



RESEARCH REPORT

# Climate Risks to Latino Homeowners and Communities

## A Landscape Scan of National Trends and Local Insights

*Linna Zhu*

*John Walsh*

*Bryson Berry*

*March 2025*



## ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decisionmaking, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.

# Contents

<b>Acknowledgments</b>	<b>iv</b>
<b>Executive Summary</b>	<b>v</b>
<b>Climate Risks to Latino Homeowners and Communities</b>	<b>1</b>
Hazard Risks	3
Community Risks	26
Policy Implications and Conclusions	56
<b>Appendix</b>	<b>62</b>
<b>Notes</b>	<b>63</b>
<b>References</b>	<b>65</b>
<b>About the Authors</b>	<b>66</b>
<b>Statement of Independence</b>	<b>67</b>

# Acknowledgments

This report was funded by UnidosUS as part of its Home Ownership Means Equity (HOME) initiative. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at [urban.org/fundingprinciples](https://urban.org/fundingprinciples).

UnidosUS is a nonprofit, nonpartisan organization that serves as the nation’s largest Hispanic civil rights and advocacy organization. UnidosUS seeks to transform the economic trajectory of Latino families by advancing systemic change to create 4 million new Latino homeowners by 2030 through the HOME initiative. For additional information, visit [unidosus.org/homeownership](https://unidosus.org/homeownership).

# Executive Summary

Climate change presents escalating risks to Latino homeowners and communities across the United States, intensifying their exposure to natural disasters such as hurricanes, wildfires, and flooding. This report explores the interplay between hazard risks, community vulnerabilities, and socioeconomic inequities to shed light on the disproportionate impacts of climate risks on Latino homeowners. Key findings reveal significant disparities in disaster exposure and community resilience, compounded by systemic barriers that limit access to resources and financial protections.

Latino homeowners are disproportionately vulnerable to climate-related disasters because of geographic concentration in high- and moderate-risk areas and underlying socioeconomic disparities. Overall, Latino home values and households are more concentrated in high- and moderate-risk areas compared with the broader homeowner population. The economic losses are particularly pronounced in low-to-moderate-income (LMI) neighborhoods, where expected home value losses exceed Latino homeowners' proportional share of total property value.

Hurricanes pose the greatest threat, with Latino homeowners disproportionately concentrated in high-risk areas and facing a greater share of property value losses relative to their home value, particularly in LMI and majority-Latino neighborhoods. Wildfires present significant risks in the western US, particularly in California and Arizona, where Latino homeowners are slightly overrepresented in moderate-to-high-risk areas. Riverine flooding similarly exacerbates economic challenges for Latino homeowners, who are disproportionately represented in high-risk areas with low property values, particularly in LMI neighborhoods where loss shares far exceed their proportional home value. Coastal flooding, while geographically limited, poses unique challenges in high-income neighborhoods, where Latino homeowners face slightly higher loss shares relative to their property value, underscoring the diversity of climate risks affecting Latino communities.

Moreover, Latino communities face disproportionately high community risks, amplifying the impact of hazard risks. Latino neighborhoods frequently exhibit high levels of social vulnerability and reduced community resilience, which exacerbate their exposure to climate-related disasters. Factors such as limited financial resources, insufficient access to affordable housing, aging housing stock, and the concentration of older residents in low-resilience areas further intensify these vulnerabilities. These systemic challenges emphasize the need for strategic investments in infrastructure, enhanced disaster readiness, and comprehensive support systems to help Latino households withstand and recover from the growing threats that climate change poses.

Our analysis of six markets—Houston, Texas; Phoenix, Arizona; Orlando, Florida; Stockton, California; Chicago, Illinois; and Puerto Rico—reveals the localized heterogeneity of climate risks for Latino communities. In Houston, hurricanes are the primary hazard, and high social vulnerability exacerbates risks in majority-Latino neighborhoods. Phoenix faces escalating wildfire risks, particularly in socioeconomically disadvantaged areas. Orlando’s challenges include both hurricanes and wildfires, while Chicago contends with riverine flooding and urban infrastructure vulnerabilities. Stockton faces increasing risks from heat waves and flooding but has made significant strides through local climate adaptation projects. Puerto Rico, uniquely vulnerable because of its geography, faces severe hurricane impacts compounded by widespread social vulnerability. These six markets have also been selected by UnidosUS and its local affiliates to advance Latino homeownership through their HOME initiative.

Addressing the disproportionate impact of climate-related hazards on Latino homeowners and communities necessitates multipronged policy interventions focused on enhancing housing market resilience, ensuring insurance affordability, and promoting equitable community development. This report outlines several policy recommendations:

- improve insurance accessibility and affordability
- strengthen data used to assess climate risks
- enhance climate resilience and reduce community vulnerability
- improve financial assistance for home improvements
- expand outreach and education
- promote equitable and resilient community development
- mitigate labor hour losses and support resilience in weather-exposed industries

As climate risks increase, addressing the systemic inequities Latino homeowners face is critical to safeguarding housing stability and closing racial wealth and homeownership gaps. This report underscores the urgent need for targeted investments and collaborative policy solutions to ensure Latino communities can effectively adapt to and recover from the challenges climate change poses.

---

#### BOX 1

##### **Key Takeaways**

Latino homeowners face disproportionate exposure to climate risks, bearing greater home value losses and economic burdens across different hazard types. Latino homeowners living in communities with

disaster risk face \$3.1 billion in annual estimated losses. Key findings from this research highlight the significant disparities in climate risk exposure and its economic consequences.

**Latino homeowners and home values are disproportionately concentrated in high- and moderate-risk areas**

- Twenty-seven percent of Latino home values are located in high-risk areas, compared with 19 percent of total home values.
- Similarly, 22.8 percent of Latino homeowners live in high-risk areas, exceeding their 16.1 percent share of total homeowners.

**Latino homeowners bear a disproportionately higher share of home value losses across neighborhoods at all income levels**

- In low- and moderate-income (LMI) neighborhoods, Latino homes account for 12 percent of total home value but shoulder 16 percent of total losses.

**Hurricanes pose the greatest threat of all disasters, with Latino homeowners disproportionately concentrated in high-risk zones**

- Twenty percent of Latino homeowners live in areas with high hurricane risk, compared with 13 percent of all homeowners.
- In LMI neighborhoods, Latino homeowners hold 10 percent of total home value but bear 13 percent of total home value losses attributable to hurricanes.

**Wildfire risks are especially prevalent in the western US, where large Latino populations reside**

- As is true in hurricane-prone areas, Latino homeowners in high- and moderate-risk wildfire zones experience disproportionately higher home value losses relative to their total home value.

**Riverine flooding presents a significant risk, particularly in low- and moderate-income Latino neighborhoods**

- In LMI neighborhoods, Latino homeowners hold 10 percent of total home value but bear 14 percent of total home value losses attributable to riverine flooding.

**Latino communities exhibit high social vulnerability and low community resilience**

- In majority-Latino communities (where more than 50 percent of households are Latino), 30 percent are classified as highly vulnerable, while 21 percent have extremely low resilience.
- In neighborhoods with Latino population shares between 15 and 50 percent, nearly one-third are either highly socially vulnerable or have very low resilience.

These findings underscore the urgent need for targeted policies and investments to enhance climate resilience and mitigate economic losses in Latino communities.





# Climate Risks to Latino Homeowners and Communities

As climate change intensifies, the frequency and severity of natural disasters—such as hurricanes, wildfires, and flooding events—have significantly increased, posing severe risks to vulnerable populations. Latino communities, often concentrated in regions prone to these hazards,<sup>1</sup> face unique challenges stemming from geographic vulnerability and from socioeconomic and systemic factors that limit their ability to prepare for, withstand, and recover from disasters.

The US Latino population has grown rapidly, becoming the nation's second-largest racial or ethnic group. Latinos make up nearly 19 percent of the total population as of 2022 and are expected to reach 28 percent by 2060.<sup>2</sup> This growth has also been geographically diverse,<sup>3</sup> with Latino populations expanding into regions not historically associated with large Latino communities.

Although the Latino population is seeing increased growth, sustaining homeownership in Latino communities has been unsteady. The Great Recession saw the Latino homeownership rate fall from nearly 50 percent in 2007 to roughly 45 percent in 2012 (So and Brown 2019). By 2022, the homeownership rate had recovered to 51 percent, surpassing 2007 levels (Choi et al. 2024). The Latino segment will be vital to the overall outlook for homeownership and its ongoing capacity to anchor financial security for American families and communities. For example, Latino households are expected to grow faster than any other race or ethnicity in the next two decades, driving the increase in the overall homeownership rate.

Having access to and sustaining homeownership is key for Latino households to build wealth that can be passed intergenerationally. Over the next two decades, Latino households are estimated to drive nearly 70 percent of the net homeownership gains (Goodman and Zhu 2021). It is important to understand the risks facing Latino homeownership, especially because of the anticipated growth in Latino households. As natural disasters become increasingly severe, it is important that Latino homeowners can protect their homes to secure generational wealth.

## **What We Do and Do Not Know about Climate Risks and Latino Homeownership**

Various disasters disproportionately affect Latino households. For instance, Latino households are disproportionately affected by flooding, as they are more likely to reside in flood-prone neighborhoods characterized by limited access to protective infrastructure and disaster recovery resources.<sup>4</sup> Similarly,

Latino communities in hurricane-prone regions, such as the Gulf Coast, experience disproportionate impacts because of higher exposure to storm surges (Park and Franklin 2023). These vulnerabilities are further compounded by systemic barriers, including low household incomes, inequities in housing access (Choi et al. 2024), and a lack of community resilience to withstand and recover from disasters (Zhu et al. 2024). Together, these factors underscore the urgent need for a comprehensive understanding of how escalating climate risks affect Latino homeowners and communities.

The implications of climate risks for Latino homeowners are profound, particularly in their ability to sustain homeownership and maintain housing wealth. Rising insurance premiums, coupled with limited carrier availability, make it increasingly difficult for homeowners in high-risk areas to secure adequate and affordable coverage (Cornelissen, Heller, and DeLong 2024; Neal, Mehrotra, and Pang 2024). This leaves homes more vulnerable to natural disasters and undermines the stability of housing wealth, a critical source of financial security for Latino families (Zhu and Zinn 2024). Additionally, escalating climate risks have been shown to affect mortgage performance, leading to higher rates of loan delinquency and foreclosure (FHFA 2024). These challenges, in turn, harm borrowers' access to credit and contribute to long-term property value depreciation. Furthermore, natural disasters disproportionately affect property values in historically marginalized neighborhoods, exacerbating existing racial and ethnic wealth gaps (Zhu et al. 2024).

Despite the increasing urgency of addressing climate risks, significant knowledge gaps persist in understanding disasters' full impact on Latino homeowners and communities. Research has highlighted geographic vulnerabilities but often lacks a comprehensive examination of how overall climate risks affect Latino homeowners. There is limited insight into how specific hazards—such as hurricanes, flooding, and wildfires—uniquely affect Latino homeowners, particularly in terms of property values and long-term housing stability. Additionally, the critical role of social vulnerability and community resilience—factors that influence how households prepare for, withstand, and recover from disasters—remains underexplored. For example, after Hurricane Katrina, communities with strong social networks were able to rebuild faster because of coordinated financial aid and access to resources. Conversely, areas with weaker community resilience faced prolonged recovery times and greater displacement. Together, these gaps highlight the need for a comprehensive landscape scan that examines both hazard risks and community vulnerabilities, offering actionable insights tailored to Latino homeowners and their communities.

Motivated by these gaps, this research investigates the interplay between climate risks and Latino homeownership, addressing three primary objectives. First, we provide a comprehensive landscape scan of how escalating climate hazards—hurricanes, wildfires, riverine flooding, and coastal flooding—

affect Latino homeowners across the United States. Second, we examine community risks, focusing on the social vulnerabilities and resilience factors that shape households' ability to prepare for, withstand, and recover from natural disasters. Third, we adopt a regional lens by analyzing the climate risk profiles of six markets where UnidosUS affiliates operate: Phoenix, Arizona; Orlando, Florida; Stockton, California; Houston, Texas; Chicago, Illinois; and Puerto Rico. These markets reflect a diverse array of climate vulnerabilities and socioeconomic contexts, offering critical insights into the localized dimensions of climate risks for Latino communities.

We conclude with policy implications and recommendations for mitigating climate risks and enhancing the resilience of Latino communities in the face of climate change.

## Hazard Risks

This section examines the disaster exposure Latino households face, with a focus on homeowners. Throughout this section, we quantify and compare estimated losses in owner-occupied home values resulting from expected disaster damage for Latino homeowners and homeowners overall.

---

### BOX 2

#### Key Findings Regarding Hazard Risks

Our analysis of hazard risks reveals that Latino homeowners are disproportionately vulnerable to **overall climate-related disasters** because of geographic concentration and socioeconomic disparities. Overall, Latino home values and households are more concentrated in high- and moderate-risk areas compared with the broader homeowner population. The economic losses are particularly pronounced in low-to-moderate-income (LMI) neighborhoods, where expected home value losses exceed their proportional share of property value. These disparities emphasize the critical need for targeted resilience-building efforts in disaster-prone Latino communities.

- **Hurricanes** present the greatest climate threat to Latino homeowners. The share of Latino homeowners exposed to hurricane risk is slightly smaller compared with all homeowners, but a disproportionate number reside in high-risk areas. Latino home values in these regions also face outsized losses relative to the homes' overall share of residential value, particularly in LMI and majority-Latino neighborhoods. This pattern highlights the compounded economic vulnerability of Latino households when disaster strikes.
- **Wildfire** risks are most prevalent in the western United States, including in California and Arizona, where Latino populations are significant. Latino homeowners are slightly overrepresented in areas with moderate to high wildfire risk, and substantial property values

are concentrated in these regions. But challenges persist in accurately assessing risks for neighborhoods with large Latino populations because of insufficient data.

- **Riverine flooding** poses a significant risk to Latino homeowners, who are disproportionately represented in high-risk areas compared with all homeowners. In these regions, lower median home values exacerbate economic vulnerability, particularly in LMI neighborhoods where loss shares far exceed their proportional home values.
- Finally, **coastal flooding** risks, though geographically limited, demonstrate a distinct pattern of risk exposure for Latino homeowners. Compared with other disasters, Latino homeowners face smaller proportional losses from coastal flooding. But disparities persist in high-income coastal neighborhoods, where Latino loss shares slightly exceed their share of property value.

---

## Methodology and Data

To assess the impact of hazard risks on these populations and communities, we employ a multistep analytical approach leveraging data from Federal Emergency Management Agency's National Risk Index (FEMA NRI) and the American Community Survey.

First, we use the tract-level expected annual loss (EAL) rates for building value from the NRI dataset. FEMA calculates this rate by taking a community's expected annual building loss as a share of total building value in the community.<sup>5</sup> Second, using five-year American Community Survey data, we compute the total tract-level owner-occupied residential home value Latino homeowners hold. This involves multiplying the median reported Latino-held owner-occupied home values in each tract by the number of Latino homeowners, yielding an aggregate measure of Latino-owned home values.

Next, we apply the tract-level EAL rates to total Latino home values to estimate the EAL value for Latino owner-occupied residential units. On average, census tracts have small-enough variations in residential home values that the unknown element of which homes are damaged in a disaster will not result in substantial differences in the overall building value of losses. Aggregated to the national level this estimate finds that Latino homeowners living in communities with disaster risk face \$3.1 billion dollars in annual estimated losses, or 1.1 percent of total Latino home value in these areas. For homeowners overall, the total estimated loss accounts for less than a tenth of a percent of total home value.

Table 1 shows the share of total expected annual losses to residential properties owned by Latino households and by all households, broken out by selected disaster types. Hurricanes account for the

largest share of expected annual losses for Latino owners (41.5 percent), a concentration higher than that among total owners (37.2 percent). The next-highest risks among Latino homeowners are wildfires (6.1 percent) and riverine flooding (5.1 percent), with smaller contributions from coastal flooding (1.2 percent) and heat waves. Appendix table A.1 provides data for other disaster types.

**TABLE 1**  
**Share of Expected Annual Losses to Residential Property, by Disaster Type**

Disaster event	Latino residential losses	Total residential losses
Hurricanes	41.5%	37.2%
Wildfires	6.1%	8.0%
Riverine flooding	5.1%	5.9%
Coastal flooding	1.2%	2.0%
Heat waves	0.0%	0.0%
Other	46.1%	46.9%
Total	100.0%	100.0%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** For data regarding other disasters, see appendix table A.1.

Finally, we analyze the distribution of estimated expected annual losses for Latino-owned homes using the NRI’s composite risk ratings, which reflect physical damage risks and community risks reflected in community resilience and social vulnerability. To provide further insight, we disaggregate the data by neighborhood income levels, enabling a detailed examination of how hazard risks intersect with community socioeconomic characteristics.

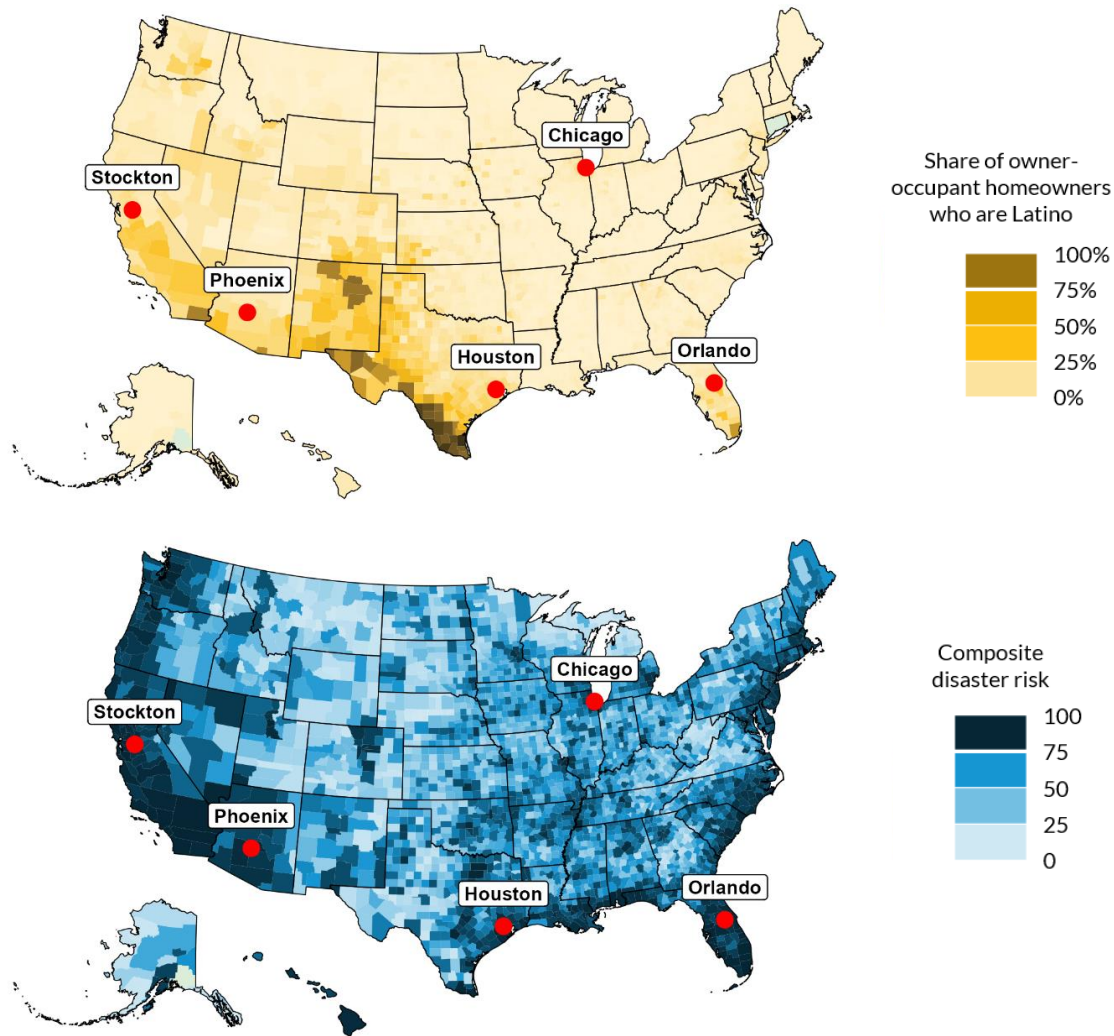
### Overall Climate Risks for Latino Homeowners

Before examining the results for individual hazard types, we must understand the overall distribution of climate risks Latino homeowners face. The NRI provides aggregated expected annual loss rates and composite risk ratings, consolidating data from 18 hazard types into a single comprehensive measure of disaster risk.

Figure 1 compares the geographic distribution of Latino homeownership and composite disaster risk scores. The top map illustrates the share of owner-occupied units Latino households own across the United States, highlighting significant concentrations in the southwestern region—notably, in Arizona, California, and Texas—and in parts of Florida. The bottom map shows composite risk ratings, with darker shades indicating higher overall disaster risk. When overlaid, these maps reveal that many areas with high concentrations of Latino homeowners are regions that face elevated composite disaster risks.

