCR%20Frequently%20Asked%20Questions\_508\_pdf.

Freeman, Lance. 2005. "Displacement or Succession?: Residential Mobility in Gentrifying Neighborhoods," *Urban Affairs Review*, 40(4), 463-491. https://doi.org/10.1177/1078087404273341.

Glass, Ruth L. 1964. London: Aspects of Change. London, UK: MacGibbon & Kee.

Graetz, Nick, Carl Gershenson, Peter Hepburn, Sonya R. Porter, Danielle H. Sandler, and Matthew Desmond. 2023. "A comprehensive demographic profile of the US evicted population," *Proc. Natl. Acad. Sci. U.S.A.*, Vol. 120(41), e2305860120. https://www.pnas.org/doi/10.1073/pnas.2305860120.

Gromis, Ashley and Matthew Desmond. 2021. "Estimating the Prevalence of Eviction in the United States: New data from the 2017 American Housing Survey." *Cityscape*, Vol. 23(2): 279-289.

Hartman, Chester and David Robinson. 2003. "Evictions: The hidden housing problem," Housing Policy Debate, Vol. 14 (4): 461–501. https://doi.org/10.1080/10511482.2003.9521483.

Hatch, Megan. 2021. "Voluntary, forced, and induced renter mobility: The influence of state policies," Journal of Housing Economics, Vol. 51: 101689. https://doi.org/10.1016/j.jhe.2020.101689.

Hepburn, Peter. 2024. "Commentary: Using Eviction Court Records to Inform Local Policy." *Cityscape*, Vol.26(1): 287-294.

Hincken, Garrett. 2021. *How 'Tangled Titles' Affect Philadelphia*. Philadelphia, PA: The Pew Charitable Trusts. <a href="https://www.pewtrusts.org/-/media/assets/2021/08/tangledtitlesphilly\_report\_final.pdf">https://www.pewtrusts.org/-/media/assets/2021/08/tangledtitlesphilly\_report\_final.pdf</a>.

The Housing Assistance Council. 2023. A Methodological Approach to Estimate Residential Heirs' Property in the United States. Washington, DC: Fannie Mae.

https://www.fanniemae.com/sites/g/files/koqyhd191/files/2023-12/heirs-property-research-report\_0.pdf.

Hussein, Nada, Tori Bourret, and Sarah Gallagher. 2023. *Eviction Record Sealing and Expungement Toolkit*. Washington, DC: National Low Income Housing Coalition. <a href="https://nlihc.org/sites/default/files/2023-04/eviction-record-sealing-and-expungement-toolkit.pdf">https://nlihc.org/sites/default/files/2023-04/eviction-record-sealing-and-expungement-toolkit.pdf</a>.

Indiana Judicial Branch. n.d. "Odyssey Case Management System." <a href="https://www.in.gov/courts/admin/tech/odyssey/">https://www.in.gov/courts/admin/tech/odyssey/</a>.

Lake, Jaboa and Leni Tupper. 2021. *Eviction Record Expungement Can Remove Barriers to Stable Housing*. Washington, DC: Center for American Progress. <a href="https://www.americanprogress.org/article/eviction-record-expungement-can-remove-barriers-stable-housing/">https://www.americanprogress.org/article/eviction-record-expungement-can-remove-barriers-stable-housing/</a>.

LaPoint, Cameron. 2023. *Property Tax Sales, Private Capital, and Gentrification in the U.S.* <a href="https://dx.doi.org/10.2139/ssrn.4219360">https://dx.doi.org/10.2139/ssrn.4219360</a>.

Lee, Tina, Samantha Carr, Nóra Al Haider. 2022. *Using Open Data to Prevent Evictions*. Washington, DC: National League of Cities. <a href="https://www.nlc.org/article/2022/04/05/using-open-data-to-prevent-evictions/">https://www.nlc.org/article/2022/04/05/using-open-data-to-prevent-evictions/</a>.