FIGURE 1

Latino Homeowner Concentration and Composite Disaster Risk Nationally, by County



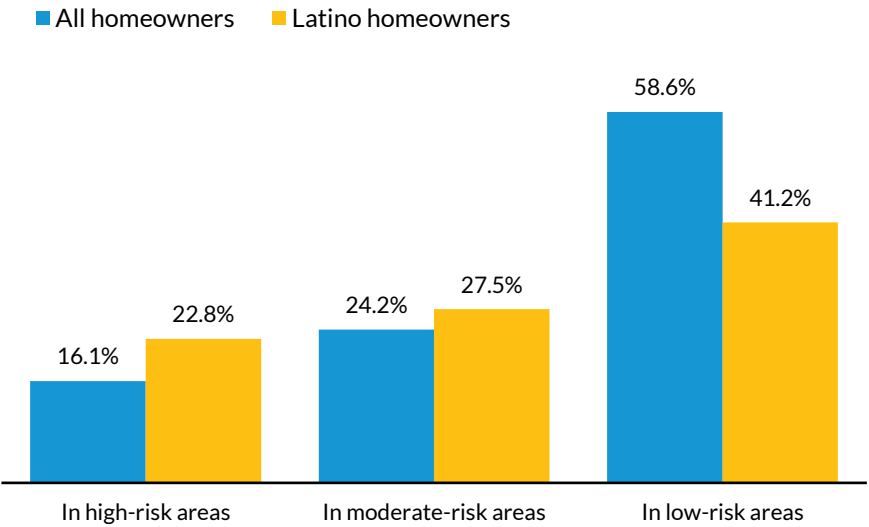
URBAN INSTITUTE

Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

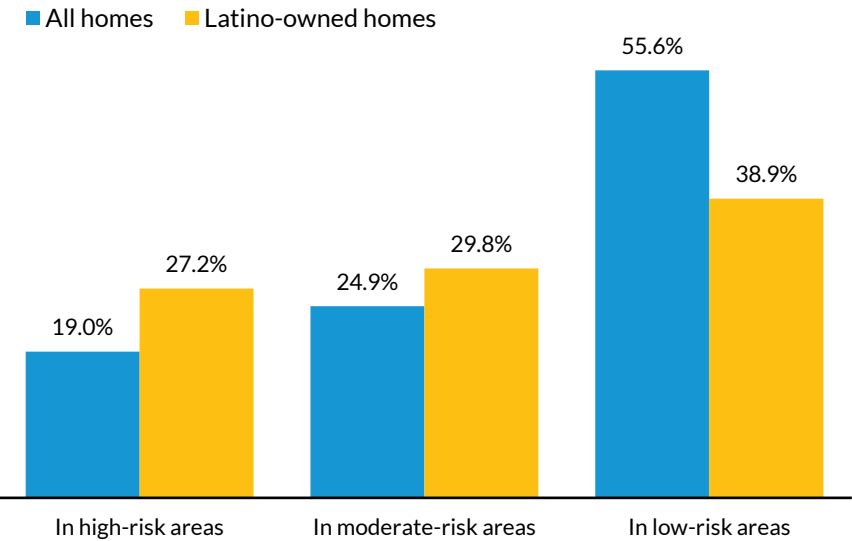
This geographic overlap signals Latino households' disproportionate exposure to climate-related hazards. Figure 2 illustrates that Latino homeowners are disproportionately concentrated in high- and moderate-risk areas compared with the general homeowner population. For instance, 27.2 percent of Latino home value is in high-risk areas, exceeding the 19 percent share of total home value. Similarly, 29.8 percent of Latino home value is in moderate-risk areas, compared with 24.9 percent of total home value. This trend holds when considering the distribution of homeowners: 22.8 percent of Latino homeowners are in high-risk areas, compared with only 16.1 percent of total homeowners. These

disparities highlight Latino communities' vulnerability to disaster risks, both in terms of the concentration of their home values and their physical presence in at-risk areas.

**FIGURE 2**  
**Residential Home Values and Homeowners, by Neighborhood Composite Disaster Risk**  
*Share of homeowners*



*Share of total residential home value*



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

When examining the expected home value losses Latino homeowners incur because of disasters, a clear and consistent disparity emerges. Latino homeowners bear a disproportionately high share of overall home value losses across neighborhoods at all income levels. Latino home values account for only 8.1 percent of total home value across all neighborhoods, yet the Latino share of expected residential losses rises to 10.8 percent (figure 3). This gap is even more pronounced in LMI neighborhoods (where households earn up to 80 percent of the area median income). Latino home values constitute 12 percent of the total, but Latino homeowners' share of expected residential losses is 16 percent. These disparities underscore Latino households' vulnerability to climate risks, particularly in LMI neighborhoods where community resilience is often low.

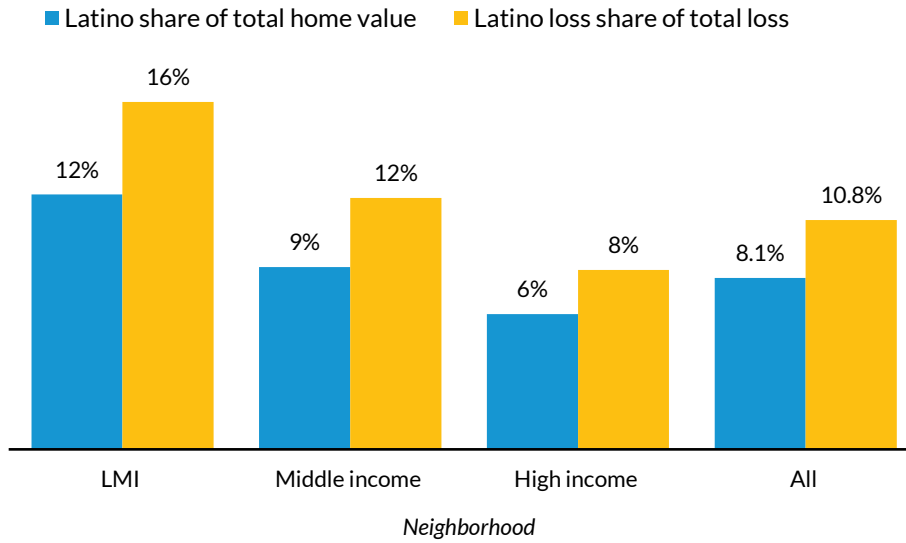
In addition, expected Latino home value losses are disproportionately concentrated in LMI neighborhoods. Figure 4 compares the share of home values and losses by neighborhood income between Latino homeowners and all homeowners. Twenty-five percent of Latino home values and 24 percent of Latino home losses are concentrated in LMI neighborhoods, compared with 17 percent and 16 percent for all homeowners, respectively. These patterns highlight the intersection of income levels and ethnic disparities in disaster impacts, emphasizing the need for targeted interventions to reduce vulnerabilities in Latino and LMI communities.

The concentration of Latino home value losses in LMI neighborhoods has significant implications for financial security, homeownership sustainability, and wealth accumulation. Homeowners in LMI neighborhoods often have lower incomes and are less likely to carry sufficient insurance coverage, leaving them especially vulnerable to hazard risks (Lloro et al. 2024). The loss of home value in these areas can reduce homeowners' financial stability and erode housing wealth—a critical source of financial security. Additionally, as home values depreciate following disasters, homeowners face greater challenges sustaining homeownership, which can lead to higher foreclosure rates. These impacts, in turn, exacerbate existing racial and ethnic wealth gaps, particularly in historically marginalized communities. Addressing these challenges requires targeted policy interventions to bolster community resilience, expand access to insurance, and provide resources for disaster recovery in vulnerable neighborhoods.



FIGURE 3

**Latino Homeowners' Share of Total Residential Value Compared with Their Share of Expected Composite Residential Loss from Disasters**



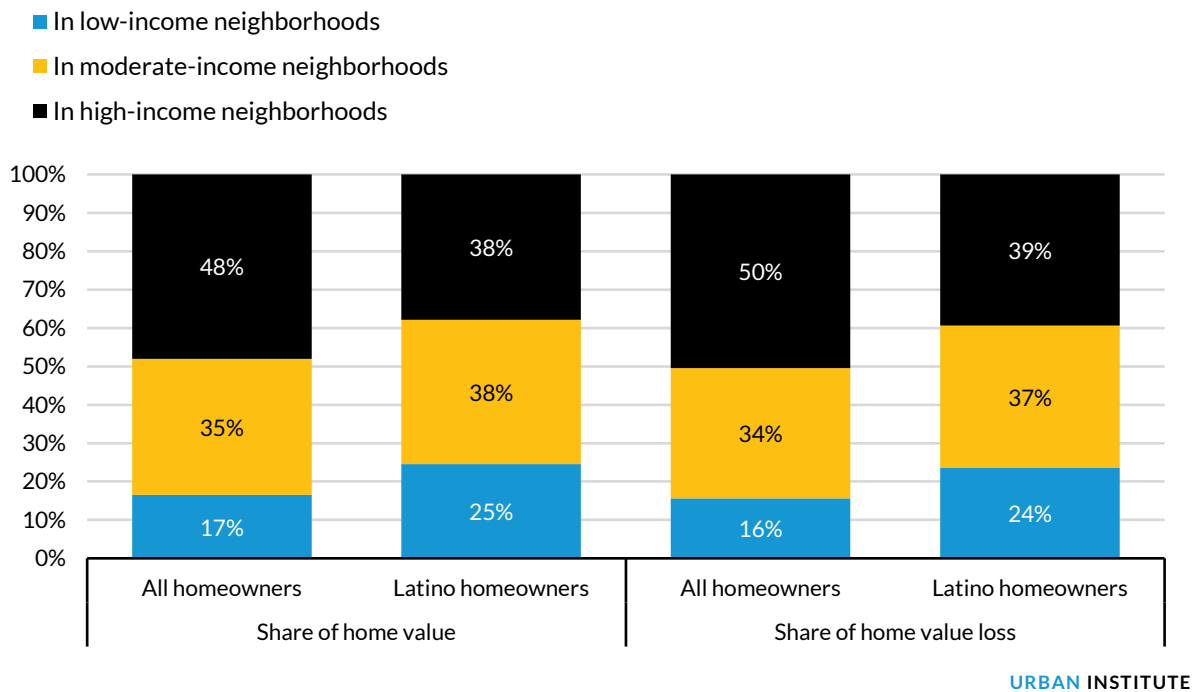
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** LMI = low to moderate income.

FIGURE 4

### Home Values and Expected Residential Losses, by Neighborhood Income

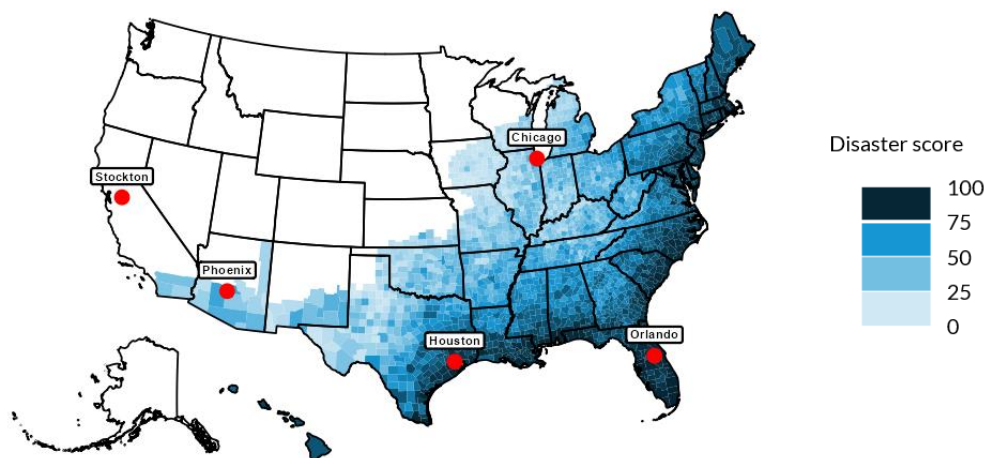


**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

## Hurricane Risks for Latino Homeowners

Hurricanes pose the greatest threat among all disaster types in terms of economic damage and loss of human life in the United States.<sup>6</sup> These storms are most destructive along the East Coast and the Gulf Coast, where their intensity and reach have been exacerbated by increasing storm velocities (Seneviratne et al. 2021). Figure 5 illustrates the distribution of hurricane disaster risk across the United States, with darker shades indicating counties at higher risk. Among the five selected markets, Houston and Orlando stand out as areas with high hurricane risk.

**FIGURE 5**  
Hurricane Disaster Risk, by County



URBAN INSTITUTE

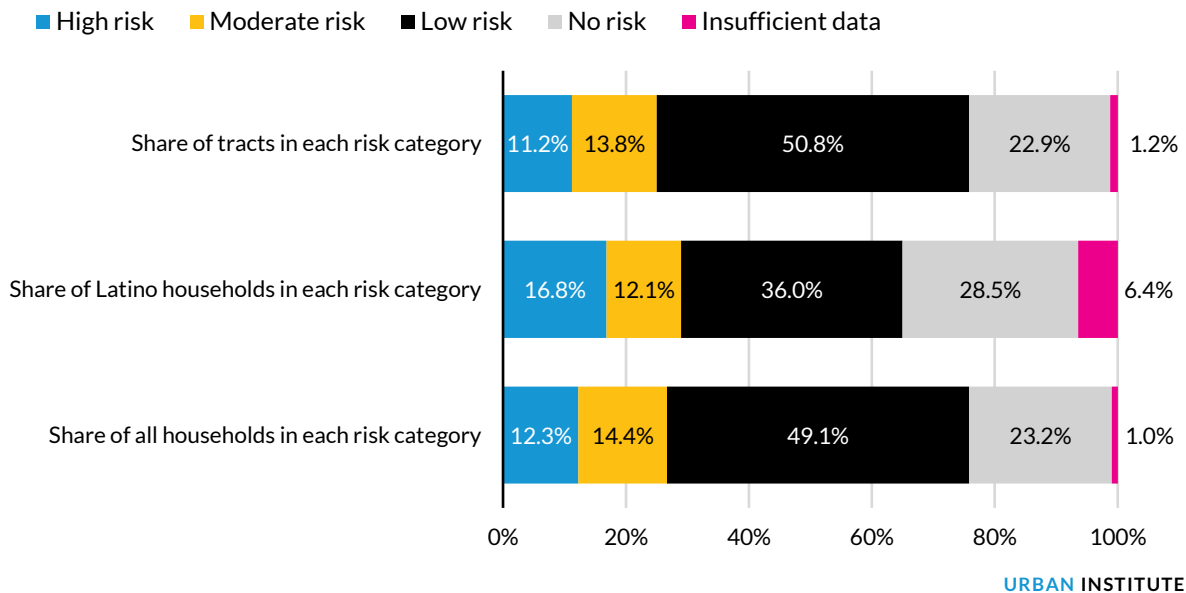
Source: Federal Emergency Management Agency National Risk Index data.

Before we look at the distributional impact of hurricane risks, it is important to note the NRI dataset's limitations. Certain census tracts do not receive a risk rating from FEMA and are instead categorized as "not applicable," "no rating," or "insufficient data." "Not applicable" indicates that the hazard type being evaluated is not geographically possible in the tract, signifying zero risk of loss. Similarly, "no rating" is assigned when the expected annual loss is equal to zero, meaning the community has no building, population, or agricultural value exposed to the hazard. "Insufficient data" is used when the community lacks the necessary information to calculate composite risk. This can occur when hazard source data are unavailable to calculate expected annual losses or when data for social vulnerability or community resilience are missing. For the remainder of the report, we group communities with not applicable and no rating together as "no risk."

Figure 6 illustrates the distribution of tracts, Latino households, and all households by hurricane risk rating. Notably, Latino households are disproportionately represented in tracts with insufficient data (6.4 percent), compared with 1.0 percent of all households. This is because most tracts FEMA reports as having insufficient data are in Puerto Rico, which has a majority-Latino population but high hurricane risk. For the remainder of the analysis, we exclude tracts with invalid risk ratings (insufficient data) to ensure the reliability of the findings.

FIGURE 6

Distribution of Census Tracts and Households, by Neighborhood Hurricane Risk



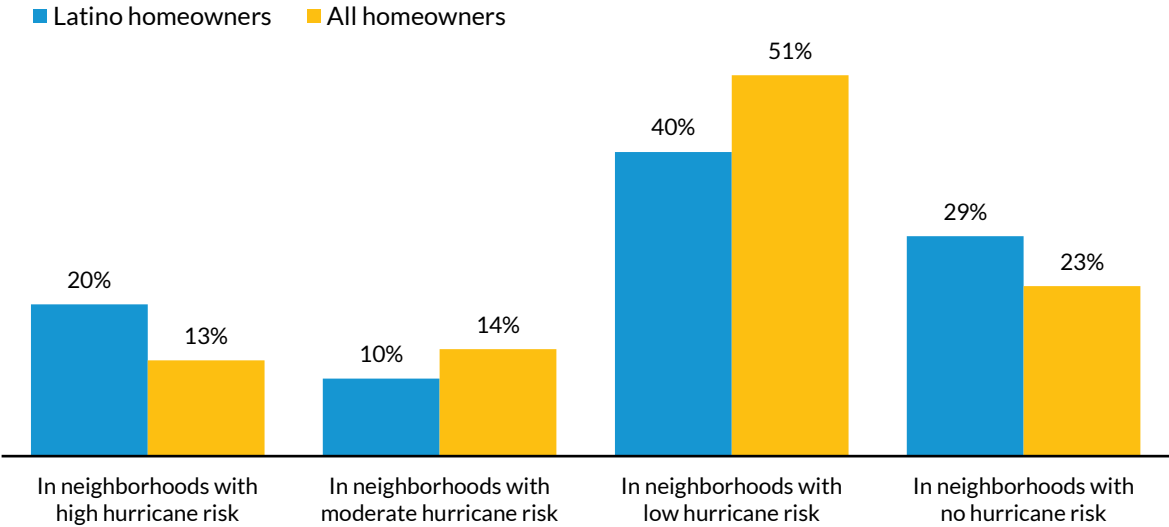
Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

Figure 7 shows the geographic distribution of hurricane risks and their impact on Latino homeowners and communities. Notably, compared with all homeowners, a smaller share of Latino homeowners has no exposure to hurricane risks overall (23 percent versus 29 percent). But among those who are exposed to hurricane risks, Latino homeowners are disproportionately concentrated in census tracts with high hurricane risk. Approximately 20 percent of Latino homeowners reside in high-risk areas, compared with only 13 percent of all homeowners. This disparity is also reflected in home values: 17 percent of Latino residential home value is in high-risk areas, compared with just 11 percent of total US home value. At the other end of the spectrum, Latino homeowners are underrepresented in low-risk areas, where 30.6 percent of their home values are concentrated, compared with 39.2 percent for all homeowners. These patterns indicate Latino homeowners' disproportionate exposure to high hurricane risks, both in terms of where they live and the value of their homes.

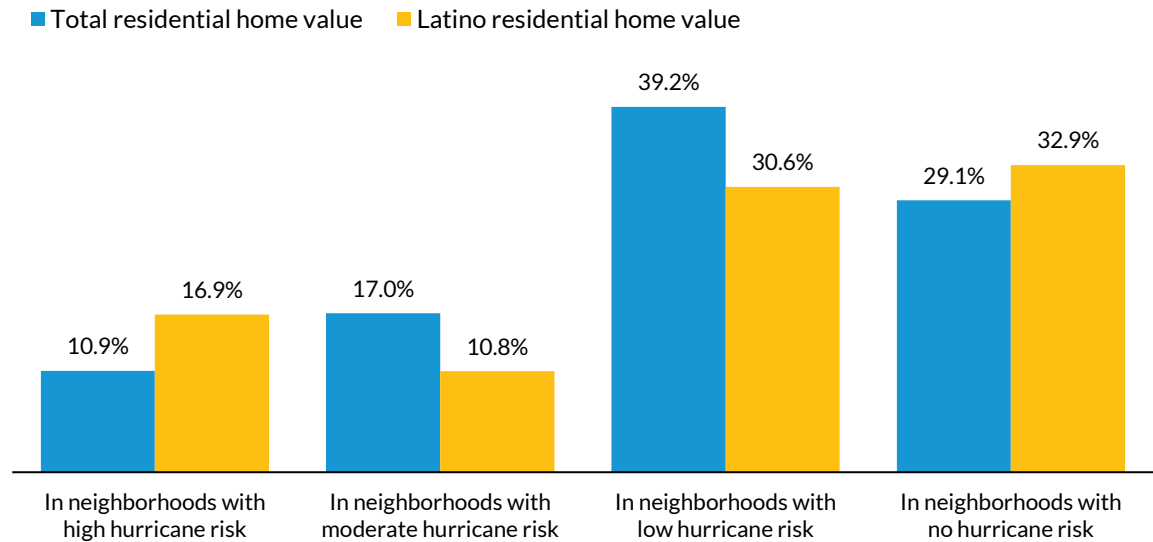
In terms of economic characteristics, there are distinct patterns in income and home value distributions (table 2). For the overall population in tracts with hurricane risk, median incomes and home values are highest in moderate-risk areas, reflecting potentially higher-value properties and greater economic stability in these regions. Home values for Latino households follow a pattern similar to home values overall. For example, the median home value for Latino homeowners in moderate-risk

areas is \$290,900, compared with \$189,800 in low-risk areas. This suggests that all homeowners in moderate- and high-risk areas have more to lose economically from a hurricane.

**FIGURE 7**  
**Residential Home Values and Expected Annual Losses Attributable to Hurricanes, by Neighborhood Hurricane Risk Category**  
*Share of homeowners*



*Share of total residential home value*



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

TABLE 2

## Household Characteristics, by Community Hurricane Risk

	High risk	Moderate risk	Low risk	No risk	All
Median homeowner income (all)	\$81,318	\$112,083	\$87,222	\$102,727	\$92,598
Median home value (all)	\$249,400	\$366,000	\$221,600	\$412,600	\$243,800
Median home value (Latino)	\$219,500	\$290,900	\$189,800	\$378,300	\$208,500

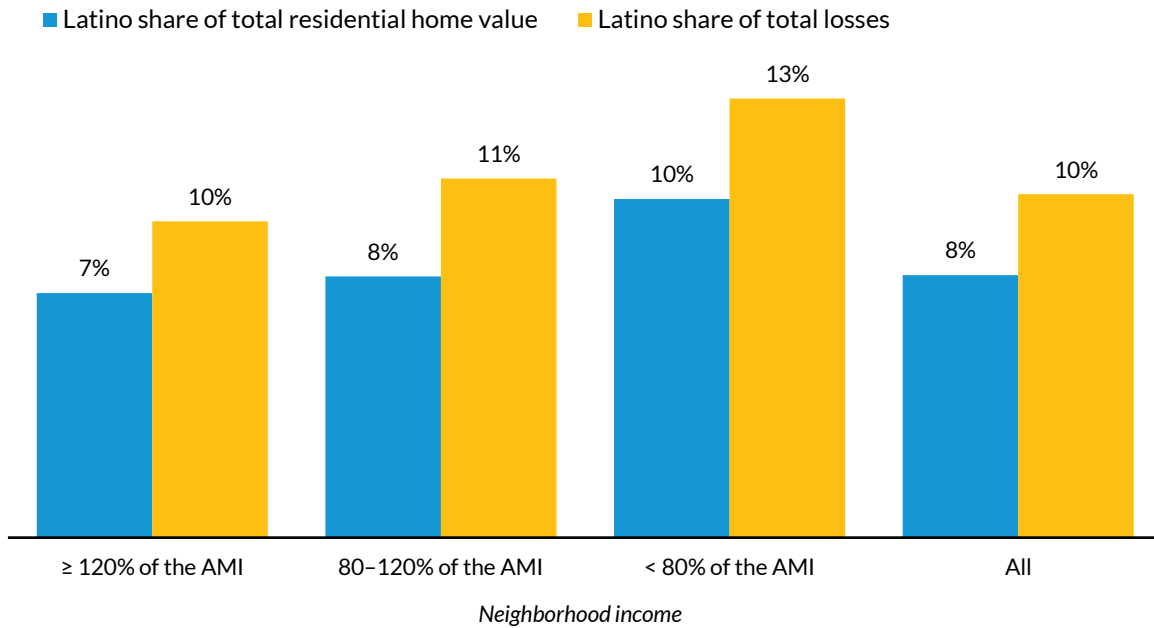
**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Income statistics for Latino owner-occupied households are not available at the tract level.

The economic consequences of hurricane risks are significant. When examining the expected home value losses Latino homeowners incur because of hurricanes in moderate-to-high-risk communities, we observe that Latino homeowners bear a disproportionately high share of expected home value losses relative to their home values across neighborhoods at all income levels. Figure 8 shows that in LMI neighborhoods, Latino homeowners account for 13 percent of total losses, compared with just 10 percent of total home value. Similarly, in moderate-income neighborhoods, Latino losses represent 11 percent of the total, compared with 8 percent of total home value. These disparities persist even in upper-income neighborhoods, where the Latino loss share (10 percent) exceeds their share of home value (7 percent).

FIGURE 8

**Residential Home Values and Expected Annual Losses in Neighborhoods with Moderate to High Hurricane Risk, by Neighborhood Income**



URBAN INSTITUTE

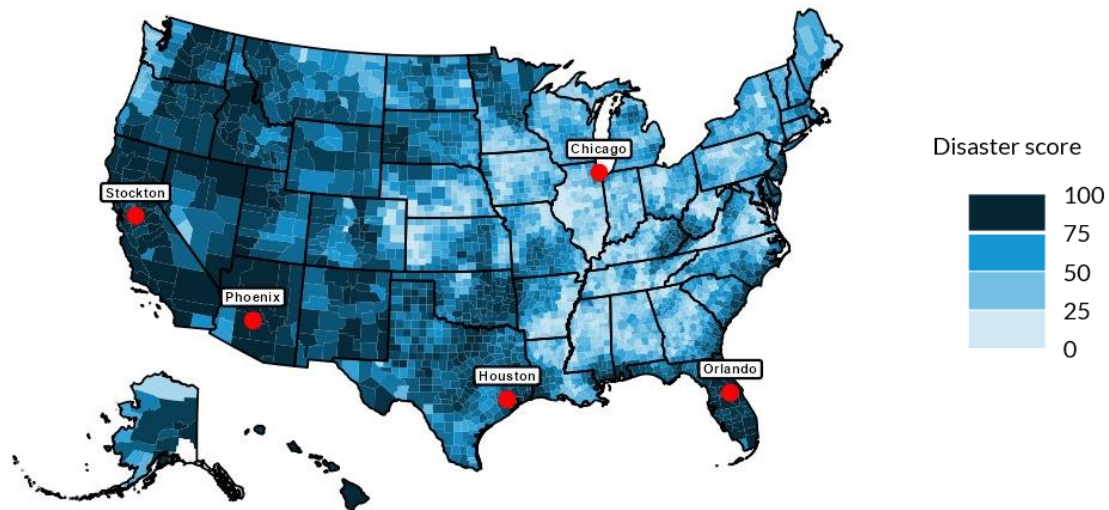
**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** AMI = area median income.

## Wildfire Risks for Latino Homeowners

Wildfires pose a significant threat to residential communities, particularly in the western United States, where dry conditions and rising temperatures have increased the frequency and severity of wildfires (Iglesias, Balch, and Travis 2022). Figure 9 highlights the geographic distribution of wildfire disaster risk across the United States, with the darkest areas representing the highest risk. Notably, California, Arizona, and other western states—and cities such as Stockton and Phoenix—exhibit the highest wildfire risk levels. These regions are home to large Latino populations, further amplifying the socioeconomic implications of wildfire risks.

**FIGURE 9**  
**Wildfire Disaster Risk, by County**



URBAN INSTITUTE

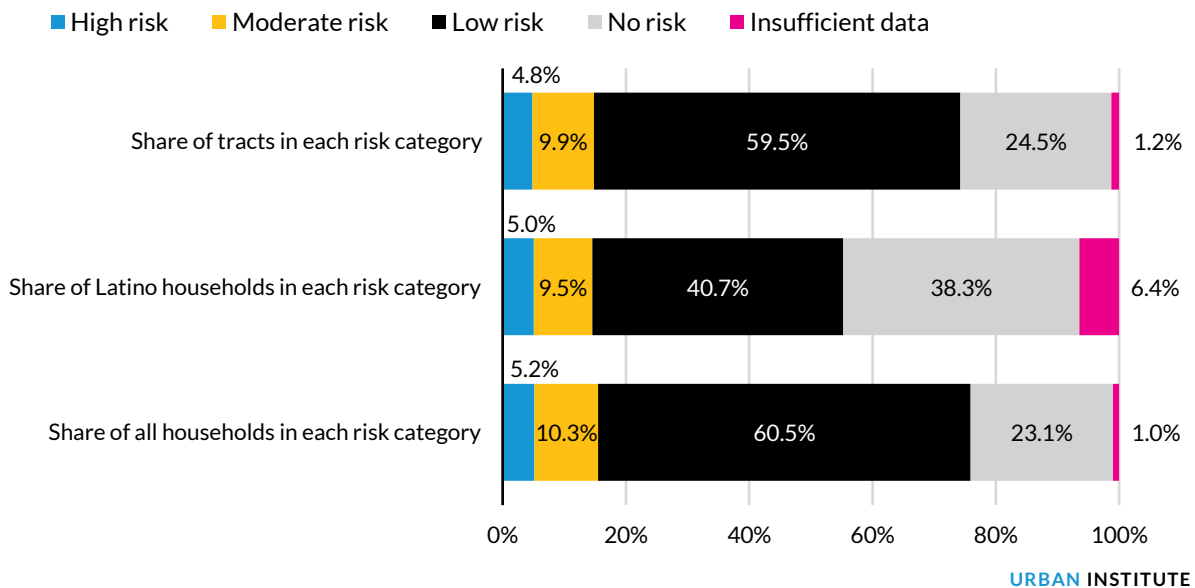
**Source:** Federal Emergency Management Agency National Risk Index data.

Figure 10 illustrates the distribution of census tracts and households by wildfire risk levels. Overall, 4.8 percent of census tracts are categorized as having high wildfire risk, while 9.9 percent are at moderate risk. Latino households, in comparison, are more likely to reside in areas with no wildfire risk (38.3 percent) relative to all households (23.1 percent) and have a similar distribution in areas with high and moderate wildfire risk. But Latino households are disproportionately represented in census tracts categorized as having insufficient data (6.4 percent), compared with just 1.0 percent for all households. This discrepancy suggests gaps in risk assessment and data availability for neighborhoods with significant Latino populations.



FIGURE 10

Distribution of Census Tracts and Households, by Neighborhood Wildfire Risk



**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

Latino homeowners are only slightly more likely to reside in areas with moderate to high wildfire risk. Figure 10 indicates that 5 percent of Latino homeowners reside in high-risk areas, compared with only 5.2 percent of all homeowners. Similarly, figure 11 indicates that Latino residential home values are slightly more concentrated in high-risk areas (9 percent) compared with total residential values (8 percent). But Latino homeowners are also more likely to reside in communities with no risk of wildfires (31.8 percent) than the overall population (17.4 percent). As a result, Latino home value is also disproportionately located in communities without wildfire risk (42 percent).

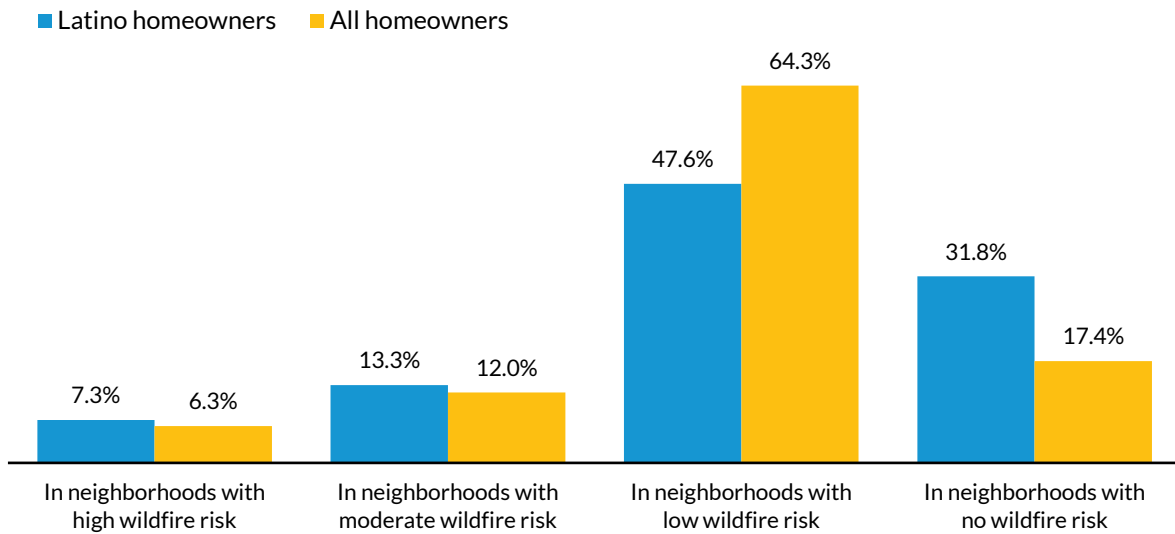
Household characteristics vary by the wildfire risk communities face. For communities affected by wildfires, as risk increases, so do household incomes and home values, though the overall difference is greater for Latino households (table 3). Home values in high-risk areas are significantly higher (\$300,800) than in moderate-risk areas (\$230,800) or low-risk areas (\$192,400). This suggests that communities with higher wildfire risk tend to have more affluent households owning higher-value homes. Home values for both the overall population and Latino owners are highest in communities with no wildfire risk.

The economic burden of wildfire risks in high- and moderate-risk areas falls disproportionately on Latino homeowners (figure 12). While Latino homeowners account for 8 percent of total residential home value, they face 10 percent of total home value losses. This disparity is primarily driven by losses in moderate-to-high-income neighborhoods, where the gap in household income and property values between Latino homeowners in moderate-to-high-risk areas and those in low-risk areas is more pronounced than for the overall population.

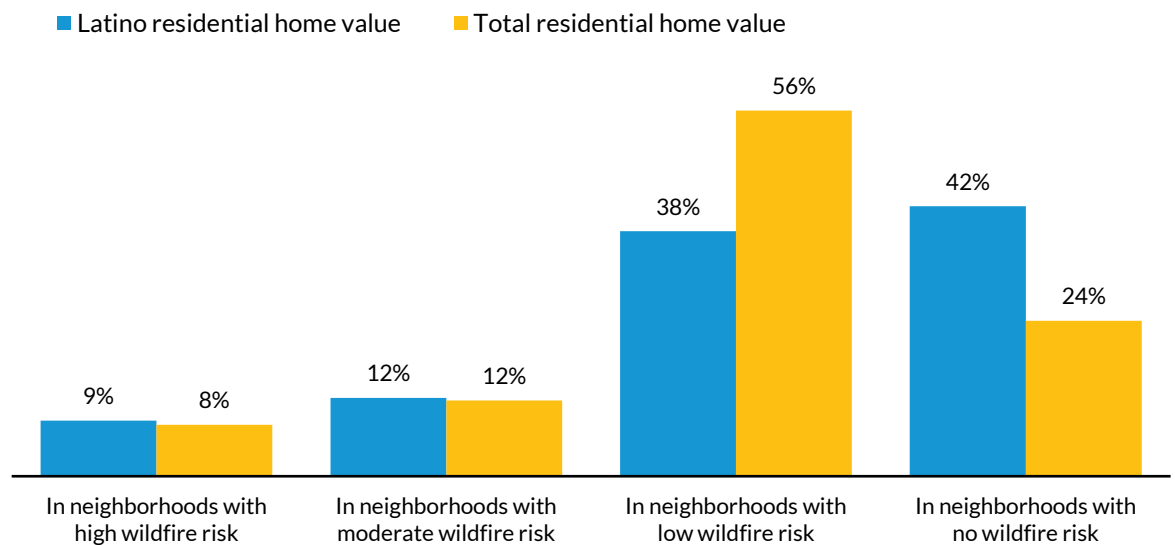
FIGURE 11

**Residential Home Values and Expected Annual Losses Attributable to Wildfires, by Neighborhood Wildfire Risk Category**

*Share of homeowners*



*Share of total residential home value*



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

TABLE 3

## Household Characteristics, by Community Wildfire Risk

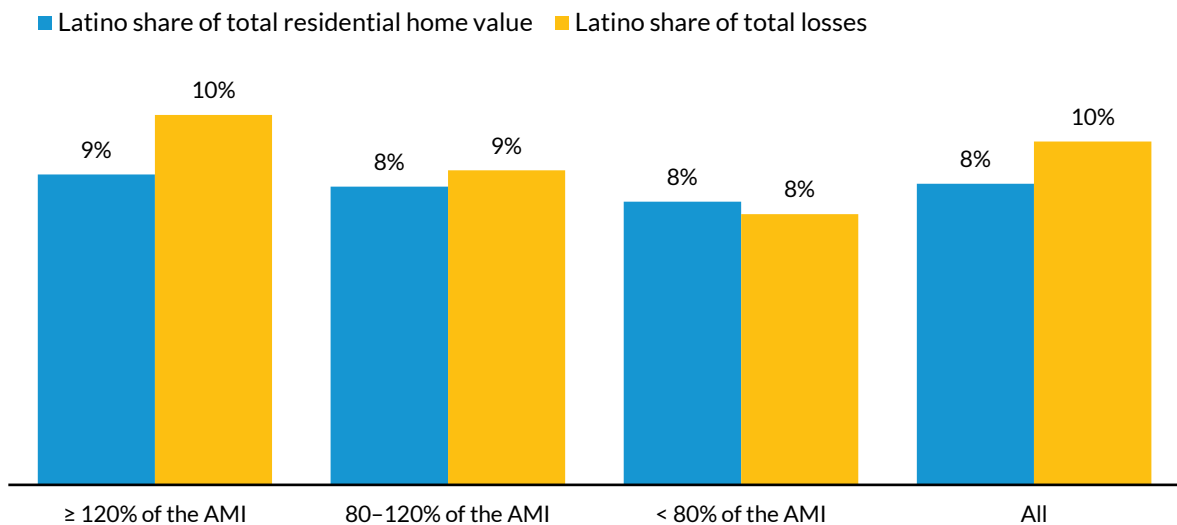
	High risk	Moderate risk	Low risk	No risk	All
Median homeowner income (all)	\$92,929	\$87,333	\$91,179	\$103,438	\$92,598
Median home value (all)	\$342,400	\$263,600	\$247,000	\$407,800	\$255,100
Median home value (Latino)	\$300,800	\$230,800	\$192,400	\$343,400	\$211,700

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Income statistics for Latino owner-occupied households are not available at the tract level.

FIGURE 12

## Residential Home Values and Expected Annual Losses Attributable to Wildfires in Neighborhoods with High to Moderate Wildfire Risk, by Neighborhood Income



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

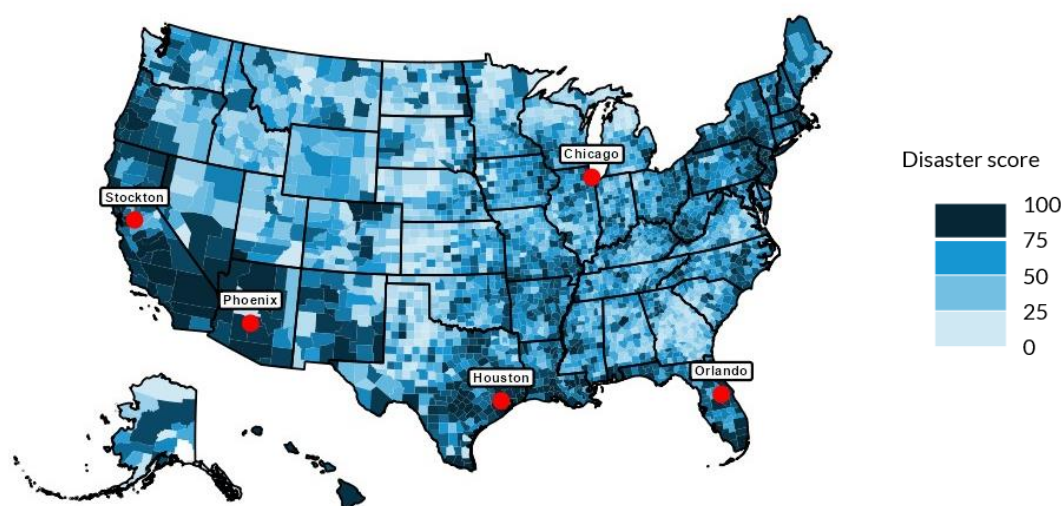
## Riverine Flood Risks for Latino Homeowners

Riverine flooding, caused by overflowing rivers and streams, represents a widespread hazard in the United States. Despite contributing a smaller share of total expected economic losses compared with hurricanes and wildfires, riverine flooding remains a significant risk for homeowners, particularly in regions near major rivers and inland water systems. Figure 13 highlights the geographic distribution of

riverine flood risk across the country, with darker areas indicating higher risk. Notable regions include counties along the Mississippi River, as well as parts of Phoenix, Orlando, and Stockton, where flood risk intersects with high Latino population densities.

**FIGURE 13**

**Riverine Flood Disaster Risk, by County**



URBAN INSTITUTE

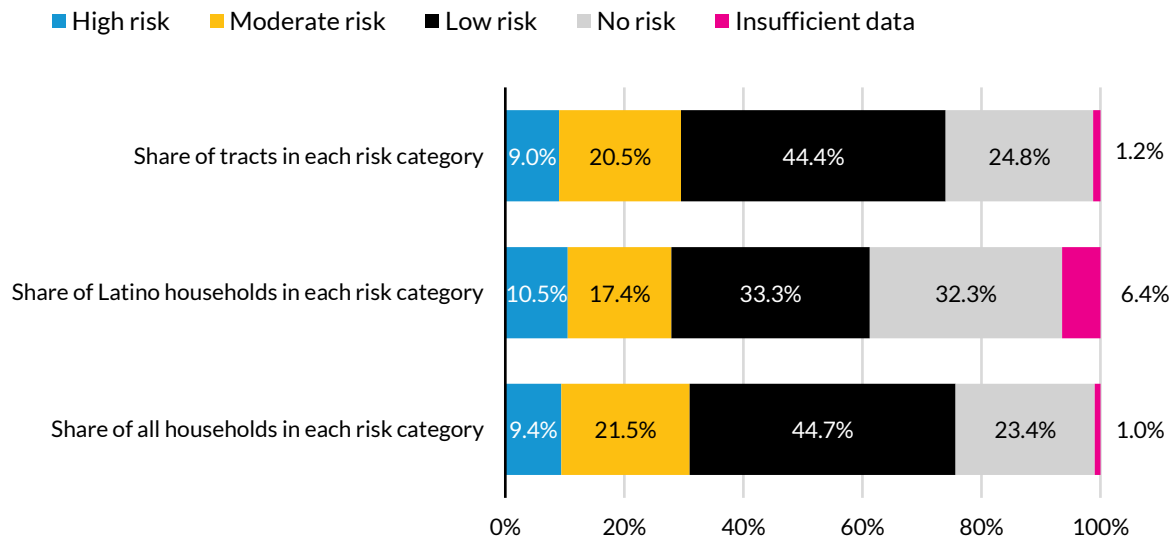
**Source:** Federal Emergency Management Agency National Risk Index data.

A significant portion of the country faces some degree of riverine flood risk, with 73.9 percent of census tracts reporting flood exposure. Latino households are more likely to be in census tracts with no risk of riverine flooding (32.3 percent) than households overall. Latino households are disproportionately located in areas with insufficient risk data, composing 6.4 percent of households in these tracts, compared with just 1.0 percent for the general population (figure 14). Although 32.3 percent of Latino households are concentrated in tracts with no riverine risk, they are overrepresented in areas where data gaps prevent accurate risk assessments. We exclude these census tracts for the remainder of this analysis.

Latino homeowners are slightly more likely to reside in high-risk areas compared with the overall homeowner population (figure 15). Similarly, Latino residential home values are disproportionately concentrated in high-risk areas, which increases households' vulnerability to property damage and financial loss. Figure 15 also indicates that Latino homeowners are disproportionately represented in no-risk areas, with more than a third of total Latino residential home values concentrated in no-risk areas.

FIGURE 14

Distribution of Census Tracts and Households, by Neighborhood Riverine Flood Risk



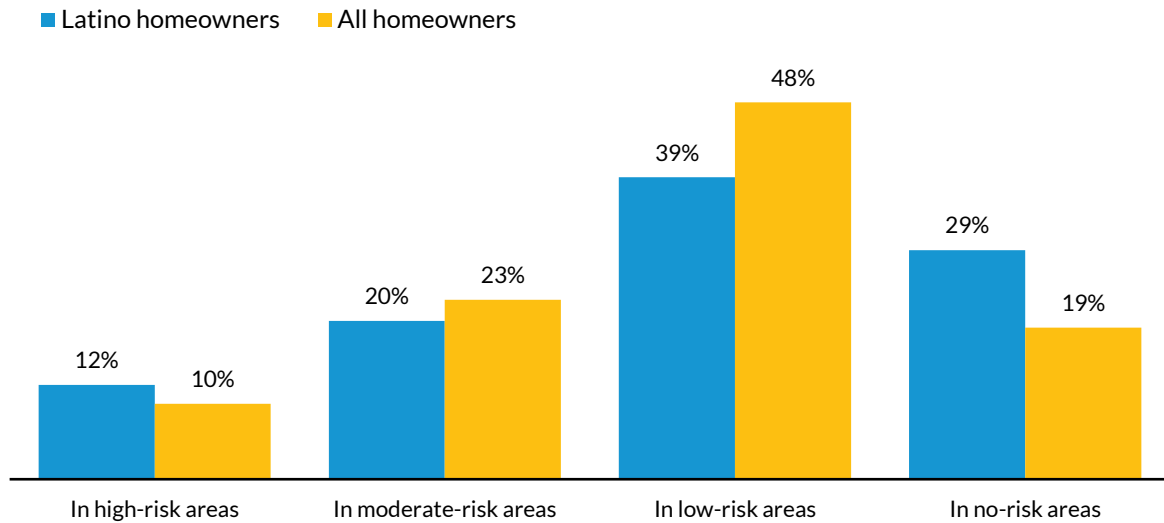
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

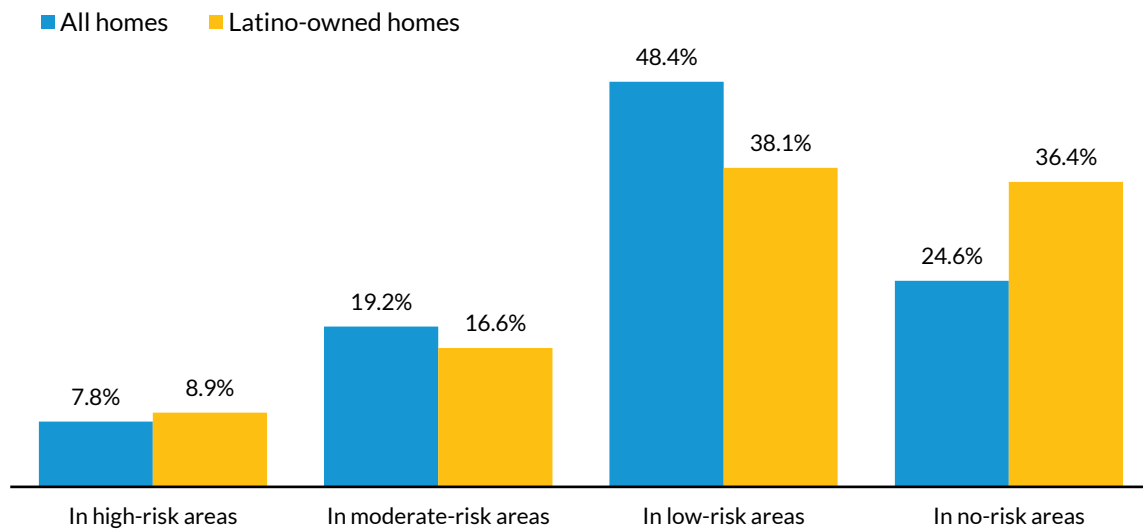
FIGURE 15

**Residential Home Values and Expected Annual Losses Attributable to Riverine Floods, by Neighborhood Riverine Flood Risk Category**

*Share of homeowners*



*Share of total residential home value*



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

Household characteristics vary by the level of risk their communities face from riverine flooding. For communities affected by riverine flooding, as risk increases, household incomes and home values

decrease, though the overall difference for home values is greater for Latino households (table 4). Home values for Latino households in high-risk areas are significantly lower (\$169,800) than in moderate-risk areas (\$206,400) or low-risk areas (\$249,000). This suggests that communities with higher riverine flood risk tend to have less affluent households owning lower-value homes. Home values for both the overall population and Latino homeowners in communities with no riverine flood risk are comparable with those in moderate-risk communities.