Legal Service Corporation (LSC), Civil Court Data Initiative. n.d. "Methodology." <a href="https://civilcourtdata.lsc.gov/about/methodology">https://civilcourtdata.lsc.gov/about/methodology</a>.

Local Housing Solutions. 2021. Foreclosure and Disposition of Tax-Delinquent Properties. https://localhousingsolutions.org/housing-policy-library/foreclosure-and-disposition-of-tax-delinquent-properties/#1.

National Low Income Housing Coalition (NLIHC). 2023. New Data from Household Pulse Survey Suggest Disparities among Households Displaced by Disasters. Washington, DC. https://nlihc.org/resource/new-

<u>data-household-pulse-survey-suggest-disparities-among-households-displaced-disasters#:~:text=Based%20on%20the%20Pulse%20survey.year%20due%20to%20a%20disaster.</u>

New America. n.d. "Foreclosure and Eviction Analysis Tool." <a href="https://www.newamerica.org/future-land-housing/feat/about/">https://www.newamerica.org/future-land-housing/feat/about/</a>.

North Texas Eviction Project. n.d. "About." <a href="https://northtexasevictions.org/about">https://northtexasevictions.org/about</a>.

NYU Furman Center (Furman Center). n.d. "About this Tracker." <a href="https://furmancenter.org/eviction-tracker?\_cf\_chl\_tk=sBOyzxjODy19kSSNMPkjx5sMuSUQJQwzUg25qnMRhog-1722957948-0.0.1.1-3860">https://furmancenter.org/eviction-tracker?\_cf\_chl\_tk=sBOyzxjODy19kSSNMPkjx5sMuSUQJQwzUg25qnMRhog-1722957948-0.0.1.1-3860</a>.

Panfil, Yuliya. 2024a. *America Needs a National Housing Loss Rate*. Washington, DC: Federation of American Scientists. <a href="https://fas.org/publication/america-needs-a-national-housing-loss-rate/">https://fas.org/publication/america-needs-a-national-housing-loss-rate/</a>.

Panfil, Yuliya. 2024b. *Towards a National Housing Loss Rate*. Washington, DC: New America. <a href="https://www.newamerica.org/future-land-housing/blog/towards-a-national-housing-loss-rate/">https://www.newamerica.org/future-land-housing/blog/towards-a-national-housing-loss-rate/</a>.

Panfil, Yuliya, Sabiha Zainulbhai, and Tim Robustelli. 2021. *Why is Eviction Data So Bad?* Washington, DC: New America. <a href="https://www.newamerica.org/future-land-housing/reports/why-is-eviction-data-bad/">https://www.newamerica.org/future-land-housing/reports/why-is-eviction-data-bad/</a>.

Paul, Nicole, Carmine Galasso, and Jack Baker. 2023. "Household Displacement and Return in Disasters: A Review," *Natural Hazards Review*, 25 (1). https://doi.org/10.1061/NHREFO.NHENG-1930.

Peiffer, Emily. 2018. Robust Eviction Data Can Keep Cities from 'Designing Policy in the Dark. Washington, DC: Urban Institute. https://howhousingmatters.org/feature/robust-eviction-data-can-keep-cities-designing-policy-dark.

The Pew Charitable Trusts. 2023. *How to Standardize Court Data for Greater Transparency and Ongoing Improvement*. Philadelphia, PA. <a href="https://www.pewtrusts.org/-/media/assets/2023/09/courts/how-to-standardize-court-data-for-greater-transparency-and-ongoing-improvement.pdf">https://www.pewtrusts.org/-/media/assets/2023/09/courts/how-to-standardize-court-data-for-greater-transparency-and-ongoing-improvement.pdf</a>.

Pippin, Scott, Shana Jones, and Cassandra Johnson Gaither. 2017. *Identifying Potential Heirs Properties in the Southeastern United States: A New GIS Methodology Utilizing Mass Appraisal Data*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station.