**TABLE 4**  
**Household Characteristics, by Community Riverine Flood Risk**

	High risk	Moderate risk	Low risk	No risk	All
Median homeowner income (all)	\$79,148	\$85,341	\$96,940	\$100,791	\$92,598
Median home value (all)	\$210,600	\$230,400	\$283,400	\$265,100	\$258,600
Median home value (Latino)	\$169,800	\$206,400	\$249,000	\$238,800	\$223,400

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

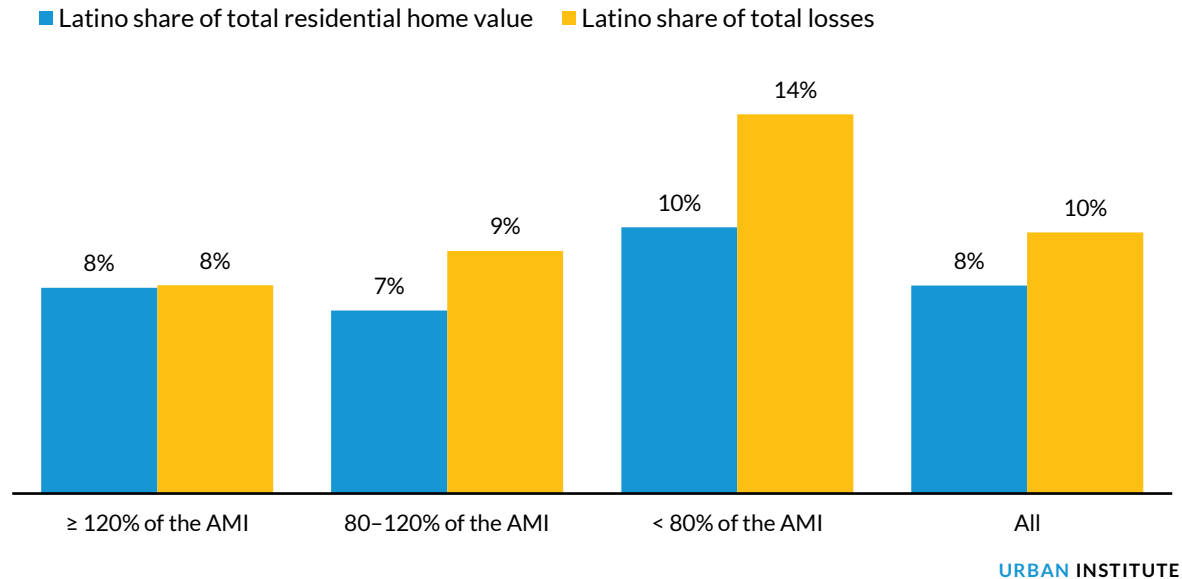
**Note:** Income statistics for Latino owner-occupied households are not available at the tract level.

When examining the expected home value losses Latino homeowners incur because of riverine flooding in moderate-to-high-risk communities, we observe that Latino homeowners bear a disproportionately high share of expected home value losses from flooding. Figure 16 shows that in LMI neighborhoods, Latino homeowners account for 14 percent of total losses but hold 10 percent of total home value. Similarly, in moderate-income neighborhoods, Latino losses represent 9 percent of total losses, compared with 7 percent of total home value. These disparities do not apply in upper-income neighborhoods, where the Latino loss share is equal to their share of home value (both 8 percent).



FIGURE 16

**Residential Home Values and Expected Annual Losses Attributable to Riverine Flooding in Neighborhoods with High to Moderate Riverine Flood Risk, by Neighborhood Income**



**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

### COASTAL FLOOD RISK

Coastal flooding, which is caused by rising tides, is a distinct flood category that FEMA separately monitors and reports.<sup>7</sup> Coastal flood risk affects a small share of US communities, and this disaster’s contribution to the overall losses residential buildings face is minimal. Because of the small scale of this disaster, we do not provide a deeper description. But areas that do face this risk can experience intense losses when coastal flooding hits. For Latino owners, there are select communities, particularly in Texas and California, where coastal flooding is a direct threat to home values. Losses are concentrated along the coasts and in midwestern counties that border the Great Lakes, as would be expected given the nature of this disaster. Certain coastal metropolitan areas, such as New York City, Houston, and San Francisco, face the most extreme risk from coastal flooding.

Coastal flooding events have increased in frequency since the 1950s, and the incidence of these events is linked to changing sea levels.<sup>8</sup> If sea levels continue to rise, the impact of coastal flooding on select coastal communities will increase. Latino households face a risk burden fairly proportionate to their exposure to coastal flood risk, but as these communities face greater risk from relative sea-level change, it is possible exposure will shift.

# Community Risks

When assessing the impact of natural hazards, traditional approaches often rely heavily on economic metrics, such as expected annual loss. Although these measures are essential for quantifying potential economic losses, they can fall short of capturing the broader impacts disasters have on communities, particularly on vulnerable populations (Zhu et al. 2024). To bridge this gap, we examine social vulnerability and community resilience, which are fundamental for understanding how Latino communities are affected by and recover from disasters.

## Why Social Vulnerability and Community Resilience Matter

Social vulnerability and community resilience capture the human and systemic factors that shape a community's ability to withstand and recover from disasters. These measures provide a more nuanced understanding of disaster risk by accounting for disparities in how different populations and communities experience and respond to hazards. Integrating these dimensions into our analysis enables us to better understand and quantify community risks, allowing for more informed policy interventions tailored to the unique challenges Latino households in LMI neighborhoods face.

1. **Social vulnerability** refers to the susceptibility of a community or population to the adverse impacts of hazards or stressors, and it measures how well they can prevent human suffering and financial loss in the event of a disaster (CDC and ATSDR 2024). FEMA uses 16 variables from the US Census Bureau to rank census tracts on social vulnerability, categorizing neighborhoods from having very high to very low vulnerability. For instance, neighborhoods with higher social vulnerability often have fewer resources to prepare for disasters, such as access to insurance or reliable evacuation plans, leaving residents more exposed to harm. In the context of climate risks, socially vulnerable areas—often disproportionately concentrated in LMI neighborhoods of color—experience greater hardship after events such as floods or hurricanes. At the national level, nearly 70 percent of census tracts in LMI neighborhoods of color are classified as highly socially vulnerable, compared with just 20 percent of neighborhoods nationwide (Zhu et al. 2024).
2. **Community resilience** is defined by the National Institute of Standards and Technology as the “ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.” Resilience reflects factors such as infrastructure, social capacity, and institutional preparedness. The NRI uses the Baseline Resilience Indicators for Communities framework to measure resilience across social,

economic, community capital, institutional, infrastructural, and environmental domains. Resilience is assessed at the county level, with census tracts assigned their parent county's resilience score. Resilient communities are better equipped to recover from disasters quickly and with fewer long-term consequences. Conversely, low-resilience neighborhoods often face prolonged disruptions, exacerbating the financial and social impacts of disasters.

## **Latino Communities Are Characterized by High Social Vulnerability and Low Community Resilience**

The intersection of high social vulnerability, low community resilience, and Latino population concentration reveals that Latino communities face disproportionately high community risks across the United States (figure 17).

The geographic distribution of Latino communities shows clear patterns of concentration in the southern and southwestern regions of the United States, particularly in Texas, New Mexico, Nevada, and Arizona. These areas house a significant share of Latino households and are characterized by having low community resilience. Low resilience in these regions reflects systemic gaps, including insufficient infrastructure to withstand natural hazards such as floods, hurricanes, and wildfires. Poor communication networks and a limited capacity to adapt to changing circumstances further exacerbate these vulnerabilities. Simultaneously, counties with high and very high social vulnerability are concentrated in the South. This is largely because of higher levels of poverty, lower educational attainment, and high concentrations of households of color. These patterns reveal that neighborhoods with significant Latino populations are often the same areas facing higher social vulnerability and lower community resilience.

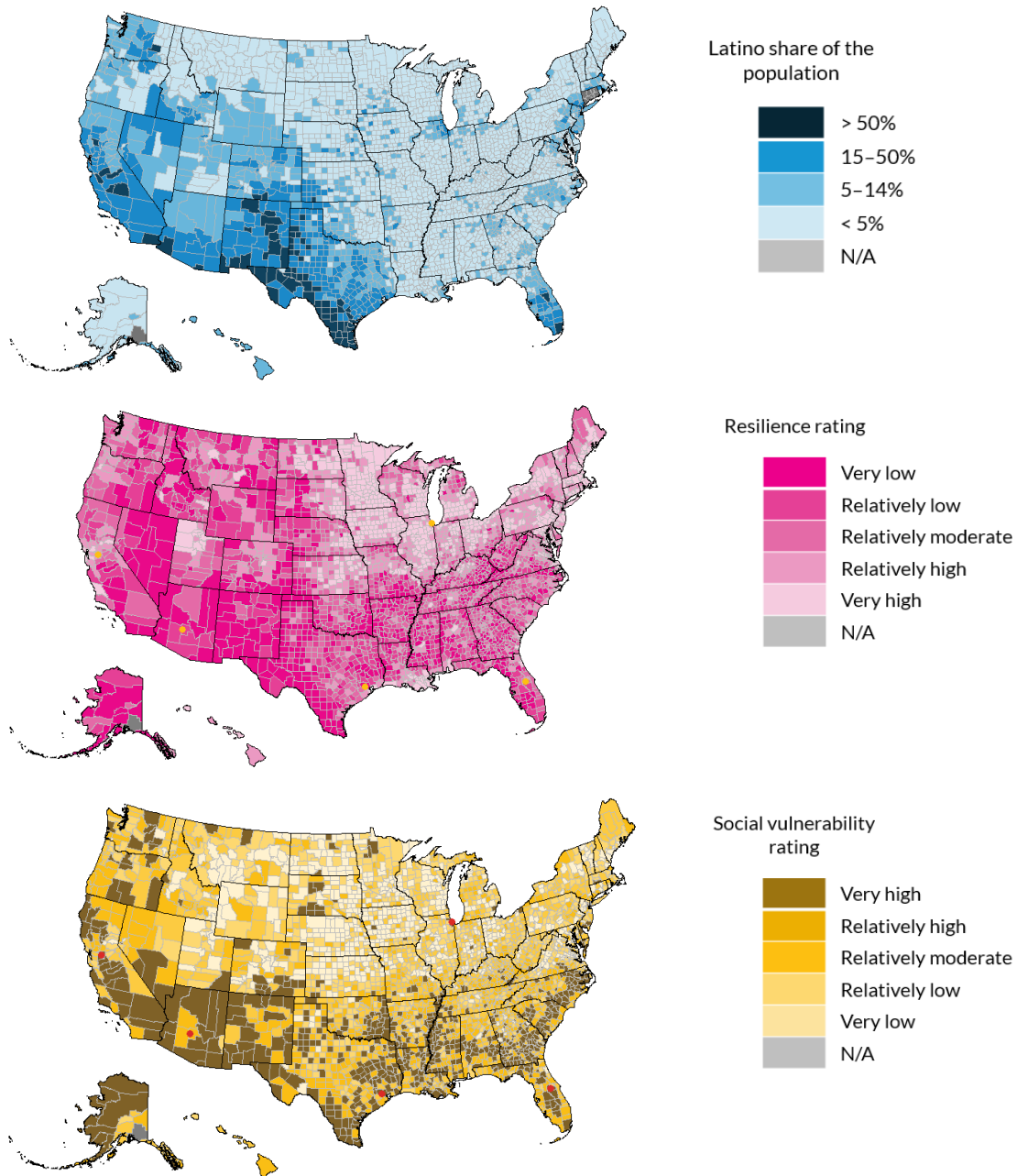
Figure 18 further explores this geographic correlation by examining how community risks—measured through social vulnerability and community resilience—vary by Latino household share. Neighborhoods with higher concentrations of Latino households experience disproportionately high community risks. In census tracts where 15 to 50 percent of households are Latino, 32.5 percent have very low community resilience, and 30.9 percent face very high social vulnerability. Both shares are significantly higher than the national averages of 19.7 percent and 20.7 percent, respectively. The trend persists in majority-Latino neighborhoods, where the proportion of socially vulnerable tracts exceeds the national average by 8.5 percentage points.

These findings align with trends in the Hazard Risks section, particularly on hurricane risks, where Latino homeowners in majority-Latino neighborhoods bear a disproportionately high share of home

value losses. They are more likely to suffer greater financial losses attributable to disasters while contending with lower incomes and residing in communities that are highly susceptible to hazard risks, further compounding their vulnerability.

FIGURE 17

Latino Population Concentration, Social Vulnerability, and Community Resilience Risk Ratings, by County



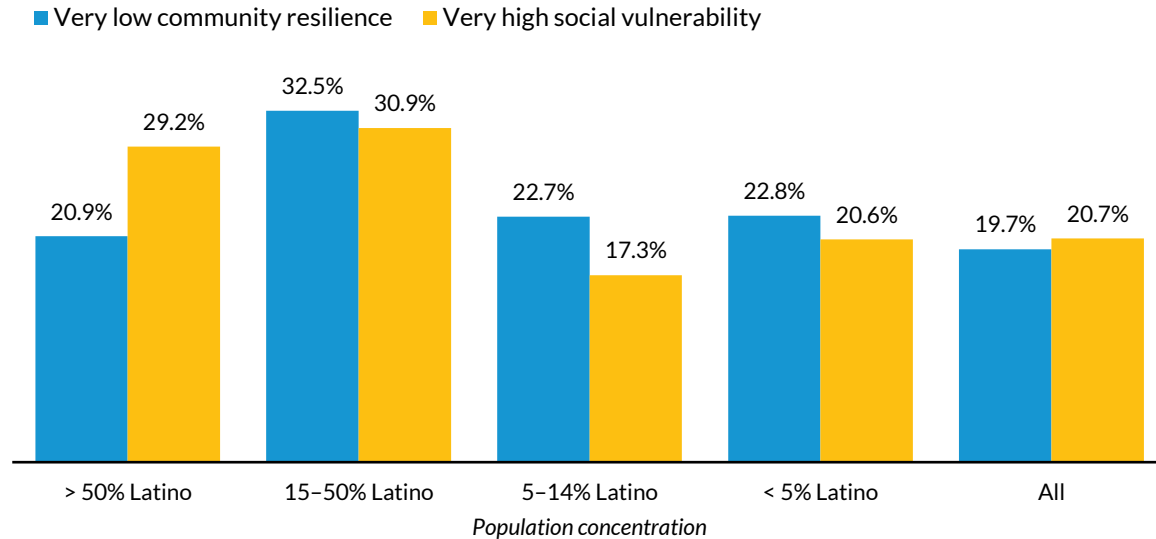
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** A lower social vulnerability rating is better. Conversely, a higher community resilience rating is better. Darker colors on the yellow and pink maps represent worse outcomes.

FIGURE 18

**Share of Very Low Community Resilience and Very High Social Vulnerability, by Latino Population Concentration**



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

High-community-risk neighborhoods—those with very high social vulnerability or very low community resilience—exhibit distinct characteristics that exacerbate their vulnerability to climate hazards. Neighborhoods with very high social vulnerability tend to have a greater share of older housing stock, with 33 percent of properties built before 1960, compared with just 24.5 percent in less vulnerable neighborhoods. Older properties are often in poorer condition and are less equipped to withstand disasters such as flooding, hurricanes, or wildfires, making them more susceptible to severe damage. Additionally, these aging homes can present higher maintenance costs and energy inefficiencies, placing further financial strain on Latino homeowners who are concentrated in these areas.

Similarly, less resilient neighborhoods have a disproportionately greater share of older homeowners: 35 percent of homeowners in very low-resilience neighborhoods are older than 65, compared with 31.9 percent in more resilient areas. Older adults are particularly vulnerable during and after disasters because of mobility challenges, health concerns, and limited access to resources. For elderly homeowners, damage to their homes can be especially devastating, as they might lack the physical ability and financial means to undertake necessary repairs or relocation. The combination of aging infrastructure and aging populations underscores the compounded risks these neighborhoods

face and highlights the urgent need for policies that address housing upgrades, disaster preparedness, and tailored support for older adults in high-risk areas.

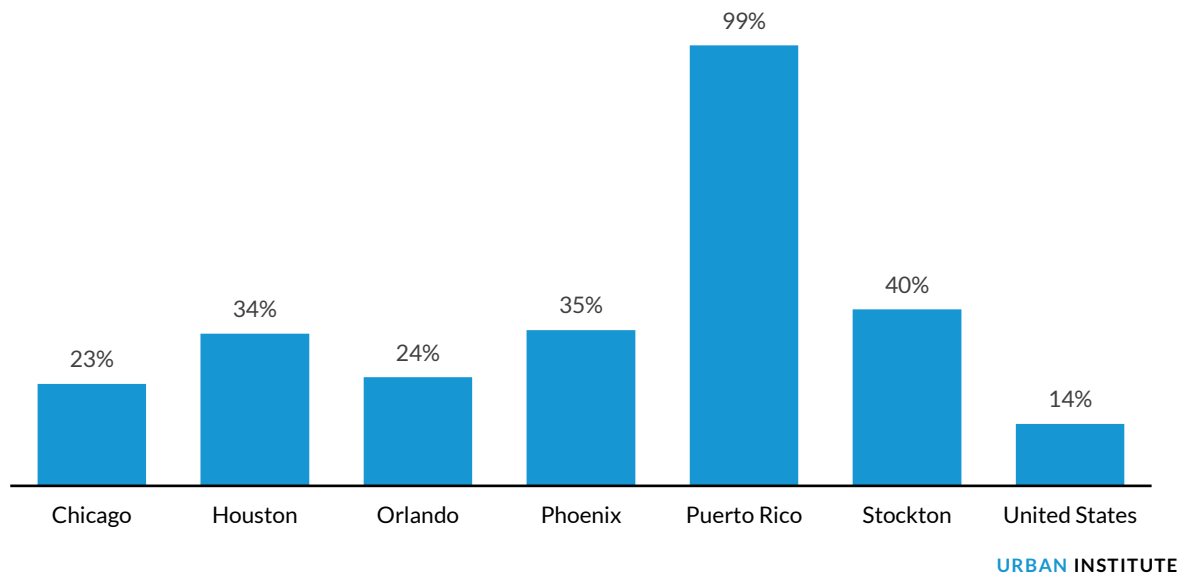
The analysis of social vulnerability, community resilience, and neighborhood characteristics reveals that Latino communities face disproportionately high levels of community risks in the face of climate hazards. These risks are compounded by systemic inequities, such as lower household income, lack of affordable housing, aging housing stock, limited resources, and greater shares of older populations, particularly in low-resilience neighborhoods. Together, these factors underscore the urgent need for targeted investments and policy interventions to address infrastructure gaps, improve disaster preparedness, and support vulnerable populations—ensuring that Latino households and communities are better equipped to withstand and recover from the growing challenges of climate change.

## **Affiliate Markets' Climate Risk Footprints**

This section explores the climate risk footprint Latino households face in five selected cities—Phoenix, Orlando, Stockton, Houston, and Chicago—and in Puerto Rico. By analyzing census tracts within these areas, we can understand how natural disaster exposure affects these communities. We selected these cities because of their moderately large or large Latino household and homeowner populations (figure 19), with southwestern cities such as Houston, Phoenix, and Stockton exhibiting the highest concentrations of Latino homeowners, while Orlando and Chicago show lower concentrations. Puerto Rico is almost entirely Latino. A significant correlation emerges between higher rates of Latino homeownership and very high social vulnerability (figure 20), particularly in Houston, Phoenix, and Stockton, where the share of highly vulnerable tracts exceeds 30 percent. In Puerto Rico, 84 percent of tracts are categorized as having very high social vulnerability, the highest among all markets we analyzed. Given the critical role of social vulnerability in shaping community resilience, this section uses social vulnerability as a proxy<sup>9</sup> to evaluate community risks and disparities across Latino communities.

FIGURE 19

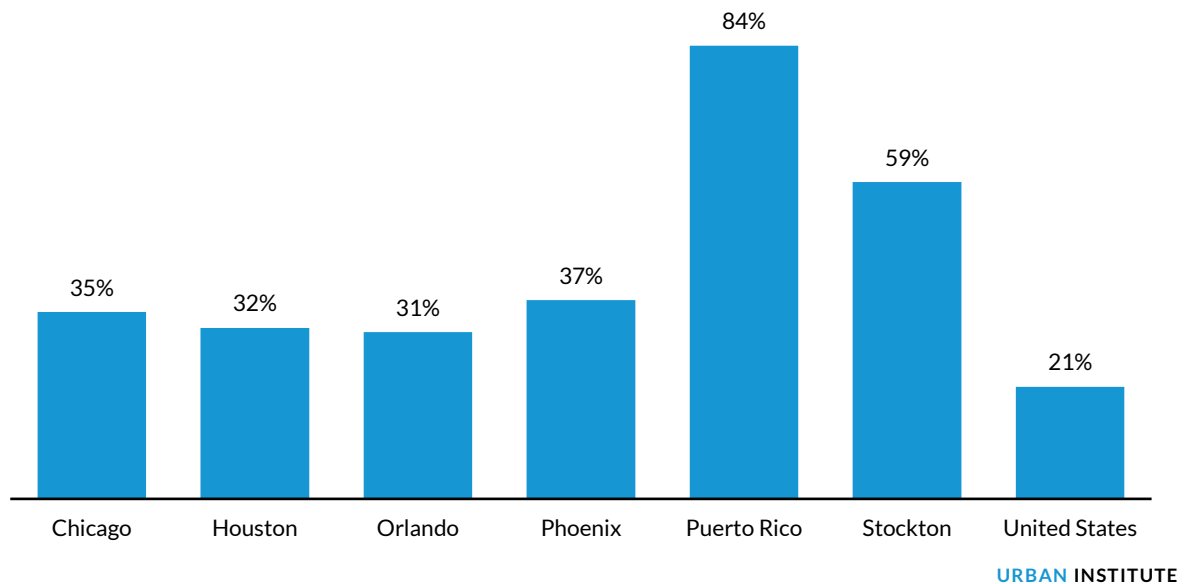
Share of Latino Households in Each Market



Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

FIGURE 20

Share of Tracts with Very High Social Vulnerability



Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.



---

### BOX 3

#### Key Findings

Our analysis of community risks in our key affiliate markets indicates that Latino homeowners face a higher share of residential and total building value losses than the overall population in each market. Latino households tend to live in lower-income tracts and tracts with higher social vulnerability, which reflects their exposure to disaster risks. Hurricanes and flood risks have the highest impacts on Latino communities, though wildfires also contribute to a significant share of risk. This overexposure to disaster risk emphasizes the need for policies that support the development and protection of Latino communities.

- **Houston** has a significant share of its communities facing high social vulnerability. Most economically distressed neighborhoods are Latino. A high share of neighborhoods in Houston are exposed to risks of residential value losses attributable to hurricanes and flooding. These factors indicate a need for increased community and infrastructure development.
- **Phoenix** has a high share of high social vulnerability and low-income tracts, but most homeowners face little disaster risk. For the homeowners who do face risks, wildfires contribute to the highest share. Latino homeowners have a lower overall risk to residential value losses than all homeowners, even though a higher share of Latino homeowners live in low-income tracts. This might reflect differences in access to homeownership and a potential need to improve social vulnerability outcomes.
- **Orlando** is a climate-resilient city compared with other affiliate markets, but it still faces significant hurricane risks. Most Orlando neighborhoods are highly socially vulnerable, with most Latino home value in high-risk tracts, threatening Latino community wealth. Orlando must strengthen community resilience as climate risk continues to worsen.
- **Chicago** faces low climate disaster risk compared with other markets, facing only minor risk from riverine flooding. In addition, Latinos are more likely to live in high-social-vulnerability neighborhoods, to be low income, and to have insurance. This leads to Latino communities being disproportionately affected by flooding.
- **Stockton**'s community resilience is very low and social vulnerability is high. Nearly half of Stockton neighborhoods are low income. Stockton is on the San Joaquin River valley, exposing many communities to severe flood risk, while simultaneously seeing increased risk of longer-lasting heat waves.
- **Puerto Rico** is almost exclusively Latino. Because of its location, households face high hurricane and flooding risks, with more than 80 percent of economic value losses coming from hurricanes alone. Puerto Rico needs infrastructure development to withstand future natural disasters.

## Houston

Houston faces significant exposure to climate risks because of its geographic location and socioeconomic landscape. Known as a global energy hub, the city is a climate vulnerability hotspot, frequently experiencing hurricanes, coastal flooding, and riverine flooding. According to the NRI, hurricanes represent the most significant climate risk for Houston, accounting for 62.39 percent of expected residential losses for Latino homeowners and 65.18 percent for all homeowners (table 5). Despite the extremely high flood risk, only 13.5 percent of Houston households have flood insurance, compared with 15 percent of Harris County households.

Compounding these hazards are systemic socioeconomic challenges. The city comprises 963 census tracts: 60.4 percent are characterized as having very high social vulnerability, and 59.2 percent are LMI neighborhoods. More than 58 percent of households in Houston are renters. Among renters, 51 percent in Harris County were cost burdened in 2021.<sup>10</sup> The poverty rate in Houston increased to 14.3 percent in 2022, and the child poverty rate increased to almost 21 percent.<sup>11</sup> Twenty-eight out of 45 of the economically distressed zip codes in Harris County are majority Latino, as of 2020. Furthermore, these patterns of poverty, housing insecurity, and vulnerability are particularly pronounced in majority-Latino neighborhoods, compounding the risks posed by frequent and severe natural disasters (figure 21).

TABLE 5

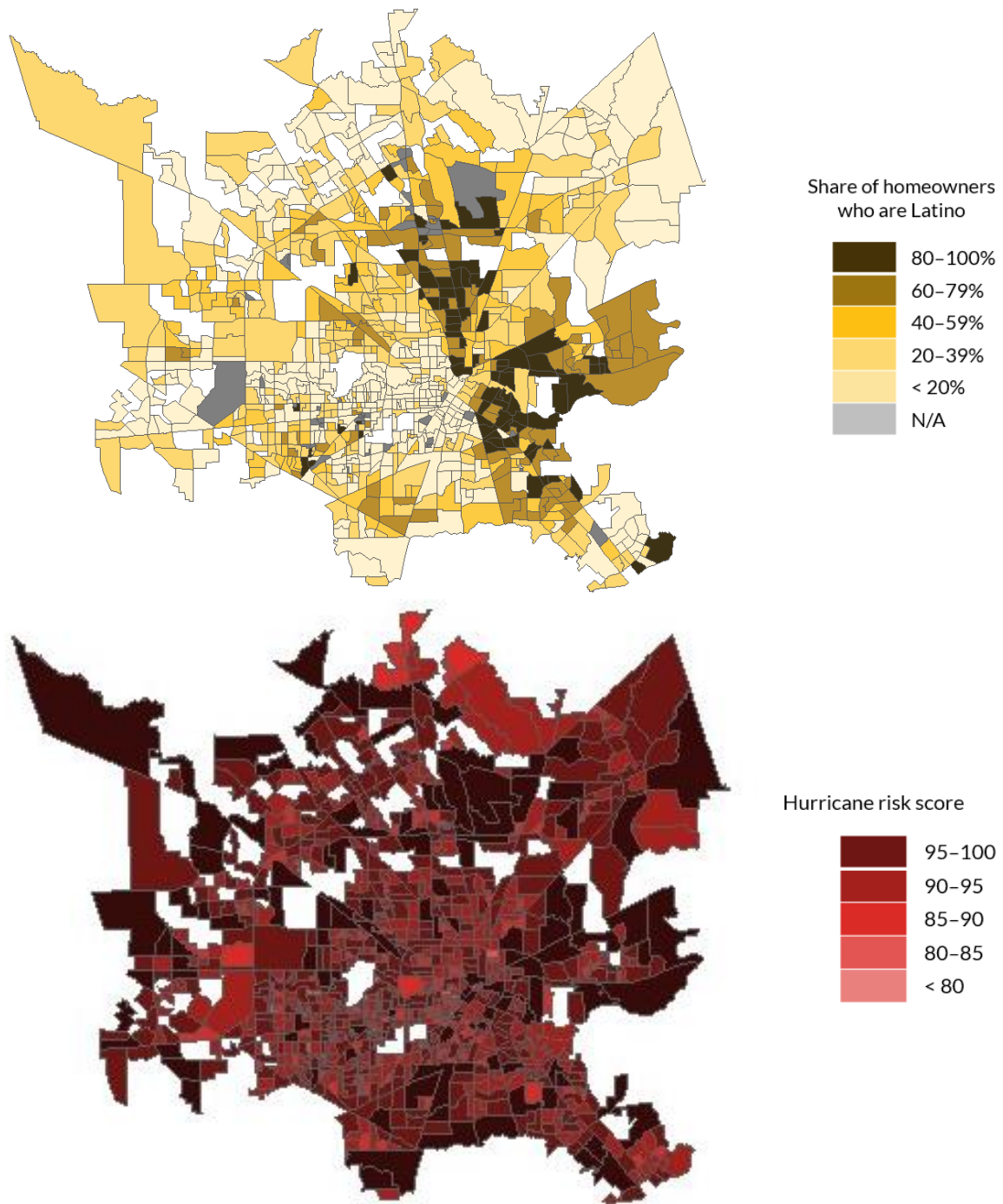
**Share of Total Expected Annual Losses to Residential Properties Latino Homeowners Own versus Properties All Homeowners Own, by Disaster Type**

Disaster event	Houston Latino residential losses share	Houston total residential losses share	Texas Latino residential losses share	Texas share
Riverine flooding	33.82%	30.76%	26.52%	29.41%
Coastal flooding	0.02%	0.01%	0.68%	0.82%
Hurricanes	62.39%	65.18%	50.82%	40.26%
Wildfires	0.08%	0.08%	3.39%	5.84%
Heat waves	0.00%	0.00%	0.00%	0.00%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

FIGURE 21

Latino Homeowner Concentration and Hurricane Risk Score Distribution, by Census Tract in Houston



URBAN INSTITUTE

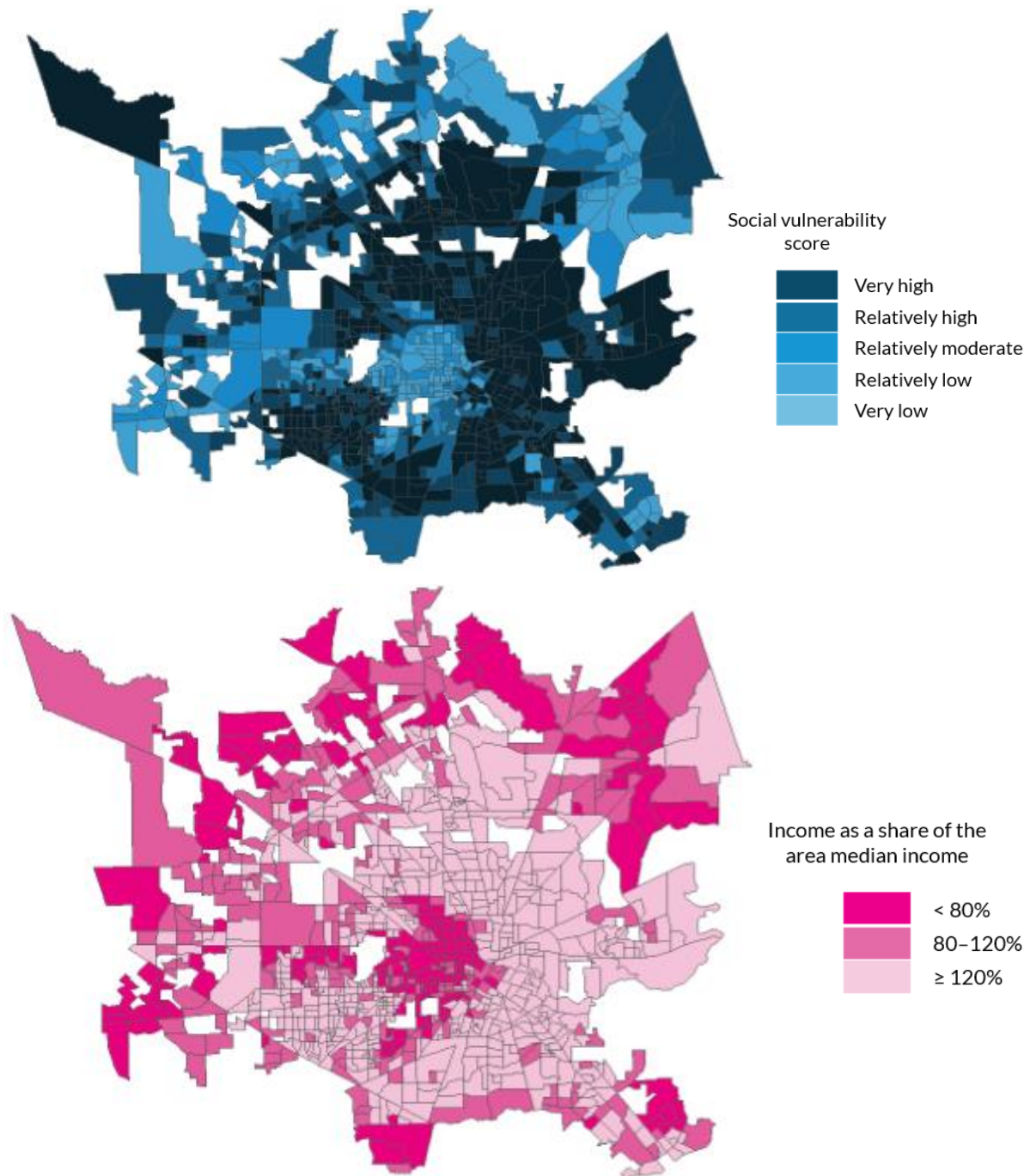
Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

Hurricanes pose the most significant climate threat to Houston's Latino communities, with 93 percent of Latino homeowners living in high-risk tracts compared with 90 percent of all homeowners. Similarly, 93 percent of Latino residential value is located in high-risk areas, slightly exceeding the 89 percent for all homeowners. Given Houston's proximity to the Gulf Coast, this pattern of geographic concentration in high-risk areas is expected.

But Houston's community risks further amplify the challenges posed by hurricane exposure (figure 22). Although central tracts exhibit low social vulnerability and higher household income, peripheral and coastal tracts—many of which are predominantly Latino—are characterized by very high social vulnerability and low incomes. In addition, 45 percent of high-risk areas are highly socially vulnerable to hurricane risk, compared with 28 percent and 25 percent in moderate- and low-risk areas, respectively (figure 23). These neighborhoods often feature aging housing stock, limited access to high-quality infrastructure, and underresourced emergency response systems. This is especially true for eastern Houston, where majority-Latino neighborhoods frequently overlap with high-risk and low-resilience tracts. This geographic disparity reinforces systemic inequities in access to resources, infrastructure, and disaster preparedness. Furthermore, Latino homeowners tend to have significantly lower incomes in high-risk areas (table 6) compared with overall homeowners, limiting their financial capacity to prepare for and weather hurricanes.

FIGURE 22

Social Vulnerability Score and Income, by Census Tract in Houston



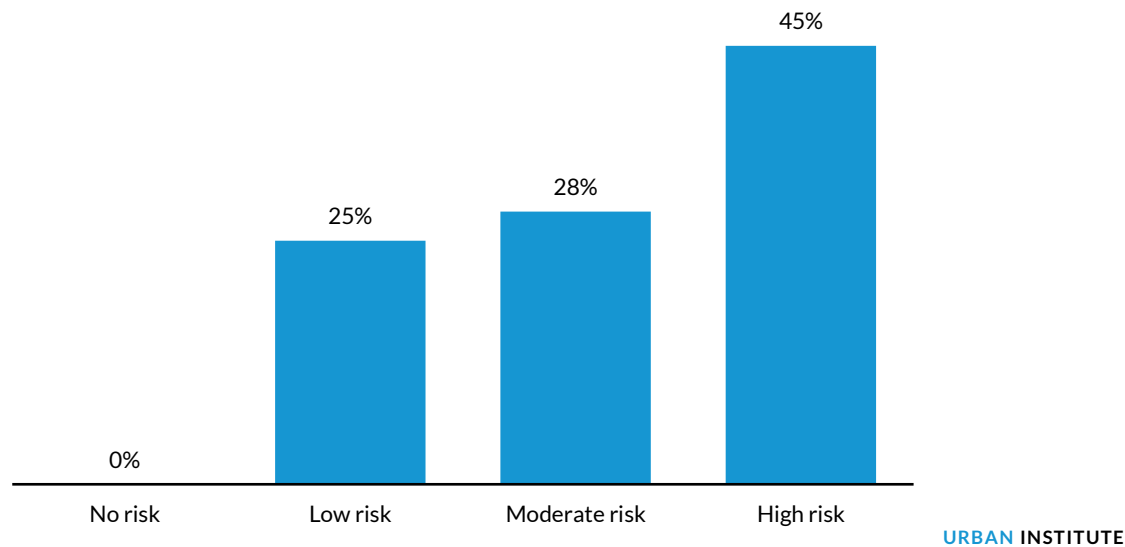
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

FIGURE 23

Share of Communities That Are Highly Socially Vulnerable, by Hurricane Risk Score, Houston



**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

TABLE 6

Household Characteristics, by Hurricane Risk

	High risk	Moderate risk	Low risk	All
Median income (Latino)	\$55,865	\$43,417	N/A	\$54,773
Median income (all)	\$70,781	\$69,804	\$59,931	\$70,507
Median home value (Latino)	\$181,300	\$174,700	N/A	\$180,800
Median home value (all)	\$230,500	\$261,300	N/A	\$234,700

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Notes:** N/A = not applicable. There is only one low-risk tract. Though there are reported homeowners and households in that tract, no home values are available in the data.

To address the compounded hazard and community risks facing Houston’s Latino communities, policymakers and local stakeholders—including lenders, housing counselors, and community development financial institutions—must collaborate on tailored strategies that mitigate climate risks and enhance community resilience.

Strengthening infrastructure resilience is essential and can be achieved by upgrading flood and hurricane mitigation systems and by funding resilient housing retrofits in high-risk, low-income neighborhoods, particularly in eastern and coastal areas with significant Latino populations (Office of Houston Mayor Sylvester Turner 2020). Providing targeted financial assistance for hurricane-related

expenses and ensuring equitable access to disaster recovery resources<sup>12</sup> are critical to supporting vulnerable households. Community resilience can be enhanced through culturally tailored disaster preparedness campaigns and through community-based resilience hubs to provide education, resources, and support. Additionally, leveraging federal, public, and private resources through Community Disaster Resilience Zones can reduce vulnerability in the most at-risk and in-need areas. These coordinated efforts will ensure that Houston’s Latino homeowners are better equipped to adapt to and recover from the escalating challenges climate risks pose.

Phoenix

Phoenix, the nation’s fifth-largest city, sits in the heart of the arid Southwest and faces unique climate challenges shaped by its geography and urban sprawl. Wildfires represent the most significant hazard, contributing to 20.9 percent of residential value losses for Latino homeowners and 43.8 percent of losses for all homeowners (table 7). Arizona has seen escalating wildfire risks, with more than 121,000 homes statewide classified as being at extreme risk in 2023.<sup>13</sup> This growing threat, driven by climate change, has already begun to reshape the insurance market, as some insurers have withdrawn from high-risk areas because of the rising costs of claims.<sup>14</sup>

Wildfire risks are not only increasing for Phoenix; much of the western United States is seeing a substantial increase in wildfires. At the beginning of 2025, Los Angeles, California, was ravaged by multiple wildfires, contributing to an estimated \$32.5 billion in insured building damage.<sup>15</sup> Wildfires are becoming such a costly disaster that many insurance companies are refusing to insure or reinsure or are outright leaving states with high levels of wildfire exposure.

TABLE 7  
Share of Total Expected Annual Losses to Residential Properties Latino Households Own versus Properties All Households Own, by Disaster Type

Disaster event	Phoenix Latino residential losses share	Phoenix total residential losses share	Arizona Latino residential losses share	Arizona share
Riverine flooding	2.83%	2.26%	2.87%	2.14%
Coastal flooding	0.00%	0.00%	0.00%	0.00%
Hurricanes	0.20%	0.15%	0.10%	0.06%
Wildfires	20.86%	43.81%	61.30%	78.90%
Heat waves	0.07%	0.01%	0.01%	0.00%

Sources: Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

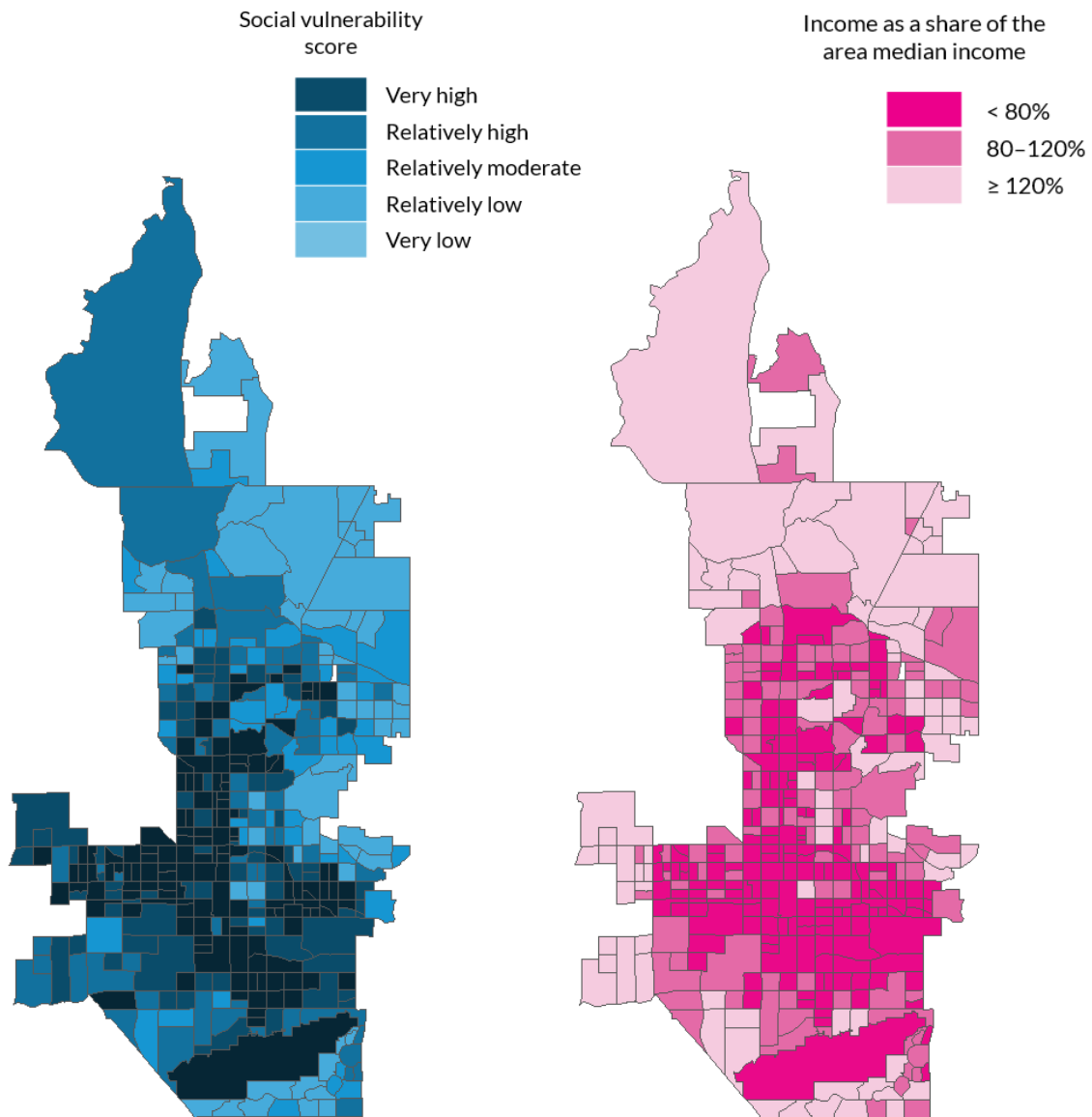
Phoenix's socioeconomic landscape exacerbates wildfire risks. The city's 384 census tracts reveal stark disparities: 56.8 percent have high or very high social vulnerability, and 48.7 percent are classified as LMI neighborhoods (figure 24). In majority-Latino tracts, which compose 38 percent of all tracts, 60 percent are rated as having very high social vulnerability, compared with only 40 percent in tracts where less than 20 percent of households are Latino.