The Polis Center at Indiana University Indianapolis (Polis Center). n.d. *Methodology: Indiana Evictions and Foreclosure Dashboard*. Indianapolis.

https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A14a869b0-3bf3-33a8-bbb0-936a452c1f44&viewer%21megaVerb=group-discover.

Porton, Adam, Ashley Gromis, and Matthew Desmond. 2020. "Inaccuracies in Eviction Records: Implications for Renters and Researchers," *Housing Policy Debate*, 0 (0): 1–19. https://doi.org/10.1080/10511482.2020.1748084.

Pries, Benjamin, Aarthi Janakiraman, Justin Steil, and Alex Bob. 2020. "Mapping Gentrification and Displacement Pressure: An Exploration of Four Distinct Methodologies," *Urban Studies*, 58(2), 405-424. https://doi.org/10.1177/0042098020903011.

Robustelli, Tim, Yulia Panfil, Katie Oran, Chenab Navalkha, and Emily Yelverton. 2020. *Displaced in America*. Washington DC: New America. <a href="https://www.newamerica.org/future-land-housing/reports/displaced-america/">https://www.newamerica.org/future-land-housing/reports/displaced-america/</a>.

Smith, Serena, Owais Gilani, Vanessa Massaro, Caroline McGann, Gavin Moore, and Michael Kane. 2024. "Mapping Gentrification: A Methodology for Measuring Neighborhood Change," *Cityscape*, 26(1), 377-393. https://www.huduser.gov/portal/periodicals/cityscape/vol26num1/ch20.pdf.

Tait, Katherine and George R. Carter III. 2023. *The History of Housing Insecurity Research at PD&R*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <a href="https://www.huduser.gov/portal/pdredge/pdr-edge-pdrat50-103123.html">https://www.huduser.gov/portal/pdredge/pdr-edge-pdrat50-103123.html</a>.

Texas Comptroller of Public Accounts (Texas Comptroller, n.d.a.) "Eminent Domain Reporting." https://comptroller.texas.gov/transparency/local/eminent-domain/. . n.d.b. "Comptroller's Online Eminent Domain Database." https://coedd.comptroller.texas.gov/search/results?entity\_type=&report\_year=2024&filing\_status=&emine nt\_domain\_begin\_year=&entity\_category\_type\_code=. Thomas, Tim, Alex Ramiller, Cheng Ren, and Ott Toomet. 2024. "Toward a National Eviction Data Collection Strategy Using Natural Language Processing." Cityscape, Vol. 26(1):241-259. Uniform Law Commission. 2010. Partition of Heirs Property Act. Chicago, IL. https://www.uniformlaws.org/committees/community-home?CommunityKey=50724584-e808-4255-bc5d-8ea4e588371d. Urban, Noah. n.d. Archival Tax Foreclosures in Detroit, 2002-2013. Detroit, Michigan: Data Driven Detroit. https://portal.datadrivendetroit.org/datasets/D3::archival-tax-foreclosures-in-detroit-2002-2013/about. U.S. Census Bureau (Census). 2024a. Phase 4.2 Household Pulse Survey. Washington, DC: U.S. Department of Commerce. https://www2.census.gov/programs-surveys/demo/technicaldocumentation/hhp/Phase 4-2 HPS Questionnaire ENGLISH.pdf. \_\_. 2024b. American Community Survey Questionnaire. Washington, DC: U.S. Department of Commerce. https://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2024/quest24.pdf. \_\_\_\_.2024c. Evolving the Household Pulse Survey. Washington, DC: U.S. Department of Commerce. .2023a. 2023 Survey of Income and Program Participation Users' Guide. Washington, DC: U.S. Department of Commerce. https://www2.census.gov/programs-surveys/sipp/techdocumentation/methodology/2023 SIPP Users Guide OCT24.pdf. \_\_\_\_. 2023b. 2023 Survey of Income and Program Participation (SIPP) – Public Use Instrument Specifications. Washington, DC: U.S. Department of Commerce. https://www2.census.gov/programssurveys/sipp/questionnaires/2023/2023\_SIPP\_PU\_Instrument\_Specifications.pdf. \_. 2020. Geography and the American Community Survey: What Data Users Need to Know. Washington, DC: U.S. Department of Commerce. https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs\_geography\_handbook\_2

020.pdf.