Most Latino homeowners in Phoenix reside in low-risk or no-risk wildfire tracts (figure 25), and they are also less likely than the general population to reside in high-risk areas. Only 2 percent of Latino homeowners live in high-risk tracts, compared with 7 percent of all homeowners (figure 26). Furthermore, 50 percent of Latino homeowners live in no-risk tracts, compared with 43 percent of all homeowners. This pattern is consistent with table 7, which shows that Latino homeowners bear a significantly smaller share of wildfire-related property value losses.



FIGURE 24

Share of Communities That Are Highly Socially Vulnerable, by Wildfire Risk Score, Phoenix



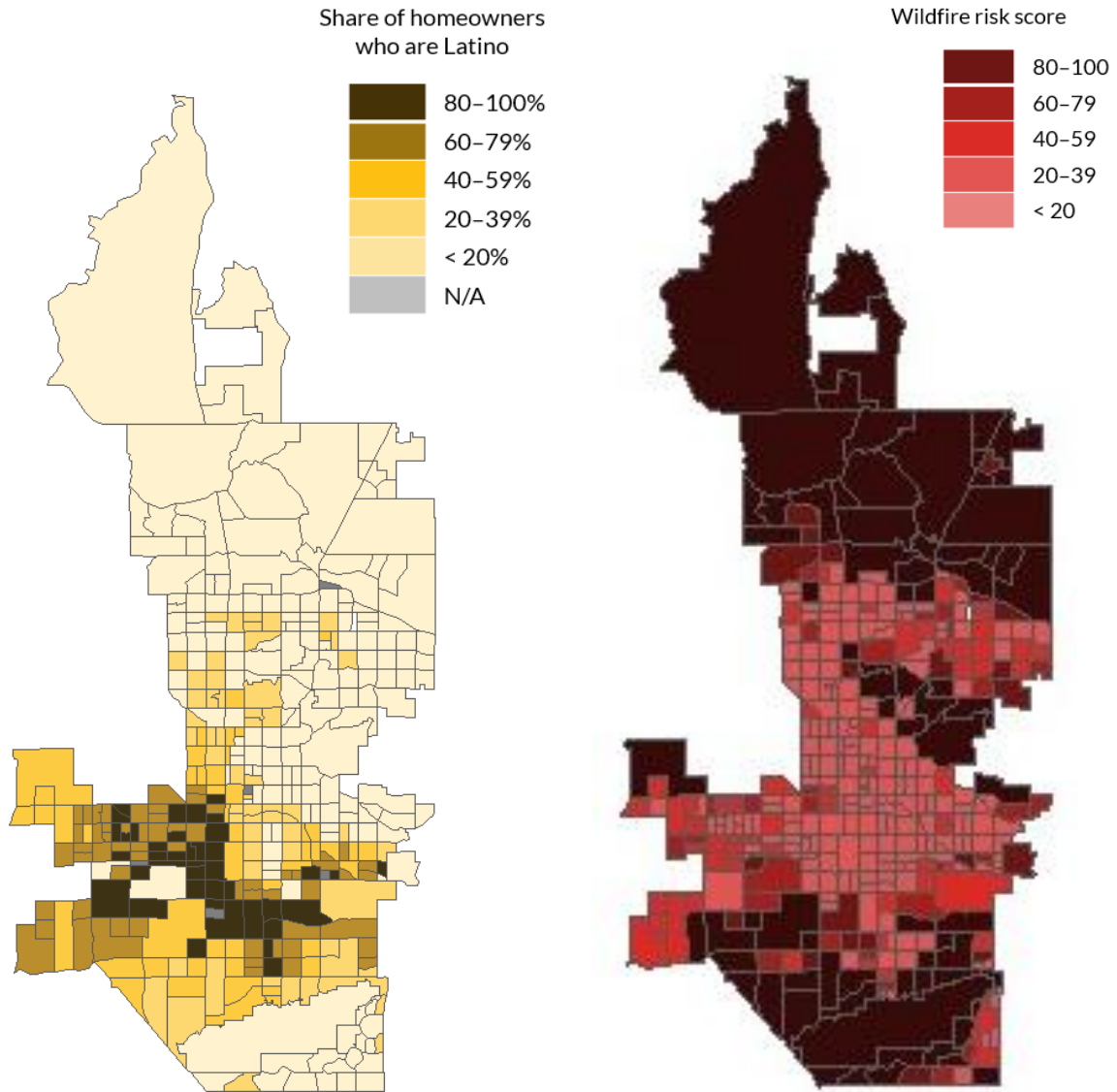
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

FIGURE 25

Latino Homeowner Concentration, by Census Tract in Phoenix



URBAN INSTITUTE

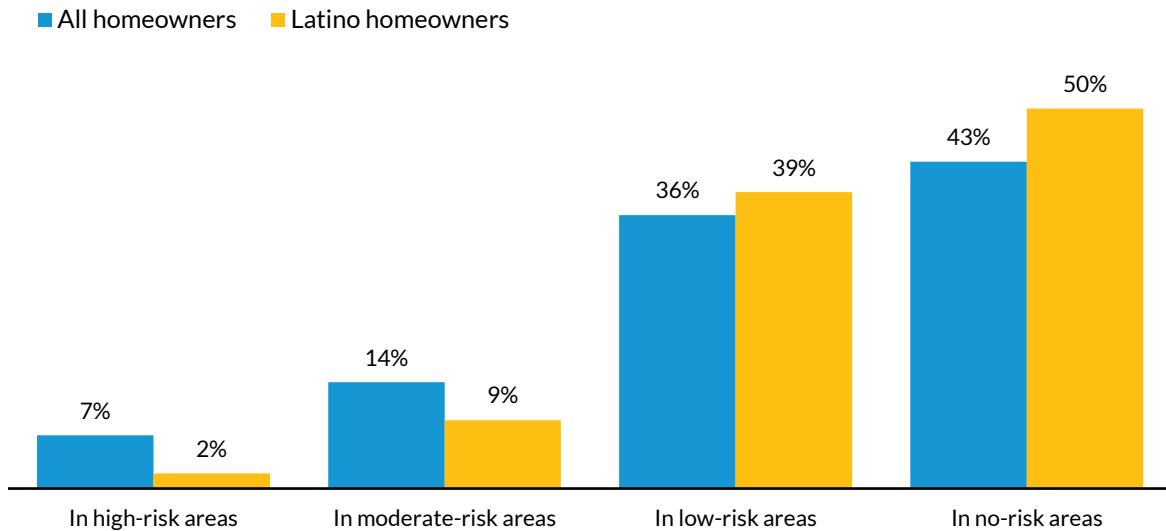
**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

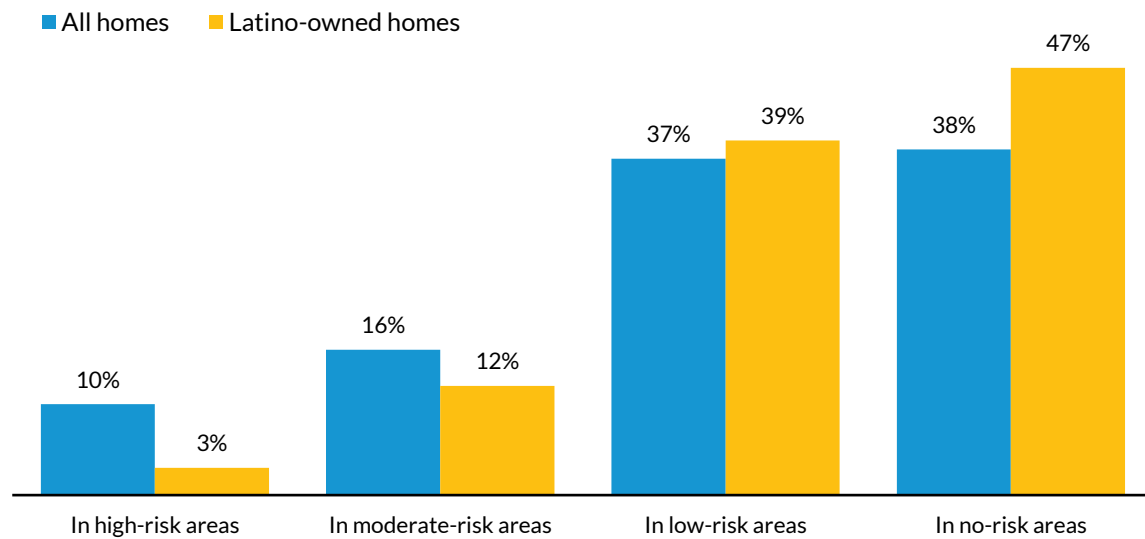
FIGURE 26

**Residential Home Values and Expected Annual Losses Attributable to Wildfires, by Census Tract in Phoenix**

*Share of homeowners*



*Share of total residential home value*



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

But these statistics do not imply that Latino communities in Phoenix are shielded from climate risks. Figures 24 and 25 highlight that the census tracts with the highest concentrations of Latino

homeowners (80 to 100 percent) are also characterized by having lower incomes and higher social vulnerability, exacerbating their challenges in preparing for and recovering from disasters. Although these tracts might currently face lower wildfire risks, their limited resources and high vulnerability leave them ill equipped to adapt to future risks as wildfires increasingly encroach on urban areas.

To enhance resilience and reduce vulnerability in Phoenix's Latino communities, stakeholders must focus on increasing homeowner awareness and preparedness, particularly through housing counseling services that offer tailored guidance on wildfire readiness. Protecting vulnerable homeowners in LMI communities requires enhancing insurance accessibility and affordability to ensure coverage amid growing risks, as well as supporting housing adaptations such as wildfire-resilient affordable housing development. Investing in proactive wildfire mitigation is also essential, with initiatives such as Arizona's Post-Wildfire Infrastructure Assistance Program<sup>16</sup> offering a model for infrastructure recovery and wildfire impact reduction.

## Orlando

Although Florida is highly vulnerable to climate-related disasters, Orlando benefits from climate resilience attributable to its central location and elevation, reducing risks such as flooding. Of the city's 91 census tracts, 61.5 percent are rated as highly socially vulnerable, and 26.4 percent are classified as low-income tracts. Latino households make up 30.3 percent of all households in Orlando, with a homeownership rate of 40.0 percent, compared with 47.4 percent for the total population. Despite its resilience to certain disasters, Orlando faces considerable risks from hurricanes and wildfires.

Hurricanes are the leading hazard, responsible for 72.2 percent of expected residential value losses for Latino homeowners and 76.3 percent for all homeowners (table 8). Hurricanes often increase flood risk in the regions they affect. Although Orlando's inland location shields it from some flooding impacts, Hurricanes Milton and Helene caused significant damage in Florida in 2024, emphasizing the increasing severity of these events attributable to escalating climate risks. As of late 2024, only 3.7 percent of households in Orlando had flood insurance, slightly higher than the 3.4 percent of households in Orange County, where Orlando is located. These low insurance rates will become increasingly dangerous for homeowners if hurricane intensity increases.

Wildfires represent the second-largest source of residential value loss and disproportionately affect Latino homeowners, accounting for 17.7 percent of their losses compared with 13 percent for all households. Figure 8 illustrates that neighborhoods where 60 to 80 percent of homeowners are Latino are particularly susceptible to wildfire risks. Orlando's wildfire risks present a unique dynamic

compared with other markets. Areas with high wildfire risk also tend to be upper-income neighborhoods, with median household incomes exceeding 120 percent of the area median income (figure 28). Table 9 shows that Latino homeowners in high-risk areas have significantly higher incomes (\$112,485) and property values (\$426,400) than those in moderate- or low-risk tracts.

**TABLE 8**

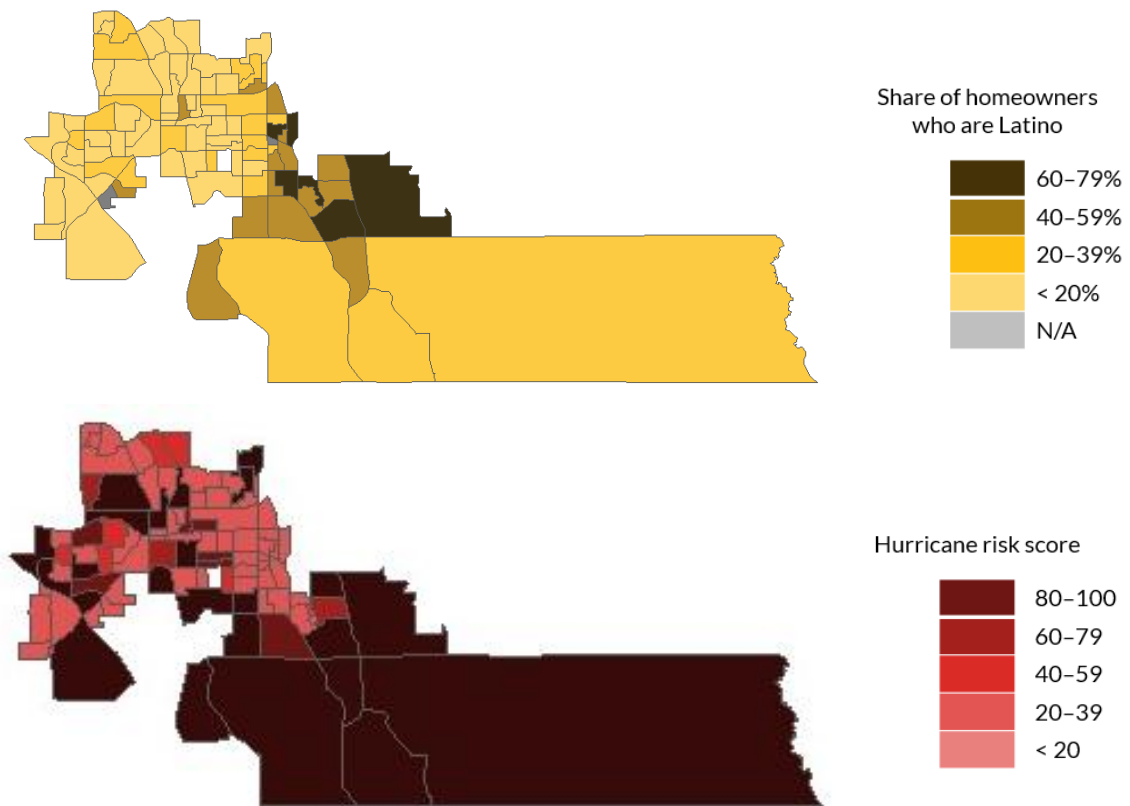
**Share of Total Expected Annual Losses to Residential Properties Latino Households Own versus Properties All Households Own, by Disaster Type**

<b>Disaster event</b>	<b>Orlando Latino residential losses share</b>	<b>Orlando total residential losses share</b>	<b>Florida Latino residential losses share</b>	<b>Florida share</b>
Riverine flooding	0.00%	0.00%	2.24%	1.39%
Coastal flooding	0.00%	0.00%	0.19%	0.59%
Hurricanes	72.17%	76.28%	91.35%	91.53%
Wildfires	17.74%	12.99%	4.02%	3.95%
Heat waves	0.00%	0.00%	0.00%	0.00%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

FIGURE 27

Latino Homeowner Concentration, by Census Tract in Orlando



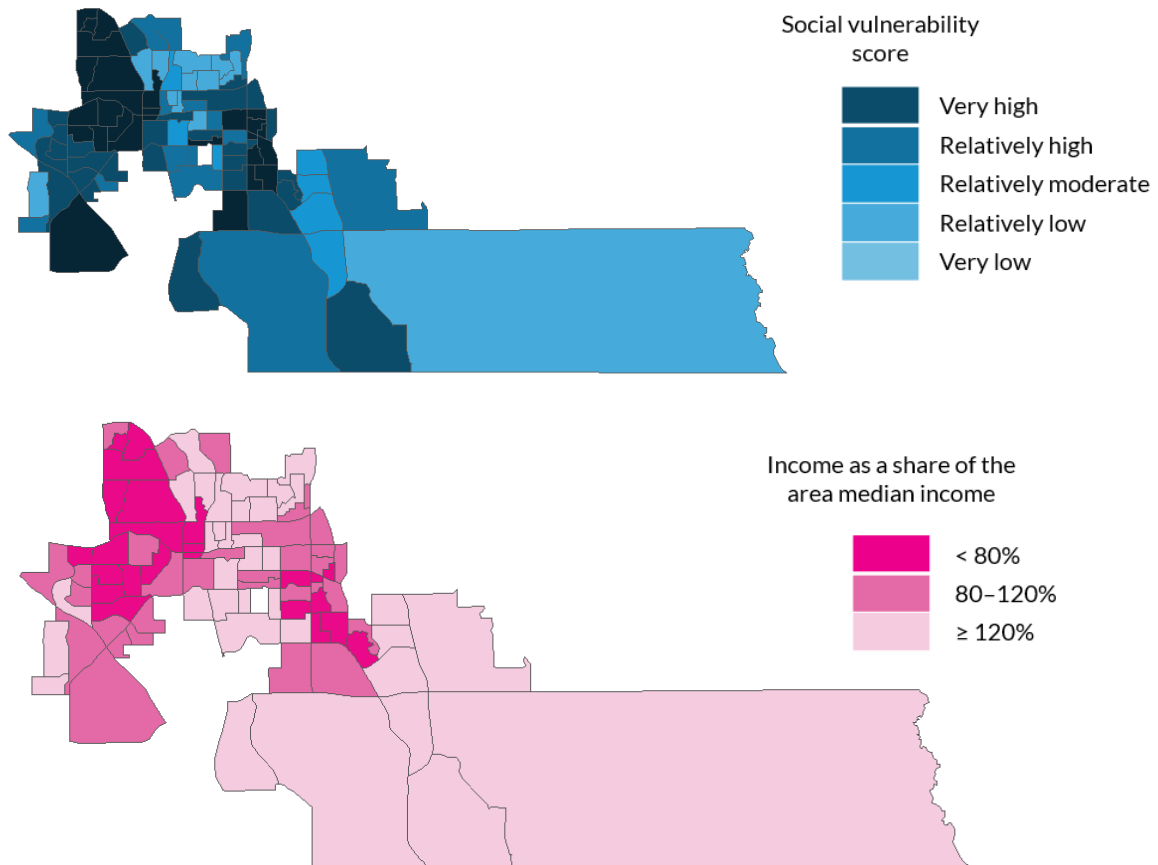
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

FIGURE 28

Social Vulnerability Score and Income, by Census Tract in Orlando



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

TABLE 9

Household Characteristics, by Wildfire Risk

	High risk	Moderate risk	Low risk	No risk	All
Share of Latino homeowners	26%	3%	23%	48%	100%
Share of Latino value	33%	3%	24%	39%	100%
Median income (Latino)	\$112,485	\$45,275	\$49,720	\$44,701	\$50,029
Median home value (Latino)	\$426,400	\$326,400	\$323,700	\$249,000	\$294,800

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

Although Orlando has no tracts rated as having low resilience, it is characterized by high levels of social vulnerability in many areas. Figure 28 highlights the overlap between Latino homeowner concentrations and high wildfire risks. Neighborhoods where 60 to 80 percent of homeowners are Latino often face the highest risks, despite their relative affluence. This intersection of high incomes and high wildfire risk suggests that Latino households in these areas might lack sufficient resources or awareness to mitigate potential impacts, highlighting the need for targeted interventions.

To address Orlando's unique challenges, stakeholders should prioritize increasing awareness and preparedness among high-risk Latino homeowners in socially vulnerable communities, leveraging housing counseling to provide tailored advice on wildfire mitigation strategies. Developing localized wildfire-resilient housing standards and providing incentives for adaptations such as fire-resistant landscaping and construction materials could reduce vulnerability in high-risk areas. It is also critical to enhance hurricane preparedness by expanding access to affordable insurance coverage for storm-related damages and retrofitting homes with storm-resistant features such as impact-resistant windows and reinforced roofing. Additionally, partnerships with local organizations to provide disaster recovery assistance and public education campaigns on disaster preparedness can further support Latino homeowners. Investing in community-driven initiatives for both wildfire and hurricane resilience ensures that Orlando's Latino homeowners are better protected from evolving climate risks.

## Chicago

Chicago is the nation's third-largest city but has a relatively small Latino population compared with the other cities in this analysis. Table 10 shows the breakdown of estimated expected annual losses by residential properties Chicago households own. Overall, the disasters we analyze in this report contribute to only a small share of expected losses to residential properties in Chicago. Among these, riverine flooding contributes the most to the expected annual losses to Latino residential property value (1.9 percent) and total residential property value (1.6 percent). The low disaster probability is reflected in flood insurance rates, as less than 1 percent of households in Chicago have flood insurance.



TABLE 10

**Share of Total Expected Annual Losses to Residential Properties Latino Homeowners Own versus Properties All Homeowners Own, by Disaster Type**

Disaster event	Chicago Latino residential losses share	Chicago total residential losses share	Illinois Latino residential losses share	Illinois share
Riverine flooding	1.89%	1.64%	12.30%	9.78%
Coastal flooding	0.01%	0.05%	0.01%	0.00%
Hurricanes	0.45%	0.45%	0.35%	0.40%
Wildfires	0.00%	0.00%	0.16%	0.20%
Heat waves	0.02%	0.00%	0.93%	0.04%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

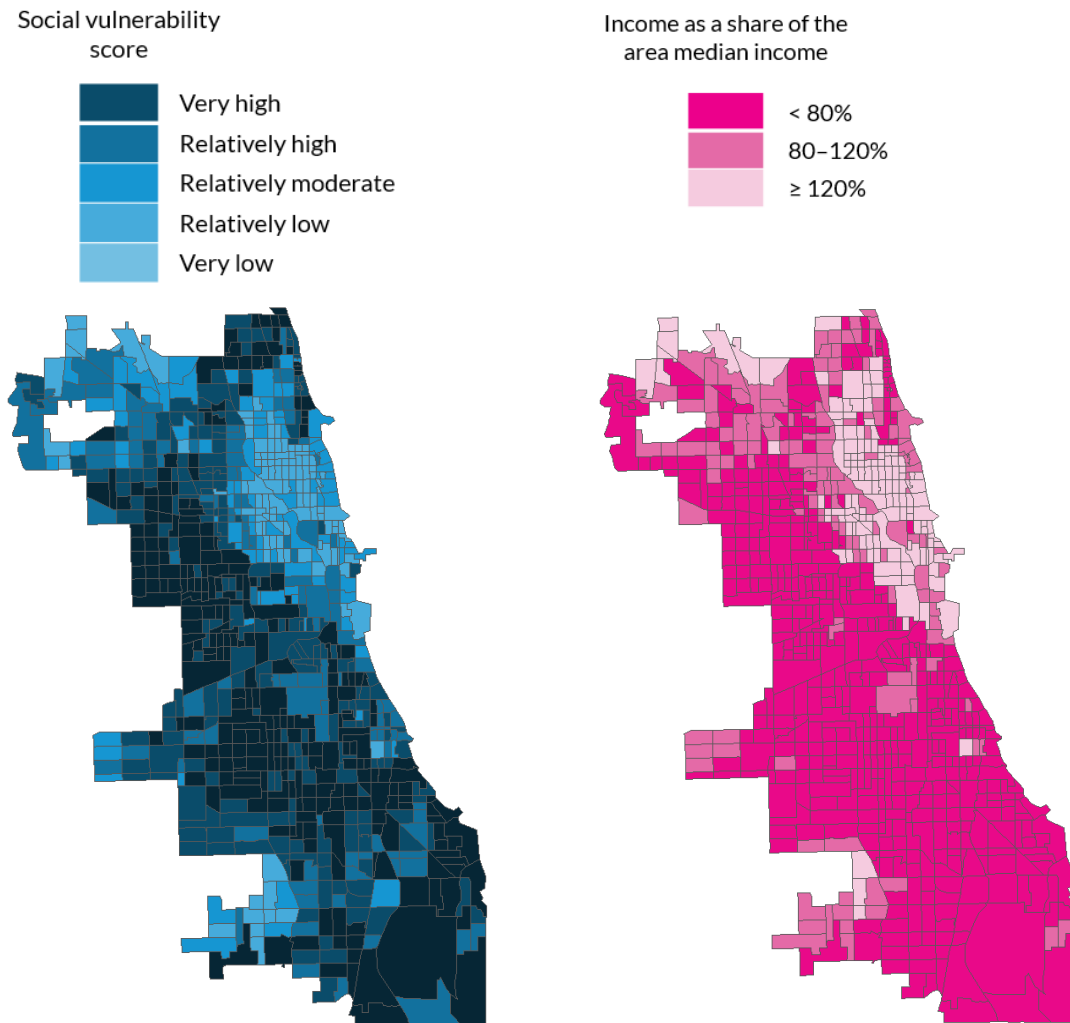
Of Chicago's 794 census tracts, 483 (60.8 percent) have very high social vulnerability ratings (figure 29), and 520 tracts (65.5 percent) are low income. Less than 22 percent of these tracts have Latino homeowner shares exceeding 40 percent. Notably, 75 percent of the tracts where Latino homeowner shares are above 80 percent have very high social vulnerability ratings, and no tracts with significant Latino populations are categorized as having very low social vulnerability.

Figures 29 and 30 demonstrate the intersection of low-income areas, high Latino homeowner concentrations, and elevated social vulnerability. Urban flooding in Chicago frequently occurs outside designated floodplains, leaving many residents unprepared. Latino neighborhoods, particularly on the city's southwest side, are disproportionately affected. This vulnerability is exacerbated by factors such as inadequate drainage systems, a prevalence of basement apartments, and limited access to flood insurance. A study by the Center for Neighborhood Technology found that 72 percent of Chicago's total flood damage claims between 2007 and 2016 were from predominantly African American or Latino neighborhoods, underscoring the issue's systemic nature (Bondie Keenan, Shankar, and Haas 2019).

To mitigate hazard risks in Chicago, particularly in predominantly Latino neighborhoods, targeted policies are essential. Expanding insurance accessibility and affordability through subsidized flood insurance programs tied to socioeconomic vulnerability, and creating state-backed insurance pools, can alleviate financial burdens on underserved communities. Updating floodplain maps to more accurately capture urban flooding risks and establishing emergency relief funds for localized flooding can provide critical support to homeowners outside FEMA-designated flood zones. Additionally, investments in green infrastructure, enhanced stormwater management systems, and neighborhood-scale projects should prioritize historically underserved areas to address systemic inequities and strengthen community resilience.

FIGURE 29

Social Vulnerability Score and Income, by Census Tract in Chicago



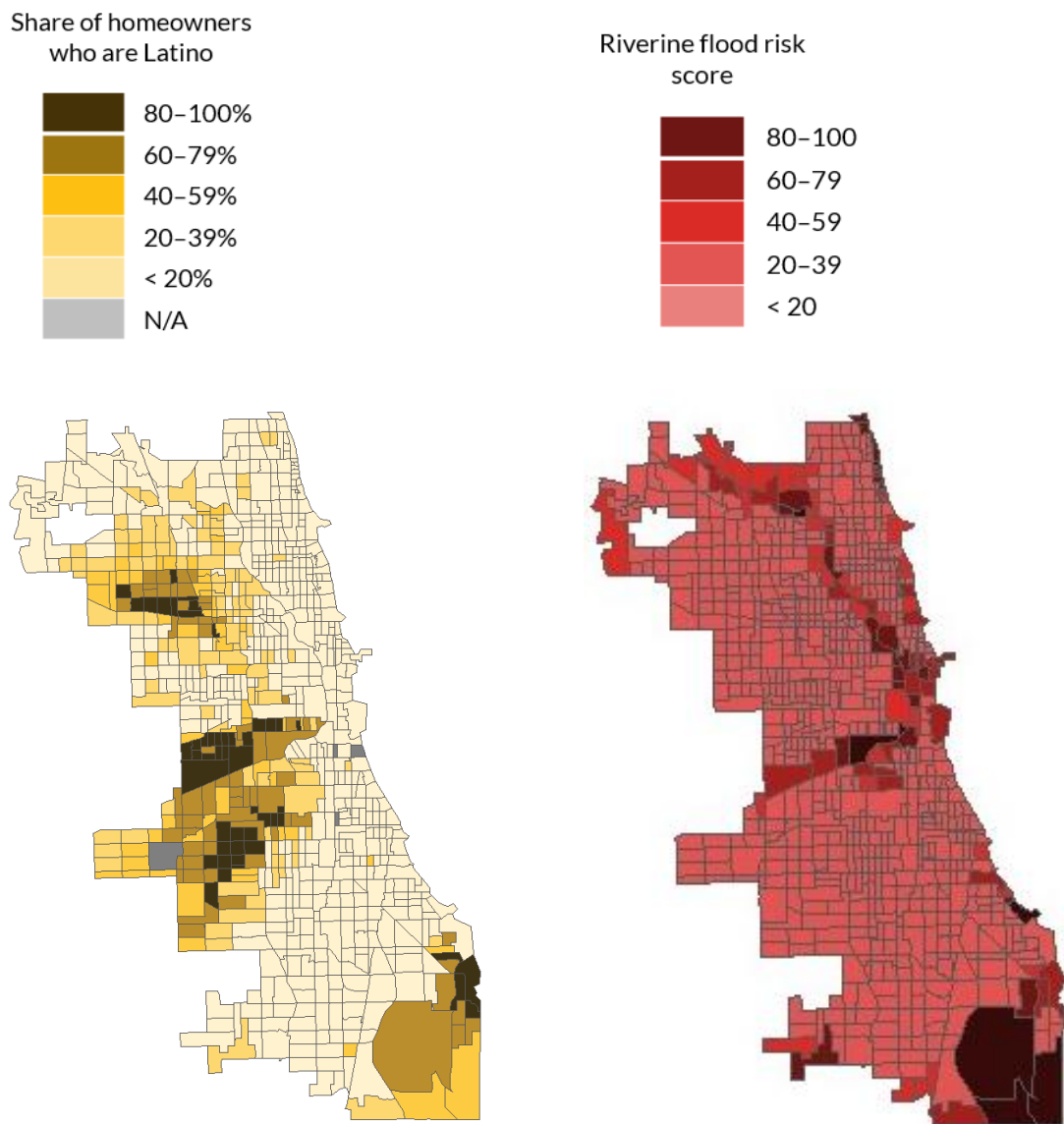
URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

FIGURE 30

Latino Homeowner Concentration, by Census Tract in Chicago



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

## Stockton

Stockton, in San Joaquin County, California, faces escalating climate-related challenges, notably heat waves and flood risks. Projections indicate that by 2050, Stockton might experience 31 days with

temperatures exceeding 100.9 degrees Fahrenheit annually.<sup>17</sup> Flood risks are also rising in Stockton, with nearly 40 percent<sup>18</sup> of properties at risk.

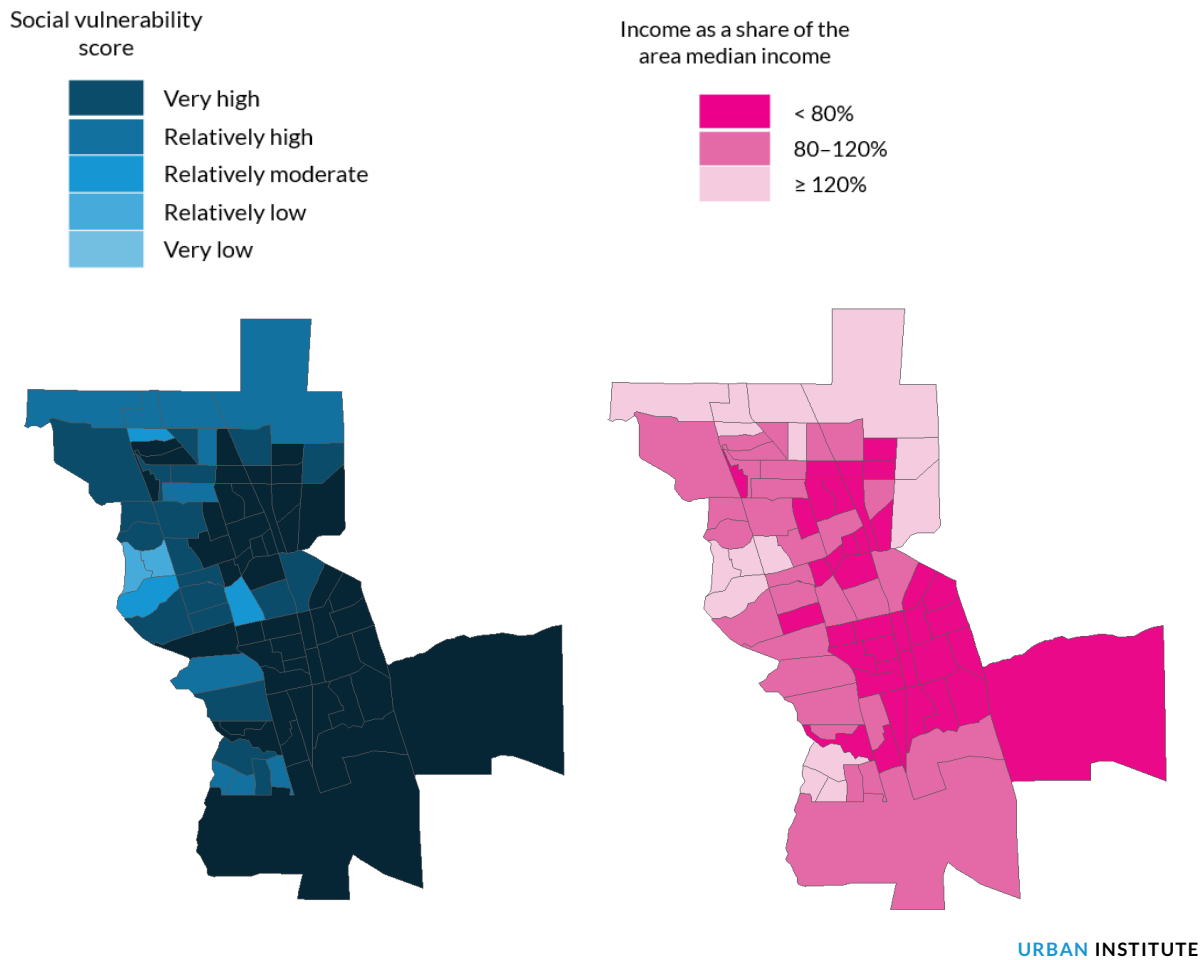
The city's vulnerability to hazard risks is exacerbated by its socioeconomic landscape. Of Stockton's 82 census tracts, 67 (81.7 percent) have high social vulnerability ratings, and 37 (45.1 percent) are classified as low- or moderate-income tracts (figure 31). Latino households, which make up 39.8 percent of all households, are predominantly concentrated in these high-vulnerability areas (figure 32). Notably, census tracts where Latino homeowners compose at least 80 percent of homeowners all exhibit very high social vulnerability.

Stockton has undertaken significant initiatives to reduce flood risks and enhance resilience. The Smith Canal floodgate,<sup>19</sup> completed in 2024 for nearly \$100 million, is the first of its kind in California, protecting thousands of homes in central Stockton from flooding and potentially lowering flood insurance requirements and costs for residents. Complementing this effort, the Lower San Joaquin River Project,<sup>20</sup> led by the US Army Corps of Engineers, the Central Valley Flood Protection Board, and the San Joaquin Area Flood Control Agency, plans to implement 23 miles of levee improvements and two closure structures to strengthen flood risk management. Additionally, Stockton is updating its Climate Action and Adaptation Plan with a \$650,000 grant, prioritizing public health and equity to address climate change impacts, particularly in disadvantaged communities (LCI, n.d.).

Despite these efforts, challenges persist. A 2023 survey of residents who live in the Sacramento–San Joaquin County Delta showed that less than 20 percent of residents had flood insurance (Rudnick et al. 2023). These low insurance rates persist, despite the increased flood risk attributable to climate change. San Joaquin's watersheds were not built to handle high levels of rainfall, and heavy rainfall in early 2023<sup>21</sup> and 2024<sup>22</sup> damaged homes, businesses, and cropland. In addition, the city's low average incomes and high social vulnerability among Latino households exacerbate vulnerabilities. Ongoing investments in infrastructure, floodplain restoration, community engagement, and equitable policy implementation are essential to mitigate the impacts of climate change on Stockton's diverse population.

FIGURE 31

Social Vulnerability Score and Income, by Census Tract in Stockton

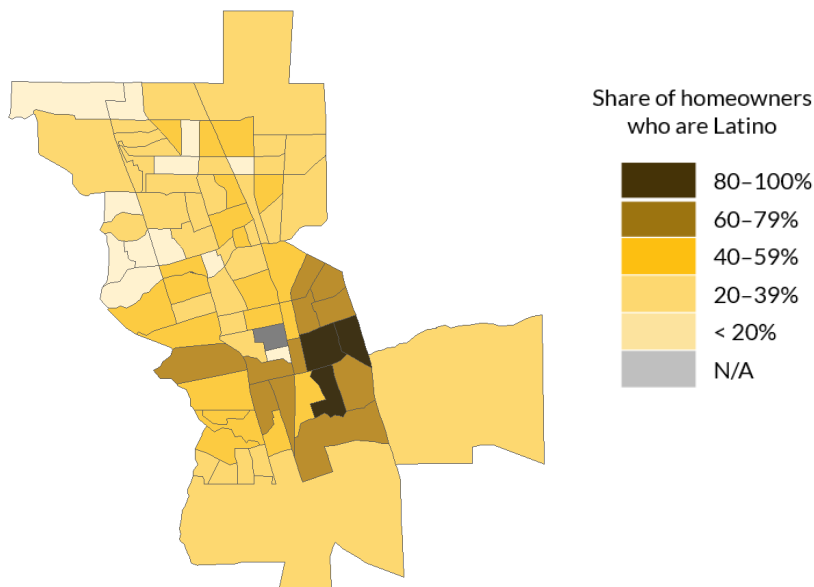


**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

FIGURE 32

**Latino Homeowner Concentration, by Census Tract in Stockton**



URBAN INSTITUTE

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

**Note:** Data using 2022 census tract geography and 2020 American Community Survey data.

## Puerto Rico

Puerto Rico, an unincorporated US territory, is in the northeastern Caribbean, east of the Dominican Republic and southeast of Florida. Known for its tropical climate and lush landscapes, the island spans 3,515 square miles, and nearly 100 percent of the population identifies as Latino. Its geographic location makes Puerto Rico particularly susceptible to natural disasters, including hurricanes and flooding. Hurricanes account for 81.2 percent of the expected economic losses to residential properties (table 11). Both coastal and riverine flooding contribute less to residential property losses, with riverine flooding responsible for 4.2 percent of Latino residential value loss and coastal flooding responsible for 1.7 percent.

The island's social vulnerability is notably high. Figure 33 illustrates that nearly all census tracts in Puerto Rico have very high social vulnerability ratings, and most of the island is LMI neighborhoods. This elevated vulnerability is likely attributable to such factors as poverty, disability status, and lack of access to resources, which impede the island's ability to recover from natural disasters.

The devastation caused by Hurricane Maria in 2017 underscored the critical need for improved infrastructure and disaster preparedness. In response, the US Department of Energy has offered a conditional loan guarantee of up to \$861.3 million<sup>23</sup> for two utility-scale solar energy projects in Puerto Rico. These projects aim to enhance energy security and resilience against future hurricanes by providing sustainable power solutions.

Despite these initiatives, the island's aging infrastructure, combined with economic constraints, continues to hinder recovery efforts and exacerbate vulnerabilities. Ongoing investments in resilient infrastructure, community engagement, and equitable policy implementation are essential to mitigate the impacts of climate change and natural disasters on Puerto Rico's population.

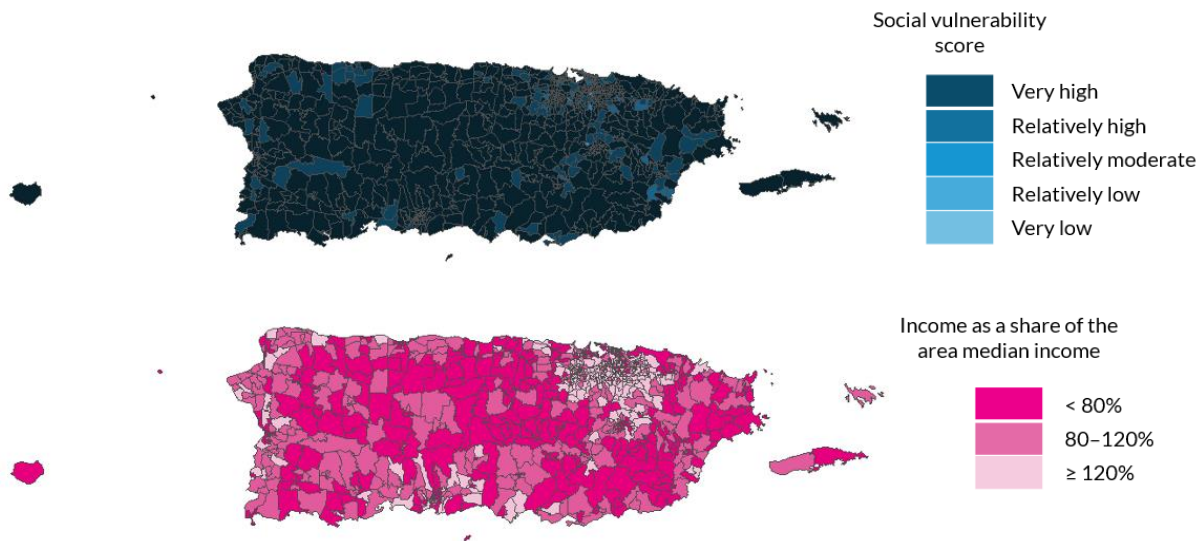
**TABLE 11**  
**Share of Total Expected Annual Losses to Residential Properties Latino Homeowners Own versus Properties All Homeowners Own, by Disaster Type**

<b>Disaster event</b>	<b>Latino residential losses share</b>	<b>Total residential losses share</b>
Riverine flooding	4.17%	4.06%
Coastal flooding	1.66%	1.73%
Hurricanes	81.20%	81.20%
Wildfires	0.00%	0.00%
Heat waves	0.00%	0.00%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

FIGURE 33

**Social Vulnerability Score and Income, by Census Tract in Puerto Rico**



**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

## Policy Implications and Conclusions

Addressing the disproportionate impact of climate-related hazards on Latino homeowners and communities necessitates multipronged policy interventions focused on enhancing housing market resilience, ensuring insurance affordability, and promoting equitable community development. The following recommendations outline strategies to mitigate these challenges.

### Improve Accessibility and Affordability of Insurance

The persistent unavailability and unaffordability of homeowner’s insurance disproportionately affect historically marginalized communities, widening racial wealth and homeownership gaps. Low-income homeowners often pay higher effective insurance rates compared with higher-income homeowners (Neal, Mehrotra, and Pang 2024), making homeownership increasingly unaffordable as premiums rise in high-risk areas. In addition, many low-income homeowners, particularly those without mortgages, might opt out of insurance entirely, leaving themselves vulnerable to catastrophic loss. Low-income Latino homeowners are especially at risk, as approximately 14 percent of Latino homeowners in the US are uninsured—nearly double the national average (Cornelissen, Heller, and DeLong 2024).



To address these challenges, a key step is improving both data collection and homeowner education to monitor insurance gaps and emerging inequalities in the market. State insurance regulators and the Federal Insurance Office should collaborate to collect and analyze granular, timely data on coverage availability and affordability, particularly in high-risk areas. Additionally, targeted outreach and educational campaigns can help homebuyers and homeowners better understand their insurance coverage needs, identify gaps in protection, and take steps to address them.