2017. How a Question Becomes Part of the American Community Survey. Washington, DC: U.S. Department of Commerce. https://www.census.gov/content/dam/Census/library/visualizations/2017/comm/acs-questions.pdf.
n.d. "Small Area Estimation." <a href="https://www.census.gov/topics/research/stat-research/expertise/small-area-est.html">https://www.census.gov/topics/research/stat-research/expertise/small-area-est.html</a> .
U.S. Department of Housing and Urban Development (HUD). 2021. Report to Congress on the Feasibility of Creating a National Evictions Database. Washington, DC.
https://www.huduser.gov/portal/sites/default/files/pdf/Eviction-Database-Feasibility-Report-to-Congress-2021.pdf.
2023. 2023 American Housing Survey Instrument Items. Washington, DC.
https://www2.census.gov/programs-surveys/ahs/2023/2023 AHS Items Booklet.pdf.
U.S. Department of Justice (DOJ), Environment and Natural Resources Division. n.d. "Condemnation." Washington, DC. <a href="https://www.justice.gov/enrd/condemnation">https://www.justice.gov/enrd/condemnation</a> .
U.S. Government Accountability Office (GAO). 2024. <i>Evictions: National Data Are Limited and Challenging to Collect</i> . Washington, DC. <a href="https://www.gao.gov/assets/d24106637.pdf">https://www.gao.gov/assets/d24106637.pdf</a> .
2006. Eminent Domain: Information about Its Uses and Effect on Property Owners and Communities Is Limited. Washington, DC. https://www.gao.gov/assets/gao-07-28.pdf.

Zainulbhai, Sabiha. 2023. What Can Court Data Actually Tell Us About Evictions? Washington, DC: New America. https://www.newamerica.org/future-land-housing/reports/us-eviction-court-data/.

Zainulbhai, Sabiha and Helen Bonnyman. 2024. *Understanding Evictions: A Guide to Using Local Court Data*. Washington, DC: New America. <a href="https://www.newamerica.org/future-land-housing/reports/understanding-evictions-a-guide-to-using-local-court-data/">https://www.newamerica.org/future-land-housing/reports/understanding-evictions-a-guide-to-using-local-court-data/</a>.

Zuk, Miriam, Ariel H. Bierbaum, Karen Chapple, Karolina Gorska, and Anastasia Loukaitou-Sideris. 2017. "Gentrification, Displacement, and the Role of Public Investment," *Journal of Planning Literature*, 33(1), 31-44. <a href="https://doi.org/10.1177/0885412217716439">https://doi.org/10.1177/0885412217716439</a>.

## Appendix – List of Entities or Individuals Consulted

The authors of this report are grateful for the information and views offered by the following individuals and entities consulted. While all efforts have been made to ensure accuracy, any errors or omissions in this information are the responsibility of the authors.

Richard Bamattre and Will Lehman, Hennepin County, Minnesota

Maxine Becker, Arizona Bar Foundation

Patrick Boyle, Enterprise Community Partners

Sophie Collyer and Chris Wimer, The Center on Poverty & Social Policy, Columbia University

Candice Dias, Center for Public Service and Policy, University of Pennsylvania

Sarah Duda, Institute for Housing Studies, DePaul University

Katherine Clardy Key, The City of Alexandria, Virginia

Cameron LaPoint, Yale University

Shea Lemar, Geospatial Research and Solutions, Arizona State University

Scott Markley, Cornell University

Marc McAleavey, The Polis Center, Indiana University Indianapolis

Bill O'Dell, Anne Ray, and Maria Watson, The Shimberg Center for Housing Studies, University of Florida

Yuliya Panfil and Sabiha Zainulbhai, Future of Land and Housing Program at New America

Chloe Sarnoff, Robin Hood

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