State policymakers play an important role balancing market-based solutions with targeted government subsidies. States could reconsider regulatory restrictions on private insurers that discourage their participation in high-risk markets, such as by allowing insurers to adjust premiums more flexibly. At the same time, promoting more state and local subsidized insurance initiatives can ensure coverage for low-income homeowners unable to secure private-market policies. For example, California's FAIR Plan offers essential insurance to residents in wildfire-prone areas who face limited private-market options. Greater flexibility for private insurers to adjust premiums to reflect escalating climate risks can improve insurance availability, while targeted government subsidies for those unable to afford coverage can enhance affordability. By balancing market-based solutions with targeted government support, policymakers can foster a more resilient and equitable housing market.

## **Strengthen Data Used to Assess Climate Risks**

Strengthening the data used to assess climate risks is essential for accurately identifying and mitigating the vulnerabilities Latino communities face. Our analysis indicates that a significant portion of Latino households resides in areas where climate risks cannot be precisely evaluated because of data limitations. FEMA's NRI relies on historical data and does not fully account for future climate scenarios, which can lead to an underestimation of risks in certain areas (Zhu et al. 2024).

To enhance the NRI's accuracy and comprehensiveness, FEMA should consider incorporating simulations of future climate disasters and expanding geographic coverage in its input datasets. Moreover, improving the granularity of data collection is crucial. Localized data can reveal specific vulnerabilities within Latino communities, allowing for targeted interventions. For instance, updated mapping of flood-prone areas that consider both historical events and future projections can inform infrastructure development and emergency preparedness plans. Additionally, ensuring that these data are accessible and understandable to local governments and the public is vital for fostering community-led resilience initiatives.

## Enhance Climate Resilience and Reduce Community Vulnerability

Significant federal- and state-level investments are needed to strengthen community resilience and mitigate risks associated with climate hazards. Programs such as FEMA's Building Resilient Infrastructure and Communities provide essential funding for projects such as flood control systems and resilient housing retrofits, helping communities better withstand disasters. Similarly, the US Department of Housing and Urban Development's Community Development Block Grant Disaster Recovery has supported long-term recovery in disaster-affected areas, such as rebuilding homes and infrastructure following devastating disaster events. These programs should ensure that disadvantaged homeowners have fair access to rebuilding efforts by addressing systemic barriers to entry, such as language barriers and accessibility challenges. Strengthening disaster preparedness and recovery efforts through necessary resources and advocating for equitable rebuilding programs will help close these gaps.

At the state level, initiatives such as California's Wildfire Resilience Program fund wildfire risk reduction measures, including forest management and home hardening grants, while New York City's East Side Coastal Resiliency project employs large-scale infrastructure, such as floodwalls and levees, to protect vulnerable urban areas from flooding and storm surges. Programs such as the Resilient Florida Program exemplify state-level innovation, offering funding for resilient housing developments and flood mitigation projects in regions prone to rising sea levels and chronic flooding. But these programs should also consider integrating relocation strategies in areas where rebuilding in the same hazard-prone location might not be sustainable. Providing incentives and support for relocating to safer areas can reduce long-term risk for vulnerable homeowners.

These initiatives enhance resilience to hazard risks and stabilize the homeowner's insurance market by addressing key drivers of volatility. Insurers increasingly rely on global reinsurance markets to manage their exposure to catastrophic losses, but the rising frequency and severity of climate-related disasters have led to higher costs and reduced coverage availability (Keys and Mulder 2024). This dependence on unregulated global reinsurance markets has created instability in high-risk areas, resulting in elevated premiums and limited insurance options for homeowners. In addition to replicating and expanding resilience-building programs, governments must prioritize outreach and education to ensure communities are aware of available resources. Partnering with community-based groups can help programs and government officials disseminate information effectively and ensure resources reach the most vulnerable homeowners, addressing disparities in program access. These partnerships could help governments mitigate challenges, improve infrastructure resilience, and ensure more

equitable access to affordable insurance coverage, safeguarding communities against escalating climate risks.

## **Improve Financial Assistance for Home Improvements**

Expanding financial assistance for home improvements is essential for making homes more climate resilient, reducing insurance premiums, and increasing eligibility for coverage. Homes in poor condition—often concentrated in low-income communities and in communities of color (Zhu et al. 2022)—are particularly vulnerable to climate risks. Offering targeted financial support for upgrades such as floodproofing, fire-resistant materials, and reinforced roofing can significantly reduce the risk of property damage in areas prone to natural disasters such as wildfires and flooding.

Access to home repair programs for low income households requires broad availability and targeted subsidies to ensure affordability. Subsidizing home improvement costs, especially for vulnerable populations, can remove financial barriers and promote more inclusive participation in resilience-building efforts. For instance, fire-resistant materials in wildfire-prone areas and flood prevention materials in high-risk flood zones can enhance resilience and reduce long-term recovery costs. Programs such as the California Wildfire Mitigation Program, a home hardening initiative, provide a model for addressing these needs by offering grants to help homeowners implement critical safety upgrades. Community-based groups can also be key partners in raising awareness about such programs, helping to disseminate information and reach the most vulnerable homeowners. Partnering with trusted organizations can improve program visibility and engagement, particularly in underserved areas.

## **Expand Outreach and Education**

Effective outreach and education are essential to addressing gaps in homeowner's insurance coverage, particularly among underserved populations who might lack awareness of insurance benefits and requirements. Many uninsured homeowners are unaware of the financial protections that insurance offers or might not understand how to select appropriate coverage. Localized public awareness campaigns can play a critical role in educating homeowners about the importance of insurance and the options available to them, tailored to address their communities' unique needs. These campaigns should prioritize language access and culturally relevant outreach, ensuring that messaging is accessible and resonates with diverse populations. Community groups are well positioned to assist with this effort,

particularly in bridging language barriers and fostering trust in communities that have historically been excluded or underserved.

Partnering with community-based organizations, such as local nonprofits and advocacy groups, can extend the reach of these efforts, especially to homeowners with language barriers and those in economically disadvantaged areas. These partnerships can help bridge communication barriers and build trust, ensuring that critical information reaches those most at risk. In addition, housing counseling agencies are uniquely positioned to enhance these efforts. Integrating insurance education into their services, and into nonprofit- and municipal-led financial coaching and empowerment programs, can broaden the reach of these resources. Counselors can provide personalized guidance to homeowners about assessing coverage needs, comparing policies, and accessing state or federal assistance programs.

## **Promote Equitable and Resilient Community Development**

State and local programs play a critical role in expanding renewable energy access, improving energy efficiency, and enhancing climate resilience for underserved communities. Successful models provide valuable blueprints for expanding efficient solutions. California's Solar on Multifamily Affordable Housing program helps reduce energy costs for low-income renters by encouraging solar energy adoption in affordable housing. New York's NY-Sun Initiative expands solar access through targeted incentives and financing solutions. The Resilient Florida Program funds flood mitigation and resilient housing projects to protect communities facing chronic flooding and rising sea levels.

Despite these advancements, barriers remain for many low-income households. Up-front costs, complex application processes, and administrative hurdles can limit participation. To address these barriers, policymakers should develop accessible financing solutions to bridge the gap for households that cannot afford the up-front costs of energy upgrades. Additionally, regulatory reforms to streamline administrative requirements for accessing tax credits and rebates can further lower barriers for vulnerable populations. Increasing oversight and enforcement to combat predatory practices is equally important.

Expanding outreach through community-based organizations is essential to ensuring equitable access. These organizations can help residents navigate available programs and advocate for further improvements, ensuring that climate resilience efforts reach those who need them most. Strengthening these partnerships will create more inclusive pathways to housing stability, energy affordability, and long-term resilience.

## Mitigate Labor Hour Losses and Support Resilience in Weather-Exposed Industries

Latino workers are disproportionately represented in weather-exposed industries and are 43 percent more likely<sup>24</sup> than non-Latino workers to reside in areas with the highest projected labor hour losses attributable to climate impacts. This loss of labor hours, driven by rising temperatures, extreme weather events, and other climate-related disruptions, creates significant barriers for both current and aspiring Latino homeowners. For current homeowners, inconsistent labor income can hinder their ability to invest in home reinforcements, such as climate-resilient upgrades or repairs. For aspiring homeowners, labor instability undermines financial stability, making it harder to save for down payments or qualify for mortgages.

To address these challenges, policies should prioritize providing immediate support and resources to workers in weather-exposed industries. Although mitigating immediate impacts is essential, long-term strategies must also focus on expanding opportunities in resilient employment sectors. This includes investing in job training programs that prepare workers for resilient employment sectors, such as renewable energy, climate adaptation projects, and green infrastructure development. In addition, mortgage loss mitigation tools, such as forbearance, were proven to be effective at reducing negative outcomes for owners that experienced labor shocks during the COVID-19 pandemic (Goodman and Zhu 2024). Making sure the loss mitigation toolkit is available across mortgage types would provide additional protection to workers affected by weather-exposed events.

In conclusion, this report underscores the urgent and unique challenges climate risks pose to Latino homeowners and communities. The disproportionate exposure to hazard risks such as hurricanes, wildfires, riverine flooding, and coastal flooding, coupled with systemic barriers such as social vulnerability and inadequate community resilience, highlights the pressing need for targeted interventions. Latino homeowners, particularly those in low-to-moderate-income neighborhoods, face amplified risks that threaten their housing stability, financial security, and long-term wealth accumulation.

Addressing these challenges requires a collaborative, multipronged approach that prioritizes resilience building, equitable access to insurance, and systemic investments in vulnerable communities. By enhancing community infrastructure, expanding affordable insurance programs, and fostering adaptive capacity through education and resources, policymakers and stakeholders can mitigate the adverse effects of climate change on Latino households. These efforts are essential to safeguarding housing stability and to promoting broader equity and economic mobility in the face of escalating climate risks.

# Appendix

**TABLE A.1**

**Share of Expected Annual Losses to Residential Property, by Disaster Type**

Disaster event	Latino residential losses	Total residential losses
Hurricanes	41.54%	37.20%
Earthquakes	41.03%	35.60%
Wildfires	6.15%	8.00%
Riverine flooding	5.09%	5.90%
Tornadoes	2.42%	5.60%
Hail	1.85%	2.70%
Coastal flooding	1.16%	2.00%
Strong winds	0.36%	1.30%
Volcanic activity	0.13%	0.50%
Ice storms	0.11%	0.60%
Landslides	0.06%	0.30%
Winter weather	0.05%	0.20%
Lightning	0.04%	0.10%
Heat waves	0.00%	0.00%
Cold waves	0.00%	0.00%
Tsunamis	0.00%	0.00%
Total	100.00%	100.00%

**Sources:** Federal Emergency Management Agency National Risk Index data and 2022 five-year American Community Survey data.

# Notes

- <sup>1</sup> Lauren Mora and Mark Hugo Lopez, “Most U.S. Latinos Say Global Climate Change and Other Environmental Issues Impact Their Local Communities,” Pew Research Center, October 4, 2021, <https://www.pewresearch.org/short-reads/2021/10/04/most-u-s-latinos-say-global-climate-change-and-other-environmental-issues-impact-their-local-communities/>.
- <sup>2</sup> Jie Zong, “A Mosaic, Not a Monolith: A Profile of the U.S. Latino Population, 2000–2020,” University of California, Los Angeles, Latino Policy and Politics Institute, October 26, 2022, <https://latino.ucla.edu/research/latino-population-2000-2020/>.
- <sup>3</sup> Jeffrey S. Passel, Mark Hugo Lopez, and D’Vera Cohn, “U.S. Hispanic Population Continued Its Geographic Spread in the 2010s,” Pew Research Center, February 3, 2022, <https://www.pewresearch.org/short-reads/2022/02/03/u-s-hispanic-population-continued-its-geographic-spread-in-the-2010s/>.
- <sup>4</sup> “Latinos Face Higher Flood Risks Than Other Groups,” Headwaters Economics, November 6, 2023, <https://headwaterseconomics.org/natural-hazards/latinos-face-higher-flood-risks/>.
- <sup>5</sup> “Expected Annual Loss,” Federal Emergency Management Agency, accessed March 18, 2025, <https://hazards.fema.gov/nri/expected-annual-loss>.
- <sup>6</sup> “Hurricane Costs,” National Oceanic and Atmospheric Administration, Office for Coastal Management, last updated March 6, 2025, <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>.
- <sup>7</sup> “Climate Change Indicators: Coastal Flooding,” US Environmental Protection Agency, accessed January 28, 2025, <https://www.epa.gov/climate-indicators/climate-change-indicators-coastal-flooding>.
- <sup>8</sup> “Climate Change Indicators: Coastal Flooding,” US Environmental Protection Agency.
- <sup>9</sup> Community resilience is measured at the county level, which does not allow us to track variations across tracts within a city. Therefore, in this section, we rely on the social vulnerability measure to characterize community risks.
- <sup>10</sup> “The 2023 State of Housing in Harris County and Houston,” Rice University, Kinder Institute for Urban Research, July 25, 2023, <https://kinder.rice.edu/research/2023-state-housing-harris-county-and-houston>.
- <sup>11</sup> Anastasia Goodwin and Libby Seline, “Houston Poverty Rates the Highest among Major U.S. Metros, New Census Data Shows,” *Houston Chronicle*, September 14, 2023, <https://www.houstonchronicle.com/news/houston-texas/census/article/houston-poverty-rate-increase-18365435.php#>.
- <sup>12</sup> “Disaster Relief: Harris County Recovery Assistance,” Memorial Assistance Ministries, accessed January 28, 2025, <https://www.mamhouston.org/hcra>.
- <sup>13</sup> “Facts + Statistics,” Insurance Information Institute, accessed January 28, 2025, <https://www.iii.org/fact-statistic/facts-statistics-wildfires>.
- <sup>14</sup> Katie Wilcox, “Why Are Homeowners Insurance Rates Continuing to Rise in Arizona?” 12News, last updated December 2, 2024, <https://www.12news.com/article/money/homeowners-insurance-rates-continuing-to-rise-in-arizona/75-43fd4292-ad22-41e1-9787-f7368085d8d7..>
- <sup>15</sup> Steve Evans, “LA Wildfires: 17,027 Structures Damaged or Destroyed. Insured Loss Estimates Avg. \$32.5bn,” *Artemis*, January 20, 2025, <https://www.artemis.bm/news/la-wildfires-17027-structures-damaged-or-destroyed-insured-loss-estimates-avg-32-5bn/>.

- <sup>16</sup> “Post-Wildfire Infrastructure Assistance Program,” Arizona Department of Forestry and Fire Management, accessed January 28, 2025, [https://dffm.az.gov/grants/post-wildfire-infrastructure-assistance-program?utm\\_source=chatgpt.com](https://dffm.az.gov/grants/post-wildfire-infrastructure-assistance-program?utm_source=chatgpt.com).
- <sup>17</sup> “Top Climate Change Risks: Heat, Fire, Flood, Stockton, CA,” ClimateCheck, accessed January 28, 2025, <https://climatecheck.com/california/stockton>.
- <sup>18</sup> “Top Climate Change Risks: Heat, Fire, Flood, Stockton, CA,” ClimateCheck.
- <sup>19</sup> “Smith Canal Gate Structure,” San Joaquin Area Flood Control Agency, accessed January 28, 2025, <https://www.sjafca.org/projects/smith-canal-gate-structure>.
- <sup>20</sup> “Lower San Joaquin River,” US Army Corps of Engineers Sacramento District, accessed January 28, 2025, <https://www.spk.usace.army.mil/Missions/Civil-Works/Lower-San-Joaquin-River-Beta/>.
- <sup>21</sup> Cassie Dickman, “Stockton Receives Double Its Yearly Rainfall, with More to Come,” Stocktonia, March 16, 2023, <https://stocktonia.org/news/weather/2023/03/16/stockton-receives-double-its-yearly-rainfall-with-more-to-come/>.
- <sup>22</sup> Hannah Workman, “San Joaquin County Declares State of Emergency Due to Risk of Delta Levee Failure,” Stockton Record, last updated October 30, 2024, <https://www.recordnet.com/story/news/local/2024/10/30/san-joaquin-declares-state-of-emergency-due-to-risk-delta-victoria-island-levee-failure/75949194007/>.
- <sup>23</sup> US Department of Energy, “Biden Harris Administration Announces More Than \$860 Million Loan Guarantee to Support Construction of Utility-Scale Solar and Battery Storage in Puerto Rico,” press release, October 15, 2024, <https://web.archive.org/web/20250121174749/https://www.energy.gov/articles/biden-harris-administration-announces-more-860-million-loan-guarantee-support-construction>.
- <sup>24</sup> Natalie Knight Griffin, “The Climate Crisis Is a Latino Civil Rights Crisis,” UnidosUS blog, March 25, 2024, <https://unidosus.org/blog/2024/03/25/the-climate-crisis-is-a-latino-civil-rights-crisis/>.



# References

- Bondie Keenan, Marcella, Preeti Shankar, and Peter Haas. 2019. "Assessing Disparities of Urban Flood Risk for Households of Color in Chicago." *Illinois Municipal Policy Journal* 4 (1): 1–18.
- CDC and ATSDR (Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry). 2024. "CDC/ATSDR SVI 2022 Documentation." Atlanta: CDC and ATSDR.
- Choi, Jung Hyun, Daniel Pang, Amalie Zinn, and Aniket Mehrotra. 2024. *Barriers to Accessing Mortgage Credit: Exploring Mortgage Underwriting for Latino Homebuyers*. Washington, DC: Urban Institute.
- Cornelissen, Sharon, Douglas Heller, and Michael DeLong. 2024. *Exposed: A Report on 1.6 Trillion Dollars of Uninsured American Homes*. Washington, DC: Consumer Federation of America.
- Goodman, Laurie, and Jun Zhu. 2021. *The Future of Headship and Homeownership*. Washington, DC: Urban Institute.
- Goodman, Laurie, and Jun Zhu. 2024. "Estimated Number of Loans Saved during the COVID-19 Pandemic Attributable to Improved Loss Mitigation." Washington, DC: Urban Institute.
- Headwater Economics. 2022. *Latinos face higher flood risks than other groups*. Bozeman: Headwater Economics.
- Iglesias, Virginia, Jennifer K. Balch, and William R. Travis. 2022. "U.S. Fires Became Larger, More Frequent, and More Widespread in the 2000s." *Science Advances* 8 (11).
- Keys, Benjamin J., and Philip Mulder. 2024. "Property Insurance and Disaster Risk: New Evidence from Mortgage Escrow Data." Cambridge, MA: National Bureau of Economic Research.
- LCI (California Governor's Office of Land Use and Climate Innovation). n.d. "Stockton Climate Action Plan." Sacramento, CA: LCI.
- Lloro, Alicia, Ellen Merry, Kabir Dasgupta, et al. 2024. *Economic Well-Being of U.S. Households in 2023*. Washington, DC: Board of Governors of the Federal Reserve System.
- Neal, Michael, Aniket Mehrotra, and Daniel Pang. 2024. *Homeowner's Insurance amid Greater Climate Disaster Risk*. Washington, DC: Urban Institute.
- Office of Houston Mayor Sylvester Turner. 2020. *Resilient Houston*. Houston: Office of Houston Mayor Sylvester Turner.
- Park, Gainbi, and Rachel Franklin. 2023. "The Changing Demography of Hurricane At-Risk Areas in the United States (1970–2018)." *Population, Space and Place* 29 (6). <https://doi.org/10.1002/psp.2685>.
- Rudnick, Jessica, Kenji Tomari, Kristin Dobbin, Mark Lubell, and Kelly Biedenweg. 2023. *Delta Residents Survey Summary Report: Summary of Results from 2023 Survey of Sacramento–San Joaquin Delta Residents' Perspectives on Regional Social and Environmental Change and Well-Being*. Sacramento, CA: Delta Stewardship Council.
- Seneviratne, Sonia I., Xuebin Zhang, Muhammad Adnan, et al. 2021. "Weather and Climate Extreme Events in a Changing Climate." In *Climate Change 2021: The Physical Science Basis, Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by V. Masson-Delmotte, P. Zhai, A. Pirani, et al., 1513–776. New York: Cambridge University Press.
- So, Agatha, and Jennifer Brown. 2019. "Latino Homeownership 2007–2017: A Decade of Decline for Latinos." Washington, DC: UnidosUS.
- Zhu, Linna, and Amalie Zinn. 2024. *The Great Inequality Transfer: Unpacking the Relationship between Homeownership and Intergenerational Wealth Transfers*. Washington, DC: Urban Institute.
- Zhu, Linna, Michael Neal, Laurie Goodman, and Amalie Zinn. 2024. "Assessing Climate Risk in Marginalized Communities." Washington, DC: Urban Institute.

# About the Authors

**Linna Zhu** is a senior research associate in the Housing Finance Policy Center at the Urban Institute. She conducts data-driven quantitative research on policy issues related to US mortgage finance, housing supply, and racial inequality. Central to her current work is how to ensure individuals and communities can equally adapt to technological advancements, such as artificial intelligence, demographic shifts (e.g., a rapidly aging population), and the adversities posed by climate change. Zhu has published widely noted research articles on such topics as algorithmic bias in automated valuation models, artificial intelligence in mortgage lending, the Community Reinvestment Act, aging in place, housing security at older ages, intergenerational wealth transfer, AAPI homeownership, housing supply, and local planning responses. Her work has been cited in notable media outlets, including the *New York Times*, the *Washington Post*, *USA Today*, Marketplace, National Mortgage News, and CNBC. Her research has been published in leading academic and policy journals, such as *Regional Science and Urban Economics* and *Cityscape*. She serves on the advisory board of the Design Thinking Executive Program at the University of California, Riverside. Zhu holds a BA in economics from Renmin University of China, an MS in finance from Johns Hopkins University, and a PhD in public policy and management from the University of Southern California.

**John Walsh** is a research associate in the Housing Finance Policy Center. Before joining Urban, he interned with the US Department of Housing and Urban Development in the financial management division. Walsh graduated from Indiana University's School of Public and Environmental Affairs with a degree in policy analysis, a minor in economics, and a certificate in applied research and inquiry. As a senior, he coauthored his thesis on the Community Reinvestment Act and its impact on mortgage outcomes during the 2008 economic recession.

**Bryson Berry** is a research assistant in the Housing Finance Policy Center. His research interests include housing policy, racial equity, and wealth inequality. Before joining Urban, Berry was a research assistant at the Minnesota Council of Nonprofits, where he helped analyze data and design a report evaluating the growth in the Minnesota nonprofit sector. He also completed an independent research project studying the black-white wealth gap and presented his research at the UC Links International Conference at the University of California, Berkeley.

## STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.



500 L'Enfant Plaza SW  
Washington, DC 20024

[www.urban.org](http://www.urban.org)